THE BANTUFIRST PROJECT: 2021 FIELDWORK REPORT ON THE KWILU-KASAÏ-KAMTSHA-LOANGE RIVER RECONNAISSANCE MISSION

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Introduction

The BantuFirst research project is a cross-disciplinary project funded by the European Research Council (ERC Consolidator's Grant no. 724275) under the European Union's Horizon 2020 research and innovation program. Since 2018, the BantuFirst team has been collecting new linguistic, genetic, and archaeological data from several Bantu-speaking Congolese provinces south of the equatorial rainforest (Kinshasa, Kwango, Kwilu and Mai-Ndombe). Part of the linguistic analysis suggests that the West-Coastal Bantu (WCB) branch of the Bantu family likely developed between the Kwilu and Kamtsha Rivers of the Democratic Republic of Congo (Pacchiarotti *et al* 2019). Earlier interdisciplinary research had furthered the hypothesis that ancestral WCB language communities were possibly the first Bantu speakers south of the Congo rainforest subsequent to a southward movement during a climate-induced retraction of the rainforest ~2500 BP (Grollemund *et al*. 2015; Bostoen *et al*. 2015). Yet, while Bequaert (1947) and van Moorsel (1970) had conducted collections along the Kasai, near Tshikapa and Seko respectively, no archaeological investigation of the putative WCB homeland had been completed prior to the BantuFirst project.

Three previous BantuFirst missions targeted the Kwilu-Kasai region, including along the road between Kinshasa and Bandundu (Seidensticker *et al*. 2018), around Idiofa (Matonda Sakala *et al*. 2019), and along the lower Kasai River (Matonda Sakala *et al*. 2021). These investigations revealed an archaeologically rich landscape with material spanning the Late Pleistocene and Holocene. Of particular interest within the BantuFirst research framework was the uninvestigated Kwilu-Kamtsha-Kasai region – the area potentially associated with the earliest WCB speakers. Therefore, in addition to further surveys along the lower Kasai River, the 2021 mission conducted the first archaeological research along the Kwilu, Kamtsha, and Loange rivers (Figure 1).

The immediate objectives of the 2021 fieldwork were a) to identify and sample new sites via pedestrian survey; b) to collect radiometrically anchored artefact assemblage via excavation; and c) to collect sediment samples for archaeobotanical and palaeoenvironmental analysis. Once all analyses are complete, these objectives should lead to a preliminary geospatial and chronological outline of archaeological phenomena within the study region from which further fieldwork will be based. As with the previous BantuFirst missions, the 2021 team encountered substantial archaeological deposits ranging in age from the Middle Stone Age (cf. Taylor 2016) through the Iron Age (from ca. 2000 BP onwards).

Methodology

Between September and October 2021, the BantuFirst 2021 field team – made up of Peter Coutros (UGent), Igor Matonda Sakala (UNIKIN), Arnold Mabuaka (IMNC), and Isidore Nkanu – conducted a survey of approximately 800 km of river. Because this was the first archaeological research conducted in most of the survey region, the main objective of the field season was to establish an initial baseline map by which future research could be

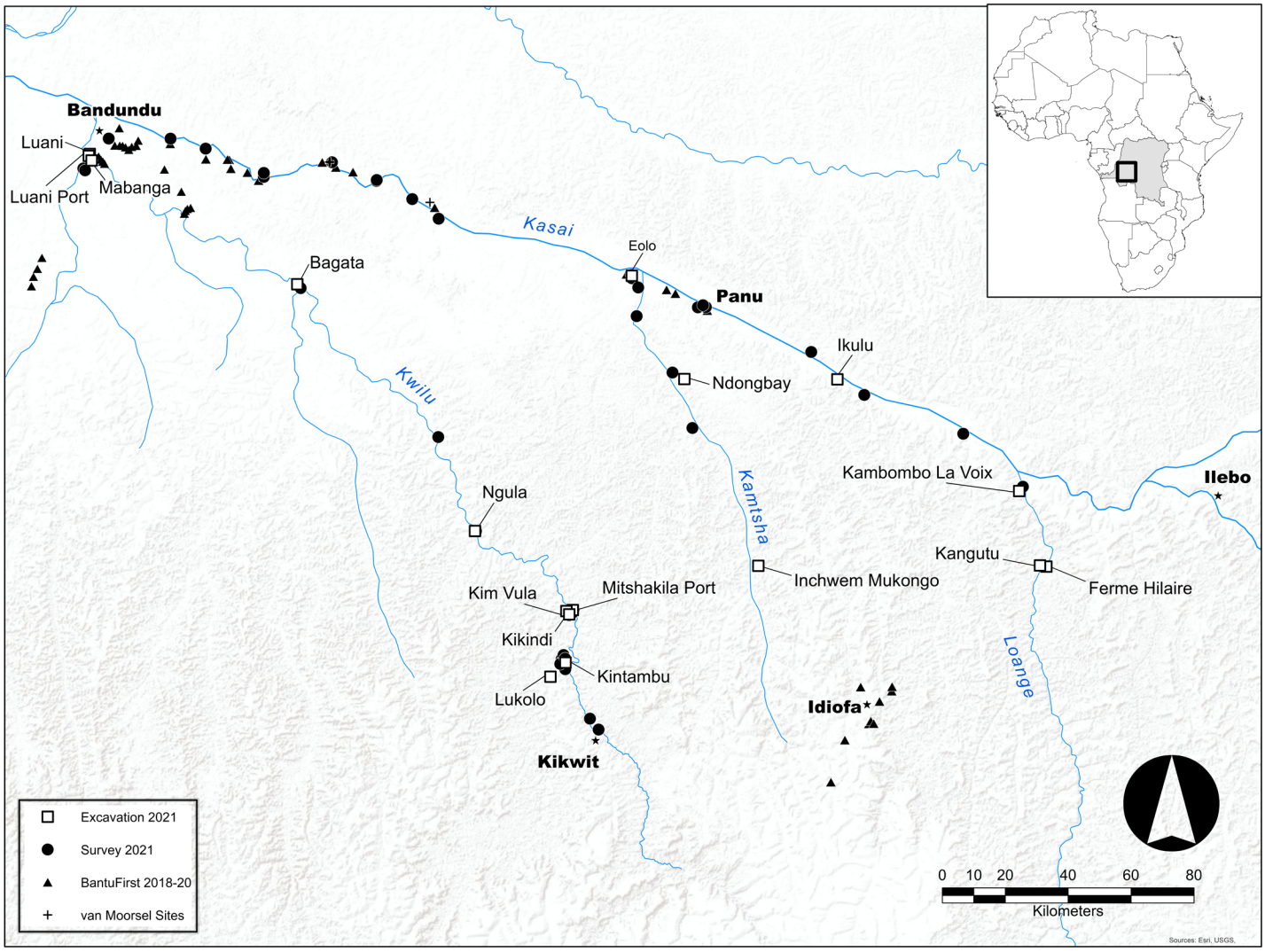

Figure 1. Archaeological sites identified by the BantuFirst team within the Kwilu-Kasai-Kamtsha-Loange River Network. (Map by P. Coutros.)

directed. Therefore, beginning in Kikwit, the team progressed along the Kwilu, Kasai, Kamtsha, and Loange Rivers, mainly targeting villages, fluvial ports, agricultural fields, and exposed profiles due to the open vegetation and surface visibility. Other landscape features that were deemed high-probability (ridgelines, etc.), as well as areas identified by local consultants, were also surveyed when encountered. If a particular location yielded no surface survey results, auger sampling was performed in cardinal directions from an artificial datum to 1m in depth in order to ensure no subsurface deposits were missed. For each site identified, preferential surface collection was conducted, focusing on diagnostic sherds (rim, base, and decorated) and lithics.

When excavations were warranted at a given site – based on the amount and nature of surface and/or profile material – units were typically measured at 1x2 m and excavated to a minimum depth of 1 m. When particularly promising deposits were encountered, select units were expanded to 2x2 m (Table 1). All cultural material – both diagnostic and nondiagnostic – collected from excavated sites was retained and is currently undergoing analysis in Kinshasa together with the diagnostic survey material. In addition, a series of soil samples were taken from the profile of each excavated unit in vertical intervals of 20 cm. This material is being exported to Ghent University for microbotanical analysis, with the hope of providing further data on environmental contexts and subsistence practices.

Table 1: Locations and notes from sites excavated during the 2021.

No.	Site	Location	Unit#	Unit Size	Finds
1	Lukolo	S 4 85 E 18 67	1	1x1 m	Iron slag refuse pit
2	Mitshakila Port	S 4 66 E 18 73	1 2 3	1x2 m 1x2 m 1x1 m	Lithics Ceramics; Lithics Debitage
3	Kimvula	S 4 67 E 18 72	1	1x2 m	Ceramics
4	Bagata	S 3 72 E 17 95	1 2 3	1x2 m 1x2 m 1x2 m	Ceramics Ceramics Ceramics; Lithics
5	Ferme Hilaire	S 4 54 E 20 09	1 2	1x2 m 1x2 m	Ceramics Ceramics
6	Luani Port	S 3 35 E 17 36	1 2	1x2 m 1x2 m	Ceramics Ceramics
7	Luani	S 3 35 E 17 35	1 2	2x2 m 1x2 m	Ceramics; Lithics Ceramics
8	Eolo	S 3 70 E 18 91	1 2 3 4 5	1x2 m 1x2 m 2x2 m 1x2 m 1x2 m	Ceramics Ceramics Ceramics Ceramics Ceramics
9	Kabombo La Voix	S 4 32 E 20 01	1 2	1x2 m 1x2 m	Ceramics Ceramics
10	Kangutu	S 4 54 E 20 07	1 2	1x2 m 2x2 m	Ceramics Ceramics
11	Ndongbay	S 4 00 E 19 06	1	1x2 m	Ceramics
12	Intshwem-Mukongo	S 4 54 E 19 27	1 2	1x2 m 1x2 m	Ceramics Ceramics
13	Kintambu	S 4 81 E 18 71	1 2	1x2 m 1x2 m	Ceramics Ceramics
14	Ngula	S 4 43 E 18 45	1	1x2 m	Ceramics
15	Mabanga	S 3 37 E 17 36	1	1x2 m	Lithics
16	Kikundi	S 4 67 E 18 72	1 2 3	1x2 m 2x2 m 1x2 m	Ceramics Ceramics Ceramics
17	Ikulu	S 4 00 E 19 49	1	1x1 m	Ceramics

BantuFirst mission. (Table by P. Coutros)

As this was the first archaeological project in most of the targeted region, establishing relations with local officials and residents was a main component of the mission. Therefore, exceptional time and effort was made for engaging with communities through informal information sessions beyond the obligatory meetings with officials. Igor Matonda Sakala also gave an interview on the local radio station in Eolo, describing the objectives, methodology, and potential results of the project. This interview was particularly fruitful, as several interested educators, officials, and residents approached the team after the broadcast with further questions and information.

Preliminary results

In all, a total of 64 new sites were identified during the 2021 field season, adding to the 76 sites previously identified by the BantuFirst team (see Figure 1). Sites ranged from surface scatters and isolated finds to stone lines identified in exposed profiles. Excavations were conducted at 17 new sites with a total of 34 units (see Table 1). Here we provide both descriptions of the excavations and the preliminary results at Mitshakila Port and Eolo, two sites representative of the lithic and ceramic sites respectively.

Perhaps most surprising was the number of sites encountered along the Kwilu and Kasai rivers, as archaeological material was recovered from nearly every location surveyed. Interestingly, though, very few sites were identified along the Kamtsha River. This, however, may be the result of the topographical nature of the river valley or the survey design itself (or some combination of the two), rather than the actual presence of archaeological materials. The Kamtsha is a relatively small and highly sinuous tributary of the Kasai with significant point bar build-up and high concentrations of large woody debris. In addition, the banks of the river – particularly along the lower Kamtsha – are substantially lower in elevation with a comparatively wide active floodplain. Likely as a result of these disincentives against frequent navigation and extensive settlement, the survey team encountered few modern settlements or agricultural fields along the Kamtsha. The apparent lack of archaeological sites may then be a result of fewer open areas to survey and more vegetation to obscure surface material in areas that were surveyed. Likewise, the recurrent flooding along the lower riverbanks may have buried or washed away much of whatever surface material once existed. It is also possible, however, that due to the wider floodplain and frequency of flooding – or other unknown variables – few pre-modern settlements existed along the banks of the Kamtsha.

Eolo

Eolo or Eoló, also written Yoló, is a large multilingual town, where Lwel and Nzadi prevail. Its name is likely derived from *iyoolo*, which would be an onomatopoeia imitating the sound of a dive into deep water (cf. Nkiene Musinga 2021: 67). Eolo is located on the left bank of the Kasai, where the river would indeed be deep, approximately 25 km downstream from Panu and less than 1 km from the confluence with the Kamtsha River. After two days of survey around the town, the team had identified several ceramic concentrations and numerous isolated lithic finds. The most promising location was on the eastern edge of the town, where a large hill abruptly rises ~45 m above the surrounding landscape upon which the neighborhood of Eolo Kapela is situated. Survey along this ~200 m wide hill revealed large amounts of ceramics on the surface of several cleared and vacant residential plots and within erosion channels and exposed profiles – indicating the presence of subsurface deposits. On the third day, excavations began near the center of Eolo Kapela, where five units were eventually excavated in 20 cm spits.

The first unit was placed directly over a large ceramic concentration identified during the initial survey. This unit was situated within a residential plot where the landowner had cut into the side of the hill to flatten the parcel. Therefore, no topsoil was encountered and the surface ceramics were embedded within the semi-consolidated orange sandy-loam. The majority of material was recovered from this sediment layer, which extended between 0-40 cm in depth. Below this, a brief pause in materials between 40-60 cm was accompanied by a change in soil to a yellowish loose loamy sand. A small number of ceramics were recovered at the base of this sediment layer, which was immediately followed by a layer of compact yellow sand containing no archaeological materials.

A second unit was then placed in an adjacent property 7 m uphill from unit 1, as it was hypothesized that the ceramic concentration may have been the result of downslope erosion. After ~10 cm of disturbed topsoil was cleared, a dark orange sandy-loam dominated the

Figure 2. a) Eolo Unit 3 at final level of excavation; b) complete vessel recovered from Eolo U2, 120 cm. (Photos by P. Coutros.)

top 40 cm, producing a small to moderate number of ceramics. Between 40-60 cm the soil developed into a dark brown sand with significantly higher numbers of material. Against the western wall of the unit, extending down from 55-100 cm, a pit feature was identified and excavated independently. While the pit contained high levels of charcoal fragments and ashy soil, no artefacts were recovered from within. Below 60 cm, the soil was almost uniformly orange sandy-loam, albeit slightly more consolidated than the upper layers, with few artefacts. However, at approximately 110 cm, a lens of ashy soil was revealed in the southeastern corner of the unit. While exploring this feature, approximately 45 cm to the west, a complete vessel with linear comb impressions around a slightly everted rim (17.5 cm dia.) was recovered at ~120 cm in depth (see Figure 2b). Beyond this level, however, the soil became a hard orange clay-sand and no artefacts were recovered. A third unit was placed 50 cm to the west of unit 2 in order to further explore the context of the pit feature identified in unit 2 (see Figure 2a). Unfortunately, while the stratigraphy closely mirrored that of unit 2, a limited number of artefacts were recovered – and were largely restricted to the 60-80 cm layer of lightly consolidated orange sandy-loam.

In an effort to identify the spatial extent of the site, two additional units were installed to the south and west of unit 2, each at a distance of ~75 m. Unit 5 was positioned to the west of – and at a similar altitude to – units 2 and 3. The location for unit 4, the southern unit, was chosen as it was further uphill from the initial three units and was located on a relatively flat portion of the hilltop. Here, it was thought, any artefact bearing sediments and features would have been less affected by downhill erosion. Unfortunately, after excavating to a depth of 1 m, unit 4 produced no material below the modern refuse in the upper 30 cm.

As with the previous units, the location for unit 5 was selected due to a large amount of surface ceramics. However, at approximately 10 cm down, it became clear that the southwestern portion of the unit consisted of sub-

Figure 3. Finds from Mitshakila Port excavations: a) excavation unit 1 at final depth; b) point (U2, 25 cm); c) biface (U1, 40 cm). (Photos by P. Coutros.)

stantially different sediment and artefact yields than the northeastern portion. The two sections were thus excavated separately. The southwestern section between 10-80 cm consisted of a homogeneous layer of dark loamy sand with high concentrations of ash, charcoal and a few heavily corroded iron objects and ceramics. The northeastern section was largely dominated by a mottled dark brown sandy loam with few ceramics and no iron objects. At 70 cm in depth, a small fully enclosed pit feature was identified in the NE section, which was again excavated separately. This pit feature contained extremely high levels of charcoal and charred ceramics – many of which were able to be reconstructed to form several nearly-complete vessels. After 1 m, the pit feature was exhausted, and the remainder of the NE section was excavated to sterile soil. Initial interpretations suggest that the SW section of the unit is a more recent intrusion into the matrix of the NE section, although the antiquity of this intrusion is unclear.

Mitshakila Port

Mitshakila is a small village on the right bank of the Kwilu River, approximately 40 km north of Kikwit, which used to be a trade post of the *Compagnie du Kasaï* (Smith 1987: 79). While the village itself is located ~1 km inland from the river, a substantial secondary portion of the settlement (known as Mitshakila Port) is located along the riverbank. Surface survey within this secondary settlement revealed no artefact concentrations but yielded several isolated ceramic and lithic finds. The inspection of a relatively small (10 m dia.) and shallow (~60 cm) sand/clay mine within the center of the settlement revealed several lithic artefacts within the northern profile, indicating the presence of at least some subsurface deposits. Thus, three units were excavated around the perimeter of the sand/clay mine revealing a relatively shallow, connected layer of archaeological deposits interrupted by recent mining activities. The sediments in all three units were dominated by an extremely compact orange clay, causing difficulty while screening. Therefore, any further excavations here should include plans and materials for implementing a wet screening protocol.

Unit 1 was excavated on the northern edge of the exposed profile. Immediately upon commencing excavations it became clear that the western section of the unit was a more recent intrusion into the compact clay, and was thus excavated separately. This loose, loamy sand contained significant amounts of ash with some charcoal and few ceramics. After this section was fully excavated, work began on the eastern section which was a largely homogenous column of extremely hard orange clay. This section of the unit yielded several microliths and one biface almost exclusively coming from between 20-40 cm (see Figure 3c). However, the artefact bearing layer did not extend uniformly across the unit and was concentrated to the north. Similarly, the upper layers of unit 2 produced little material (including several ceramic sherds from the same vessel) with the majority coming from 20-40 cm in depth. Large amounts of debitage and one lithic point (see Figure 3b) were recovered from this layer, in addition to moderate amounts of naturally broken stone.

Unit 3 was located against the southern profile of the mine and produced very little material. Interestingly, the reduction in the artefact bearing layer became quite pronounced in the southeastern portion of the unit. This, in combination with the similar phenomenon in unit 1, suggests the deposits are somewhat circumscribed and centered to the north and west of the mine, and not as expansive as initially believed. While it is possible that the layer represents a 'stone line', the homogeneity of the lithic material and the limited spatial extent of the deposits do not rule out the possibility that these are primary deposition contexts (Taylor 2016).

Conclusion

The forthcoming artefact analysis and radiocarbon dating from the 2021 mission will provide much needed context to these new sites. However, the cumulative results of the three BantuFirst archaeological missions to the Kwilu-Kasai River network have revealed it to be an important – and understudied – portion of the Congo Basin. As a major tributary of the Congo River, the Kasai has long played a major role as a thoroughfare and trade-route for populations from both Angola and DRC (Vansina 1962). Further research will be required to identify the extent and antiquity of this phenomenon and define the chronology of changes in land use, social institutions, and material culture that are potentially associated with the influx of Bantu-speaking populations. Therefore, following McIntosh's (2005: 163) "anchors and variability" framework, future BantuFirst fieldwork campaigns will consist of more targeted excavations and related survey with a focus on spatiotemporal variability and regional-scale comparative analysis.

Acknowledgements

We would like to thank Prof. Placide Mumbembele, Director of the Institut des Musées nationaux du Congo (IMNC), and his staff for all of their support. Also, the project would not be possible without the assistance of our full team and local collaborators. The 2021 mission was carried out under the Arrêté ministériel n° 091/CAB/MIN/CA/PKB/2018 du 30 mars 2018 issued by the Ministère de la Culture et des Arts.

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