A study of Oziza archaeological and ethnographical sites and features in Ebonyi state of Nigeria: research methodological discussion

Emeka E. Okonkwo a,*, Jecinta Ikegwu b,1

a Archaeology and Tourism Department, University of Nigeria, Nsukka, Nigeria
b Humanities Unit, School of General Studies, University of Nigeria, Nsukka, Nigeria

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ABSTRACT

Oziza community is one outstanding heritage site, which straddles the East of Ugwuegu and Ukpa rock shelters and has a total area of 24.32km². Oziza is situated on a hill, with undulating plain, and lies between N90°00' north of Upper Afikpo. It is endowed with both archaeological and ethnographic resources; interestingly, this study arose because there has not been a systematic study of the archaeology of Oziza. The existence of the heritage site is now in danger, particularly with the current wave of herdsmen assault and communal clashes. In this paper, we will discuss how we carried the research, choose and discussed with respondents within the Oziza community, and essential individuals that helped to create awareness about the heritage of the Oziza community.

1. Introduction

Archaeological excavations and documentation carried-out in Eastern Nigeria in the past had posited that the Cuesta found in Nsukka – Okigwe – Afikpo was the origin of Igbo settlement. The natural sandstone ridges in Afikpo with rock shelters and caves had been used as dwelling places for the prehistoric and historical peoples of the study area. The sites and rock-shelters, therefore, served the earliest settlements for the inhabitants before their migration to the present clusters.

At the mention of Afikpo, many questions are called to mind. These questions are what is the degree of archaeological excavations and recovering in Afikpo by Hartle (1967), Chikwendu (1976), Andah and Anozie (1980/81) as well as in Okigwe by 00 (2000) is? How far is the suggestion made by Ekechukwu (2002) helped in inventorizing the archaeological sites found in the Cuesta for tourism? All these research works had not contributed to social change and tourism shift; instead, these works were locked under the shelves and lockers in the library. Poverty and unemployment are still common in Nigeria despite landmark research works that should serve as a roadmap to developmental strides and employment generation.

The main focus of this research work was to study archaeological and ethnographical sites and features in Oziza to understanding the human occupation of the area. This research work would strengthen other works already carried-out in Afikpo with that of her closest neighbour (Okigwe) in order to reconcile them with the work of Ekechukwu (2002), whose aim is to inventoried all the archaeological sites found at Nsukka-Okigwe-Afikpo cuesta for tourism. After all, archaeological sites are variable resources and when harnessed will be opened for tourism and thus, answer the clarion call for job creation, and poverty alleviation.

Specifically, this research arose because there has not been a systematic study of the archaeology of Oziza, although there had been archaeological research done in the Cuesta. Therefore, this study compared other archaeological works done in the area and its environs in order to increase understanding or to throw more light on the human occupation of the area.

2. The Oziza town: geographical location

Oziza is a town in Afikpo North and is located on the axis of 5°, 54N and 7° 56°E. The town is a sub-group of Afikpo, situated on a hill, with undulating plain, and lies between N90°00' north of Upper Afikpo. It is located East of Ugwuegu and Ukpa rock shelters with a total area of 24.32km². It has four sub-group of villages namely Amaityme Amor, Amaeta and Urrah. Oziza town is an Igbo-speaking enclave that settled at this present position many generations ago. The principal occupations of Oziza settlers are farming, fishing, hunting and pottery making. The people also engage in wrestling, especially during festivities.

Oziza has unique and similar geomorphology and two central lithological units characterise the geomorphology: (a) Siliceous sandstone and carbonaceous shale (b) calcareous sandstone and grey shale (Andah and Anozie, 1980/81). Oziza has undulating topography with sandstone forming prominent ridges. The Cuesta where the Ogbu-Eju (rock shelters) was located...
possessed a robust scrap features that made the shale to be underlaid with much broader flat flowing lowlands which are flooded during the rainy season.

The vegetation cover of Ozizza falls within the Guinea Savanna zone. Tall trees and grassland characterise it, as exemplified by the presence of raffia palm, silk cotton tree; shrubs and bamboos found especially at Amaeta village. The road to the village is always flooded during the rainy season and the only access to the village during rainy periods is by canoe. High temperature, climate fluctuations also characterise Oziza, but the wind action is stable. Ozizza community has large hectares of land for farming and thus, has many foodstuffs with a pleasant climate. Ozizza cuesta has fatty mineral deposits. During reconnaissance, coal deposits were found at Amaori village while shale and grained sandstones were found at Ogba-Eju. Ibeanu (2000) reported that coal, shale and grained sandstone deposits were found at Okigwe cuesta, precisely at Ihube and Ugba junctions. All these mineral deposits have not been utilised for commercial purposes (Figures 1, 2, 3 and 4).
3. Conducting ethnographic fieldwork in Ozizza

“Ethnography has expanded to become established as one of the vital study elements connected with a qualitative research study. This qualitative study method dates to many centuries ago, and first begun with anthropologists” (Holloway et al., 2010). Ethnographers that usually adopt in-depth interviews and participant observation to accumulate information usually are confronted with the quandary of staying unbiased and also moral in their information collection procedure, along with generating reports that can be reproducible (Eyisi and Okonkwo, 2019). Therefore, ethnographers that study their individuals, are anticipated to be moral scientists, as well as to embrace reflexivity and make recognised their position in the research study procedure; as co-creators of knowledge (Eyisi and Okonkwo, 2019). On the other hand, the archaeological survey is vital and indispensable in any excavation or fieldwork and helps in the collection of surface/sub-surface data. Ogunde (2000) has collaborated the above view with Eyisi and Okonkwo (2019) in his assertion that more considerable attention should be paid to surface research, which makes it possible for the archaeologist to have some insight about how man has broadly used space at one-time or the other, or the relationships between man and terrestrial space. “Advocacy for sound qualitative research, which can be evaluated based on credibility, usefulness, and transferability” (Roller and Lavrakas, 2015) has caused the introduction of important concepts related to ethnographic study. Several of these concepts consist of the idea of staying in the middle while performing qualitative fieldwork as observed by Breen (2007) and O’Reilly (2012). “This approach enables a researcher to try and remain neutral as neither an insider nor an outsider during a research process” (Breen, 2007). Reflexivity; which is a procedure of subjecting oneself to a critical investigation as part of a co-creator of expertise in a research study procedure likewise assists a researcher to come close to the procedure with trustworthiness. Scholars like Blaisdell (2015); Russell--Mundine (2012) and Zhang (2017) have argued for and embraced this technique in attending to researcher predisposition and also developing a researcher-interviewee partnership.

An attempt is made here to discuss in detail how we were reflective, and conscious of our position during our communications with the Ozizza people of Ebonyi State, Southeastern part of Nigeria; in a bid to appreciate their exceptional cultural values and techniques as well as past human activities. Giving the general practice of ethical committee approval of a title/research, we note here that our institution is yet to adopt this ethical approach. However, efforts are made by the researchers

Figure 2. Map of Afikpo showing Ozizza archaeological site.
In-depth and semi-structured meeting with a number of thoroughly chosen individuals were carried out. A total number of 35 individuals from among knowledgeable persons in the Ozizza community were selected. Their selection was based on their ranks and positions within and outside the Ozizza community. A non-probability sampling method was used to select the individuals to be interviewed. Here, we identified one member of some population of interest and interviewed the participant and after offer an opportunity for the person to suggest another interviewee(s) whom might be knowledgeable on the subject. Using this strategy, ten titled men, seven craftsmen, ten pottery makers, and also eight clan heads were recognized and interviewed using an interview guide. “Snowball sampling often leads the researcher into a realm he/she knows little about” (Eyisi and Okonkwo, 2019).

Ethnographic data were zeroed mainly on understanding past subsistence practices, technological know-how and cultural festivities. Subsistence practices identified are farming and fishing. The technological know-how was pottery making and fish netting while cultural festivities were new-yam festival (Iri-iri), masquerading and mgba (wrestling). According to the respondents, perfection into any local craft and mgba (wrestling) was by regular participation or by apprenticeship. The clustered settlement in Ozizza gave room for the inhabitants to interact very closely with each other and to share things in common.

Following Fielding (1993) suggestion, we followed the same pattern each time to ask the questions which are relevant to addressing our aims and objectives, but at some other times, we felt free to alter the sequence and probe for more information from the respondents. Hence, the primary benefit of a qualitative research study approach depends on the connection between the interviewer and the interviewee. This method proved to be useful in achieving the aim of our research as the persons interviewed gave excellent information, provided more in-depth answers and a full range of data (Eyisi and Okonkwo, 2019). The information was gathered with tape/video recorders in addition to field notes. Photographs, documents, as well as field observations, were likewise made throughout this inquiry.

In October 2012, we did initial research of Ozizza for fieldwork preparations as well as to acquaint ourselves with the research study location. We conducted a reconnaissance survey, which allowed us to locate some attraction sites and recognise essential individuals for interviews. The reconnaissance survey also allowed us to determine and observe proof of previous activities of man in the research location to assist us in determining specific possible sites for the research. The potential sites identified were recorded and mapped for a more comprehensive research study. We subsequently identified both elders and knowledgeable persons in Ozizza as essential informants and finally evaluated those that made up the respondents for in-depth interviews. This preliminary study lasted for twenty days.

In the second phase of the fieldwork, which occurred in December 2012, we studied the ethnographic resources (natural and cultural features) in Ozizza and their GPS coordinates. This allowed us to map the site utilizing the portable GPS gadget. In 2013, we revisited Ozizza and conducted an archaeological excavation. We also surveyed pottery wares currently in use and compared them with those excavated to determine culture continuity. Conservation practices of both natural and cultural resources were further studied. The visit lasted for four months. Our concluding visit was in February 2014 when we revisited Ozizza to revalidate our data. Lastly, information collected from secondary sources were made used to supplement the qualitative information. We likewise utilised secondary sources; thus, as argued by Veal (1997):

secondary data are already existing data such as textbooks, journal articles and conference papers written for some other purposes, but which can be used a second time by a researcher. Secondary research was useful to our research because it provided the theoretical anchor for our study, (Veal, 1997).
The study covers large research areas such as cultural/heritage resources, cultural landscape, and the caves and rock-shelter in Ozizza town and Afikpo North local government area of Ebonyi State. Again, the secondary research enabled the evaluation and determination of the viability and usefulness of oral interviews in the reconstruction of the archaeological sites in Afikpo.

Our institution (University of Nigeria, Nsukka) does not require that we receive ethical approval for this study. The practice is alien to our institution and may adopt it in future.

4. Execution of the research

In order to actualise the purpose of the research during the reconnaissance, the following tools were employed: compass, black and white scale, metal tape, ranging poles and iron ruler. Compass was used in measuring directions which showed that Ozizza lays due south of upper Afikpo. The metal tape was used to measure the distance of all the sites reading from Aminayime town hall. Black and white scale was used to initiate the North of each site identified. Vanier calliper was used to measure the thickness of artefacts found in-situ and at the surface collection. These tools were also handy during the excavation in the rock shelter 10 (ten) at Ogbo-Eje. Other approaches employed were the map-based and data-based format. According to Ekechukwu (2002), a map-based approach is an indispensable Geographical Information System (GIS) used in displaying and analysing spatial data. The relationship between GIS and archaeological data is to measure objects in the space. Thus, archaeologists make use of GIS to generate maps, plans, and scales of the given sites.

Data-based format is also suitable for the archaeological site management in this research. Ekechukwu (2002) observed that data-based format employed in archaeological site conservation was to create the site from the field inventory and documentation. The information is typically stored in the computers or found in site data forms prepared for each site for use by archaeological resource managers in taking important decisions regarding site management and the use of such sites for tourism promotion purposes (Ekechukwu, 2002). For proper management, documentation and preservation, the data-based solution was employed in the research area.

5. Recognition of the key interviewees

Clark et al. (1998), has rightly argued that “selecting appropriate interviewees is of paramount importance when conducting qualitative research”. Thus, “after extensive reading of available literature relating to our study area, along with several personal contacts, several individuals were identified as crucial interviewees for our research” (Eyisi and Okonkwo, 2019). The informants chosen are representatives of the essential organisations in charge of creating and also carrying out a policy that guides co-existence and resource use in the study area. It is also of interest to note here that apart from key interviewees listed below, we also interviewed other informants and the information collected from these individuals were used to substantiate data gathered from the essential interviewees.

6. Representativeness of the data collected

Individuals representing organisations were identified and interviewed, including the Chief of Ozizza and his cabinet members, the women leader and her group, youth leader and his group and Ozizza neighbourhood watch group. Others are notable cultural institutions in Ozizza like the associations of farmers and artisans, masquerade cult, dance group, among others. Clark et al. (1998) argued that “the representativeness of data is a measure of its validity and reliability”. In this instance, we presumed that the data is credible and dependable because of the nature of people and also organisations the information was accumulated from, and what they represent. “The researchers asked each interviewee the same question, and there were similarities in their responses. Instructively, triangulation of data collection techniques was used (including crucial informants, focus group discussion and observations) to complement the information and increase the reliability of the result”, (Eyisi and Okonkwo, 2019). “Validity indicates the degree to which an instrument measures the construct under investigation. Accurate content validity refers to the subjective agreement among professionals that a scale logically appears to reflect what it purports to measure” (Zikmund, 2000 cited in Eyisi and Okonkwo, 2019). In our study, content credibility was enhanced via an evaluation of the literary works.

7. Collection of data: identification and mapping of features

Besides gathering information from essential informants and other individuals within and outside the Ozizza community through key informant interviews and observations, we made use of Global Positioning System (GPS) in mapping Ozizza cultural landscapes and features identified during our earlier fieldwork. Maps appropriate for the research study were additionally gathered and analysed.

8. Data analysis/Interpretation approach

According to Patton (1990:372 cited in Eyisi and Okonkwo, 2019), “there are no absolute rules to data analysis except to do the very best with your full intellet to fairly represent the data and communicate what the data reveal given the purpose of the study.” Okpoko and Ezeh (2011:146 cited in Eyisi and Okonkwo, 2019) further observed that “analysis of data depends on the type of information that have been obtained. For example, data obtained through interviews are analysed in the same way that interviews are analysed in other types of social research…”. Howbeit, the evaluation needs to be made straightforward for even more all-natural understanding, make sure replicability as well as needs to be associated with the function of the research study. Seven methods were employed in analysing and interpreting the data collected from our study of archaeological and ethnographic sites and features in Ozizza community.

Statistical analysis, as well as site distribution mapping of archaeological features used close technique generated results from our archaeological field reconnaissance. Factors such as the size of the site, human habitation and components of the vegetation cover were tackled. The data analysis dwelt on data processing, which was harmonised with the archaeological information generated from our field. These, coupled with geographical data, helped during the interpretation. The possibilities of this trend were characterised on the following stages: Statistical analysis, site distribution mapping, nearest neighbour analysis and site catchment analysis. Others are Sedimentological and palynological analyses, Mineralogical analysis and Petrographical microscope as well as hard-ness text analysis. All these aided statistical inferences.

Statistical analysis such as the mean and percentage of each data collected was used to analyse data from the research findings such as pottery, stone artefacts and other material items. The pottery was analysed based on their shapes and decorations. The stone artefacts were analysed based on their period of existence. Illustrations were based on graphs and pie charts. Measurement of variables, are illustrated in the table. Mean was employed, especially during small deviation. These various methods of data analyses were employed in the research methodology.

Site distribution mapping was another approach adopted to aid the interpretation of our site and to help actualise the purpose of the research. According to Daniel (1962), site distribution mapping serves as the primary tool of archaeological research and exposition. Supported by Hodder and Orton (1976), the maps provide empirical evidence on which some fundamental theories and related interpretations can be made. Ezediche (2000), a sequel to his findings in land use and the spatial distribution in Nsukka-Okigwe cuesta asserted that site distribution
mapping entails the production or representation of a site distribution format or structure in the study area. The usefulness of site distribution mapping is overwhelming. It is not only needed for interpretation of site clustering but also used in selecting the number of study units from the entire area of study (Ezeadichie, 2000). The system applied here was based on the systemic grid to avoid clustering. In this study, the points within the square were selected randomly and shaded to save time and resources.

Site catchment analysis is very relevant when dealing with the environment. It draws a link between natural resource localisation and the utilisation of these resources during the occurrence of sites and features in the cherished location. The study adopted Site catchment analysis to make a similar description between sites with the natural resources, bearing in mind that the availability of natural resources determined early settlement and landscape usage. This serves as reasons for a bunch of archaeological materials and sites in the study area. Ozizza, Ukpa and Ugwuengu in Afikpo, as well as Okigwe rock-shelters, were identified and adopted for this aim.

Nearest neighbour analysis was first utilised in calculating the spatial uniformity in archaeological sites or artefacts distribution patterns by Clark and Evans in 1954. The nearest-neighbour analysis is a statistical calculation in archaeological recording sites and finds during archaeological fieldwork. The purpose of the study according to Clark and Evans (1954), is to “provide a measure of the non-randomness of a point distribution by comparing the mean of the distance from each point to its nearest neighbour with the mean distance predicted by a random hypothesis”. Therefore, “the nearest-neighbour analysis allows quantitative comparison of patterns and among areas, its usage help to eliminate the effect of scale” (Rossbacher, 1986). Many authors had propagated formulas for calculating site catchment analysis, such as:

Clark and Evans (1954): \( r_n = \sum_{i=1}^{N} r_{i}/N \)

Hodder and Orton (1976): \( (w/o-e=W-e=Q = e^{-w/f-c}) \) where \( w = r^2 \) (\( r = \) nearest neighbour distance), \( c = \) constant or chosen limit of \( w \) and this is to be estimated from the site density format (Ezeadichie, 2000);

Rossbacher (1986): \( RN = 2d \sqrt{n/a} \) where \( RN = \) nearest neighbor value

\[ 2d = \text{mean distance observed} \]
\[ a = \text{area under study (km}^2) \]
\[ N = \text{Total No of finds/points.} \]

Among these authors’ formulas, the simplest and cherished is Rossbacher (1986). Therefore, NNA (Nearest Neighbour Analysis) measures the extent to which a particular pattern is clustered/nucleated, random or regular/uniform. The standard benchmark for classifying whether a site is clustered or not are: 0 to 0.13 = linear clustering; 0.5 = clustered/nucleated; 1.0 to 1.4 = random; 1.5 to 2.5 = regular/uniform and figure from 3. 0 above is considered high regular spacing.

Sedimentological analysis: Without sediments, there would be no archaeological sites. “Sediments are composed variously of particles of disaggregated rock, dust from whatever source, bits of dead animals and plants, and chemical precipitates” (Dincauze, 2000:257). Invariably, sediment in the archaeological study is the combination of physical, mechanical and chemical remains found in the giving environment which are called the archaeological sites – piles of artefacts, ecofacts and features used by man, left behind and buried beneath the earth million years past. In this sedimentological analysis, soil pedological and palynological is mostly paramount, bearing in mind that the excavation was at the rock-shelter. In the pedological soil analysis, soil samples were collected, taken to the Soil Department’s Laboratory, University of Nigeria, Nsukka, to determine the soil texture in other to examine and initiate the level of human activities and environmental changes.

In the case of the palynological analysis, soil samples were also taken to the Department of Archaeology Laboratory, University of Ibadan, to study the pollen grains which helped to throw more light on the vegetation of the study area. Palynology is the scientific study of pollen and spores. Therefore, both soil pedological and palynological analysis determined the level of activities and human impact. It is believed that high phosphates in the soil are an indication of human/animal use and decay (Ibeanu, 2000:20).

Mineralogical analysis and Petrographic microscope: The mixture of mineral grains and rock fragments make-up sandstones, although most sandstones are dominated by mineral grains (Sandstone, Mudstone and Shale) as was found in this study area. In Sandstone region, minerals such as calcium, magnesium, sodium, potassium, zinc, iron, manganese, titanium and phosphorus abound. However, in some area, calcium is generally more abundant, while clay minerals, fine-size micas, quartz and feldspars are abundant minerals in the Mudstone and Shale region. The availability of this geological outcrop (sandstone, mudstones and shale) in this study area generates resources valuable by man, e.g. pottery and coal.

Petrology is the scientific study of rock, clay and metal while the thin section is a specially prepared slice of stone, potsherds and iron. “Petrology involves an examination under a microscope of the thin sections cut from samples of pottery in precisely the manner used to examine stone by petrography” (Green and Moore, 2010). Petrographic microscopes are used to test the purity and to investigate the optical properties which are conditioned by atomic arrangement (Shepherd, 1985). The study is essential as it exposed the mineral of the geological area where pots or other artefacts are manufactured. It also gave an idea about the sources of raw materials (Sharer and Ashmore, 2003; Renfrew and Bahn, 2000; Grant et al., 2002). Given these, therefore, Tomber and Dore (1998) posit petrology as a medium for the detailed record and comparison in some area, such as Roman and or Great Britain. Most probably, the petrographic study of the potsherds has given ample opportunities to compare Ogba-eju site in Ozizza with other sites in Afikpo and its environs. For clarity and chronological seek, potsherds were methodologically analysed.

Laboratory Methods: Selected potsherds, raw clay and tempering material excavated from Ogba-eju rock-shelter ten (RS/10) with that of Ukpa rock-shelter and Ugwuengu valley were subjected to chemical analyses (petrographic and mineralogical analyses) and sent to the Geology Department, University of Ibadan for thin sectioning. Each sample for petrographic analysis was cut and impregnated with epoxy, lapped with carborundum, mixed with water for three days and kept at a new slide. The slides were viewed under the petrographic microscope at 30 microns. The XRD was based on passing x-ray beam through the clay samples that generated peaks, typical for each type of minerals for the clay. Both results were then subjected to archaeological interpretation, which was aimed at identifying the authenticity and sources of the pottery tradition in Afikpo. It was also to authenticate their relationship to strengthen information generated from the ethnographic resources and archaeological sites. The clay samples from the three sites in Afikpo were also submitted and subjected to hardness test in the Department of Civil Engineering Laboratory, University of Nigeria, Nsukka. This is to prove the strength of the clay materials used for the pottery in Afikpo.

9. Interpretation of archaeological findings

The archaeological survey and excavation yielded tremendous results. The study identified ten rock shelters in Ozizza (locally called Ogba-Eju). The 10th rock-shelter was excavated and findings were clearly recorded and documented; and the materials recovered enabled us to understand when and how the human beings occupied the area. The study identified what the materials were used for and how relevant they are in the present time. Sites inventory survey in Ozizza was conducted and documented. The interpretation of finds commenced with an archaeological survey in Ozizza, Afikpo. Invariably, interpretation is not something that happens after the site has been dug and finds have been...
analysed (Drewett, 1999). Thus, it is an on-going process during research work.

As observed from the excavation, important cultural materials were recovered in Ogba-Eju, Ozizza such as potsherds, pot, rock-outcrop, Snail shells and kernels shells in the different spit levels (1–6). Layers II identified Rock boulder/rock outcrop. This suggests the possibility of the rock shelter engaging into a fissure (long narrow crack/opening within the rock). This is probably due to ageing resulting in a situation in which part of the rock may fall to the ground and buried due to denudation activities on the soil surface. This projection has no developmental phase but only recorded within the middle cultural layer. The other cultural materials potsherds, pots, snail shells and kernels/shells have one developmental phase that point to food production; suggesting late Stone Age. The decorative motifs centred mostly on burnished or combination of burnished with incision, groove and plain cross-cross (see Table 1).

These techniques appeared in almost all the levels. The pattern points to the uniqueness and most straightforward pattern of the decoration. The decorative motifs centred mostly on burnished or combination of burnished with incision, groove and plain cross-cross (see Table 1).

Layer VI brought different arguments regarding the pot buried at the level of 100–120cm. The first impression was simple; the pot was meant as a water coolant used by farmers on transition during the farming season. Secondly, oral information from our local guide and some elders in the communities ascertained that the pot might have been used for water storage by the utilizers of the rock shelters: farmers, hunters, fishers and oat takers). According to informants and from cultural remains observed in the area; these various people came to the rock shelter for different purposes. For instance, Farmers utilised the environment to cultivate food crops and they generally relaxed in the shelter when the sun becomes unbearable.

Farmers also make use of the area for sacrifice during the farming season. Yam must not be planted except sacrifices are performed at the "the-akwiko" shrine just a pole to the excavated rock shelter. Items such as fowls and sheep are slaughtered, its' blood smeared at the altar of the 'the-akwiko' shrine. The celebrants eat the meats. Hunters also hunt in the area and also relaxed in the rock shelter. Fishers adapt to the environment during the flooding season for fishing and people visits the area for oath-taking during any disputes. These reasons as was buttressed by the informants are possible motives behind the pot been kept and buried for oath-taking during any disputes. These reasons as was buttressed by the informants are possible motives behind the pot been kept and buried after for many years.

Archaeologically, the pot was used for either sacrifice or oath-taking. This could be a possible explanation because the rock shelter contained plants such as Anyasi (Glyhaea brevis) and palm tree (Elaeis guineensis). Instances abound in Igbo culture area where the trees, especially Anyasi (Glyhaea brevis), are used for land boundaries and for instituting a shrine. Therefore, it was most probably that the pot stored water for that purpose. However, other people believe that the pot was meant for water storage used by farmers.

In the final analysis, the pot had no negative impression. Farmers used the environment as a transitory dwelling zone and based on the fact that drinking water is scarce in the area, it was most probably that

| Organic Materials       | Surface | 0–20cm | 20cm–40cm | 40cm–60cm | 60cm–80cm | 80cm–100cm | 100cm–120cm | Total | %  |
|-------------------------|---------|--------|-----------|-----------|-----------|------------|-------------|-------|---|
| Palm Kernel and Shells  | 3       | 40     | 13        | 1         | -         | -          | -           | 57    | 19.387755 |
| Fish net                | 5       | -      | -         | -         | -         | -          | -           | 05    | 1.7000630 |
| Bottle and charcoal     | 4       | 8      | 3         | 4         | 2         | 1          | -           | 22    | 7.482939  |
| Seed husk               | 3       | 7      | 1         | -         | -         | -          | -           | 11    | 3.741497  |
| Wood snare              | 1       | -      | -         | -         | -         | -          | -           | 01    | 0.340135  |
| Plants/Trees            | 2       | -      | -         | -         | -         | -          | -           | 02    | 0.680273  |
| Snail shells            | 3       | 3      | -         | -         | -         | -          | -           | 06    | 2.040816  |
| Total                   | 104     | 35.374150 |          |           |           |           |             |       |   |

| Lithic Material         | Surface | 0–20cm | 20cm–40cm | 40cm–60cm | 60cm–80cm | 80cm–100cm | 100cm–120cm | Total | %  |
|-------------------------|---------|--------|-----------|-----------|-----------|------------|-------------|-------|---|
| Rock                    | -       | 5      | 1         | 2         | 1         | 1          | -           | 10    | 3.401361  |
| Quartzite               | -       | 1      | 7         | 1         | -         | -          | -           | 09    | 3.061234  |
| Quartz                  | -       | -      | -         | -         | -         | -          | 1           | 01    | 0.340135  |
| Stone tools             | 3       | -      | -         | -         | -         | -          | -           | 03    | 1.020488  |
| Fish Hook               | 1       | -      | -         | -         | -         | -          | -           | 01    | 0.340135  |
| Total                   | 24      | 8.163265 |          |           |           |           |             |       |   |

| Metallurgy              | Surface | 0–20cm | 20cm–40cm | 40cm–60cm | 60cm–80cm | 80cm–100cm | 100cm–120cm | Total | %  |
|-------------------------|---------|--------|-----------|-----------|-----------|------------|-------------|-------|---|
| Aluminum                | 4       | -      | -         | -         | -         | -          | -           | 04    | 1.360544  |
| Binding wire            | 1       | -      | -         | -         | -         | -          | -           | 01    | 0.340135  |
| Plastic                 | 1       | 1      | -         | -         | -         | -          | -           | 02    | 0.680273  |
| Zinc                    | 1       | 2      | -         | -         | -         | -          | -           | 03    | 1.020488  |
| Total                   | 10      | 3.401361 |          |           |           |           |             |       |   |

| Ceramics                | Surface | 0–20cm | 20cm–40cm | 40cm–60cm | 60cm–80cm | 80cm–100cm | 100cm–120cm | Total | %  |
|-------------------------|---------|--------|-----------|-----------|-----------|------------|-------------|-------|---|
| Pottery clay            | -       | 1      | -         | -         | -         | -          | -           | 01    | 0.340135  |
| Pottery                 |         |        |           |           |           |           |             |       |   |
| Rims                    | 3       | 6      | 1         | -         | -         | -          | 1           | 13    | 4.21768   |
| Body                    | 4       | 28     | 66        | 6         | 16        | 16         | 1           | 137   | 46.598640 |
| Neck                    | -       | 1      | 1         | -         | -         | -          | 1           | 04    | 1.360544  |
| Appliqué                | -       | -      | -         | -         | -         | -          | 1           | 01    | 0.340135  |
| Total                   | 155     | 52.721088 |          |           |           |           |             |       |   |

| Grand Total             | 39      | 103     | 91        | 16        | 20        | 21         | 4           | 294   | 100.000000 |

*Ash at the wall of the Rock Shelter.

Table 1. Ogba-Eju Rock shelter (RS/10): Inventory of Findings.
the pot was used for the storage of drinking water. Water would be stored and utilised for drinking when one was tasty. The pot found beneath the earth's surface may also have been as the result of denudation and the stone tripod is acting as a stabiliser to the pot were buried. Inside the pot was covered by soil. The soil fossilised, taking the shape of the pot. The pot, being fragile, broke soon after it was excavated from the earth crust. The pot recovered did not differ much with Afikpo contemporary pots.

Apart from the fact that no dating was recorded, yet at Ogba-eju site, Ozizza Afikpo, radiocarbon dated by Hartle for Ukpa rock-shelter was traced to 5000–3000BP; Andah and Anozie (2100–2000Bp) and at Uhuachiku, Okigwe by Ibeanu was dated 3464 ± 104, all indicating human activities in the past. Despite the problem arising from their dating, it was generally believed that the dates, especially that dated by Hartle were proof of early agricultural practices in Igboland. Hence, the pottery in Ogba-eju rock-shelter was extrapolated to concord with other dates in Afikpo.

This research work is significant because it focused on archaeological and ethnographic sites and features in Ozizza intending to understand the human occupation of the area. It is a truism that of all the pieces of literature on Okigwe-Afikpo, none systematically studied the archaeology of Ozizza. Secondly, this study was used to compare other archaeological works done in the cuesta and its environs with a view to understanding the human occupation of the area. Most of the archaeological excavations and recovering in Afikpo by Hartle (1966), Chikwendu (1976), Andah and Anozie (1980/81) and Okigwe by Ibeanu (2000) have not contributed to social change and tourism shift rather their works were locked under the shelves and lockers in the Department and University library. Poverty and unemployment are still common in Nigeria despite landmark research works that should serve as a roadmap to developmental strides and employment generation. Towards this end, this work serves as a source of documentation and inventorizing the archaeological sites for global consumption; while showcasing the research with the larger society as a way of disseminating information. Therefore, it is the belief of the researchers that the methodological discussion could serve as a clue in helping other scholars or researchers wishing to undertake such a similar study in order parts of the world. Finally, this documentation helped in creating awareness about the heritage of the Ozizza community in Nigeria (Figures 5 and 6).

10. Summary and conclusion

An attempt has been made based on archaeological survey and ethnographic data collection as well as palynological studies to linked connectivity between Ukpa, Ugwegu and Ozizza, Afikpo communities. Oral tradition was adopted in achieving these objectives. Okpoko (1982) observed that oral tradition is used to establish direct historical continuity between the past and the present inhabitants in the studied area. Cultural materials recovered during oral information attested much about the people. Although microlithic was not found at Ogba-Eju, oral tradition characterised Ujii as a depression on the sandstone ridge and was used to link Ohahudi first settlers in Ozizza to the agricultural origin with that of Ukpa about 3000–5000Bp (Hartle, 1967). Based on the palynological studies, the site was dated to be Late Neogene to Holocene period, since carbon 14 charcoal dating is still forthcoming. Hartle dated the site as earlier than Okigwe (Holocene period) and comparable with Hartle's date 5000 –3000 Bp (550 –1050 BC) and Chikwendu's date 2580 –80 Bp 2220 –80 Bp (1020 ± 90 BC) in both Ukpa and Ugwuegu in Afikpo. The polymorph studies showed that the underscored area had the impact of man and was dominated by Baculate spore, Cyathidites minor, Dicyophyllidite harrisii, Amaranthaceae and monoprites.

The uniqueness of the palynomorphs assemblages of the area at present can be divided into two: the dry and wet vegetation. The dry
vegetation pattern was dominated by ferns Punctatisporites spp., while pollens and spores dominated the wet pattern. Examples were Cyathid- ites minor, Baculolute spore, and tricolpates. The wet period always promotes flooding in the area and the intersection of these seasons contain coal assemblages, the reason behind littering of pieces of coal at the sandstone hill along the hill in proximity to Cross River and close to Amaori sub-group of villages in Ozizza. The three sites in Afikpo have the same cultural affinity. Also, in the area of ethnographic resources (fishing, hunting, communication skill and festivities), they are equally the same. That suggested some degree of interaction between the three sites. The interaction was started and initiated from ‘Ndiegu – Successors of ‘Obahdu’ (the missing link in Ozizza). There were other connectors, such as the dietary pattern of the past. This inference came from both snail shells and seed husks recovered from the three excavations conducted so far at Afikpo.

The Ozizza in Afikpo scarplands occupied by early inhabitants were agriculturists with their stratigraphy ceramic. This was ascertainment from cultural materials at the site. Although coal deposits were caused by the sedimentary nature of the rock, Umeji et al. (2012) classified Afikpo as syncline sedimentary rock that was formed by the over lain sanitarin and Cretaceous (Danian) deposits. This perhaps was the cause of the coal deposits found on top of sandstone ridges. Despite the coal deposits, Afikpo never practiced iron smelting since there was lack of evidence of slags, bellows, lumps of baked earth (that is, furnace walls) and tuyere in the three Afikpo excavated sites. Afikpo inhabitants (past and present) seemed to be self-sufficient communities that concentrated only on food production and procurement. Evidence of the impact of man had been shown in the various analyses.

Again, pottery production of Afikpo is a real resource. The products were exchanged for monetary value among the Cameroonians, Calabar, Aba and Imo people. The transaction came through canoe transportation from Afikpo across the Cross River to Calabar. Better still, their homogeneity regarding cultural setting/relics was made intact through pottery making, hunting expedition, fishing with netting, festivals and masquerading which features in Afikpo depict an element of solidarity. All was the binding force over millions of years past in Afikpo. Their solidarity and identity were portrayed in the prehistoric Afikpo pottery communities. Forms, patterns and decorations of pottery making were the same, reflecting and pointing to one descendant – “Ndiegu”. No wonder the three communities had a similar correlation in agriculture, origin, names, settlement structures and patterns, and patrilineal affiliation.

Finally, Eyisi and Okonkwo (2019) rightly observed that “more scholars should be encouraged to document and share their research with the larger society as a way of disseminating information”. Perhaps, this research report will undoubtedly produce a stage for more study in a paper.

Disclosure

Author contribution statement

Emeka Okonkwo, Jacinta Ikegwu: Conceived and designed the experiments; Performed the experiments; Analyzed and interpreted the data; Contributed reagents, materials, analysis tools or data; Wrote the paper.

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Additional Information

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