■ **NIGERIA**

Archaeological Investigation at Ile-Ife, Southwest Nigeria: A Preliminary Report on the 2010 Test Excavations

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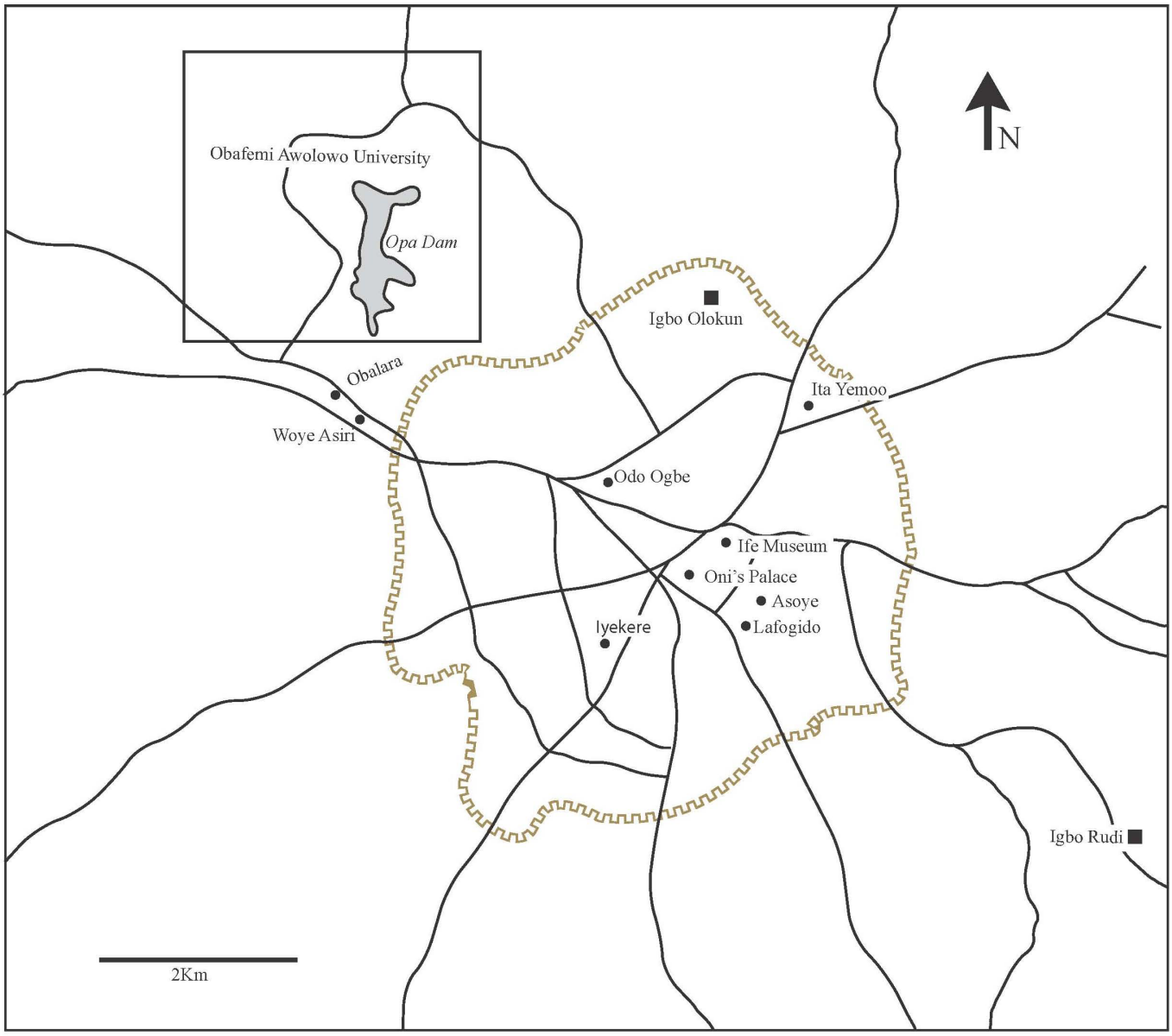
Introduction

This paper reports on preliminary archaeological investigations carried out at Ile-Ife, southwest Nigeria in November and December 2010 (Figure 1). Survey reconnaissance, shovel testing, and test excavations were carried out within Ile-Ife in order to gather information on site characteristics, search for deposits suitable for future expanded excavations, and recover material culture and dateable samples. Due to the extensive urban build-up in Ife, the survey focused on the campus of the Obafemi Awolowo University, where there are extensive areas without buildings. Other sites within the town such as Igbo Olokun, Igbo Rudi and Iyekere were also visited (Figure 2). While shovel testing was carried out at all surveyed sites, Igbo Olokun

Figure 1: Ile-Ife in the context of Southwest Nigeria.

Figure 2: Ile-Ife: excavated and other sites mentioned in the text.



and Igbo Rudi were chosen for test excavation. The results of the excavations are presented here. Igbo Olokun is known for its plentiful evidence of ancient glass manufacturing, and Igbo Rudi is a newly discovered, or at least previously unreported, settlement site with midden mounds. As a departure from the previous approaches to archaeology in Ile-Ife, which mostly focused on artworks and potsherd pavements, this research is designed to collect data that will help us to understand the different aspects of society in ancient Ile-Ife without privileging any particular class of artifacts.

This paper presents results of the test excavations carried out at the two sites mentioned above. The paper focuses on pottery and glass beads, since these are the most commonly occurring artifacts. I first present some brief background information on the physical setting and previous archaeological investigations at Ile-Ife. Second, I describe the excavations. This is followed by preliminary analysis of finds, after which conclusions and future research directions are discussed.

Background

Located in Osun State, southwestern Nigeria, Ile-Ife lies within the forest belt. Trees attain heights of up to 40 meters (Jeje 1980:36) and there is secondary vegetation that includes lower trees and tall grasses. The dense nature of the vegetation in Ile-Ife as in other parts of southwest Nigeria, poses a challenge to archaeology in the area because mobility and surface visibility are often limited. Climate in southern Nigeria is characterized by a dry season (October-February) and a wet season (March-September). Topographically, Ile-Ife has a bowl-like shape, surrounded by hill and ridge complexes of granite and epidiorite (Campbell 1991: 1; Jeje 1980: 22; Ozanne 1969: 32). The most important of these are the seven hills (Oke-Ora, Oke-Pao, Oke-Ijugbe, Oke-Onigbin, Oke-Obagbile, Oko Araromi, and Oke Owu) that immediately encircle the town. These hills are of archaeological and historical significance. Ozanne (1969:32) suggests that early inhabitants of Ile-Ife would have settled at the foot of these hills, attracted by the rich soil. Also tradition has it that Oduduwa, the progenitor of the Yoruba, descended from Oke-ora. Archaeological investigation on the hill has recovered some material, but the period of the occupation is uncertain (Agbontae 1985).

Since the visit of Leo Frobenius to Ile-Ife in 1910, the ancient urban center has gained international renown. The fame of Ile-Ife was based on its fascinating figures in copper alloy, terracotta, and stone, and potsherd pavements. Subsequent research was directed toward finding, recording, and excavating more shrines for artwork (e.g., Fagg 1953; Fagg and Willett 1960; Murray 1948). Between the late 1950s and 1970s numerous previously known and newly discovered shrines were excavated (Eyo 1970; Willett 1967, 1969), including Ita Yemoo (Willett 1959, 1970), Odo Ogbe Street and Lafogido (Eyo 1974a), Oduduwa College site (Myers 1967), Obalara and Woye Asiri (Garlake 1974, 1977), and Asoye compound and Igbo Olokun (Eluyemi 1985, 1987).

Two things are common to all the previous excavations in Ile-Ife. First, they all exposed and recovered either potsherd pavements or artworks of various kinds, or both, hence the historical narrative at Ile-Ife orbits around these aspects of material culture. While Willett (1967) used changing figurine styles to propose three phases of Ife's development -- pre-classical, classical, and postclassical -- Eyo (1974b) focused on the potsherd pavements. Potsherd pavements are ceramic tiles usually laid on their edges in a herringbone pattern, at times with a pot buried in the center (Garlake 1977:63). A survey of pavements in Ile-Ife indicate a wide spread distribution across the city, which may have covered 12km^2 between the 12th and 15th centuries (Ogunfolakan 1994). As a consequence of this focus on artworks and pavements, many of which were initially unearthed as chance discoveries, the second feature of Ile-Ife archaeology is the lack of a systematic and problem-oriented approach to the archaeology. Many of the previous excavations were conducted along the lines of rescue operations and lack detailed documentation of the stratigraphy and finds – especially pottery. Garlake (1974, 1977) produced the most detailed reports on archaeological excavations in Ile-Ife, at Obalara's Land and Woye Asiri respectively. This is not to say that Garlake's excavations were free of the "rescue syndrome"; however the amount of detail on the procedure, stratigraphy, composition and concentration of material make the publication exceptional. Thus, Garlake's (1977) pottery analysis is a major source for the study of Ife pottery.

Despite the multiplicity of excavations at Ile-Ife (both planned and unplanned), none has yet focused intensively on the sites of industrial glass bead production. Although there have been some studies on the glass beads of Ile-Ife, the contextual information of the samples analyzed did not go beyond the site names (Ige 2010; Lankton et al. 2006: 114-118; Willett 1977: 22). Nor has any excavation until now been carried out on a midden mound. The test excavations during our 2010 preliminary fieldwork at Ile-Ife targeted sites that could furnish in-

formation on both glass bead making (Igbo Olokun) and domestic remains (Igbo Rudi). The section that follows presents results from the excavated units.

Test Excavations

Following reconnaissance survey and shovel testing around Ile-Ife, test pits measuring 1m x 1m were excavated at Igbo Olukun (TP1) and Igbo Rudi (TP2) (Figures 3a and 3b). In line with the general goal of the project, the test excavations aimed to 1) check if there are intact deposits where further excavation could be carried out, 2) collect material culture by systematic excavation in order to develop a preliminary pottery sequence for Ife, comparing this material with that reported previously, 3) recover samples for radiometric dating in order to expand the chronology for Ile-Ife. The two test pits were excavated in natural layers. However, in a situation where a layer appeared to be over 10cm deep, the level was closed at 10cm arbitrarily. This was the case mostly at Igbo Rudi. These excavations were conducted with the assistance of Mr Awowoyin, Mr Kasim, and Mr Oladapo.

Igbo Olokun (TP1). As stated above, several people have excavated at Igbo Olokun in the past. For example during the course of archaeological investigation at Igbo Olokun, which involved survey and excavations, Eluyemi (1987) estimated the total area of Igbo Olokun to be over ten hectares. However, due to urbanization, the site has been encroached upon and the total area of the site is reduced. None of the previously excavated areas could be located. There are crucible fragments on the surface of the street at Igbo Olokun. These surface materials are the only indication remaining that suggests the potential of the site. Although previous excavations at Igbo Olokun have shown evidence of glass bead manufacture (Fagg 1953; Frobenius 1913; Willett 1977) and to a lesser extent, iron working (Eluyemi 1987), none of the publications present a detailed report of the prior excavations. Hence, the intent of the test excavation was to gain a preliminary view of the deposits at Igbo Olokun in addition to advancing the general goals of the research.

Figure 3: Clearing of the surface at the sites (A=Igbo Olokun, B=Igbo Rudi).

A

B

A spot within a cluster of banana trees in the northeast of the fenced plot was chosen for the test pit (N 07° 30.225, E 004° 33.701). After we established the 1m x 1m unit, the southwest corner of the pit was chosen as the reference point (Point of Origin) from which measurements were taken as we excavated. The deposit was shallow: sterile, red, very compact clay was encountered 52cm below surface. However, underlying the sterile layer, a pit with cultural material was encountered, suggesting that cultural levels may continue further down. Levels one to seven yielded materials in varying quantities that included pottery, crucible fragments, other non-vessel ceramics, glass beads, glass de-

Table 1: Distribution of artifacts from Igbo-Olokun (TP1) (recorded by artifact count unless otherwise indicated).

Levels	Pottery	Cylindrical Ceramic	Ceramic Disc	Fired Clay (g.)	Glass Bead	Crucible Fragments	Glass Manufacturing Debris (g.)	Iron Objects	Slag	Bones (g.)
1	76					5				
2	256	7				12	5			4.1
3	167	1		30	26	9	16	1		
4	32	1		122	4	4	7			
5	208	4		220	19	9	21			
6	356	9	2	152	71	12	55	1	1	
7	92	4	1		20	3	7	1		
Total	1187	26	3	524	140	54	111	3	1	4.1

Table 2: Distribution of artifacts from Igbo-Rudi (TP 2).

Levels	Pottery	Ceramic Disc	Baked Clay (g.)	Glass Beads	Iron Objects	Small Shell (g.)	Tortoise Shell (g.)	Oyster Shell (g.)	Cowrie (No.)	Bones (g.)
1	59					4				
2	113	1	40							16
3	80		158			4				24
4	104					30		6		43
5	75		121			28				
6	187	2	159			20	4	4		10
7	128		612		1	20	9			22
8	72		186	1		1	3		1	4
Total	818	3	1276	1	1	107	16	7	1	119

bris, animal bones, charcoal, iron objects, slag, and baked clay (Table 1). A pit feature in Level 8 revealed itself as a darker spot at the southeast corner, spreading about 45cm and 57cm along the north and east walls respectively. Excavation of this feature (Feature 1) revealed an irregular pit 30cm deep containing pottery, crucible fragments, baked clay, glass debris and glass beads. Unfortunately, there was no charcoal in the fill. We had to close the unit due to time constraints, so we do not know if the pit extends further or if more cultural levels underlie it. We hope to check this during future fieldwork.

Igbo Rudi (TP2). The second test pit was located about 6.6km southwest of Igbo Olokun (N 07° 27.354, E 004° 35.822) in a sacred forest belonging to the Iwara people and used for the ritual coronation of the Iwara king. The sacred forest is

called Igbo Rudi. Historically the site is said to be one of the ancient settlements of the descendant of the Iwara people in Ile-Ife. However, farming has encroached upon much of the forest. No previous excavation had been carried out at Igbo Rudi, and no surface materials were in evidence. It was the elevation that first attracted Dr Ogunfolakan to the site (Ogunfolakan 2010, personal communication). Shovel probing, which yielded some potsherds, affirmed Ogunfolakan's suggestion. A 1m x 1m test pit (TP2) was therefore a follow up. TP2 extended 90cm below the surface with eight cultural levels. Level nine was sterile, red compact clay. Levels one through level eight yielded abundant and diverse materials including pottery, ceramics disks, baked clay, animal bones, snail, tortoise, and oyster shells, charcoal, iron objects, glass beads, and cowries (Table 2). The nature of these materials and their density suggest that the mound is a midden resulting from the accumulation of trash. Charcoal samples were collected throughout the levels for radiometric dating. Since no excavations have been done at the

Figure 4: Rim classes recognized at Igbo Olokun and Igbo Rudi.

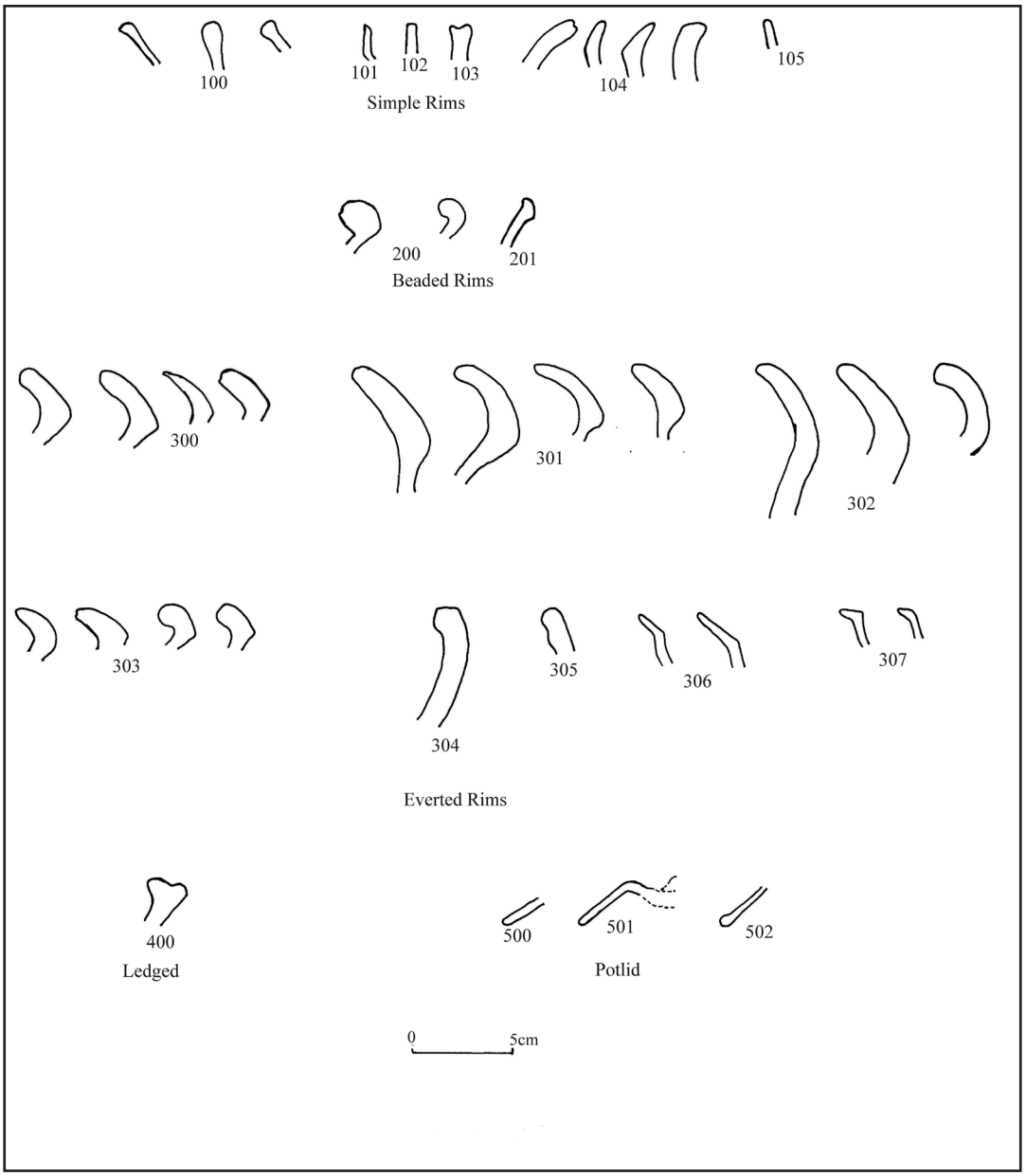
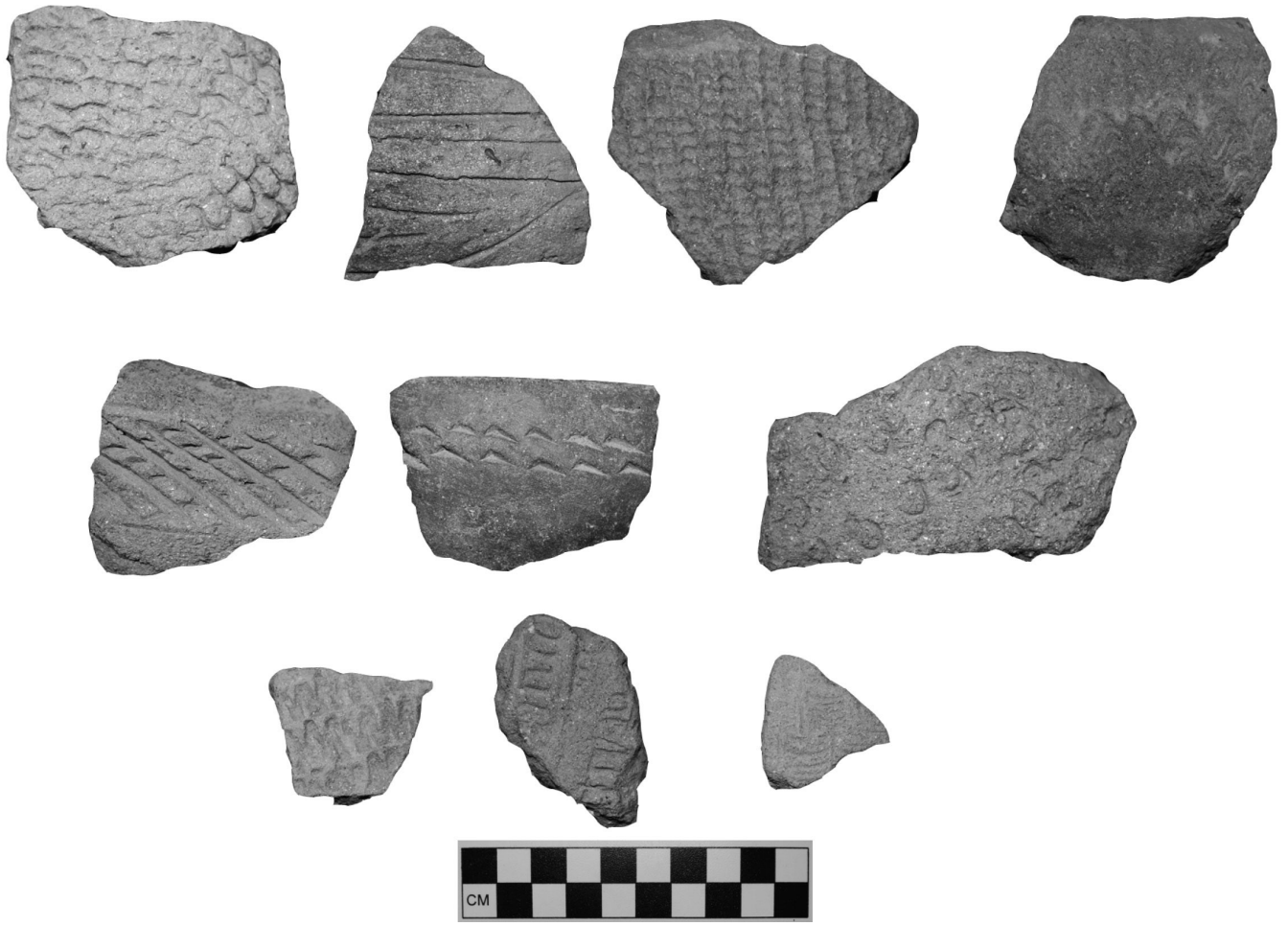


Table 3: Comparative summary of major decorative motifs (*=present, **=prominant).

Decorative Motifs		**Igbo Olokun**	**Igbo Rudi**
Twisted Twine		**	*
Knotted Twine		*	*
Carved Roulette	Ladder Pattern	**	
	Other Pattern	**	*
Toothed Roulette		*	
Maize Cob		*	*
Punctate		*	**
Circle Stylus		*	**
Dragged Comb		**	*
Incised		*	**
Rib/Raised		*	
Composite		*	*

Figure 5: Selected decorative motifs from left, top: maize cob, incisions, twisted twine, dragged comb; middle: cross hatched, punctate, circular stylus; bottom: carved wooden roulettes - toothed, ladder, other carved pattern.



site, a date for the site is essential.

Preliminary Analysis of Finds

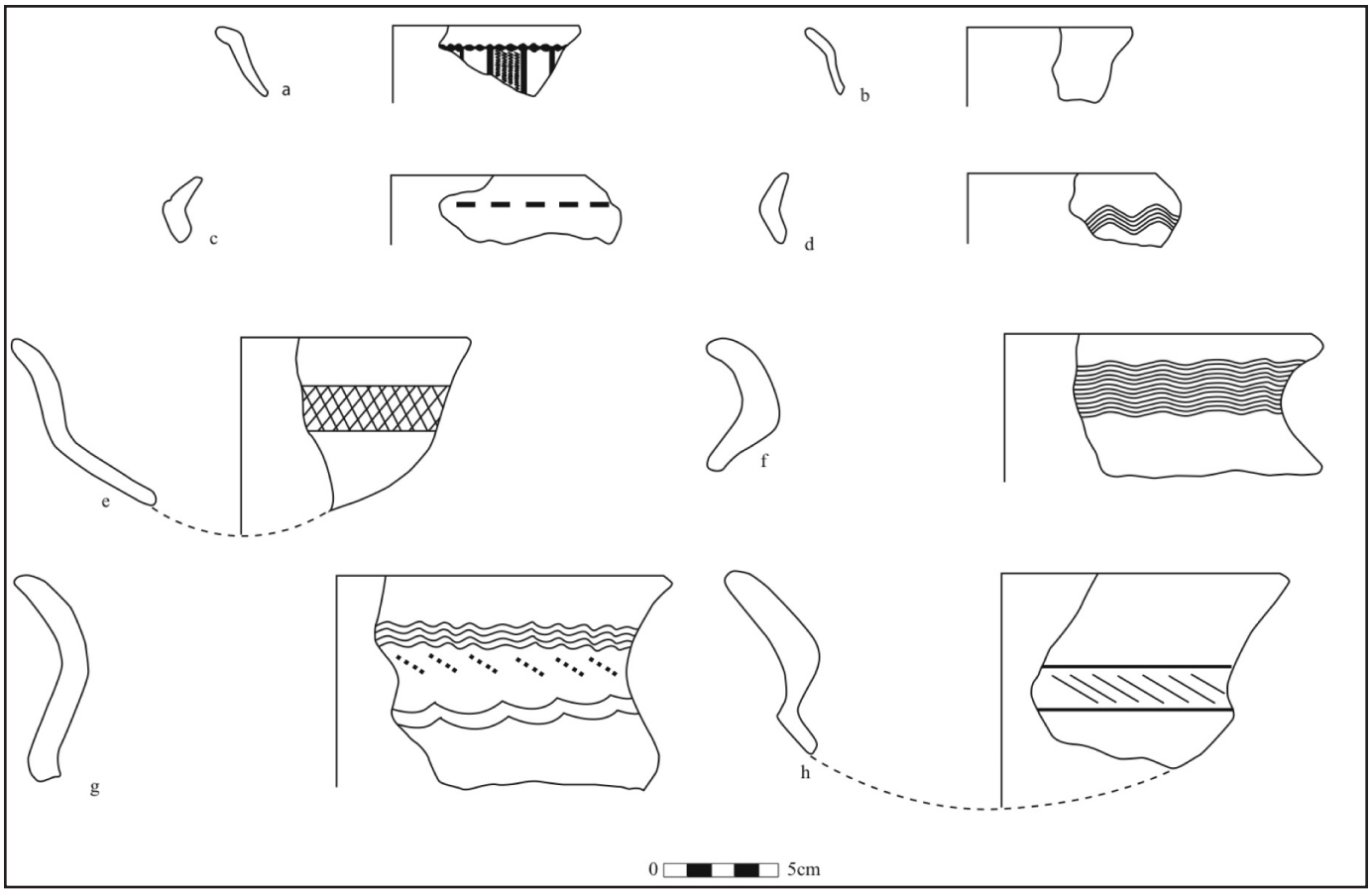
The two test pits excavated yielded a variety of materials, although the composition of the materials varied between the sites. Most of the organic materials (animal bone, snail, oyster, cowrie and tortoise shells) came from Igbo Rudi. Igbo Olokun, on the other hand, yielded considerable industrial materials: crucibles, glass beads and glass debris. Since pottery is the most common material and the best for developing a cultural sequence, preliminary analysis here focuses on description of the pottery from the two sites. I also describe other fired clay artifacts and the glass bead assemblage.

Pottery

Researchers have not agreed upon a standardized approach to the ceramics from Ile-Ife and Yorubaland. The approach used here identified five major rim classes (Figure 4: simple, beaded/rolled, everted, ledged, and potlids) and a number of decorative motifs and other formal elements, including paste. Rim sherd and body sherd decoration were analyzed separately. The differences between the two assemblages include dominant vessel and rim forms, paste texture, hardness, and non-plastic inclusions, and preferred decorative motifs.

Igbo Olokun. The pottery recovered from Igbo Olokun is notable for the thin walls, fine, well-fired paste, and the small sherd size (<3cm diame-

Figure 6: Vessel Classes: a=Everted unrestricted (Composite decorations); b=Everted unrestricted (undecorated); c=Simple close (Punctate); d=Simple close (Dragged comb) {from Igbo Olokun}; e= Everted unrestricted (Cross hatched); f=Everted globular (Dragged comb); g=Everted carinated (Composite decorations); h=Everted Carinated (Slant incisions) {from Igbo Rudi}.



ter) of a sizeable portion of the assemblage. Crushed quartz is the dominant non-plastic-inclusion, and mica is present but not plentiful in the paste. The rim sherds are dominated by simple rims, (Figure 4: 101, 102, and 105) and everted rims (Figure 4: 306 and 307), most of which are unslipped and undecorated. This situation is unusual compared to the previously studied pottery collections from Ile-Ife (Garlake 1974, 1977). On the few decorated sherds, twisted cord and carved roulette (Figure 5: ladder and other patterns) are the dominant motifs.

Igbo Rudi. Everted rims from carinated bowls dominate the Igbo Rudi assemblage (Figure 4: 300, 301, and 302). The most common decorative motif is incision, including cross-hatching, curved incision, channels, and zig-zag (Figure 5). Sherds are relatively large, allowing localization of the decoration; most frequently, decoration is located on the shoulder and the neck (Figure 6). Almost three-quarters of the Igbo Rudi sherds are friable with a sandy paste. Thus, sand is the dominant non-plastic inclusion. Grog is only used as a complimenting additive. Mica is present, indicating a local source for the clay used; mica is a common element of clays within a 40km radius of Ife (e.g., Iloyi and Okun Ogundiran 2011, personal communication).

Table 3 presents a summary comparison of decorative motifs of the Igbo Olokun and Igbo Rudi assemblages. While Igbo Olokun vessels are decorated either on the rim alone or shoulder, vessels from Igbo Rudi are decorated between the shoulder and the neck (Figure 6).

Comparing the assemblage with previously identified vessel classes for Ile-Ife and other Yoruba region sites, the everted rim and carinated bowls stand out. This type is rarely described in the archaeology literature of Yoruba pottery. For example, this form is not found in Garlake's (1974, 1977) collection for Ile-Ife. However, where something similar is found, there is variation. For instance, similar bowls described by Eyo (Eyo 1976:49) at Igbo Laja, Owo are more widely everted. In northern Yoruba region Aribidesi et al. (2005: 149) reports a similar type but it is not a dominant type as it is at Igbo Rudi. The assemblage from Ede Ile bears some resemblance (Ogundiran 2009): carinated bowls are decorated with comb impressions or cord roulette with prominent maker's marks on the shoulder or in the inner part of the rim (Ogundiran and Saunders 2011).

Although the assemblage that we are working with is small, some similarities are still noticeable in comparison with Garlake's decorative motifs. The carved wooden roulette ladder pattern at Igbo Olokun is comparable to the ladder pattern Garlake (1977:85) described for early classical Ife. This decorative motif is totally absent at Igbo Rudi. Twisted twine is also common to Garlake's assemblage and in our pottery collection. At the moment, Garlake's (1977:92) claim that carved roulette is an early Ife decorative motif that was replaced by cord impressed motif cannot be tested at Igbo Olokun and Igbo Rudi until further extensive excavations are carried out. The wavy dragged comb recognized at our two sites is similar to the decorative motifs at Woye Asiri. At Igbo Olokun the decoration appears on simple rims, while it occurs on everted rims at Igbo Rudi. Both are reported at Woye Asiri (Garlake 1977:76).

Figure 7: Fragmented fired clay cylinders of unknown function - Igbo Olokun (TP 1).

Other Fired Clay Artifacts. In addition to potsherds, six round and ground ceramic discs--three from each site, were recovered. None are per-

forated. Elsewhere, it is suggested that this type of disc was used as a weight or part of a pavement (McIntosh 1995: 217). Garlake (1977) excavated a pile of discs at Woye Asiri in Ile-Ife. He argues that they are best described as part of mud wall surfacing or part of a continuous mosaic finish (Garlake 1977: 71). Although the contexts for the six discs excavated from Igbo Olokun and Igbo Rudi may not support Garlake's argument, ethnographic evidence has showed that ceramic discs were part of early Yoruba architectural design (Ogundiran 2011, personal communication). However, we cannot make any conclusions until further investigation is carried out.

Several fragments of fired clay cylinders were found in TP1 (Figure 7). This type of artifact has never been reported in the archaeology literature on Ile-Ife. We could not determine the actual size and complete morphology of the artifact type because most of the artifacts are broken. However, it is observed that some have a tapered end. No interpretation is yet available; perhaps they were related to glass bead making as they were found only at Igbo Olokun. It is my hope that extensive excavation of the site will help to reveal more contextual information, which may offer some idea about what the artifact's function.

Glass Beads

A total of 121 glass beads and glass bead fragments were recovered from the unit at Igbo Olokun. About 90% of the glass beads are blue (pale or cobalt blue). Other colors present are blue-green, green, gray, yellow, and brown. There are a few clear and colourless glass beads, some of which are coated red or brown on the outside (Figure 8a). The beads are mostly tubular but some are oblate (Wood 2005, 2009). The edge is either rounded or angular. The blue tubular glass beads of Ife are described as segi type (Eluyemi 1978: 18), and are suggested to be the most culturally valuable at Ife (Ogundiran 2002: 434). All the beads analyzed were drawn. Drawn beads are common in Ife and its occurrence is mentioned several times in the literature (e.g., Eluyemi 1987; Ige 2010; Lankton et al. 2006). The recovery of the glass beads, glass debris and droplets (Figure 8b), crucible fragments with glass fused on the inside, and exposure of what is suspected to be a furnace at the bottom of the test pit are strong indicators that glass beads were manufactured, reheated, and/or remelted at Ile-Ife (Ogundiran 2002: 433), although the debate on the source of raw material for Ife glass beads is still contentious (Lankton et al. 2006). However, based on the high lime and alumina contents of the cobalt and blue-green Ife segi beads, which are absent in glass beads from around the world, Ige (2010: 66) suggests that they may represent a unique African glassmaking tradition with the production center in or around Ile-Ife.

Figure 8: Top= Ile-Ife glass beads from Igbo Olokun (TP1); bottom: selected glass manufacture debris from TP 1.

a

b

ered similar materials and/or features of glass bead production. For example, Eluyemi (1987) excavated 188 and collected 180 glass beads from Igbo Olokun. Analysis of the glass beads, both excavated and surface collected, revealed that blue, circular, and opaque beads dominate the collection (Eluyemi 1987: 203-213). Eluyemi also identified and excavated 14 glass bead furnaces at Igbo Olokun. He describes the furnaces as shallow bowl-like with a base made with pebbles, stones and clay. The average diameters and depth of the furnaces are 25cm and 14cm respectively (Eluyemi 1987: 200). In view of this, the feature uncovered at Igbo Olukun in 2010 does not seem to match Eluyemi's description in terms of the dimension and composition of the material for the base/foundation of the furnace. However, since only a portion of the feature was exposed, further excavation may help to determine its true form and function.

Dating

A charcoal sample, collected from level five (35cm below the surface) from Igbo Olokun, was sent for AMS radiocarbon dating. The result of the sample yielded a calibrated date (two sigma) of cal AD 1670-1960. As the expected date was several centuries earlier, it may be that this date is associated with more recent activities at the site. We know from historical records that sacred groves were used and reused for different purposes, especially ritual. It has also been suggested that in past years local people dug at Igbo Olokun for ancient beads (Eluyemi 1987). For these reasons, it is likely that recent charcoal may have found its way into the deposit through either of these processes. Another possibility is that bead making could have continued at the site until the 18th or 19th century. The occurrence of maize cob decoration on the pottery from Igbo Olokun is also an indicator that we may be digging the later period of the site's occupation. If this is the case, then the date would be associated with the late production phase at the site. Of course all or any of these positions are very preliminary until more detailed and extensive work is carried out at Igbo Olokun and its surroundings.

Conclusions and Future Research

While the chronology of glass-bead production at Igbo Olokun still remains to be fully elucidated, the 2010 preliminary archaeological investigations confirmed that debris from these activities could still be found, despite urban encroachments on the site. A much larger sampling plan is envisioned in the next phase of work at Igbo Olokun scheduled for November 2011-February 2012. This will permit the establishment of site chronology, description of material culture and glass technology, and, it is hoped, identification of residential areas associated with the glassworks. The excavation at Igbo Rudi was the first to be conducted in an unoccupied zone at Ile-Ife. The density of cultural remains at TP2 suggests that it is a midden. The site has the potential to yield materials to extend the cultural sequence for Ile-Ife through a comprehensive study of the pottery. Additional investigation of this site is also planned in the coming months.

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