

Discovery of Palaeolithic Artefacts in Anderi, Lower Dir, Pakistan

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Introduction

The main objective of the present paper is to share a recent discovery of a prehistoric site with those who are interested in the Stone Age archaeology of Pakistan, as it has a rich cultural heritage. Remains of the past cultures are revealed from time to time in this region with the help of archaeological operations such as surveys, explorations and excavations. As a result, new sites of cultural significance are put on the archaeological map of the country which opens up further vistas of knowledge for researches in various fields of Pakistan archaeology. The north-western parts of Pakistan particularly the Khyber Pakhtunkhwa contributes a lot to the cultural heritage of the country. In an exploratory work, the author recently discovered stone artefacts from Anderi, Lower Dir. From their preliminary analysis the stone tools encompass the two main divisions of the Stone Age-Paleolithic and Mesolithic.

Geographical features and brief history of the area

The district of Lower Dir has an area of 1585 square kilometers, which lies between 34°-37' to 35° -07' north latitudes and 71°-31' to 72°-14' east longitudes. It is bounded on the north by upper Dir, on the east by upper Dir and Swat, on the south by Malakand Agency and on the west by Bajaur Agency and Afghanistan (Fig. 1).

The topography of the area is mostly dominated by mountains of numerous elevations. It is encircled on all sides by the southern slopes of the mighty and lofty Hindu Kush ranges that run in north south direction (Dicter 1967). The highest peak of the area is found in the north which rises to a height of 3000 meters. The height in the central part of the area varies from place to place between 2000 and 1800 meters. The elevation in the southern part of the area gently decreases near the confluence of Rivers Swat and Panjkora. Apart from various mountain ranges, the area has several fertile valleys with rivers and streams of perennial waters. Important valleys of the area are Samarbagh, Munda Maidan, Timergara, Talash, Adinzai and Asbanr. All of these yield annual crops such as wheat, barley, maize and various types of vegetables.

Dir area occupies a strategic position in the north-west of the Khyber Pakhtunkhwa. An ancient route from Afghanistan and across the Hindu Kush from Central Asia connected Bajaur with Dir. The same route from Dir onwards connects the Swat valley- the ancient Uddiyana and the Peshawar valley-the ancient Gandhara. Both these valleys have been the richest centers of Mahayana and Hinayana Buddhist art- the so called Gandhara art of the first millennium of the Christian era (Swati 1997: 1-60 & 77-95). The strategic significance of this route may be judged from the marches of Alexander the Great and Zahir-ud-Din Muhammad Babur who used this route respectively in 327 B.C and 1519 A.D. while invading sub-continent (McCrindle 1984; Babur 1987).

The earliest archaeological sites in the area are cemeteries of the Aryans who had inhabited this area right from the middle of the second millennium B.C. These cemeteries were discovered in Timergara and Balambat areas on both sides of the river Panjkora (Dani, 1963). A team of experts led by A.H. Dani from the Department of Archaeology University of Peshawar conducted excavations at both places. The excavations revealed numerous graves containing various burials with a variety of grave-objects. In the chronology of four periods established by Dani periods I, II and III are protohistoric and period IV is historic. The pottery from Balambat settlement site closely resembles the Achaemenid pottery found elsewhere in the region. Based on comparative study, Dani has assigned period IV at the site to early historic period of the region which bracketed a date between the sixth and the fourth century B.C (Dani, 1963, p. 48). A part of the later history of the area has been derived from the accounts of the Greek historians who have described in detail the invasion of India by Alexander the Great in 327 B.C. After subduing the Asspasians of Bajaur, he crossed

the river Panjkora- ancient Gurius. He entered into the country of the Assakenians whose capital town as well as their stronghold was Massaga. He captured the town after severe fighting in which he himself severely wounded (McCrindle 1984). He, however, conquered the country of the Assakenians whose territory was stretched from Talash valley to the right bank of river Swat.

The history of Dir from the fourth century B.C onwards is mainly based on the archaeological material. The established chronological sequence reveals that the area remained under the control of alien and indigenous rulers of various dynasties. These ruling dynasties include the Mauryans, Indo-Greeks, Scythians, Indo-Parthians, Kushans, Huns and the Hindu Shahis who ruled the region from the fourth century B.C till the beginning of the eleventh century A.D. (Errington 2007: 29-106; Dani 1991; Rahman 1968-69; Rahman 1979). The rulers of the Hindu dynasty were overthrown by the Ghaznavids. The Islamic history of the region till the rise of the Mughals is shrouded in mystery. Babur, the founder of the Mughal Empire in India, invaded the area in 1519 A.D. He conquered some parts of Dir and Swat. The last attempt for the possession of the area was made by the British who annexed it to the British India and the presence of the Churchill point near Chakdara fort on the right bank of river Swat is their everlasting evidence in this part of the world (McMahon and Ramsay 1901).

Discovery of Palaeolithic artefacts

As far as prehistory is concerned, Dir is completely unexplored area in Pakistan. On the other hand, it has rich cultural heritage regarding the archaeology of protohistoric and historic periods in Pakistan. The protohistoric cemeteries of the Aryans have spanned the long chronological gap between the end of the Harappan civilization and the beginning of the historic period (Possehl 2002). The absence of the remains of the Stone Age cultures from such fertile and easily accessible valleys with favourable environmental conditions accommodating rich flora and fauna was extremely surprising.

With a view to resolving such a recurring issue, the author conducted a thorough and an intensive survey in the Malakand valley of Lower Dir. As mentioned earlier, the sole purpose of undertaking this exploratory work was to search and investigate the area for the cultural remains of the Palaeolithic man. Expectedly, the author succeeded in finding almost the whole range of artefacts of the Stone Age- Palaeolithic and Mesolithic. The efforts thus made revealed the remains of people who existed thousands of years ago in the area. Their economy was primarily based on hunting and food gathering. The preliminary study and analysis of the artefacts obviously suggest their different cultural affinities regarding the Stone Age. Thus, these discoveries in the form of stone tools have pushed back the history of the area thousands of years into the past.

Location

The Palaeolithic site of Anderi is located in Malakand valley in the north-west of Timergara about two km from Balambat, the headquarters of district administration (Fig. 2). The site lies at 34°- 51' 00" north and 71°- 49'- 50" east. The valley lies in east west direction and gently slopes down towards the Panjkora River. The Malakand valley is surrounded on three sides by the spurs of the Malakand hill while to its east flows the Panjkora River (Figs. 12 and 13). Located at the mouth of the Malakand valley, the site of Anderi commands the low lying area of the Panjkora River and the adjacent slopes and small valleys between the mountains of Malakand.

The Maidan-Timergara road passes through the western end of the site. Anderi khwar, a stream of perennial water, flows along the southern edge of the valley and empties its water into the Panjkora River (Figs. 9). A six meter thick fluvial deposit consisting of sand, gravels and boulders makes the valley bed (Figs. 10 and 11). The section of the valley has been exposed by flood activity along the northern bank of the stream. The artefacts were collected randomly from the surface of the site (Figs. 7 and 8). A few Middle and Upper Palaeolithic artefacts were also recovered from the exposed and eroded section of the stream side. The location of the site suggests that it was an open-air site which was used both as a factory site and living

floor. At present no traces either of workshop or habitation of Palaeolithic or Mesolithic can be found on the surface except stone artefacts lying scattered on it because of human and natural activities. It should be mentioned here that most of the Mesolithic artefacts are found in the western area of the site while Middle and Upper Palaeolithic tools are concentrated in the eastern area.

Material

The Paleolithic man in the area used greenish chert and fine grained local rocks of grey colour for his tool kit. The tools exhibit a thin patina/encrustation on their surfaces. The presence of patina on some of the artefacts suggests that they remained exposed to sun for a considerable time after serving their basic need. When concealed in the ground, the stone artefacts form an encrustation of lime and clay on their surface. Other material used for making tools of different types include milky quartz, quartz crystals, greenish flint and in rare cases blackish chert.

Tools

The artefacts collected from the site belong to different periods of the Stone Age. They cover all the major periods of the Stone Age in Pakistan. They range from the Middle Paleolithic through Upper Palaeolithic to the Mesolithic period which is the middle phase of the Stone Age. A good number of the artefacts in the collection are comprised of tools of the Mesolithic culture. The Mesolithic culture appeared across the world after the retreat of the last glaciation (Wurm) to its original altitudes in ca.12000 B.P.

The preliminary study and analysis of the tools in the collection suggest that the area was first occupied by Middle and Upper Palaeolithic people in the warm phases or inter stadials of the Wurmian glaciation of the Pleistocene geological era that appeared in c. 80,000 B.P. and ended about 12000 years ago. At the present state of our knowledge, the last occupation of the area is represented by the artefacts of the Mesolithic people in the Holocene.

Middle and Upper Palaeolithic

Dominant Middle Palaeolithic artefacts in the collection include hand axes, cleavers, choppers, cores, points, typical Mousterian side scrapers and Levallois flakes. These tools, except a few points and scrapers, are very heavy and may be compared with the lower Palaeolithic elsewhere in the region particularly the Soan valley in the Potwar plateau (Figs. 3, 14, 15 and 16). Similar Middle Paleolithic tools from Sanghao cave and the Palaeolithic rock shelter of Ango Gatkai are smaller in size (Figs. 3 and 4).

The Upper Palaeolithic tools are represented by carinated end and side scrapers, flake blades, burins, awls, parallel sided blades, specific backed blades and fluted blade cores (Fig. 5). The Upper Palaeolithic tools of the Anderi site are comparable in size with the artefacts of the Upper Palaeolithic in the region like Riwat 55; Sanghao cave layers 9-5; and the sites of Bajaur–Mohmand area.

Our attribution of the stone artefacts to Middle and Upper Paleolithic is based on their typology and technology. The Middle Palaeolithic people employed the prepared core technique for manufacturing stone tools which is known as Levallois technique. Some of the tools show well prepared striking platforms such as the Levallois flakes and points (Fig. 4 nos. 1 and 10). Parallel and contemporary to Levallois, was the discoidal flaking technique. Both these techniques are associated with Mousterian cultures across the world. In some cases the artefacts show shallow concoidal flake scars on the surfaces suggesting the use of soft hammer like bone or antler.

In the regional perspective the Sanghao cave in the Peshawar valley and Ango Gatkai in the Bajaur Agency are Mousterian sites (Dani 1964; Rahman 2010). Both technologically and typologically the artefacts of the Anderi Paleolithic site closely resemble the artifacts of Sanghao cave and the Ango Gatkai rock shelter. The stone artefacts from Palaeolithic sites of the Soan valley farther to the south-east exhibit similar features as found in the tools of the recently discovered Palaeolithic site- Anderi (Ranere 1982; Salim 1986; Allchin 1992).

Mesolithic

The artefacts of the Mesolithic period are represented by microliths or very tiny tools. Quartz crystals, chalcedony, greenish chert and flint are the principal material used for the artefacts manufacturing. Some of the tools are very small which suggest that they must have been used as components of composite tools. Notable among them are tiny bladelets that detached either from wooden or bone handles of saws or sickles in the course of millennia. The tools are microlithic in character. The Mesolithic tools include arrow heads, various forms of small scrapers, points, blade flakes, and bladelets, tiny crescents and burins, triangles and bladelet cores. The Mesolithic people seem to have employed the pressure flaking technique for making their stone tools as may be judged from the shallow but parallel scars on their surfaces. The Mesolithic tools are both geometric and non-geometric in shape (Fig. 6). The nearest Mesolithic site is Musa Kamar in the Bajaur Agency where the same types of microlithic tools are found (Rahman 2010).

Chronology

Since the artefacts in our collection have been picked up randomly from the surface of the site without conducting proper excavation, no exact dating of the artefacts at our disposal is possible. However, as mentioned earlier, there are a number of the Stone Age sites in the region whose tools are technologically and typologically closely resemble the artefacts from the site under discussion. Besides, they have been dated by scientific methods such as thermoluminescence and radiocarbon. Most important and the nearest notable C14 dated sites are Sanghao Cave in Peshawar valley (Ranere 1982; Khan and Gowlett 1995), and Kara Kamar in Afghanistan (Coon and Ralph 1955). The Palaeolithic site of Riwat 55 in the Soan Valley has been dated by thermoluminescence (Rendell *et al.*, 1989). Other dated sites are caves and rock shelters from the Zagros Mountains of Iran and Iraq in Western Asia particularly layers D and C at Shanidar cave are Palaeolithic. They have C14 dates ranging from 60,000 to 34,000 B. P (Braidwood and Howe 1966). Referring to the above dated sites in the region, the material of the Middle and Upper Paleolithic from the site of Anderi can tentatively be assigned to a minimum range from 45,000 B.P for Middle Paleolithic and 30,000 B.P for Upper Paleolithic.

As far as the Mesolithic culture is concerned, it appeared in the post-glacial era or Holocene period about 12,000 years B.P. The Mesolithic cultures of Pakistan do not show any confirmed chronological framework due to the absence of proper and scientific investigation. Most of them lack sequence of absolute chronology. Some important Mesolithic sites in Pakistan are Sanghao cave (Dani 1964), Jamalgarhi rock shelter (Salim 1986), Khanpur cave (Johnson 1972), Duhbi in the Thar Desert (Shar *et al.* 1996), Gul Shah Top, Yarak, Nekumshak and Tup Takhti Khel in Bannu area (Khan *et al.* 1991). A number of Mesolithic sites have been discovered in the Bajaur- Mohmand area (Rahman 2010). Most of the Mesolithic cultures are comprised microlithic tools. Since we know that all Mesolithic cultures are post-Pleistocene and they preceded the Neolithic cultures. The earliest Neolithic site is Mehargarh in Baluchistan dated by C14 determinations to the seventh millennium B.C (Jarrieger 1995). Based on the above facts, a tentative date ranging from seventh to tenth millennium B.C. seems to be more plausible for the Mesolithic tools revealed by the site of Anderi in lower Dir area.

As evident from the present discovery and the work that has already done on its archaeology suggest that Dir area accommodated various people with numerous cultures of considerable antiquity right from the beginning of the Stone Age to the present times. The earliest history of the region based on the established chronological framework may be traced back to the middle of the second millennium B.C. (Dani 1963). Cemeteries of the Aryans were the oldest archaeological sites which reflect their social and religious life in the second millennium B.C. Now, with the recent discovery of the Stone Age artefacts, the history of the region has been pushed by thousands of years back into the past. Having such a rich cultural heritage, the area needs systematic and scientific investigations into its archaeological relics. If systematically surveyed, the area has great potentials as regards the prehistoric archaeology of Pakistan. Now, it is binding on all the

concerned people to undertake the task of survey and exploration in the area for establishing a complete cultural profile from the beginning of the Stone Age onwards.

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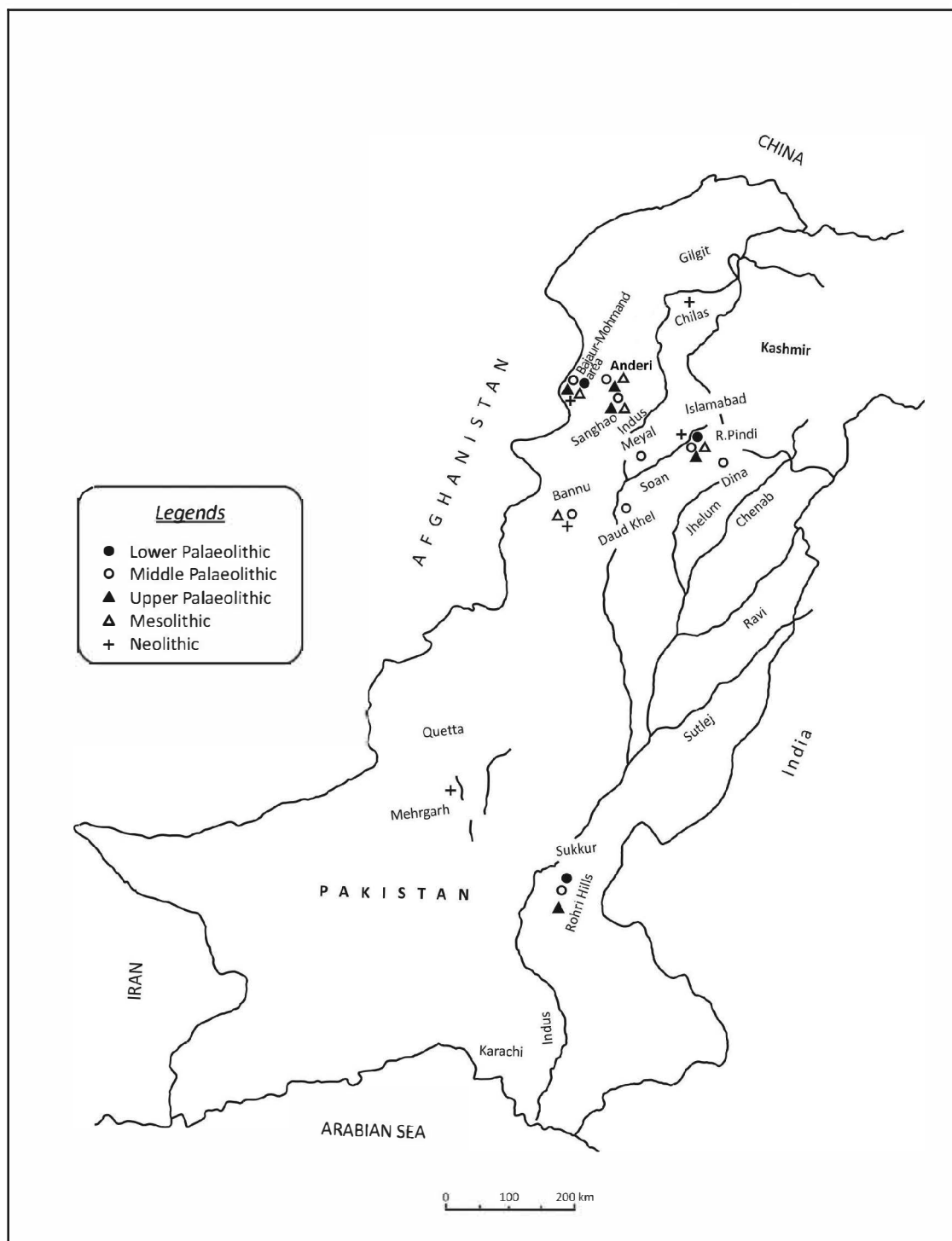


Figure 1: Map showing the distribution of the Stone Age sites in Pakistan with reference to the Palaeolithic site of Anderi in lower Dir.

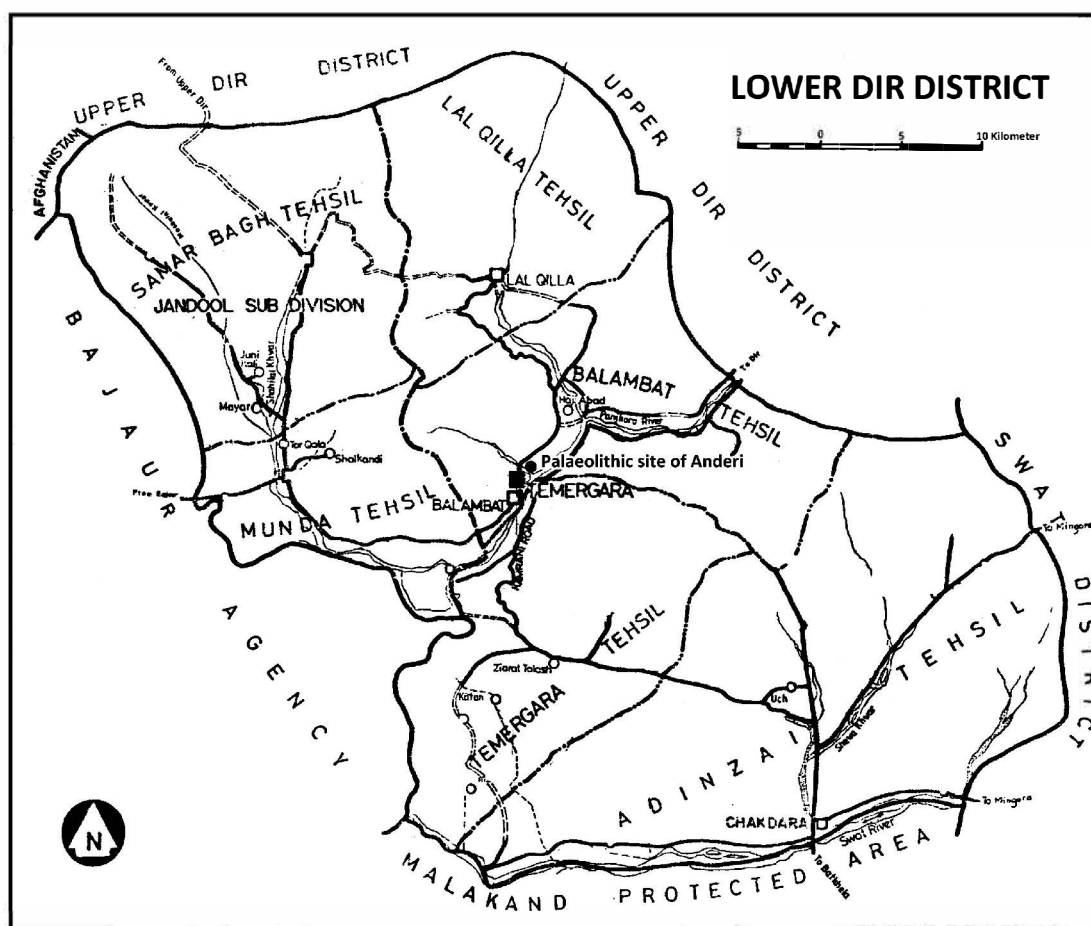


Figure 2: Location map of Lower Dir, showing the open air Palaeolithic site of Anderi



Figure 3: Anderi: Middle Palaeolithic tools, no. 1 chopping tool; no. 2 hand axe; nos. 3 and 4 side scrapers.

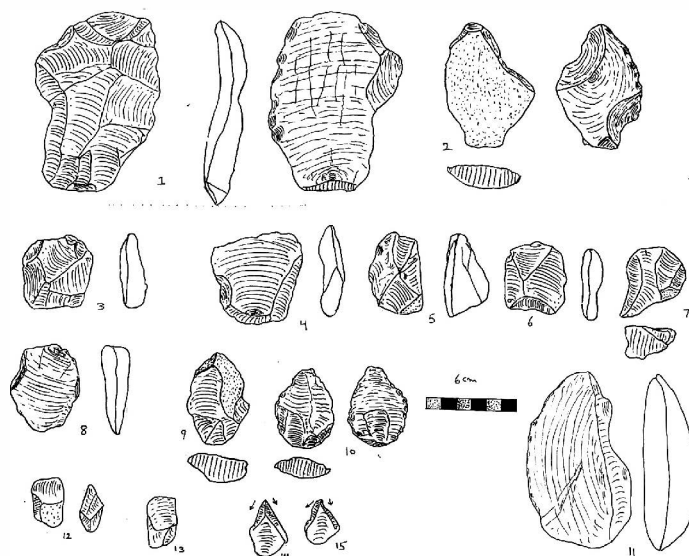


Figure 4: Anderi: Middle Palaeolithic tools, no.1 typical Mousterian Levallois flake; nos. 2 - 8 and 11 various types of scrapers; nos. 9 and 10 Mousterian points; nos. 12 and 13 tranchets; nos. 14 and 15 burins.

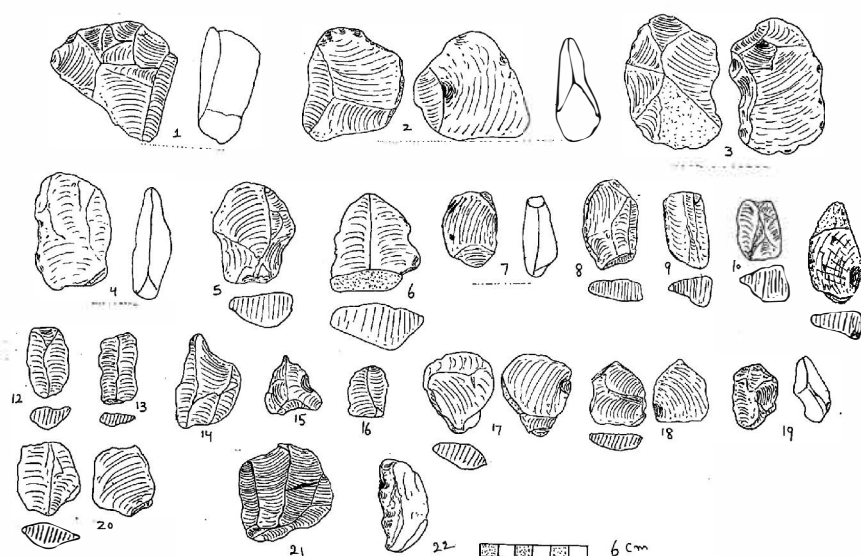


Figure 5: Anderi: Upper Palaeolithic tools, nos. 1 and 19 carinated end scrapers; no.2 end scraper; nos. 3 - 8 side scrapers; nos. 9 - 11 thick backed blades; nos. 12 and 13 blades; nos. 14 and 15 awls; no. 22 denticulate; 16 and 20 short blades; 17 and 18 flakes; no. 21 blade core.

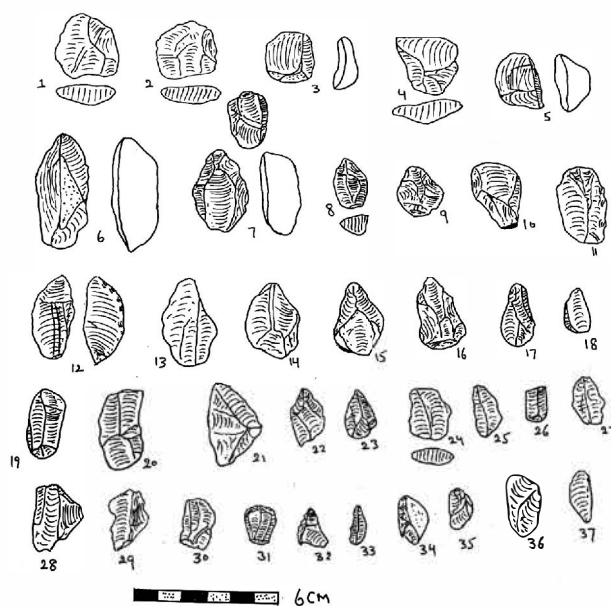


Figure 6. Anderi: Mesolithic artefacts, nos. 1 - 5 scrapers; nos. 6 - 9 nose shape end scrapers; no. 10 tranchet; no. 11 blade; nos. 24 - 27 microlithic blades; nos. 12 - 18 points or arrow heads; nos. 22 and 23 awls; nos. 19 and 20 bladelet cores; no. 21 triangle; 34, 35 and 37 crescent like tools; no. 31 trapeze; 28 - 29 flakes; 32 and 33 tiny blades; 30 and 36 blade flakes



Figures 7: Anderi: view of the Palaeolithic site from south-west.



Figure 8: Anderi: view of the site from west.



Figure 9: Anderi: view of the Anderi Khwar and the exposed section to the left from west.



Figure 10: Anderi: view of the section of the valley along the Khwar.



Figure 11: Anderi: close view of the section



Figure 12: Anderi: view of the Malakand valley from south-east with the Khwar, section and the site in the foreground.



Figure 13: Anderi: aerial view of the site and its surroundings and the Panjkora river to its east



Figure 14: Anderi: a struck discoidal Middle Palaeolithic core



Figure 15: Anderi: a cleaver.

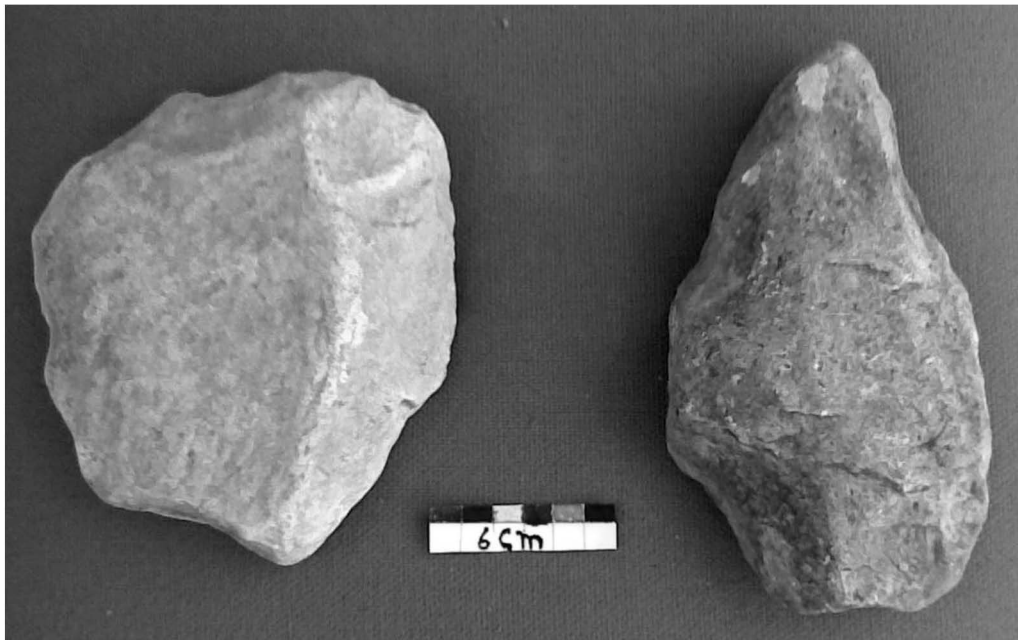


Figure 16: Anderi: chopping tool and hand axe.



Figure 17: Anderi: Levallois flake, points and scraper.

