

# A Ceramic Neolithic in the Bajaur Area, Pakistan

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## Abstract

*The cultural significance of an area may be discerned from the archaeological remains which it possesses. The Bajaur area has rich archaeological remains of the prehistoric, proto-historic and historic periods. The prehistory or the Stone Age of the area comprises Palaeolithic, Mesolithic and Neolithic. The present paper aims at introducing the last period of the Stone Age or prehistory which is generally known as Neolithic. The term Neolithic literally means 'new Stone Age'. It is characterized by the presence of some distinctive features such as polished and ground stone tools along with flaked stone tools and domestication of plants and animals. The Neolithic is further divided into two periods- aceramic or pre-pottery Neolithic and ceramic or pottery Neolithic. It succeeded the Mesolithic period that began about 12,000 years B.P. in the Holocene geological era.*

*The Neolithic period in the Bajaur area is represented by the Palaeolithic rock shelter of Ango Gatkai. The excavation conducted here in 2004 has revealed a two-meter thick cultural deposit containing seven stratified layers of which the three upper layers 1-3 in the profile are aceramic Neolithic because there is complete absence of potsherds from the cultural materials at the site. The first evidence of pre-pottery Neolithic was found at the site of Mehrgarh in Baluchistan. The rock shelter of Ango Gatkai is the second aceramic Neolithic site in Pakistan after Mehrgarh and Kile Gul Muhammad in Baluchistan.*

**Keywords:** Aceramic, Neolithic, Bajaur, Pakistan, Prehistoric, Ango Gatkai

## Introduction

The Bajaur area is rich in archaeological remains. In 2003-4 the author conducted surveys and explorations in the area. A good number of sites were discovered. They included 45 sites of the Stone Age as well as sites of the proto-historic and historic periods. The Stone Age sites include Palaeolithic, Mesolithic and Neolithic periods. At present, we are only concerned with the last period of the Stone Age which is generally known as Neolithic. The term Neolithic literally means 'new Stone Age'. It succeeded the Mesolithic period that began about 12,000 years B.P. in the Holocene geological era. With the retreat of the last glaciation Wurm of the Pleistocene, there occurred marked climatic changes in the very beginning of the Holocene period that produced warmer, moister and almost similar conditions to

those of the present day in western and south Asia. Favourable environmental conditions provided prehistoric people with more reliable food supplies. Similarly, the regular collection of wild cereals led to the domestication of certain types of plants that might be grown artificially. Certain species of animals were also domesticated but the latter seems to be a subsequent phenomenon. The Neolithic

people also occupied spacious settlements to accommodate the new way of life. Prior to this, they lived in small caves and rock shelters and perhaps in small huts in the open air (Rahman, 2009; Ali and Rahman, 2005). The occupation of regular settlements of the Neolithic people was perhaps the first step towards urbanization. Previously, their living was mainly confined to natural habitats such as caves and rock shelters

and temporary camp sites. All these fundamental changes in man's living virtually led to well-urbanized centers. Owing to these dramatic changes, V.G. Childe called the new period as 'Neolithic revolution' (Childe, 1941: 66).

As the first domestication of plants is concerned, N. Valinov (1949-50) identified Western Asia as a main source of this phenomenon where the advent of production based economy had taken place. The technique of the economy of food production did not exclude the gathering, hunting and fishing though their role became secondary to that of land and animal husbandry (Allchin and Allchin, 1986; Seriandi, 1999: 109-126). The earliest evidence of these changes in South Asia comes from the site of Mehrgarh in Baluchistan ((Jarrige, 1995: 51-67).

Before discussing the Neolithic culture of Ango Gatkai, it is necessary to give a brief history of other Neolithic cultures in Pakistan and the surrounding area.

The first evidence of the presence of the Neolithic revealed at the mound of Kile Gul Muhammad near the Quetta city, Baluchistan. Radio carbon (C14) samples from a hearth in the upper most levels have given dates of 4400 and 4000 B.C. Evidence of domesticated sheep, goats and cattle and houses of mud bricks was found. The excavation yielded blades of chert, jasper, chalcedony and rubbing and granite grinding stones along with awls of bone. The absence of pottery led the excavator to call period I as aceramic or pre- pottery Neolithic (Fairservis, 1956: 169-402).

In the Gumal valley the site of Gumla was excavated by Dani. The excavation revealed a stratigraphical sequence of 6 periods. Based on the complete absence of pottery, he designated Period

I as aceramic Neolithic. The stone industry of Period I is predominately microlithic that includes parallel-sided blades, awls, burins, and scrapers of different kinds. Other stone implements comprise saddle quern, rubbing stones, stone balls and pestles (Dani, 1970-71).

More important is the Neolithic site of Mehrgarh where in locality MR3 the Neolithic Period I was identified (Jarrige,1995:51-67). Period I represents the pre-ceramic or aceramic Neolithic culture. The aceramic Neolithic is characterized by the presence of domesticated plants and animals, craft activities and regular burial practices. The lithic industry of Period 1 is comprised grinding stones, querns and small flint blades and flakes. From all faunal and floral remains found in Period I, Meadow led to the conclusion that the Neolithic period at Mehrgarh witnessed domestication of animals and plants as early as it did in Western Asia (Meadow, 1981: 143-179, Meadow, 1884: 34-40). The Neolithic at Mehrgarh has been dated to by C14 to ca. 7000-4000 B.C (Jarrige, 1995: 52).

At Kupruk in northern Afghanistan is the nearest oldest Neolithic site so far known in the region. Here Louis Dupree excavated three rock shelters that gave the evidence of aceramic Neolithic comprising phases A and B. (Dupree,1972: 9-11) The early Neolithic phase A (dated to 8000 B.C.) yielded the remains of domesticated animals such as sheep, goat and cattle but no evidence of domesticated plants was found (Perkins, 1972: 73). The ground stone tools include pecked stone hoes, celts, querns, and ground stone tools. The chipped stone include blades and blade tools (Srivastava, 1982: 212-214). The Aceramic Neolithic Phase B yielded the remains of the same species of domesticated animals that were found in Phase A. (Perkins, 1972: 73). The lithic industry of Phase B

is characterized by the presence of backed blades, burins, and side and end scrapers. Bone tools were also found in this phase. Phase B is bracketed between 7000 and 5000 B.C.

The Neolithic period in the Bajaur area is represented by the Palaeolithic rock shelter of Ango Gatkai (see Fig. 2 site no. 2). This is the single Neolithic site so far known in the area. The excavation conducted here in 2004 has exposed a two-meter thick cultural deposit containing seven stratified layers of which the three upper layers 1-3 in the profile are aceramic Neolithic because there is complete absence of potsherds from the cultural material (Rahman, 2010: 98-105). The site was previously occupied by the Palaeolithic man. The principal raw material for tools manufacturing is chert in a variety of colors found in the area. Quartz and flint have also been employed by the Neolithic people of Ango Gatkai in a limited quantity (Fig.11). Other stone rocks used by the people are granite, sand stone, limestone and green stone. The stone industry of Ango Gatkai Neolithic period is comprised both chipped and ground stone tools. They include blades, burins, points, scrapers, awls, flakes and numerous ground stone tools, pounders, rubbers, hammers stone of various types, saddle quern (Fig.13), flat grinding stone and a great number of anvils with marks of use known as dimple scars either on one or both surfaces (Figs.3, nos, 4, 5 and 6). Similar hammers or anvils are also reported from Sanghao Cave and from the Mesolithic sites of South Africa (Dani, 1964:26-43; Clark, 1959: 173). The existence of some flaked hammer stones made on chert in the Neolithic horizon is significant (Fig. 3, nos.1, 5 and 14). The main source of all these material seems to have been the dry bed of the nearby hill torrent. Choppers and chopping tools are the characteristic of this site (Fig.3 nos.7-13).

Such types of Neolithic period artefacts were first reported by Ranov from Central Asia (Ranov and Davis, 1979: 260).

The technique employed for the manufacturing of tools by the Neolithic people is not much different from the preceding periods; however, here most of the tools are crude with less retouch or trimming on the working edges. The evidence offered by the presence of thin flakes struck from prepared cores gives the Neolithic of Ango Gatkai a unique position as compared to the Neolithic sites elsewhere (Figs. 8, 9 and 10). The Neolithic tools of Ango Gatkai are not microlithic but are normal size tools.

Apart from stone tools the Neolithic people also employed bone implements for different purposes. The worked bone and bone tools include anvils, chisels and polished awls (Fig.12). The Neolithic period yielded a good number of birds and animals bones. However, they have not been subjected to analytical study so far. In this context, we refer to the already identified animal remains from Afghanistan as the climatic conditions seem to have been similar in both the regions during the Neolithic times. The faunal remains at the site suggest that the Neolithic people exploited the same fauna and flora of the Palaeolithic times. The Neolithic people used querns and different types of ground stone tools to process vegetal food and to augment it with meat obtained from hunting. The prolific occurrence of faunal remains and ground stone tools found at the rock shelter of Ango Gatkai suggests that the economy of the Neolithic people was based on hunting and food collecting.

## Conclusion

The excavation conducted at the Palaeolithic rock shelter of Ango Gatkai yielded three layers (1-3) of aceramic Neolithic in the stratigraphical sequence which form Period III. Remains of animals were found in large quantities but they have not been studied so far. Hence the question of their domestication is still unresolved. Similar is the case with the domestication of plants. The use of choppers and chopping tools is the distinctive feature of this Neolithic site. Generally, the chipped stone industry is comprised crude implements except a few beautifully made flakes, points and blades. The presence of flaked hammer stones with worn edges in the aceramic Neolithic is significant. Large number of various types of anvils with single and double scars on their surfaces suggest that Ango Gatkai was both a factory and living site where different types of stone artefacts were made and then the finished products were supplied to other sites in the surrounding region where they still awaiting scientific archaeological investigation. In the absence of any absolute dating, a provisional date between 7000 and 4000 B.C may be reasonable for the Neolithic period III of the site before the advent of Gandhara grave culture in the 2<sup>nd</sup> millennium B.C.

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Figure 1. Map showing the location of the Stone Age Sites in Pakistan

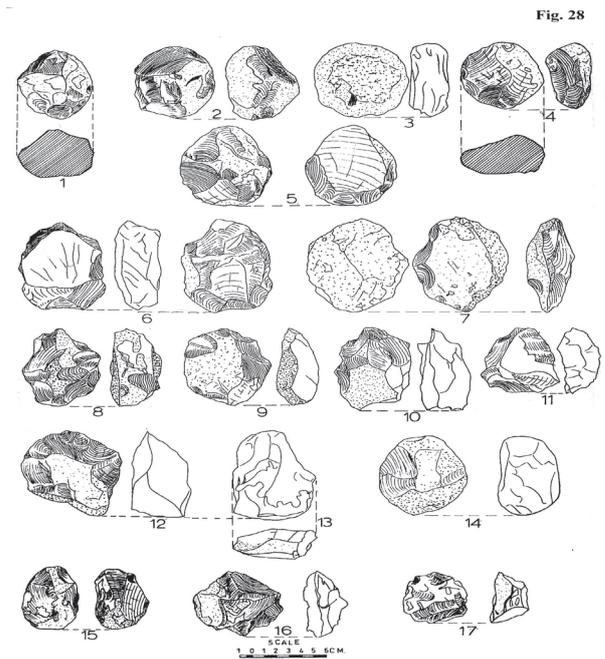


Figure 3. Nos 1, 2, 4 5 and 14 flaked hammer stones; 3 a disc shaped hammer stone; 6, 7, 10, 11, 12, 13 and 17 chopping tools; 8 and 9 choppers; 15 and 16 cores,

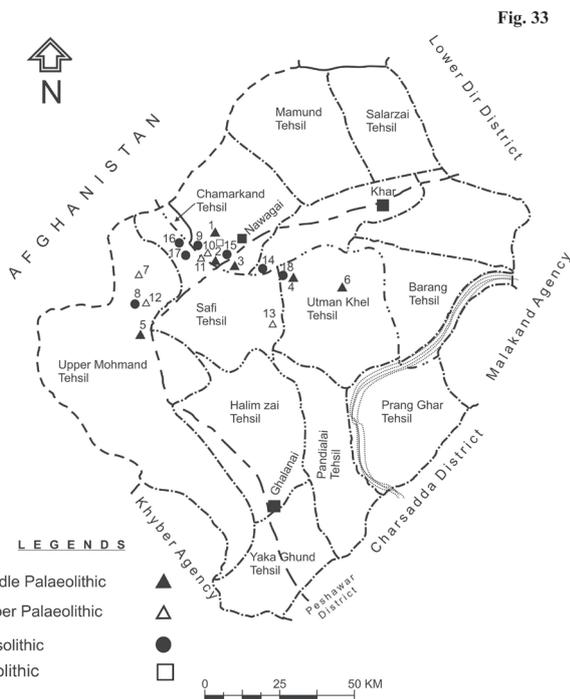


Figure 2. Location map of Ango Gatkai Paleolithic/ Neolithic rock shelter, District Bajaur.

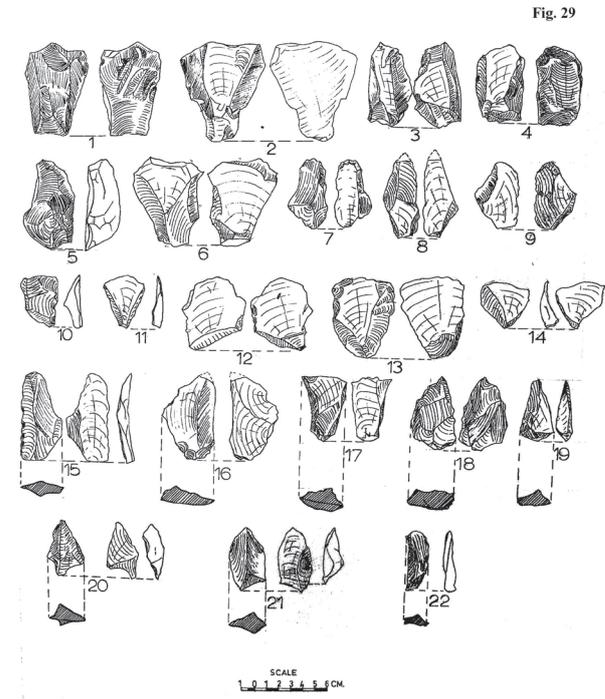
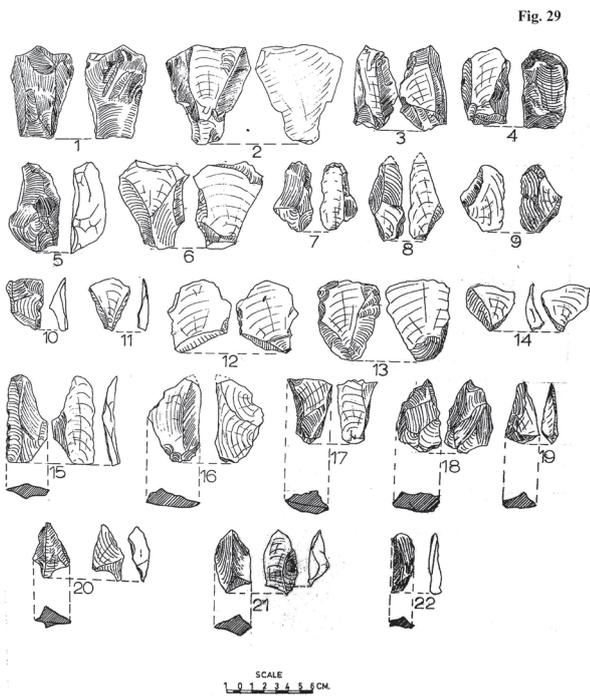
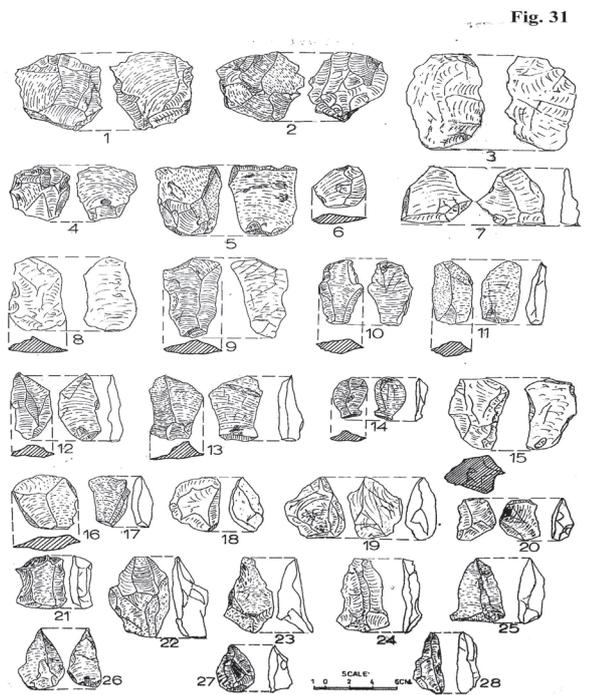


Figure 4. Nos. 1, 2, 7, 10, 17 and 22 end scrapers; 3 blade core; 5 flake core; 6 flake; 4, 9 and 12 side scrapers, 14, 19, 20 and 21 points; 8, 15 and 16 flake blades; 13 cleaver; 18 burin.



**Figure 5.** Nos.1, 3, 5, 6 and 7 ground stone tools; 2, 4, 10 and 14 anvils with dimple scars; 8, 11, 12 and 13 hammers; 9 a celt type tool



**Figure 6.** Nos.1 and 2 flaked cores; 3 biface; 4, 5, 6, 9, 13, 14, 16, 17, 18, 19 and 21 various types of scrapers; 20 a backed scraper; 7 and 8 flakes; 22 and 25-28 pointed tools; 23 an elongated tool; 24 blade.



**Figure 7.** The Palaeolithic / Neolithic rock shelter of Ango Gatkai, District Bajaur.



**Figure 8.** Points, layers 1-3.



**Figure 9.** An oval shaped flake, a point and scrapers layers 2 and 3.



Figure 10. A point layer 3.



Figure 11. A fine flint blade layer 2, Ango Gatkai.



Figure 12. Bone tools, a polished awl in the middle is from Layer 3.



Figure 13. A broken saddle quern, layer 3, Ango Gatka