Introduction

The region around Ségu, one of Mali’s major cities, has only recently become the object of archaeological interest. For decades, the focus of research was firmly on the rich areas north of 15° latitude: the Niger’s Inland Delta, the Dogon country, the Lakes Region or the Saharan margins at Gao, Kidal and Timbuktu. There, the remains of large settlement clusters or Late Stone Age remains kept archaeologists occupied with the promise of insights into early urbanism, domestication, and trans-Saharan trade. The Ségu area seemed unimportant in this regard, and while most archaeologists, the authors included, routinely passed through here on their way north, its archaeology has remained largely unexplored.

The Ségu area was well known from historical documents and oral traditions as the centre of the seventeenth to nineteenth century Bamana Ségu polity (e.g. Banbera and Conrad 1990; Bazin 2006; Dumestre 1974; Kesteloot 1972; Roberts 1987), but was thought to be of limited interest for earlier periods. The few mentions in earlier archaeological literature (Curdy 1982; Pageard 1961; Pageard 1975; Szumowski 1957) did not encourage further research. Only after 2009 did it become clear that this area held substantial archaeological remains from periods well before the Ségou polity. Many of these remains appear to date to the period of the Empire of Mali (c. thirteenth to fifteenth century), of which a regional centre was excavated at Sorotomo (MacDonald et al. 2011), and whose origins are said to lie in the Do region, just west of Ségou (MacDonald et al. forthcoming). To further explore the nature and time depth of settlement around Ségou, our project, a collaboration between the Frobenius Institute in Germany, and the Institute des Sciences Humaines and Université des Sciences Sociales et Gestion in Bamako, has begun to examine the settlements of the Maraka communities (Marakadugu). The Maraka are a population group which in recent history distinguished itself from the surrounding Bamana communities with a partly mercantile, partly religious specialisation. Their culture has been described as urban and Islamic in aspiration, yet often with a rural agricultural and highly syncretic reality (Bazin 1972, 2004). Some of the Maraka settlements, Sinzani in particular, acquired importance under the Ségou polity as slave plantations and ports of trade (Roberts 1987), but most of them were generally thought to have been more important during earlier periods, surviving the turbulent Ségou polity as part of an ‘eternal landscape’ (MacDonald and Camara 2012:174–176). Our project seeks to understand the chronology of these settlements and their roles in the successive political formations through a combination of archaeological investigation with research on oral tradition and written historical documents. In this article we report on the first season of prospection and excavation, which took place between December 2016 and January 2017.

Prospection

Satellite survey

Prior to the field season, the target areas on the left and right banks of the River Niger in an approximate radius of 80 km around the modern city of Segou were subjected to a very basic remote sensing investigation. Gestrich carefully examined various sets of freely available satellite imagery with the naked eye, trying to pinpoint anomalous areas that might be of archaeological interest. The particular aim of this exercise was to identify tell-type settlement mounds. Some of the previously known examples have three distinctive characteristics that, we hoped, would aid their recognition on the satellite images: 1) where they were not farmed, deflation left
them with a carapace of lateritic pebbles and potsherds; 2) the procurement of earthen construction material tended to result in small ponding areas within and around settlement remains; and 3) high and steep sites often have deep water erosion gullies which can be visible on satellite images.

With this technique, we identified a number of sites, three of which we were later able to confirm on the ground: a) the c. 100ha tell complex called “Duguné tu;” b) a field of earthen tumuli near the hamlet of Niaman-Wéré; and c) a 1.3 ha pair of tells near the village of Biyan (Figure 1). While this method of satellite survey resulted in no false positives, most of the sites we found during the ground survey had not been identified from the satellite images. We must thus, unfortunately, report that this cheap and easy form of remote identification of sites is not effective in this area. Attempts to arrive at a better methodology for satellite-based remote survey will be continued as a part of this project.

**Figure 1:** The research area showing sites documented during archaeological survey in December 2016.

**Ground survey**

The ground survey was informant-led and conducted in tandem with the first interviews of the oral tradition component of our project. In the villages we visited, we asked to be shown all sites of cultural and historical importance that the inhabitants were aware of, including all sites where people used to live. As the main occupation in the region is unmechanised agriculture, people are usually aware of almost all archaeological sites on their territory. In addition to this local knowledge, the visits gave us the opportunity to unsystematically identify sites that were not recognised as such by our informants. The limitations of this approach became apparent quite quickly. Due in part to security concerns, we generally only had one day for each village, which turned out to be insufficient: the remains were often so numerous that our informants refused to accompany us any further after about three or four hours of walking, incredulous that we would want to take GPS points and make surface collections at each and every old settlement mound. What we report here is thus necessarily a first impression and will,
sometimes drastically, tend to underestimate the amount of archaeological remains.

The uppermost layers of the sites we visited can be very roughly dated using existing ceramic typologies for the sites of Sorotomo (MacDonald et al. 2011:60) and Tiébala (Curdy 1982), as well as the results of Kevin MacDonald’s work on the sites of the Ségu polity (MacDonald and Camara 2011:35–40). While further data is needed to construct a robust regional chronology, two clear changes in this ceramic sequence appear to allow the chronological distinction of pre-fourteenth century, fourteenth to seventeenth century, and post-seventeenth century assemblages.

**Busén**

Busén is the legendary site of origin of the Jara (Diarra) patronymic group. Today, however, the inhabitants are mainly of the Sanogo lineage, who claim to have come from Kong in modern-day Côte d’Ivoire with a raiding army which defeated the Jara and gave the chiefship to the Sanogo. The archaeological sites around Busén can be placed into three categories: 1) smaller habitation sites, abandoned between the fourteenth and seventeenth centuries. This includes the site cluster of Niamasuruma, to the east of the village, as well as three small mounds on the village’s eastern margins; 2) the very large (more than 100 ha), low mounded site of Masalatomo, to the south of Busén, which has surface ceramics belonging to the post seventeenth century Ségu polity period; and 3) the habitation mound on which the modern village is built, a ‘living’ tell site with an estimated 4m of stratigraphic deposits.

**Faraku**

Faraku is one of the region’s numerous masadugu, settlements of Traoré governors of the Empire of Mali, mentioned several times in the 17th century Tarikh al-Sudan (Bazin 1988; Es-Sa’di (Houdas) 1964:19-20, 406-418; Hunwick 1999:14–16). The modern-day village is a living settlement mound of impressive height, with an estimated 8 m of stratigraphic deposits. Our survey was able to cover the area west of the village, which has numerous lower habitation mounds of around 1 – 2 m of estimated deposits. We were told that the south and east of the village had similar numbers of such sites, but we were unable to visit them. A full survey is planned for February 2018. For the sites we documented, the surface ceramics suggest an abandonment date between the fourteenth and the seventeenth century. We were also shown an intact vessel, recovered by the villagers during the digging of a well north of the village. This was reported as having been found at about 2m depth and is of a type that has not previously been documented in this region.

**Togu**

Four sites were identified around the Maraka village of Togu. This settlement is said to have shifted several times, when the population was dispersed due to warfare (cf. Mage 1868:426-237). Among the sites are two single settlement mounds (TOG1 and TOG4), the remains of a small iron smelting operation (TOG3), and one cluster of 13 settlement mounds with a total area of around 30 ha (TOG2; Figure 2).
Duguba, a village famous for its sorcerers, is often said to be the oldest settlement in the region. Our prospections found a large area of settlement remains, extending along the top and side of the high riverbank dune. According to local oral sources, these settlements were abandoned as the village moved to its present location, apparently changing from an extensive to a nucleated form. Furthermore, we found the remains of deflated laterite and clay tumuli (cf. MacDonald et al in press) on the laterite outcrop north of the village (Figure 3).

**Kukun**

A small cluster of habitation mounds lies to the south of the village. The southern part of this site is truncated by the factory of the Malian textile company COMATEX. This site was previously documented by MacDonald under the name ‘Ségu Comatex’, and the
characteristics of its ceramic assemblage have been published (MacDonald and Camara 2011:37).

General observations

The sites documented in our survey have certain commonalities with more northerly regions in Mali: they are tells resulting from the collapse of earthen architecture. Many of them are small, nucleated mounds, some of which cluster together into a single settlement, as is the case at TOG 2 and at Busén Niamasuruma. The larger sites, however, are quite flat with no clearly separated mounds. This was already observed at Sorotomo, where most of the extensive site has only thin archaeological layers (MacDonald et al. 2011:56). Duguné tu and Busén Masalatomo seem to have a similar structure, which we have argued elsewhere that represent a short-lived, but intensive settlement activity (MacDonald et al. 2011:62). The nature of the extensive settlement site at Duguba is not yet clear, seeing as the geography of the riverbank makes it harder to estimate the extent and thickness of the archaeological layers.

Our surveys indicate that the area was densely occupied, even before the period of the Ségu polity. The surface assemblages of the sites suggest abandonments at several different periods. Further indications of the chronology of the area’s occupation come from our first test excavations.

Excavations

Duguba (MDB).

In order to gain a first insight into the chronology and stratigraphy of the settlement site at Duguba, our research team decided to take advantage of an existing erosion gully. We placed a 4x2m excavation unit abutting the gully to the west (Figure 4), which gave us the opportunity to get a relatively deep section in a short space of time, while also having at least some contextual and artefactual information from the excavated levels.

In total, we excavated five architectural phases of mud-brick and coursed earth construction. The floor levels were frequently made of thin layers of laterite pebbles and clay packed into a hard surface, a feature known from the excavations at Sorotomo (MacDonald et al. 2011:57). For the upper layers, the soil matrix consisted entirely of collapsed building material, walls and floor levels, as is usual in a settlement mound. Below 110 cm beneath the surface, however, the soil consisted mainly of the red sandy material of the underlying dune formation. Contrary to our expectations, this deposit was not sterile. Unlike the rare and extremely fragmented materials from the upper levels, it was relatively rich in larger fragments of pottery,
bone and charcoal. Mud-brick walls continued into these lower levels, with no evidence of foundation trenches, as did two shallow elongated pit features. Due to time constraints, we had to halt excavations before reaching sterile soil (Figure 4).

We have three radiocarbon dates from the excavated sequence at MDB, two of which came from the upper phase, one each from the lowest and the highest floor level. Both of these samples returned a very similar date in the time period between 1270 and 1390 cal AD. The lower level of non-sterile red sand, however, returned a far earlier date between 406 and 542 cal AD (Table 1). Whether this means that a distinct earlier phase of occupation is represented in the red sand deposits remains to be seen in future field seasons, but the changes observed in a preliminary analysis of the pottery from Duguba suggest this to be the case.

Togu (TOG2)

At Togu, we opened a 3x3m unit north of the summit of mound G in the TOG2 cluster (Figure 2). We ended excavations at a depth of 1.8 m without reaching sterile soil. The excavations brought to light a successive series of mudbrick and coursed earth architecture, with the same type of laterite and clay floor as at Duguba and Sorotomo. As at Sorotomo, the layout of the recovered buildings appears to incorporate both round and rectilinear elements (Figure 5). A number of intact or complete pottery vessels were recovered from the floor levels inside the structures, usually preserved by their proximity to the stump of a collapsed wall.

The stratigraphy of our unit was complicated by the existence of several successive phases of pit digging and refuse disposal (Figure 6). These deposits were particularly rich in pottery, faunal and botanical remains whose analysis should help, in future, to shed light on questions

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Table 1: Radiocarbon dates from the excavations at Duguba and TOG2.
Three radiocarbon dates from floor levels – one at the bottom, one in the middle and one from the top – date the occupation of the site to a relatively short period between 1039 and 1281 cal AD (Table 1). For the moment, we cannot exclude the possibility of an earlier occupation below our excavated levels, yet judging from the surrounding terrain it seems unlikely that stratified deposits should continue for more than another 50 cm. The excavations at TOG2 are set to continue to sterile soil in December 2017.

Conclusions

Our recent fieldwork shows that the Ségu region was not only an area of significant settlement during the the Bamana Ségu polity, but also during earlier periods. Particularly interesting is the fact that, in this area, we have an unusually coherent set of written sources, oral traditions and archaeology for the period of the Empire of Mali and the centuries preceding it. We therefore hope that future work in this project will allow us to add to a better understanding of the nature and development of this political formation, and to broaden the insights we have already gained from the excavations at Sorotomo (MacDonald et al. 2011). Furthermore, the data from Togu, the earlier Phase at Duguba, and some of our further enquiries into oral traditions seem to indicate that the area around Ségu was also important in the late first and early second millennia AD, the period of the Empire of Ghana/Wagadu.

In the future, we plan to undertake more research at Duguba, Faraku, and Togu, conditions permitting. We also plan to survey other areas and test other sites, particularly on the left bank of the Niger near Nyamina and Sama Markala. Our ongoing research thus helps to demonstrate the archaeological potential and historical importance of the area between the Niger and Bani rivers, south of the traditional areas of archaeological interest in Mali. While we might not be answering questions of the origins of urbanism or socio-political complexity here, this region affords us the rare chance to conduct more historically-oriented archaeology, and to add an archaeo-

Acknowledgements

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The image shows a profile of excavations at TOG2, illustrating the stratigraphy and features found during the archaeological survey.
References Cited

Banbera, T. and D. C. Conrad
1990 A state of intrigue. The epic of Bamana Segu according to Tayiru Banbera. Oxford: Published for the British Academy by Oxford University Press.

Bazin, J.


Curdy, P.

Dumestre, G., ed.

Es-Sa’di, A.

Hunwick, J. O.
1999 Timbuktu and the Songhay Empire. Al-Sa’di’s Ta’rikh al-sūdān ; down to 1613 and other contemporary documents. Leiden: Brill.

Kesteloot, L.

MacDonald, K.C. and S. Camara


MacDonald, K.C., S. Camara, S. Canos Donnay, N. Gestrich, and D. Keita

MacDonald, K.C., N. Gestrich, S. Camara, and D. Keita

Mage, E

Pageard, R.


Roberts, R.

Szumowski, G.