

DISCOVERY OF LATE PALEOLITHIC ARTIFACTS IN INNER MONGOLIA AND NORTH-WEST SHANSI

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I. Introduction

During the months August to October of 1958, the author was sent to Chungar, Tokto, Chingshuaibo of Inner Mongolia and P'ienkuan of north-west Shansi for reconnaissance of Palaeoliths in that region. As a result of this work, we discovered 31 Palaeolithic localities which have yielded a great quantity of well-shaped quartzite implements and artifacts. (Fig. 1)



Legend

1. Peking 2. Choukoutien 3. Tingtsun 4. Sjara — osso-gol
 5. Choci-tong-keou 6. Ching yang 7. Area of Palaeolithic sites in
 the present report. ⊗ Palaeolithic sites

Fig. 1

Though most of the artifacts were found on the land surface, they were either washed out from the consolidated sandy layers or are the residual of some sand deposits which

were all weathered away. All the sandy layer and the sandy deposits are found on the 2nd terrace of the Huangho valley and covered by some consolidated sandy dunes in the near-by district. Geologically these layers and deposits are the sandy facies well known in Inner Mongolia and equivalent to the Loess or loessic deposits of Shansi and Shensi Provinces. Before a detailed geological study being made in this region, it seems to me, that all the collected stone implements and artifacts, we may safely say, are of late Palaeolithic age.

According to our field observation, the Palaeolithic sites in the surveyed region may be divided into two kinds: working shops and dwellings. In the working shops, quartzite flakes and nuclei are very abundant and all scattered in a small limited area and no (or only) broken implements were found there. On the other hand, in the so-called "dwellings" we may collect one or two well shaped implements, but no hearth or *foyer* was ever encountered. Therefore, the so-called "dwellings" might be only temporary or only the campings of ancient hunters.

All the collected implements can be divided into two groups: well shaped and finely trimmed ones and crude macroliths.

II. Description of Artifacts

Ching-shuai-ho Points

From several localities in Chingshuaiho District of Inner Mongolia, we collected a number of quartzite points, all well trimmed and having regular shape. In general they

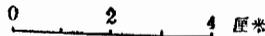
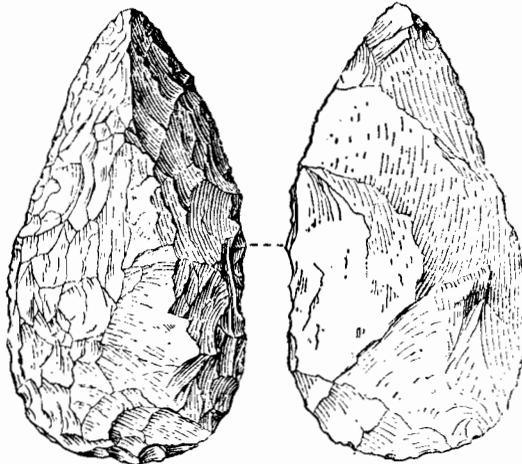


Fig. 2

were made of flakes detached from river pebbles and finely retouched on the two edges of the pointed portion and also on the base opposite to the point. The trace of the

retouches is flat and extended far from the edge. It seems that the technique of the secondary work was practised by pressure technique, and, in certain extent, similar to that known on the Mousterian points of western Europe. However, it might be realized by using woody hammer repeatedly beating the edge on a quartzite flake, so far as our experiments show.

One specimen (Fig. 2), oblong in shape, has an extremely thin base and all the secondary works applied only from the detached surface.

Another specimen (Fig. 3), pentagonal in outline was worked into a sharp point and a cutting base. The secondary works on the two edges forming the point are all

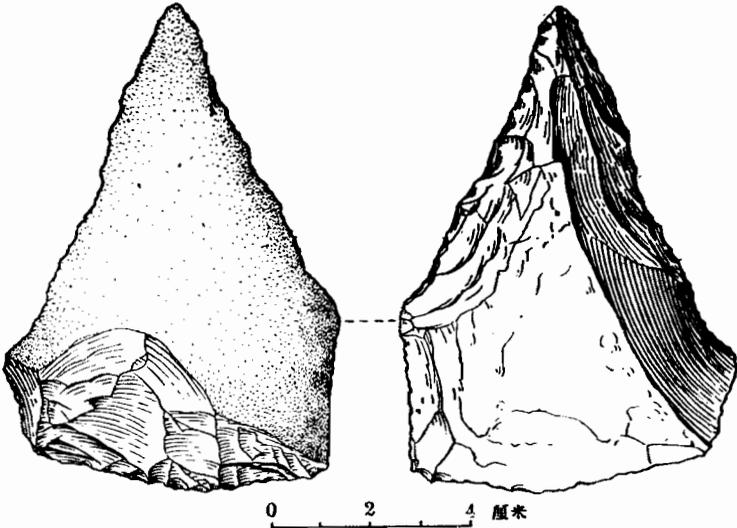


Fig. 3

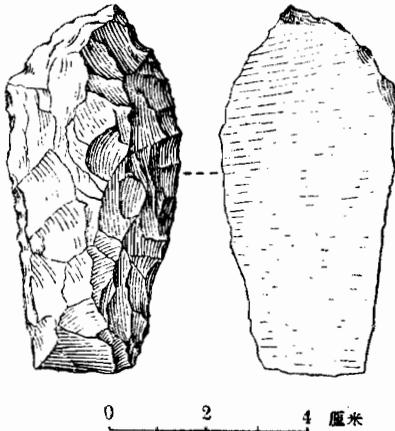


Fig. 4

applied on the original worn surface of the original river pebble and those on the base are found on the reverse.

A third specimen (Fig. 4), polyhedral in shape, was trimmed all around its edges and on the flat surface. One short and obtuse point, with an opposite cutting base was shaped out.

A fourth specimen (Fig. 5) is a triangular point, which differs from the other from the same district in having an unworked base.

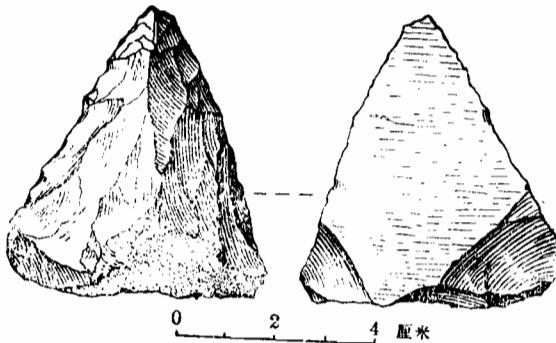


Fig. 5

Scraping Tools

Scraping tools in our present collection are very abundant and vary widely in shape. But all of them have uni-faced and flat trimmings.

One type seems to be noticeable, in which we may group three specimens. In general they were retouched into two major edges, one being more convex than the other, and all by uni-faced technique. Of course, they might be interpreted as double ended points, but as shown by the utilized trace on one specimen, it seems that they were used as scraping or abrading tools.

One specimen (Fig. 6) is beautifully worked into a crescent shape. Another two are of more elongated shape. One end of one edge of an elongated specimen (Fig. 7) is greatly worn, while all other edges remain sharpened. It seems that it was used for scraping or abrading some hard material (for example, wood) for a long time.

One specimen (Fig. 8) is made of opal, tri-prismatic in shape and similar to the small native boat of Chekiang Province. All the chippings are shallow and flat only on the flattened major surface. At one extremity of it, there are some oblique blows making a cutting edge, in some way similar to that of an European Palaeolithic graver or *burin*. However, the blows are not so regular as they were made purposely.

One specimen (Fig. 9) may be named as convex scraper. Its convex edge was carefully trimmed by uni-faced technique and the opposite one remains unchipped. Heavy blows were found on the lower part of the two short borders.

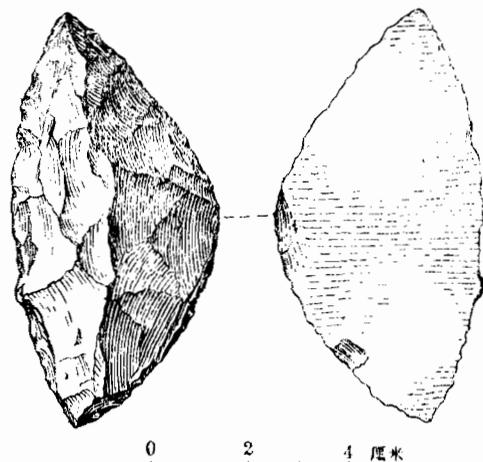


Fig. 6

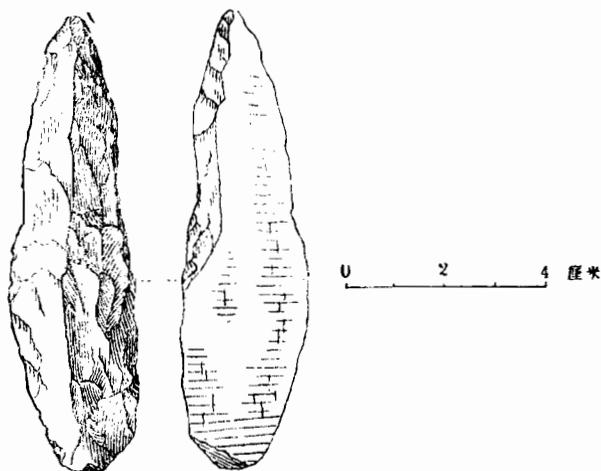


Fig. 7

Heavy Borer

To this type we may group three similar specimens. They were made either of a flat pebble or a thick flake and shaped by heavy blows of stone hammer into an obliquely pointed portion. On two specimens (Fig. 10 B & C), made of quartzite flake, the blows were given a the flat detached surface, while on the other specimen (Fig. 10 A), made of a flat pebble, the blows were exercised alternately on both surfaces. The two edges on the tip of the point are all greatly worn down, while the other part of the edges remains sharpened. By the characteristic of the wear on these specimens, it seems that they were used for boring certain hard material such as wood and probably not used for digging ground because one of them is too small for such a purpose.

Small Biface Chisel

This specimen was made of a small rectangular quartzite pebble (Fig. 11). Three borders of it were all trimmed bi-laterally by stone hammer and only one short border remains unworked, suitable for handling. Two long and parallel edges are zigzag and cutting. The worked end, oppsite to the handle, is greatly worn down and seems to be utilized for a long time for scraping or abrading some hard objects, like wood. No trace of wearing can be observed even in the portion adjacent to the worn end on the two long borders. Therefore only the cutting end opposite the handle of this implement was used.

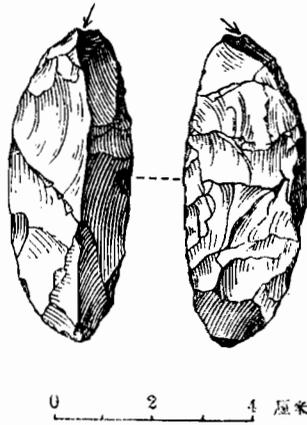


Fig. 8

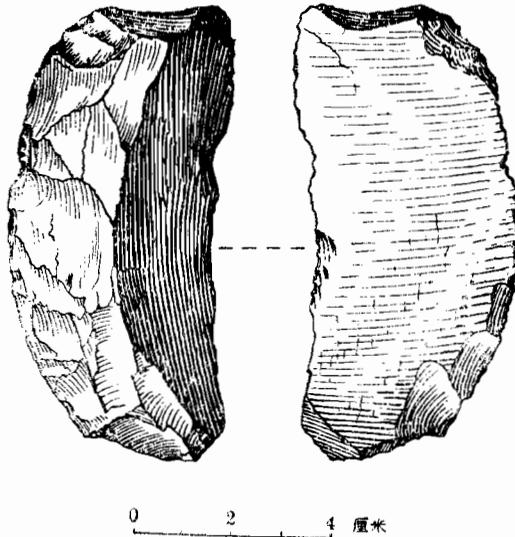


Fig. 9

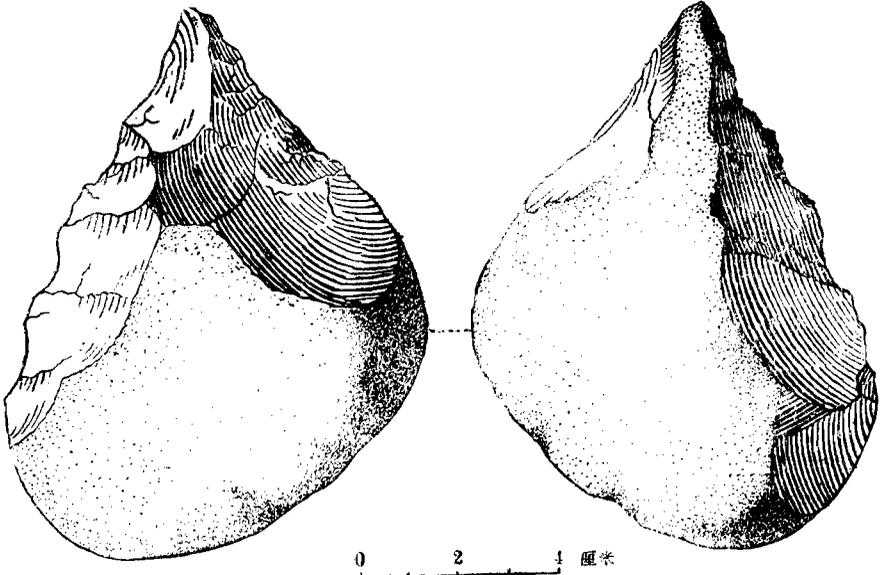


Fig. 10A

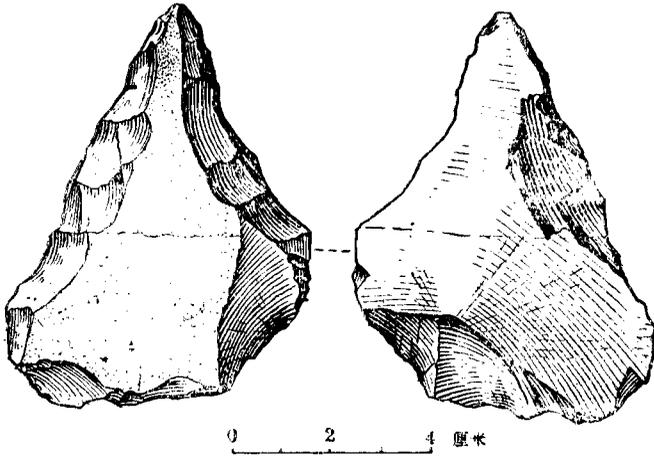


Fig. 10B

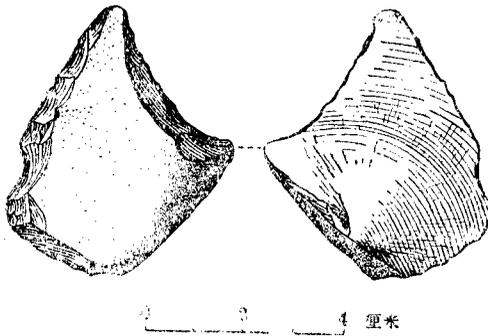


Fig. 10C

Thick End-Scraper

This specimen (Fig. 12) was made of a thick quartzite flake, on which a great part of the original pebbled surface is preserved. The secondary works are located on the two short ends and were trimmed into an arched shape. Trace of wear can only be observed on these two trimmed ends. Therefore, it seems, this implement was used for scraping certain object by these two ends.

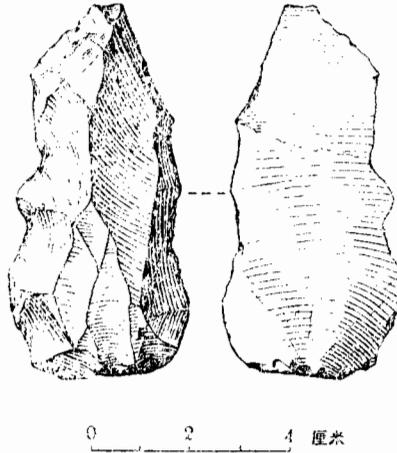


Fig. 11

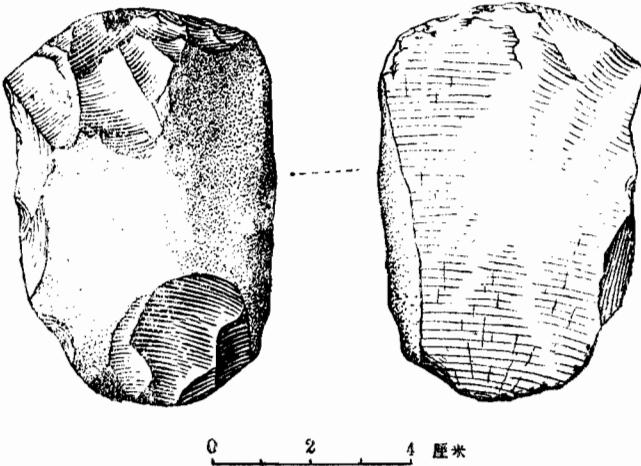


Fig. 12

Chopping Tools

To this category we group all the macroliths of all shapes and considerably great in number. In general, they were made chiefly by alternating blows on the edges of a flat

and rounded pebble. So that their cutting edges are in zigzags and might be used for chopping. On most of the specimens trace of wearing can be recognized on its edges.

There are also some examples which were made of thick flakes and chipped all around but only from one surface. So it makes that they are somewhat similar to the so-called "turtle shaped implements".

Bolas

We also collected a number of bolas in this region. They were chiefly made of quartzite pebbles and some made of silicified limestone also encountered. They are all trimmed around and only small flakes were detached. On their surfaces, trace of heavy blows can be easily recognized.

III. Conclusion

The Palaeoliths described here are partly found in the consolidated sand layers beneath the consolidated sand dunes and partly on the surface but washed out from the sandy deposit on the 2nd terrace of the Huangho valley. From the geological point of view it seems quite reasonable to suggest that they were late Palaeolithic in age. Moreover, in view of the characteristics of the artifacts in the present collection, such a suggestion also seems justified, because they exhibit highly developed technique both in flaking and retouching.

In Inner Mongolia and Mongolian People's Republic, certain Mesolithic Sabarak Industry is known (Nelson). But in having no well worked Microliths, which are the prototype of Neolithic Industry in north-east China, our present artifacts are quite different from those of Sabarak Industry. In the same Inner Mongolia region, along the River Sjara-osso-gol of Ikchao, a great quantity of Palaeoliths of more or less the same geological age is known as the so-called "Ordos Industry". But in the Ordos Industry, we have a great number of blade implements and microliths, all of which are absent in our present collection. On the other hand, in the present collection we have many finely retouched points and scrapers, which are unknown in Ordos Industry.

The question that whether the difference is due either to the age or to the cultural nature can not yet be solved at the present time.

From the Tingsun culture of central Shansi and Palcoliths in the basal gravels of "Loess" in N. Shansi and Shensi, our present collection is quite different in having no large heavy and crude implements and in having the finely trimmed points and scrapers. Perhaps, this means the advancement of the geological time of our present artifacts.

As is general known the finely retouched points and scrapers were used for cutting and scraping animal skins. The presence in our collection of such tools could indicate that the ancient owners of these tools lived partly on hunting. At the same time the chopping tools were probably used for cutting trees and bushes for fire and for making wood sticks or weapons.

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