

Two cases of early man in China: a small tool industry from Donggutuo (northern Nihewan Basin) and a large tool industry from Longgupo (southern Yangtze River)

YA-MEI HOU

Institute of Vertebrate Paleontology and Paleoanthropology, Chinese Academy of Sciences,
P. O. Box 643, Beijing 100044, China
houyamei@ivpp.ac.cn

I. Donggutuo Industry in the northern Nihewan basin

The Donggutuo (DGT) site (40° 13' 22" N, 114° 40' 11" E) is a fluvial-lacustrine sequence located in the transition zone between the North China Plain and Inner Mongolian Plateau. It was discovered in 1981 (WEI 1985; WEI et al. 1985) and dated at 1 Ma B.P. by Chinese and American research groups (LI et al. 1982; SCHICK 1993). The most recent dating of the contemporaneous Xiaochangliang site produced an age of 1.36 Ma B.P. (ZHU et al. 2001), confirming the validity of the DGT age determination. These two sites afford strong evidence of the presence of earliest humans and the earliest reliable record of occupation

ers and burins (Figs. 1 and 2). Of the cores found, a newly defined category called the "Donggutuo core" (Hou 2003; Fig. 3) is notable. These appear to have been fashioned specifically to produce small, elongated flakes. This makes the Donggutuo stone assemblage unique, as it employs a different production technique to that used for normal flake tools. The method of selection and shaping gives the "Donggutuo core" a distinct form. Hou (2003) suggests that the principle of the "Donggutuo cores" is very similar to that of the microlithic wedge-shaped cores of the Upper Palaeolithic in North China.

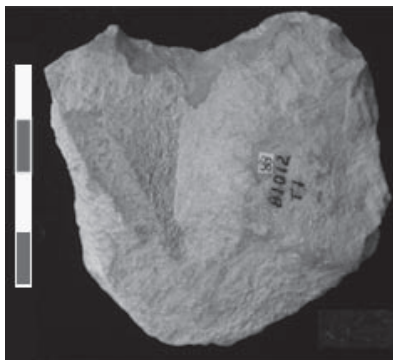


Fig. 1
A notch from
Donggutuo
site.

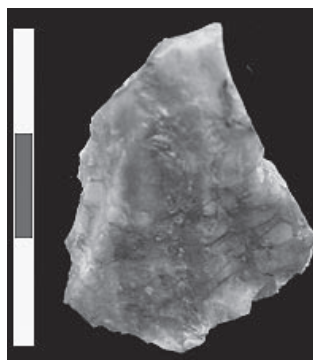


Fig. 2
A burin from
Donggutuo site.

at a latitude of 40° N in northeast Asia.

The stone artefacts from DGT are characterised by their small size and are made mainly from variable quality chert, siliceous limestone, quartz, quartzite, chalcedony and lava. Numerically, flakes dominate the lithic assemblage, although tools and cores are also prominent. The tools present are mostly made from flakes and comprise side-scrapers, denticulates, points, end-scrapers, bor-



Fig. 3
Two examples
of the newly
defined
"Donggutuo core".

II. Longgupo Industry on the southern Yangtze River

The Longgupo cave site (30° 21' N, 109° 4' E), Wushan County, is located near Chongqing City, in the Three Gorges area of the Yangtze River. It was discovered in 1985, since which time several excavations have been undertaken (HUANG & FANG 1991). The so-called Wushan fauna is composed of 116 species, including *Gigantopithecus blacki*, *Ailuropoda microra*, *Pachycrocuta licenti* and *Nestoritherium* sp. Those human fossils present were primarily determined to be a *Homo erectus* subspecies, *H. erectus wushanensis*. A later Sino-American group, together with other co-workers, recognised that these fossils looked different from

other known East Asian *H. erectus* specimens, but similar to *H. habilis* or *H. ergaster* from East Africa. In addition, the associated mammal fauna and palaeomagnetic analyses, provide a approximate age of 2 Ma B.P., which is in agreement with previously obtained ESR dates (HUANG et al. 1995).

In 1997 and 1998, additional stone artefacts were excavated from Layers 5-7 (quadrats C9, E 9, F8 and F9) and subsequently partially investigated. They were composed mainly of black, relatively hard homogeneous limestone and ranged in size from 85 to 218 mm. Preliminary observations suggest they can be divided into flakes, side-choppers, picks, cleavers and proto-adzes (Fig.4; Hou et al. 1999, 2002).

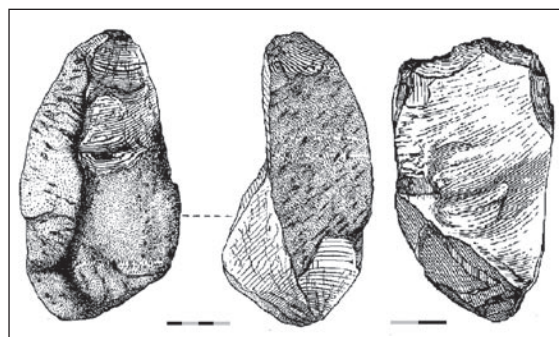


Fig.4
Stone artefacts from the Longgupo site:
a pick (left and centre) and a chopper (right).

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