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A preliminary Archaeological Investigation of *Rikochi* Abandoned Settlement, Kaduna State, Nigeria

Ruhaimatu Lawal
Department of Archaeology, Ahmadu Bello University, Zaria-Nigeria
ruhaimahlawal77@gmail.com

Abstract
This paper is an attempt to report the archaeological investigation carried out on Rikochi abandoned settlement. Rikochi is one of the earliest walled Hausa settlements of the Zaria people. The goal of this paper is to understand an aspect of the culture history of the people that settled, used and abandoned the site. The ground/surface survey method which involves traversing the site on foot with the eyes focused on the ground to identify evidence of human occupation was adopted; the finds identified on the site were studied, measurements were taken and some collected for further studies while the features were identified measured and studied insitu. The finds identified include: potsherds, grinding stones {both upper and lower} and hammer stones. The features are: defensive wall, streams and lateritic outcrops. The paper in the end classified the site as a habitation site due to the cultural remains identified on the site. This research has revealed that the past inhabitants had relationship with the neighbouring communities in the form of trade, exchange of goods and intermarriages; this was gathered from the oral tradition collected and the presence of pottery remains which were never made in the settlement. They past inhabitants like their present descendants were able to understand and utilize their environment to sustain themselves, particularly in the area of agriculture.

Keywords: *Archaeological reconnaissance, culture history, insitu, finds and feature.*

Introduction
Rikochi is a village settlement situated about 120km Northeast of Zaria, located in Kubau Local Government Area of Kaduna State (see fig. 1). The abandoned settlement is located on the plains surrounded by a defensive wall. The site is under serious cultivation by the inhabitants of old Rikochi settlement. Presently Rikochi has two habitation settlements which are *Sabuwar* (New) Rikochi and the *Tsohuwar* (Old) Rikochi. The abandoned settlement of Rikochi is situated on the western part of the old Rikochi village. It is about half a kilometre from the

village while the new Rikochi village is about one and half kilometre northeaster of the old settlement. Old Rikochi village is about 8km on the right off the Kargi main road. The people of New Rikichi are the descendants of the people that once lived and abandoned the archaeological site. Oral source has it that the present inhabitants of the Old Rikochi were immigrants from neighbouring villages who came and settled after the first settlement had been abandoned.

Geographically, Rikochi site is located between latitude 10^0 57' 31.82" N- 10^0 58' 55.07"N and Longitude 8^0 14' 20.71''E - 8^0 17' 24.44''E. It is located on the north-eastern part, on the map of Dutsen-Wai, Sheet 125 NE. They towns that share border with Rikochi are; Kuraye to the North, Kargi to the Northeast, Magami to the Southeast, Malaika to the West and Baro to the East (See Fig.2). The relief of the area is that of a gently undulating surface, except the eastern part of the study area, at Dutsen Wai town, where the Dutsen Wai hills form a prominent topographic feature with elevation of 853.44m above sea level (Segun 2018). Zaria plains are very distinct and impressive landforms which have been associated with several types of human activities such as settlement, farming, herding and a wide range of industrial activities. Zaria plains and the high plains of Hausaland in general have been associated with warping at different periods the latest of which occurred in the Pleistocene period (Thorp, 1970 cf Odofin, 2010). Zaria region "possesses a tropical continental climate; the continentality of its climate is more pronounced during the dry season especially in December and January" (Hore, 1970). The study area like the whole of Zazzau lies within the tropical wet and dry climate zone (A) characterized by string of seasonality in rainfall and temperature distribution.

The rainfall condition is determined by the position of the Inter Tropical Discontinuity (ITD) that separates the two prevailing air masses (MT and CT) (Iguisi, 1996 cf Olaniyi, 2004). Rainy season starts in May and ends in October, though highly seasonal. Apart from the seasonality, the rainfall is also characterized by fluctuation from year to year. This fluctuation sometimes results in drought in some areas and flood in others. Some areas may also experience normal rainfall (Ekemezie, 1992). The mean annual rainfall can be as high as 2000m in wet year and as low as 500mm in draught. The mean monthly maximum temperature in the area is about 35^0C in April and a mean monthly minimum of 12^0C in December (KRB Report 1978; Bello 2000 cf. Olaniyi, 2004).

The vegetation of Rikochi area like that of the Zaria region falls within what the plant geographers termed Northern Guinea Savannah zone of Nigeria, a designation which implies a woodland vegetation type characterized by the presence of *Isobelinia doka* (*Doka*) *I. tomentosa* (*Farin-doka*) and *Uapaca togoensis* (Kafago). The vegetation in *Kasar* Hausa is largely determined by rainfall among other factors such as: types of soil and the impact of human activity (Jackson, 1970).

The major ethnic group in the area is Hausa and it is the major language of communication. The main goal of this paper is to document an aspect of the people's material culture via archaeological reconnaissance. The type of reconnaissance conducted on the site was the surface reconnaissance which entails traversing the site on foot to identify archaeological remains of importance to the research. The researcher was aided by two field guides and four research assistants.

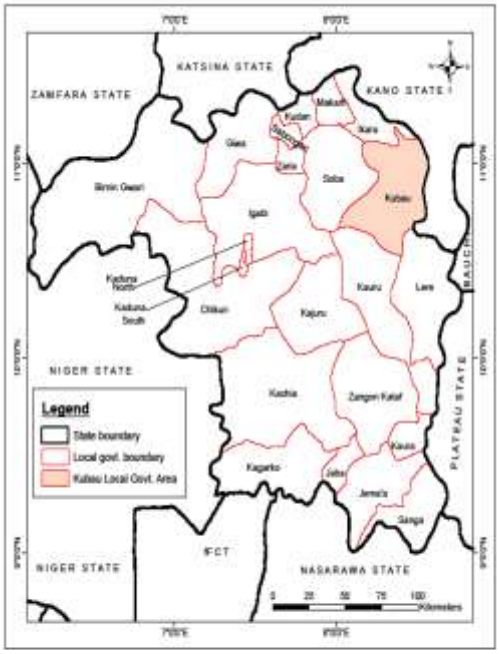


Fig. 1: Map of Kaduna State
Source: Adopted and Modified from Google Earth

Fig. 2: Rikochi Abandoned Settlement
Source: Modified from https://www.openstreetmap.org/#map=6/9.117/8.674

Archaeological Reconnaissance

Archaeological sites consist essentially of the activity area and rubbish. That is where people have done things in the past and have left some residues of having done something. Archaeological materials result from how people discard things and features during the life of the site and how they finally abandoned the site. Archaeological rubbish may generate basic information on what actually took place and where (Drewett, 2009).

Plate 1: Vegetation of the Site

Archaeological reconnaissance is generally the first step in archaeological project and often the last before excavation (Joukowsky, 1986). Archaeological reconnaissance is a systematic search of the landscape for sites and artefacts. This involves systematic field walking up and down fields and exposed surfaces at regular intervals determined by the size of the site (Price, 2007). Archaeological reconnaissance of Rikochi settlement took place between 1st -5th of May 2019. The site was revisited on the 13th of May and 23th of July 2019 for further investigation and collection of oral traditions from the present inhabitants of the old Rikochi settlement. The reconnaissance was carried out by traversing on foot with the eyes focused on the ground with the main goal of identifying the cultural and natural features on the site. Thus, surface reconnaissance which is the oldest, cheapest and most common method of searching for finds was adopted for the research.

The abandoned walled settlement is about half a kilometre away from the Old Rikochi settlement; it was accessed from the northern part through an opening

which could have been a gate in the past. A large neem tree towards the north-east of the site very close to the wall was chosen as the Datum point. A surveyor with the aid of a Global Positioning System (GPS) mapped the wall which gave an area of 722,626.22sqm and a perimeter of 3163.06m. The site is irregular in shape, characterized by short grasses and scattered trees. The vegetation on the south, the south-west and the south-eastern parts are thicker; this could be due to the soil of the area and the concentration of trees. The soil towards the south-western end of the site is swampy which avails the people the opportunity to cultivate that part all year round. The presence of a stream on that part also made irrigational agriculture possible (see plate 1). The features identified were studied, measured and photographed; Global Positioning System (GPS) was used in taking the location of the features, which was used for the production of archaeological site map.

The finds identified on the site include potsherds, iron slag, stone hammers and grinding stones (upper and lower) (see fig 3 and table 1). The finds seemed to follow a particular pattern of distribution. Potsherds were identified scattered all over the site, grinding stones were concentrated on the eastern part of the site while few grinding stones and hammer stones were identified at the centre of the site. The artefacts collected were bagged and properly labelled to prevent confusion and accident.

4.2 Materials Collected

The material remains collected from the site are in the forms of artifacts and features. Artifact is any material remains which its shape and form is not altered in the process of collection while feature is the remains which cannot be collect without altering its shapes and forms. The findings have been discussed below, a histogram and a table summarizing the findings have also been provided below (see fig. 3 and table 1).

Potsherds

Pottery is among the most common ceramics used by many past societies. Their relatively slow degradation in archaeological record makes them the most frequently encountered in archaeological research (Newman, 1987; cf Crimshaw, 1980 cf Goffer 2007). Well fired pottery is almost indestructible and very informative when recovered from archaeological context (Andah and Okpoko, 1994). Pots are not usually found in their complete form in the archaeological context but they are found in broken pieces which are known as potsherds.

Potsherds are usually the bulk of the find identified on archaeological sites. Like most archaeological sites, pottery was also the most identified and collected artifact from Rikochi site. A systematic random collection method was adopted in the course of the research. The site was divided into five based on the four cardinal points and the centre of the site; surface collections was made based on this division. A total of one hundred and eighty nine potsherds were collected from the surface of the site in the course of the reconnaissance. The criteria used in the collection of potsherds include but not limited to the forms, style and decorative motifs.

Stone/ Lithic Tools

Stones are part of the materials fashioned for use by the past inhabitants. The most abundant form of artifacts found on prehistoric sites beside potsherds is stone artefact due to their indestructible nature. In many areas of the world they represent the only form of remains that withstood the impact of environmental and human perturbation, such as erosion, decay, and landscape development. Because of this, lithic artifacts represent one of the most important clues to understanding prehistoric life ways (Andrefsky 2005). The stone artefacts identified include grinding stones (both upper and lower), and hammer stones. The hammer stones and some of the upper grinding stones were collected at the centre of the site because they were found in concentration here compared to other parts of the site. Few upper and a concentration of lower grinding stones were identified at close range (between 1-3m apart) on the eastern part of the site. Twenty two fragmented lower grinding stones of irregular shapes were identified on the site; two of the lower grinding stones were identified in association with the upper grinding stones, six fragmented upper grinding stones were identified separately which makes a total of eight upper grinding stones and five hammer stones were also identified and collected (see plates 2-4).

Plate 2: Samples of Fragmented Lower Grinding Stones

Plate 3: Fragmented Upper Grinding Stone Plate 4: Hammer Stones.

Defensive Wall

Defensive walls are fortification constructed by a people to protect themselves from invaders and external attacks. The site under study is one of the oldest walled settlements of Zazzau. The fort was built to surround the entire settlement. The defensive wall though not as high as its original height but is still visible except in some portions at the eastern part and some at the western part. The highest measured part of the wall is at the northern part of the site and it measures 1.5m in height and 6.5m in width. The remnant of the wall was observed to have been built with mud and imbedded lateritic stones which are common in the region (See Plate 6).

Land Features

The land features to be discussed in the course of this research are the natural features identified on the site. These features have not been made or modified by man but were put to use by the people who once inhabited the site and abandoned it. These features were very important in the daily lives of the people and they contributed to their social and economic lives. The site apart from human threat is also faced with natural threats such as erosion. The south-western part of the site is seriously threatened by gully erosion (see plate 7)

Plate 6: A section of the Defensive Wall

Plate 7: Gully Erosion.

Lateritic Outcrop

Several lateritic outcrops were identified on the site. This feature enhanced smelting operation by the people of the Zaria area. This is in agreement with the earlier researchers in Zaria area such as Sutton (1976) and Effah-Gyamfi (1981) who are of the opinion that the large lateritic deposits found in the area were source of raw material for the smelting operations in Zaria area (See Plate 8).

Rivers and Streams

Rivers and streams are sources of water which were available to the past inhabitants of the site. The people particularly settled close to water sources, which helped them in both their domestic and industrial activities. The streams identified on the site are *Masiyachiya* and *Pantakiya*. These streams were used by the past inhabitants for farming, fishing, industrial activities and for domestic purposes. The present inhabitants of Rikochi utilise the streams for farming and

domestic use only. The areas around the streams contain evidence of human activities such as potsherds, trees such as; Tamarid *Tamarindus indicus*, Shea *Vitellaria paradoxum*, mango *Magnifera indica*, *Adarisonia digitata* (*kuka*) Baobab and short grasses (see plates 9 and 10).

Plate 8: Lateritic Outcrop

Plate 9: Rafin Maciyaciya

Plate 10: Rafin Pantakiya

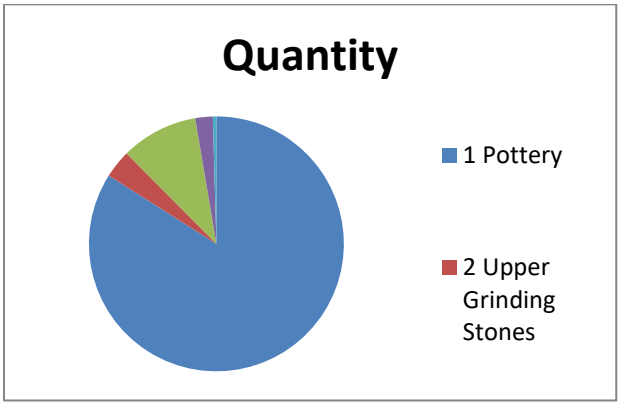


Figure 3: Histogram of the Material Remains

S/N	Item	Quantity
1	Pottery	189
2	Upper Grinding Stones	8
3	Lower Grinding Stones	22
4	Hammer Stones	5
5	Defensive Structure	1

Table 1: Inventory of the material remains from the Site.

Data Analysis

Pottery

The summary presented above (see fig.3 and table1) shows that pottery was the largest cultural remains on the site as it is the case in most archaeological sites. One hundred and eighty-nine potsherds were collected from the surface of the site based on the four cardinal points. Out of the one hundred and eighty-nine potsherds collected thirty were identified as rims, thirteen as neck, one hundred and forty-two as body parts, two as base and two as handles. Vessels with their rim diameter shorter than their height are pots while those with rim diameter longer than their projected heights are termed bowls (Aremu, 2000). Vessels with large orifices relative to their height are called open bowl while the ones with relatively small orifices are called closed or restricted pots (Banning, 2000). The thirty rim sherds identified from the surface of the site were classified into pot and bowl forms and further classified into seven forms; four were pots forms and three were bowls forms, they also represent large and small pots and bowls.

Form 1 (Pot): Five rim sherds fall under this category. They are straight neck vessels and measures between 8-16cm in diameter and 1.7-2.3cm in thickness. This accounted for 9.43% of the total number of rim sherds identified (see form 1 fig.4). **Form 2 (Pot):** Two rim sherds fall under this category. They are everted rims with sharp angle of curvature internally below the lip of the rim. They measure 8 and 10cm in diameter and 1.8 and 2.0cm in thickness and accounted for 3.77% of the total number of rim sherds identified (see form 2 fig.5). **Form 3 (Pot):** Six rim sherds fall under this category; they are everted rims with tapered lips and gentle curvature internally and externally. They measure between 9-17cm in diameter and 1.1-2.4cm in thickness, this accounted for 11.32% of the total number of rim sherds identified (see form 3 fig.6). **Form 4 (Pot):** Thirteen rim sherds fall under this category; they were everted rims with tapered lips and gradual external protruding rims. They measure between 5-15cm in diameter and 0.7-1.4cm in thickness and accounted for 24.53% of the total number of rim sherds identified (see form 4 fig.7).

Form 5 (bowl): Only one rim sherd falls under this category. It is an inverted rim with flat lip, it measures 12cm in diameter and 1.9cm in thickness and accounted for 1.89% of the total number of rim sherds identified (see form 5 fig.8). **Form 6 (Bowl):** Two rim sherds fall under this category; they are inverted rims with gradual curvature internally and externally. They measure 7 and 10cm in diameter and 0.6 and 0.9cm in thickness and accounted for 3.77% of the total number of rim sherds identified (see form 6 fig.9). **Form 7 (Bowl):** Only one rim sherd falls under this category. It is a straight neck vessel with flat lip and a designable rim-neck joint; it measures 15cm in diameter and 1.3cm in thickness and accounted for 1.89% of the total number of rim sherds identified (see form 7 fig.10).

One hundred and thirty-one (69.3%) out of the one hundred and eighty-nine potsherds collected were burnished while fifty-eight (30.7%) were unburnished. Decorative motifs represent impressions made on an object to add aesthetic value, identity and other important features to the pottery (Bakinde 2011). Leoni and Prichett (1978) opined that decorations in Hausa pots are sparse, the craftsmen rely on simplicity and elegance of form to convey the beauty of the piece. Decorative techniques are tools or methods used to achieve the observed designs on pottery vessels (Ibeanu 2006). Decorative techniques are also referred to as plastic decoration. McIntosh (1981 cf Bakinde 2011), defined plastic decoration as any ‘decorative technique that exploits the plastic properties of clay. Fifty-three potsherds were identified with various plastic decorations on them. The plastic

techniques of decoration identified on the site are Groove which has the highest occurrence and accounted to 60.38%, the next in quantity is roulette, which accounted for 30.19%, then notching which accounted for 5.66% and incision accounted for 3.77% of the potsherds with plastic decorations.

Out of the thirty-four (18%) potsherds identified with decorations from the surface, twenty-one (61.8%) had grooves/incision decorations which include: two vertical grooves, ten horizontal grooves and nine had multiple groove decorations, which include grooved lips and vertical incisions (see plate 11). Roulette is a rough cylindrical object, usually quite small which is rolled over the surface of a vessel at leather hard stage to leave a continuous band of impression that repeat itself at each revolution (Soper, 1985, Ibeanu 2,007). Ten (29.4%) of the sherds with decoration from the surface collection were identified with various roulette decorations. Eight sherds had fine string roulette decorations and two had twisted cord roulette (see plates 12 and 13). Notching decoration is done by indentation or depression on a leather hard pot, and it usually gives a 'U' or V shape design. Three (9.1%) out of the thirty-three potsherds with decorations from the surface collection had the notching decoration, the decoration is made on the rim of the potsherds (see plate 14).

Other Finds

Stone Artefacts

Stone is one of the most frequently encountered remains in archaeological record due to its indestructible nature, thus it is one of the most often studied remains by the archaeologists (Waelkens et.al. 1992 cf Shadmon, 1996 cf Goffer, 2007). A total number of twenty-two fragmented lower grinding stones were identified at the east and the south-eastern part of the site. Two of the lower grinding stones were identified with their upper grinding stones. Six upper grinding stones were identified on the south-western and the centre of the site. Thus in sum, eight upper grinding stones were identified on the surface of the site (see fig.3 and table1). All the grinding stones were fragmented; exhibited concaved rubbed surface due to grinding and a flattened bottom which gives it balance to rest on the floor. Five stone hammers were also identified and collected from the surface of the site. Two upper grinding stones and the five hammer stones were identified visually by a geologist. The upper grinding stones and three of the hammer stones were from quartz rock and the other two hammer stones are from basalt rock (Magaji, 2021 Pers Comm).

Lateritic Outcrop

This is part of rock formation that is red in colour and gravel like in nature. This was a source of ore for smelting iron. The site has several lateritic outcrops which makes the site a probable centre of raw material for iron smelting. This like the iron slag does not give us a strong basis to argue for iron working in the area.

Defensive wall

The majority of ancient settlements on the plains of Zazzau and the Hausaland in general were protected by defensive walls. The site of Rikochi was surrounded by a defensive wall which is still visible on the site. The wall was made of mud with stones embedded inside. The wall has been washed away by both natural and human activities on some parts. Currently the wall has completely gone down on the west and eastern portions. The highest points are at the northern and southern parts. Traditions have it that, queen Amina was a great warrior who conquered several settlements and each settlement she conquers she built a wall around it. The defensive walls in Zazzau are built of mud which is the most available material then. Traditions has it that queen Amina also settled in Rikochi in the course of her sojourns.

Discussion

The site of Rikochi, as oral tradition has it is one of the earliest settlements by the founders of Zaria. The site has indeed provided material evidence which is the characteristic material evidence found in the Zaria area. The pottery remains have a lot of similarities with the remains identified and analysed from other sites (Turunku, Kargi, Kufena, Dutsen Abba etc.) in the area. The similarities are in the forms, style, decoration and use as gathered from the oral tradition and the analysis carried out. The pottery remains analysed exhibits pot and bowl forms, the decorations identified on the Rikochi potsherds are similar to those from Turunku, Kargi, Kufena Dutsen Abba etc. where researches were carried out earlier. The decorations identified on the potsherds are; grooves/incision, roulette and notching. This agrees with the statement by Boachie-Ansah (2000) “that the major decorations Identified from old Kargi area are roulette, grooves, incision, stamping and notching. These decorations are very similar to most of the pottery decorations identified in the area. Thus he opined that quite a number of the motifs on Kargi pottery belong to a repertoire of decorations used by Hausa craftsmen such as leather workers, garment embroiders, cap makers, calabash carvers and mason decorators”. The major use of clay pots in the Zaria area and the Hausaland in general are for cooking, storing water, serving food, burning

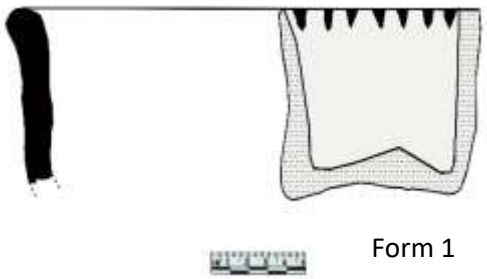
incenses etc. the study of the rim forms shows that some of the rims belong to large pots while some belong to smaller pots. The bowls are also of different forms, sizes and shapes (see fig. 4-10). Oral information has it that the people of Rikochi were never potters but bought and are still buying their pottery wares from the neighbouring communities. The presence of potsherds in large quantity indicates that the people though not pottery makers but utilised pottery wares in their various domestic uses.

The inhabitants of Rikochi abandoned site existed during the Late Stone Age as they extensively utilised stone tools which is evidenced in a lot of fragmented upper and lower grinding stones and hammer stones. Thus, the evidence of grinding stones in large numbers could suggest that the people were agrarians and they utilised grinding stones to process their grains as oral tradition also stated. The people of Rikochi could have engaged in wars or land tussles which probable resulted in the need for a defensive wall to guard them against their enemies or to demarcate their land to create borders.

Conclusion

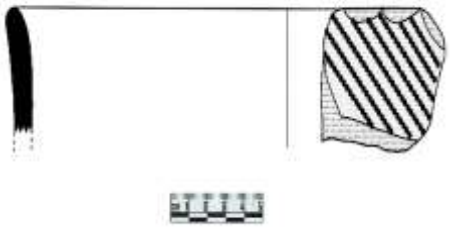
In conclusion we can state for sure that people settled on the abandoned site of Rikochi as Oral tradition has it. The presence of streams, potsherds, grinding stones, hammer stones, and defensive wall indicates that the site is a habitation site. The presence of large number of potsherds on the site despite the people not being engaged in pottery making suggests trade contact and probable exchange of good and intermarriages. The evidences identified also prove that the people are agrarians who had a settled live. The presence of lots of grinding stone on the site is also a probable indicator that the people processed a lot of grains; this also supports the oral tradition that the people were involved growing and processing of grains such as Millet *Pennisetum glaucum*, Maize *Zea mays*, Guinea corns *Sorghum bicolor*. The absence of house foundations on the site could be attributed to the material used in the constructions of the houses and probably human influence as the site is presently being used for farming. Based on the pattern of the distribution of the findings on the site, population seems to have concentrated in particular areas such as the centre and eastern part of the site.

RIKOCHI SURFACE RIMFORMS (POTS)



Form 1 Fig. 4

Form 2 Fig.5

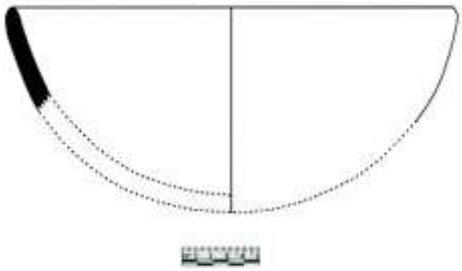


Form 3 Fig. 6

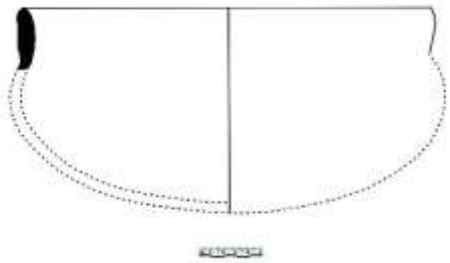
Form 4 Fig. 7

RIKOCHI SURFACE RIMFORM (BOWLS)

Form 5 Fig. 8



Form 6: Reconstructed bowl Fig. 9



Form 7: Reconstructed bowl Fig. 10

Plastic Decorations

Plate 11: Grooves/incision

Plate 12: Fine String Roulettes

Plate 13: Twisted Cord Roulettes

Plate 14: Notching.

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