Chapter: 2

Methodology

This chapter deals with the various methods applied to study the research material. The Pottery Assemblages from Andro Khuman, Khamaran / Khamaral, Koutruk, Khangabok and Sekta form a mass array of pottery collection with varied characteristics. The pottery assemblages of all the five sites are under different guides, scattered at various locations. The Methodology adopted for the research was as follows:

Archaeological Evidences

Andro Khuman is about 30 km from Imphal and it comes under the Imphal East District. Excavation was carried out on 13th-18thSeptember, 2003 under the leadership of Dr. L. Kunjeswori Devi, Senior Assistant Professor, Department of History, Manipur University in collaboration with the State Archaeology, Govt. of Manipur. The excavated cultural materials are under the curatorship of Dr. L. Bilasini Devi, Curator, Museum of the Manipur University.

The pottery assemblage of Khamaran/Khamaral which is a village in Imphal-West District, excavated by the State Archaeology, Govt. of Manipur, simultaneously, Dr. Kujeswori Devi, Senior Assistant Professor of the History Department, Manipur University, also carried out an excavation at the same site. Hence the excavated artifacts are housed at their respective museums.

Koutruk is a schedule caste village which is located to the north-west and 18 kms away from Imphal. A trench of 8x8sq.m was laid to carry out the excavation by the State Archaeology, Government of Manipur in April 2000. In 2005, Assistant Professor, Dr. L. Kujeswori Devi of the Department of History, Manipur University conducted an excavation a trench measuring an area of 5x5 sq.m., at a height of 110m on the hill slope in the previously excavated location. The artifacts of the former excavation are exhibited in the Museum of the State Archaeology, Govt. of Manipur and the latter are under the guidance of the excavator.

The site Khangabok is in Thoubal District. The locals call this site, Murari/Morari Lampak (lawn or ground of the dead or the grave-yard), this is situated at Khangabok Meisnam Leikai, L.P.School Compound. The excavation here was conducted from 18th-28thMarch,1996 by the State Archaeology, Govt. of Manipur. Thus the artifacts are housed at the Museum of the State Archaeology, Govt. of Manipur.Apart from the above mentioned pottery collection, there is another pottery assemblage collected by the Manipur State Museum, Polo Ground, Imphal, through House Survey which is under the guidance of the curator.

The site Thumkhong Lairembi Sekta is located at a distance of 18 km north-east of Imphal on the left bank of the Iril River, in the Imphal District of Manipur. It was first excavated by A.K.Sharma of Archaeological Survey of India in collaboration with the State Archaeology of Manipur on 23rd March, 1991. The same site was excavated by the State Archaeology, Govt. of Manipur in 1994 under the supervision of Dr. O.Kumar Singh. The artifacts of the above mentioned excavations are under the guidance of the State Archaeology Department of Manipur.

From the above mentioned information, it is clear that the study materials of the research is scattered in various places in the Imphal valley, under varied guidance. Thus firstly, preliminary data in terms of excavation reports were collected from the State Archaeology, Govt. of Manipur, Kangla Complex, Imphal. Along with data collection, an attempt was accomplished to locate the excavated cultural materials. Accordingly, the excavators and the artifact keepers were approached under whose permission the following materials were further analyzed for research work. The prerequisite facet of this research was to get permission from the artifact keepers, after which the analytical steps were further proceeded.

Literary Survey

Through literature survey the foremost step towards understanding the sites was obtained by reading and analyzing the available chronicles, excavation reports, other relevant articles and books. This was done by visiting the libraries of the State Archaeology Office, Manipur University, Museum of the Manipur University, State Museum, etc. This is complimented by internet searches. Thus by the end of literature survey, one can have an apt understanding of the burial customs.

Personal Interviews

Though proper understanding of the sites through literature survey is important, personal interviews with the excavators and other related scholars are obligatory as it becomes necessary to clarify the doubts arose during the literature survey. Personal interviews were vital qualitative occasions for the interviewer as research related unpublished topics were also discussed.

Analytical Process

Analysis of the cultural material is the most crucial part of any research.

- a. Visual records
- b. Method of Cleaning and Recording
- c. Description of Vessel Shapes
- d. Morphological Attributes (classification and analysis)
- e. Statistical Analysis
- f. Photography and Drawing Documentation
- g. Supplement of Morphological Attribute Tables of the Sites

In any analytical work, documentation or visual records of the original status of the cultural materialis necessary. The analytical work proceededwith cleaning of the study materials. The process of pottery cleaning is done with plain water with a soft brush or a coir brush, which seems to be quite effective in removing the dirt from the surface. Incase of encrustation, soaking in the water for about five to ten minutes is required, after which acoir brush and a pointed instrument are used to remove the encrustation. Of course, there are instances of heavy encrustation, in which case, it is best left untouched, apart from brushing, prolonged soaking and rubbing can damage the pottery surface resulting in losing the decoration of the surface because these potteries are ill fired hence they are easily damaged.

After cleaning, they are carefully wiped with a clean cotton cloth and left in room temperature for drying; it takes at least 12 hours to completely dry the earthen vessels. Further work with pottery is avoided, until the pot is completely dry as breakage is inevitable due to pressure.

Bell metal coins acquired from Khangabok through house survey has been undertaken in this research as they evaluate the date of the other associated artifacts thus analysis of these coins plays a vital sphere of this study. Only four coins have been found along with the earthen vessels. Sodium hydroxide pellets and distilled water is used to clean the coins, the coins are soaked for two days in 2gms of NaOH pellets in 125ml distilled water of a beaker, which is then brushed with a nylon soft tooth brush. These coins are than wastedwith distilled water carefully and properly so as not to leave any chemical residue. They are dried with a soft cotton cloth and left to dry in room temperature for about an hour. Incase of the coins, magnifying glasses are used to record the features on the obverse as well as the reverse sides.

Thus after having cleaned the artifacts, one can proceed further with next step of analytical works, of which classification of the vessels is *de rigueur*. After a careful study of the vessel morphology, an appropriate description is assigned to each shape in order to avoid inconvenience to understand the vessels. The stages of defining and preparing a morphological chart have been simultaneously done. The classification of the pottery assemblages from all the five sites are done on the basis of typology by analyzing the morphological features.

The morphological attributes of each vessel is recorded in the morphological attribute tables in Chapter IV. Study of these tablescan present the macroscopic attributes of the pottery assemblages at the sites. Table no. 2 will give a fair idea of the parameter undertaken for the analysis

A probable statistical analysis can be concluded by studying and understanding the morphological attribute tables of all the five sites. This issue is broadly described in Chapter IV where the forestated tables are enclosed.

In order to analysis the texture of these pots and pot sherds, a standard medium is adopted to bring forth a common platform. Photographs of pot sherds are used to classify the texture and one centimeter tag is used on the pot sherd. Illustration no. 1.i is equated with the coarse type, Illustration no.1.iias the medium type and Illustration no. 1.iiiasthe fine type. The Munsell Soil Colour Charts (1954 Edition) is used to standardize the colours of the pottery.

The true nature of the study materials can be further enhanced by photography and drawing documentation. The distinctive shapes of the vessels are drawn in order to exhibit the morphological characteristics.

Ethno-archaeology

In order to comprehend the pottery manufacturing techniques of the pottery assemblage present at the five sites there was necessity to conduct Ethnoarchaeological study. "The ultimate archaeological purpose of ethnoarchaeology is to obtain ethnographic information about the behavior associated with material object for comparison with archaeological data. Comparative studies of this kind involve analogy" (Thompson, 1992:234). Thus two presently active pottery manufacturing sites; Ningthamcha Kharong and Thongjao were taken up to record ethnographic informations.

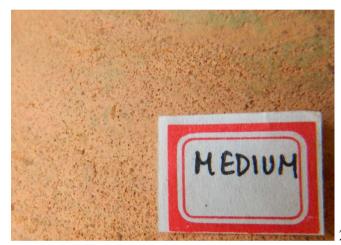
Table 2

Illustration. I

Texture



1. Coarse



2. Medium



3. Fine