

THE UPPER PALAEOOLITHIC HABITATION SITE AT CH'ANGNAE, KOREA

Park Hi-hyun*

Ch'angnae, a prehistoric open-air site, is located at the confluence of two tributaries of the South Han River in the south-eastern part of Seoul. Along the South Han River there are a number of Palaeolithic sites, both limestone caves and open sites. Yonggul, Kungul, and Sangsi are cave sites that have yielded both faunal remains, bone tools and lithic artefacts. The open sites have produced rather richer assemblages of stone tools. Amongst the latter the Suyangga, Myongori, and Ch'angnae sites are comparable in sedimentological and lithic technology (Sohn 1988; 1990).

The Ch'angnae open site, of approximately 240 square meters, was excavated during the summers of 1982 and 1983. The site consisted of a small camp that yielded stone tools around the intact postholes of a single Upper Palaeolithic habitation. Numerous stone tools were also spread around a nearby hearth (Park 1989).

The Upper Palaeolithic habitation layer was sealed under the subsequent layers of the Holocene Neolithic and the Bronze Age. Stratigraphically, there is a bottom layer which is composed of shist bedrock. Above this is a sterile layer of unsorted pebbles and cobbles that must have been deposited by a river. Above this came the Palaeolithic habitation layer, and above this in turn the Neolithic layer with potsherds with incised geometric designs. The Bronze Age pottery above was plain.

The Upper Palaeolithic habitation site yielded numerous chipped stone artefacts that can be classified as tools for hunting, butchering, kitchen use, and general use. The tools were mostly flaked with direct percussion techniques followed by retouch, the latter being quite highly developed during the Palaeolithic period. The blade technique was, however, only very rarely found in this industry.

Unearthed altogether were 514 stone tools, including side-scrapers (22%) and Aurignacoid round end-scrapers (4%). Most tools, however, are atypical in terms of standard terminology. The rock material used for stone tools was mainly quartz, but sandstone, siltstone, shale, cherty shale, chert and obsidian also occur. One hammerstone must have been used by a left-handed person in view of the location of use scars on it.

In the Upper Palaeolithic layer of Ch'angnae, one of the most striking features is the dominance of flake tools (about 76%) over core tools (about 24%). Stone tools that

retain pebble cortex amount to about 48% of the total tools. The ratio of single purpose tool to multiple purpose tools is very high, at 97.8 to only 2.2 in percentage terms.

The site has also yielded postholes, a hearth and areas of tool manufacture, all associated with a single tent structure. Each post hole had a different size and angle in the ground, and we were able to attempt to reconstruct a nearly complete plan of the habitation. The main supports for the tent were a tripod of poles (*kawimok* in Korean, meaning a scissor-setting of logs) and the structure was built in the following stages (Park 1989):

a) The main poles were stood in a tripod position with their upper ends meeting, and presumably tied together by rope. Each pole was supported at its base by a small pile of stones. Other poles were then added to enclose an oblong space of approximately 10 square meters, with an estimated height of 3.6 meters.

b) To produce a more solid structure, a piece of rope was attached to the tops of the poles and then tied around a large stone situated outside the hut.

The nearly upright entrance to the hut faced east towards the South Han River. An oval hearth 56 by 76 cm in size with a large rock and some pebbles was situated just in front of the entrance. It is very windy at Ch'angnae nowadays so the structure might have been intended to provide protection for the fire against strong wind, similar to a hearth at the Terra Amata site at Nice in France (de Lumley 1969).

According to the analysis of pollens and charcoals extracted from the layer, the vegetation included *Quercus*, *Chenopodium* and Gramineae.

It is assumed that palaeoclimatic conditions on the site were generally warm with annual cycles of humid and dry seasons. In view of the tent size and the stone artefacts, the habitation was probably used for short-term occupation in the last interstadial of the final glacial period.

According to the distribution of the tools and flakes the inhabitants of the site flaked chiefly in the southern part of the tent. In view of the knapping techniques and the tent structure, the Ch'angnae site is culturally comparable with the Upper Palaeolithic habitation at Sokchang-ni (Sohn 1973). Furthermore, it resembles some of the Upper Palaeolithic sites of the Yenisei and the Lena River basins in Siberia (Gerasimov 1964; Okladnikov 1964) as well as those of the Ordosian in China (Jia and Huang 1985). In particular, the tent structure can be compared with the Hasami-yama site in Japan (Ichinose *et al.* 1986) and with French sites in the Seine Valley (Leroi-Gourhan *et Brezillon* 1983; Leroi-Gourhan 1984) and the Dordogne (Bordes *et Gaussen* 1970; L'Homme *et Maury* 1989).

REFERENCES

- Bordes, F. *et Gaussen*, J. 1970. Un fond de tente Magdalénien près de Mussidan (Dordogne). *Fundamenta, Fruhe, Menschheit und Umwelt* 1:312-329.
- Gerasimov, M. M. 1964. The Paleolithic site of Malta; excavations of 1956-1957. In H.N. Michael (ed.), *The Archaeology and Geomorphology of Northern Asia*, pp. 3-32. Arctic Institute

- of North America, Translations from Russian Sources No.5, University of Toronto Press.
- Ichinose, K. O. *et al.* 1986. The Palaeolithic habitation site at Hasami-yama, Japan. *Kokokaku Journal* 262:15-19. In Japanese.
- Jia, L. P. and Huang, W. W. 1985. The Late Palaeolithic of China. In R.K. Wu and J.W. Olsen (eds), *Palaeoanthropology and Palaeolithic Archaeology in the People's Republic of China*, pp. 221-3. Orlando: Academic Press.
- Leroi-Gourhan A. 1984. *Pincevent: Campement Magdalénien de Chasseurs de Rennes*. Ministère de la Culture, France.
- Leroi-Gourhan, A. et Brezillon, M. 1983. *Fouilles de Pincevent: Essai d'Analyse Ethnographique d'un Habitat Magdalénien*. Supplement, Gallia Préhistoire, 2 volumes. Paris: C.N.R.S.
- L'Homme, J. P. et Maury, S. 1989. Les batisseurs de la préhistoire. *Archéologia* 250: 34-43. Dijon.
- Lumley, H. de 1969. A Paleolithic camp at Nice. *Scientific American* 220/5:42-50.
- Okladnikov, A. P. 1964. Paleolithic remains in the Lena River Basin. In H.N. Michael (ed.), *The Archaeology and Geomorphology of Northern Asia*, pp. 33-79. Arctic Institute of North America, Translations from Russian Sources No.5. University of Toronto Press.
- Park, H.H. 1989. *A Study of the Upper Palaeolithic Cultures at Ch'angnae, Korea*. Unpublished Doctoral Dissertation, Graduate School of Yonsei University, Korea. In Korean.
- Sohn, P. 1973. *The Upper Palaeolithic Habitation, Sokchangni, Korea; a Summary Report*. Yonsei University Museum, Korea. In Korean.
- Sohn, P. 1988. *Guide to the Palaeolithic Study of Korea*. Yonsei University press. In Korean.
- Sohn, P. 1990. *Palaeolithic Sites in Korea and Manchuria*. Seoul: Corea Institute of Prehistory. In Korean.