LOWER PALAEOLITHIC IN THE SOAN VALLEY, RAWALPINDI, PAKISTAN

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A First report in some detail was presented in 1930's by de Terra and Paterson (1939) classifying Palaeolithic cultures, geological deposits, terraces and their relation to the four glacial periods of Kashmir. Tools were collected from terraces and other deposits. The collection was distributed to the Cambridge University and Archaeological Survey of India, and some were retained after 1947 by the Department of Archaeology and Museums, Government of Pakistan, and the Lahore Museum. No absolute chronology was known at that time. A summary of their findings is as follows.

They identified four glacial period in Kashmir to which they related different terraces from which Palaeolithic collections were made. Paterson (1939:301-12) identified the following pebble-tool and hand-axe traditions.

Table 1. De Terra and Paterson's terminology (1939)

Deposits	Cultures	
Terrace 2.3rd Glacial	Late Acheulian	Late Soan A B
Terrace 1.2nd Interglacial	Middle Acheulian Early Acheulian Abbevillian	Early Soan A B C (Pebble tools)
2nd Glacial	Pre-Soan flakes	

Terrace 2 material was attributed to the Middle Palaeolithic and T1 and 2nd Glacial to the Lower Palaeolithic. Later the new classification and chronology was introduced by Paterson and Drummund (1962) such as Stellenbosch for hand-axe collections. Later Cambridge Archaeological mission reported a 2 million years old artefact from a conglomerate. This was the first earliest absolute date of Palaeolithic (Dennell 1988:98-99). They did some work in Potwar and Pabbi hills near Kharian. Allchins Group was not allowed to continue further and their data and collections are with Department of Archaeology and Museums, Karachi, who had deputed Dr. Ashfaque with them. Ashfaque (2004) is neither a prehistorian nor has studied Palaeolithic. He has taken Dennell—Allchins data and published it in a book form. Ashfaquc's work lacks many details including only one drawing of a tool is given, and its thickness and flaking is not, and chronology in not clear. He gives a date of 1.2 m.y for pebble tools and compares them with Oldowan of Africa (2004:137). He also reports hand-axes from Chak Sighu and Morgah sites (2004:98).

The present Author has been conducting Palaeolithic research since 1970 and then focused on Lower Palaeolithic (Salim 1997), a succession of Palaeolithic cultures is given in Table 2 as it is proposed now.

Table 2. Palaeolithic Cultures of Pakistan

Mesolithic	Microliths		Bannu, Soan valley, Rohri Hills
Late Palaeolithic	Flake blade		Rohri Hills
Middle Palaeolithic	Acheulian	Soan tradition	Potwar
Lower Palaeolithic	Acheulian (hand-axe cleaver)	Soan tradition	Potwar

Paterson's Soan pebble tools may have some relation to artefacts from Pinjor sites (2.2 MY) discovered in 1993 (Salim 1997:141). They are pebble and flake tools. No one had reported any tools from Pinjor zone earlier in Pakistan. Paterson recognized tools from TI or surface of Conglomerate which lie above Pinjor silts. At site PS.57, 162 artefacts were collected. The tools include chopper, chopping tools, scrapers and utilized pieces. Some are abraded indicating rolling by water and some are fresh. They are given in Fig.2.

Similar tools are found at PS-59, which I have named Ranov site, after it was visited by Prof. Ranov from Tajikistan in 2004. One such site with Pleistocene silt and conglomerate is reported below.

5.2 Site PS-55

It is located some 300 metres to the south of G.T Road and an old 265 km sign, which no longer exists. There is an Autocraft Engg. Firm to its northeast constructed along G.T. Road. Actually there are lots of activities related to levelling of geological deposits for houses, housing schemes or by highway department. Mohra Nagial village, which was about 1 km to its north some 20 years ago has joined this area, and some houses are only 100 m away from this site. The silts are about 18 m in height from the ground level with horizontal layers of silt, sand and thin layers of conglomerate. Artefacts were collected only from the conglomerate layers 2,4 and 6 (Fig. 1).

Layer 2. It is recognized within silts 6 m below from the top surface. According to Shami it is a graded sediment 3 m thick. The pebbles range between 5 mm – 12.5 cm and the bigger pebbles were employed for tool manufacture. Below this is a 5 m silt and sand layer where on animal tooth was collected.

Layer 4. Some 5 m below layer 1, is another layer 2 with sand and silt sometimes cemented. Artefacts and bone pieces are preserved here. It is about 4m thick and on the northern section; it splits in two sub layers.

Layer 6. Its thickness varies from I m to 2 m with bigger pebbles sometimes embedded in a hard sandstone. Artefacts range between 2.5 cm and 15 cm in length. A soil sample no. 6 was collected from this layer and indicates slow as well as fast deposition.

The erosion, mostly by heavy rains, has re-deposited some of the artefacts and pebbles below on the ground surface or in fields.

Overlying Pinjor silts is quartzite conglomerate of Upper Siwalik Age. Acheulian hand-axes are found within it (Salim 1997: 266). At following sites only hand-axes are found.

1. Park view, PS-18
2. Morgah, PS-27

3. Gurha Shahan, PS 21
4. Gurha Shahan PS 51
5. Gurha Shahan PS-53
6. Dhok Nawaz PS-41

Acheulian tools are sometimes rolled. The hand-axe, a bifacial tool is flaked all over and is different from pebble tool. They have thick but and oval (1997:236) and rectangular shapes. Cleavers may be triangular with broad cutting edge (1997:241). There are picks with pointed end and one weighs 5.2kg that may have been used to pierce large mammal bones (1997:257). Other artefacts are flake, core and broken flakes. The collection from sites is as follows.

Gurha Shahan. PS-7

It was discovered in 1974 and details were given with Middle Palaeolithic artefacts as follows.

"Site PS-7 is located to the south of the Grand Trunk Road and about 200 metres from it. The Boulder Conglomerate has domed shape and is covered by thorny bushes and grasses, and is surrounded but nor overlain by the Loess Silt. 18 artefacts were collected only from the top and face of the Boulder Conglomerate but not from the Loess Silt. This was only a small collection but artefacts were difficult to see here because of the vegetation cover. The area of the site is 186 x 47 meters. No artefacts are reported outside this area, on the Loess Silt." (Salim 1986:63)

However with recent housing activities, upper layers have been levelled by bulldozer exposing a considerable area. The site is now only about 15 m to the south of the Road and is spread over an area of about 200m x 300m. Levelling activities have mixed Middle Palaeolithic and early Acheulian artefacts, which are distinguished by pink coloration apparently due to fire, plus patination and weathered ridges or edges. The Middle Palaeolithic artefacts have fresh state of preservation with sharp edges and ridges.

A small area of 22 m x 70 m for a house left a 1.5 m section indicating a 30 cm silt layer sloping towards north. Below this is Upper Siwalik Conglomerate with sand intercalated (Fig: 3). In the entire 1.5 m section, Lower Palaeolithic artefacts are embedded. Most of this collection is made from the depth of 1.5 m. Most artefacts show signs of rolling. Hand-axes cleavers are recorded in situ. Where this Conglomerate is not disturbed, from its top surface and face, early Acheulian artefacts are collected including rolled, patinated or retaining pink colour- a feature immediately distinguishing them from other artefacts (Fig. 4, 5)

PS-53.

Section of the site (Fig. 6), oval hand-axe with cortex butt (Fig. 7) and a clever is made on a flake (Fig. 8) is given.

The earliest pebble tools from freshwater Pinjor Zone may be dated to around 2.2my. Overlying Upper Siwalik Conglomerate from its top layers has Acheulian Culture which can be tentatively placed around .5-.8my The pebble tools may have some relation to those of East Africa at Olduuai Gorge (Leakay 1976:24-28). The hand-axe tradition here coming later may have been local development or dispersal from the Old World.

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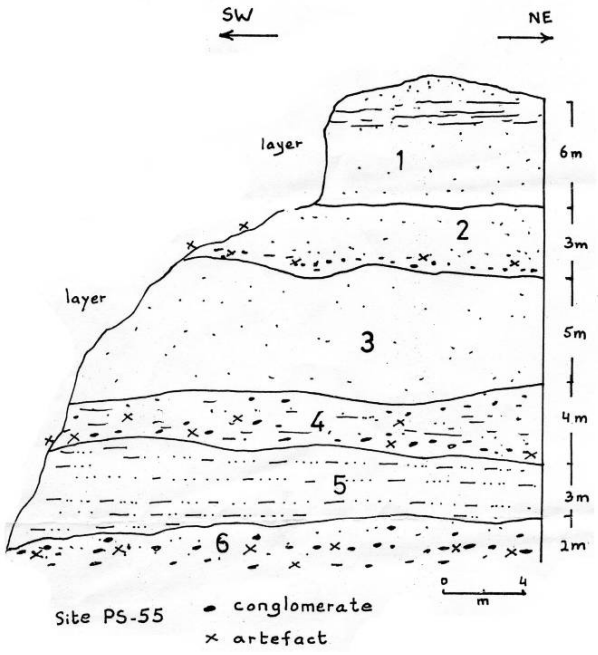

Fig. 1: Pinjor Section near Nagial with artefacts in layers 2, 4 and 6.

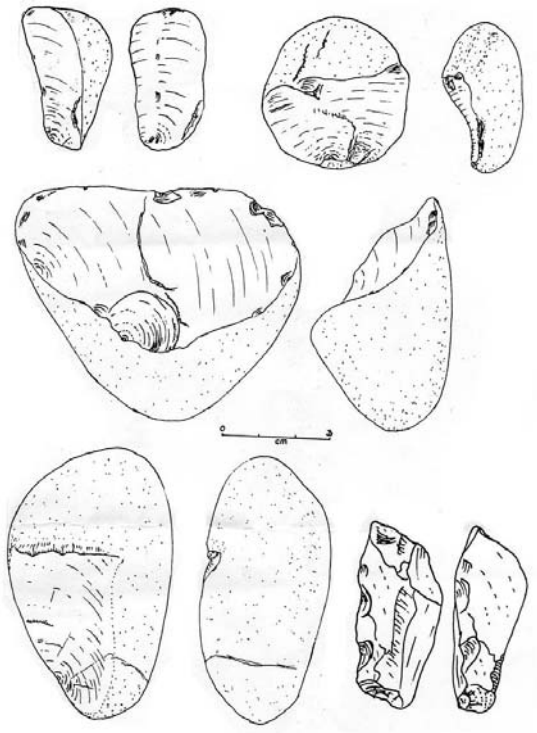

Fig. 2: Site PS-55, Layer 2; flake 1-2, chopper 3, Layer 4; core 4, Layer 6; scraper 5.

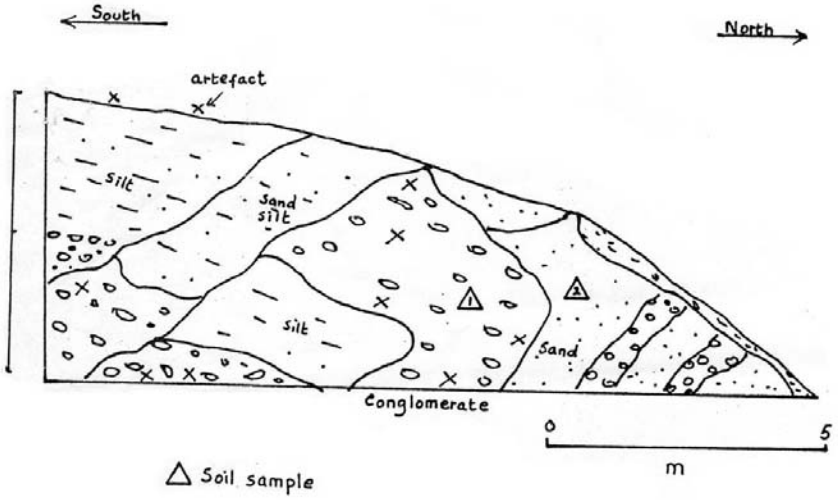

Fig. 3: Site PS-7 section

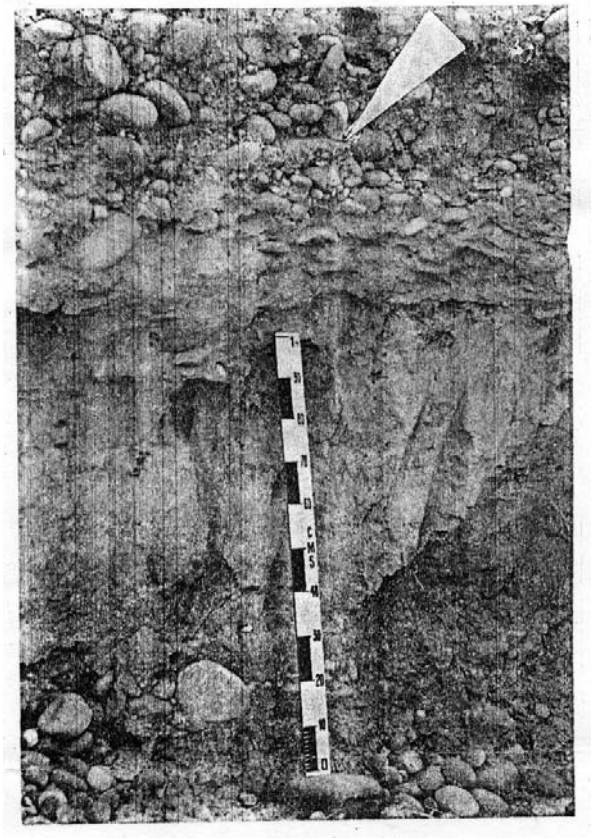

Fig. 4: Site PS-7, hand-axe in situ

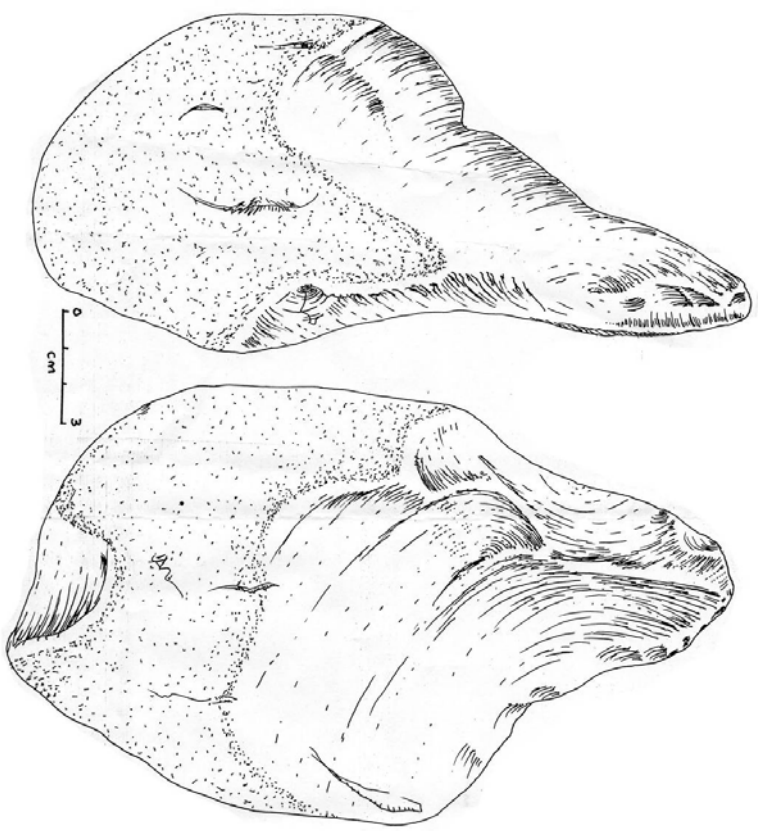

Fig. 5

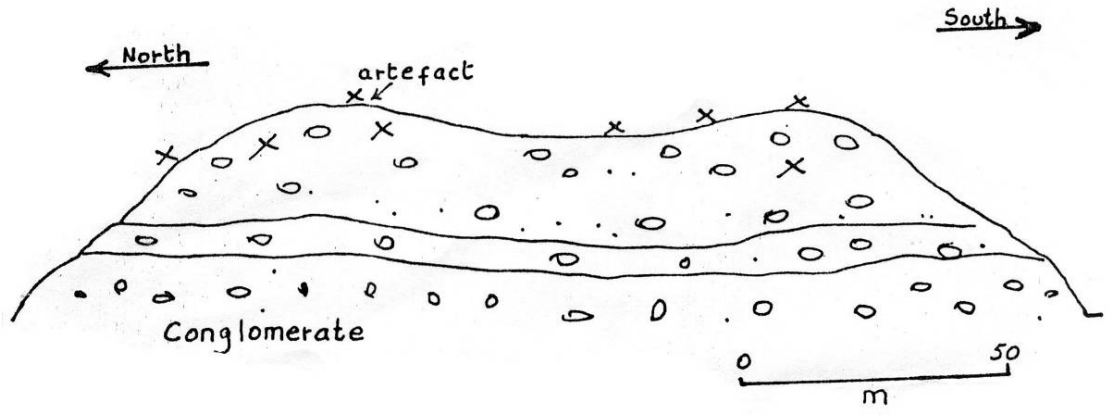

Fig. 6: Site PS-53 section

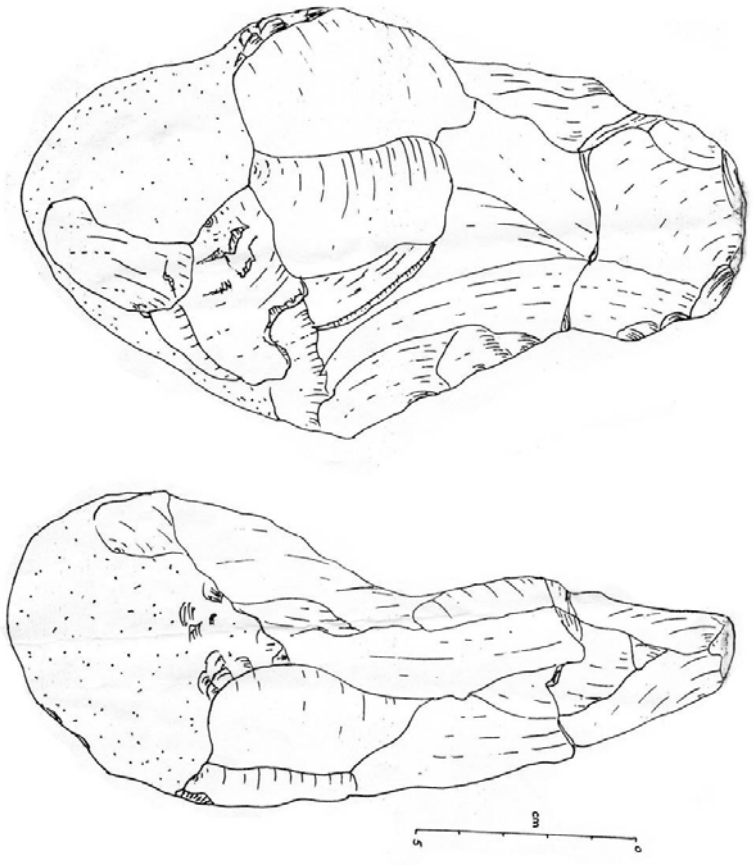

Fig. 7: Hand-axe (Site PS-53)

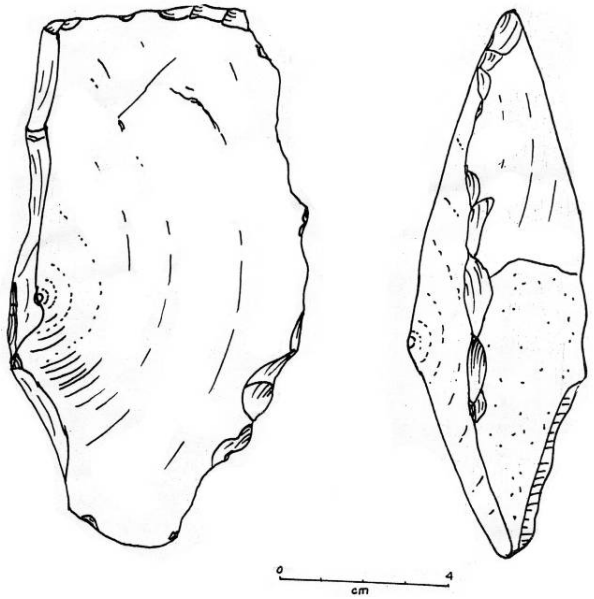

Fig. 8: Cleaver (Site PS-53)