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A Preliminary Analysis of the Neolithic Pottery from Unexcavated Sites of Kashmir Valley

Abstract

Physical sciences like Geology, Physics, Chemistry, etc., have authenticated the ancient accounts of Kashmir, including seventh-century CE Nilmatpurana and twelfth-century CE Rajatarangini that Kashmir was once a sizable lake, Satisar. Today's lakes like Wular, Manasbal, and Dal are considered (Satisar's) remnants of this sizable lake. On a mountaintop overlooking Manasbal Lake, Bandey (2009: 43-68) and Yatoo (2012: 222-228) discovered Middle Palaeolithic material culture. There are dozens of prehistoric and early historic sites along the river Jhelum (Vatista) and its tributaries. Archaeological sites from 3000 BCE to 800 CE tended to be found near lakes and rivers on the raised plains or Karewas. Most of these sites are identified by the presence of the material remains in general and pottery in particular. This paper reviews the types of pottery retrieved from the Neolithic sites along River Jhelum and its tributaries in the Valley of Kashmir. This study highlights the types, shapes, pottery fabrics, production methods, distribution and functions of Neolithic pottery in the Valley of Kashmir. The research is based on the pot shreds collected as surface finds and in context as assortments in the sections of more than three dozen unexcavated Neolithic sites in the Valley

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Keywords : Neolithic Period, Pottery, Kashmir Valley, Unexcavated Sites, Survey

सारांश

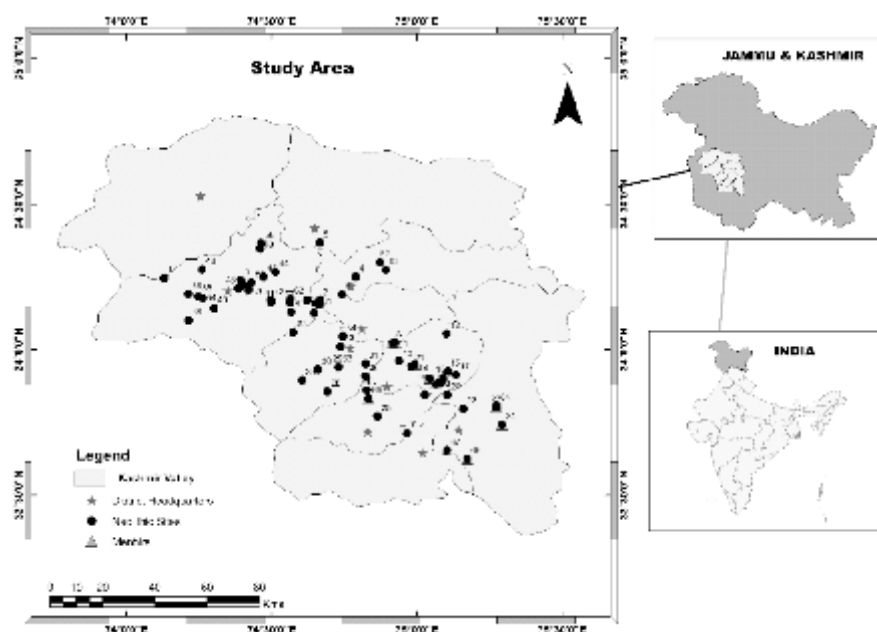
भूविज्ञान, भौतिकी, रसायन विज्ञान आदि ने कश्मीर की प्राचीन पुस्तकों को प्रमाणित किया है कि कश्मीर कभी एक बड़े आकार की झील, सतीसर थी। जिसमें सातवीं शताब्दी ईस्वी का नीलमतपुराण और बारहवीं शताब्दी ईस्वी की राजतरंगिणी शामिल हैं। आज की झीलों जैसे वुलर, मनसबल और डल को इस बड़े आकार की झील (सतीसर) के अवशेष माना जाता है। मनसबल झील के सामने एक पर्वत की चोटी पर, बांदे (2009 : 43–68) और यादू (2012 : 222–228) ने मध्य पुरापाषाण भौतिक संस्कृति की खोज की। झेलम (वतिस्ता) और उसकी सहायक नदियों के किनारे दर्जनों प्रागैतिहासिक और प्रारंभिक ऐतिहासिक स्थल हैं। 3000 ईसा पूर्व से 800 ईस्वी तक के पुरातात्विक स्थल झीलों और नदियों के पास उभरे हुए मैदानों या करेवा में पाए जाते थे। इनमें से अधिकांश स्थलों की पहचान सामान्य रूप से भौतिक अवशेषों और विशेष रूप से मिट्टी के बर्तनों की उपस्थिति से होती है। यह शोध पत्र कश्मीर की घाटी में झेलम नदी और उसकी सहायक नदियों के साथ नवपाषाण स्थलों से प्राप्त मिट्टी के बर्तनों के प्रकारों की समीक्षा करता है। यह अध्ययन कश्मीर की घाटी में नवपाषाणकालीन मिट्टी के बर्तनों के प्रकार, आकार, मिट्टी के बर्तनों के कपड़े, उत्पादन के तरीके, वितरण और कार्यों पर प्रकाश डालता है। अनुसंधान घाटी में तीन दर्जन से अधिक गैर-खुदाई नवपाषाण स्थलों के वर्गों में सतह के रूप में एकत्र किए गए बर्तन के टुकड़े और संदर्भ में वर्गीकरण के रूप में आधारित है।

प्रमुख शब्द : नवपाषाण काल, मृद्भाण्ड, कश्मीर घाटी, बिना खुदाई वाले स्थल, सर्वेक्षण।

Introduction

Pottery refers to the objects produced of clay that are shaped and sized differently and have specific uses. It is also known as ceramics, derived from the Greek term 'Keromas' meaning 'burned material' or 'earthen ware'. As pottery has been an ordinary man's tool since ancient times, it provides us with adequate details about his way of life and his culture. Pottery is one of the remarkable ways that man has communicated thoughts throughout history. Initially, he conveyed his emotions, aesthetic preferences, and artistic creation in various ways.

Studying prehistoric pottery enables us to get insight into society, culture, economics, and occasionally even the religious beliefs of the period. It sheds light on the petrology, engineering ability, artisanal ability, and technical excellence of the time. Archaeologically, pottery is conceptualised as interpretative, suggesting the context of human social evolution. It has been considered the alphabet of archaeology and archaeological history and a gauge of a country's civilisation. It is non-perishable, and its pieces are enough to identify the age or chronology and the many cultural phases of the bygone cultures, aiding in reconstructing the history of a certain period and place. During the survey of the study area, most of the Neolithic sites (Map 1) were identified and located based on the presence of the pot shreds only.



Map. 1. Neolithic Sites in the Valley of Kashmir

Methodological Analysis of the Pot shreds

Various material remains related to the sites were recovered

during the fieldwork, and additional items were recorded in situ. The tools used in the material culture were bone, stone, and pottery. On several scales, this material culture was investigated. Pottery was examined to determine chronological dates, compare and contrast artefacts from sites that date from the same era but are located in different places, determine the scale of a site, and other factors.

Pottery is the most reported artefact retrieved from the surface and in context at these sites (Figs. 1-4) The regional survey's core methodology, like many others, was the collection and analysis of pottery; understanding potential site interactions and functions by examining them inside or between the sites in an area is one of the other objectives (Meyer 2003: 14; Millett 2000: 54). Although the study's research issues were complex and intriguing, time and resources were limited and lack of scientific analysis in laboratories. As a result, the collection of all the pottery from the sites was prohibited by these limits, and the collection of only diagnostic shreds would have revealed only a limited amount of information regarding the representativeness of the pottery on the ground (Mattingly 2000: 8; Meyer and Gregory 2003: 48). In order to strike a balance, a sufficient number of pottery shreds that varied in fabric (colour, texture, inclusions), surface treatment and ornamentation (slips, incisions, perforations, decorative designs), the body part of a vessel (rim, neck, shoulder, handle, body or base), and other factors were collected.

As pottery was recovered from almost all the sites, it was a critical study component. Regarding its analysis, I concentrated on two key issues: typology, categorisation, and possible chronology. Pottery analysis in connection to these concerns enables a clearer understanding of a site's purpose, its time of occupation, and relationships within and

across sites, according to Carreté et al. (1995: 63), and Millett (2000: 53-54). Notably, the relative age of the pottery with previously excavated or investigated sites in Kashmir and the good quantity of information in the form of prior datasets were the foundations for the quality of dating the sites in the current research.

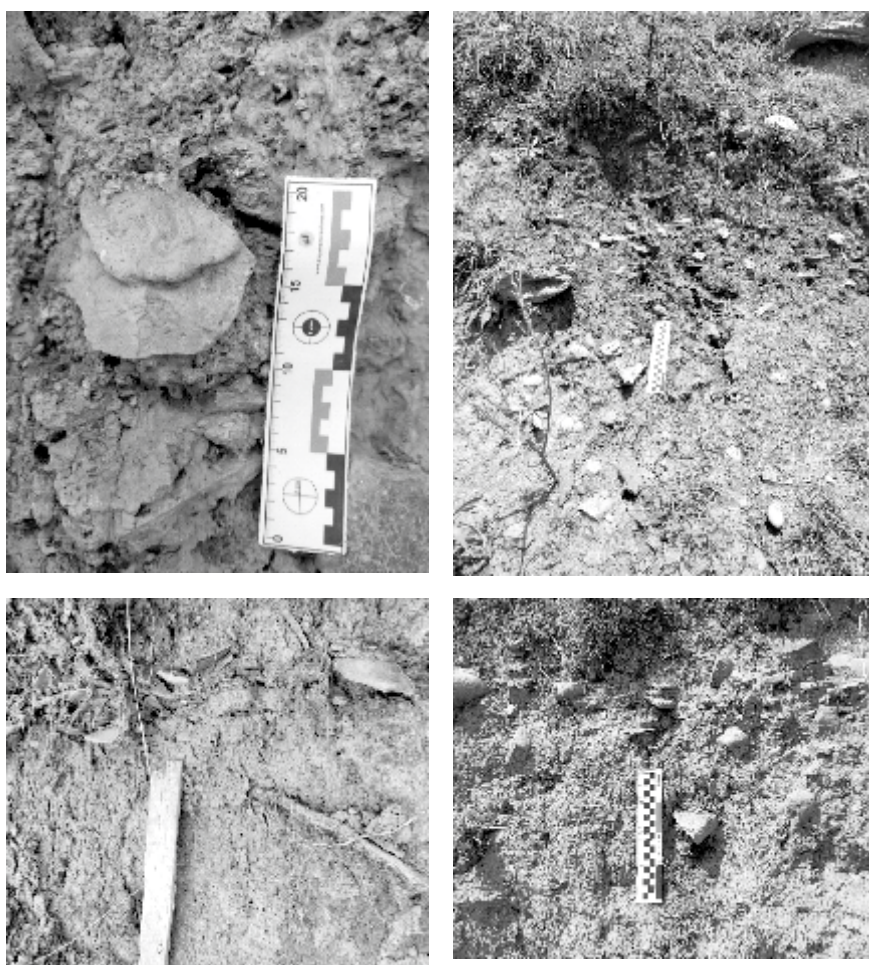


Fig. 1-4 : Pot Shreds in the Sections at various Neolithic sites.

Typology and Categorisation

This method of categorising ceramics is based on detecting apparent similarities and different patterns. Sorting ceramic shreds or

vessels into groups includes making sure that members of one group resemble one another more than they do members of other groups (Millett 2000: 54-55; Sinopoli 1991: 49). Although there is just a handful of Neolithic, early, and later historic sites in Kashmir that have documented ceramic typological information, these include Burzahom, Gufkral, Kanispora, Semthan, etc. (Bandey 2009: 112-146; Ghosh 1996:11-12, 1964: 17-18; 1965: 9-10; Mani 2000: 1-21; Mitra 1983b: 21-26; 1984: 16-25; Rao 1986: 34-176; Sharma; 1981-81: 19-23).



Fig. 5-6 : A broken pot in the context and cleaned on right side.

In order to observe the typologies existent at these sites and compare them with the published data, I returned to these locations. Therefore, a solid foundation was established for developing a new typological sequence of pottery using the published typological details from these sites, the published literature of excavated sites that provided the pottery dataset, and the new typological details obtained by visiting sites and their archives within the present research and by categorising shreds and being able to examine for similarities and variations in ceramics across the whole Valley.

Along with typology, the categorisation of pottery offered a complex analytical tool for identifying and classifying potteries in regions without local typologies. Since the Neolithic group already had a comprehensive understanding of hierarchical systems for classifying pottery into broad groupings like coarse, fine, and burnished ware, classification was clearer. The primary criteria for classification were the raw materials, clays, tempers, and embellishments utilised in a vessel (Blakely and Bennett 1989: 6-7). As a result, I divided the ceramics into more or less distinct groups based on how similar and different the physical and material appearances were.



Figure 7-8. Stone Ponders and the Celts retrieved during the field survey.

In order to propose a relative date for such finds, and by extension sites or portions of sites, I analysed lithic material culture (fig. 7-8) by classifying them according to their morphology and compared lithic tools reported from excavated sites in Kashmir with lithic assemblage found during the fresh survey on the basis of their typology, possible function, and manufacturing technology. Following morphological analysis of lithic artefacts, comparisons were made to comprehend and maybe even provide relative ages. This study and comparison procedure published artefacts with radiometric dates from the excavated and studied sites of Burzahom, Gufkral, Kanispora (Bandey 2009: 112-146; Ghosh 1996:11-

12, 1964: 17-18; 1965: 9-10; Mani 2000: 1-21; Mitra 1983b: 21-26; 1984: 16-25; Rao 1986: 34-176; Sharma; 1981-81: 19-23).

Analysis of Neolithic Pottery Retrieved from Unexcavated Sites

At most of the Neolithic sites handmade as well as wheel throne pottery can be seen in the form of scattered pot shreds. It was one of the complex process to produce pots for different purposes. The potters identified a source of clay appropriate for making pots. The clay was prepared into the desired fine particles by dabbing it with stone ponders (Fig. 7). But, the Neolithic people of Kashmir were lucky enough to use loess for making different vessels. Because, it was easily available to them in and around their habitations located on the Karewas. The loess soil , because of its fine shape and minute size of clay crystals was ideal for making pottery. As this soil becomes exceptionally plastic when mixed with water. (Same soil is presently used by the local potters, Fig.). The mud was finely kneaded and underwent three important steps to get the desired pottery. First, the clay was moulded into a pot by hand and later by wheel or table-turn; then clay pot was dried to retain the moulded shape and finally in the dried clay pot was used as it is in the beginning and later they learnt baking in the fire. In fine grey wares crushed milky quartz was used as fillers. The burnished ware has very less quantity of filler were as the gritty red ware contains many types of coarse sand fillers. The tempering material was added during the kneading of the clay. During the process of sun-drying and baking of the pottery the water evaporated and to prevent the cracking and warping of these vessels the potters used sand as tempering material to counter this problem.

The examination of the pot shreds and the ethnographic study helps us to understand that the Neolithic people manufactured the pots and other earthen ware through Strip or Coil technique. In this technique

thin and long ropes of clay were rolled and were used spirally one above the other, wherein one coil was mounted along the base and at each turn the coil spiraled one above the other. In the Strip technique the procedure of pot making was same but the separate strips in the form of rings were built one above the other. The shape of the pot was perfected by thinning the walls after manually pressing, dabbing with a wooden dabber and smearing the coils against each other. Possibly the pot was put on reed mat or basket to turn round and round while the potter dabber the pot with both hands sometime inside and outside. That is why reed mat impressions are seen on the bases of the Neolithic pottery. These techniques left the surfaces of the pottery rough and it might have been subjected to scrapping or brushing with a reed brush as evident from the collected pot shreds in the field.

The pottery from all the Neolithic sites is categorised into four types: gritty ware, burnished ware, fine ware, and coarse ware. These four items are regarded as the diagnostic items from Kashmir's Neolithic era (Bandey 2009: 122-131; Ghosh 1964: 19; Mani 2000: 1-28; 2008: 234; Mitra 1984: 22-23; Sharma 1992: 63-68). Among the four types of pottery, coarse ware (sometimes referred to as rippled rim pottery) stands out for its use of black and grey colours, pedestal and ring bases, and surface ornamentation of wavy lines or dots. Due to surface striations, fine ware—also known as combed grey ware—has been discovered in two colours: grey and buff. The mat or basket imprint that can be seen on the base of most instances serves as its distinctive design feature. Burnished pottery also comes in two tones of black and steel grey has a pedestal and flat bases, and has carved triangle motifs on the stem and rim region of the pots. Gritty porcelain is available in red and buff tones, and many specimens have pedestal bases without any decoration.

The earliest and only excavated Neolithic sites where these four ceramic styles were discovered are Burzahom, Gufkral, and, Kanispora. During later expeditions to determine the distribution of the Neolithic material culture in Kashmir, these four ceramic types were also documented from several locations in Kashmir (Bandey 2003a, b; Joshi 1990: 34; Mitra 1984: 16-17; Pant et al. 1982: 38; Yattoo 2005). The descriptions of these pottery types gave the relative age range of each form of pottery in Kashmir by Saar (1992: 29) and Bandey 2009) and the interpretation of these descriptions by Bandey (2009: 121–135). According to their estimates and comparative analysis of the pottery, gritty red or buff pottery first occurred between 1700 and 1000 BCE, followed by burnished ware between 2000 and 1700 BCE, and coarse grey and fine grey ware between 2000 and 1700 BCE.

Coarse grey ware comprises spherical cooking pots with pedestal or flat bases, rippling rims, and basins among the shapes that were examined (and some chosen pieces were drawn) from the four ceramic kinds. Bowls, jars, and spherical-bodied pots with out-turned collars and rippling rims have all been identified as examples of fine grey pottery. Burnished grey or buff ware was made in the shapes of high-necked jars with flaring rims, globular bodies, flat bases, bowls with or without stands, dishes on stands, spherical pots, and vases and miniature pots. Gritty red or buff porcelain has been identified as pedestal-based bowls and tiny miniature pots. Once more, these forms match those described in the four ceramic types from Burzahom, Gufkral, and Kanispora.

The main shapes constructed by the drawing (Fig. 20-22) of the pot shreds show that the handmade vessels in the early Neolithic period were Bowls, Basins, and pots with mat impressions. Then Dish-on-stand, Dishes, Globular pots, Funnel shaped vases, Jars and High Necked Jars,



Fig. 9



Fig. 10

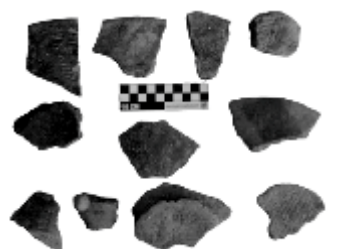


Fig. 11

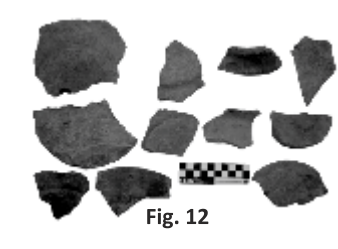


Fig. 12



Fig. 13



Fig. 14



Fig. 15



Fig. 16

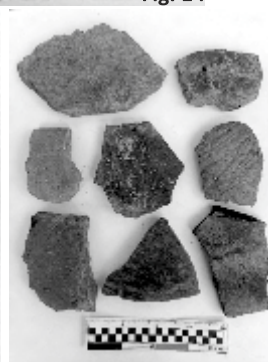
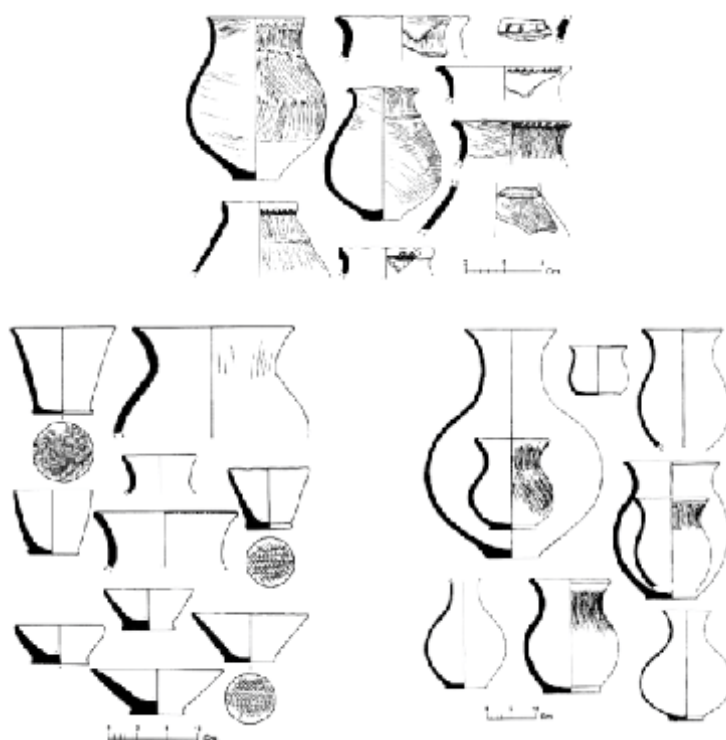


Fig. 17

Fig. 9-17 : Handmade, Burnished, Coarse, Fine grey, Gritty red ware Neolithic Pot Shreds from various Sites.



Figs. 18-19. A perforated pot shred and a terracotta disc with mat impression.



Figs 20-22 . Drawings of the Diagnostic Neolithic Pot Shreds collected during the Survey

etc. were made. The shapes do not belong to the same period but are associated with the various evolutionary stages of the Neolithic period of Kashmir valley. Most of the vessels had flat based bottoms and the rims were simple and flaring. There seems both long-necked vessels as well as neckless shapes too.

Similar pottery forms have been found at Swat in Pakistan's Kalako-deray (Period III, 1505 BCE), Loebanr III, and Ghalegay, according to Stacul (1976: 17–24; 1977: 251; 1987: 45–48; 1993: 71–78). Using similarities in mat-impressed bases and the plastic ornamentation on the vessel body portions, he linked two of the four ceramic types—fine grey ware and burnished ware—to those of the Neolithic Burzahom in Kashmir (Stacul 1976; 1977; 1997b: 48). Stacul discovered parallels between the forms of the fine ware he refers to as gritty brown ware and burnished ware, including jars, hemispherical bowls, and bowls-on-stand with rippling rims and mat imprinted bottoms (Stacul 1993: 78). Additional parallels between the tiny pots discovered at sites various sites and those discovered at Kalako-deray (Stacul 1995: 111, 124) and Aligrama (Stacul and Tusa 1975: 314) in Swat, Pakistan, may be detected. In the current survey, beautifully carved holes (perforation) on fine pot-shreds were seen (fig. 18). Similar kinds were also identified at Burzahom. In the past, only Burzahom-made stone or bone implements, such as mace heads and harvesters (both stone and bone), had such holes (stone). However, Burzahom and Gufkral are known for their perforated ceramics.

Conclusion

Most Neolithic sites in the Kashmir valley have been recognised and found based on the existence of pot shreds from that time since pottery is abundant across Kashmir's Neolithic sites. Many clay vessels

and pot shreds of various colours, fabrics, shapes, forms, and sizes have been unearthed from Kashmir's excavated Neolithic sites. The same is true for unexcavated Neolithic sites in Kashmir. During the field inspection of the research sites, pot shreds of various fabrics were gathered. On the basis of colour, texture and materials, these pot shreds have been recognised as four varieties viz., Coarse, thick grey pottery, Fine Grey ware, Black burnished ware and Gritty red ware. According to the aforesaid description of pot shreds from Neolithic sites in south Kashmir, the pottery of the Neolithic civilisation of Kashmir falls into two technical classes: medium coarse and medium fine fabrics in grey, black, and dull red ware. Coarse fabric is distinguished by primitive and attractive pottery in which the clay used to make the pottery is not thoroughly levigated. And the various hues are due to the uncontrolled firing. The clay used to make pottery in fine fabric is thoroughly levigated, polished by elutriation, and has minute particles. The major wares of this fabric are burnished grey ware, red ware, and shades of these wares such as black, ashy, buff, and so on. Most of the research sites have both handmade and largely slow-wheel throne pottery. Upon studying the shreds, it appears that strip and coil techniques were used to make pottery. Handcrafted pottery might have been shaped by squeezing a hollow ball of clay between the thumbs and then thinning thin walls between the thumb and finger, particularly when forming miniature vessels. The pots' necks and rims were created in a variety of styles, and the majority of the pots had disc bottoms. Nail impressions, basket impressions, grass and reed impressions, mat impressions, ridging, and notches on the rims and necks of the vessels are the most common ornamentation forms seen on pot shreds. No colourful or painted pottery has been found at any of the sites. The shreds of vessel mouths

demonstrate that the pots had flared rims, short curved and straight long necks, and wide and open mouths.

The beauty of Kashmir's Neolithic pottery resides in its mastery of form and design. The above description of the pottery fragments in figures 5-19, suggests that Neolithic people created pottery in various forms and sizes for different uses. The primary functions of the pottery might have been storage of various items, cooking, dishes used while dining, and so on. It is clear that the Neolithic people of Kashmir were skilled artisans who produced pottery after going through many stages of pot manufacturing. The evidence to support the many stages of trials in pottery manufacture, however, is what is absent. The Neolithic pottery of Kashmir clearly demonstrates that it belonged to many sub-cultural periods and stages of the Neolithic period, as seen by the handmade and wheel-thrown as well as pot shreds in various fabrics and colours.

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