The Jizouden Site -the Paleolithic CultureReport of Excavation, 1985

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The Jizouden Site is located in the southern suburb of Akita City, Akita Prefecture (Fig.1.). It is situated on the lower river terrace (L1) of the right bank from the Iwami River in Akita Plains where is at a height of 31m above sea level. The site was discovered by the Akita City Board of Education in 1985.

A total of 4,447 paleolithic artifacts were discovered from the Jizouden Site. 4,358 artifacts in the Late Paleolithic Period which exhibited 14 concentrated areas (Fig.73.) were recorded.

The stratigraphy at the site is as follows:

Stratum 1: modern cultivated layer

Stratum 2: Jomon and Yayoi Period layer

Stratum 3: transitional layer

Stratum 4a: yellowish brown clayey silt

Stratum 4b: yellowish brown and brown clayey silt

Stratum 4c: bright yellowish brown clayey silt

Stratum 5: dull yellowish brown clayey silt

Stratum 6: light gray clayey silt

Stratum 7: light gray clayey silt

Stratum 8: bright yellowish brown clayey silt

Stratum 9: light gray sandy silt

Stratum 10~15: terrace gravel layer

Paleolithic artifacts in stratum 4a and 4b are inferred in situ.

The assemblage consists of axes (N=4), knife shaped tools (N=5), pen-point-knife shaped tools (N=22), trapezoid tools (N=39), side-scrapers (N=8), end-scrapers (N=4), notches (N=5), denticulates (N=7), retouched-flakes (N=18), cores (N=71), pebble tools (N=9), flakes (N=1,555), and chips (N=2,700). The total number is 4,447 (Table.2.). Most of lithic artifacts were made of hard siliceous shale, but axes and pebble tools were made of serpentinite, hornfels, granite, and so on.

We consider that these lithic artifacts were belonged to the first half of the Upper Paleolithic Period.

Resulting AMS 14 C determinations of carbonized remains excavated from concentrated areas of BL3, BL4 and BL7 are; $29,720\pm130$ 14 CBP(32,773~32,501 cal BC(61.0%) and 32,328~32,244 cal BC(7.2%)), $30,110\pm140$ 14 CBP(32,910~32,677 cal BC(68.2%)), and $28,080\pm120$ 14 CBP(30,662~30,001 cal BC(68.2%)). They were measured by Institute of Accelerator Analysis Ltd. (Appendix No.2 Table.3 and 4.).

1,545 lithic artifacts (34.7% of all lithic artifacts) were grouped to 35 nodules (Table.6.) and 694 lithic

artifacts are refitted (Table.7~10.). We consider that some row materials of lithic artifacts were gotten around the Jizouden Site.

Stone flaking technique is classified into four types (Fig.111.). Main flaking techniques were $\mathbb{I} \sim \mathbb{N}$ types which produced 1:1 (ratio length: width) flakes. Most of blank flakes of tools were made by these techniques. Blade technique was not performed at the Jizouden Site.

Lithic distribution at the Jizouden Site was composed of 14 lithic concentrated units. It is said that the pattern is considered to be "circular shaped lithic distributions". "Circular shaped lithic distributions" is a characterized feature at the early Upper Paleolithic Period in Japan, and the Jizouden Site is one of the typical examples. The diameter of circular shaped lithic distributions at the Jizouden Site is about 30m. Carbonized remains and heated lithic artifacts concentrated on BL3, 4, and 7 (Fig.85 and 86.). Knife shaped tools, pen-point-knife shaped tools, and trapezoid tools concentrated on BL4 where was in the center part of circular shaped lithic distributions (Fig.118.). By contrast, axes and pebble tools were scattered around part of circular shaped lithic distributions (Fig.118.).

According to the result of lithic use-wear analysis Dr. Yoshitaka Kanomata, Associate Professor of Tohoku University, knife shaped tools, pen-point-knife shaped tools, and trapezoid tools which have blunting on base have impact fractures (PL.5~8). These stone tools which consequently concentrated on BL4 where was in the center part of circular shaped lithic distributions were probably used to thrust something (Appendix No.3 Fig.1.). Also the axe was probably used to scrape hide (PL.9~10). By the reasons of lithic use-wear analysis and stone tools distribution, Dr. Kanomata considers that why circular shaped lithic distributions had been formed in the Jizouden Site was to hunt large animal at that period of time (cf. Appendix No.3).

Paleolithic artifact of the Jizouden Site is one of the representative industry of the first half of the Upper Paleolithic Period in Japan, therefore, this site is considered to be very important to study Paleolithic Period.

All datas of lithic artifact and this report have been disclosed on the public to the WEB site below; [http://www.city.akita.akita.jp/city/ed/cl/site_report/jizoudensite_paleolithic/default.htm]