

Martinshöhle revisited

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Geographic Location

The Martinshöhle is a former cave site which was located at the Burgberg in Iserlohn-Letmathe, North Rhine-Westphalia (Germany) (Fig. 1). It was destroyed during quarrying at the beginning of the twentieth century (Fig. 1).

Research History

Between 1875 and 1877, the cave was excavated by the anthropologist Hermann Schaaffhausen (Hammerschmidt et al. 1995).

In 1932, Julius Andree performed a typological analysis of the lithic assemblage and made an attempt to reconstruct the stratigraphy considering Schaaffhausen's observations (Andree 1932). Today, the collection comprises 401 lithic pieces, which were reanalysed between 2021 and 2022 in the context of two bachelor theses (Gumboldt 2021 and Riemenschneider 2022).

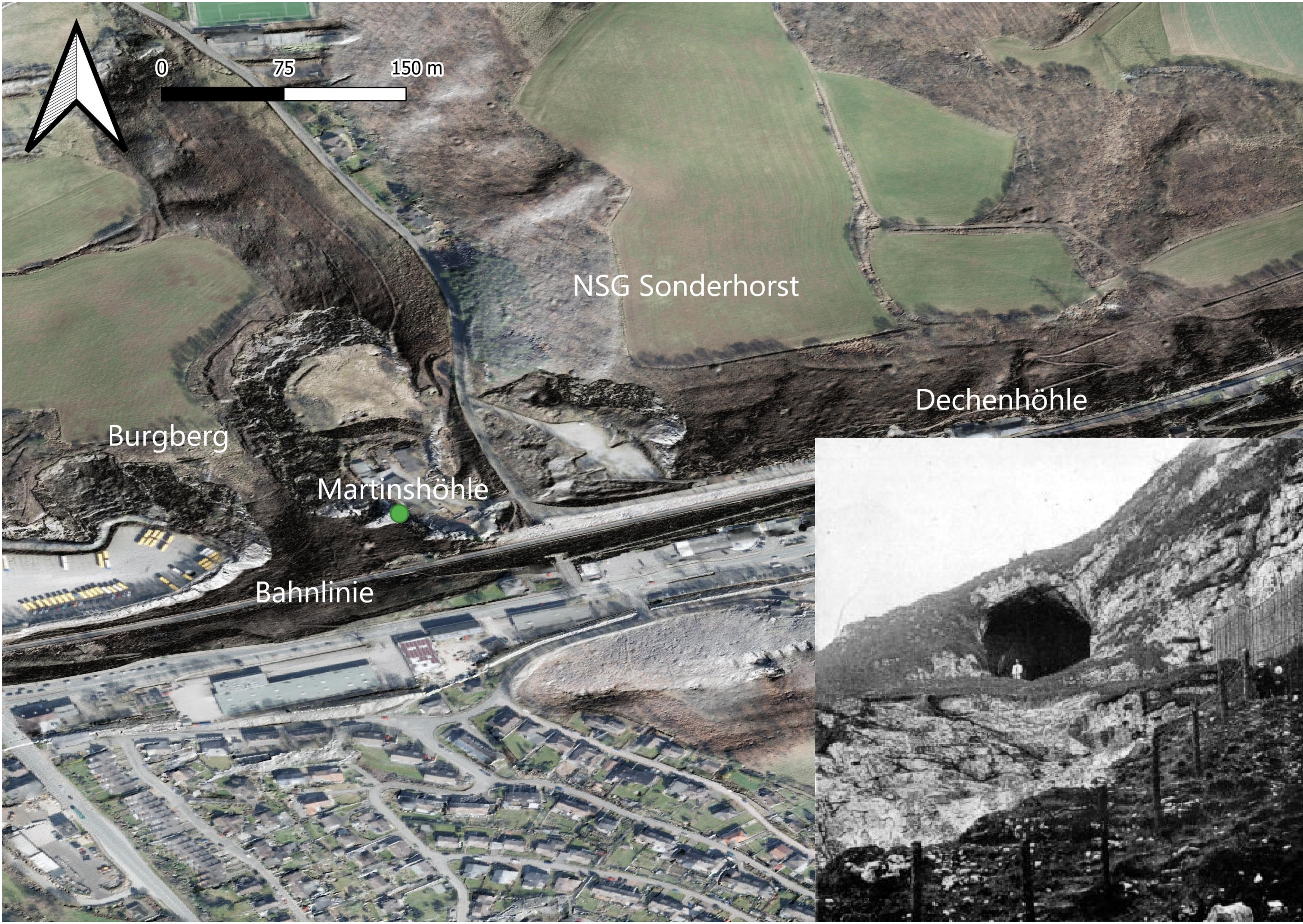


Fig. 1 Location of Martinshöhle at the Burgberg in Iserlohn-Letmathe, North Rhine-Westphalia (Germany) (Gumboldt 2021). The small picture shows the entrance of the Martinshöhle before the cave was destroyed during quarrying at the beginning of the twentieth century (Photo: Stadtarchiv Hagen).

Conclusion

Some of the artefacts made of Lydite and Quartzite such as a Levallois flake (Fig. 2, 3) and a scraper with Keilmesser-like morphology (Fig. 2, 3) (Weiss et al. 2018) can be assigned to the Late Middle Palaeolithic and show parallels to artefacts of the nearby cave site of Balver Höhle. The backed points (Fig. 2, 2) match with artefacts of the open-air site of Kettig, thus indicating the use of the Martinshöhle during the Allerød by members of the Federmesser groups. A fragment of a barbed point likely can also be assigned to this period (Fig. 3) (Baales et al. 2013). The Mesolithic is represented by some microliths, truncated blades, and three cores (Fig. 2, 1)

for the production of blades and bladelets. At least one large core of Baltic flint with a secondary to tertiary faceted striking platform (Fig. 2, 1) for the production of blades can be assigned to the Neolithic. Comparing these findings to the sparse stratigraphical observations available, it seems plausible to correlate the Neolithic and Mesolithic finds to the probably Holocene layer 1. Separated by a thin layer of sinter follows layer 2, which likely contained the Final Palaeolithic artefacts. The Late Middle Palaeolithic finds can then be correlated with the lowermost layer 3, which is in accord with Schaaffhausen's observations (Fig. 2).

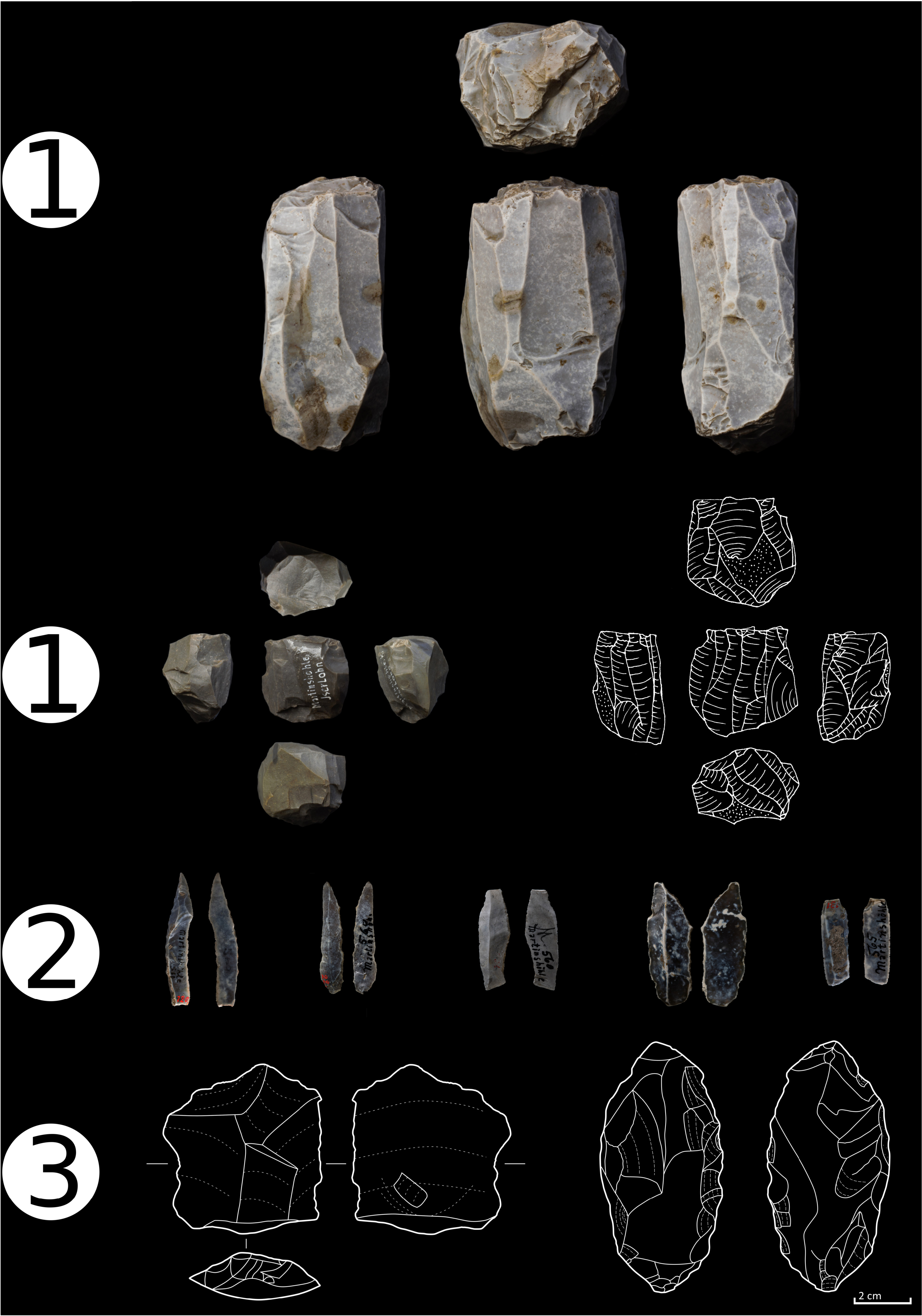


Fig. 2 Reconstructed stratigraphy based on Schaffhausen's explanations with lithic artefacts assigned by the authors.

1 – Humus with artefacts from the Neolithic and Mesolithic (e.g., cores of Baltic flint and Lydite). 2 – Clay with artefacts from the Final Palaeolithic (e.g., backed points out of Baltic flint). 3 – Yellow plastic clay with artefacts from the Late Middle Palaeolithic (e.g., a Levallois flake and scrapers). Between layer 1 and 2, there is a thin layer of sinter which could mark the Pleistocene-Holocene transition (Drawings and Photos: Gumboldt and Riemenschneider; Graphic: after Niggemann et al. 2018).

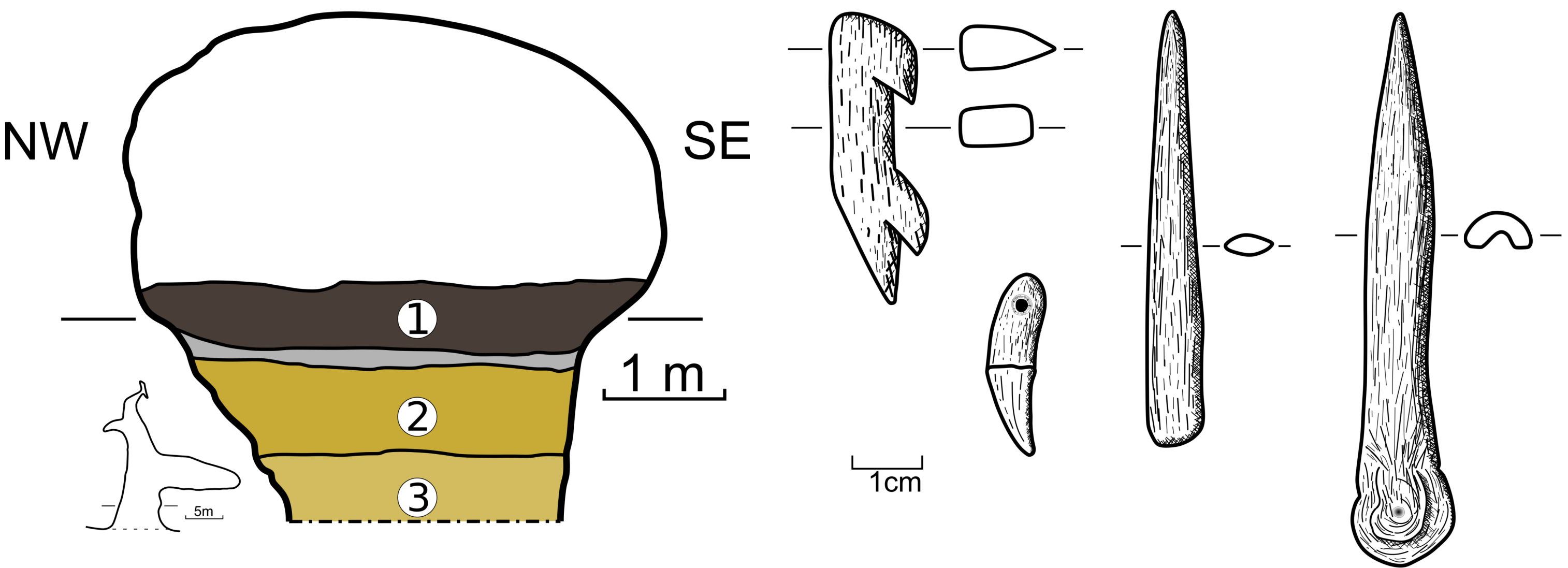


Fig. 3 Bone artefacts from Martinshöhle. From left to right: Fragment of a barbed point made of antler, perforated canine-tooth, pointed piece made of bone, awl made of bone (Drawing: Gumboldt).

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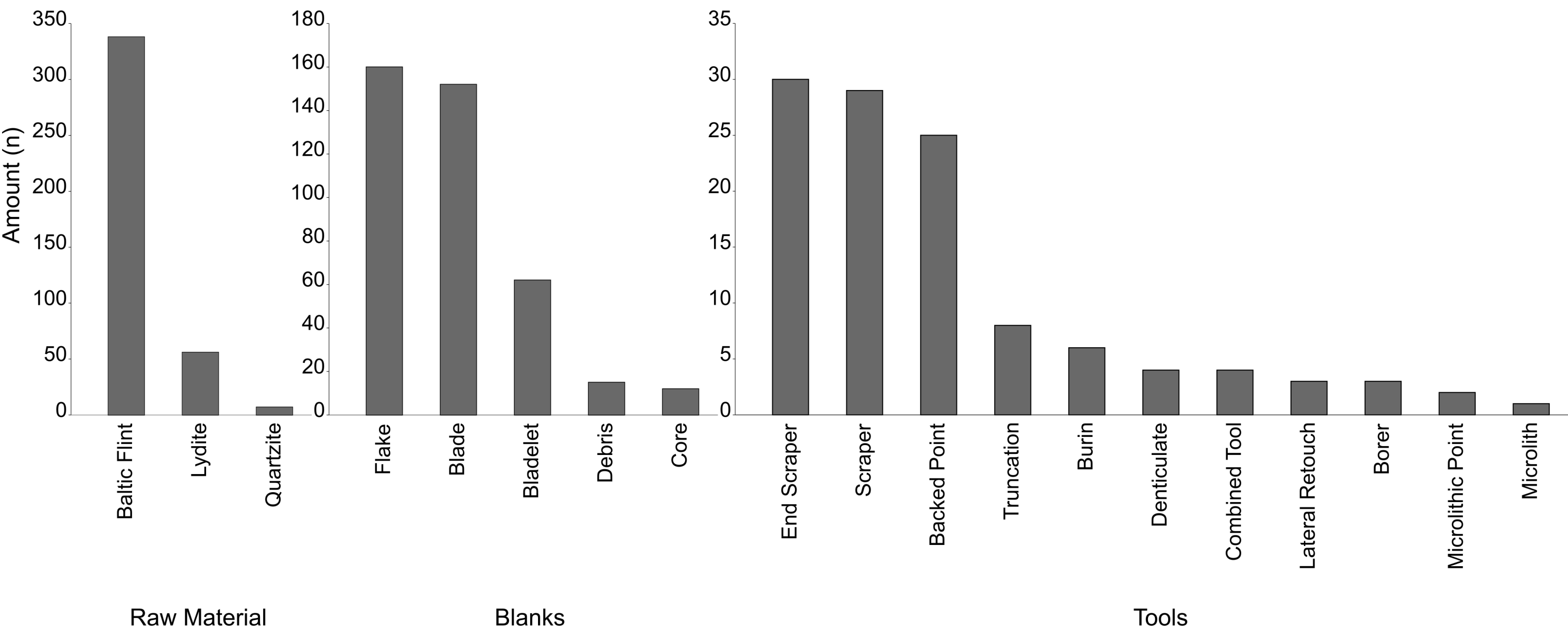
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Tab. 1 The lithic assemblage from the Martinshöhle by raw material, blanks, and tools. It consists of 401 artefacts in total, 115 of which are tools. The largest part of the assemblage (338) is made of Baltic flint which can be found some 50 kilometers to the north. 56 artefacts are made of local Lydite, and 7 artefacts are made of Quartzite which can be found in the Central Rhine Valley. Based on the lithic assemblage the aim of the blank production was the production of flakes (160) and blades (152). The largest part of the tools consists of end scrapers (30), scrapers (29), and backed points (25) (Gumboldt 2021 and Riemenschneider 2022).