

An Ethnographic Study of Terracotta Art and Pottery Making in Subarnapur District, Odisha

Paramatap Pradhan

Assistant Professor, School of History, Gangadhar Meher University, Sambalpur

E-mail-param.3247@gmail.com

To Cite this Article

Paramatap Pradhan (2025). An Ethnographic Study of Terracotta Art and Pottery Making in Subarnapur District, Odisha. *Studies in Indian Anthropology and Sociology*, 2: 2, pp. 179-189.

Abstract: The making of pottery is an important event of prehistoric past and marked the beginning of Neolithic revolution in human society. Its impact had largely revolutionized the colonization of human groups and found a new way of cultural tradition. Pottery is a century old craft used by human and is one of the most tangible and iconic elements of Indian art. The pottery industry in India has recently been promoted as a significant cottage industry by both small and large pottery organizations. During these times the technologies were changed according to the necessity of human society. Only a small number of traditional communities around the world continue to practise this tradition. Within the Potters community, pot-making expertise and knowledge are passed down from generation to generation. It is a craft that is unique to an agricultural economy. The present paper “An Ethnographic study of Terracotta Art and Pottery making in Subarnapur District, Odisha” is an outcome of the field research on the Balijuri people in western Odisha; examine the present status of crafts and artisans, technique of terracotta art and pottery production and sale of finished products. The present study aims at understanding the initiatives taken by the potters of Balijuri village of Subarnapur, Odisha to sustain the pottery industry and their livelihood. Paper also documents the procedures involved in making the pots and its current status. In Balijuri village of Subarnapur, Odisha, the potters started making many innovative pottery products using new technologies. Study revealed that this traditional craft system will not survive if some urgent measures are not be taken in near future.

Keywords: Traditional pottery making, Ethnography, Terracotta Art

Introduction

Art emerges from human knowledge and imagination, undergoing multiple stages of transformation in the creative process. It serves as a demonstration of human creative ability and a medium for communication and expression of behaviour including emotions, concepts, and other facets of existence. Starting with rock painting, classified

as immovable art, people have explored diverse mediums to express their creative impulses. Clay, in portable forms, was among them and has been the most favoured artistic medium since antiquity. The abundant availability of clay and its malleable properties have rendered it the predominant medium in art. To enhance the durability of fragile clay pieces, individuals developed the technique of fire.

Terracotta artifacts and ceramics have been crafted and utilized by humans since ancient times as household goods, ritualistic things, aesthetic pieces, and sculptures. India possesses a significant history of terracotta assemblages, documented at numerous Harappan, Chalcolithic, and Early Historic sites. Recently, numerous regions of the country have distinguished terracotta traditions. Odisha is one of the states renowned for its rich terracotta history. The Early Historic period of the state is distinguished by its exquisite terracotta art. Numerous scholars have endeavoured to investigate them. This study endeavours to comprehend the cultural importance of ancient terracotta art and pottery production in western Odisha using an ethno-archaeological lens. This research focuses exclusively on terracotta art and clay artefacts from both ancient and contemporary periods. Despite significant industrialization and modernization, pottery remains a fundamental tool in Indian households. India possesses a significant temporal depth that extends back to the Harappan period. In India, pottery is linked to various religious and ritualistic acts and is seen as pure and sacred.

The scope of ceramic ethnoarchaeological research in India is characterized by a continuous tradition of ceramic production; hence the ethno-archaeological approach holds significant potential to enrich the understanding of pre and proto-historic pottery in this area. Individuals continue to utilize traditional processes associated with the old ceramic making process. The rich cultural diversity and extensive demographic and geographic scope of India render this country a suitable site for ceramic ethno-archaeological investigation. Subarnapur district holds a significant role in the cultural history of ancient Odisha among the thirty districts of the state. The district is situated in the western region of Odisha. It is adjacent to Bolangir to the west, Sambalpur to the north, Boudh to the southeast, and Rairakhol to the east. The reign of numerous dynasties such as Bhanja, Somavamsi, Telguchoda, Ganga, Gajapati, and Chauhan has established a significant political history for Subarnapur district.

The Mahanadi traverses the core of Subarnapur district. The other significant rivers that flow through the region are the Tel and Ong. They convey water from many regions via minor tributaries, ultimately discharging into the Mahanadi at Subarnapur. The village of Balijuri is located in the Subarnapur district. It is situated on the banks of the Mahanadi River. Balijuri hamlet is renowned for its terracotta craftsmanship. Three

hundred and fifty households reside in Balijuri village. The family of potters who create terracotta objects and pottery are referred to as Kumbhara in western Odisha. Typically, Kumbhara Pada, the settlement of the potter community, is located on the outskirts of the village; but, in this instance, it is positioned in the central area of the hamlet. Twenty-six potter families reside in the Kumbhara pada of Balijuri village, all of them are involved in terracotta artisan production. They also engage in state and national exhibitions. The subsequent table illustrates the total population of the Potter family in Balijuri village.

In Balijuri village, terracotta is produced by the Kumbhara community. Out of one hundred five family members of potters, eighty-five members (80.95%) are involved in the production of terracotta objects. They produce numerous types of terracotta artifacts and earthenware utilized for residential, ceremonial, and decorative purposes. Domestic items include *handi*, *mathia*, *surei*, *patli*, *telani*, *tad*, *jali handi*, *motton handi*, *thali*, *gina*, glass, pressure cooker, *kadei*, filter, *chulha*, *tawa*, *mana*, *tambi*, *kumpi*, and water bottle. The ceremonial clay artifacts comprise *dipa*, *dhupadani*, *rukha*, *kalasa*, *mangala handi*, elephant, bull, monkey, and figurines of Ganesh and Saraswati. They produce a variety of ornamental items, including toys, flower vases, wall ornaments, garden decorations, wedding decor, brush holders, pen holders, and figurines of animals, birds, and humans. This knowledge system on various aspects passes from one generation to next generation mainly orally (Anonymous, 1999; Geedh, 2013).

Study Area

The designated study area for this research is Balijuri Village in Subarnapur District. It is located at latitude of 20° 50' 04" N and a longitude of 43° 48' 22" E. Balijuri hamlet is situated on the banks of the Tel River, a distributary of the Mahanadi River. Balijuri is located 12 kilometers from the district headquarters of Subarnapur district, in the direction of Bolangir. There is a 9th-century A.D. Baidyanath temple (Shaiva) that is under the protection of the Indian Archaeological Survey. The Balijuri village is about 3 kilometers from this temple. This community is inhabited by over 26 households. This village is bordered to the east by Laakarma, to the west by Chhapapali, to the north by Hordokhol, and to the south by the Tel River.

Objectives

The present work attempts to understand different aspects of present day terracotta craft and pottery making and throw light on ancient terracotta craft and pottery making of Subarnapur district. The major objectives of the work consist of;

1. To understand the technological aspects related to pottery making and terracotta art including source and preparation of clay, different techniques of making the terracotta objects, firing technique, colouring and decoration.
2. To understand the economic aspects of terracotta craft and pottery making with special emphasis on terracotta supply chain from makers to users.
3. To study the similarities in art forms between past and present terracotta art and pottery making and to trace the possible continuity in art forms.
4. To understand the social life of the potters community.

Scope of the Work

The scope of the current investigation is extensive, from the prehistoric era to the present day. Limited materials exist on this subject within the Indian context, and even fewer works are available specifically about Odisha. This study aims to encompass the Subarnapur district of Odisha, with particular emphasis on Balijuri village within Subarnapur district.

Research Methodology

The methodologies of the present work involve intensive ethnography in different villages of Subarnapur district and also the study of ancient terracotta materials reported from different sites in western Odisha. With this data collection from the contemporary terracotta and pottery makers and users involves ethnographic techniques such as-

- (i) Direct observation in a way by involving participation.
- (ii) Interviewing pragmatically in non-structured and/or structured format.

Generally, there are two main approaches were used in ethno-archaeology such as- the direct historical approach and the general comparative approach.

The Direct Historical Approach: In the direct historical approach the key requirement is the demonstration of continuity between the archaeological and ethnographic units of comparison the advantage of this approach is that the inferences about the archaeological objects deal with specific behavioural correlates an often involves meaning as well.

The General Comparative Approach: In the general comparative approaches, one seeks appropriate analogues any were in time and space, on the basis of modern ethnography study. Comparative studies based on large world sample have produced impressive information allows the development generalised behavioural correlates, but

normally does not allow statement about meaning. Thus analogy plays an important in ethnoarchaeology.

The Terracotta Art and Pottery Making Technology

Terracotta is a Latin term meaning “baked earth.” It refers to glazed or unglazed burned clay utilized to create earthenware items such as pots, bricks, and statues, as well as for architectural purposes like pottery. Terracotta is a form of clay pottery. Pottery production is a significant occurrence in prehistoric times and signifies the onset of the Neolithic Revolution in human civilization. The use of clay and water to create distinct shapes for various purposes is recognized as one of the oldest crafts in human history. This craft reflects the lifestyle, beliefs, customs, and traditions of indigenous societies. Following the discovery of pottery, a succession of revolutionary transformations occurred during various periods. Alterations were identified in both industrial techniques and artistic genres. The Indus Valley civilization exemplifies a transformative advancement in pottery production among specific groups in India, with this traditional knowledge being transmitted through generations via their customary occupations. They are commonly referred to as “Kumharas” or “Kumbharas” in major parts of India. In West Bengal, potters are referred to as “Kumar.” In South India, they are referred to as “Kusavan” in Tamil. Kuyovan in Malayalam, Kumora or Kumar in Telugu, and Kumhara or Kumbhara in Odisha (Sikdar and Chaudhuri, 2015). All these titles are etymologically derived from the original Sanskrit term “Kumbhakara,” meaning “pot maker.” In certain regions of Western Odisha, pottery art is referred to as “Bhanda.” The Sanskrit word “Bhanda” means “pot”, so this is where it comes from. There are many studies that have described the pottery making technology of such communities (Saraswati and Behura, 2010).

Pottery production is a prominent and emblematic aspect of Indian art, representing an ancient craft tradition practiced by the Kumbhara communities in the Subarnapur area of western Odisha. This craft system illustrates the lives of indigenous communities, encompassing their beliefs, faith, customs, and traditions via terracotta artistry.

The tradition of terracotta art persists in contemporary society in Subarnapur. The practice of lay modeling appears to be confined to a specific group of individuals in Subarnapur. Nearly all facets concerning ceramic and terracotta manufacturing and supply are managed by local potters, known as Kumbharas. The survey conducted in the villages of Subarnapur district has yielded insights into the terracotta artifacts from a regional standpoint. The process of creating terracotta figures and corresponding miniature pots and toys includes the following stages: clay preparation, form

construction, detailing and decorating, drying, application of pre-firing slip and wash (if applicable), baking and firing, and finally, painting or colouring (if applicable).

Subarnapur district possesses three types of soil, including:

- (a) Adhesive soil (black soil with a higher clay content)
- (b) Silty soil (equal proportions of sand and clay), and
- (c) Sandy soil (predominance of sand)

Sticky soil (chikina mati) is utilized for the fabrication of terracotta artifacts due to its adhesive properties. Clayey soil is advantageous for the production of pottery and ceramics. Sandy soil is utilized as a combination and is uncommon in this region. Soil is primarily sourced from river banks, lakes, or ponds. Additionally acquired from the proprietor of a specific parcel of land where this soil type is present. Following the conveyance of the soil from the source location to the potter's studio via tractor or bullock cart, it is let to desiccate either in sunlight or shade. The soil is desiccated until it is free of moisture. The pebbles, stones, wooden fragments, and grass roots are eliminated. The soil milling operation is conducted on the firm ground.

The powdered soil is subsequently immersed in water as per its necessity. Once the soil is adequately saturated with water, it is kneaded, and a mixture of sand and ash is incorporated. After the fortifying components are combined with the clay, the total combination is kneaded with feet and subsequently with hands on a wooden plank or a firm surface for duration. To prevent adhesion, sand, cow dung ash, and water are periodically sprinkled over the hardened ground. This is succeeded by the kneading process; the clay is maintained in a shaded area, shaped into a small dome for modelling purposes.

Techniques of Pottery Making

The technical aspects of pottery manufacturing can be categorized into four stages: clay preparation, shape, surface treatment, and fire. The subsequent steps are elaborated about below.

The pedodiversity in India results in various soil types distributed across different regions. Diversity is evident in soil composition, texture, and colour. Only specific soil types, particularly clay, are utilized exclusively for pottery production due to their distinct advantages. All varieties of clay are not suited for manufacturing pottery. The selection of appropriate clay for pottery is crucial for the durability and quality of the finished product. The expertise in clay choosing mostly relies on the potter's extensive experience, enabling him to discern its appropriateness merely by examining

its colour and texture. Clay is typically excavated from the banks of ponds or from uncultivated ground. The land's upper surface is unsuitable for pottery production due to its high impurity content. The potter's initial task is to locate appropriate clay within the entire pond or uncultivated region. A general test was conducted by excavating the specific region vertically to a depth of one meter following the preliminary search. If all criteria are met, they proceed to excavate vertically without disturbing adjacent areas. Soil testing and excavation are integral components of the potter's traditional expertise. They transport the excavated earth to their residence using a bullock cart, a trailer connected to a tractor, or a small truck. This kind of transportation enables them to transfer substantial quantities of soil. Due to the issue of waterlogging during the monsoon season, dirt is typically gathered and piled during the summer season. The collected soil is stored in an expansive open area. They assert that the quality of clay is enhanced through exposure to sunlight, wind, and water. Consequently, the storage of clay in shaded areas is typically discouraged. The methods of clay processing vary significantly by region due to soil characteristics; yet, there are specific defined procedures universally employed by potters. Initially, the majority of contaminants are eliminated manually. The earth is compacted with a wooden mallet. The subsequent phase involves the filtration of the clay. The clay is filtered using a chaluni (sieve). The majority of contaminants are eliminated here. Subsequently, the potters immerse it in water, which is contained either in a pit or a big urn. The clay is soaked in water for twenty-four hours. On the subsequent day, the saturated clay is extracted from the pit or urn and re-filtered using a chaluni. This technique eliminates all impurities, transforming the clay into high-quality clay. The fine clay is combined with an equal volume of water and applied to a square-shaped pit area, for a duration of one day. Sawdust is utilized as a tempering agent for clay. If the temper is inadequately blended, it will lose its malleability, resulting in the pot cracking. Manipulation enhances the pot's durability.

Shaping of Pottery

The pottery crafted by the Kumbharas is either produced on a wheel or through a combination of wheel and hand-made techniques. Previously, handcrafted pottery was also common among them. The artisanal skills encompass the application of pattering, dabber, and modeling processes. The hand was utilized solely for the production of large storage jars. The dense inner surface of the jar has finger marks that indicate the union of two distinct segments of clay rings positioned one atop the other. The outside of the jar is well-crafted. The forms of handcrafted pottery are typically asymmetrical

and irregular. Conversely, wheel-thrown pottery has symmetrical forms with uniform thickness and a smooth surface. Potteries are produced using both handcrafting and wheel-throwing techniques. In these instances, the vessel's main body is handcrafted, but the neck and rim are produced using a wheel. Nearly all jars and spherical vessels are produced using this method. Finger impressions, scooping marks, and irregular surfaces are evident in such pots. Prior to initiating the wheel throwing process, the potter portions out the requisite quantity of prepared clay from the mass and kneads it. Upon completion of the final kneading, a mass of clay is shaped into either a cylindrical or spherical form. The dimensions may differ based on the type of pot desired. The potter typically extracts individual lumps of clay for each pot; however, occasionally, multiple pots may be fashioned from a single lump of clay. The potter rotates the wheel with the stick in a clockwise manner. Upon reaching its maximum velocity, the wheel is centered with clay. The potter employs his fingers to manipulate the clay into distinct shapes. The completed pot is finally extracted from the wheel using thread (soota). The complete procedure of shaping on the wheel requires about five minutes. Nonetheless, certain external factors may independently affect the overall manufacturing timeframe, including the size of the clay lump, the potter's strength in operating the wheel, and the dimensions of the wheel, among others. The freshly crafted pots are subsequently dried by being placed in ashes overnight. It is essential to avoid the use of sunlight for drying, as it may compromise the integrity of the pottery's structure. The ashes absorb the pot's moisture. On the next morning, the pot is removed once it reaches a leather-hard state. The rigid pot is subsequently expanded through hammering against an anvil. The complete procedure requires approximately ten to fifteen minutes each pot. A potter can complete approximately twenty to twenty-five pots in a single day, contingent upon their size.

Firing Technique

The process of ceramic baking is exceedingly labour-intensive. It comprises a sequence of steps. A potter must possess extensive experience, and the procedure requires meticulous observation. Inadequate heat can result in unbaked (*kanccha*) pottery, while excessive heat may cause cracking of the pottery. The firing procedure consists of two distinct types: kiln firing and open firing. In all methods, the baking location is locally referred to as *bhati*. The artisans of Balijuri Village employ the open firing method. Timber, shrubs, straw, and husks serve as raw materials. This technique involves firing pots on a level surface or occasionally in a pit. Upon preparing the firing ground, it is obscured with dry foliage and timber. Piling is the method employed to

prepare the firing bed. The initial phase of pot piling is centering. In this method, three pots are positioned in a slightly inverted manner, with the openings of all the pots directed towards the center. Similarly, the other pots are arranged as depicted one by one. This might be referred to as base piling. Upon the conclusion of base piling, the remaining pots are stacked in an inverted posture, one above the other. The smaller pots are consistently positioned atop the larger ones. Subsequent to the completion of the full piling procedure in a *bhati*, around 200 to 300 pots can be organized during stacking. Two fire channels are constructed using fragmented pot shards atop the stacked pots. These fire channels are designed to dissipate excess heat and flames during the baking process. A specific gap is consistently preserved at regular intervals using shattered pots to dissipate excess heat. The voids are filled with dried straw and pottery shards. The entire dome structure is thereafter enveloped with fragmented pottery and subsequently compacted with dry husks. The entire *bhati* is thus sealed. Subsequently, the *bhati* is ignited, and the firing stick (bamboo) is positioned at the center of the baking bed. The baking process for all the pots required four to five hours, followed by a cooling period of thirty minutes.

The Final Product and Marketization

Basically most of the pots are used for storing water but some are used for other specific purpose like to make chapatti, to take out water from large pots or for traditional rituals. The local names of the pots are *kalasa*, *chhota mathiya*, *bada mathiya*, *kadhai*, *chhota surei*, *badasurei*. Apart from these they also produce lids and other small sized pots for ritual purposes. Earlier they used to make large storage jars to store their grains. They use to sell these products to the nearby market either directly or through local trader. Sometimes the villagers directly buy the potteries from them. With this they used to sell their terracotta products in fairs organised by the different districts of Odisha. The prices of the potteries fluctuate depending upon the demand in the market.





Fig. 1: Materials used during the process of pottery making

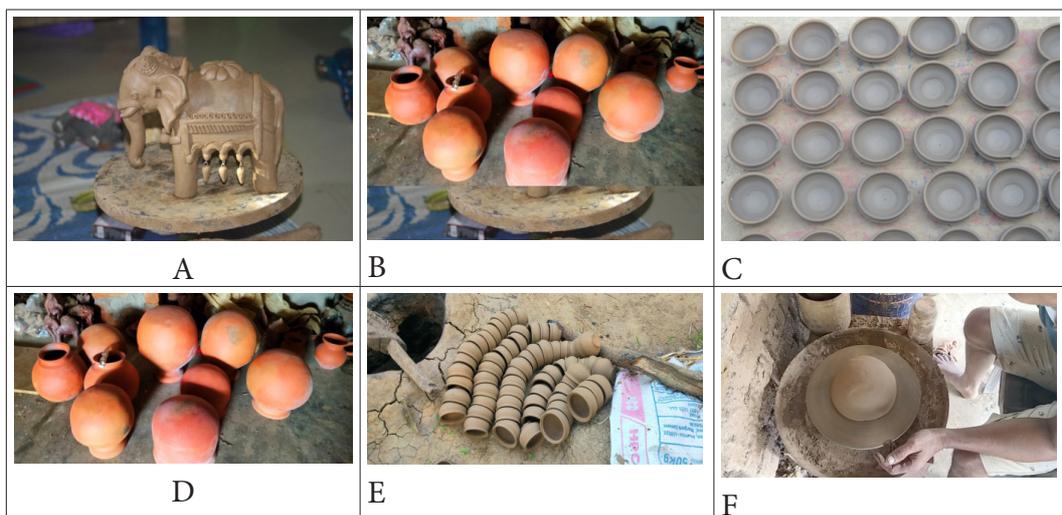


Fig. 2: Different terracotta products

Discussion

The tradition of pottery making relies on a specialized system of material resources, tools, manufacturing procedures, skills, both verbal and non-verbal knowledge, and unique methods of coordination. However, as time progresses, these approaches adapt and assume new forms in response to the evolving circumstances. In certain regions, the entire tradition has disintegrated due to an absence of adaptive survival tactics. This study has analyzed the traditional pottery-making procedures and the use of new techniques within a potter community in India. This information will assist in supplying the ethnographic data required to comprehend the qualities and nature of the technical knowledge employed by an artisan group in Balijuri village inside a certain eco-cultural zone.

Acknowledgement

For providing SEED funds to finish this project, the author is grateful to the vice chancellor of Gangadhar Meher University in Sambalpur, Odisha, India. Additionally, I would like to thank the residents of Balijuri village, especially Arjun Rana, who greatly assisted me in gathering data for this research.

References

- Saraswati, B. Behura N. K. 2010. *Pottery Techniques in Peasant India*. Calcutta: Anthropological Survey of India.
- Sikdar, M. and Chaudhuri, P. 2015. "Pottery Making Tradition among the Prajapati Community of Gujarat, India", *Euras J Anthropol*, 6(1).
- Anonymous. 1999. Final Declaration Report of UNESCO on Protection of Traditional Knowledge and Expressions of Indigenous Cultures.
- Geedh, S. 2013. "Contemporary Traditional Pottery Practices at Archaeo-Historically Important Sites, District Khargone, Madhya Pradesh", *International Journal of Modern Physics: Conference Series*, 93-98.
- Sarangi, S. 2015. Terracotta Art and Pottery Making in western Odisha: An Ethno-archaeological Study, Unpublished Ph.D Thesis, Utkal University, Bhubaneswar, Odisha.