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Pottery making tradition among the Prajapati community of Gujarat, India

Mithun Sikdar*, Pritish Chaudhuri

Anthropological Survey of India, Western Regional Centre, Udaipur, Rajasthan, India

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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. Few of the traditional communities in the world still maintain this tradition as their occupation. Here we offer a description of the pottery making tradition of the local "Prajapati" community of Central Gujarat and the techniques utilise by them in their day to day life. They inherited the technology of pottery making from their forefathers. The method of procuring the raw materials, processing of the same and ultimately ending up with a final product take large of their energy that has been depicted here with vivid description.

Key words: *Traditional pottery making, Prajapati, Gujarat*

Introduction

Utilizing the clay and water in order to give definite shapes for different purposes can be identified as the oldest craft known to human culture. The evidences of this pottery making can be traced from the Neolithic Era with the involvement of various types of traditional knowledge. After the discovery of pottery there was a series of revolutionary changes found to occur at various period of time. The changes were found in terms of the technique of production and also in the art forms. For example, Indus Valley Civilization has also shown a revolutionary change in the field of pottery making. In some particular communities in India this traditional knowledge is inherited from generation to generation though their traditional occupation. Generally they are called Kumhars in most of the parts of India. For example in the whole of Western, Central, Northern and Eastern India the potters are known as Kumhar or Kumbhar. In West Bengal, the potters are also referred to as Kumor. In southern India, they are called Kusavan in Tamil; Kusavan or Kuyarvan in Malayalam; Kuvara or Kumbara in Kanarese; Kusave in Tulu and Kummara or Kumrulu in Telugu. Etymologically, all these names have been derived from the

* Corresponding author: Anthropological Survey of India, Western Regional Centre, Udaipur 313001, Rajasthan, India (**e-mail:** msikdar@hotmail.com)

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original Sanskrit word Kumbhakara, the 'pot maker.' In some parts of Western Orissa, potters are also known as Bhande which is the derivation of the Sanskrit word Bhanda, meaning a 'pot.' There are many studies that have described the pottery making technology of such communities (Marshall, 1931; Starr Richard, 1941; Dumond, 1953; Rawson, 1953; Sinha et al. 1961; Saraswati, 1964; Saraswati, 1979; Jane, 2000; Duary, 2008; Saraswati and Behura, 2010). However there is no such systematic study on the traditional knowledge of pottery making among the Prajapati community of Gujarat. For this, a study has been conducted at Radhvanaj Village in the month of March 2014 to know about the traditional knowledge of pottery making among the Prajapati community. The village is situated in Matar Taluka of Kheda district in Gujarat. The map of Kheda has been depicted in Figure 1.

In Radhvanaj, the potters called themselves as Prajapati and claim their descent from Prajapati, the son of the Hindu God Brahma. In Hindu mythology also they are regarded the descendants of Lord Prajapati. In Gujarat the Prajapati community is divided into several endogamous subdivisions like Gurjar (live all over Gujarat), Variya (distributed in Pachmahal, Kalol, Kheda, Charotar, Ahmedabad, Sabarkantha, Jamnagar and Bhavnagar etc), Lad (distributed in Surat, Navsari etc), Vataliya (distributed mainly in Ahmedabad, Dholka, Dhandhuka, Bhavnagar etc), Sorathiya (distributed mainly in Saurashtra, Ahmedabad etc), Ajmeri (Distributed in Bharuch, Vadodara etc), Maru (Originally migrated from the Marwar region of Rajasthan and settled in different regions of Gujarat); Khambati (distributed in Petlad and Khambhat area). In has been reported that there are some exclusive characteristics that every group of potters follow. Variya, Gurjar, Maru potters are actually the pot makers. The Vatalia used to make chillam or hukkaha (smoking apparatus) whereas the Dalwadi potters are the brick makers. Vatalia and Gurjar potters consume non-vegetarian dishes, whereas Variya, Dalwadi and Maru are purely vegetarian. All of them are endogamous groups and marry within themselves.

In Radhvanaj Village, the potters of Variya group can be found. It was reported that six to seven generation back they migrated from a village named Chekhla, situated in the Sanand Taluka of Ahmedabad district of Gujarat. Therefore they are also known as Chekhliya Kumhar. The Variya Prajapati of Radhvanaj is very religious. Khoriyar Mata is their traditional deity or Kuladevi. Khoriyar Mata is worshipped during the festive season of Navratri. The main temple of Khoriyar Mata is situated at Matel in Bhavnagar district of Gujarat. Traditionally they called this sacred place as Taatniya Dhara. Another temple is situated at Chachdiwada in Ahmedabad district of Gujarat. Traditionally they use to call these sacred places as Vasna. Apart from Khoriyar Mata, the Variya Prajapati also worships other Hindu deities like Ganesha, Shiva, Durga, Ranchod Rai (Krishna), etc. Apart from that they also take active part in all village festivals. During marriage ceremonies, the Pajapatis are assigned the task of fetching and serving water. In return they receive either two or three bags of grains, cloths, food or sometimes payments. It is obvious that they have to depend on other communities for selling their products and similarly other communities have also to depend on them to buy the clay articles for domestic and ritual purposes. Apart from that the Prajapatis of Radhvanaj village take active part in all the socio-economic and political issues in the village.

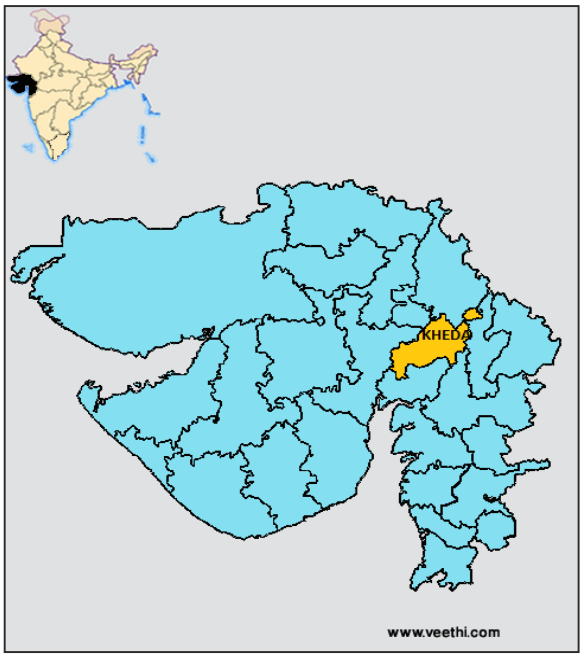

Figure 1: Map of India depicting Kheda district in Gujarat

The pottery making technology of Prajapati community

The whole process of traditional pottery making of Prajapati community has been divided into three headings:

1. Raw materials used in pottery making
2. Techniques used for pottery making.
3. Final product and marketization.

1. Raw material used in pottery making

Procurement of raw materials

The essential raw materials for making pottery can be procured mainly from natural resources. The basic raw material is the soil which is easily available in the surroundings. The other raw materials include the colours for the purpose of painting as well as decorating the pots. Last but not the least is the dry wood, husk and straw that is used as fuel for firing purposes. The absence of one or the other raw material can be identified as the cause of collapse of this industry. The potters of Radhvanaj Village bring the soil from the nearby pond of the village. All type of soils (*maati*) does not suit to prepare all types of pottery. Locally the soil which the potters of Radhvanaj used to bring the *kali mitti* (black soil) which is a fine in nature. For painting purpose they generally use three types of colours: red, white and black (Fig. 2, Fig. 3). All these are natural colour available in the form of soil. The red colour is the red ochre locally known as *laal mitti*, white colour is the chalk locally known as khadi, and black colour is the mineral colour locally known as *kaali mitti*. These colours are extracted from the local mines and brought to the local market. From the local market, the potters use to buy these colours. But recently they also started to use the readymade chemical colours or oil colours over the traditional colours because of various advantages. The oil colours are easily available in the market and they are more durable. They can also be applied directly without processing. For firing the pots, dried out bushes and woods are collected from the nearby forest. Sometimes when there is a shortage of wood and bushes in the forest, they purchase the same from the Suthar community (traditional carpenter). Apart from dried bushed and

woods, grain husk and straws are also required for the same. They collect the grain husk and straws from their own agricultural field after the harvest is over. The potters who don't have their own agricultural field collect it from other communities in exchange of pots. This is one type of barter going on in the village.

Figure 2: Preparation of Red colour

Figure 3: Preparation of White and Black colour

Traditional tools used for pottery making

Here we describe about the tools that they use during the preparation of the pottery and the areas where they can be found. All the tools are inseparable to each other.

Chaak

The foremost tool for pottery making is *chaak* (Fig. 4). *Chaak* or 'wheel' shows the identity of the potter. In India it can be divided into two major types, namely, 'blocked-wheel' and 'spoked-wheel' on the basis of their structure. Both the wheels are rotated by hand. Further they are classified into two groups, viz 'pivoted-wheel' and 'socketed-wheel' on the basis of their base of rotation. In pivoted system the entire wheel is balanced on a single iron nail of 4-5 cm length which is fixed on the ground with the help of a concrete base. In socketed wheel system the entire wheel is run on a ball bearing system. In all types of wheel the diameter of the wheel varies from 60 cm to 70 cm and the thickness varies from 6 cm to 7 cm. The main function of the chaak is to provide desired shape to the clay ball in the form of a pot.

Figure 4: Chaak

Laathi

A stick or laathi is generally made out of bamboo or wood. This tool is used for rotating the wheel (chaak). The size of the stick varies from 100 cm to 130 cm. For

rotating the wheel, one end of the stick is made pointed so that it can be fixed into the already existing hole on the wheel.

Jakharia

Jakharia is a long Y shaped tree branch (almost 2 m long) which is used to lift and carry the bushes and dried branches from the forest as firewood (firing of pottery).

Digging tools

The spade (fawra) and shovels (kudaal) are there to dig out the soil.

Challni

Challni is used to remove the lumps and other impurities from the soil. It acts as a filter. This is made up of tin or iron plate.

Dhokena

This is a wooden mallet specially designed to ram the soil (Fig. 5).

Figure 5: Dhokena

Tapla

This tool is made up of hard wood but light in weight. It is used for enlarging and smoothing the pot after separating from the *chaak*. It is suitable for both wheel made and handmade pottery.

Sometimes it is also used for tapering the outer wall upon joining the upper and lower part of the pottery, in case the pottery is made into two parts. A *tapla* has two parts, i.e. handle and the body. There are different *tapla* with varying size and weight. The length of a *tapla* is about 27 cm. The length of the handle varies from 12 to 14 cm and the length of the working body is 15 cm. The thickness is about 3 cm. A light *tapla* weighs about 250 to 300 grams. Usually the *tapla* has two working surfaces.

Figure 6: Tapla

Pella

This is a kind of stone anvil which is locally available in the market. Sometimes the community used to make it by themselves. *Pella* consists of a grip and a working surface (Fig. 7). The working surface of *pella* is either flat or convex. *Pella* is used for enlarging and shaping the pots. It gives support to the inner wall while beating with a *tapla*. The diameter of the working surface varies from 10 cm to 13 cm. The diameter of the grip is 6 cm.

Pelli

Pelli is also a stone anvil of smaller size. The diameter of the working surface varies from 5 cm to 7 cm.

Figure 7: Pella and Pelli

Kundh

It is the broken part of older pots mainly having the rim, neck and shoulder portion. The kundh is wrapped with a piece of cloth and it is served as a working base for beating the pot (Fig. 8).

Figure 8: Kundh

Patthar ki Maala

It is actually a polishing tool (Fig. 9). It is made up of round shaped stones joined together with a thread. When the pots become half dried, mustard oil is applied on the surface and then it is rubbed with this *mala* to give it a shinning surface. Simply it can be said that it is used for burnishing the earthen pots. The burnishing is done before firing.

Figure 9: Patthar ki maala

Bajri ki Dunde

This is the traditional painting brush used by the potters. This is actually a naturally occurring brush made out of millet spike (Fig. 10).

Figure 10: Bajri ki dunde

Soot

This is a long thread that is used to separate the pot from the wheel (Fig. 11).

Figure 11: A lid is separated from the wheel by using *soot*

2. Techniques of pottery making

While discussing about the technical aspect of manufacturing the pottery, the whole process may be divided into four stages viz., preparation of clay, shaping, surface treatment and firing. All these steps are discussed below.

Depending on the *pedodiversity* we can have different types of soils spreading over different parts of India. The diversity can be seen in terms of soil composition, texture

as well as colour. Only certain soil types (clay) are used exclusively for pottery making because of its obvious advantages. All types of clay are not suitable for making pottery. Therefore selection of suitable clay for pottery making is very much important as far as the longevity and fine finishing of the pottery is concerned. The knowledge of clay selection depends mainly on the age old experience of the potter and he can easily identify its suitability just by observing its colour and texture. Clay is generally dug from pond side or from fallow land. The upper surface of the land is not used for making pottery as it contains lots of impurities. The preliminary work of the potter is to search for suitable clay in the entire pond or fallow area. After the preliminary search a general test has been performed by digging the particular area vertically up to one meter. If everything satisfies the criteria they continue to dig vertically without disturbing the nearby areas. Soil testing and digging of the same also come under traditional knowledge of the potter. They bring the dig out soil to their home with the help of bullock cart or trailer attached to a tractor or even on small truck. This type of transportation facilitates them to bring large quantity of soil. Because of the water logging problem in the monsoon season, the soil is generally collected and stacked during summer season. The soil collected is stored in a large open space. They believe that the quality of clay gets improved if it is exposed to sun, wind and water. Therefore storage of clay under a shade is generally avoided. The methods of processing of clay differ largely from region to region according to the nature of soil, but there are certain standardized steps which are adopted by all the potters.

First, most of the impurities are removed by hands. Then the soil is rammed with a wooden mallet (Fig. 12). The next stage is filtering of the clay. The clay is filtered with a *challni* (filter). Here most of the impurities are removed. After that, the potters put it into water which is stored either into a pit or in a large urn. The clay is moistened in water for a day. In the following day the saturated clay is bring out from the pit or urn and again filtered with *challni*. By this process the entire impurities are removed and the clay turned into fine quality clay. The fine clay is mixed with equal proportion of water and spread over a square shaped pit area (locally known as *chowkri*) for a day (Fig. 13). Saw dust is used as tempering material to the clay. If the temper is not mixed properly then it loses its pliability and the pot will crack. Tampering gives strength to the pot.

Figure 12: Ramming

Figure 13: *Chowkri*

Shaping of pottery

Shaping of the pottery among the Prajapati is either wheel made or a combination of wheel and handmade. Earlier handmade pottery was also prevalent among them. The handmade methods include the use of pattering, dabber and mould techniques.

The use of hand was only employed for manufacturing big sized storage jars as depicted in the Figure 14. The thick inner surface of the jar contains finger impressions which show the joining of two different parts of clay rings placed one above the other. The outer surface of the jar is nicely finished. The shapes of handmade pottery are generally asymmetrical and uneven. On the other hand wheel made potteries are having symmetrical shapes with equal thickness and even surface.

Figure 14: Big size storage jar

There are potteries which are produced with the help of hand and wheel made method. In such cases, the main body of the vessel is made by hand and the neck as well as the rim is made on wheel. Almost all the jars and globular pots are made with this process. Finger impression, scooping marks, uneven surfaces, etc can be seen in such pots. Before starting the process of wheel throwing, the potter separates the required amount of prepared clay from the heap and kneads it. After the final kneading, a heap of clay is prepared either in the form of a cylinder or of a ball. The size may vary according to the type of pot they want to make. The potter generally takes out separate clay lump for each pots but sometimes more than one pot can be prepared from a single lump of clay. The potter rotates the wheel with the stick (*lathi*) in a clock wise direction. When the wheel receives its maximum speed, the clay is placed at the center of the wheel. The potter uses his fingers and gives the clay definite shapes by manipulating it. At last the finished pot is removed from the wheel with the help of thread (*soot*). The entire process of forming a definite shape on the wheel takes only five minutes. However there are some external factors which may have their independent influence to decide the total time frame of manufacture and these include the size of the clay lump, the strength of the potter for revolving the wheel, dimension of the wheel etc. The newly prepared pots are then dried by keeping it in ashes for overnight (Fig. 15). It is kept in mind that for drying purpose no sun heat has to be used as it may collapse the structure of the pottery.

Figure 15: Pots kept in the ashes

Figure 16: Enlargement of pottery by beating

The ashes absorb the moisture of the pot. In the following morning the pot is taken out after it gets leather hard condition. The hard pot is then enlarged by beating with the help of anvil (Fig. 16). The entire process takes about ten to fifteen minutes for each pot. In a single day, a potter can finish about twenty to twenty five pots depending on the size.

Firing technique

Baking of pottery is a very laborious job. It includes a series of stages. A potter should be highly experienced and the process needs a very careful observation. Improper heat may lead to an unbaked *(kaccha)* pottery and sometimes excessive heat may lead to cracking of the pottery. The method of firing is of two different kinds viz. firing in a kiln and open firing. In both the method the baking place is locally known as *limdhada*. The potters of Radhvanaj Village use the open firing technique. Woods, bushes, straws and husks are used as raw materials. In this method pots are baked on a flat ground or sometimes in a pit. After preparing the firing ground, it is covered up with dry bushes and woods. Piling is the technique to prepare the firing bed. The first step of the piling of pot is centering (Fig. 17). In this method three pots are arranged in slightly inverted position by keeping the mouth of all the pots facing the centre. In the same manner the other pots are also piled as shown in Figure 18. It can be termed as base piling. After the completion of base piling, other remaining pots are piled one above the other in inverted position as shown in Figure 19. The smaller pots are always kept over the bigger ones. There after the entire piling process is completed (Fig. 20). In a *limdhada*, about 200 to 300 pots can be arranged during piling. Two fire channels are made with broken pieces of pots on the top of the piled pots. These fire channels are made to release the excess heat and fire during baking process (Fig.21). Particular gap is also maintained at regular intervals with the help of broken pots to release the excess heat. The gaps are filled up with dry straws and potsherds (Fig. 22). Then the entire dome structure is covered up with the broken pieces of pots and then packed with dry husks. In this way the entire *limdhada* is sealed (Fig. 23). Then the *limdhada* is ignited (Fig. 24) and the firing stick (bamboo) is placed at the center of the baking bed. It took four to five hours to bake all the pots and half hour for cooling down.

Figure 17: Centering

Figure 18: Base piling

Figure 19: Pilling

Figure 20: Complete piling

Figure 21: Baking

Figure 22: Filling of gaps with dry straws and potsherds

Figure 23: Sealing of Limdhada

Figure 24: Ignition of Limdhada

Paintings on the pottery

Both geometric as well as naturalistic paintings can be observed in the pottery. They are generally executed with white and black colours on red surface. Such types of paintings are known as black and white painting on red ware. Figure 25 shows the combination of both naturalistic as well as geometric figures. It shows black and white paintings on burnished red ware. In between two parallel lines the painting shows the picture of Star and Sun which are drawn in alternative manner on the shoulder of the pottery. A wavy pattern is also painted in black on the pottery in between the second and third parallel lines. The lower part of the pottery is painted with parallelogram like structures filled up with white and black colours in alternative manner. Figure 26 shows a geometric design executed on a red ware. In this design, triangle is painted around the shoulder portion of the pottery in between two parallel lines. The triangles are painted with white pigment and filled up with black colour. The lower part of the pottery is painted with square shaped structures filled up with white and black colours in alternative manner. Figure 27 shows the depiction of floral motifs on burnished red ware.

Figure 25: Naturalistic painting on the pots

Figure 26*:* Geometric paintings on the pot

Figure 27: Floral motifs on the pots

3. 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 *lota, chhota ghara, bada ghara, bade matki/ matla, chhota matki, dhochki, degra, maan* and *kalari*. Apart from these they also produce lids and other small sized pots for ritual purposes. Earlier they used to make large storage jars called *kothi* 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 form them. The prices of the potteries fluctuate depending upon the demand in the market. However for a cursory glance the prices of different product have been shown in the following Table 1 (Prices are recorded in Rupees for the month of March, 2014):

During the time of festivals like *Ganesh Chaturthi, Dusheera* and *Diwali* they also get special order for making the idols of *Lord Ganesha* and *Amba Mata*. People from other districts also visit Radhvanaj Village to purchase those idols. Prices of the idol are also determined according to the demand and the size of the idol. Lamps are also

prepared and sold during the *Diwali* festival. The small crockery items and lamps are sold in the local market and surrounding villages.

Table 1: Prices of different potteries prepared by the Prajapati community

Sl. No.	Name of the article	Vessel type	Percentage of total produce	Purpose of use	Price in local market (in Rupees) per piece
1.	*Lota*	Tumbler	10%	To take out water from the storage pot	Rs. 2/- to Rs. 3/-
2.	*Chhota ghara*	Small pot	5%	During ritual	Rs. 10/-
3.	*Bada ghara*	Big pot	30%	To store water	Rs. 20/-
4.	*Bade matki/ matla*	Water pot	15%	To store water	Rs. 70/- to Rs. 80/-
5.	*Chhota matki*	Small water pot	10%	To store water	Rs. 40/- to Rs. 50/-
6.	*Dhochki*	Pitcher		During ritual	Rs. 5/-
7.	*Degra*	Medium sized water container	15%	To store water	Rs. 40/- to Rs. 50/-
8.	*Maan*	Large sized water container	10%	To store water	Rs. 60/-
9.	*Kalari*	Plate	5%	To bake chapatti	Rs. 10/-

Discussion

Pottery making tradition is based on specific system of material resources, tools, manufacturing techniques, skills, verbal and non-verbal knowledge and special ways of coordinating ways (Pfaffenberger, 1992). But as time passes these techniques evolve and take a new form with the changing situation. Sometimes due to lack of adaptive survival strategies the whole tradition has collapsed in some parts of the world. The present study has examined the processes of traditional pottery making procedure and adoption of modern technique among a potter community of India. This information will be helpful in providing the ethnographic data necessary to understand the characteristics and nature of the technical knowledge practised by an artisan group of Gujarat in a particular eco-cultural zone.

The pottery making tradition of Prajapati community not only depicts the traditional knowledge of this community but also their caste identity. Throughout the whole process of pottery making there is no division of labour between male and female potters. Only during soil collection and marketization of the product male folks take active part. Though pottery making tradition takes much of their energy but they also engage themselves in agricultural activities. However the agricultural products are used only for their survival and not for any monitory gain. Their pottery making tradition also shows a combination of economic, social and political relations with other communities in such a caste ridden Indian village. However with the adoption of various steel utensils by the villagers the present condition of pottery tradition became trivial. It is very much important at this point to introduce community based special welfare programme to continue this traditional knowledge among the future generations. Galla (2008) emphasised on the importance of the ***voice*** of the bearer of intangible heritage in safeguarding cultural rights. We are now facing the situation in which advances in the technical environment and the adoption

of modern production techniques and economic gains have almost destroyed the traditional methods of pottery production among the traditional potters. Further research has to be conducted among the potter communities in a nationwide scale so as to protect and sustain the cultural diversity of the traditional potters to maintain the traditional knowledge of pottery making.

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