

ETHIOPIA

Classification and Analysis of Potsherds from Dunjame, East Gojjam, Ethiopia

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Study Area

Dunjame is located in East Gojjam zone in Enarj Enawga *Woreda*. It is located between two rivers: the Enat Chee River in the north and the Gilgel Chee River in the south (Figure 1) at an altitude of 2725masl. Dunjame is situated at N10°45'26" latitude and E38°04'20" longitude. Currently, the site is owned by farmers as farmland.

The study area has great potential for further ethnographic and archaeological study. The settlement sites and cultural mounds of the *Agaw* people,

who conquered these hilly lands, are found widely throughout the *woreda*. For instance, Mount Ayal-fush 3146masl has huge amounts of collapsed stones and ruined wall structures. Cave sites, particularly Qatila in Dunjame and Abunash Cave in Enemi, located 10km southwest of Dunjame, were surveyed and have rock engravings and burials. Both caves are found at the edge of Enat Chee River.

The area receives an average of 1228mm annual rainfall and the mean annual temperature ranges between 22.5°-25.0° C and sustains alpine (*dega*), temperate (*weyna dega*) and subtropical (*qolla*) climatic zones. The temperate climate region receives abundant rainfall for a good part of the year and the region is favorable and agriculturally productive. The crop distribution in the region varies in accordance with the different climatic zones. The alpine (*dega*) area is suitable for the production of barley (*Hordeum vulgare*) and potato (*Solanum tuberosum*). The area militated against the cultivation of some crops, including *teff* (*Eragrostis teff*). Cotton (*Gossypium hirsutum*), sorghum (*Sorghum vulgare*), soya bean (*Glayscale max*) and spices such as red pepper (*Capsicum annum*) are chiefly produced in the subtropical (*qolla*) region.

According to the Enarj Enawga *Woreda* Agriculture and Rurla Development Office (ARDO), four soil types are identified in the *woreda*. Black soil is suitable for crop cultivation and this soil type covers 30% of the total area of the *woreda*. The rest of the *woreda* is covered with 25% red soil, 24% brown soil and 21% sandy soil types. The fertile black soils of the area produce *teff* (*Eragrostis teff*), *nug* (*Guizotia Abyssinica*), *finger millet* (*Eleusine coracana*) and maize (*Zea mays*) for which the area is known. Based on current ethnographic observation of the region, the pot makers are using red soil widely for pottery production.

Introduction

Dunjame was discovered during an archaeological survey conducted between January and February 2014. The site is covered with potsherds, par-

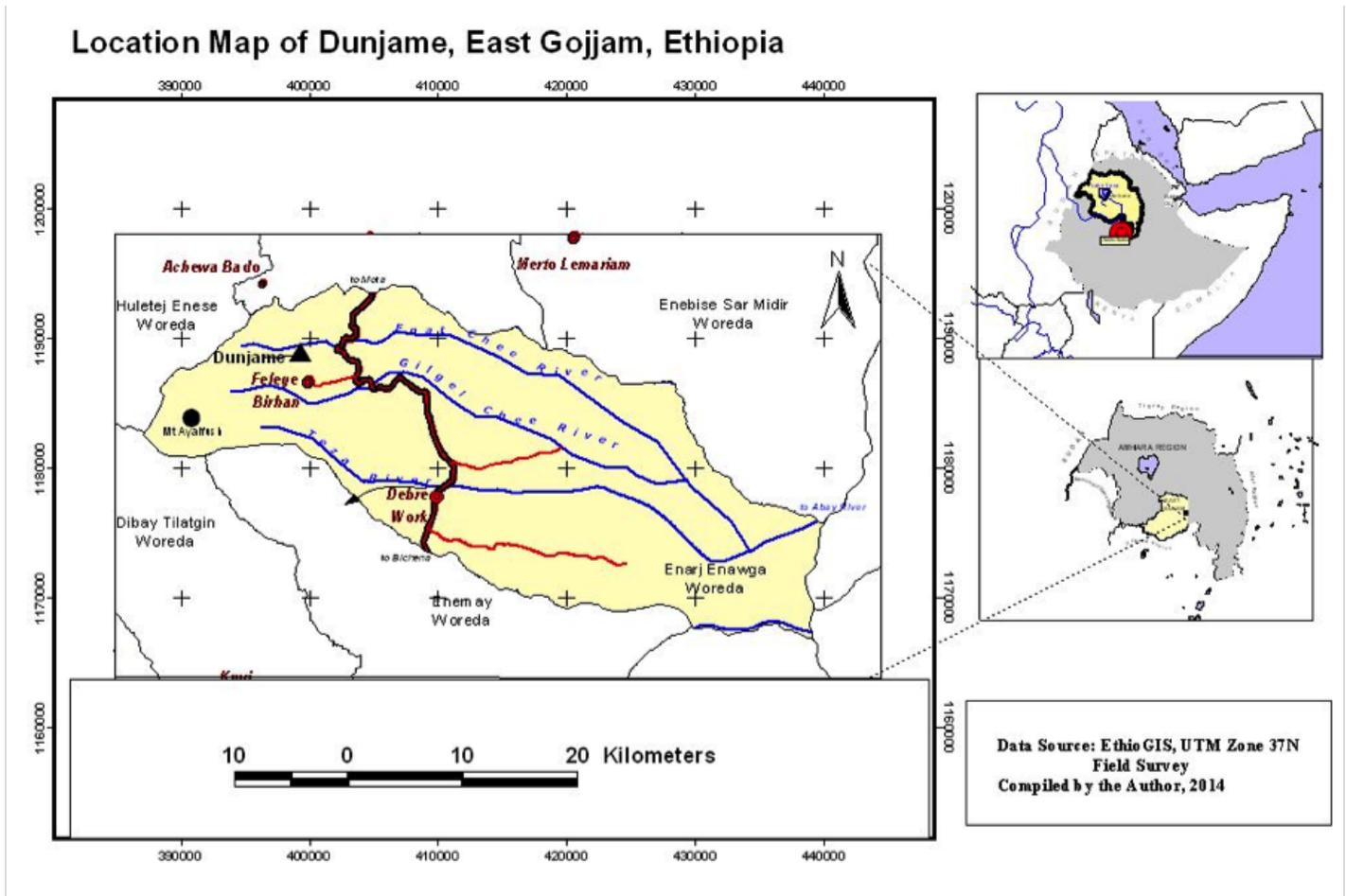


Figure 1: The study area: Dunjame, East Gojjam, Ethiopia.

ticularly in an area surrounding a ruined structure of a building. These sherds were then carefully collected and sorted. The collected sherds were kept in Felege Birhan, a small town located 1km southwest of Dunjame. Due to the lack of a museum and laboratory center in the town, the collection was transported to Debre Work, the capital town of Enarj Enawga *woreda*. The potsherds were first classified and analyzed in the laboratory in the Enarj Enawga Culture and Tourism Office.

As part of archaeological survey work conducted in the area, a total of 1873 (n=1873) potsherds were collected. The sherds were categorized into two broad patterns: diagnostic and non-diagnostic patterns. The site was disturbed by the excavations of local people in search of adornments and jewelry, which are most commonly recovered in excavations at Dunjame.

The collected sherds have more than one color, which includes black, brown, red, black top red bottom, black top brown bottom varieties. The pottery fragments were all recovered during surface survey. This article presents the typology and analysis of the findings.

Pottery Classification

The criteria used in classification of the pots from Dunjame are largely based on body parts (Table 1) and decoration styles. This approach is consistent with previous classifications by Beldados (2010, 2011, 2012, 2014a,b). Accordingly, there are five major pottery categories. These are:

- I. Rim lip

- II. Handles
- III. Body sherds
- IV. Neck sherds
- V. Open bowls

I. Rim-lip. As indicated in the above table, there are a total of 340 (50%) rim-lip sherds. Potsherds belong to this category are the largest proportion of all sherds. They are also the most decorated category comparatively bearing different decorative styles (Figure 2a). Most are decorated with closely spaced horizontally impressed parallel lines (Figure 2b). A single rim sherd is decorated with incised vertically parallel and impressed horizontal parallel lines. In both cases, lines are closely spaced. Incised lines, top-bottom wavy line, fingernail impression and clay ball attachment on the lip are also used in decorating rim sherds. Rim-lips have an average length of 6cm.

II. Handle. Handles are the second largest category. About 161 handles were recorded in this classification. Twenty-two are crude knobs (Figure 3a). There are seven handle sherds having ear like attachments. Four of these are very small in size having an average length of 2cm and they bear no decorative patterns (Figure 3b). The most frequent type of handle decoration is fingernail impression. Decoration patterns on handle sherds take two different forms. One form rounds the bottom edge of

the handle and the other is lineally distributed on the curved top of the handles. Diagonal line incision is used only for a single handle. The average length of handle sherds measures 5cm.

III. Body Sherds. Most body sherds are waisted. The decoration on body sherds is composed of diagonal lines with geometric patterns representing triangular shapes. Sherds in this category are decorated with single and groups of impressed lines as well as geometric representation (Figure 4a). Incised zig-zag lines (Figure 4b) and parallel incised lines placed far apart from one another are also marked on the body sherds. An average length of body sherd is 5.5cm. Body sherds are the third largest collection from the surface in Dunjame.

IV. Neck Sherds. In the neck sherd category, the number of decorated sherds exceeds the non-decorated sherds. Decorations on neck sherds are similar to those found on functional pots. This category consisted of a well-burnished single sherd (Figure 5a). Closely spaced impressed lines are observed predominantly in neck sherds (Figure 5b). Diagonal line incisions and impressed vertical lines are other decorative features. Neck sherds are the smallest group in size with an average length of 2.5cm.

V. Open Bowl Sherds. Open bowl sherds are decorated on the upper part of the body. Unlike other classifications, decorations are not clear. Both incised and impressed parallel lines are used as decora-

No.	Body part categories	Status of decoration		Total	Percentage	Total potsherds collected	
		Decorated	Non decorated			Diagnostic	Non-diagnostic
1	Rim-lip	32	308	340	50	680	1193
2	Handle	17	144	161	23.7		
3	Body sherds	52	83	135	19.9		
4	Neck sherds	20	5	25	3.7		
5	Open bowl	7	12	19	2.8		
	Total	120	560	680	100	1873	

Table 1: Summary of potsherd profiles collected at Dunjame.



Figure 2: Decorated Rim-lip sherds (A) and assemblage of lip sherds (B). These collections are rich in decoration. Image (A) shows each single rim-lip sherd bearing different decoration patterns and typologically both are black. Image (B) represents the decorated and non-decorated collections of the rim-lip sherd category.



(A) Crude Knobs

(B) Small Sized Handles

Figure 3: Pot handles. Pot handles are comparatively less decorated. The sherds in the above image bear no decoration. Crude knob sherds are well fired and predominantly black in colour. Sherds that are ear-like attachments are non-fired and red.



(A) Decorated



(B) Zigzag Inscribed Line

Figure 4: Body sherds. The body sherd category bears a unique decorative pattern in the Dunjame collection. Image (A) reveals triangular shaped geometric patterns. This is not common in other sherds.



(A) Non-Decorated



(B) Decorated

Figure 5: Neck sherds. Neck sherds are 3.7% of the total collection with an average length of 2.5cm. The undecorated sherd (A) is well burnished and the decorated sherd (B) is not well burnished.

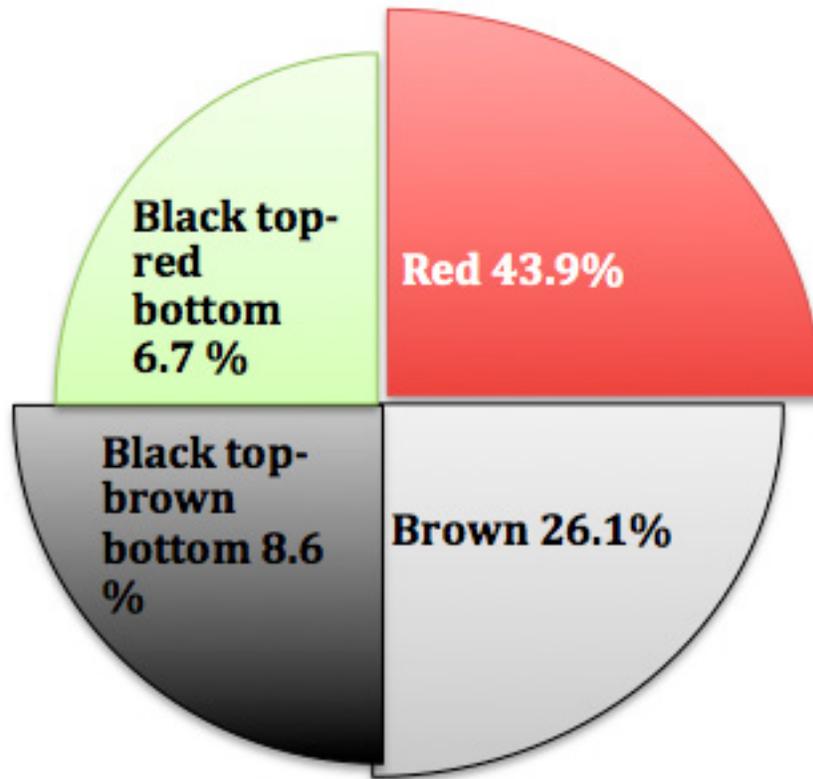


Figure 6: Pie-chart showing typological proportions of potsherds.

No.	Colors	Body Parts					Total	%
		Rim-lip	Handles	Body sherds	Neck sherds	Open bowls		
1	Red	131	95	53	13	6	298	43.9
2	Black	68	0	22	2	8	100	14.8
3	Brown	79	64	30	4	0	177	26.1
4	Blacktop-bottom red	29	0	10	4	2	45	6.7
5	Black top-bottom brown	33	0	20	2	3	58	8.6
6	Total	340	161	135	25	19	680	100

Table 2: Typological classifications of potsherds from Dunjame.

tive styles on open bowl sherds. The dominant color of this category is black. The average length of open bowl is 6cm.

In all classifications, the non-decorated potsherds are enormous. Impressed lines on neck sherds, incised lines on rim-lip and body sherds and fingernail impression on the handles are the most frequently observed decorative styles of potsherds collected at Dunjame.

Typologically the collected potsherds have different colors: red, black, brown, black top-red bottom and black top-brown bottom (Table 2). In the categorization of potsherds into a typology, firstly each body part was classified into five groups based on colors. Secondly, potsherds of the same color from each body part were collected together; thirdly the number of potsherds in each color type was counted and recorded.

Red colors are predominantly observed in potsherds collected at Dunjame. Red sherds account for approximately 43.9% of the total collections whereas black top-bottom red sherds account for 6.7% and are the lowest proportionately. In all collections, the five colors signify rim-lip, body sherds and neck sherds. Brown color is absent in open bowl sherds. Handles are characterized by red (59.1%) and brown (39.8%) colors. The availability of red, black, brown, black top-bottom red and black top-bottom-brown is high in rim-lip and low in bead-like sherds. Figure 6 provides the total proportions/percentage ratios of Dunjame potsherds based on typology.

Other Contributions to Dunjame Pottery

The typological work on pottery at Dunjame, East Gojjam was conducted to determine the function of pots in a living society. It is believed that the study of the current use of pots may provide an analogy for the functions of pots used in the past society. In the meantime, there were groups of pot makers distributed across the area. They produce pots of different morphology and functions. According to the

ethnoarchaeological study, pottery has a range of uses in the local community. The main use of pots in Dunjame is for cooking purposes. This includes cooking coffee and stew (*wet*), baking *enjera* and bread, and roasting grains. The farming community entirely depends on pots to prepare local drinks such as *tela*, *teji* and *areki*. Pots are also used for ritual purposes. The society around Dunjame breaks a pot containing water when elders die. It is the way of expressing one's heartfelt mourning for the diseased.

Most of the sherds in the archaeological collection are rim-lips. Pot handles are represented in the form of hollow attachments. Impression is the technique predominantly employed in the decoration of potsherds recovered in the Dunjame ceramic collection.

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