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An Overview of the Neolithic-Megalithic Culture of Gufkral, Kashmir

Sofi Sabzar Ahmad

Ph. D. Research Student, Department of History, University of Kashmir Srinagar, Jammu and Kashmir. E-mail: sabzarahmad12393@gmail.com

Abstract: *The valley of Kashmir has a rich historical past, as evidenced by the numerous archaeological sites in the region. Among these sites, Gufkral holds a special place as it reveals and helps to understand the cultural aspects of the times. The Neolithic period in Kashmir was characterized by advances in stone tool, pottery and other aspects representing a shift from hunting and gathering to agriculture and animal domestication. Burzahom, Gufkral, and Kanispur are key sites that demonstrate this cultural shift, with Gufkral revealing a distinct settlement pattern and tool technology. This paper focuses on characterizing the material culture of the Neolithic-Megalithic period at Gufkral. The study examines settlement pattern, subsistence pattern, lithic technology, and ceramics, functioning of dwelling pits of the Neolithic and Megalithic culture.*

Keywords: *Kashmir, Gufkral, Neolithic, Megalith, Menhir, Pit dwelling, Karewas*

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Aims and Objectives

- To provide an overview of the Neolithic-Megalithic culture of Gufkral, focusing on settlement pattern, subsistence, ceramics, lithic technology, and the functioning of the pits.
- This study aims to contextualize the Megalithic culture of Gufkral, through an analysis of the recovered material culture**.**
- To provide an overview of the current condition or status of the Neolithic-Megalithic site at Gufkral.

Scope and Significance

This paper significantly enriches our understanding of the Neolithic-Megalithic culture of Gufkral, Kashmir, by providing an overview of its material culture. Additionally, this study aims to demonstrate the significance of Gufkral in the Neolithic sites in Kashmir by highlighting its role within the larger

regional context. Megaliths were reported from many archaeological settlements in Kashmir including Burzahom, Gufkral, Hariparigom, Begagund, Brah, Waztal, Sombur, and Dadasar. Unfortunately, no significant efforts were made to thoroughly investigate the megalithic culture of Kashmir, which continued for around eight centuries. Even at sites like Burzahom and Gufkral, no special attention was paid to extensively excavate and expose the megalithic period, to understand all the cultural details of this period. This has resulted in limited understanding of the cultural nuances of this significant period. The significance of this study lies in its endeavour to contextualize the Megalithic culture of Gufkral.

Introduction

The antiquity of the human settlements in Kashmir valley goes back to prehistoric times. The evidence related to early human habitation is evident from several stone tools found in the region.The Stone tools belongs to the Lower, Middle, and Upper palaeolithic were reported from various localities in Kashmir (Banday 2009). Following the palaeolithic period, a developed Neolithic culture emerged, particularly on the Karewas (elevated tablelands) overlooking lakes and streams. The hunting and gathering subsistence base of the Palaeolithic period did not end abruptly. Instead, it was supplemented by a new economy based on food production and the domestication of animals (Fonia 2021). Advancements in stone tools especially the production of ground, chipped, and polished stone tools, various types of pottery, and largely sedentary life, were the main features of this period in Kashmir (Fonia 2021). The Neolithic culture in Kashmir yielded both aceramic and ceramic phases. Prominent archaeological sites like Burzahom (Fonia 2021), Gufkral (IAR 1981-82), Kanispur (IAR 1998-99), Kuladur (Baramulla), and Khan Saheb (Budgam) have yielded evidence of both these phases (Pant 1982). The excavated Neolithic cultural sequence from a few sites and the material remains from nearly four dozen locations suggested widespread Neolithic activities in Kashmir. H. De. Terra and T. T. Paterson reported the first Neolithic site at Burzahom in 1935 (Terra & Paterson 2003). Their small-scale excavation at Burzahom revealed material culture for three different periods. The cultural remains from the topmost layer coincided with the early historic site of Harwan (4th Century CE) (Terra & Paterson 2003). The Megaliths at the site were assumed to be erected during the second cultural layer (Terra 1942). The cultural remains reported from the lowest layer consisted of various stone and bone tools, handmade pottery with matt impressions (Terra 1942). In addition, some shallow pits were also noticed at the site. However, Terra believed that these pits were dug by the treasure hunters (Terra 1942). In doing so, he overlooked an important clue and failed to contextualize these pits. A similar site was identified at Nunar (Ganderbal), where a Neolithic occupation layer was found approximately seven feet beneath the surface (Terra & Paterson 2003). Over the past few decades, archaeological explorations have brought to light rich Neolithic material culture from numerous sites in Kashmir. Important contributions were made by S. A. Shali and R. K. Pant of the frontier circle by conducting the first intensive archaeological explorations from Anantnag to Pampore (IAR 1962-63). This exploration led to the identification of Neolithic cultural remains similar to Burzahom at nine other sites. These sites include Gufkral, Jayadevi-Udar, Olchibag, Pampore, Panzgom, Sombur, Begagund, Thajiwor, and Hariparigom (IAR 1962-63). The surface collections from these sites include pottery, particularly coarse grey, burnished, gritty ware, often featuring mat impressions (IAR 1962-63). Additionally, mace heads and stone celts were also reported (Fig. 1). Pit dwellings were found at Gufkral (Fig. 2), Olchibag, Sempur (IAR 1962-63), and Damodar Udar (IAR 1961-62). B. M. Pande and S. S. Saar reported a polished stone axe and a harvester at Gurahoma-Sangri (situated approximately 48 kilometres northwest of Srinagar along the Srinagar-Bandipora road) (IAR 1961-62). Similarly, at Kanyalwan (located on the Bijbehara-Pahalgam road), typical Neolithic pottery and

stone tools were found (IAR 1976-77). Furthermore, the explorations carried out by S. N. Jaiswal and R. K. Jatta from the North Western Branch of the Archaeological led to the identification of Neolithic sites at Kanispur, Petha Gantamulla (Bala), and Singhpur (IAR 1981-82). Subsequent explorations unveiled Neolithic settlements at Raiteng (Baramulla), Gopas Udar (Pattan), Kriri Chak (Pattan), Kuladur (Pattan), Mukam Udar (Pattan), Taparibal (Baramulla), Wanigom (Baramulla), Yohteng (Baramulla), Shahpendu, Pinglish (Tral), Romu (Pulwama), and Habshah Saheb (Tsodur Budgam) (IAR 1981-82) (Fig.3. Map.1). Among these Neolithic sites, only three have undergone systematic excavations: Burzahom, Gufkral, and Kanispur. However, this endeavour focused on the material culture associated with Neolithic-Megalithic Gufkral in the Pulwama district of Jammu and Kashmir.

Figure 1: Cultural remains found from different Sites A, Neolithic celts; B, gritty red ware with or without mat-impressions recovered from Begagund, Gufkral, Hariparigom, Jayadevi Udar, Olchibag, Pampore, Panzgom, Sombur and Thajiwor. (Source: IAR 1962-63)

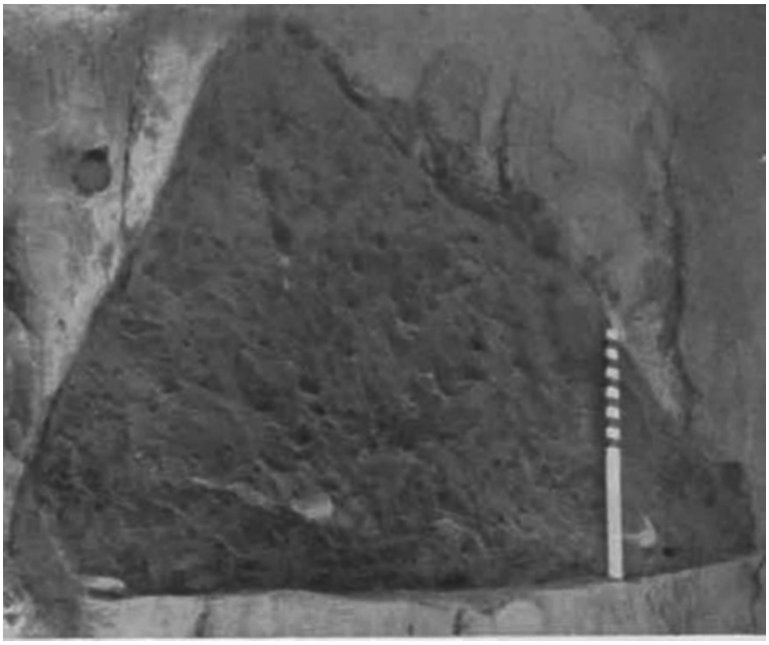

Figure 2: View of the pit found at Gufkral (Source: IAR 1962-63)

Gufkral

The name Gufkral is derived from two Kashmiri words, *Guf* and *Kral*. *Guf* in common parlance means cave, while Kral means potter. It appears that the village got its name from the profession of these potters and the caves that were dug into the Karewa deposit, which can be traced back to the neolithic times. There are a few caves on the slopes of the Karewa that village potters are presently using to store their finished pottery. Gufkral, locally known as 'Kral Wudur', is geographically positioned at 33°53'45.67''N 75°5'40.54'' E, at an elevation of 1671 masl, adjacent to Bonmir village. The site can be approached by two local link roads, the Kaigam-Tral road and the Dadsar-Tral road. The site is a few kilometres away from the national highway NH44 while travelling from Anantnag to Srinagar and the access road to the site branches off from the main highway. Currently, the site is marked by an army cantonment on its northern flank, and the upper portion of the mound serves as a military helipad.

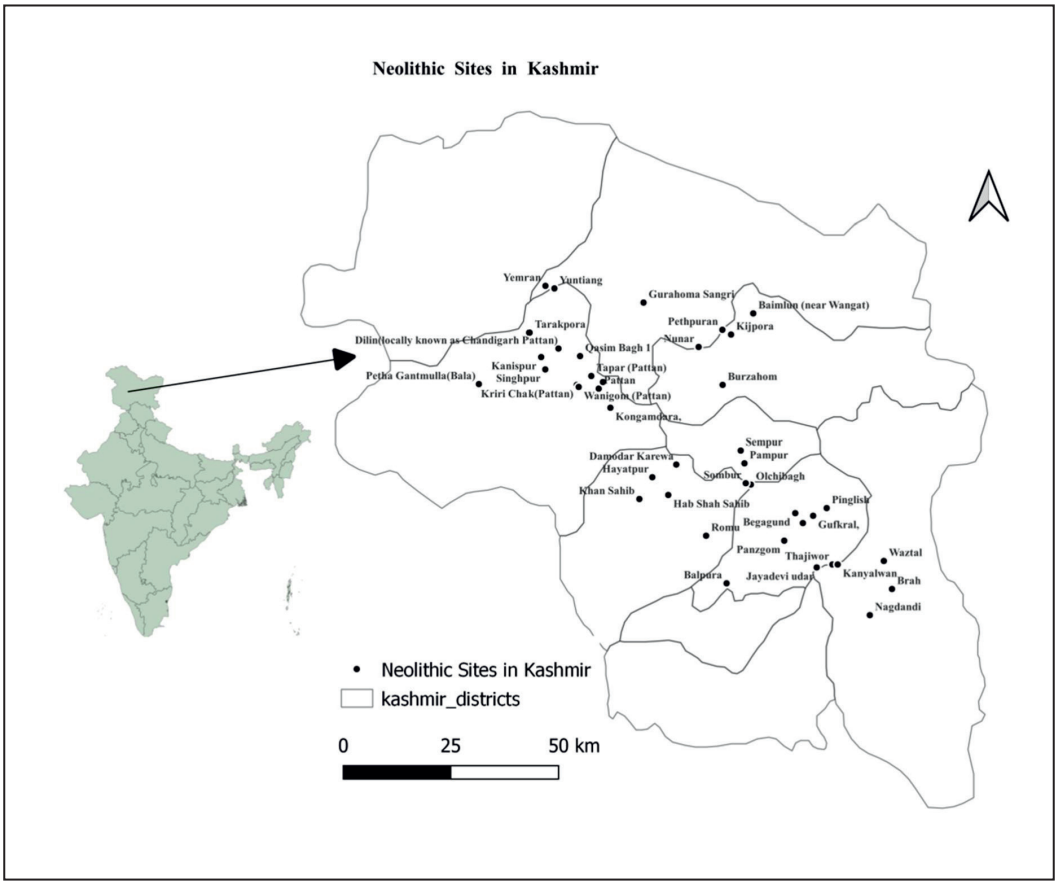

Figure 3: Map. 1. Showing the distribution of neolithic sites in Kashmir (Source: Author)

A school building and a water tank have been constructed on the southernmost tip and in the centre of the archaeological mound (Fig.4 & 5). These modern structures have greatly affected the archaeological site.Walnut, apricot, and almond trees adorn the surrounding slopes, adding to the picturesque scene. The archaeological mound measures 400 meters from north to south and 75 meters from east to west. Many menhirs are rolled down on the eastern flank of the mound; none remain in their original upright positions. S. S. Lai and R. K. Pant of the Frontier Circle of the Archaeological Survey of India brought the site to the limelight in 1962 (IAR 1962-63). Subsequently, the excavations at the site were conducted in 1981 by the Prehistoric Branch of the Archaeological Survey of India (Sharma 1982).

Figure 4: View of the water tank constructed on top of the archaeological mound at Gufkral (Image credit: Author)

It is important to mention that while Gufkral was excavated for only two seasons, Burzahom, on the other hand was excavated for almost a decade. Excavations at the site revealed the existence of an aceramic Neolithic phase in Kashmir, which A. K. Sharma refers to as the Neolithic IA. Sharma also connects Neolithic IB at Gufkral with Neolithic I at Burzahom and Neolithic IC with Neolithic II (Sharma 1982). Both sites also having a Megalithic phase (Sharma 2013). Radiocarbon dating (see Table 1) of the aceramic Neolithic IA phase is around 2787 to 2350 BCE. The early Neolithic IB phase spans from 2347 to 2000 BCE, followed by the late Neolithic IC from 2000 to 1850 BCE (Sharma 2013) (Fig. 6). The Megalithic phase is dated approximately rom 1850 to 1300 BCE (Sharma 2013).

Figure 5: View of the School Building constructed on top of the archaeological mound (Image credit: Author)

Table 1: Radio carbon dates of Gufkral excavation (Source: A. K Sharma 2013)

	Uncalibrated	*Calibrated*
Period IA- Aceramic Neolithic	2420- 2000 B. CE	2787- 2350 B. CE
Period IB- Early Neolithic	2000- 1700 B. CE	2347- 2000 B. CE
Period IC- Late Neolithic	1700- 1550 B. CE	2000 1850 B. CE.
Period II- Megalithic	1550-1100 B. CE.	1850 – 1300 B. CE
Period III- Historical		

Settlement Pattern

During the early Period IA of Gufkral, a settlement pattern similar to Burzahom was noticed. The circular and rectangular types of pits were found during this period. These pits were directly dug into the Karewa deposits with wide bases and narrow tops (Fig.7). A notable feature of these pits was the frequent occurrence of red ochre paste on the floors (IAR 1981-82). These pits exhibited a wide variety of diameters ranging from 3.80 meters to 1.50 meters at the top (IAR 1981-82). The finding of post holes near these pits suggests some superstructure was constructed over them. To prevent the rainwater entering into the pits, the lower parts of the superstructures were plastered with mud and covered with reed, the remains of which were discovered during the excavations (Sharma 2013). Storage pits and hearths surrounded the dwelling pits. In one case, a storage pit yielded deposits of two stone adzes, one of which was painted with red ochre, a stone slicer, bone tools and many animal bones (Sharma 2013). The building activity of the subsequent Period IB, underwent some significant changes. The pits disappeared during this period, and the mud-based structures appeared (IAR 1981-82). Additionally, an intriguing find was a wall-like structure constructed from compressed mud intermixed with Chunam, adding to the architectural diversity (IAR 1981-82).

Figure 6: Filled excavated trenches at Gufkral (Image credit: Author)

Figure 7: Pits found at Gufkral (Source: A. K. Sharma 2013)

Subsistence Pattern: The Neolithic people from Period IA subsisted largely on hunting and food gathering, as indicated by the absence of cultivated cereals or domesticated animals (Sharma 2013). Domestication of a few animals, including sheep, goats, and dogs, started towards the end of the aceramic period (Sharma 2013). The cultivation of wheat, barley, and lentils also commenced towards the later phase of Period IA (Sharma 2013). The percentage of domesticated animals and cultivation of selected crops increased during the late Neolithic period (Sharma 1982). Hunting was also practised, as indicated by the cut marks on domesticated and wild animal bones (Sharma 1983). At Gufkral, the discovery of cowrie shells was an important finding reported at Neolithic levels. No academic attention has been paid to its discovery in Kashmir. Although cowrie shells are mostly found in tropical and subtropical waters, their use is widespread far beyond these areas, covering economic, ritual, artistic and utilitarian purposes (Alarashi et al. 2018). Cowries have traditionally been thought of as amulets intended to increase fertility, protect against sterility, protect against the evil eye, and bring good luck (Alarashi et al. 2018). Later, these cowrie shells served as a means for small-scale transactions or were used as coins of small denominational value.

Neolithic Technology (Tools and Implements)

The excavations at the site revealed a wide range of stone and bone tools (Fig. 8 & 9). The bone tools demonstrated a higher percentage than stone tools (Sharma 2013). The stone tool of the Neolithic people at Gufkral included polished celts, pounders, querns, harvesters, finished and unfinished points, balls, spindle whorls with big holes, and pestles. During my recent field survey at the site, a neolithic

stone celt which is in possession of a nearby villager was documented (Fig. 10). Bone tools were prepared from animal bones and are represented by small arrowheads, points, awls, scrapers, piercers, needles, double-holed harvesters, harpoons, etc. (Sharma 1982).

Figure 8: Stone tools found at Gufkral Pestles,1, 3 & 5, Polisher 4, Ring Stone, 6, 7, 8, (Neolithic), Pounder, 2, (Megalithic).

(Source: A. K. Sharma 2013)

From Period IC, highly polished bone, carnelian, and steatite beads were found (Fig. 11). Additionally, artefacts included terracotta bangles, terracotta pieces adorned with relief designs, cowrie shells, a copper hairpin featuring a flattened coiled head (resembling a find from Chanhudaro), as well as spindle whorls fashioned from stone (Sharma 1982). The discovery of spindle whorls with substantial perforations at Gufkral provides a clue about the weaving of woollen garments.

Figure 9: Bone tools found at Gufkral Points, 3, 4, 5, 9, Scrapers, 6, 10, Arrow heads, 7, 11, 2, Awls, 2, 8, Borer, 1 (Neolithic Period) (Source: A. K. Sharma 2013)

Ceramics

During the aceramic period IA at Gufkral, the people were not acquainted with pottery making. Period IB witnessed the occurrence of handmade pottery, primarily consisting of coarse grey ware and a limited number of rough, redware pottery (Sharma 1982). The important shapes included large jars, vases, bowls, basins, and dish-on-stands with mat impressions on the bases. The excavations also evidenced a potter's kiln (with an outer diameter of 2.50 m and inner diameter of 2.15m), yielded a substantial quantity of charcoal, ash, charred wood, and burnt pottery (Sharma 2013). The Period IC at Gufkral witnessed the emergence of wheel-made pottery, primarily consisting of grey, burnished grey, black, and red wares (Sharma 1982). The new shapes observed in this ware included long-necked jars with flaring rims, funnel-shaped vases, and globular bodies. Graffiti marks (designs scratched on the pot) were also observed on a few potsherds (Sharma 1982). It is generally believed that these graffiti marks were a degraded form of the Indus script, owing to the similarities between the pictographic letter and scratched mark (Sankalia 1977). Interestingly, the Jorwe culture also revealed the graffiti-marked pottery.

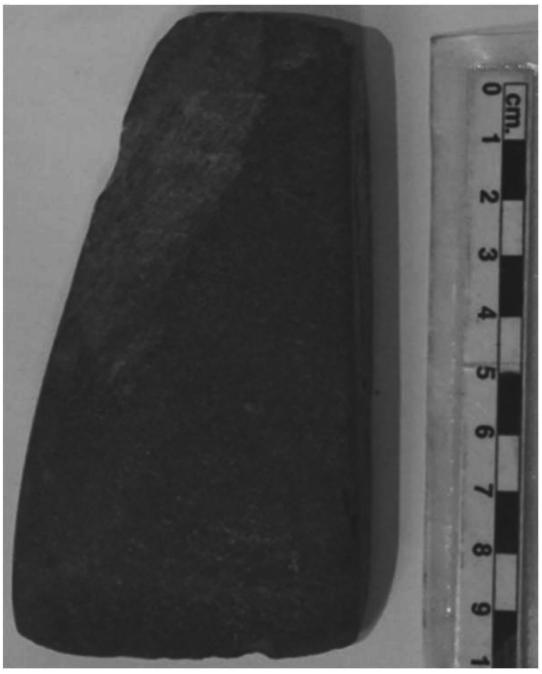

Figure 10: Stone celt at Gufkral (Image credit: Author) Fig. 11.

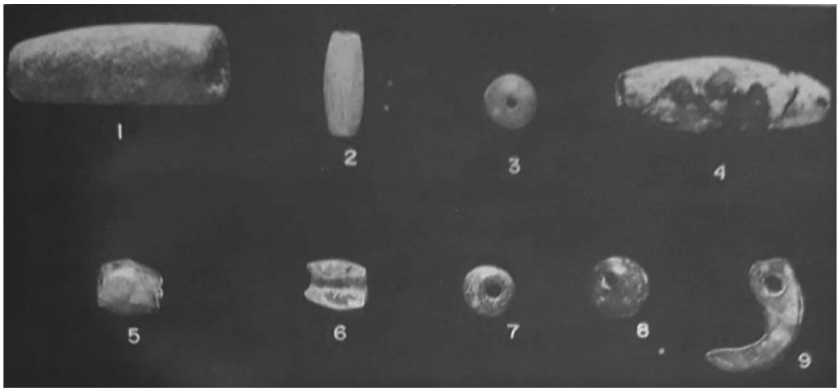

Figure 11: Beads Neolithic period, 1, 2, 3, 5, 6, 8, 9, and 4, 7 belonged to the Megalithic Period. (Source: A. K. Sharma 2013)

Pit Dwelling Function

Pits found at Burzahom, Gufkral and Swat Valley have traditionally been interpreted as Neolithic dwellings (Stacul 1996). This interpretation is based on the discovery of stone tools, potsherds, hearths, charcoal, ash, and landing steps in these pits. These pits were believed to be shelters during the cold winters, with people residing above ground in the summers. However, R. A. E. Conningham and T. L. Sutherland have questioned this view based on a fresh interpretation of pits found at British Iron Age sites (Connningham & Sutherland 1997). Once a fire was lit at the bottom of the pit, smoke produced in such reduced environments made them unsuitable for habitation. An alternative explanation suggests that these pits could have served as underground grain storage locations, similar to British Iron Age settlements (Connningham & Sutherland 1997). However, the current available evidence strongly indicates their use as dwellings. First, these pits were found during the Aceramic phase, a time when crop cultivation had not yet commenced. The evidence suggests that people during this phase primarily relied on hunting and fishing and these pits may not be used for grain storage. Moreover, the presence of post holes around these pits suggests the construction of some sort of superstructure over them. Based on these findings, it is reasonable to assume that these pits might have served as Neolithic dwellings.

Megalithic Culture

The Neolithic ages in Kashmir came to an end around 1700 BCE. The Megalithic period in the region followed the Neolithic occupation at different settlements (Fonia 2021). The term Megalith is derived from two Greek words '*megas*' meaning large, and '*lithos*' meaning stone. The Megalithic monuments are reported throughout the Indian Subcontinent (Menon & Vahia 2010). Megaliths have been found at many places in Kashmir, including Burzahom, Gufkral, Hariparigom, Begagund, Brah, Waztal, Sombur, and Dadasar. Unfortunately, no significant efforts were made to investigate the Megalithic culture of Kashmir thoroughly. The Megalithic phase of period II is represented by a deposit measuring 50 to 60 cms thickness. Large-sized menhirs (locally known as Shahmar Pals), similar to Burzahom, arrived during this period (IAR 1981-82). A total number of 16 menhirs are found at the site. However, unlike Burzahom, all of these menhirs have fallen, with some rolling down on the eastern slope of the mound and currently being used a ritual place (Fig. 12 & 13). The menhirs vary in size, with the longest measuring 5.3 meters and the smallest measuring 2.90 meters. Interestingly, one of these menhirs has been worshipped by the local military personals, who control a major portion of the mound. It is difficult to draw a sketch of these menhirs before their collapse owing to their deteriorated conditions. However, it is possible that these menhirs formed a cromlech type structure before their collapse, as speculated at Burzahom. At Gufkral, no foundational pits were dug for the erection of these menhirs, unlike at Dadsar and Burzahom (Sharma 1982). These menhirs appear to have been meticulously planned and constructed with the collective effort of an entire community. However, the traditions associated with these monuments remain largely unknown. Their exact purpose remains a mystery, and local legends only offer simplistic explanations, such as their use for tethering horses, warding off spirits, and other related stories. Their exact function is uncertain as they are non-sepulchral, meaning they are not associated with any skeletal remains (Khazanchi 2004). The occurrence of these massive menhirs in Kashmir raises some important questions. Are these menhirs the commemorative stones for tribes? Were they constructed to demonstrate the power of the tribes in the contemporary times and for future generations? Were they meant to represent celestial movements, such as the sun and moon with the sky? Or were they religious structures? It is still a mystery, thus leaving space for further interpretations and exploration. In the folklore of Kashmir the construction of these menhirs are attributed not to the humans but to the supernatural forces.

The ceramic tradition of this period was characterised by the presence of hand-made burnished grey ware, gritty red ware, and thick dull red ware (IAR 1981-82). The proportion of thick, dull red ware and wheel-made pottery increased during this period (IAR 1981-82). The important shapes observed during this period include jars with shapeless rims, bowls, basins, long-necked jars, globular jars, and dish-on-stands. A distinctive pot introduced during this period was the channel-spouted vessel (IAR 1981-82).

Stone and bone tools continued to be used during this period, though their numbers and quality witnessed a decrease (IAR 1981-82). It is reasonable to assume that the increased use of iron and copper tools during this period reduced the numbers and quality of stone and bone tools. However, improvement was observed in the handling process of bone tools, as they were now equipped with handles mostly made from the tibia of sheep and goats (Sharma 2013). Among the other notable finds were a fine cobbler's awl, spindle-whorls with medium-sized holes, a cowrie shell, a copper point, beads, Iron and a miniature pot (Sharma 2013).

The palaeobotanical evidences recovered during this period provided a significant clue that the Megalithic people at Gufkral depended on agriculture for sustenance. This is evident by the discovery of a wide variety of cereals and pulses, including wheat (Triticum Aestivum), six-row barley (Hordeum Vulgare Linn), and the naked variety of barley (Hordeum Vulgare Linn, nudum). Rice (Oryza Sativa Linn), pea (Pisum Arvense Linn), lentil (Lens Esculenta Moench), clover (Triticum sp.), apricot (Primus Armenica L.) and millet (Elusive Coracana) were also found (Sharma 2013).

Figure 12: View of the Menhir turned into worshipping stone at Gufkral (Image credit: Author)

Figure 13: View of the rolled down Menhirs at Gufkral (Image credit: Author)

Conclusion

Gufkral provides important information about the evolution and development of Neolithic-Megalithic cultures in Kashmir. The excavations from different periods at the site revealed a remarkable change in settlement patterns, subsistence base, tool technology, and other aspects. The discovery of pits varying in sizes and shapes during the aceramic Neolithic phase I provides a clue that the Neolithic people at Kashmir initially resided in underground pits. Furthermore, the Neolithic people of Gufkral initially subsisted largely on hunting and fishing, this was supplemented by crop farming and domestication of animals during the late Neolithic times. Carbon 14 dating suggests that the Megalithic period at Gufkral began around 1800-1300 BCE and brought significant cultural developments particularly the introduction of rice, and iron tools. The introduction of rice during this period was a revolutionary change. Since rice could be cultivated on low lying areas with easy excess to irrigation. This resulted shift in settlements from higher to lower altitudes. This shift is clear from a comparatively lower elevation of Gufkral (1671 masl) and later at Semthan (1641 masl). Subsequently, rice cultivation gained popularity, during the early historic period at Semthan. Moreover, the Megalithic period witnessed a reduction in the quantity and quality of stone and bone tools. It is possible that the increased focus on iron and copper tools led to these changes in the tools of these people at Gufkral. The menhirs in Kashmir are non-sepulchral, meaning they are not associated with any skeletal remains. In the folklore of Kashmir the construction of these menhirs are attributed not to the humans but to the supernatural forces. It is important to mention here that, while consulting oral sources at Brah, Anantnag, and the locals believe that the scattered menhirs were formerly horses that petrified to stone while munching grass in an orchard belonged to Rajab. Gufkral is an important Neolithic-Megalithic site in Kashmir. Although the site was excavated only for two seasons, it served as an important archive from the third millennium BCE. As noticed at Gufkral, Semthan, Martand, and other archaeological sites in Kashmir people prefer to sell the antiquities in their possession to the antique dealers rather than to preserve this precious heritage for posterity. People often feel insecure about showing the antiquities in their possession because of the possible apprehensions of the government's takeover. The need of the hour is to educate the common masses how to preserve the rich archaeological heritage in Kashmir.

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