
NEW EXCAVATIONS AT EDEM-ANI OF ENUGU STATE, NIGERIA: A REPORT OF THE 2021 FIELDWORK

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Abstract

This paper reports on the archaeological investigation conducted at Edem-Ani in late 2021 as part of the field school training programme for the undergraduate students of the Department of Archaeology and Tourism, University of Nigeria, Nsukka. The aim of the field exercise was to teach students the rudiments of archaeological fieldwork with a focus on understanding the history of the study area through its material culture remains. The field exercise employed a three-pronged strategy for data collection: oral interview, survey and excavation. Oral historic information from the interviews conducted indicated the existence of hidden treasure in the area whose location is unknown. Interrogating this claim with the use of survey and excavation proved abortive due to several limitations. Yet, the importance of archaeology in understanding and complementing historic information cannot be undermined. Unearthed material remains which include potsherds, iron slags and palm kernels suggest a trade network with neighbouring communities such as iron working in the region and exploitation of the oil palm.

Keywords: Archaeological Excavation, Oral history, Amaesumesu, shovel-testing, Manila

Introduction

Archaeological investigation is the procedure employed in the field of archaeology ranging from site discovery to publication of findings (Carver, 2009). Recently, archaeological investigations have helped us to know more about the details of the human experience much more than we did a few years back (Ortman, 2019). This throws more light on the heritage of the people through the reconstruction of history and thereby supporting human, religious and cultural diversity (Cameron and Tomka, 1993; Popa, 2019).

Many archaeological investigations have been conducted and used to unravel ancient sites in Nigeria and around the globe. Nsukka and its environs are not left out in this as there are many scholarly archaeological studies conducted there ranging from iron works at Lejja, Umundu, Opi, and Ukehe, to pottery works at Eha-Ndiagu and more. Though known for its rich cultural history and the materiality of her people, the Edem-Ani community in Nsukka Local Government Area (LGA) of Enugu state, is challenged by the paucity of archaeological data from the area. Research in the area has focused on cultural heritage with little or no attention to archaeology (see Ejikeme & Ukaegbu, 2013; Nwankwo & Ayadiuno 2021; Okoro, 2022). A new archaeological investigation was conducted in the area to address this gap. The investigation was part of the field training for the third-year students embarked upon by the Department of Archaeology and Tourism, University of Nigeria, Nsukka between November and December 2021 for the 2020/2021 academic session (see Fig. 1). The fieldwork was designed to answer questions on the cultural history and materiality of the

people of Edem-Ani. Two villages in Edem-Ani - Ubogidi and Amaesumesu - were investigated for ethnographic and archaeological information, respectively. Amaesumesu was selected for archaeological investigation because of the historical narrative of hidden treasure associated with the people's settlement. Recent farming activities in Amaesumesu have led to the recovery of manilas suspected to be buried by a woman in the past in a bid to hide her wealth from unwanted inheritors. Thus, an archaeological investigation in the area was undertaken to interrogate the claim. This study contributes material evidence to the existing knowledge on the history of Edem-Ani using remains from archaeological excavations. The paper presents results from archaeological investigations at Amaesumesu. Comprehensive data from ethnographic studies will be presented by other authors in this issue.

Given the paucity of archaeological data on Edem-Ani, archaeological data which is useful in the discussion and contextualisation of this research work has been sourced from the wider Nsukka area. For instance, communities in Nsukka areas like Orba, Opi, Umundu, Aku, Lejja, Orba, Obimo, Owerre-Elu, Nru among others have produced remarkable evidence of early ironworking including C14 dates. Anozie (1979) noted that iron smelting in Lejja and Umundu lasted between 1625 and 1925 CE. Also, Okafor 1992; Okafor & Phillips, 1992 and Whiteman & Okafor 2003 delineated three phases of early iron smelting in Nsukka area, with Opi, Lejja and Aku belonging to the earliest group which dates to the later part of the first millennium BCE; Owerre-Elu, Nru-Isiakpu axis belonging to the middle period which dates to the first and into the second millennium CE while Umundu, Orba and Ehandiagu were grouped following the late period which dates from the middle to the later part of the second millennium CE. However, a new discovery by Eze-Uzomaka (2009) pushes back further the date of early ironworking in Lejja to between the second millennium BCE to the first millennium CE. These dates seem to point to the earliest date for ironworking in Nigeria.



Figure 1. Project Team with the respondent at Ubogidi in Edem-Ani

Historical Background

According to oral testimony by Elder Eze Chima Chukwuma on the history of the site investigated at Amaesumesu, it is believed that the site is a 'gold mine', harbouring precious artefacts that were intentionally buried by an early occupant. The first inhabitant of the land-Ezeowonwatta - was a warrior but died at a young age during the inter-tribal war between Edem and Alor-Uno. His only son got married to a wealthy maiden - Orieshu Nwaidu- from Amamkpume in Ozzi-Edem. She found it difficult to conceive and when she finally did, she begot a son who turned out to be sickly. She did not want her son's inheritance collected from him because of his ailing condition. Hence, she buried her wealth in different spots on the land. After her death, the location of her wealth became a puzzle to unravel. Recently, during farm work on the land by the present inhabitants, some manilas were uncovered, wrapped in a cloth with ash for preservation. These discoveries at different spots were believed to have belonged to her. There has been speculation that there is a possibility that more of this wealth is still buried in different unknown locations within the vicinity.

Study Area

Edem-Ani is in the Nsukka Local Government Area of Enugu State in South-East Nigeria (see Fig. 2). The town is one of the three autonomous communities that make up Edem town. The others are Akpa-Edem and Ozzi-Edem. Edem-Ani is made up of fourteen villages, and two of those villages - Ubogidi and Amaesumesu - were investigated in this study. Edem town is characterised by a combination of thick tropical rainforest and derived savannah vegetation. Whilst the former occupies mainly the lowland areas, the latter occupies the hills and farmlands with stunted trees, tall grasses and shrubs.



Figure 2. Map of Nsukka Local Government Area showing the study areas. Source: Google Earth

Materials and Methods

During our archaeological fieldwork at Edem-Ani, a three-pronged approach was adopted for data collection: oral interview, survey and excavation. Oral interviews were conducted at the two villages, but archaeological surveys and excavations were carried out only in Amaesumesu; at Elder Chima's compound. Information from our oral interview coupled with the field survey guided us in locating the area for excavation. The survey strategy used in this study is field walking and Shovel Test Pit (STP) surveys which are minimally invasive. The shovel-pitting or shovel-testing method does not require unearthing a lot of ground; only a shovel width-size area in different spots is opened (Reitz and Shackley, 2012). The strategy usually supplies enough data to decide the potential of a site for further archaeological investigation. Shovel testing was adopted as a survey strategy to understand the distribution of archaeological materials in the area and narrow down our choice of spot for excavation.

Shovel testing and finds

Survey work was started at Amaesumesu village in 2021 using shovel-test units which were mapped for easy identification (see Fig. 3). Ten shovel-test units were opened in the area reaching depths between 40 cm and 90 cm (see Fig.4). As we were only allowed to work within a small area, STPs were set up at every one-metre interval within a 12-metre square area. These produced few cultural materials with no conspicuous concentrations. Shovel-test diggings were recorded in spits, normally of 10 cm thickness, and all excavated deposits were sieve-screened in dry condition. The type and quantity of cultural materials were recorded using the level where they were recovered. Results from the shovel test led us to locate one of the to-be excavated units on pit 1 which had the greatest depth and an appreciable quantity of cultural materials. Although pit 1 did not produce as many cultural materials as pits 2, 8, 9 and 10 (see Table 1), the fact that it recorded the greatest depth shows its prospect for further investigation.



Figure 3. Site distribution of Shovel Test Pits



Figure 4. Shovel test pit.

Pottery recovered from shovel test units ranged between one from pit 6 and twenty-two from pit 9. Results are summarised in Table 1.

Unit	Depth (cm)	Pottery	Charcoal	Palm kernel	Iron slag
1	90	14	*	5	3
2	60	17	**	5	2
3	60	7	*	1	1
4	70	14	*	1	-
5	50	10	*	9	-
6	40	1	-	-	-
7	60	12	*	4	-
8	60	18	*	1	3
9	50	22	*	6	-
10	70	18	***	14	-

 Table 1. Summary of shovel test units and quantification of main artefact categories

*= poor; ** = moderate; ***= high

Excavations and finds

Two areas (Units 1 and 2) were excavated at Amaesumesu village (see Fig.5). Unit 1 was set up based on minimal reconnaissance which involved walking over the terrain in search of distinctive surface features with the use of naked eyes. During the reconnaissance, surface scatters of artefacts like smoking pipes and potsherds were identified. This led us to situate a unit around that area. Survey work at Unit 2 was with the use of a shovel test strategy.



Figure 5. Site plan of the study area

Unit 1

A 2 x 2 m unit was set up for Unit 1 and excavations proceeded at 30 cm spit intervals, reaching a sterile layer at 80 cm. The soil around this area was hard and difficult to dig through. This informed our style of excavating at 30 cm spits for prompt completion due to the limited time allotted for the excavation. Three stratigraphic cultural layers were established in the excavation(see Fig.6). Materials recovered from this unit were palm kernel, charcoal, pottery, metal scraps, plastic scraps and modern glass (see Table 2).



Figure 6. Stratigraphy of Unit 1. Table 2. Inventory of finds from Unit 1

Finds/Stratum (cm)	0-30	30-60	60-80	Total			
A. Organic materials							
Palm kernel	50	2	-	52			
Charcoal	***	*	-				
B. Pottery							
Decorated	154	18	3	175			
Plain	17	20	-	37			
Corroded	98	32	7	137			
Rim sherds	4	2	-	6			
Body sherds	268	70	3	341			
C. Others							
Metal scraps	9	-	-	9			
Plastic scraps	1	-	-	1			
Modern glass	1	-	-	1			

*= poor; ** = moderate; ***= high

Unit 2

A 1.5 x 1.5 m unit was set up for unit 2 (see Fig. 7). The relatively smaller size for this unit was due to the limited space available for excavation. The unit was situated within a yam barn in which manilas were claimed to have been recovered during farming activities. Excavation within this barn was aimed at further exploring the area in search of recovery of manilas. The excavation unit was recorded in spits, normally of 20 cm thickness. The top 20 cm of the deposit was loose soil riddled with roots. Layers were delineated based on colour and material inclusion. The 80 cm thick archaeological deposit was made of two layers, a 60 cm thick dark brown soil overlaying a 20 cm thick reddish soil (see Fig. 8). Materials recovered from this unit include pottery, charcoal, unidentified seed and iron slag (see Table 3).



Figure 7. Excavation of unit 2



Figure 8. Stratigraphy of Unit 2

Finds/Stratum (cm)	0-40	40-80	Total			
A. Organic materials						
Charcoal	**	*				
B. Pottery						
Decorated	72	23	95			
Plain	44	20	64			
Corroded	59	15	74			
Rim sherds	2	1	3			
Body sherds	177	59	236			
C. Others						
Iron slag	24	-	24			
Unidentified Seed	1	-	1			
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Table 3. Inventory of finds from Unit 2

*= poor; ** = moderate; ***= high

Discussion and Conclusion

The fieldwork conducted in 2021 was a productive exercise that exposed the students to the fundamentals of archaeological fieldwork and the interpretation of data. Our investigation was one of the few archaeological studies in the area targeted at understanding the history of the Edem-Ani people. This article focuses mainly on archaeological data interpretation from the excavations conducted in the area. One major challenge in this study is the lack of radiocarbon dates for our units to define the chronological sequence. Two excavated units $(1.5 \times 1.5 \text{ m and } 2 \times 2 \text{ m})$ and ten shovel test units were opened in the area. The materials from these units were mostly palm kernels, charcoal, potsherds, unidentified seed, iron slag, metal scraps and plastic scraps. All the STPs were positive with varying frequencies of potsherds, yielding one to twenty-two potsherds per pit. The excavation team was constrained within a defined space in order not to destroy economic plants. This prevented us from exploring larger areas to interrogate the historic claims of buried wealth in the area. Our survey strategy informed our choice of spot for unit 2. In future excavations, pits 2, 8, 9 and 10 have the potential for yielding copious materials to fully understand the cultural materiality of the Edem-Ani people. Aside from the fact that the frequency and diversity of materials from these units were remarkable from the site plan, it is clear that pits 2, 8, 9 and 10 are clustered in the northern section of the barn, the same area where unit 1 was situated. This clustering may suggest an area with the potential for a remarkable yield of materials. On

the contrary, Pit 6 located in the south-east section of the barn yielded the lowest finds with only a single potsherd recovered.

Unit 1 has a high frequency of charcoal, palm kernel and potsherds in the topmost 30 cm layer of the deposit, which reduced appreciably at 30-60 cm and further reduced drastically at the basal layer 60-80 cm. The archaeological assemblage was dominated by potsherds with a higher representation of decorated sherds over plain sherds. Davies (1967) and Okpoko (1987) opined that pottery sherds remain the most recovered cultural materials from any archaeological excavation especially in West Africa because of their durability and abundance. Though pottery sherds may be fragmented, lifeless, and difficult to analyse, they are pointers to early human occupation and habitation as they can be used to establish the cultural sequence, define cultural groupings, trade, past ways of life as well as establish relative chronological sequence (Davies, 1967). In Igbo land, the decorative motif on pottery does not only reflect the religious and aesthetic values but also reveals the course of trade, diplomacy, wars and cosmic beliefs, and cultural continuity between the past and present inhabitants of a given society as is the case with Edem-Ani people. Presently, some pots used in Edem-Ani are bought in the nearby markets such as Ogige market Nsukka, Afor-Opi, Nkwo Ibagwa, Eke Ede-Oballa and Orie Orba. Thus, pottery sherds with different decorations identified in the study area suggest that the people though, not pottery makers must have purchased them from other pottery-making communities such as Nrobo in Uzo-Uwani L.G.A and Ugwuogo Nike in Isi-Uzo L.G.A both in Enugu State. This discovery further suggests that the early inhabitants of Edem-Ani had trade contact and inter-group relationship with their distant neighbours.

The topmost 30 cm layer of unit 1 also had materials such as modern glass, metal and plastic scraps which never occurred in later layers down the profile. The material profile reflected in the inventory of finds captured the evolution of the landscape from an area with less activity to one with increased activity. The bottom layer 80-60 cm reflected a period marking the beginning of human habitation of the area due to the poor material finds. This changed in layer 60-30 cm due to increased activity in the area leading to increased materials in the deposit. The topmost 30 cm captured intense activities on the site. The high frequency of palm kernel in the topmost layer may suggest its significance and inclusion in the diet of the people of the area. Based on linguistic evidence, Williamson (1993) reports that oil palm (Elaeis guineensis Jacq.) is heavily embedded in culture and ritual among the people of southern Nigeria just like other indigenous plants including wine palm (Raphia hookeri), aerial yam (Dioscorea bulbifera), and guinea yam (D. cayenensis and D. rotundata), and kola nuts (Cola acuminata and C. nitida). Additionally, the palm kernels discovered in the excavations suggest that the paleoenvironmental condition of Edem-Ani in particular and Nsukka in general area has over time supported the growth of this important tree crop. According to Iloje (1961), this condition has afforded the ecological background needed for the early development of food production and early settlement/habitations of the area. Furthermore, our findings here showed that oil palm trees were in abundance within the vicinity and must have been of very high dietary and economic importance to the local community.

Furthermore, there are several pieces of iron slags excavated from the site. According to Itanyi (2013), the presence of slag in any archaeological site, depending on its size, is indicative of either large-scale or small-scale industrial ironworking. Thus, the small sizes and low quantity of slag are suggestive that the area was not the centre of iron smelting. With the extinction of iron smelting and our inability to recover a furnace in Edem-Ani, we find it difficult to identify the type of furnace used for iron smelting. However, scholars who had

studied iron smelting in Nsukka area have made useful suggestions about the type of furnace used by the people. For example, Anozie (1979) stated that a shaft furnace was used to smelt iron in Umundu and Opi both in Nsukka area, while at Lejja, a pit/bowl furnace was used. On the contrary, further investigation by Okafor (1993) on furnace types in Nsukka area showed that what was thought to be a bowl furnace by Anozie (1979) was a pit furnace into which slag was tapped. The type of furnace that produced the slag at Edem-Ani needs to be further interrogated.

Unit 2 excavation produced less diverse cultural materials in relation to unit 1. The unit was made up of two main strata (layers 1 and 2). Data from the unit showed poor human activity associated with low frequency of potsherd and charcoal. No palm kernel was recovered from this unit. The excavation conducted within and outside the barn did not unearth any spectacular find such as manilas that were claimed to have been earlier recovered during farming activities in the area. The absence of manila in our collection of finds does not in any way refute the claims of our respondents. Bearing in mind the limited space we had to work to avoid destroying the farmland of the land owner, much of the larger area could not be explored. Time constraint was also another challenge. The fieldwork could not extend more than the timeframe planned for it because of a lack of funds to run the exercise.

The results presented in this paper contribute to a growing body of archaeological research conducted in Igboland. Although the claims by the people of Amaesumesu could not be verified, our study proves the potential of archaeological investigation in providing answers to claims about the history of the Edem-Ani people.

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References

- Anozie, F. N. (1979). Early iron technology in Igboland: Lejja and Umundu. West African Journal of Archaeology 9: 120-134
- Cameron, C. M. and Tomka, S. A. (eds.). (1993). Abandonment of settlements and regions: Ethno-archaeological and archaeological approaches. Cambridge: Cambridge University Press.

Carver, M. (2009). Archaeological investigations. London and New York: Routledge

Davies, O. (1979). Roman mines in Europe. New York: Arno Press.

Ejikeme, J. N. U. and Ukaegbu, M. O. (2013). Traditional postpartum and baby care practices in Edem-Ani, Nsukka Local Government Area, Enugu State. *Journal of Tourism and Heritage Studies* 2(1): 79-87.

- Eze-Uzomaka, P. I. (2009). Nigerian scientists discover 4005-year iron technology. The *Nations* Newspaper, Sunday, April 26th
- Iloeje, N. P. (1961). The structure and relief of Nsukka-Okigwe Cuesta. *Nigerian Geographical Journal* 4: 21-35
- Itanyi, E. (2013). An archaeology of old Nsukka division. Germany: Lambart Academic Publishing.
- Nwankwo, C. F and Ayadiuno, R. U. (2021). Landscape memories of land struggles in plateaus of two Nsukka villages, Nigeria. *Human Geography* 15(2):176–189.
- Okafor, E. E. (1992). Early iron smelting in Nsukka, Nigeria. Information from slags and residues. Ph.D Thesis, University of Sheffield.
- Okafor, E. E. and Phillips, P. (1992). New 14C ages from Nsukka, Nigeria, and the origins of African metallurgy. *Antiquity* 66 (252): 686-688
- Okoro, M. N. (2022). Nkwo Onunu cultural heritage in Nsukka Igbo, Nigeria: A festival in honour of a Mother Goddess. African Arts 55 (2): 50-65.
- Okpoko A. I. (1987) Early metal-using communities in West Africa. West African Journal of Archaeology 17: 205-227
- Ortman, S. G. (2019). A new kind of relevance for archaeology. *Front. Digit. Humanit.* 6:16. doi: 10.3389/fdigh.2019.00016.
- Popa, C. N. (2019). The responsibility of European archaeologists. *European Journal of* Archaeology 22: 255–268.
- Reitz, E. J and Shackley, M. (2012). Environmental archaeology (Manuals in Archaeological Method, Theory and Technique). New York, Dordrecht, Heidelberg, London: Springer.
- Whiteman, J. A and Okafor E. E (2003). Characterization of Nigerian bloomery Iron smelting slag. *Historical Metallurgy* 33(2): 72-84.
- Williamson, K. (1993). Linguistic evidence for the use of some tree and tuber food plants in southern Nigeria. In T. Shaw, P. Sinclair, B. W. Andah, & A. Okpoko (Eds.), *The* archaeology of Africa: Food, metals and towns 139–153. Routledge.