Slovak Geol. Mag., 7, 4 (2001), 341–343

Lower Bavarian Plattenhornstein flint from Baiersdorf imported into northeast Austria

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Abstract. Analysis of three selected late Neolithic stone artefacts, considered to be imports from the lower Bavarian area (southern Germany) into eastern Austria, again demonstrates the importance of provenance studies on raw materials and of being able to recognize the material visually. The artefacts are stray finds of so-called sickle blades made of Baiersdorf Plattenhornstein from (i) Annastift near Krummnussbaum in the lower Austrian Danube valley and, in northern Lower Austria, from (ii) Kühnring and (iii) Roggendorf . As the crow flies, the latter two objects are about 300 km away from source and, in practical terms, considerably further.

Keywords: Flint raw material, Baiersdorfer Plattenhornstein, provenance, flint sickles, late Neolithic.

Analysis and reconstruction of procurement and trade patterns in prehistoric raw materials is becoming ever more important for an understanding of relationships over wide areas and the synchronization of culture sequences. Lithics are of special importance because of their durability and because of the distinctive appearance of particular petrological types. Here we consider flint of the kind known as Baiersdorfer Plattenhornstein, named after the location in Lower Bavaria which is the sole source (for example Binsteiner, 1999 (footnote 49), 2000 and 2001). It is presumed that this material was traded in the form of finished objects along the Danube valley (e.g. to Annastift near Krummnussbaum) and then further north into the Manhartsberg region around Eggenburg. It is also possible that some travelled through Bohemia, as with Lower Bavarian Arnhofen flint (Binsteiner, 2000 and 2001). We will now describe and analyse three characteristic objects.

Annastift near Krummnussbaum (Melk district): Fig. 2

Flint blade, thin, light brown, patinated, tabular flint (Plattensilex) with light brown cortex preserved on both sides; elongated sickle-shaped form with a nearly straight cutting edge preserving distinct sickle gloss and an asymmetrically curved back; all sides carefully retouched. Length 20.8 cm, max. width 6.2 cm, thickness 0.8-1.1 cm, weight 199.54 gm.

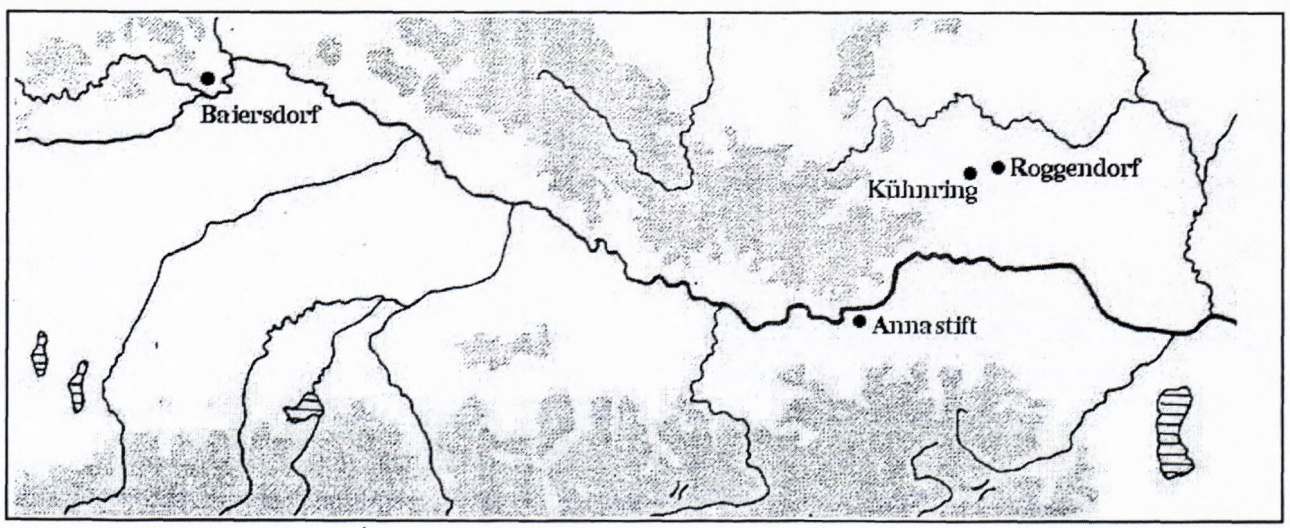

Fig. 1 Distribution map of Altheim sickles made from Baiersdorf Plattenhornstein in Lower Austria.

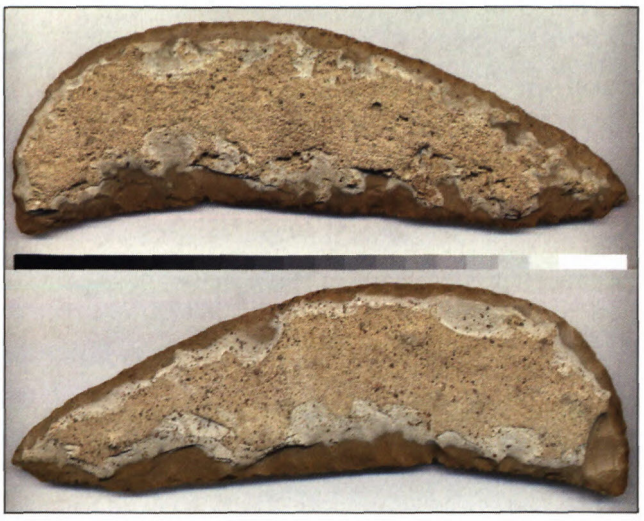

Fig. 2 Annastift near Krummnussbaum.

Fig. 3 Kühnring.

Fig. 4 Roggendorf.

Stray find from ploughing in the 1970s; now in Melk Museum.
Literature: Reitinger, 1968-70. Trnka, 2001.

Kühnring (Horn district): Fig. 3.

Flint blade, thin, light brown, patinated, tabular flint (Plattensilex); elongated form with lightly curved cutting edge displaying distinct sickle gloss and an asymmetrically curved back; all sides carefully retouched; the cortex has been almost entirely preserved on one side but polished to make it smoother both at the tip and again towards the rear; on the opposite side only a small area of cortex was left; the grip or alternatively neck, was broken (?in antiquity).
Surviving length 20.0 cm, max. width 5.5 cm, max. thickness 1.02 cm, weight 123.35 gm.
Stray find, collected by Johann Krahuletz at the turn of the 19th/20th century; now in the Krahuletz Museum, Eggenburg, Inv. No. 3104.
Literature: Bayer, 1933, 214, Tab. 10/1. Hrodegh, 1925, Fig. 35. Trnka, 2001.

Roggendorf near Eggenburg (Hollabrunn district): Fig. 4.

Tip of a sickle blade, thin, light grey, tabular flint (Plattensilex); fine retouch on cutting edge with well-developed sickle gloss, lighter retouch on blade back; one side has a light brown, relatively rough cortex, the other a paler cortex which has been polished to a point where the brighter light grey colour comes through.
Surviving length 7.0 cm, max. width 3.1 cm, thickness 0.5 cm, weight 15.36 gm.
Stray find (no details) now in the Krahuletz Museum, Eggenburg, Inv. No. 33242.

Discussion

All three of these artefacts are Altheim sickles. Typical Altheim sickles are made from sheet tabular flint and are highly sophisticated artefacts about 20 cm long with characteristic straight edge, curved back with the roughly worked base meeting the blade edge at right angles. The edges are retouched in a narrow band no deeper than 1 cm, except when the original tablet is too thick (Tillmann, 1992, 291f). The three Lower Austrian examples are made on tablets that vary between 0.5 and 1 cm in thickness. There is no question that they have been made in an Altheim culture milieu on grounds of both form and raw material. In terms of culture chronology these are early Baden or Bóleraz (c. mid-fourth millennium B.C.)

Baiersdorf Plattenhornstein comes from residual deposits in weathered limestone outcrops. The thickness of the sheets or tablets generally ranges from 1 to 2 cm with a colour that varies from blue-grey to grey-brown, with fossil remains and sometimes banding or mottling. The two sides of the cortex differ, with one being more textured than the other, but it is always the case that the inner sides of either surface have a lighter colour (Binsteiner, 1992, 332).

Baiersdorf Plattenhornstein was widely traded in the south German later Neolithic (Grillo, 1997, 162f) and has recently been shown to have been traded into the south-eastern Alpine region as well, over an estimated distance

of 470 km. The best known findspots are the Styrian sites of Tesserriegel (Binsteiner, 1999) and the hoard find of Hengsberg near Schönberg (Fuchs, 1987). Finds seems to demonstrate that a large amount of Baiersdorf Plattenhornstein was utilized in the late Neolithic/early Copper Age of eastern and western Styria (Gerald Fuchs, pers. comm. 2001). It must remain an open question both how and why it was transported over such long distances, but it is obviously significant that there is no equivalent raw material in eastern Austria from which such long sickle blades could have been made.

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