

**CERAMIC AND ACERAMIC CULTURES OF NORTH-WESTERN NIGERIA: A
PRELIMINARY REPORT OF DUTSEN MURHU EXCAVATION, BIRNIN-KUDU**

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Abstract

Dutsen Murhu is one of the famous rock art painting sites in Birnin Kudu Local Government Area of Jigawa State. The site was first discovered in 1954 together with Dutsen Mesa and Habude by the then village head (*Maigari*). The paintings suggest evidence of early food producing societies of West Africa. Dutsen Murhu site is endowed with natural resources which were utilized in making such cultural materials and as such clearly depicted the technological advancement of the people who inhabited the sites. Test pit technique of excavation was adopted with an interval of 10cm (Spit) all through and yielded a collection of different material remains such as lithic objects, potsherds and charcoal samples among others. This paper is an outline of ceramic and aceramic cultures from a preliminary report of the excavation carried out at Dutsen Murhu site between 20th and 25th July, 2019 by the Department of archaeology, Ahmadu Bello University, Zaria. The paper however, added to the existing literature on the evidence of early food production in the area; shows an indication of transition from nomadic to sedentary ways of life and also contributed to the discussion of ceramic and aceramic phases of Late Stone Age.

Keywords: *Excavation, Early Food production, Ceramic and Aceramic Periods, Birnin-Kudu and Dutsen Murhu.*

Introduction

Birnin-Kudu is an ancient settlement situated in the present day Birnin-Kudu Local Government Area of Jigawa state. The settlement is bordered by town and villages of Jigawa, Bauchi and Kano states, with Dutse to the North, Yamre to the East, Ningi to the South and Sumaila to the West among others. This historic settlement, lies between latitude $11^{\circ} 21' - 11^{\circ} 31' N$ and $9^{\circ} 19' - 9^{\circ} 29' E$. The choice of this archaeological investigation was predicated upon the impressive, material culture visible on the surface of the settlement. Birnin-Kudu has two major historical sites which include both Birnin-Bodan where the present-day people of Birnin-Kudu settled in the past and rock art settlements. The rock art settlements comprise of Dutsen Mesa, Dutsen Murhu and Dutsen Hambude situated at the part of the present day of Birnin-Kudu settlement (Mtaku, 1987). Thus, this investigation was carried out at Dutsen-Murhu settlement which was declared on 15th October, 1964 as national monument (Mtaku, 1987) and the settlement have been facing challenges of not been studied extensively compare to other settlements in Birnin-Kudu such as Dutsen-Mesa which was excavated by Godwin 1954 and furthered studied by Thurstan Shaw 1978 (Nzenwunwa,1983).

The excavation was carried out by research team from the Department of Archaeology, Ahmadu Bello University Zaria during the 2019 yearly field school at Dutsen-Murhu site and revealed the evidence of Late Stone Age materials from the site. The excavation was said to be part of means of retrieving data in archaeology (Cunliffe, 1982); and every measure was taken to avoid the destruction of material evidences situated beneath the earth surface of the site, as part of justifications of an excavation (Daniel, 1987). Test pit method of excavation was adopted in the cause of the research, with an interval of 10cm marked as arbitrary level of the excavation. The pit terminated at 11th arbitrary level (110cm) and the presence of material culture from the pit represents the phases of Late Stone Age culture.

As rightly pointed out above, the excavation conducted on the Dutsen Murhu settlement was aimed at uncovering material remains that could speak more about the past inhabitants of these settlement in relation to their cultural heritage as depicted on the surface of the settlement. The instrument used for the excavation include: digger, mattock, brush, hand trowel, pegs, surveying pins, nails, board, head pan, dust pan, zip lock, polytene bags, measuring tape, shovels, among others.

Site Description and Characteristics

This is one of the historic settlement sites of the people of Birnin-Kudu, the site is a rock settlement characterized by the presence of rocks, small stones, grasses, loamy soil and material culture such as rock paintings, potsherds and iron slags on the surface of the settlement. The place was named Murhu as a result of the position of rock art on the three boulders informed of 'fire-hearth' which is Murhu in local name (Hausa Language).

Thus, a single pit was excavated tagged with an acronym of BK/DM/2019/Test Pit 1, at this settlement with the initial establishment of 2 by 1m before the pit was extended with 0.50m by northern wall, eastern part A and eastern wall part B respectively. Step trench technique was firstly adopted before the extension at Eastern wall part A and B gave the opportunity to collapse and dig up the step. Because of these, four respective stages will be discussed together: as the main pit and other three extensions will be addressed together at each arbitrary level. An interval of 10cm (spit) was adopted as stated earlier and the level of the pit accounts for respective material culture from the pit and as well as the nature of each level. The excavation terminated at the 90cm (9th spit) towards the northeastern wall; while the remaining part reached 110cm which is 11th spit and marked as the sterile layer.

The topographic nature of the settlement and the pit from the top soil to the natural sterile layer remained undulating as it was elevated at the north-western and sloppy towards the south-eastern wall. There were certain obstructions at some level such as boulders which were documented and mapped accordingly. The soil colour include: darkish brown, reddish brown, light brown and the texture changes from coarse to fine and nature from loosed to compact at different layers.



Plate I: Overview of Dutsen-Murhu Rock Painting Settlement
Source: Department of Archaeology, ABU, Zaria, 2019 Field School

Excavation of Dutsen Murhu

Spit I (0-10cm)

An iron implement, six numbers of potsherds, charcoal samples and stone tools were all collected at this level. The pit was a bit elevated at the northern wall and the soil was becoming loosed, the soil remained loamy and darkish brown which is damper at the northern wall.

At the spit II (10-20cm), six numbers of potsherds, charcoal sample, two flake tools, grains and seeds were retrieved. The soil type remained loamy, fine in texture and there were identifications of rock boulders at the southern wall which was measured 0.20m to the eastern wall, 22cm to the Southern wall and 1.12m to Western wall. From the northern wall extension, there was removal of rock boulder at the Southern wall.

At spit III (20 – 30cm), eight numbers of potsherds, 2 flake tools and alongside with grains and seeds were collected from this level. The soil type remained loamy, light brown in colour at the western wall, there was identification of rock boulder at the Eastern wall and the boulder at point E become clearer.

At spit IV (30 – 40cm), fourteen numbers of potsherds, 3 stone flakes, an anvil and concentrations of rootlet were retrieved at this arbitrary level. The type of the soil changed to Sandy, fine in texture

and damper at the centre of the pit. From the extension, there was identification of rock boulders at the northern wall, rock boulder at the western wall and at the southern wall become more clearer as well and was measured 29cm in diameter.

Spit V (40 – 50cm) accounted for twenty-two potsherds, charcoal sample and 3 stone flakes from this layer. The rock boulder from the western wall become clearer and joined with the rock boulder from point C. The type of the soil remained sandy, light brown in colour at the northeastern, while the remaining part were darkish brown in colour. And the rock boulder at point B became more wider than before.

At spit VI (50 – 60cm) moreover, twenty potsherds, 3 flake tools, an anvil and charcoal samples were collected at this layer. The soil type remained sandy, loosed in nature and coarse in texture. The extension led to the removal of rock boulder which turned to be triangle in shape and the angle was measured 27cm length and 6cm base. There was identification of rock boulder at the centre of the pit; the rock boulder at point D and C became more clearer and concentration of rock boulder at the eastern wall.

Spit VII (60 – 70cm) accounted for the discovery of a polished stone axe which was lying at the north-western angle of the pit. The identified axe is blackish, polished and smooth hand size object. This polished stone axe was found lying directly on an anvil in their context. The stone axe was retrieved alongside with a stone anvil. This level also accounted for the presence of stone chopper which was measured 42cm to the northern wall, 1.16m to the eastern wall, and 42cm to the western wall. The chopper has a red pigment depicted on it which also similar to the colour of the paints depicted on Dutsen Murhu rocks. Aside of the red pigment on the chopper, the chopper has a smooth surface, hand pebble size with a perforated hole from behind. This spit also accounted for the presence spheroid which was identified 58cm to the eastern wall, 37cm to the northern wall, and 82cm to the western wall. The spheroid is also hand pebble size and with smooth surface. This spit also accounted for eleven potsherds, four flake tools, five upper grinding stones, charcoal samples and two stone core tools. At this level the colour of the pit has the mixture of reddish brown in some locations while some were darkish brown in colour. The type of the soil remained sandy and the rock boulder at point C and D became more wider and this led to the removal of the rock boulder at point E.



Plate2: Polished hand axe in its context.



Plate3: Chopper in its context at 60cm spit

Source: Department of Archaeology, ABU, Zaria, 2019 Field School



Plate 4: The stone tools retrieved from the spit level VII

Source: Department of Archaeology, ABU, Zaria, 2019 Field School

At spit VIII (70 – 80cm), four flakes, an upper grinding stones, four potsherds and charcoal samples were retrieved. The type of the soil, nature and texture remained the same at this level. The rock boulder become more visible, and stone flakes were also collected from the pit.

Spit IX (80 – 90cm) accounted for four potsherds and a core tool from this level. The soil type remained sandy, concentration of lateritic soil, and at the eastern wall, there was rock boulder closer to point A. The soil colour remained darkish brown at the eastern wall and reddish brown at the northern wall. The rock boulder became more visible at point A after the extension and this led to the end of the digging at the southern wall as there was identification of earth crop at the location.

At spit X (90 – 100cm) non-material culture was collected at this level. The type of the soil remained sandy all through, reddish brown in colour, and damper, fine and concentration of the lateritic soil at the centre of the pit.

Spit XI (100 – 110cm) accounted for two core tools from this arbitrary level. The stone core A was measured 54cm to the western wall, 92cm to the eastern wall, 120cm to the southern wall and 114cm at the northern wall. The type of the soil remained sandy and reddish brown in colour; the identification of earth crop that has led to the end of the digging and there was an identification of stone core. At this level, there was an identification of bed rock which disturbed the continuation of the excavation and accounts for the absence of cultural materials that marked the natural sterile layer of the pit. The stratigraphy of the pit was recorded and represented on a graph sheet for future purpose.



Plate 5: Spit Level XI

Discussion and Conclusion

This archaeological investigation carried out at rock art settlement of Dutsen Murhu was executed successfully, the aim of the investigation has been therefore achieved and yielded a lot of result to the contributions on the existing discussion about the settlement. The archaeological excavation carried out at the settlement indicated the similarities between the material on the surface of the settlement and beneath the earth surface most in particular the presence of hand chopper with a

red pigment depicted on it which is similar in colour to what were used in achieving the rock art paintings on the settlement. Although, an extensive further research is required on the chopper to understand either the red pigment was natural or artificial, but from the facial analysis, it is probably an artificial depicted pigment as the red pigment depicted is a round mark on the chopper and this suggests a deliberate act by maker. Thus, further research on the constituent of the red pigment is required as to affirm the source(s) and if possible, any cultural value attached to the red pigment over the settlement. Chopper and stone anvil in the excavated pit, however, suggests a several stone tools working at the settlement and as well an indication of nomadic ways of life. The chopper could have probably used on chopping, cutting, hacking and other functions with the aid of an anvil placed on the surface of the settlement. This also suggests that probably the group of the people that depicted the art works on the rock at the settlement were the same group of people that occupied the settlement in the prehistoric past. The material evidence from the excavated pit of Dutsen Murhu indicates a strong transition from nomadic to sedentary ways of life, most especially the presence of hand stone axe in context with stone anvil, spheroid, upper grinding stones, and choppers among many others objects from the settlement, which were used during the nomadic and early agricultural periods. The stone hand axe in archaeological records believed to have been severally used to produced other varieties of stone tools over a period of time (Mithen, 2005) and this often suggests a sedentary way of life because it shows considerable skill, design and symmetry beyond the utility requirement (Miller, 2001).

Also, this archaeological investigation from the settlement both on the surface and beneath the earth indicates the direct evidence of early food production based on the material remains identified from the pit such as charcoal sample, plant remains, rootlet, grains and seeds, among others. The excavated pit reveals the evidence of use of fire at the settlement through the abundance of charcoal samples collected at different layers from the pit. This research also suggests that probably the settlement was occupied during the Stone Age period and the material culture from the pit indicates the Late Stone Age activities over the settlements.

Thus, the sequence of the layers from the excavated pit also brought into limelight discussion on the transition from aceramic and ceramic periods of Late Stone Age as obtainable in many places in other part of the World. The aceramic phase of this period can also be referred to as Pre-ceramic phase, where there was absence of ceramic in the archaeological record of the past societies. Stone-

Miller (2002) described Aceramic period as a culture at any time prior to its development of pottery as well as cultures that lack pottery. Ceramic phase was the later period of Late Stone Age when ceramic was first introduced in the history of man alongside with the uses of microliths tools. Thus, the spit I to IX (0-90cm) of the excavated pits from Dutsen-Murhu site accounted for the ceramic phase of the site as there were accounts of series of lithic objects such as: core tools; polished hand-axe; flake tools; upper grinding stones; spheroids; and stone anvil, alongside with several potsherds with different decorations and forms. The spit level IX was drastically faced with the reduction of potsherds (pottery wares); the potsherds from this level were cruder and this can be argued to have probably suggests the beginning of pottery usage at the settlement, when potsherds were not in abundance (Bower, 1973). The presence of both lithic (Late Stone Age tools) and ceramic in the archaeological record at these upper levels attests that the settlement was occupied during the ceramic phase of Late Stone Age period. This is also supported by the conclusion of Killebrew et-al (2013) that many sites in Turkey, Syria, Northern Mesopotamia and Ubaid based on the evidence of ceramic alongside with stone tools were occupied during the ceramic phase.

However, the spit X that accounted for the absence of material culture (both lithic and ceramic) probably suggests the transition period between the ceramic and aceramic phases at the settlement. This might as well accounted for different groups of people to have occupied the settlement over time or the influence of new culture by the migrants into the settlement unlike the Neolithic aceramic sites of Khirokitia and Kalavastos-Tenta where the material culture from the sites argued to have been indigenous to the area and that the settlements didn't have much external contact because of a lack of settlement in the northwest during the period (Nicholas, 2006). Whereas, the stone tools from Dutsen Murhu based on the geological studies of the settlement could have been of external source, as the nature of the geological formation of the area and the presence of igneous rock over the site are different from the nature of the stone core manufactured in the production of those stone tools identified in the course of the investigation.

Thus, the last layer of the pit (Spit XI) accounted for the absence of ceramic of any kind; but presence of stone tools, which could have suggested the aceramic phase at the settlement. This also supported the evidences from Khirokitia and Kalavastos-Tenta in Cyprus where the sites were declared as Neolithic aceramic sites based on the availabilities of stone tool objects with absence of ceramic at the site (Nicholas, 2006). Although, the conclusion on the aceramic phase from this

pit (Dutsen Murhu) might be tentative as a single spit out of the 11 spit from the pit represents the aceramic phase from the site. This therefore, recommends for further excavations at the site, in order to gather more supportive evidence on the aceramic phase of Late Stone Age in the site. The conclusion of this paper however, also supported the famous principle of superposition that if all things are been equal, the layer beneath is older than the one on top, as aceramic phase from the site is older than the ceramic phase from the pit based on the assumption of relative dating.

Moreover, this tend to conclude that the period of the occupation at the settlement involve both period of absence of ceramic and presence of ceramic which is referred to as ceramic and aceramic phases of Late Stone Age culture in Europe and some other parts of the World. This was basically experienced from the stratigraphic sequence of Dutsen Murhu excavated test pit 1. It was observed that there were collections of both lithic and ceramic objects from the top layers, while at the last layer of the excavation lithic object were the only material culture identified and collected from the pit, which is an evidence of aceramic period of Late Stone Age.

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