*Chapter 7*

# The AM 41 site

## A Late Ceramic Age necropole to the west of Iracoubo

Part of an early LCA necropole excavated in February 2006 (van den Bel 2006; Annexe 1.4) is located in the southern part of allotment AM 41, west of Iracoubo. The local inhabitants referred to it as "Les Sables Blancs." According to local hearsay, many urns have been found here. This funerary site lies on a natural sandy elevation and consists of two separated urn concentrations, dubbed Zone A and Zone B. The ceramic vessels were found in dissimilar positions and represent a variety of burial modes which may suggest a certain level of social complexity.[185]

### 7.1. Introduction

The funerary site of AM 41 (No. 97303.061) is situated 1.5 km west of the present-day village of Iracoubo. The site is registered under allotment number AM 41 (measuring 25,000 m² in total) within the community of Iracoubo.[186] In February 2006, it was excavated in the course of two weeks by INRAP agents and volunteers (Figs. 7.1a and 2.1). Its location, known as *Les Sables Blancs*, represents the first Pleistocene elevation to the west of the village of Iracoubo located in the lower Holocene floodplains next to the course of the Iracoubo River.

Prior hereto, in 2003, an archaeological site had been discovered at the same height as the above-mentioned allotment along the RN 1. This occurred during a pedestrian survey carried out by the *Action Collective de Recherche* (ACR) which was called *Préhistoire du littoral de Guyane* (Migeon and Mestre 2004).[187] This site was named Sable Blanc Est (SBE, No. 97303.060). At that time the necropole presented here was not yet discovered. As both sites are geographically separated, but registered under the same toponym, we will henceforth refer to them as AM 41 and SBE.

In 2005, (illegal) construction work on the AM 41 plot drew the attention of SA members who demanded its discontinuation. Next, when exploring the partially bulldozered terrain, they discovered numerous, decapitated ceramic

185 A condensed version of the fieldreport has been published by the present author in the first volume of *Revista amazônica* (van den Bel 2009a).

186 When Jérôme Briand (INRAP) conducted diagnostic reseach along the RN 1 near Iracoubo, he discovered that the plot number of the excavation was actually coded AM 41 and not AM 43, as was furnished by the State as the official plot number (Briand 2012a:23). Here we will refer to the correct plot number (AM 41), in full knowledge that previous reports and publications refer to it as AM 43.

187 Cf. Section 1.1 for this research project. Another pedestrian survey, held in 2000, covered the area between Sinnamary and Organabo, but did not encounter any archaeological material at this location (Jérémie and Kayamaré 2001).

vessels in two areas: (a) the first at 150 m south of the RN 1 and (b) the second at 250 m south of the RN 1 (Gassies and Lemaire 2005a). In order to comprehend the distribution of these vessels and its possible link with the previously found site positioned along the RN 1, the SA carried out a complementary mechanical survey (Gassies and Lemaire 2005b).

This evaluation resulted in the designation of the following zones: (a) comprising a site situated to the south representing a concentration of ceramic depositions interpreted as a necropole which the authorities "froze" legally, (b) a central part with only two vessels, which may represent an extention of the

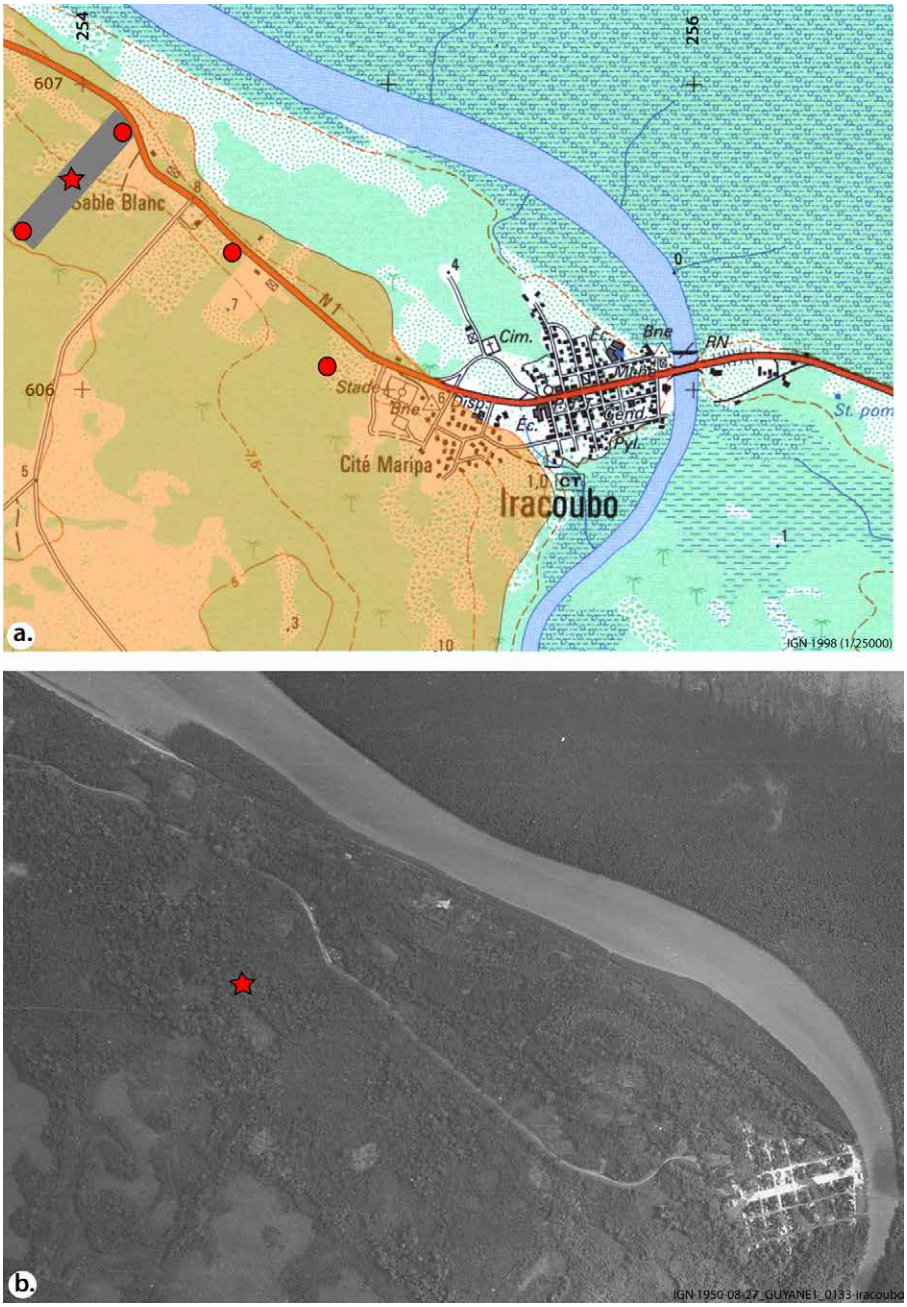


*Figure 7.1. The geographical position of the site is marked with a star: (a) includes the other sites along the RN 1, situated on the border of the Pleistocene deposits (indicated in transparent orange) and (b) presents an aerial photograph of Iracoubo in 1950. Note the course of the Iracoubo River, the very nearby habitations (which by now have disappeared) as well as the large number of slash and burn fields (courtesy of the IGN).*

southern necropole and (c) a northern part, next to the RN 1, representing the SBE site to which construction works inflicted heavy damage (Fig. 7.2).

Eventually, the SA selected the central part (covering 5400 m²) to be excavated in no less than two weeks. The INRAP was requested to do so between 6 and 16 February 2006. The goal of this investigation: to search for the boundaries of this central archaeological zone and to determine its characteristics. One year later, a small part of the northern zone (330 m²) was excavated in August 2007 as part of the Earthmovers Project (Rostain et al. 2008; Rostain 2010c) (cf. Section 7.3.3 for further discussion).

### *7.1.1 The setting*

As mentioned above, this allotment (measuring 290 x 90 m) had been deforested and flattened by means of a bulldozer before the SA or the INRAP had been able to carry out any archaeological research. The natural relief of this terrain had completely disappeared. However, the mechanical survey conducted by Gassies and Lemaire (2005b) had indicated that the ceramic vessels found in the central part (60 x 90 m) as well as in the southern part must have been situated on geological elevations in the landscape, separated by means of lower hydromorphic zones. The bulldozers must have filled up a minor creek located north of the central part and in a lower area to the south. These assumptions were confirmed by means of the adjacent allotments the mechanical shovels left untouched. They revealed the original topography, reflecting the continuity of the geological formations at surface level.

The allotment is located on the Old Coastal Plain belonging to the Coswine Series and includes fine sand and mottled clays of marine and continental origins (Mazéas 1961:9–10). In fact, at this stage the RN 1 runs on the edge of the Old Coastal Plain overhanging the Young Coastal Plain which is accentuated by means of a steep truncation or escarpment measuring several metres deep (Fig. 7.1a).[188] The central part of AM 41 represents a natural longtitudinal elevation of the Coswine Series comprising ferralitic soils with a yellow horizon due to the accumulation of iron oxides (hematite), representing hydromorphic soils.

Prior to the pedestrian surveys carried out by Jérémie and Kayamaré (2000) as well as Migeon and Mestre (2004), the Muncipality of Iracoubo provided but a small number of archaeological sites of which only a handful represent pre-Columbian examples (Gassies et al. 2002). However, the latter surveys definitely illustrated a multitude of prehistoric sites, tripling their number along the littoral between the Sinnamary and Organabo Rivers. Even today, the local population is quite familiar with the presence of artefacts in their environment and knows the exact location of Amerindian burial grounds and urns.

The SA archaeological evaluation, comprising 22 mechanical test pits, eight trenches, and one cross-cutting trench of almost 290 m in length, evidenced multiple ceramic depositions, frequently imbricated and sometimes outlined with vertical placed griddles. In total, six sherds taken from the most southern zone were dated by means of thermoluminescence. They indicated two chronological episodes: (a) between the end of the 9th and 10th century AD and (b) between

188 However, according to Franck Dolique (geomorphologist at the IRD Cayenne), the central part of the terrain consisted of sediment belonging to the White Sand Formation (Fr. *Série Détritique de Base*) (Gassies and Lemaire 2005b:6).

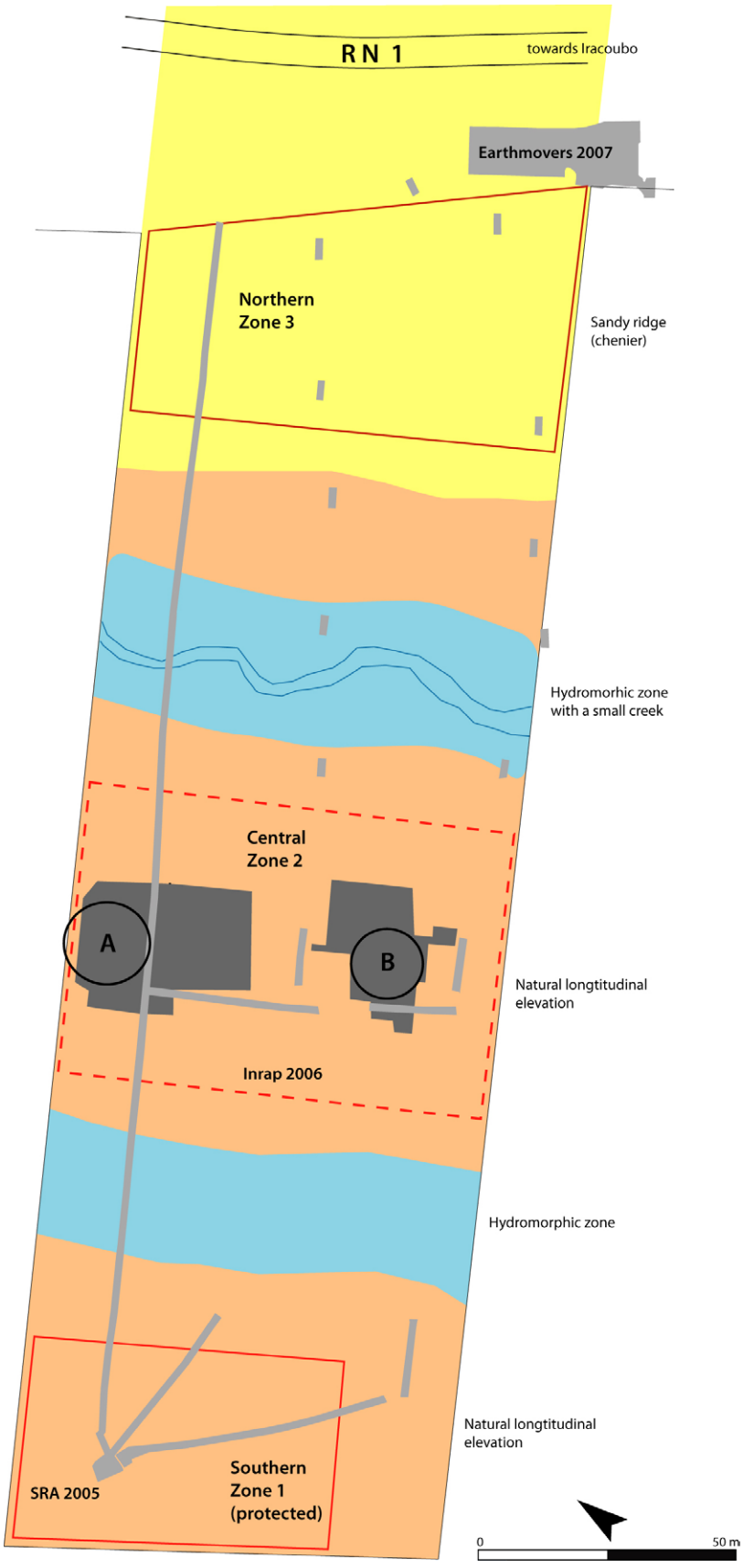


*Figure 7.2. An overview of the AM 41 allotment and the three archaeological zones as defined by the SA in 2005. The colour orange represents the clayey deposits of the Old Coastal Plain whereas yellow refers to its sandy ridges. Blue depicts a hydromorphic zone. The 2005 trenches are indicated in grey, the 2006 excavation in dark grey and the 2007 excavation also in grey.*

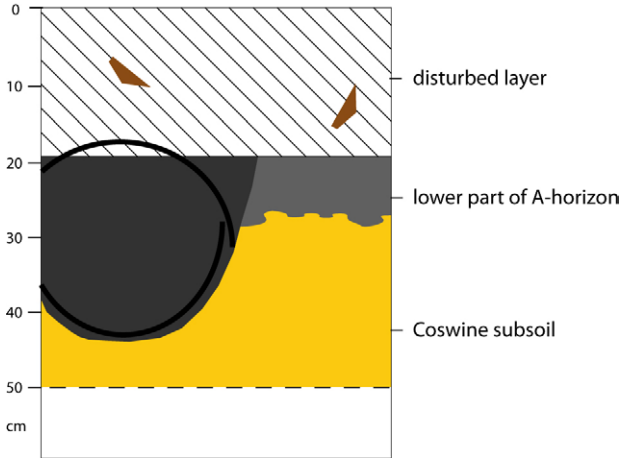


*Figure 7.3. A schematic soil section with a ceramic deposition.*

the end of the 12th and the beginning of the 13th century AD (Migeon 2006:65, Table 2a).[189] However, the low number of ceramics did not allow them to ascribe the archaeological material to a specific LCA complex (Gassies and Lemaire 2005b).

### *7.1.2 The methods of excavation*

The SA and the conductor of the future works decided to program only one week as to the excavations of the central part covering 5400 m². The previous research in this part had resulted in two urns only. In addition, the evaluating reasearch suggested we would be in the periphery of the necropole. We therefore decided, bearing the envisioned two weeks in mind, to cover the entire area by means of a mechanical shovel of 8 tonnes provided by the conductor of works.[190]

In retrospective, the grey trenches the SA had dug during 2005 (Fig. 7.2) sadly indicate that these explorative trenches "missed" the two ceramic concentrations by several metres, stressing the fact it is indeed extremely difficult to locate these type of sites –despite the fact you know you must be very close. A systematic test trenching grid or further additional trenches would have proven more successful…

Firstly, we extended Pit 3 and Trench 18 of the mechanical SA survey on the location where two vessels were found (Gassies and Lemaire 2005b:8, Fig. 9, Photographs 10-12, 16). Our first Pit 1 (20 x 25 m) was extended towards the northern limit of the central part, revealing a large concentration of pottery depositions (Zone A). It presumably continues onto the adjacent plot in the west (cf. Fig. 7.2). The two vessels the SA had discovered were, in fact, isolated features, but were fortunately detected and initiated the excavations. We further observed that (a) this concentration was situated at the summit of a low longitudinal Pleistocene elevation and (b) the depositions were bounded by means of hydromorphic zones located on both sides of this natural levee. Unfortunately, the bulldozer had decapitated the majority of the vessels which were found at *c.*30 cm deep (Fig. 7.3). Interestingly, only the vessels found in an upright position in

189 The reliability of these results must be doubted, since the method used by Archeolabs corresponds to an estimation of age (Roque and Vartianen 2007). However, according to Cano et al. (2014:4), TL dating of seven pre-Columbian sherds permitted to confirm archaeological interpretation on the chronology of the Middle Amazon River. Cf. Section 4.4.2.

190 Provided with a small machine weighing only 8 tonnes we were incapable of covering the entire area.

Pit 3 were filled with very fine blond sand. This sand fill differed from the matrix and the cover layer the bulldozer brought up.

Once this concentration was uncovered, Pit 2 (15 x 20 m) was dug towards the centre of the central part. However, this pit did not yield any ceramic depositions but did feature only one pit which perhaps represented a hearth pit. With some time left, we still needed and wished to explore the other half of the area. Continuing with a trench towards the other side of the central part, we stumbled upon a second concentration of vessels (Zone B) after 30 cm and then extended Pit 3 (20 x 20 m) around these ceramic depositions. Thanks to this discovery the SA granted us three more days of excavation.

It rained cats and dogs the enitre two weeks. Within this extension we decided not only to remove all the ceramics, but also to adapt our registration procedures, in spite of the fact that this kind of haphazard archaeology is certainly not something we had hoped for nor was it something this site deserved. Fortunately, many people came to the rescue in the hope to "save" this necropole. All features were photographed, topographed and numbered per excavation pit.

Pits 2 and 3 included a canal system transsecting Zone B. This inspired us to carry out some fieldwalking in the vicinity of the site in order to locate more important canals. One canal was located to the south of the protected, "frozen" Zone 1, in the marshy outer bend –which was inundated during the rainy season and high tides– of the Iracoubo River, i.e. patchy area to the south of the site (cf. Fig. 7.1b,). Other parts of this canal system may have been excavated in 2007 alongside the RN 1 (Rostain et al. 2007:11), thus covering the entire allotment and maybe even the entire Sable Blancs area. The local residents cultivated the adjacent allotment to the southeast during the time of the excavation. It was covered with small conical heaps of earth on which peas, beans, maize, etc., were grown. In 2007, the Earthmovers team had reported this as a raised-field complex (Rostain et al. 2008:3, Fig. 1). Banana trees had been planted on the adjacent allotments to the northwest, but no permission was granted here for fieldwalking.

As to the excavation itself, the analysis was to be finished within one week. This merely enabled us to wash the material, but no further study with regard to the field report was allowed. Eventually the ceramic inventory, to be presented in this chapter, was studied with regard to the present dissertation by means of obtaining study days from the INRAP (cf. Section 7.3).

One radiocarbon date was acquired through other means –knowing that no radiocarbon dates at all had been calculated as to this project. This yielded one result concerning F 8 in Pit 3: a calibrated date of approximately the first half of the 10$^{th}$ century AD (KIA-33862, 1000 ± 35 BP; van den Bel 2009a:239), predating all the conventional radiocarbon dates of the SBE site, situated to the north of this necropole (McKey et al. 2010, Table S1) (cf. Appendix 1).

## 7.2. The spatial distribution and diversity of the features

### *7.2.1 Introduction*

Table 7.1 and Figure 7.4 deal with the general data the excavation provided, yielding in total 131 features (Annexe 5.1). During the excavation, two concentrations, or Zones, have been observed, consisting of ceramic depositions. In Pit 1 a concentration of 23 pits with 28 ceramic depositions (Zone A) was

excavated (Fig. 7.5). The core of this area measures *c*.10 m in diameter. Four depositions in Pit 1 (F 11, F 31, F 41-2) are found outside this core area. The other area, dubbed Zone B, is situated in Pit 3 at a distance of *c*.75 m from Zone A. It contains 16 pits with 19 ceramic depositions (Fig. 7.6). This concentration measures *c* 8 m in diameter. Only one deposition (Pit 3, F 22) is situated "outside" this core area, i.e. F 41 and F 42 in Pit 1.

Both excavation pits also exhibit two possible wooden structures situated at some distance from the two vessel concentrations. Excavation Pit 2, situated in between both concentrations, is empty. It only features a shallow more or less round pit (Pit 2, F 1) measuring 90 cm in diameter and is 21 cm deep. Its profile consisted of burnt clay fragments and numerous sherds. Its sandy fill also revealed large quantities of charcoal, suggesting it may have served as a combustion pit.

A large canal or ditch, measuring 110 cm in width and 30 cm in depth stretches E-W across the excavation. It runs from Pit 1 to Pit 3 where we observed at least four perpendicular side canals. This system probably facilitated the draining of this rather hydromorphic area, located near a large bend in the Iracoubo River in the southern of the allotment. However, it is difficult to date this system. The reason for this is that no diagnostic material was found in these ditches. We nevertheless presume it was dug after the funerary site was abandoned and its presence long forgotten. An ascription to the Historic Age is proposed here, probably towards the end of the 18th century when Iracoubo was first inhabited by European planters.

The principal shape of the pits is round, ranging between 35 and 60 cm in diameter. Several rectangular pits measure either 60 x 90 cm or between 110 to 220 cm. In certain cases, no pit was visible around the ceramic depositon. These ceramics were perhaps placed on the surface or in a shallow pit only, thus not detected during excavation (not to mention after the bulldozing). Furthermore, as witnessed during the first and second surveys, the ceramic depositions were found or positioned in a number of ways and included the following types of ceramic ware: (a) large griddle fragments, (b) one complete vessel, (c) two complete ("double") vessels of which one serves as a lid, (d) (various) half vessels and/or large ceramic fragments and (e) small piles of "stacked" sherds (Figs. 7.4-6).

During excavations carried out in the field or at the depot in Cayenne, no human bone, burnt or unburnt, was detected in the pits or in the pots, respectively. This is also the case at another urn site near Iracoubo (Briand 2012a:79). Even if any bone was spotted, it occurred in such small quantities that no type of analysis could claim an ascription to humans (or possible pets?). The interpretation of urns

| | Pit 1 | Pit 2 | Pit 3 | N |
|---|---|---|---|---|
| Post holes | 6 | | 5 | 11 |
| Ceramic depositions | 29 | | 19 | 48 |
| Ceramic concentration | 2 | | 1 | 3 |
| Pit | | 1 | | 1 |
| Canal | | 1 | 5 | 6 |
| Treefall | 5 | | 1 | 6 |
| Root | 18 | | 1 | 19 |
| Undetermined | 35 | | 2 | 37 |
| | **95** | **2** | **34** | **131** |

*Table 7.1. The general feature count.*

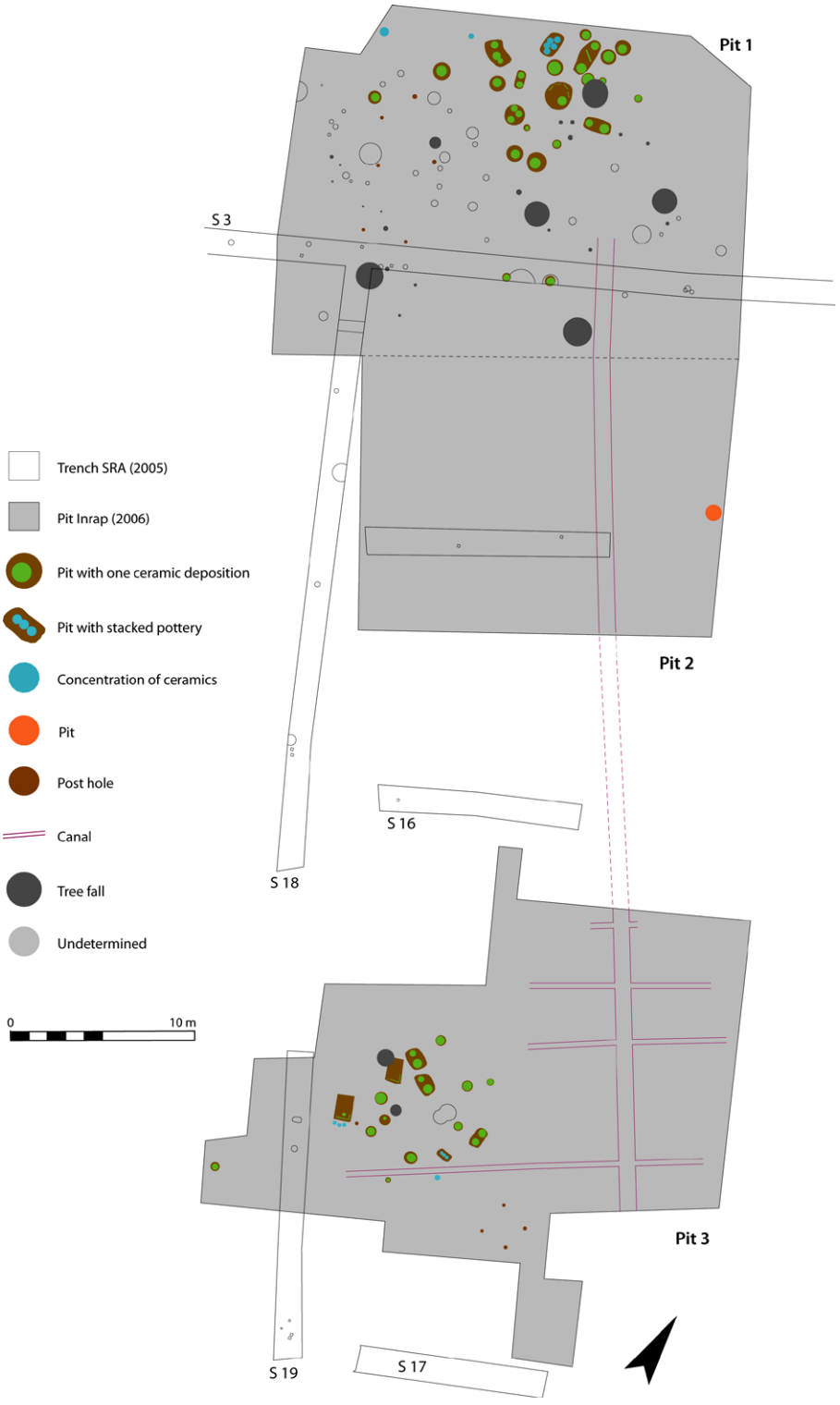


*Figure 7.4. An overview of the excavation in the Central Zone with Pits 1-3, illustrating the distribution of features per type.*

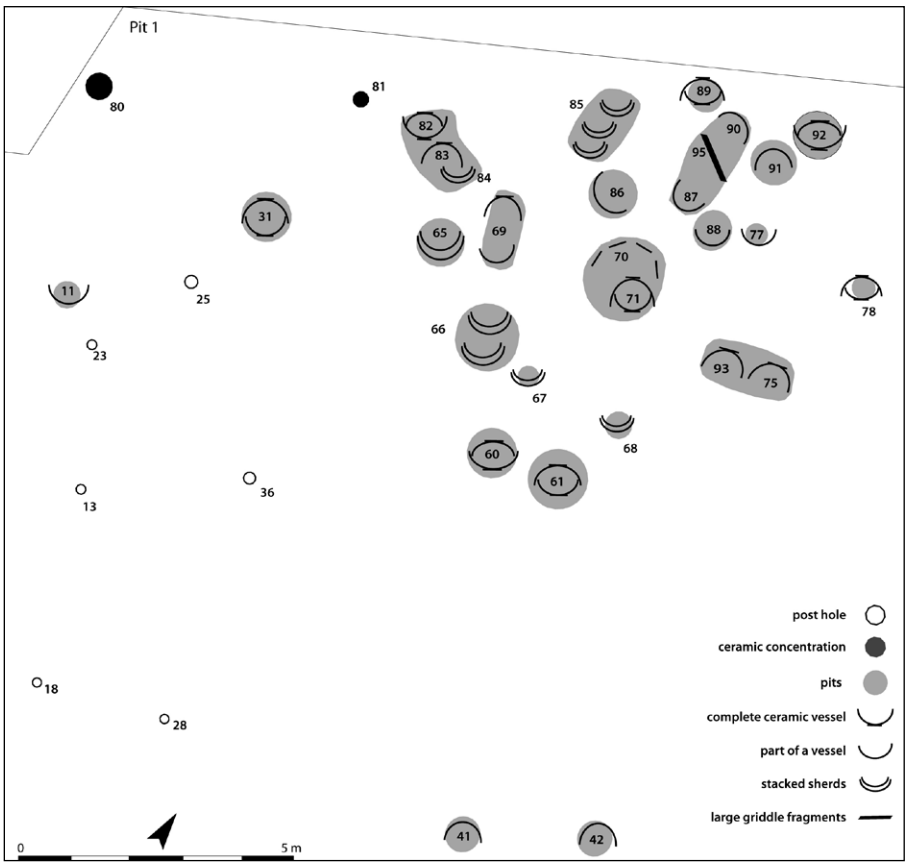


*Figure 7.5. The distribution of features and types of the ceramic depositions in Zone A.*

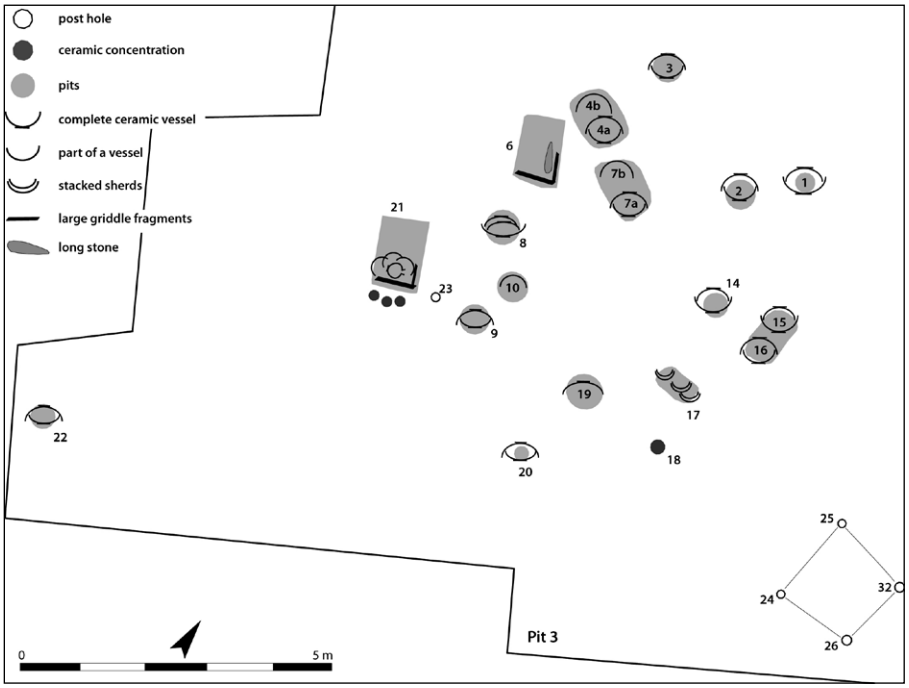


*Figure 7.6. The distribution of features and types of the ceramic depositions in Zone B.*

is therefore primarily based on the spatial configuration of the vessel depositions and their modes of enterrement.

Such a dense concentration of pits, that evidently indicates a clear voluntary action to deposit ceramics at one place, evokes a communal burial site or necropole. In this manner, the various burial modes suggest two major types of burials of which the primary and secondary ones are the most relevant. In addition, we suggest that the larger rectangular pits favour an inhumation, or primary burial, whereas a secondary burial is rather found in the contents of single or double depositions. No other important features were encountered during the excavation –indicating the presence of a habitation area– next to or among the alleged burial areas. The interpretation as a burial ground located at a distance from a habitation area (SBE?) underscores the interpretation of a necropole. Its isolated location is stressed due to its position on a slightly higher, albeit a small and stretched natural elevation surrounded and/or obstructed by means of two hydromorphic areas. More ceramic concentrations on this same elevation at both sides of the existing zones A and B are to be expected.

Interestingly, as mentioned above, the majority of the vessels in Zone B were filled with white fine sand, as can be found at the sandy ridge along the RN 1. If this sand was not transported by means of the bulldozer (which seems unlikely considering a distance of more than 100 m and with a minor creek in between), it might have been transported by the pre-Columbian population in order to cover the urns. After questioning the proprietor of this terrain, he confirmed the presence of two small "mounds" in the central area we were excavating. Perhaps this suggested the presence of a man-made mound, marking the location of the urns by means of a tumulus (Fr., *tertre*). The southern elevation (protected by law) was situated more than 125 m to the southwest of Zone A. It sat on a similar elevation and was also separated by means of a hydromorphic area on both sides. Unfortunately, we do not have any additional data on the articulation and distribution of the ceramic depositions in this area.

As mentioned before, members of the INRAP recently had come across another extensive funerary zone (Briand 2012a) along the RN 1. This suggests another funerary area, situated on the same Pleistocene elevation bordering the Holocene plains in the vicinity of a large, important river such as the Iracoubo River.

### *7.2.2 The types of depositions*

Various types of ceramic depositions were observed in both zones. They may differ in one and the same burial pit. As to this site, the following modes of deposition (Modes 1-5) were recorded:

**Mode 1** A single complete vessel placed in an upright position at the bottom of a pit. It was covered by means of a single complete vessel, positioned upside down above the standing vessel, which served as a lid and dubbed a "double" one. Clearly the most popular type of deposition, it consisted of the following features. Zone A: F 31, F 60-61, F 71, F 78, F 82, F 89, F 92; Zone B: F 1-4a, F 7a, F 8-9, F 14-16, F 19-20, F 22);

**Mode 2** A single complete vessel placed upside down in a pit. Zone A: F 69, F 75, F 83, F 93;

**Mode 3** A large fragment of a vessel (e.g. base, rim or half a vessel) placed in a pit. Zone A: F 11, F 69, F 77, F 86-88, F 90-91; Zone B: F 4b, F 7b, F 10;

**Mode 4** Large sherds piled up or stacked together in a shallow pit. Zone A: F 65-68 and F 84-85; Zone B: F 17;

**Mode 5** A deposition in a large pit set with griddle fragments against the pit wall. Each zone included two of these so-called "boxed" pits. Zone A: F 70 and F 95; Zone B: F 6 and F 21.

It is important to understand that these burial zones presumably represent the final moment of all funerary practices that may have continued the entire time span this necropole was functioning and possibly beyond. In fact, archaeological excavations in the Lesser Antilles and various ethnohistoric sources (cf. Appendix 4) have documented the complete cycle of funerary practices before, during and after the interment of the deceased, suggesting multiple manipulations of the body and redepositions (Hoogland and Hofman 2013). In this manner, for example, we may assume that Modes 2-4 were once deposited as a Mode 1. Moreover, they have been used or moved during post-interment rituals or served another burial ritual. In sum, this realm of the deceased is an active, living element of pre-Columbian society and village life as it is today among the Amerindians of the Guianas.

## The description of the pits

In total, 39 pits were recorded in connection with ceramics. They were dug into the sterile subsoil (Fig. 7.3). Now and again their outer limits were difficult to distinguish. In general, however, the dimensions of the ceramic deposition itself served as a good indication as to the size of the pit. The pit fills, frequently less dark than the sediment in the vessels, did on occasion contain a small number of sherds. The majority of the pits were filled with clayey, slightly humic sediment (e.g. goetite or limonite). This may be an indication of their depth as well as a possible reopening, or a partial interment, of a vessel. Nonetheless, any type of bioturbation is possible.

The shape and dimensions of the pits depend on the content, such as the dimensions of the vessel or perhaps a human body or bone bundles as to larger pits. Whenever multiple vessels were found in a pit, the general outline of the pit was irregular, suggesting the presence of various moments of digging and/or the expansion of the first pit, such as for F 70-1, F 87, F 95 and F 90 in Zone A. This phenomenon is a clear indication of an explicit knowledge of the location of a specific pit within a larger concentration, revealing perhaps (social) memory of burials, reflecting family bands.

The rectangular shaped pits or boxes (Mode 5) represent a dissimilar type of pit when compared to the more or less round pits of Modes 1-4. Their rectangular shape is accentuated by means of vertically placed griddle fragments: half a griddle or even one complete griddle (F 21) as to two pit walls, forming an angle. Zone B features two rectangular pits (F 6 and F 21), containing a large dolerite stone, weighing 14 kg (Fig. 7.7) and two small decorated ceramic vessels, respectively. This stone artefact was encountered at the flat bottom of this box, aligning the "panelled" wall. F 21 included numerous large vessel fragments. They were found on top of the two decorated vessels and may have served as a "cover" forming altogether a "house" with walls and a roof (Fig. 7.8).


*Figure 7.7. The dolerite stone found in boxed pit F 6 in Zone B.*


*Figure 7.8. The boxed pit F 21 in Zone B. One can clearly see the red painted bottle (EC 33) covered by large, thick body sherds. Note the stacked sherds next to the box's edge.*

Interestingly, Zone A does not feature clear rectangular pits, but does have two fairly large pits set with vertical placed griddle fragments. This pair is situated approximately in the middle of the concentration. One pit is set with multiple griddle fragments (F 70) and contains a Mode 1 ceramic deposition (F 71). The other is elongated and has a vertically placed griddle fragment set in the middle (F 95). This fragment separates two Mode 3 ceramic depositions, on each side of the griddle, placed in the centre (Fig. 7.5)

### *7.2.3 The post holes*

In Pit 1, six post holes were identified. Their diameters vary between 17 and 24 cm and their depths between 8 and 18 cm (cf. Fig. 7.5). Altogether they represent three pairs, situated to the southwest of Zone A, which may refer to some kind of wooden structure.

Pit 3 has five post holes of which four (F 24-26 and F 32) form a square, measuring *c.*1.5 x 1.5 m (Fig. 7.6). This possible construction is situated at c.5 m distance to the east of Zone B. The post hole diameters measure between 15 and 18 cm with a depth of between 21 and 32 cm. Although we have no radiocarbon dates regarding these features, a contemporaneity with the necropole is presumed because of (a) the absence of other post holes and (b) the presence of sherds found in vertical position against the wall of the hole, suggesting pre-Columbian mode of cornering post holes. In fact, the presence of sherds at the excavation surface revealed the existence of these post holes (Fig. 7.9). The function of this small construction remains uncertain, but it may well have been related to burial practices.

*Figure 7.9. A possible square wooden construction next to Zone B.*

### *7.2.4 The interpretations*

As mentioned above, no human bones were found in these ceramic depositions. Its interpretation as a burial site is thus primarily based on: (a) the spatial configuration of the ceramic depostitions and (b) the manner in which these ceramic depositions were put in the ground. It is true that similar depositions at other sites have yielded human bone in their contents (e.g. Awala Yalimapo, CSL Phase 3, LPB, Wayabo). However, a further microspcopical and chemical analysis is required in order to check this hypothesis. Perhaps one day we will be fortunate enough to find well-preserved urnfields in the Neotropics. Furthermore, it is also possible that only bundles of bones may have been placed next to the urns and/or into the urns, as witnessed in southern Amapá, along the Canal do Norte (Saldanha and Cabral 2012:22–29). Hopefully, for French Guiana, bones and other perishable items (e.g. food, small wooden objects, shell) or anything else small enough to fit into these kinds of urns will be discovered one day in the future.

At present, the interpretation of it being a human burial ground is probably the most valid. Dissimilarities can nonetheless be witnessed in the diversity of ceramic depositions which may provide more detail with regard to pre-Columbian funerary practices in general. In sum, simple ceramic depostitions (Modes 1-3) may suggest secondary (burnt or unburnt) burials and the "boxed pits" and/or griddle-sided pits (Mode 5) may suggest the primary or secondary burial of a chief. So-called "stacked" piles of ceramics (Mode 4) may suggest ceramic depositions of pottery sherds which played a role during funerary rituals, such as the (ceremonial) breaking or "killing" of drinking bowls (Boomert 2001:68).[191]

It is proposed here that the diversity in ceramic depositions reflects dissimilarities in social positions (status) in pre-Columbian society. As noted above, the elaborate Mode 5 desposition differs from the other modes and provides us with a fine example. Zone B has two boxed pits (F 6 and F 21), both housing various

191 Archaeologists working in the Maya region refer to ceramics that are intentionally broken during rituals as "killed" ceramics. These objects are removed from the dynamic culture in order to contest its use (Stanton et al. 2008:235).

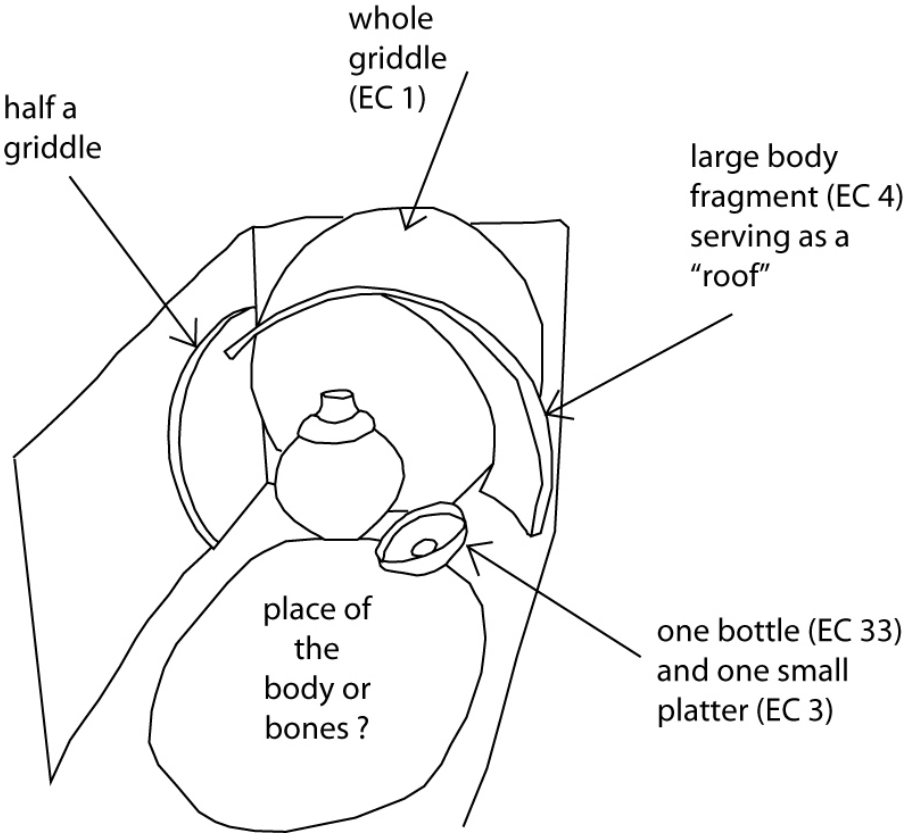


*Figure 7.10. The hypothetical reconstitution of boxed pit F 21 in Zone B.*

objects: F 6 contains a long dolerite rock (cf. Fig. 7.7) whereas F 21 contains two small decorated vessels. Both boxes are partially lined with standing griddles of which F 21 is also covered with large pottery fragments. A combination of a rectangular pit, "griddle walls" and a rounded cover or roof, evokes the shape of a house, created for the deceased individual (Fig. 7.10). Following this hypothesis, this burial mode reveals the specific cosmovision of life and death found among the pre-Columbian population around Iracoubo, suggesting the deceased are buried in "the house of the dead." Similar thought is also evoked when reading ethnohistoric and ethnographic sources, relating that primary graves are placed inside houses the owners subsequently abandoned by the owners. In this manner, this house represents not only the afterlife dwelling, but also a place to return to for the living in order to evoke memories of the deceased.

Interestingly, Mode 5 appears to be restricted with regard to each funerary zone. It may have played a central role, around which urns were added, eventually forming one compact necropole. This type of distribution refers to a possible ancestor or founder cult which is again comforted, if we further develop this idea, by means of the existance of a second funerary zone (and perhaps more on either side?) of which each may represent a lineage or clan tumulus. Similar configurations are known among the Late Historic and contemporary Palikur of the Urucauá River (Amapá): each social unit, or clan, has its own burial ground (Nimuendajú 1926:22; Passes 2004).

One or more burial grounds forming one extensive burial zone, represents a remarkable and identifiable feature in the landscape not only for Amerindians of a certain social or ethnic group as well as for the "other" (neighbouring) groups,

hereby marking possible territories. This is even more evident when burial grounds are marked by means of placing urns together or stockpiling them in order to create landscape markers by way of: (a) creating small mounds (Guapindaia 2001:167), (b) erecting stone slabs as in Amapá (Nimuendaju 2004; Cabral and Saldanha 2009) or even (c) digging (ring-) ditches in order to mark the necropole and/or ceremonial area (Mestre and Hildebrand 2011).

The marking of the spot of a restricted funerary area, next to possible *tumuli*, is evidenced at AM 41 by means of the absence of a multitude of other features, i.e. many more post holes and midden areas. The various types of pits suggest that this quite small natural elevation exclusively served funerary purposes. The hearth pit of Pit 2, the supposed wooden structure next to Zone B and another small post hole cloud next to Zone A are indeed considered part of this funerary site. The presence of wooden structures next to the core areas may suggest actitvities related to mortuary rites (e.g. food production, feasts or celebrations, incineration, defleshing) notwithstanding that these activities may have been performed anywhere else and not in particular on the burial site.

Comprehending the entire cycle of mortuary rites by means of archaeological data remains difficult without the assistance of ethnographic and historical data. Numerous excavations in the Lesser Antilles, where human skeletal remains are very often well-conserved, have evidenced the complexity of primary burials in this region during the Early and Late Ceramic Age (Hoogland 1996; Altena 2007; Hoogland and Hofman 2013). In Lowland South America and, in particular, the southern and southeastern Guianas bordering the Middle and Lower Amazon River offered an abundance of primary and secondary urn burial sites attributed to the LCA. In certain areas, they have also evidenced anthropomorphic urns, of which the Marajó, Maracá and Aristé examples probably represent the most exquisite ceramic funerary art on the Lower Amazon River (Schaan 2001; Guapindaia 2001; Rapp Py-Daniel 2015; Saldanha and Cabral 2012). It is opined that urnfields represent a mayor aspect of the LCA society in the eastern Guianas (see below).

## 7.3. The ceramic study

### *7.3.1 Introduction*

This inventory presents all the ceramics found in both zones, weighing in total 173 kg.[192] Having photographed the ceramics in the field per feature, the vessels were bagged and washed. As to this investigation, the ceramic study –which the present author conducted in August 2012– was not included in the fieldreport. Neither time nor money was available in order to carry out a ceramic analysis. Due to recent disturbance of the top layer (e.g. the destruction of vessels and high fragmentation) the ceramics were not counted, only weighed. After six years at the State Depot of the SA (Cayenne), the bags were destroyed by animals (mainly *piang* or opossum). Moreover, irresponsible users had mixed up their contents.

This ceramic study is primarily based on complete vessel shapes and the variety of rim profiles, represented by means of 74 constituent elements (EC) measuring more than 5 cm². All these diagnostic elements comprise ceramic material taken

192 A condensed version of this ceramic study combined with the LPB study has been published in *Boletim do Museu Paraense Emílio Goeldi* (van den Bel 2015).

from pit features. They belong either to Zone A (N=41) or Zone B (N=33) and reveal a larger quantity of ceramics as to the former zone.[193]

The goal of this research is to establish a catalogue of the vessel shapes and, if possible, gain insight into the vessels types found in each zone in order to discover any (dis)similarities.

### The production modes

The sole manufacturing technique observed with regard to these recipients is the coiling technique. Only griddles and one collar fragment (EC 58) evidence the application of the lumping technique by means of superposing two clay cakes.

The paste contains various non-plastic elements which the potters may have used as a temper. In total, the naked eye spotted four modes: (a) a mineral, (b) a vegetal, (c) mixed and (d) a grog temper (pounded potsherds) of which the latter is the most popular (80%). The attribution to a specific mode was based on the dominant presence of a specific non-plastic. For example, grog tempered sherds also contain a minor portion of sand and/or ash, but the dominance of grog was found to be the most important element. Technically, it is probably more exact to refer to these pastes as a mixed temper. Further microscopical analysis is needed in order to determine these opinions. *Caraipé* or *kwepi* tempered sherds are rare (N=1). However, as mentioned before, *kwepi* has been observed in minor quantities in mixed temper but, generally speaking, it is not an important temper with regard to this site (Table 7.2).

Firing methods were also determined by means of the naked eye. They were grouped in four major colours: (a) red all-over, (b) orange to brown all-over, (c) dark centre (grey/black) with lighter margins and (d) a dark colour all over (grey or black) (Rye 1981:116, Fig. 104). The two latter colours are the result of a firing technique in a reducing environment (63%) which is predominant. The first technique reflects an oxidizing environment (7%) and represents the least observed firing technique. In general, the popular grog tempered ceramics are preferably fired in a reducing environment (48%).

## *7.3.2 The constituent elements*

The EC-count (N=74) contains 15 decorated individuals and thirty-three complete vessel shapes (Annexe 5.2.3). We counted 62 rims, 40 bases and five griddles (N=107). There were also three re-used rims: that is to say, the lower part of a vessel broken at the keel was repaired and thought to have served as an unrestricted open vessel. Remarkably this type was only registered with regard to Zone B.

### The rims

The diversity of the rim profiles observed during this study made it possible to establish eight modal series (SM) (Table 7.3; Figs. 7.13-4). The principal diagnostic elements of the rim profiles regarding morphology are rectilinear, concave and convex shapes as to open and restricted vessels (SM I-III and SM V-VII) as well as the presence of keels and collars, i.e. SM IV and SM VIII respectively. The most important series are SM I-III and SM V, the others are less relevant. Specific labial

193 We count one possible "double" number (EC 10 = EC 11) and two rims which have not been drawn.

| | | | Mode | N |
|---|---|---|---|---|
| Mineral (7%) | **1** | sand | 11 | 5 |
| | | sand + mica | 12 | 0 |
| | | sand + mica + black minerals | 13 | 0 |
| Vegetal (1%) | **2** | charcoal particles | 21 | 0 |
| | | ash particles | 22 | 1 |
| Mixed (12%) | **3** | charcoal + minerals | 31 | 5 |
| | | ash + minerals | 32 | 4 |
| Grog (80%) | **4** | pounded potsherds | 41 | 59 |
| | | | | **74** |

*Table 7.2. The distribution of temper modes*

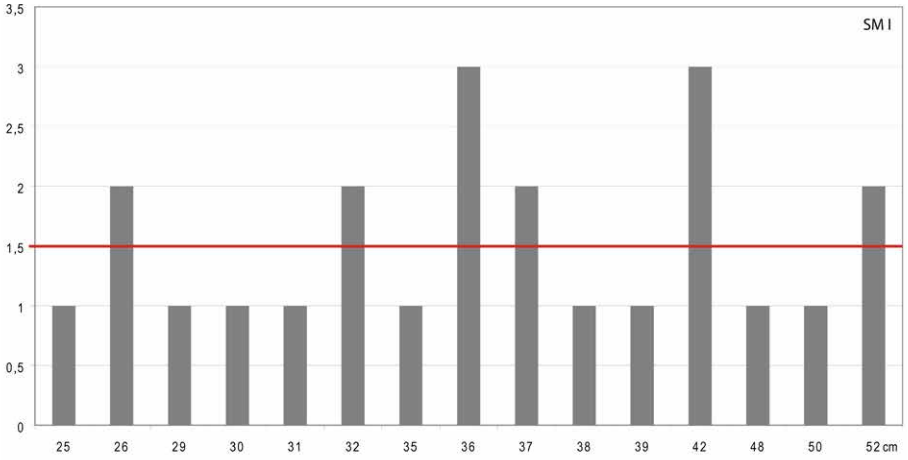


*Figure 7.11. The diameter frequency of SM I.*

treatment was only recorded with regard to SM III and the re-used vessels (SM 0). The thickness, diameter, firing, decoration and paste were recorded with each EC. A quick assessment learns that open vessel shapes are predominant with regard to this ceramic assemblage (72%).

**SM I** This series represent the rims of open vessels with a rectilinear (N=15) or a slightly convex profile (N=9). It is by far the most popular series (N=24, 39%) and represents nearly 50% of all ECs and is considered the most important product of this site (Table 7.3). The distal ends of the lips are rounded (54%), flattened (25%) or tapered (21%). The wall thickness varies between 6 and 11 mm.

The diameters of SM I vary between 25 and 52 cm.[194] Taking the mean (36 cm) of the sum of the most frequent number as a possible discriminating element, one observes several peaks or higher frequencies as to this series at 26, 32, 36, 37, 42 and 52 cm (Fig. 7.11). These peaks reflect vessel sizes of similar morphological shapes which are predominated by means of diameters measuring over 25 cm in circumference. The importance of grog temper is notable for this series (83%). In combination with a reducing firing technique (58%) it is the most important production technique recorded for this site. All other possible combinations of temper and firing technique are of less significance to this series. Interestingly, this series features no decoration at all.

194 Diameters over 30 cm are per measured per 2 cm.

**SM II** The second most important series, SM II, is of less significance than SM I albeit more relevant than the remaining series (Table 7.3). It comprises of restricted vessels with convergent or highly convex rim profiles (N=12, 19%). The lips are rounded (75%), tapered (16%) or flattened (8%) and the wall thickness varies between 7 and 12 cm. The diameters evolve between 23 and 52 cm and a frequency peak is observed between 32 and 28 cm. This reflects the predominance of a ceramic recipient with large diameters and illustrates the consistency in the manufacturing of these vessels (Fig. 7.12). The preponderance of a grog paste is evident (75%) as is also the case regarding reduced firing (75%).

In contrast to the most dominant series, this second best series counts three decorated vessels of which two feature a red slip (on one vessel red slip is applied bifacially and on the other only on the exterior) and the third is adorned with a double-headed modelled appliqué. Red slip is the most common mode of decoration, but one vessel with modelled application (EC 35) is remarkable and differs from the bulk of the material. Furthermore, its diameter is very small (23 cm) compared to the average of this series and its sandy paste (No. 11) is striking too. It is nevertheless a very homogeneous and important series as to this site.

| SM | | Shape | Description | N |
|---|---|---|---|---|
| I | a | O | rectilinear profile | 15 |
| | b | O | convex profile | 9 |
| II | | R | convergent profile | 12 |
| III | | O | lip demarcation on the interior | 5 |
| IV | a | O | keeled pots | 2 |
| | b | O | keeled vessel | 4 |
| V | | O | boat-shaped vessel | 3 |
| VI | | O | bowls | 2 |
| VII | | O | platters | 2 |
| VIII | a | R | bottles (small) | 2 |
| | b | R | collared vessels (large) | 3 |
| 0 | | x | re-used vessels | 3 |
| | | | | **62** |

*Table 7.3. The rim series SM I-VIII.*

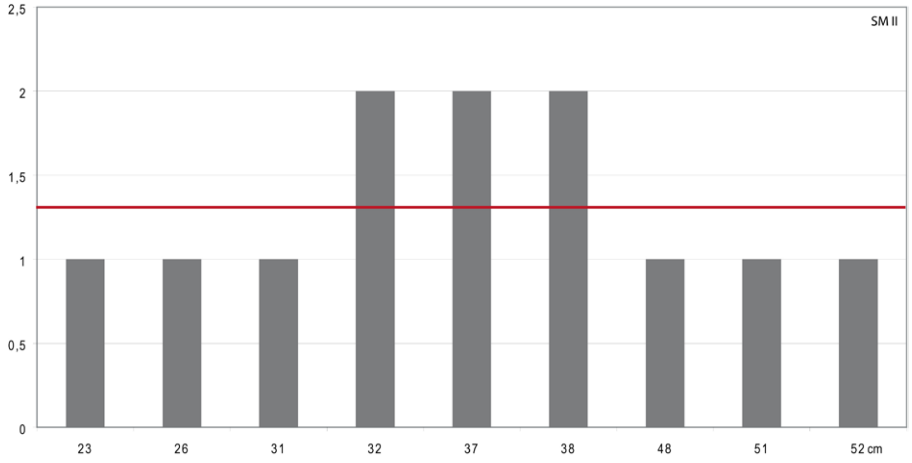


*Figure 7.12. The diameter frequency of SM II.*

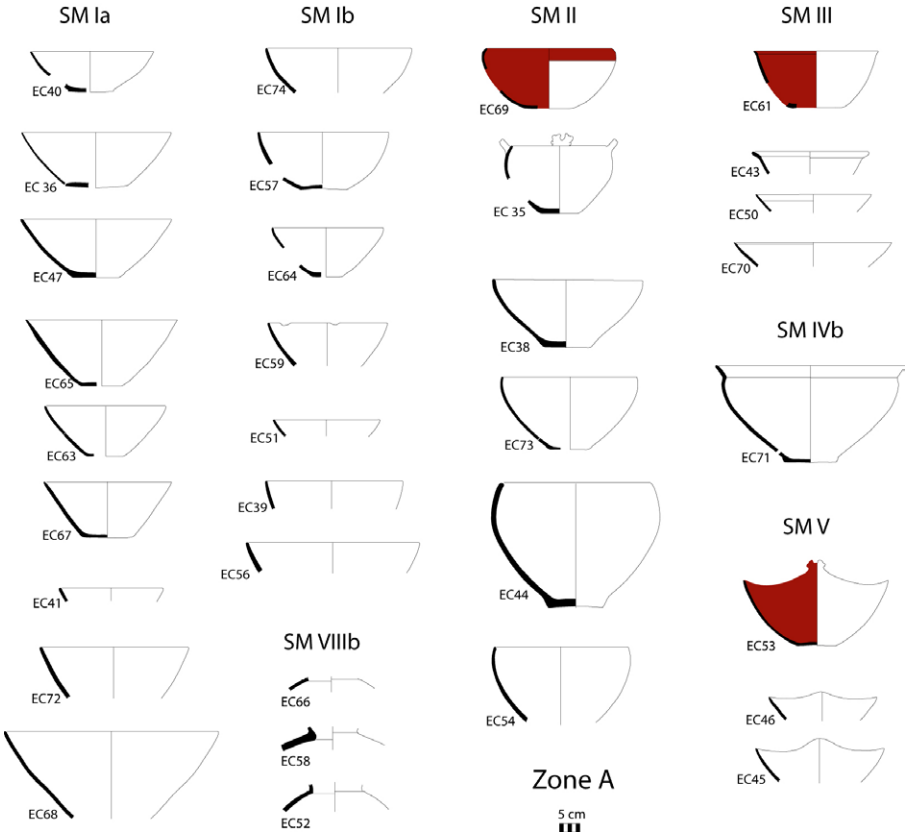


*Figure 7.13. The ceramics found in Zone A.*

**SM III-IV** and **SM VIII** These are minority series compared to the two previously discussed (Table 7.3). However, they occur more frequently than SM V-VII while featuring highly recognizable morphologies. The specific morphology of each series, demarcation, carenation and collar respectively, renders them dissimilar.

As to SM IV, we were able to distinguish the vessel height, resulting in small pots (SM IVa) and larger vessels (SM IVb). As to SM VIII we could distinguish a difference in size, resulting in small bottles (SM VIIIa) and collared, large jars (SM VIIIb). SM III featured one vessel with a red slip on the interior whereas the bottles of SM VIIIa included an extra strip of clay or thickening applied to the base of the collar. The SM IV series did not feature any decorated elements. However, its paste is mixed with sand and differs from the exclusively grog tempered SM III and SM VIII series, revealing a singularity with this keeled series.

**SM V-VI** and **SM VII** These infrequent series consist of seven individuals each of which represents distinct vessel shapes: (a) boat shaped vessels, (b) bowls and (c) platters respectively. Despite their less significant numbers, all are grog tempered and have at least one individual with a red slip decoration. The red slipped, boat shaped vessel EC 53 (F 65 of Zone A) is noteworthy. Apart from the red slip applied to the interior it features a double-headed modelled appliqué at the tip of higher rim part, i.e. EC 35.

**SM 0** represents the lower half of broken vessels of which the broken body edge is smoothed in order to serve as a vessel again.

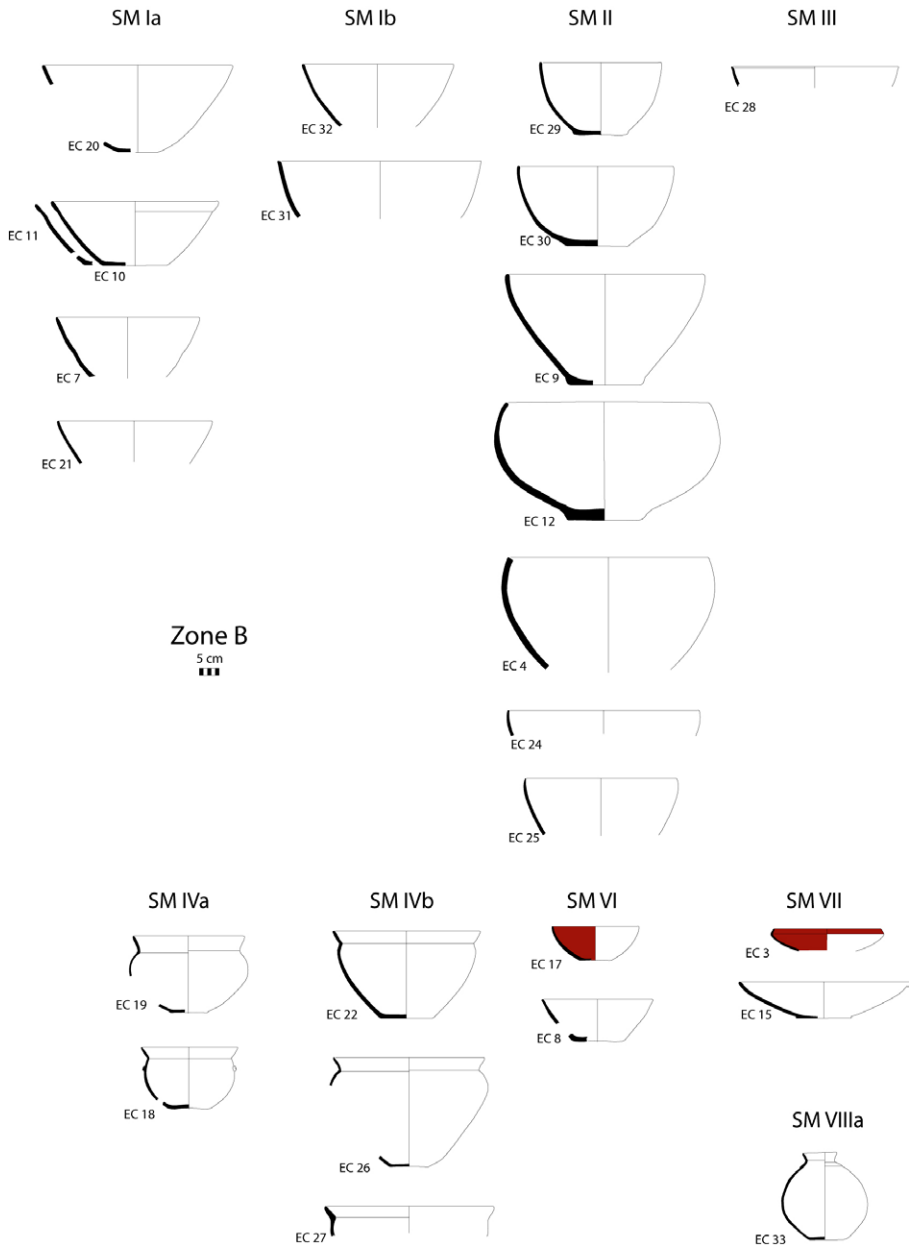


*Figure 7.14. The ceramics found in Zone B.*

## The bases

The base profiles consist of 40 individuals, or 37% of the total EC count. These can be divided into seven modal series (Table 7.4, Fig. 7.15a, b) which have been defined according to morphology: (a) flat bases (SM 1-3, 70%), (b) concave or dimpled bases (SM 4-6, 28%) and (c) annular bases (SM 7, 2.5%), of which the flat bases are dominant. Appendicular or pedestalled profiles are the most frequent type of profile with 48%. It has to be noted that bases often showed traces of (secondary) fire, resulting in fragmented and fire-eroded base fragments (e.g. EC 9, EC 19, EC 42).

| SM | Type | Profile | N |
|---|---|---|---|
| 1 | flat | convex | 4 |
| 2 | flat | straight | 9 |
| 3 | flat | appendicular | 15 |
| 4 | concave | straight | 4 |
| 5 | concave | appendicular | 4 |
| 6 | concave | convex | 3 |
| 7 | annular | | 1 |
| | | | **40** |

*Table 7.4. The base series SM 1-7.*

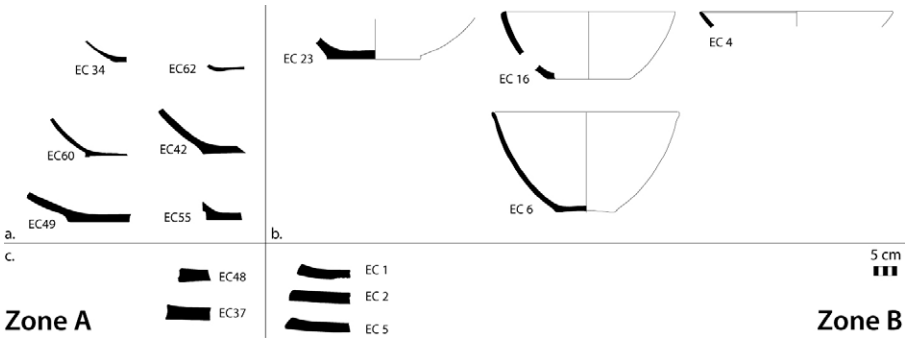


*Figure 7.15. (a) The bases (without rim profiles), (b) SM 0 and (c) the griddles per funerary zone.*

**Flat bases** A subdivision was established with regard to flat bases (N=28) according to the angle and smoothness of the first coils with: (a) a convex profile (SM 1, 14%), (b) a straight profile (SM 2 and SM 2a, 38%) and (c) an appendicular profile (SM 3, 63%). The grog paste (79%) dominates this series again in combination with a reducing firing technique. The majority of the flat bases have a diameter ranging between 6 and 12 cm and two larger ones measure 16 and 18 cm. The thickness varies between 8 and 18 mm. One very thick, flat base measures 21 mm! There appears to be no clear relationship between temper, diameter, and thickness. Two bases have red slipped interiors.

**Concave bases** These bases (N=11) were subdivided into three similar groups: concave bases with (a) a straight profile (SM 4, 36%), (b) an appendicular profile (SM 5, 36%) and (c) a convex profile (SM 6, 28%). The thickness of these bases varies between 6 and 18 mm and the diameters range between 8 and 13 cm with one large diameter measuring 24 cm. Pounded potsherds are again the most frequent ingredient (81%) in combination with a reducing firing technique. Three bases have a red slip on the inside.

Only one **annular base** was recorded (EC 60) with a 15 cm diameter. It is grog tempered.

We may conclude that the bases reflect the same image as the rim profiles. Dominated by means of a grog temper and red slip as a decoration, they correspond with a homogeneous production. With regard to this part of the assemblage, appendicular bases may represent a certain trait or cultural marker.

### The griddles

Only five griddle rims were detected in this assemblage (Fig. 7.15c). Half or complete griddles served as standing objects in upright position –placed on their side– in order to create a wall-effect in the rectangular pits, i.e. F 21 in Zone B and F 70 and F 95 in Zone A). The paste consists of coarsely pounded potsherds and thickness varies between 22 and 28 mm whereas diameters measure over 60 cm. One griddle could be measured precisely (EC 1 measures 82 cm in diameter) since it was in one piece in pit F 21, Zone B.

## *7.3.3 The decoration modes*

The ceramic assemblage has few decorations (N=11): (a) seven red slipped vessels, (b) two double-headed modelled appliqués and (c) two thickenings around the base of the collar, amounting to *c.*10% of the total number of individuals (Annexe 5.2.4).

The decorative repertoire is rather simple and consists mainly of the uniform application of red slip (64%) to the interior side or to both sides. When applied to the outside, only the upper part is painted, forming a "band" of red slip around the vessel. The absence of any incisions, punctations and finger indentations as well as other coloured modes, such as white, white-on-red, and/or polychrome slipping or painting is noteworthy.

## *7.3.4 The synthesis of the ceramic assemblage*

### The ceramic assemblage of AM 41

When discussing the ceramic assemblage of AM 41 it is important to point out that all ceramics were found together, constituting one large funerary zone, situated on a stretched natural elevation separated from the (supposed) village, situated to the north.

The ceramics were found in two concentations (Zone A and Zone B) in which ceramic vessels were deposited in various positions and manners. Although no (human) bone, either burnt or unburnt, was observed in the pits or pots, it is presumed that these ceramics represent existing, often domestic, vessels which were re-used for and during funerary rites.

The typological synthesis is based on 62 constituent elements including 33 archaeologically complete vessels. The morphological register declines around (a) simple, hemispherical bowls with rectilinear or convergent rims (SM I-II). Less frequent, but other characteristic vessels or series are: (b) hemispherical vessels with a lip demarcation on the interior (SM III), (c) keeled vessels (SM IV), (d) bottles (SM VIIIa), (e) jars (SM VIIIb), (f) boat shaped vessels (SM IV), (g) small bowls (SM V) and (h) platters (SM VI).

Decoration is rare and composed of the application of a uniform red slip to the interior and/ or outside wall, a thickening around the collar and double-headed appliqués. Omnipresent features are appendicular bases, pounded potsherds as a temper and a reduced firing technique. Altogether it represents a homogeneous complex in space, but eventually no (minor) differences between the ceramics from both funerary zones could be distinguished.

## The cultural affiliation

The results of this ceramic inventory must evidently first be compared to the study of the 2007 Earthmovers' excavation at Sable Blanc Est (Rostain et al. 2008), situated to the north along the RN 1 (Fig. 7.2). However, the participants in this project never carried out the ceramic study of the latter site. Although features were plotted and described, sadly a full inventory of the ceramics is lacking. The report simply stated that:

> *Dès les premières prospections, il est apparu que la céramique est clairement de style Barbakoeba (Boomert 1993; Rostain 1994; Rostain & Versteeg 2003b; Versteeg 2003). Nature et qualité de pâte, état de surface et épaisseur, décor (rare) ne laissent aucun doute sur l'origine de ce matériel. Par ailleurs, le site de Sable Blanc Est est localisé au centre du territoire Barbakoeba, qui s'étend du fleuve Kourou en Guyane française au fleuve Cottica au Suriname, soit près de 250 km de long (Rostain 2004).* (Rostain et al. 2008:37)

These arguments are further elaborated in a statement that a "preliminary study" of the ceramic material indicated that visible, or apparent, coils (Fr., *colombins apparants*) and modelled appliqués are the dominating decoration modes of the excavated material, hereby including photographs of decorated sherds (Rostain et al. 2008, Figs. 31-2). In short, we are not able to compare the two assemblages regarding vessel morphology, pastes and decoration modes. We can only rely on the mere presence of (certain) decoration modes which have not been quantified either as to the SBE excavations.

Fortunately, Claude Coutet (2009:326–351) selected 881 sherds from the 2007 excavations taken from various features and surface collecting in order to serve her technological analysis. Acknowledging the omnipresence of grog (and mixed) as a temper in combination with reduced firing and characterising appendicular base, she proposed seven Types which correspond to the series as proposed for AM 41 (Table 7.5), suggesting the presence of similar vessel shapes as well as the contemporaneity of both sites (ibid., p. 351).

From this point of view, we can acknowledge the presence of double-headed appliqués, but must deny the presence of visible coils with AM 41. On the other hand, the resemblance between EC 17 of AM 41 vs. the red-slipped boat shaped vessel found in F 84 at SBE is noteworthy. Thus, both sites share certain decorative elements common to the entire littoral between Hertenrits and Kourou. However, an important difference is observed when comparing the sites themselves. Although both have ceramic depositions, AM 41 represents a funerary site alone whereas SBE appears to be a multi-occupation and/or mixed site, revealing both habitation and funerary features in the same excavation pit. Furthermore, the SBE radiocarbon dates (N=7; five hearth pits, one midden area and one urn burial) range from between 700 and 950 BP (McKey et al. 2010, Table S1) whereas the only AM 41 date is earlier, predating the excavated area of SBE.

Despite the lack of more comparative archaeological material between these sites, the geographical separation of both remains an important factor and needs further elaboration. The 2011 INRAP survey along the RN 1 between the SBE excavation and the village of Iracoubo provided complementary data on this question (Briand 2012a). It indicated that the entire stretch of elevated, Pleistocene land along this road, yielded almost exclusively ceramic depositions perhaps revealing one huge burial ground (Briand 2012a:93). The inventory of the

| Type | Series |
|---|---|
| 1a | SM II |
| 1b | SM V |
| 2 | SM IV |
| 3a | SM I |
| 3b | SM III / SM VII |
| 4a | SM I |
| 4b | SM I |
| 4c | SM VI |
| 5 | SM VIII |
| 6 | SM VIII |
| 7 | SM II ? |
| 8 | x |

*Table 7.5. The comparison between SBE Types as defined by Coutet (2009) vs. AM 41 modal series.*

exhumed ceramic material recorded apparent coils, indented rims, punctations, red slip and modelled appliqués, as observed at SBE. In addition, this survey also detected red-on-white painting (Briand 2012a, Figs. 89–92). Vessel shapes (ibid., Figs. 87-8) present us with similar characteristics when compared with AM 41: a thickened collar, open vessels (similar to SM 1a) and boat shaped vessels; all with a paste containing pounded sherds. Briand finally attributes these ceramics to the 'Barbakoeba culture and the Arauquinoid Tradition' (ibid., p. 81).

Here, we may also point out the morphological similarities between the collared vessels SM IV of Zone B and those found at BPS 13 (Vacher et al. 1998:225, Plates 9.159, 161, 167-8), BPS 172 (ibid, p. 237, Plates 26.106, 108-9), but also with regard to the boat shaped vessels of SM V, Zone B vs. BPS 172 (Vacher et al; 1998:236, Plate 25.99). Striking similarities can be found in EC 12, Zone A vs. BPS17 (Vacher et al. 1998:230, Plate 16.29-30) which included a double urn burial.

Another LCA site featuring similar decoration modes is Bois Diable/La Sablière, located on a Holocene sand ridge, west of the present-day village of Kourou (see Fig. 2.1). This site was excavated during the early 1990s (Barone-Visigalli and Prost 1991; Thooris 1994a) as well as in 2008 and 2009 during the Earthmovers Project (Rostain et al. 2009, 2010). According to Rostain et al. (2010:25), Bois Diable revealed ceramics attributed to two complexes: (a) Barbakoeba material was found, but the majority can be attributed to (b) the later Thémire occupation as he concluded some 20 years ago (in Barone-Visigalli and Prost 1991:52)[195].

The latter report contains Rostain's ceramic inventory of the 1991 excavations of which 7% is decorated (N=1306). A detailed analysis of 112 potsherds enabled the identification of four types based on paste (grog, sand or mica), but also on three types of rims and decoration modes of which complex white-on-red painting, vertical incisions (crossed and parallel), quadrillage and triangles are several of the observed modes (Rostain in Barone-Visigalli and Prost 1991:31–33).

As to the next salvage excavations at Bois Diable in 1993, the ceramic analysis carried out by Catherine Thooris (1994a:14–23) on 598 rims and 150 bases confirmed the abundance of grog as a temper and the presence of similar decoration modes, suggesting an ascription to the Kwatta and Barbakoeba complexes of Suriname (ibid., p. 26). Notably the indented clay-strips applied just below the rim, the apparent coils and the biomorphic modelling (eyes) represent important Barbakoeba markers according to Boomert (1993), also being important decorative aspects of this site (ibid., p. 20, Plates 14-15 and 17). The dominant vessel shapes are open, concave and convex vessels as well as the restricted convex rims which, all in all represent *c.*66% of the assemblage (ibid., p. 19).

There is (once again) no ceramic inventory included in the Earthmovers reports to continue this comparative analysis. However, Claude Coutet (2009:297–325) selected 846 potsherds for analysis from three different concentrations and several features. Her analysis confirmed the abundance of grog as a temper and the important application of red and white-on-red painting as decoration (7%) whereas incisions are rare, probably due to preselection in the field. Coutet distinguished ten types, confirming the rarity of restricted vessels at this site as well as the abundance of open everted bowls and platters with modelled lips (flattened on the inside or thickened on the outside) (Table 7.6).

195 According to Rostain's analysis, Koriabo sherds as well as *kwepi* tempered material was identified at La Sablière (Barone-Visigalli and Prost 1991:52).

| Type | Rims | Shape | Profile | % |
|---|---|---|---|---|
| | B | O | tangent | 1 |
| 3, 8? | C | O | concave | 32 |
| 1, 7 | D | O | rectilinear | 12 |
| 2, 5a, 6 | E | O | convex | 16 |
| 9 | F | O (vertical) | rectilinear | 9 |
| | G | R | concave | 5 |
| | H | R | rectilinear | 6 |
| 4, 10 | I | R | convex | 19 |
| Coutet | Thooris | | | |

*Table 7.6. The comparison suggested with regard to Bois Diable/La Sablière between the Types as defined by Coutet (2009) vs. the series defined by Thooris (1994a).*

In sum, the LCA material from AM 41 is (slightly) different when compared to the material from the above-mentioned sites. However, it also shares a number of traits which can indeed be attributed to a larger, perhaps regional ceramic entity, such as the alleged Barbakoeba complex. However, in my view, when considering the large distribution of the Barbakoeba style (roughly between Paramaribo and Kourou), we must pay attention to the diachronic local patterns during the LCA. In this manner we must adjust and/or enrich the original Barbakoeba complex, as Boomert (1993) developed for eastern coastal Suriname, on a regional level, i.e. regional diversity, in stead of simply contenting ourselves to attach the detailed results to an existing tradition. In fact, the proposed regional ceramic diversity of Barbakoeba is strengthened by means of the existence of various ways of primary and secondary burials in the coastal zone of the alleged Barbakoeba area and beyond. The LCA littoral population of the eastern Guianas may possibly share the concept of secondary burials in special burial grounds or necropole albeit materialized in various local and regional ways (see below).

## 7.4 The Iracoubo necropole

In addition to cultural affiliation, we would now like to explore the possible existence of a so-called "Urn-Horizon" during the LCA as to the eastern Coastal Guianas with AM 41 as a starting point.[196] The excavations at AM 41, SBE and recently along the RN 1, have revealed various burial grounds, mainly consisting of urns, perhaps forming a single, but diachronic burial ground, situated to the west of the present-day village of Iracoubo. Although similar extensive data are not readily available with regard to adjacent areas, the existing data allows us to suggest the existence of other LCA burial grounds in western French Guiana and Suriname. Hitherto, exclusive burial sites were thought to be located in eastern French Guiana, notably near the Brazilian border:

> *Les sites funéraires archéologiques connus en Guyane sont toujours localisés en dehors des sites d'habitat. Seules les sépultures secondaires, mises en urne après incinération ou après décomposition du corps, sont pour l'instant repérées. Les*

196 Although the term Horizon is obsolete in South American archaeology, it is applied here as discussed by Willey and Philips (1958:32). The notion of urns is susceptible to be understood from the perspective of the so-called 'urnfield-cultures' as found in Middle Europe during the Late Bronze Age i.e. *c.*1000 BC when, albeit briefly, various populations utilized highly similar interment modes over a large area.

> *nécropoles les plus remarquables et les mieux connues sont localisées dans les grottes des collines de Ouanary, qui ont livré des urnes funéraires élaborées.* (Rostain 1994a:103)

The distribution of urn burials as to the LCA along the littoral of the eastern Guianas enables us to establish three important funerary areas from the east to the west:

a. The region between the Cayenne and the Araguarí Rivers. In this area, Late Aristé anthropomorphic urns are most often discovered in rock shelters or in deep pits (Br., *poços*) which are geographically separated from the village (knowing that Aristé habitat sites have not been excavated in French Guiana). These urns as well as other beautifully decorated pottery found in the same context are known since the first excavations by Emílio Goeldi in Amapá (Goeldi 1900; Nimuendajú 1926; Meggers and Evans 1957; P. Hilbert 1957; Cabral and Saldanha 2007, 2009).[197] In French Guiana, we are familiar with Late Aristé urns since the work of Hugues Petitjean Roget (1983, 1995a) and Stéphen Rostain (1994a) during the 1980s at the Ouanary Hills and more recently by means of the INRAP excavations concerning the international bridge across the Oyapock River (Mestre and Hildebrand 2011);

b. The Island of Cayenne which probably represents a stand-alone and/or transition area between the Late Aristé and Barbakoeba ceramic complexes. The Cayenne sites feature secondary urn burials as well as primary burials covered in ceramic debris placed in rectangular pits (cf. Chapter 9);

c. The Barbakoeba culture area roughly located between Paramaribo and Cayenne with at least three known necropoles: (i) the Kwatta-Tingiholo site near Paramaribo, (ii) the Awala and Yalimapo/Les Hattes site at the forked mouth of the Maroni and Mana Rivers and (iii) Iracoubo. Other probable sites are Organabo and Pointe Brigandin (Sinnamary River), of which the latter yielded one possible urn burial (Fig. 7.16). The former is solely known through local rumours –as was the case with Iracoubo prior to the 2006 excavations. Here we will shortly discuss the burial grounds of the Lower Maroni and Mana Rivers as well as the burials in the vicinity of Paramaribo alone in order to establish their (dis)similarities.

## The Mana/Maroni River

Between the second half of the 1980s and 2000, only two urns were reported by the local Kali'na population of the villages of Awala and Yalimapo/Les Hattes of which we have written proof (Cornette 1987; Janin 2002; Thomas 2002). The first, found in 1987, contains a secondary burial in a spheric urn which was broken at the base of the collar. It was covered with a large open bowl.[198] In 1997, road reconstructions at the CD 7 near Awala in the so-called Zone IV, as described by Alain Cornette (1987) revealed the other composite, spheric

197 Further to the south, the urn burials of the Mazagão and Maracá ceramic complex are indeed part of this "Late Ceramic urn Horizon." It is not included in this discussion, but recent excavations along the Lower Amazon River banks by the IEPA have shown the co-existence of Mazagão, Maracá, and Koriabo (Saldanha and Cabral 2012).

198 The Kali'na of Awala considers this urn a cachiri vessel and the lid a water container (Cornette 1987).

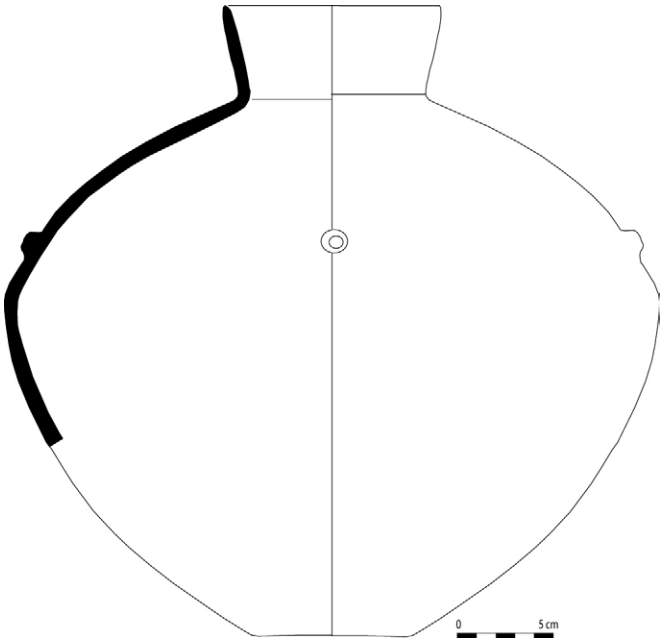


*Figure 7.16. 'Profil de jarre à papule appliqué' found at the site of Pointe Brigandin, Lower Sinnamary River (adapted from Petitjean Roget 1995b).*

urn which was (intentionally?) broken at the neck. It featured four vertical lugs applied to the upper wall just below the base of the collar (Sylvie Jérémie, personal communication 2010). Both urns contained human bones of which the latter yielded a date of 865 ± 40 BP (PA-1945) (Thomas 2002:15; Janin 2002:41).

In addition to human bones, the 1997 urn also contained animal bones, such as agouti (*Dasyprocta agouti*), acouchi (*Myoprocta acouchi*), paca (*Agouti paca*), capuchin monkey (*Cebus* sp.) and the cariacou (*Odocoileus* sp.), as determined by Sandrine Grouard and Eric Pellé (2002).[199] According to the latter authors, this could possibly reflect certain priviliges for these animals as offerings. It is to be presumed that the local Kali'na population who discovered this site, once a (pre-Columbian) burial ground, have found more urns:

> *La zone IV est la plus littorale: elle est localisée entre la piste et la mer, dans le secteur des carbets de passage. De cette zone, provient une urne funéraire quasi entière et plutôt énigmatique, d'une part par sa pos[ i ]tion et d'autre part par les deux récipients qui la composent. Sa fonction ne fait aucun doute, car une partie du contenu se trouvait encore associée à l'urne elle-même.*
>
> *Le premier problème posé est celui de sa position, qui n'était pas, au moment de la découverte, la position normale d'origine. Ici, au lieu d'être verticale, elle se trouvait couchée et en partie écrasée. Après avoir obtenu quelques renseignements de la part de William Daniel, le chef du village (Il nous a en effet signalé que « autrefois » la mer est venue jusqu'à l'emplacement des actuels carbets de passage, et qu'à d'autres endroits du littoral (vers le S.E.), d'autres poteries de ce type avaient été découvertes par les flots), il semblerait que ce fut la mer, lors d'une transgression, qui déterra l'urne qui ce coucha sur le côté.*

199 Interestingly, many animals bones (birds, rodents, crab) have also been identified in several burial pits at the LCA site of Curiaú Mirim 1 situated on the left bank of the Amazon River (Gambim 2012).

> *Le second problème est peut-être lié en partie au premier : l'urne est composée de deux récipients qui ne sont ni l'un ni l'autre destinés à cette utilisation à l'origine. Le récipient principal est une grande jarre à cachiri, et le second, qui apparemment coiffait le premier, est une vasque à eau. Il est possible que [l]a vasque ait été placée par la mer. Et pourquoi avoir employé une poterie d'usage habituellement domestique ? Il est certes encore trop tôt pour pouvoir répondre de manière plus sûre; nous attendons les résultats de l'étude complète de cette poterie qui est en cours.* (Cornette 1987:82)

More recently, another restricted, spheric urn has been reported from Alatou near Awala. It featured a thickening around the base of the collar sharing a characteristic trait with the CSL Phase 3 (CSL EC 100 vs. Coutet 2009:343) and yielded two dates corresponding to the CSL date: Alatou 1 (ETH-40724, 805 ± 30 BP) and Alatou 2 (ETH-41721, 885 ± 40 BP) (Coutet 2011, 2014b; Coutet et al. 2014) corresponding to the SBE series. According to Thomas Romon, the Alatou 1 urn (Tukuali 2) contained the remains of two young adults and one newborn which had been exposed to fire (Coutet et al. 2014:208).

## Paramaribo

To the west of Paramaribo, several burials were unearthed at the artificial mound site of Hertenrits. Here various burial modes were recorded: primary and secondary urn burials (Geijskes 1964; Boomert 1980). The Peruvia-2 site, west of the Coppename River, yielded two urn burials, one of which had a ceramic lid and contained human remains (Versteeg 1985:722–723).

However, the only necropole near Paramaribo is probably the Kwatta-Tingiholo site. The excavations Geijskes carried out during the 1950s revealed 38 primary burials, of which four skulls were covered with an inverted complete pottery vessel serving as a lid, next to secondary urn burials which probably contained the complete inhumated body (Khudabux et al. 1991). For a number of human skulls, supplementary research resulted in identifying voluntary cranial deformation (Tacoma et al. 1991).[200]

Two radiocarbon measurements of human bone have dated this ensemble between the 7th and 12th century AD (Versteeg 2003:159). Recently, in order to study the cranial deformation, Anne van Duijvenbode reviewed the entire "Geijskes" collection, containing human remains from Kwatta-Tingiholo (N=25), Hertenrits (N=8), Okrodam (N=3), Saramacca (N=4), Waterkant (N=2) and Aruba (N=1), at the University of Leiden (van Duijvenbode 2012).

## The detection in the field

Although urn burials appear to represent the most important burial mode as to the sandy coastal ridges between Sinnamary and Paramaribo during the LCA, one also finds other types of burials, such as found at Crique Sparouine and Wayabo. However, these sites are situated in the (direct) hinterland of the coastal plains and are located within the habitat, suggesting a coexistence of the living and the dead. Another possibility is that the dead have been buried in abandoned houses, creating a dwelling for the dead and in this matter inferring to an afterlife, as suggested regarding the "boxed" burials (cf. Fig. 7.10).

200 On the cranial deformation among the Callinago, see Breton (1665:145-6).

In contrast to the sober urns of the western French Guiana plains, those found at the Oyapock River often take complex shapes and are beautifully painted. This renders them priced objects of interest to explorers and researchers. The interest in such ceramics, despite the fact that these sites are situated in remote areas, probably frustrated the discovery of other types of burial grounds such as the more modest necropole of AM 41, albeit the fact that this type of urn necropole was already known from the early 20th century at, for example, Caviana Island (Nimuendajú 2004:67–90).

More importantly, burial sites are more easily recognised when human (burnt) bone is detected which is often better preserved in urns placed in rock shelters than in the open air, especially in the Neotropics but there are (always) exceptions to be found in Suriname (Khudabux et al. 1991) and Amapá (Gambim 2012). Furthermore, in order to assure the presence of a (non-marked) burial ground during excavation, an extensive surface needs to be excavated in order to infer the presence of a necropole and a certain spatial organisation within the necropole as the case regarding a burial ground within a habitation ground site. The latter case is most often observed during operations in compliance archaeology, as seen at larger excavations (e.g. BPS 230, BPS 172, Katoury, Eva 2, Crique Sparouine, LPB, CSL, Cimetière paysager Poncel). It is rare to encounter a necropole as they appear to be confined to rather a small or restricted space and are often buried under the forest floor, as pointed out by means of the necropoles of AM 41 and Pointe Morne.

## Conclusion

Based on a handful of radiocarbon dates, the contemporaneity of AM 41 and SBE is difficult to apprehend. However, instead of simply stating this site is a Barbakoeba site, we must look further into the varied elements of this large LCA palympcest and reconsidering 250 years of occupation. A range of possibilities is suggested here considering the status of the various sites and possible associations: (a) the AM 41 site represents a stand-alone funerary site and/or is linked to a nearby village, (b) the AM 41 site is a burial ground meant for certain members of society reflecting social stratification as suggested with regard to other "isolated" cemetaries in northeastern Amazonia (Guapindaia 2001), (c) the SBE habitation site represents simultaneously a habitation and funerary site, (d) the SBE habitation site is built on a former burial ground and (e) the SBE habitation site shifts on the sandridge and hence the abandoned part of the village serves as a "village of the dead." In addition, regarding the above-mentioned propositions, it is possible that the SBE habitation site partially serves funerary rites, thus any lamenting, dancing, etc., is performed at the village whereas the actual interment is outside the village (at AM 41?), as for example Father Fauque suggests in 1736 on the Lower Oyapock:

> *J'entrai dans une [c]ase haute, que nous appelons soura en langage galibi; m'entretenant avec ceux qui 1'habitoient, je fus tout à coup saisi d une odeur cadavereuse ; et comme j'en témoignai ma surprise, on me dit qu'on venoit de déterrer les ossemens d'un mort, qu'on devoit transporter dans une autre contrée, et l'on me montra en même temps une espèce d'urne qui renfermoit ce dépôt. Je me ressouvins alors que j'avois vu ici, il y a trois ou quatre ans, deux Palikours, lesquels étoient venus chercher les os d'un de leurs parens qui y étoit mort. Comme*

> *je ne pensois pas alors à les questionner sur cette pratique, je le fis en cette occasion, et ces sauvages me répondirent que 1'usage de leur nation étoit de transporter les ossemens des morts dans le lieu de leur naissance, qu'ils regardent comme leur unique et véritable patrie.* (Fauque 1835:8)

Whatever the case or combination may be, further research in this particular area is required in order to test one or more of the above-mentioned possibilites. Moreover, the series of vessels at the AM 41 necropole differ –when regarding the existing data– from those found at SBE which are again similar to those found at Awala and Yalimapo (Coutet 2011, 2014b; Coutet et al. 2014).

When compared to the eastern part of French Guiana, it is evident that the Late Aristé urns are entirely different, suggesting two mayor (funerary) culture areas to the east and west of Cayenne Island which in turn may be regarded as a transition area (cf. Section 9.8). However, both areas are somehow linked by means of the fact that the presence, or possibly the introduction of urn cemeteries in general is, in both areas, likely to be dated from *c*.900 AD. This suggests the appearance of a shared mode of interment or an "Urn Horizon," in the eastern Guianas as to the (early) LCA.

We must now advocate that AM 41 clearly illustrates that necropoles exist in the western plains of French Guiana which 'Contrairement à l'idée commune, l'existence de cimetières indigènes (antérieurs à la période coloniale) est moins rare qu'on l'a prétendu, et le deviendra probablement encore moins lorsque les nombreux sites archéologiques, notamment en Guyane, auront fait l'objet de fouilles systématiques, ce qui est loin d'être le cas' (Chaumeil 1997:88).

*Figure 7.17. Double ceramic deposition F 8 in Pit 3.*