

PALAEOLITHS OF SHANSI

CHIA LAN-PO WANG CHIEH-YI CHIU CHUNG-LANG

(*Institute of Vertebrate Paleontology and Paleoanthropology, Academia Sinica*)

The Palaeoliths are very abundant in North China. One hundred and seventy three localities in Shansi and the adjoining parts in Honan and Shensi provinces have been known to possess them. Most of these localities have paleoliths found on the ground surface, but at sixty two localities they were found *in situ* in the strata: one in the cave deposits, thirty-five in the reddish clays or in between the reddish clay and Loess, and twenty six in the fluvio-lacustrine deposits.

These localities are distributed along the upper reaches of the San Kan Ho, upper and lower reaches of the Fen Ho, upper reaches of the Chang Ho, and "San Men Gorge District" and the area eastern of it along Huang Ho borders.

Sixty five localities, such as Tingsun, Chiao Cheng, Litsumshikou, etc., had been described before. This article is written as an explanatory note to the new finds made in 1957 and 1958.

According to the stratigraphical fact, these discoveries may be grouped under three kind of cultures: (1) Cultures in reddish clays; (2) Cultures in the basal gravels of Loess; (3) Cultures in the Loess.

Cultures in Reddish Clays

We consider that the Palaeoliths from the deep part of reddish clays belong to the Lower Palaeolithic age. The chief localities are as follows:—

Chang Chia Wan (Tung Kuan District, Shensi),

Wo Lung P'u (*Ibid*),

Hou Chia Po (Shen Hsien District, Honan),

Kuan Kou (Yuan Chu District, Shansi),

Tung Ling (*Ibid*),

Chai Hou Ko Ta (*Ibid*),

Hsü Chia Miao (*Ibid*),

Ho Hsi Po (*Ibid*), etc.

The implements which we found *in situ* as mentioned above, are characterized by a simple type of tools similar to that of *Sinanthropus* cultures. All of them belong to

the flake industries. Flakes are variable in size. The striking platform is large and makes an obtuse angle with the plane of fracture (over 100°), and the natural flat surface of pebble is always used as a platform.

There are two methods for producing flakes. One of them is by the hammer stone directly from a core, and the other is to work on a stone anvil after removal of a first flake. These kinds of flakes are similar to those of *Sinanthropus* site.

Most of the choppers found from deep part of reddish clays of Yuan Chu District are always worked in single face. They are similar to those in *Sinanthropus* site. Some of them are worked with hammer stone and sometimes are worked on the anvils.

A large point made of a hornfels flake was discovered in Yuan Chu District. It is much larger and more roughly trimmed than the point of *Sinanthropus*, but made by the same methods, retouched on only one face, leaving on the opposite face the smooth conchoidal surface also.

The age of the artifacts from the upper part of reddish clays and that of flavio-lacustrine deposits in upper part of reddish clay are considered to be late early Palaeolithic time. Up to date, we know the following localities:—

Hou Yen Ling and Lu tzu Mo (Chiao Cheng District),

Feng Cheng Shan (Ching Lo District),

Tingsun (Lin Fen District, 1954),

Litsunshikou and Nan Liang (Hou Ma, 1956 and 1959),

Ko Ho (Yung Chi District).

The Tingsun culture is characterized by a complex tool type. It consists of large Triangular Point, Bolas, Double Face Chopper (some of them may be called the "Biface Tool"). The large Triangular Point, Bolas and the Biface Tool are never found before or in the earlier Palaeolithic time, and they also show signs of much more skillful workmanship. It is noticed that the Tingsun culture is more advanced.

Large Triangular Points are also found in Ko Ho and Feng Cheng Shan and the flakes are made by the same methods. Some implements and flakes of other localities just mentioned above have the same characters. Therefore, these may belong to the same period of Tingsun Culture.

Culture in the Basal Gravel of Loess

The Palaeolithic remains of Yang Chuang (Ning Wu District) and Hou Ko Ta Feng (Shuo Hsien District) were found in the basal gravels of Loess and the remains in later locality are very abundant.

The implements of Hou Ko Ta Feng are usually of medium and small size, scrapers, the retouch of which is beautiful and seems to be worked by an improved

technique as by a wooden striker. According to the stratigraphical fact, these implements much later than those from the upper part of reddish clay, and may belong to the middle Palaeolithic time.

Culture in the Loess

This culture is found in North Shansi. Its chief localities are Ma Po Shan (Ta Tung District) and Fen Wang Tze (Chuo Hsien District). The stratigraphical fact shows it's being still later than the Cultures from the basal gravel of Loess. But the materials are poor, and no comparison can be made with other contemporary localities of North China.

The artifacts of Early Palaeolithic in the deep part of reddish clay are distributed only in Southern Shansi and the adjoining parts in Honan and Shensi provinces. In the middle part of Shansi the artifacts sometimes occur in the upper part of reddish clay of a slightly later date than the southern localities. In the northern part, as far as it is known at present, they can be regarded as approximately contemporary with middle and late Palaeolithic. In this part they were found in the basal gravel of Loess or in the Loess deposits.

It gives us an impression that the oldest human fossils and earliest cultures are to be located between North-Tsinling and Huang Ho.