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VILLAGE POTTERS OF BANNU DISTRICT, KHYBER-PAKHTUNKHWA, PAKISTAN: OBSERVATIONS ON A CRAFT TRADITION IN DECLINE

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Introduction

The pioneering study of traditional pottery techniques of Pakistan by Owen S. Rye and Clifford Evans (Rye and Evans, 1976) not only produced a record of the diversity of techniques and skills used by potters in Pakistan, it also laid down a methodology for future work. Their work also demonstrated the huge potential for more detailed regional studies in Pakistan, as has subsequently been shown by Michela Spataro's (2004) study of three pottery making centres in Sindh Province and a preliminary study of potters in Peshawar District by Carl Knappett (1994). In this paper we report some preliminary observations of a range of potters' workshops in five villages in Bannu District in the province of Khyber-Pakhtunkhwa (formerly the North West Frontier Province) of Pakistan (Figure 1).

Records of craft practices are not only important in their own right as accounts of what are all-too-often declining traditions and skills, but also because they document the complex economic and social relations of craft production, and yield insights into perceptions and practices of divisions of labour (particularly gender-specific ones), and the social reproduction of craft skills, in local and small-scale production systems. We cannot claim to have produced in-depth information about these issues in our short and rather unsystematic study, but feel it worth while recording what we have observed and, in particular, what the various potters have told us.

The Bannu Potters Survey

Our observations were made at the villages of Bharat, Mandeo, Nurar, Gandi Khan Khel and Shabaz Azmat Khel in Bannu District (Figure 1), as well as in the pottery bazaar located just outside the Railway Gate of Bannu City (Figure 2a). The study was undertaken over six days (from 20th to 25th December 1991) at the end of a season of archaeological field work. We cannot claim to have been wholly inclusive or systematic in our work, selecting villages and potters to be visited on the basis of local information, mostly gained from the shops in the pottery bazaar in Bannu City. The villages selected were identified as the principal potters' villages in the District at that time. There had once been potters at the villages of Bazaar Ahmad Khan and Sher Ahmed Kala, and the only remaining potter in Mama Khel had recently died. There were

still potters in Hawed and one in Nawazabad, who had set up a workshop there having moved from Mandeo. This was the only example we found of a new pot-producing workshop having been

established, otherwise the picture was of numerical decline. At the time of our survey there were 6 potters' workshops in Nurar, while previously there had been at least 10. Seven potters' workshops had closed in Shabaz Azmat Khel, although in Gandi Khan Khel (known locally as 'the village of the potters') there were still 70 surviving workshops, while previously there had been almost 90.

We believe that we have visited and recorded a series of examples which are representative of the main pottery making traditions in the District, and which demonstrate the various problems faced by potters seeking to earn a living in an uncertain and changing economic arena. The criteria for selecting which potters to visit and interview were: (a) the type of pot-making technology known to be practised by particular potters and (b) if there had been a decline in the numbers of potters in a village and, if so, to discern what economic or other social factors lay behind this.

Observations and questioning were focussed towards gaining information on the issues considered under the various headings below. In retrospect, we are aware that other questions might have posed, and also that our questioning of individual potters did not always conform to a 'structured' format. We were fortunate in that most of the potters were very forthcoming with information, especially with their personal views on life as village-based potters. A more formal question-and-answer approach would probably have stifled the open spontaneity of our sources.

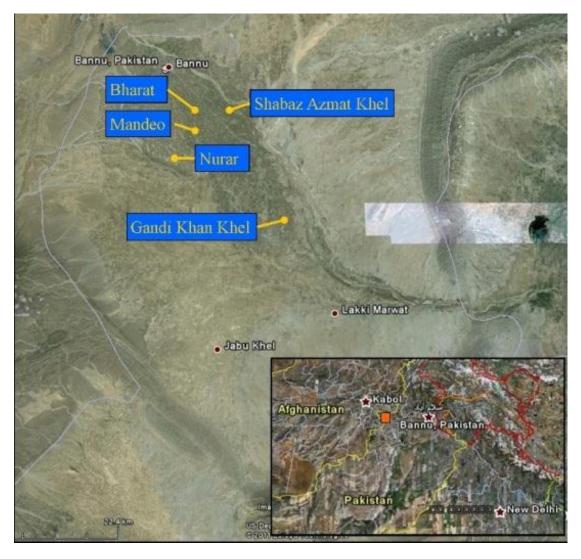


Figure 1. Map showing the location of Bannu District in north-west Pakistan (inset) and of the six villages at which studies were made of potters and their workshops. The base maps are images derived from Google Earth TM .



Figure 2. Some products of the Bannu potters' workshops: (a): a range of pots on sale in the pottery bazaar, outside the old Railway Gate in Bannu City, and (b) the range of ceramic wares produced by Umar Khan's workshop in the village of Mandeo: (i) globular water jar (matteya), (ii) water pitcher (garrai); (iii) small narrow-necked cooking pot (dagai); (iv) spouted water vessel (keeza); (v) shallow flat-bottomed dishes (kundail) for mixing and shaping flat bread (roti/chappati); (vi) round-bottomed serving dish (kunali); (vii) milling bowl (braghiyeh); (viii) pounding vessel for spices (batāl); (ix) handled cups (gadiwa); (x) 'moated' water vessel (tasht), for providing water to chickens or keeping food safe from ants; (xi) lid (barghala), produced in various sizes to fit cooking and water storage vessels; (xii) flat tray (thaiba), see also Figure 3a, b, & c. [The photographic images here and in all subsequent Figures are by Kenneth D. Thomas].

The range of pots and other ceramic products

The principal types of pots produced by most workshops are shown in Figure 2a and 2b. Other ceramic products include flower pots (Figure 4a), the bodies of hubble-bubble pipes (Figure 4b), ceramic 'files' for removing foot calluses, and ceramic 'mills' for de-husking rice [as illustrated by Rye and Evans (1976, p. 233, fig. 32 a-c)]. In Bannu it is not possible to conceive of a meal without bread, therefore thaibi, trays for cooking flat breads (Figure 2b.xii, Figure 3ac), are widely produced in large quantities because high rates of breakage during use lead to a regular demand for these ceramics. The principal types of pottery products shown in Figure 2b are traditional forms which show only slight variations in size and surface decoration of each type. Thus there is a high level of conservatism in terms of the pottery product range and in only one instance did we observe innovation in production of 'new' types of ceramic vessels. Musam Khan, an enterprising potter in Gandi Khan Khel, includes two types of vessels (Figure 3d) in his product repertoire which he makes solely for use by Afghans living in a nearby refugee camp. One is a jar (kurtmal) for churning vogurt and the other a dish (jagai) for preparing yogurt balls (kurt), which are dried in the sun for storage. Both are made in the same fabrics as his traditional pots and it is fascinating to consider how any future archaeologist might seek to 'explain' the occurrence of such 'new' vessel types coexisting with an otherwise 'established' ceramic tradition.

The sources of clay, temper and pigments used

Clay deposits are abundant throughout most of Bannu District, although potters often have to pay land owners a fee for digging up the clay they need, a situation also reported by Spataro (2004) in her study of pottery workshops in the Thar Desert in Sindh Province. The banks of the river Tochi are a source of clay for some potters, but for many the Tochi is valued for its clean sands used as tempering. All the pigments used to decorate vessels are naturallyoccurring minerals, derived from various localities either within the District or further afield. For example, the bright red pigment used by Umar Khan on some of his pots (Figure 2 ii, iii & v) is an ochreous clay (srā khatta) derived from deposits near Mir Ali, some 25 kilometres to the west of Umar Khan's village of Mandeo.

Musam Khan's clay source is near a water tank some 1.4 km from his village (Gandi Khan Khel). His source of clean sand is 7 km away. He uses red, white and black pigments to paint his pots. These are all minerals that mostly come from deposits in the hills fringing the east of Bannu District, although black comes from Karborgha (in Kohat District, north of

Bannu District), which Musam Khan obtains when he and a group of fellow potters go on pilgrimage to an important *ziarat* (saint's tomb).

Thaibi have particularly high levels of tempering in their fabric (usually more than 50%, by volume). Traditionally, this temper has been of crushed pottery (grog), ancient pottery occurring on the surfaces of archaeological sites being sometimes preferred (particularly the very fine wares found on Bronze Age sites). Mir Paiyodad (Bharat) uses brick dust from a nearby brick works as a temper for *thaibi*, but the products are of lower quality (more brittle and with inferior heat transference and retention). Spataro (2004) observed that the *chapatti* baking pans made in the Thar Desert incorporate two types of temper: grog in the bottom and sand in the rim.

The range of manufacturing techniques

i. Shaping the clay

Thaibi are made entirely by hand on a bed of temper on a clean floor, while most other ceramic products are made on a foot-operated 'kick wheel' (Figure 4a and b). Water storage and cooling jars (matteya) are shaped on the wheel, then finished by hand using a dabber and a paddle over a dish of clean coarse sand (Figure 4c and d), to thin out and shape the vessel, and to incorporate sand into the outer surface to enhance its water cooling properties. Umar Khan (village Mandeo) informed us that, once formed, these water jars are left to dry in the sun "for as long as possible" because the better they are dried, the less chance there is of them cracking during firing.

ii. The types of kilns used

Thaibi are usually fired in simple rectangular kilns such as that of Mir Paiyodad (Figure 3b), which is built against the wall of his house. This kiln can fire up to 300 thaibi at a time. Sloping kilns, examples of which are shown in Figure 5a and b, allow the fire to spread quickly from its starting place at the entrance of the kiln, ensuring a more even firing of all the vessels stacked in the kiln. The village of Shabaz Azmat Khel had the most sophisticated kilns encountered in our survey (Figure 5c and d). These circular updraft kilns and the associated pottery production system of the potter Mir Shad were described in detail by Rye and Evans (1976, 43-9). We examined the kiln of Said Ghani, but it was full of cooling fired water pots at the time of our visit, so the internal structure could not be examined directly. It is, however, similar to that illustrated by Rye and Evans (1976, p. 48, fig. 11).

iii. Loading and firing the kilns

Firing is usually started with dried maize stalks or processing debris from rice, although some potters

now use kerosene to start the burn. The principal firing fuel in open kilns is dung cakes, made from cattle and water buffalo dung mixed with chopped straw and chaff and dried in the sun (Figure 6a and b). The stacking of pots in open kilns is generally as shown in figure 6c. The firing time for open kilns varies between 4 and 9 hours. Kilns are left to cool for at least 24 hours before the fired pots are removed.

By contrast, the fuel used in the updraft kilns of Shabaz Azmat Khel is solely of large sheaves of the reed mace (*Typha latifolia*), known locally as *deelai*. Up to 900 spouted water pots are loaded into the kiln. These are covered with piled-up flat dishes. The lot is then covered in a layer of *deelai* and sealed with a layer of mud plaster into which numerous holes are punched. *Deelai* sheaves are fed into the fire hole under the kiln, with the fire burning for up to 13 hours (9 hours minimum), consuming up to 50 sheaves of *deelai*.

iv. Rates of wastage during firing

The amount of wastage during firing, resulting from breaking, cracking or over-firing, varies according to kiln type, the types of pots being made, the rate of firing (too fast a burn leads to more cracked or overfired pots) and the weather (e.g. too rapid cooling in rainy conditions). Thaibi made in simple rectangular level kilns have a wastage rate of some 40-50 in 300. In sloping kilns, 500 or even 600 pots can be fired at a time, with breakage/cracking often ruining some 50 - 100 pots, but this is unpredictable and can be much higher. More than 900 pots can be fired at a time in the enclosed circular updraft kilns, with breakage rates being variable but usually low (although a bad firing can lead to 30% wastage). Further losses can occur by breakage during transport (Figure 6d). Not all of this is total waste, some cracked pots are crushed for use as temper, while larger pots can be used as construction materials in walls (including the walls of kilns).

Seasonal aspects of pottery production

Two main factors control the times when pots are manufactured:

Demand for particular types of pots. While many types, such as *thaibi* for cooking flat breads and pots for carrying and storing water, are needed all year round, others vary in demand according to the religious calendar (e.g. at *Eid* times, various types of large vessels are required for cooking and serving large feasts), the agricultural calendar (e.g. milling vessels required for crop processing) or the social calendar (most marriages occur in the spring season, when larger water pots and large dishes for the preparation and serving of food at wedding feasts are in demand).

Climate and weather: potters seek to avoid firings during rainy periods because it is more difficult to initiate and sustain the firing of a kiln, and breakage and cracking rates are much higher. Very large water storage pots are mainly made in March-April time, before the onset of the very hot weather.

Social aspects of pottery production and the social reproduction of knowledge and skills

In most villages we visited, pottery production occurs wholly in the family workshops within the walled courtyards of houses. The village of Gandi Khan Khel is an exception to this, with 18 kilns being located in public spaces, each being shared by between 3 and 6 families of potters (there being 70 surviving pot-making workshops in the village).

Virtually the whole process of pot making in Bannu District is a male preserve, although women can undertake the shaping of thaibi, although not usually their firing. The knowledge of pottery manufacture is passed down from father to son. In one case we visited a workshop in which the father had died before passing on his knowledge, with the result that much of the equipment (wheel, paddles and dabbers, mortars for producing pigment powders, etc.) lay unused. The only ceramic production in this household was the making of thaibi, which was undertaken by the women of the family. Pot making is a completely family-based activity and there seemed to be no possibility that the untrained older son of the family could become apprenticed to another potter in order to learn the craft that his father had not been able to pass on.

The economic context: competing technologies and alternative sources of income

The increasing availability throughout Pakistan of mass-produced implements, such as metal cooking pots and bowls, water containers, cups, and so on, made of plastics has had a marked impact on demand for ceramic vessels. The competing materials are less liable to break, are less heavy and more efficient in many ways. They are a little more expensive, but they require replacing far less frequently. In addition, they are seen as being 'modern' and therefore more desirable than traditional pottery vessels. Equally, if not more, important is the rise of competing sources of income. People in Bannu, as elsewhere, are much more mobile than they once were and the possibility of moving away to find work, and to earn 'good' money, is seen as increasingly attractive to the sons of potters. Many who might have learned the potter's craft, and lived a life of relative poverty, have become labourers on roads, canals and building developments. Some have become migrant workers, commonly seeking employment as labourers in the Gulf States. They send a high proportion of their

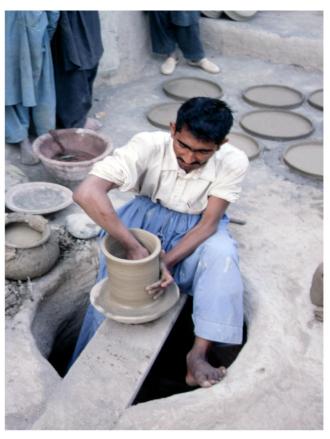








Figure 3. (a) Flat baking trays (thaibi) made in Umar Khan's workshop (village Mandeo) for cooking bread (naan and chapattis); (b) simple kiln $(2.4 \times 2.4 \text{ m})$ built against the wall of the house of Mir Paiyodad (village Bharat) for firing thaibi; (c) thaiba on top of an elaborate cooking hearth (bāt), with cooked cornmeal naan, in Umar Khan's courtyard (village Mandeo); (d) wares produced by Musam Khan (village Gandi Khan Khel) and used by Afghans in the nearby refugee camp for processing yogurt (as described in the text): left: kurtmal, right: jagai.





a





c

Figure 4. Techniques of pottery production: (a) Gul Nawaz (village Nurar) throwing a flower pot on his foot wheel (note the drying thaibi in the background); (b) Habibullah Khan (village Nurar) at his foot wheel throwing the body of a chilum (a hubble-bubble pipe, completed examples of which are drying behind him); (c) Musam Khan (village Gandi Khan Khel) beating out a water pot (matteya) over a bowl of coarse clean sand, using a dabber and paddle; (d) a range of dabbers and paddles used by Umar Khan (village Mandeo).



Figure 5. Range of pottery kilns (see also the simple kiln for firing thaihi, in Figure 3b): (a) a communal horse-shoe shaped sloping kiln (9.5 m long by 2.8 m wide, height ranging from 0.6 to 1.5 m) located in an open space in the village of Gandi Khan Khel; (b) double kiln in the courtyard of Gul Nawaz (village Nurar), the larger one (7.8 \times 3.0 m; from 0.4-0.8 m high) is for firing a range of pots, while the smaller one (3.8 \times 2.0 m; from 0 – 0.45 m high) is for firing thaihi; (c) circular updraft kiln (outer diameter 3.5 m, inner diameter 2.1 m, outside height 1.2 m) in the courtyard of Said Ghani (village Shahaz Azmat Khel); (d) Said Ghani's updraft kiln loaded with water pots.



Figure 6. (a) Firing of kilns is usually started using dried maize stalks or straw from the processing of the rice crop, while the main heat is provided by burning dung cakes (made from mixing water buffalo dung with chopped straw and chaff and dried in the sun); (b) dung cakes are made and stored throughout the non-firing season (they are also an important fuel for cooking); (c) a layer of dung cakes is placed on the bottom of the kiln, with the dried pots carefully stacked on top, with bits of dung cake packed in the spaces; flat dishes are placed on the top, covered by a layer of straw (note: this has been partially reconstructed as a demonstration for us, using already fired pots); (d) fired pots are usually packed onto the back of a lorry for transport to the main sales outlets (mostly in the pottery bazaar in Bannu City (Figure 2a).

earnings home to their families in the villages, but none return to learn the potter's craft.

Conclusion

We hope that these observations of traditional potters and pot-making techniques in Bannu District have revealed the potential for further systematic study there, as well as showing the diversity of techniques and technology used by potters in this small area. Sadly, there can be little doubt that the future of the Bannu potters is rather bleak. External and internal pressures, outlined above, have caused numerous families to abandon the making of pots, or to specialise in producing a restricted range of types of ceramic (notably thaibi, the much-in-demand cooking trays for flat breads). A few have responded to new opportunities by making different types of ceramics, such as the yogurt-processing pots used by Afghan refugees, or by moving their workshops to villages which have lost their own potters. All these aspects highlight the need for further work in this area, both to document more fully the surviving traditions, and their social contexts, as well as to investigate the socio-economic dynamics underlying innovations in pottery production.

As a postscript: there was an intention that, some 10 years on (i.e. in December 2001), we would revisit the villages and potters observed in this brief initial study to find out how they had fared in the intervening interval, how many were still in business and what range of wares they were producing. This was not to be, because events following the 11th September 2001 atrocities in the USA, which have reverberated throughout the region ever since, have made it impossible for us to undertake any kind of field work in Bannu District.

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