Editor's note

This year is the 80th anniversary of the discovery of the first skull-cap of *Homo erectus* from Zhoukoudian (Peking Man). The first fossil of Peking Man was found in 1921 or 1923. Among the specimens unearthed at Zhoukoudian and transported to Sweden a premolar of hominid was identified in 1926. The announcement of this finding made Zhoukoudian well known in the world. A well preserved hominid molar was found in 1927 *in situ* based on which the new genus and species, *Sinanthropus pekinensis* was proposed. On December 2, 1929 a complete skull-cap was found. Both Peking Man and Java Man were considered as the first hominid during that time. In 1931 man-made stone tools and fire-using evidence found from this site were identified and accepted by archaeologists. All of these findings established the important position of this hominid in human evolutionary history. The stone artefacts of 1.7 Ma found at Olduvai Gorge, Tanzania in 1959 greatly elongates the historical record of humans and makes Peking Man no longer the earliest member of mankind. However, even today Zhoukoudian site is still unmatched among Pleistocene human fossil sites and highly valuable in the study of human evolution because it has yielded many human fossils associated with an abundance of stone artefacts, fire-using evidences, as well as a wealth of mammalian and other vertebrate fossils. Since the 1980s a series of chronometric dates based on various new techniques indicates a long period occupation of ancient humans in this cave.

Since 1949 more than 70 sites yielding human fossils have been found in China. The presence of a series of common morphological features among these fossils and the morphological mosaic between *Homo erectus* and *Homo sapiens* in China indicate that human evolution of China is continuous. A few features which appear only in a few Chinese specimens but are common in Europe and/or Africa may imply a small amount of gene exchange between China and other regions in ancient times. In short, the main trend of human evolution in China could be continuous with subsidiary gene flow from the outside populations.

More than thousand Pleistocene sites in China have yielded stone artefacts. These artefacts display a Paleolithic cultural tradition quite different from that existing in Europe and Africa. In addition, there is a small amount of evidence indicating cultural exchange between China and the outside. These data substantiate the hypothesis, "Continuity with Hybridization" for human evolution in China, and support the Multi-regional Evolution hypothesis for modern human origin. The debate between this and the Recent Out of Africa hypothesis is one of the hot points of contention in current paleoanthropology.

The present issue carries several articles showing new results of research work concerning this debate from various aspects. One of them is a report on the human fossil site of Mulan Hill, Chongzuo County, Guangxi Zhuang Autonomous Region. The incipient character of modern feature shown in a mandibular fragment of 110000 years before present manifests the transition from archaic to modern humans. Lingjing, Xuchang, Henan Province is a human fossil site of around 100000–80000 years old. An article reports that among the mammalian fossils unearthed from this site the adult individuals are dominant in the assemblage of herbivorous animals including primitive cattle and common horse. This fact indicates that the ancient people of this site were skilled hunters, and the Eastern Asian ancient humans of this age were close to that of European Late Paleolithic in the level of hunting strategy, ability and social organization. A similar article in this issue deals with the pattern and tendency of games exploitation based on the study of faunal remains unearthed from Maanshan site in Guizhou Province which will enhance our understanding of the evolution concerning the hunting behaviour of early modern humans. The stone artifacts produced at Shuidonggou site of Ningxia Hui Autonomous Region is characterized by a distinctive Mousterian-Aurignacian style which embodies the Paleolithic cultural exchange between China and Europe and makes this site famous since the 1920s. This issue carries articles dealing with the new studies on the stratigraphy and chronology of Shuidonggou site group as well as some ornaments made by surface collected ostrich eggs. These articles show that in this area there are Paleolithic sites with relatively continuous strata and reliable dating record, this area is rich in Paleolithic cultural remains and has special potentiality in the study of the transition from Middle to Late Paleolithic stage and cultural exchange between China and Europe in this period. All of these research works indicate that China is one of the regions in which the evolution from archaic to modern humans took place. This provides further support to the Multi-regional Evolution Hypothesis and Continuity of human evolution in China.

In addition, articles on Paleo-DNA analysis and morphometric and geometric studies on fossil teeth provide new knowledge which could not be obtained with traditional methods. Other papers published in this issue will help to enrich the knowledge on the development of Paleolithic culture and the distribution and evolution of the close relatives of Pleistocene hominid in China.

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