

**ETHNOGRAPHIC ANALYSIS OF THE POTTERY ARTEFACTS EXCAVATED FROM
TENTHA, MANIPUR, INDIA**

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Abstract

The scientific studies of the artefacts of potsherds and coins excavated from the historical site at Kangla Ching (Kangla hill) in Tentha, Thoubal District, Manipur, are presented in this paper. The potsherds are the broken parts of an ancient pot used as coins container. We also report on comparative studies on style, techniques and appliques of the potteries found in the contemporary potsherds with an attempt to establish a cultural heritage of the people in this part of Manipur.

Keywords: Artefacts, Potsherds, Applique, Archaeometry

Introduction

Archaeometry is the branch of science where physical and chemical sciences are dealing with archaeology to establish a complete information regarding the cultural heritage of a nation [1]. A piece of ancient potteries or artefacts may lead to the study of the cultural heritage if the same is properly examined through scientific techniques such as X-ray Fluorescence, X-ray Diffraction, Energy Dispersive X-ray Spectroscopy, Mossbauer Spectroscopy, Scanning Electron Microscopy, Mineral Liberation Analysis etc. This becomes one of the most common technique for analytical aspects of Archaeology and hence, of Archaeometry [2]. The Fourier Transform Infrared Radiation is also used effectively for the determination mineralogical constitutions of an artefact [3].

It is well documented that the people in the south eastern part of Manipur were well known for iron smelting and pottery making in the traditional styles and techniques [4]. The people still retain their skill in the fields of art and crafts. Earthen potteries were widely used by the people of Manipur till late 17 A.D. The scientific study of the pottery artefacts in Manipur would contribute to enhance the favour of the rich cultural heritage of the Indian State located in the north eastern corner of India and hence, in establishment of the cultural lineage with the people of Myanmar, the neighbouring country of Manipur[5].

The Excavation Site

Tentha a typical rural and culturally renowned village situated at latitude 24.579897 and longitude 97.973335 (Fig 1) in Thoubal District, Manipur is located on both sides of the Wangjing River. It enjoys a central position in the valley of Manipur and lies at a distance of 33 kilometres south of Imphal, the capital city of Manipur, 7 kilometres west of Wangjing town and 12 kilometres south-west of Thoubal, the District Headquarter. It is grown on a hillock running through the middle of the Manipur valley at an average elevation of 2, 600 feet.



Figure 1: The excavation site at Tentha

The handy works of demi-gods and incarnations of curse-ridden godheads as well as supernatural tales still dominate the explanation of the birth and evolution of this village. According to one legend, about 2000 years ago, there was a servant called KwaiNongjengPibaYekmaHaotangla during the reign of two brothers, Kuptreng and Sendreng. In that epoch, the governance of the country, Kangleipak (modern Manipur) was divided into two-day time governance and night time governance between the two brothers. While one was the king in one shift with supreme power the other was only nominal head and vice versa. Failing to look after his family and to bring up his children properly, KwaiNongjengPiba felt a sense that he would be a bit free from the duty of being a servant by killing either the sun or Tao HuiyenAhanba. As an ordeal, KhwaiNungjengPiba, a mighty warrior, shot Tao HuiyenAhanbawith a bow from a high peak. There followed a huge collapse of Tao HuiyenAhanba's war horse from above being struck into its breast with the arrow fallen on the spot. Since then the spot has been known as Tentha - place where the arrow was fallen [6]. There is another legend conveying a relative background. Prior to ChinguNongdaLairenPakhangba there reigned a great king, KanglaKhongteknga by name. It is generally believed that the existing peak KanglaChingdon at Tentha was named after this king KanglaKhongteknga. It is even said that there still prevails much evidence of the king's having settled his royal palace on the eastern slope of this peak in and around the existing 'Chaohei-Lampak'. The excavation site is located at the top of this hill which originates from Tenthaand extends to the neighbouring villages of Tekcham, Keirak and Wabagai. The site locally known as KanglaChingdon, was excavated on the 9th July, 2001for land development of a small temple which is dedicated to Ibendhou Mali also known as Haujouma, a local mother who was

historically associated with the changing of course of Wangjing River(1873-1956), the only river which the livelihood of the people has been depending upon. The Wangjing river originated near Gomi village(altitude 1520m) of North Eastern Hills of Chandel District of Manipur.

On 9th July 2001, M. RajendraSingh (one of the authors) who dedicated the temple hired three young men for carrying out the excavation at the top of the hill which was reserved for *Ibendhou* temple [7]. While levelling the ground of the hill slopes, one medium sized pot was found buried at a depth of 1.8 metres from the surface. Another pot of smaller size was found placed just above covering it as a cap. The smaller pot was found almost broken due to penetration of the roots of a tree grown nearby finding its way down into the inner side of the bigger pot. However, the roots were not able to pass through the bottom of the bigger pot and hence it was found intact. The photograph of the bigger pot is shown in the figure 2A. Surprisingly, thirty-two small coins were also found inside the pot. Two of the coins were lost while the pot was transferring to the house of M. Rajendra Singh, which is situated at the foot of the hill. The photograph of the remaining thirty coins is shown in the figure 2B.



*Figure 2: A: ancient basement Pot
B: Coins found inside the pot*

Visual Characteristics

The specimen found at the excavation site was categorized under earthenware category of pottery. The view of the two specimens marked as **RAJEN 1** and **RAJEN 2** are shown in figure 3 and 4 respectively. The **RAJEN 1** shows the inner surfaces of the broken pieces of the smaller

pot, the thick walled red coarse ware, probably handmade as the finger impressions are appearing on its surface.

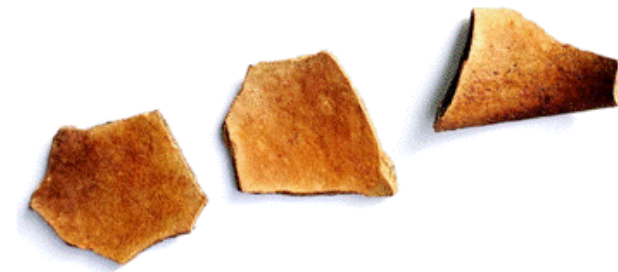


Figure 3: RAJEN 1- Inner surfaces of the shreds



Figure 4: RAJEN 2- Outer appliques of the shreds

The **RAJEN 2** shows the outer surfaces of the potsherds, with well applied surfaces one of which is blackish in colour. The appliques decorating the outer surfaces of the potteries in Manipur are well documented in the works of O. Kumar Singh [4]. The appliques found in the RAJEN potsherds from Tentha is not an exception in terms of styles, techniques, colours and designs as found in any other potteries through ages in Manipur. This type of pottery is very rare in the collection. This is characterised by the decoration on the shoulder and body part of the pots. The paste is of fine clay and tempered with fine grit. The surface is treated with slip and wall is almost uniform and 3 mm and 6 mm in thickness. The colours are brown, reddish brown and blackish brown. The blackish colour is due to the higher firing temperature of the clay when the pot was tempered. The various shapes and scriptures seen on the appliques are not exactly known. Further research would be necessary to find the exact scriptures which are found in the samples. However, most of the scriptures depicted here in the outer surfaces of the pots are found to be the word “SRI” which is also seen as printed scriptures on the faces of the coins found inside the bigger pot. The style and techniques with which the appliques are being made are found almost similar to the works depicted on the coins used during the reign of King Gambhir Singh to the reign of King Chandrakirti in Manipur. According to the historical accounts, the coinage were enforced in the princely state of Manipur during 1709 to 1891. The people including the royal communities were also haphazardly scattered and took shelters in the remote areas during the invasion of the Burmese the so called “The Seven Years Devastation” in the history [8].

The diameter of the coin found in the Tentha potteries is about 10 mm and it weighs about 0.58g which are in agreement with the features mentioned in the historical records. The coins which were found in the potsherds of Rajen Singh have the same features as those of the coins used by the people of the princely state of Manipur during 1709 to 1891. The same script “SRI” is also printed on the coins found in the Tentha potteries.

Geometrical Deductions:

The piece of the specimen shown at the right side in figure 3 & 4 above has a small curvature from which we can establish the size of the neck of the pot which was placed at the top of the bigger pot as its cap. By using simple geometry, the whole diameter of the neck of the smaller pot can be established as shown in the figure 5.

The diameter of the neck using this technique is found to be 17.6 cm. Thus, the whole size of the smaller pot can be established which would be of about $17.6 \times \frac{3}{2}$ cm which is of course about 26.4 cm diameter. This is in agreement with the size of the bigger pot which is still found intact without any deformities. The ancient people used to keep bigger pots of narrow necks for storage of water by placing smaller pots just above it, the size of which would exactly fit the neck of the big pot. The small pots are called Khujai or Khumand the bigger pots are called Pul. Those which are bigger than Pulare still known as Kharung. But the necks of kharungs are relatively bigger in size. Sometimes, Puls were also placed just above the bigger Kharung as its caps.

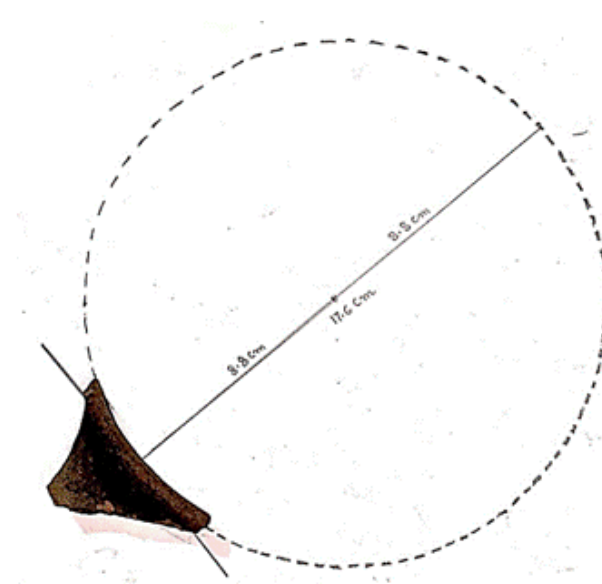


Figure 5: Diagram showing the estimated diameter of the neck of the smaller pot

Conclusion

The studies on the artefacts found during the excavations at the temple site of M. RajendraSingh in the year 2001 reveal that among the ancient people of the village, there were many professionals in the field of pottery who were well known for their unique style, technique and appliques in this part of the world. In the works of Moirang them Balaram Singh, it is stated that during the early part of the last century, Tentha was a small village which, probably, extended about half of a mile in length east to west on both sides of the KanglaChingdon range with 20 to 30 small houses. Thus evolution of the landscape of Tentha village bears an intimate relationship with the physical setting of its site. The history of the evolution of Tentha village is one of the gradual transformation and assimilations of different cultures and social groups which have developed in different periods of our history. In Archaeometry, even a piece of the artefacts of ancient potteries, the studies have greatly contributed to the establishment of the evolution and culture of the people of this part of the world.

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References

- Raheijuddin Sheikh, Md., *Physics for Cultural Heritage*, Ruby Press & Co., New Delhi, (2012).
- Raheijuddin, Md., etal, *Characterization of the Iron Slag of Kakching Manipur by X-ray and Optical Spectroscopy*, Indian Journal of Pure and Applied Physics, (2010), 632-634.
- R. Ravisankar., *Mineralogical Characterization Studies of Ancient Potteries of Tamilnadu, India by FTIR Spectroscopic Technique*, E-Journal of Chemistry, (2010).
- Kumar Singh, O., *Pottery through the Ages in Manipur*, Amusana Institute of Antiquarian Studies, Imphal (2008) 97.

- Raheijuddin Sheikh, Md., *Characterization of iron ore Sample from the ancient iron smelting Site in Manipur by Energy Dispersive X-ray (EDX) Spectroscopy*, IJETSRS, (2017), 639-643.
- Balaram Singh, M. *Tentha: A study in Transformation of a Village*, SahityaYokhatKanglup, Tentha, Manipur (2017).
- R. Palanivel, U. Rajesh Kumar, *The mineralogical and fabric analysis of ancient pottery artefacts*, Ceramica, (2011).
- L. Ibungohal Singh and Pt. N. Khelchandra Singh, *CheitharolKumbaba(The Royal Chronicles of Manipur)*, (2012).
- Sapana, Kh. et. al. "Archaeometallurgical Studies of Ancient Iron Smelters in South Eastern Part of Manipur, India", Proc. International Conference on Multidisciplinary Social Studies, Anthropology, Archaeology, History and Philosophy, SAIRAP, 23rd Nov 2019, Guwahati, Assam.
- A. Merkevicus, P. Bezdicka, R. Juskenas, J. Kiuberis, J.Senvaitiene, I. Pakutinskiene, A. Kareiva, *Chemija* **18** (2007) 36.
- J. M. Bhatnaga, R. K .Geol, *Const. Mat.* **16** (2002) 113.
- C. Manoharan, R. Venkatachalapathy, S. Danapandian, K.Deenadayalan, *Ind. J. Pure & Appl. Phys.* **45** (2007) 860.
- G. Rapp Jr., "The provenance of artificial raw materials", in Gifford (Eds.), *Archeological Geology*, Yale University Press, New Haven, USA (1985) p. 353.
- R. L. Bishop, R. L. Rands, G. R. Holley, "Ceramic compositional analysis in archeological perspective", Ed. M.B. Schiffer, *Advances in Archeological Method and Theory*, Academic Press, New York, USA, **5** (1982) p. 275.
- S. W. Kieffer, *Rev. Geophys. Space Phys.* **17** (1979) 20.

- G. Velraj, K. Janaki, A. Mohamed Musthafa, R. Palanivel, *Appl. Clay. Sci.* 43 (2009) 303.
- G. Velraj, K. Janaki, A. Mohamed Musthafa, R. Palanivel, *Spectrochim. Acta* 72A, 4 (2009) 730.
- V. C. Farmer, *Infrared spectra of minerals*, Mineralogical Society, London, UK (1974).
- A. Chakchouk, L. Trifi, B. Samet, S. Bouaziz, *Cons. Build. Mater.* 23 (2009) 1365.
- S. Shoval, *Opt. Mater.* 24 (2003) 117.
- K. Ramasamy, M. Kamalakannan, *Ind. J. Pure & App. Phys.* 25 (1987) 284.
- L. Martin, C. Mazzoli, L. Nodari, U. Russo, *Appl. Clay. Sci.* 29 (2005) 31.