### **COMPLETION REPORT**

#### 1. Summarizing the Upper Paleolithic Industry of Eastern Part in Northeast China

We have found about 20 Upper Paleolithic sites or localities since last century. Previously, based on data generated through typological and statistical analyses, the Upper Paleolithic sites in the Northeast in China were divided into three industrial types: the Flake-based Small Tool Industry, the Peddle Tool Industry and the Microblade-based Micro-tool Industry. These sites are integrated into a complicated chronological local culture. From behavioral and adaptive perspectives and through analyzing typological, morphological and technological features of assemblage, these sites belong to the Microblade-based Micro-tool Industry in final Upper Paleolithic.

#### 2. Preliminary Assessment of Obsidian Sources Using PXRF\* in Northeast, China

Stone artifacts made from obsidian have been found in archaeological contexts dating from Upper Paleolithic to Neolithic in the Eastern of Jilin Province. A geoarchaeological investigation of obsidian outcrops assessed the potential sources to determine the true sources of obsidian in archaeological sites. A characterization study of sources samples and stone artifacts from 14 archaeological sites using PXRF\* identified which sources had actually been exploited. Research results show some obsidian may have been collected from the Hokkaido in Japan. Raw material sources show the impact of geological environment on procurement and exchange. We should increase the number of sources and archaeological samples and have a systematical geological survey in order to make the result more accurately.

\*PXRF=Portable X-Ray Fluorescence

# 3. Technological and Cultural relationship of the Microblade Industry in the Upper Paleolithic between two areas (the eastern part in Northeast of China and Japan)

In contrast, typological and technical specialization or variation of microblade core encountered in the Eastern Portion of Northeast China and Japan Islands may reflect possible cultural interaction or technological attenuation in a region from the parent tradition. Several viewpoints on it are summarized as followed: 1) Techno-typological similarities of microblade core between the Late Pleistocene industries in Eastern portion of Northeast, China and Japan Islands are indicated by their designing-consistency, especially the wedge-shaped microblade core; 2) dimensional difference may have been the result of different raw materials of functional factors; 3) Obvious differences in microblade technology and dimension among many Paleolithic sites are the result of different technological origins.

## Publication of the Results of Research Project:

Verbal Presentation (Date, Venue, Name of Conference, Title of Presentation, Presenter, etc.)

Date: October 24-25, 2011 Venue: Hangzhou, China

Name of Conference: The National Postdoctoral humanities Academic Forum

Title of Presentation: Preliminary Study on Raw Materials Exploitation at Upper Paleolithic Sites In East Jilin

Province

Presenter: Chunxue WANG

Thesis (Name of Journal and its Date, Title and Author of Thesis, etc.)

1. Chunxue WANG, Quanjia CHEN. New discoveries and Research of Paleolithic site in Northeast Region, China. Journal of Chinese History, vol.77, 2012, pp259-281.

(王春雪、陈全家.中国东北地区旧石器遗存的发现与研究.中国史研究(韩),第77辑,2012年,pp259-281)

2. Quanjia CHEN, Chunxue WANG, Trudy Doelman, Hailong ZHAO. A Preliminary Assessment of Obsidian Sources Using PXRF in the Eastern of Jilin Province. Jilin University Journal, Social Sciences Edition, 2013, in press.

(陈全家、王春雪、Trudy Doelman、赵海龙. **手提式X射**线荧**光分析**仪 (PXRF) 对**吉林**东部地区发现的黑曜岩测定分析的初步研究. 吉林大学社会科学学报,2013年,待刊)

3. Chunxue WANG, Quanjia CHEN, Hailong ZHAO. Technological Analysis of the Upper Paleolithic Microblade (or Blade)-Based Micro-tool Industry in the Eastern Portion of Northeast, China: Several views on the Cultural Relationships between Japan Islands. Asian Social Science, 2013, in press.

Book (Publisher and Date of the Book, Title and Author of the Book, etc.)