The Second Social Science and Humanities Forum between Japan and Russia

The Old Stone Age of Japanese Archipelago and Siberia, with special reference to lithic use-wear analysis

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Academic exchange in Kyoto, Japan, 1968 (UISPP)
(From Serizawa 2003, Forty years of Palaeolithic Research. The Archaeological Journal, no. 503)

At the Araya Site, 1988

In Novosibirsk, 1995
Agreement with the Sakhalin State University (2001)
Prof. A. Vasilevski, Sakhalin State University, at the Soni site, Early Neolithic period (Kuznetsovo site)
Prof. Nobuo Ito of Tohoku Univ. Expedition to South Sakhalin in 1933, 1934 (from Bulletin of the Tohoku University Museum, no.5, 2006)

Archaeological collections in Tohoku Univ. Fac. of Arts and Letters
Twin Ainu armors from Higashi Taraika, Sakhalin, found in 1934

Curated in Tohoku Univ. and The Sakhalin State Museum
Use-wear study by S. Semenov (1957)

“Prehistoric Technology”
(1964 in English)

Whittling knife from Kostenki I
Experimental summary of Tohoku Univ. project (1976 to 2007)
Rock type (Shale, Obsidian, Chert, Slate, Flint, Sanukite, other CCS), and worked materials (plant, wood, meat, bone, antler, hide, leather)

Prof. Chosuke Serizawa (1919.10.21~2006.3.16)

Prof. Serizawa with Olympus BHM microscope at Tohoku Univ. with lithic artifacts from the Hoshino site (in 1981)

Experimental summary of Tohoku Univ. project (1976 to 2007)
Rock type and kind of motion (cut, grave, saw, scrape whittle, chop, bore)
Some developmental stages of microwear polish formation (from Serizawa, Kajiwara, Akoshima 1982): (1) cutting wood, (2) boring wood, (3) whittling bone, (4) cutting soaked antler, (5) scraping dry hide. Numbers of strokes and polish types are shown for each photograph.
Experiments of microwear polishes, different worked materials used in succession.
1 dry hide to antler to dry hide.  5 dry hide tanning to antler whittling.
2 dry hide to antler to dry hide.  6 dry hide tanning to antler whittling.
(From Kanomata 2002, Bunka, vol.66, nos.1-2, pp.57-76)
The Araya site was excavated originally in 1958 by Prof. Serizawa. It was well known as the type site of the “Araya type burin. The site was re-excavated in 1988 and 1989.


Microblade industry with burins.
Features at the Araya site (1988, 1989) from Serizawa and Suto, ed. 2003
Use-wear on a microblade (bone/antler type)

Use-wear on an Araya type burin (bone/antler type)

Lithic assemblage and refits from the Araya site (from Serizawa and Suto 2003)
The Araya type burins in Northeast Asia
(Serizawa 2003)
Reconstruction of Aspects of Technological Organization at the Araya Site (from Kanomata 2007)

Burins from the Araya Site (from Serizawa and Suto, 2003, Fig. 43)
Use-wear polish on microblades from the Araya site

1. D1タイプ
2. D1F1タイプ
3. 20011
4. 20823
5. E2タイプ
6. E2タイプ
7. 1類
8. 1類
9. 1類
10. 1類

**Used edge**

**Hafted edge**

**Reconstruction of hafting**

(from Kanomata 2004)

- Normal use-wear on the left side and un-usual wear on the right side.
Microwear polish on burin spalls.

Use wear analyzed in terms of life cycle of stone tools, and “Organization of Technology” (Binford 1979)

(The Araya site, Niigata pref. Kanomata 2005)
Harvest method using a slate knife, based on microwear evidence

Distribution of corn gloss micropolish on rice reaping knife
the Minami-koizumi site, Sendai City

Distribution of “corn gloss” polish on a rice reaping knife of slate. Burial pit SK2, the Shimonouchi-ura site, Sendai city, Northeastern Japan. (From Suto and Akoshima, 1984)

Corn gloss polish patches on another reaping knife in the same burial pit
Palaeolithic Research along the Mogami River Basin

**Marumori 1 site**
1) 2008, August 25 – August 29
2) 2009, August 21 – August 31
3) 2010, August 21 – August 31

**Kamino A site**
1) 1987, May 6 – May 16
2) 1991, September 21 – October 4
3) 2000, August 21 – August 30

**Takakurayama site**
1) 2010, November 3 – November 7
2) 2011, August 27 – September 7
3) 2012, August 24 – September 4
Activity areas
Cobble cluster
Hide processing

Kamino A 1987, 1991

Hide, bone/antler, wood working

Studies of the Late Palaeolithic Culture in the Mogami River Basin Vol. 2
The Kamino-A site Report of the third term excavation.
Bull.Tohoku Univ. Museum, No.11, pp.1-200
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