

New Research on Eduard Peters' Excavations at Schafstall II Rockshelter in the Lauchert Valley of Southwest Germany

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Abstract: *As part of a plan to revitalize Paleolithic research in the Lauchert Valley, we present an initial description of the collections from Schafstall II Rockshelter. These collections originate from Eduard Peters' excavations in 1948. While detailed stratigraphic information is generally lacking, this paper reports the presence of 316 lithic artifacts as well as faunal material from Schafstall II. Although few diagnostic artifacts are present in the collections, the majority of the finds appear to originate from the use of the rockshelter during the Upper Paleolithic. These assemblages include refitting complexes of knapped Jurassic chert. Among these is a refit of one lithic artifact from Schafstall II with a find from nearby Nikolaus Cave. Such inter-site refits have been documented in Gravettian and Magdalenian occupations at sites in the Ach Valley but are extremely rare in archaeological contexts. The collections from Schafstall II contain a small split-based antler point, which documents the use of the rockshelter by Aurignacian groups. Additionally, the finds include human bones and a tooth that may belong to the Upper Paleolithic. Given the rarity of Paleolithic human skeletal remains from the Swabian Jura, future analyses of these finds could yield important new data on human population dynamics during the Late Pleistocene.*

Keywords: *Swabian Jura, Lauchert Valley, Upper Paleolithic, lithic artifacts, faunal remains*

Neue Forschungen zu den Ausgrabungen von Eduard Peters im Felsdach Schafstall II im Laucherttal in Südwestdeutschland

Zusammenfassung: Im Zuge eines Vorhabens, die Paläolithforschung im Laucherttal wiederzubeleben, legen wir eine erste Beschreibung der Funde aus dem Felsdach Schafstall II vor, die aus der Ausgrabung von Eduard Peters im Jahre 1948 stammen. Während detaillierte stratigraphische Angaben im Allgemeinen fehlen, können wir über das Vorhandensein von 316 Steinartefakten sowie von Faunresten aus der Fundstelle berichten. Obwohl sich unter den Funden nur wenige diagnostische Arte-

fakte befinden, scheint die Mehrzahl der Objekte auf die Nutzung des Felsdaches im Jungpaläolithikum zurückzugehen. Die Inventare beinhalten auch Zusammensetzungs Komplexe aus Jurahornstein. Unter ihnen ist die Zusammensetzung eines Steinartefaktes aus dem Schafstall II mit einem Artefakt aus der nahegelegenen Nikolaushöhle besonders zu nennen. Solche Zusammensetzungen zwischen Fundstellen kennen wir bereits für Fundstellen aus dem Gravettien und dem Magdalénien im Achtal, sie sind aber nach wie vor im archäologischen Befund äußerst selten. Die Funde aus dem Schafstall II umfassen auch eine kleine Geweihspitze mit gespaltener Basis, die auf die Nutzung des Felsdaches durch Menschengruppen im Aurignacien hinweist. Darüber hinaus beinhaltet das Inventar menschliche Knochen sowie einen Zahn, die möglicherweise in das Jungpaläolithikum gehören. Angesichts der Seltenheit paläolithischer Menschenreste von der Schwäbischen Alb könnten zukünftige Analysen dieser Funde wichtige neue Informationen zur menschlichen Siedlungsdynamik im Jungpleistozän liefern.

Schlagwörter: Schwäbische Alb, Laucherttal, Jungpaläolithikum, Steinartefakte, Faunenreste

Introduction

Paleolithic finds from the caves and rockshelters in the Lauchert Valley in Veringenstadt have been known since the first unsystematic excavations in Nikolaus Cave in 1862 by Carl Freiherr von Mayenfisch and prior to 1894 by Karl Theodor Zingeler. More importantly, in 1910, or possibly in 1909, researchers from the Geological Institute of the University of Tübingen, probably led by R. R. Schmidt, conducted excavations at least in Annakapellen Cave, Göpfelstein Cave, and Nikolaus Cave (Scheff 2004). Research at these sites intensified in the 1930s and 1940s under the direction of Eduard Peters (* 09 April 1869 in Halberstadt; † 21 May 1948 in Veringenstadt), a retired postal official. Despite a lack of formal training, Peters had considerable experience since he worked in the Geological Institute of the University of Freiburg (1925-1934) and in 1934 also worked as a volunteer in the State Heritage Office in Stuttgart, as well as serving as a volunteer responsible for archaeology in the region of Hohenzollern. Peters is best known for his excavation at the site named after him near Engen in Hegau, Petersfels (Peters 1930; Mauser 1970; Albrecht 1979).

In Veringenstadt, Peters conducted multiple seasons of excavations at Annakapellen Cave, Göpfelstein Cave, Nikolaus Cave, Schafstall I, and Schafstall II (Fig. 1), the latter site discovered in 1948 during excavations in neighboring Schafstall I. Peters published initial results from these excavations documenting important Middle and Upper Paleolithic find horizons with similarities to the more famous sites in the Ach and Lone valleys (Peters 1936, 1946; Peters and Rieth 1936; Peters and Paret 1949). The Lauchert Valley sites became the focus of Peters' late work, and despite his advanced age and the difficult circumstances during the war, he conducted excavations at Schafstall I, which he had started between 1935 and 1937, in 1943, 1944 and 1945. He continued his fieldwork after the war in 1946, 1947 and 1948. His surviving letters demonstrate that he was highly motivated to continue his research at the sites in Veringenstadt and to publish extensively on the topic. However, the events of World War II and its aftermath, and finally his death, brought his plans to an end.

Jürgen Scheff (2004) has published a detailed chronical of Eduard Peters' research in Veringenstadt highlighting this important work in the years between 1934 and Peters' death in 1948. This publication and a recent master's thesis from the University of Tübingen (Schumacher 2014) discuss Peters' work in depth and emphasize the devastating loss of most of the finds from Peters' excavations and all of the documentation in the confusion and looting following the end of World War II.

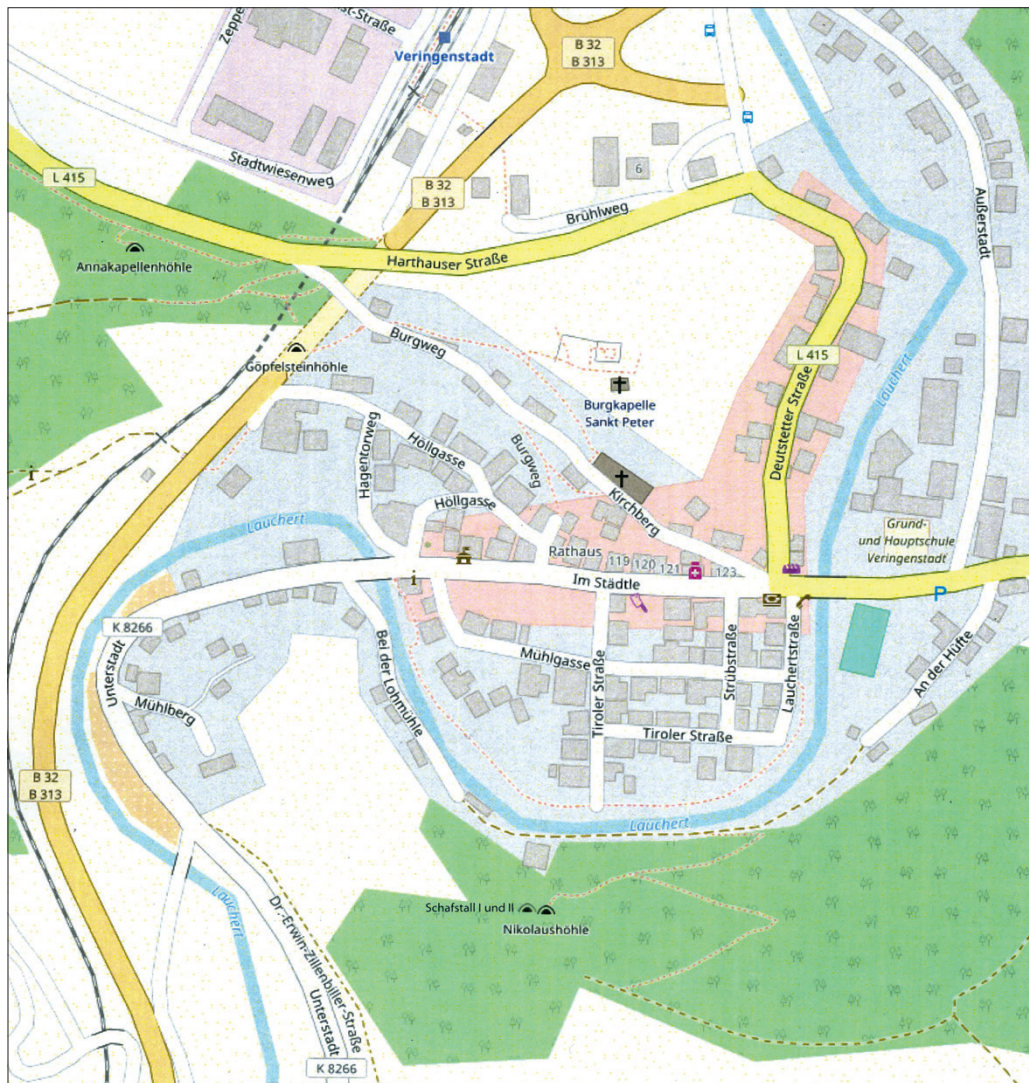


Fig. 1: Map of Veringenstadt with the Paleolithic sites of Nikolaus Cave (Nikolaushöhle), Schafstall I and II rockshelters, Göpfelstein Cave (Göpfelsteinhöhle) and Annakapellen Cave (Annakapellenhöhle). Map: © Open Streetmap (modified).

Thanks to his early publications on the topic, Peters' research in the Lauchert Valley was not forgotten, and other scholars emphasized the importance of the Veringenstadt sites. Bosinski cites Peters' research and illustrates Middle Paleolithic artifacts from Peters' excavations in Göpfelstein Cave and Schafstall I in his well-known monograph *Die mittelpaläolithischen Funde im westlichen Mitteleuropa* from 1967 (Bosinski 1967). A decade later, Joachim Hahn cited Peters' work and included the impressive finds from the Aurignacian of Göpfelstein Cave in his important monograph on this period (Hahn 1977).

While most of the finds and documentation from Peters' research in the Veringenstadt caves were lost in 1945, collections from these sites, especially from Peters' post-war excavations, are housed in Veringenstadt, at the University of Erlangen, at the Staatliches Museum für Naturkunde in Stuttgart (fauna), and elsewhere (Scheff 2004). Following World War II, Peters conducted a small excavation in Göpfelstein Cave in 1947, and continued excavations at Schafstall I in cooperation with Johann Riedinger and Helmut Müller. During fieldwork at Schafstall I, the rockshelter of Schafstall II was discovered in 1948, and a test trench was excavated. After Peters' death on May 22, 1948, systematic excavations in the Veringenstadt caves stopped, but Riedinger and Müller produced an unpublished report on the excavations at Schafstall I and II that provides much useful information. Florian Heller, who had collaborated with Peters, took some of the faunal remains from Schafstall II, Göpfelstein Cave and Nikolaus Cave to the University of Erlangen, where they are still housed in the collections of the Department of Pre- and Protohistory. Other finds, which are the focus of this preliminary report, remained in Veringenstadt.

The authors have examined these collections briefly in recent years, coming to the conclusion that they warrant more systematic study. The finds in Veringenstadt include materials from Göpfelstein Cave, Nikolaus Cave, and Schafstall I and II rockshelters. The documentation of the finds is incomplete, but many of them are labeled and can be attributed to specific sites and specific excavation seasons. This report, which reflects some of the results from a recent master's thesis (Schumacher 2014), represents a long overdue move toward a systematic study of the finds from caves and rockshelters of the Lauchert Valley near Veringenstadt. Since Riedinger labeled the finds from the 1948 excavations in Schafstall II, and since they seemed to be from a comparatively certain context, we decided to begin work on this material. These initial results suggest that we should move forward with our project to improve our knowledge of these sites, which have not enjoyed the attention that they deserve.

New excavations at Schafstall I starting in September 2016 will enable us to reinterpret part of the old excavations and possibly contribute to a better understanding of human occupation in this area throughout the Middle and Upper Paleolithic.

Schafstall II

Location

Schafstall I and II together form a long rockshelter within the limestone of the Weißer Jura ϵ about 25 meters above the base of the Lauchert Valley. The sites are located about 655 meters above sea level (see Luz 2004) and, due to the northern exposure, the rockshelters are in the shade most of the day. The sites are protected from the wind, rain and snow, but are not warmed by the sun. The two sites are distinctive parts of the same feature, with Schafstall I being more visible and also more completely excavated. In 1948 as the excavation proceeded further westward, the shelter of Schafstall II became recognizable and today it is not clear how far the second part of the rockshelter continues toward the west.

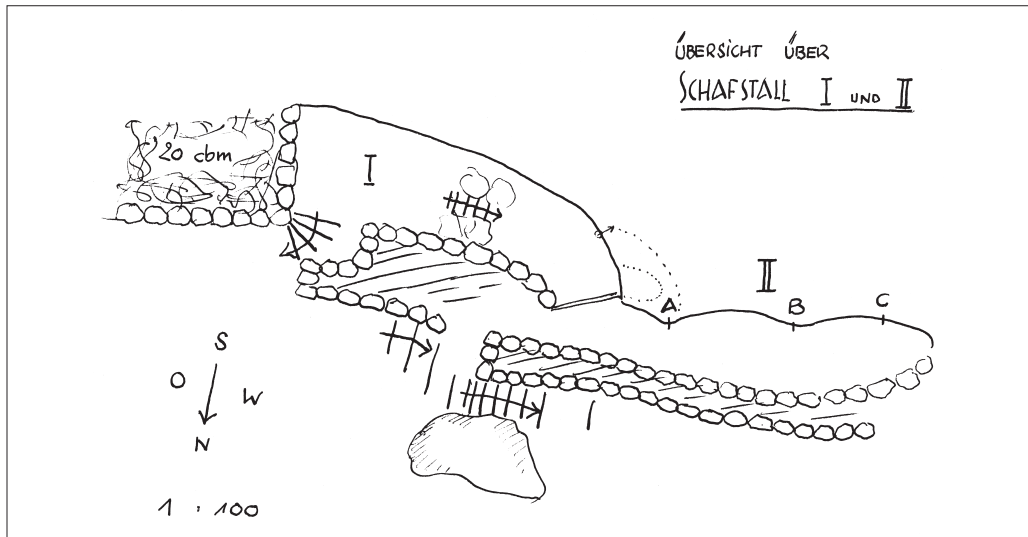


Fig. 2: Sketched map of Schafstall I and II taken by Johann Riedinger in 1948. Not to scale. Original in Heimatmuseum Veringenstadt.



Fig. 3: Schafstall (right) and Nikolaus Cave (immediately to the left) seen from Göpfelstein Cave. After Peters and Paret 1949.

Figure 2 depicts the situation as documented by Riedinger during the 1948 excavation. Schafstall is on the territory of Veringenstadt and some 250 meters from the center of town, which is located on a sharp bend in the river. Schafstall is only about 50 meters west of Nikolaus Cave, the largest cave along this part of the Lauchert, and across the river from Göpfelstein Cave, which is the best known of the archaeological caves in Veringenstadt (Fig. 1, Fig. 3).

Schafstall I is 36 m long, up to 5 m high and extends nearly 10 m into the limestone cliff (Luz 2004). Today the eastern part of the site is filled by a carefully stacked wall of limestone made by Peters' team as a way of containing the backfill from the excavation. In 1948 workers exposed and partially excavated Schafstall II. Peters argued that the rockshelter was part of a collapsed cave (Peters 1936, 177-178), but he died during the last year of excavation and, as far as we are aware, between then and the planned dig in 2016 under Conard's direction no work was conducted at the site.

Stratigraphy

Unlike all the other digs in caves of Veringenstadt, the fieldwork at Schafstall II from February 28 until May 19, 1948, is the only excavation for which an excavation report exists. Peters' crew members Johann Riedinger and Helmut Müller produced the report following Peters' death. Jürgen Scheff published the key elements of the report in his review of Peters' research in the Lauchert Valley in 2004 (Scheff 2004), and in 2014 Markus Schumacher submitted his master's thesis on the prehistory of Schafstall II to the University of Tübingen (Schumacher 2014). Much of the background to this review comes from these two sources. Recently, Giulia Toniato has begun a doctoral dissertation on the Paleolithic finds from Veringenstadt and is focusing her research on zooarchaeological questions.

During the 1948 season Peters' team excavated a ca. 5 meter long test trench along the back wall of Schafstall II. This work yielded little beyond specimens of microfauna. The excavators then started to dig deeper into the sediments at a spot labeled "A" (see Fig. 2). At a depth of 1.8 meters the crew came upon an 80 cm thick deposit rich in fauna, which was dominated by the remains of cave bear. Based on what we know today, cave bears went extinct in the Swabian Jura during the cooling leading up to the Last Glacial Maximum (Hofreiter et al. 2007; Münzel et al. 2007). This test trench also yielded a core and five chipped stone tools from a deposit that Peters called the "*schwarze Kulturschicht*" or the black cultural layer. The report suggests that the black layer, which was 4–5 cm thick, was rich in burnt bone, teeth, bone fragments, lithic artifacts and small debitage. From this spot labeled "A" on the sketch of the excavation, the crew cut a 12 m long and 1.0–1.2 m wide trench along the rear of the rockshelter which is clearly visible today and which ends at a spot labeled with the letter "C" in the documentation from Schafstall (Fig. 2, Fig. 4: *Schnitt C*). At a depth of ca. 30 cm, in a black deposit rich in cobbles, the crew recovered pottery and a Neolithic stone axe. At a depth of about 1.1 m Riedinger's sketch notes the presence of a 0.9 m thick layer of limestone debris which is supposed to be of Pleistocene age. No finds were reported in this context ("*Eiszeitliches Geröll. ohne Funde*"). At a depth of 2.8 m the excavators encountered a yellow-brown *Kulturschicht* that became darker with increasing depth (labeled with the number 5 as "*Dunkle Kulturschicht*" in the profile sketch). Bones from cave bear were well-represented in this

deposit. Again at spot C, near the base of the excavation, the crew encountered the 5 cm black cultural layer described above from point A in the test trench (Fig. 2). When one compares Riedinger's profile drawing with Peters' notes, one finds some inconsistencies that likely relate to the confused and difficult working conditions in the aftermath of Peters' sudden death. Thanks to preserved sketches of 29 artifacts made by Peters or another member of the team, it appears that the artifact described as a core in the report likely came from spot C and not from spot A. Furthermore, the *Schwarze Kulturschicht*, which is labeled with the number 6 on the profile drawing of spot C (Fig. 4), has a thickness of 30 cm. This thickness corresponds to the distance between the bone-bearing layer and the 4–5 cm thick black cultural deposit (*Schwarze Kulturschicht*).

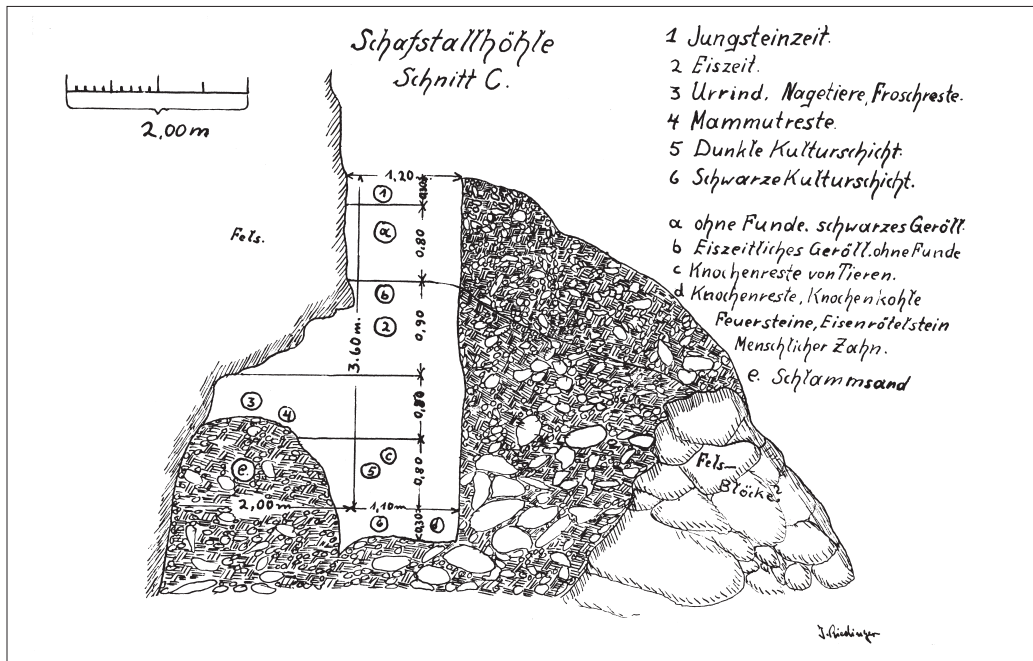


Fig. 4: Schafstall II. Profile drawn by Johann Riedinger at spot C of the excavated trench (see Fig. 2). Original in Heimatmuseum Veringerstadt.

Another inconsistency is that Riedinger's sketch shows the finds from the trench as not being in the "Dunkle Kulturschicht," but rather from deeper in the profile where the black cultural deposit (*Schwarze Kulturschicht*) should be located. More specifically, the report states: "In der dunkelbraunen Schicht fanden sich Feuersteine, Absplisse, Knochenreste, Knochenkohlen, Eisenrötstein, ein vermutlich menschlicher Zahn und ein sehr schweres Stück 8 cm lang und 3 cm im Durchmesser von vielleicht metallartigem Charakter [sic!]." No finds from the black find horizon in the area of spot C are mentioned in the report. Thus at the end of the day, the documentation is unclear. The finds could come from the yellow-dark-brown horizon with bones of large mammals including cave bear. Presumably the dark-brown horizon refers to the lower part of this unit. Alternatively, the finds could originate from the underlying black cultural deposit, or from both layers.

Although the documentation is not clear, if we can believe the report, there must be at least two find horizons (*Kulturschichten*) underlying the *Geröllschicht*, which probably refers to a layer of limestone rubble from the wall and ceiling of the rockshelter. Given the mention of cave bear bones, the Paleolithic finds likely date to the Gravettian or earlier.

Riedinger's report also contains other puzzling remarks. He writes that the overall length of the excavation at Schafstall II extended over 12 m and had a width of 1.2 to 1.4 m. He remarks that a red-brown rocky layer was reached by the middle of May, 1948, which facilitated excavation of the find horizon ("*...bis Mitte Mai bis auf die rötlich-braune Gerölleinfärbung abgetragen worden, damit die Kulturschicht nunmehr flächenmässig durchgearbeitet werden konnte*"). Oddly, up to this point no red-brown rocky layer had been mentioned in the report. Also the profile makes no mention of such a deposit.

Turning to the artifacts, four of the total of 29 finds for which sketches drawn by Peters or another team member exist (see above) are indicated to have come from "*Fundort: A - B (Stollen)*". Four other finds are specified to have come from test excavation near A in the upper western corner of Schafstall I ("*Fundort: Probegrabung bei A. von Scha I aus obere westl. Ecke*"). The remaining 21 finds are simply labeled find spot C ("*Fundort: C*"). Nearly 300 finds lack all reference to a layer or area where they were recovered; we simply know that they are from Schafstall II. Fortunately, the finds are labeled with the abbreviation "*Sch II*," so we can be sure that they actually do originate from the site. Interestingly, while all sketched artifacts are labeled in red ink ("*Kennzeichen: rote Tusche Scha II*"), the other finds are labeled with blue ink. Most of these finds are labeled "*Sch II*," but a few are labeled "*Sch IIa*," which presumably refers to spot A (see Fig. 2) or layer "a" in the profile drawing (Fig. 4). For what it is worth, these finds all show an "h" with a characteristic swing to the end of the "h." This is also true of the "h" on the profile drawing, which suggests that this is Riedinger's handwriting. The finds from the other sites show a different slope and an "h" lacking the characteristic swing. These finds are labeled using black ink and are thought to have been labeled by Peters himself. Although the documentation from Schafstall II contains a number of inconsistencies, the labeled finds from the site show a high level of coherence that indicate that the finds do indeed come from the site.

The only radiocarbon date from Schafstall II is an age of 23,870 +/- 310 B.P., measured at ETH Zürich on charred bone (ETH-32914). Suggested by a very short report and an invoice sent to the mayor's office of Veringenstadt in 2007, this date comes from a sample procured by Wilfried Rosendahl. The date is mentioned in an unpublished manuscript by Thomas Rathgeber from July 9, 2009 (Rathgeber 2009; cited after Götze 2011), a copy of which can be found at the town hall in Veringenstadt. Both Jörg Götze (2011) and Markus Schumacher (2014) cite this date, though only approximately, in their master's theses.

Lithic artifacts

The lithic assemblage from the 1948 excavation at Schafstall II contains a total of 316 artifacts, of which 82 are larger or equal to 10 mm in maximum dimension and 234 are small artifacts below 10 mm in size. As far as the blanks are concerned, the larger

artifacts include 3 cores, 7 pieces of angular debris, 60 flakes and 12 blades. Among these larger artifacts, 14 retouched tools could be identified.

The lithic artifacts were knapped almost exclusively from Jurassic chert with little variation in its features. Schumacher (2014, 31), however, notes that the specific source of the raw material is unknown. The patinated chert has a whitish gray color, while the fresh chert, as can be seen in the cases of finds bearing recent damage, has a grayish black color. Peters' documentation describes three additional pieces of a different chert raw material, which he associated with Schafstall I.

Schumacher stresses that the assemblage is of very homogeneous raw material that is typical for Schafstall II, while the other sites in Veringenstadt have often yielded artifacts of more diverse raw materials.

Among the cores is a small waste core with multiple reduction surfaces and striking platforms. The other two cores are unidirectional platform cores with negatives from the removal of blades.

Of the 60 flakes >10 mm, six belong to a refitting sequence from the preparation phase of an Upper Paleolithic core (Schumacher 2014, 37-38, 88-89; Fig. 33-36). The presence of refitting sequences in the assemblage suggests that some of the finds are from coherent archaeological contexts. The 12 blades from Schafstall II preserve unidirectional negatives, and the striking platforms show signs of preparation and abrasion. Several of the blades have cortical surfaces suggesting that they were removed early in the reduction sequence. Some of the artifacts have damaged edges as a consequence of cryoturbation or other forms of post-depositional movement (Schumacher 2014).

The assemblage contains 14 intentionally retouched tools including: 4 endscrapers, 3 splintered pieces, 3 laterally retouched blades, one truncated blade, one burin, one side scraper and one flake with a retouched edge (Fig. 5, Fig. 6). Another endscraper illustrated by Riedinger could not be located. In contrast to Göpfelstein Cave, typical Aurignacian tools such as carinated scrapers, carinated and busked burins are lacking in the assemblage. Although the sediments from Schafstall II are claimed to have been waterscreened, in contrast to the nearby site of Göpfelstein Cave where waterscreening was also employed, no bladelets are present in the small collection of lithic artifacts from Schafstall II. This observation is consistent with the lack of bladelet cores and carinated scrapers and burins at Schafstall II.

The cultural stratigraphic position of Schafstall II is not entirely clear, but a number of arguments suggest that many of the finds belong to the early Upper Paleolithic. We know from work at Göpfelstein and Schafstall I that the Lauchert Valley was occupied during the Middle Paleolithic and Aurignacian. The presence of cave bear bones in the faunal assemblage from Schafstall II points to an age prior to the Last Glacial Maximum, since this species is not known to postdate the Gravettian in southwestern Germany. Joachim Hahn (1977, 96) never studied the artifacts from Schafstall I, but he argued that the lithic artifacts from the immediately adjacent site of Schafstall II are mainly of non-specific Upper Paleolithic character. Schumacher (2014) describes the core reduction at Schafstall II as being mainly characterized by unidirectional blade production, which he, following Hahn (1988) and Teyssandier (2007), associates with the Aurignacian. More recent work, most notably at Hohle Fels, has shown that technology of the

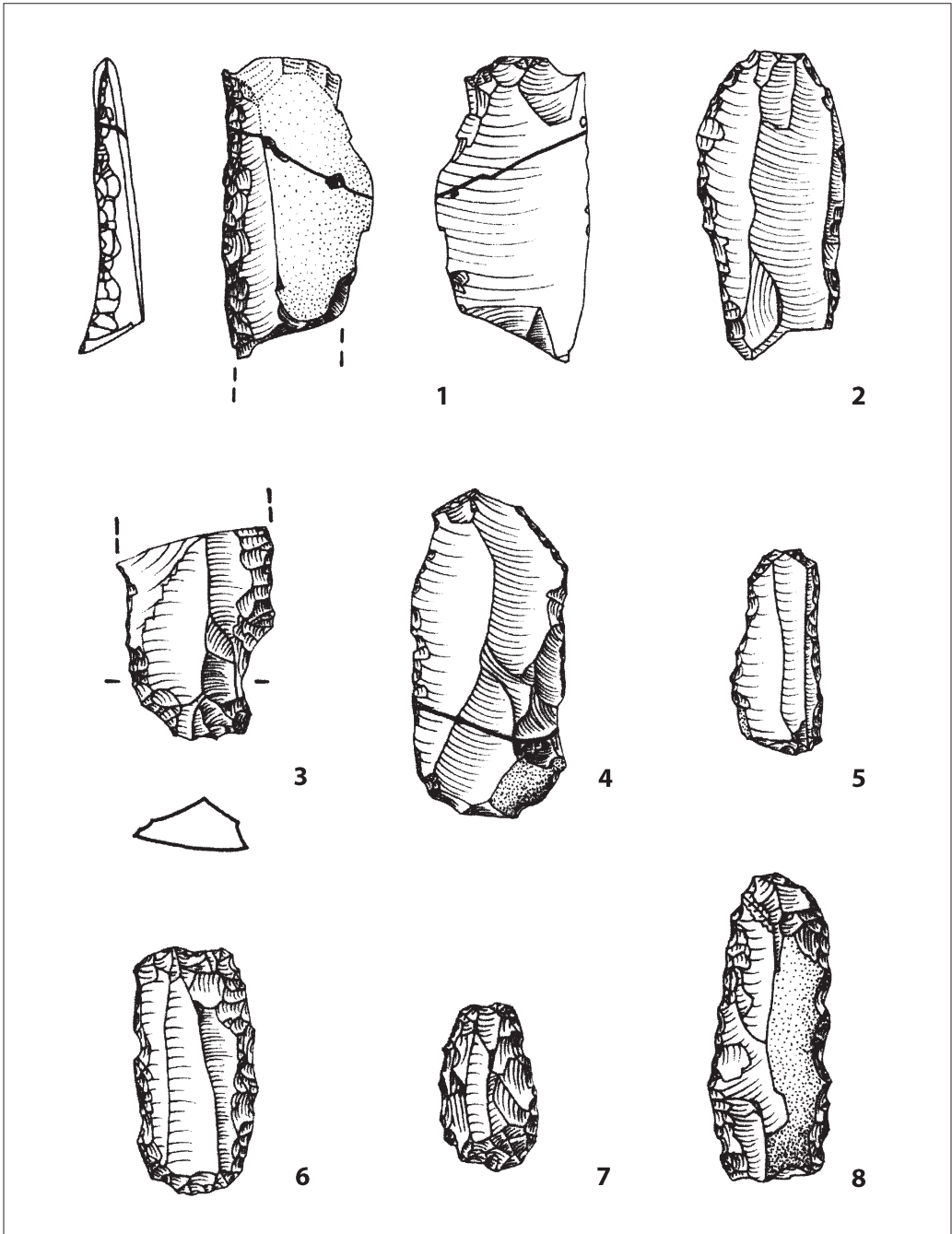


Fig. 5: Schafstall II. Tools. 1-2, 8 laterally retouched blades; 3, fragment of a laterally retouched endscraper; 4 truncated blade, 5 double endscraper, 6-7 splintered pieces. Length of no. 4: 4.8 cm. Modified after Schumacher 2004.

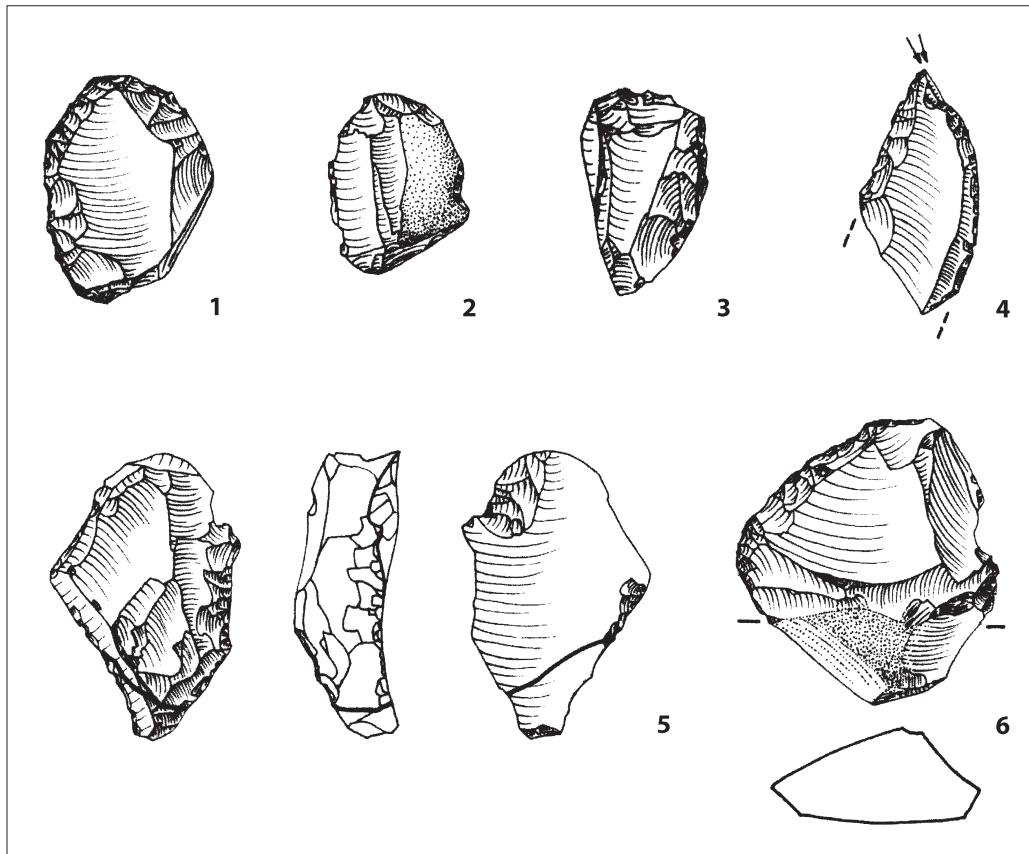


Fig. 6: Schafstall II. Tools. 1 endscraper, 2 endscraper-like tool, 3 splintered piece, 4 burin, 5 laterally retouched flake, 6 sidescraper. Length of no. 5: 4.2 cm. Modified after Schumacher 2004.

Swabian Aurignacian includes diverse forms of blade production on both the wide and narrow faces of cores, and that both unidirectional and bidirectional reduction is represented during the Aurignacian (Conard et al. 2014). Furthermore, new studies have documented additional forms of lithic variability during the Swabian Aurignacian (Bataille and Conard 2016). Until improved chronostratigraphic information from Schafstall II is available, we recommend exercising caution in making cultural assessments based on the lithic artifacts alone. As we will see below, the strongest argument for dating the Schafstall II comes from one split-based bone point, which clearly documents an Aurignacian phase of occupation.

An inter-site refit

While the specific lithic raw material from Schafstall II hardly finds any parallels in the other Veringenstadt caves, a remarkable exception is the presence of the Schafstall II Jurassic chert from nearby Nikolaus Cave. This site is located only ca. 50 meters east of Schafstall I, and we are only aware of a total of six artifacts from Nikolaus Cave, since

most of the archaeological finds have been missing since 1945. These six artifacts as well as finds from other localities such as Göpfelstein Cave were collected from the surface by an amateur, Franz Werz, who labeled each find with the name of the site where it was found and the year. Eventually these finds from sites around Veringenstadt were deposited in the collections housed and curated by the city. No artifacts from Schafstall II count among these finds, and every artifact known from Schafstall II can unambiguously be linked to Peters' excavation from 1948. Three of the chert artifacts from Nikolaus Cave are of the typical material knapped in Schafstall II, and Schumacher (2014, 66) was able to refit one of these three artifacts directly with a battered piece of angular debris from Schafstall II (Fig. 7). Both artifacts have distinctive features within the raw material itself that confirms the validity of the refit, and both artifacts are clearly labeled. The find from Nikolaus Cave was collected by Werz in 1956. Given that even very small artifacts from Schafstall II are clearly labeled, there is no reason to think that the refitting find from Nikolaus Cave might originate from Schafstall.



Fig. 7: Inter-site refit of two artifact fragments connecting Schafstall II (upper part of the refit) and Nikolaus Cave (lower part of the refit). Photo: Maria Malina.

This refit documents that the inhabitants of Schafstall II occasionally used Nikolaus Cave, but without more contextual information from both sites, there is little that can be said about the specific nature of the occupations of these caves. Nonetheless, the inter-site refit is an important third example of this phenomenon in the region and augments the famous Gravettian lithic refits connecting Hohle Fels, Geißenklösterle, Sirgenstein and Brillenhöhle in the Ach Valley (Scheer 1986, 1990; Moreau 2009). Similarly, recent work by T. Hess (2016) has identified a refit linking Magdalenian artifacts from Hohle Fels and Helga Abri, which is located a short distance around the corner and upslope from the entrance of Hohle Fels.

Bone artifact

Although detailed conclusions about the faunal remains from Schafstall II need to await Giulia Toniato's ongoing research, Schumacher (2014, 60) was able to identify a new example of a split-based point, which was likely made from reindeer antler (Fig. 8)

and for which a drawing made by Riedinger in 1948 exists. The artifact has a cross-section with a flat, oval shape. The tip and the base have been damaged through use and perhaps post-depositionally. Although the sizes of split-base points in southwest Germany vary considerably (Riek 1934; Albrecht et al. 1972; Hahn 1977; Dotzel 2011), the point from Schafstall II fits well within the documented range and would not be out of place within the largest collection from the region at Vogelherd. Peters' excavations at Göpfelstein Cave produced a number of pointed antler and bone artifacts associated with Aurignacian lithic artifacts, but none of them is an unambiguous example of a split-based point.



Fig. 8: Schafstall II. Three views of the antler point with split base. Photo: Maria Malina.

This find further documents that early modern humans of the Aurignacian inhabited the Lauchert Valley, and is in keeping with the well-established presence of Aurignacian deposits at Göpfelstein (Hahn 1977). As with the lithic artifacts, controlled excavations using modern techniques are needed at Schafstall II to improve our understanding of the archaeology of the site and to find out if the finds from the site reflect a single phase of occupation.

Human Remains

The study of the faunal material from Schafstall II also led to the identification of additional human skeletal remains that might date to the Late Pleistocene, and perhaps the early Upper Paleolithic. Bernd Trautmann and Hannes Napierala of the Institute of Archaeological Sciences in Tübingen confirmed the identifications of finds within the context of Schumacher's work on his master's thesis.

One certain find is a permanent lower right incisor (Fig. 9a). This is probably the same tooth that Riedinger mentions in his excavation report. The find is labeled *Sch II* in red ink. Based on the profile description in the excavation report, the tooth likely comes from the lowermost find horizon near the base of the excavation (see Fig. 4). The field report also mentions a piece of hematite (*Eisenrötelstein*) from this layer that is also still among the finds housed in Veringenstadt. This find is also labeled *Sch II* in red ink. If we take Riedinger's description at face value, the tooth should come from the area of spot C, but as described above, the documentation also contains a number of contradictions.

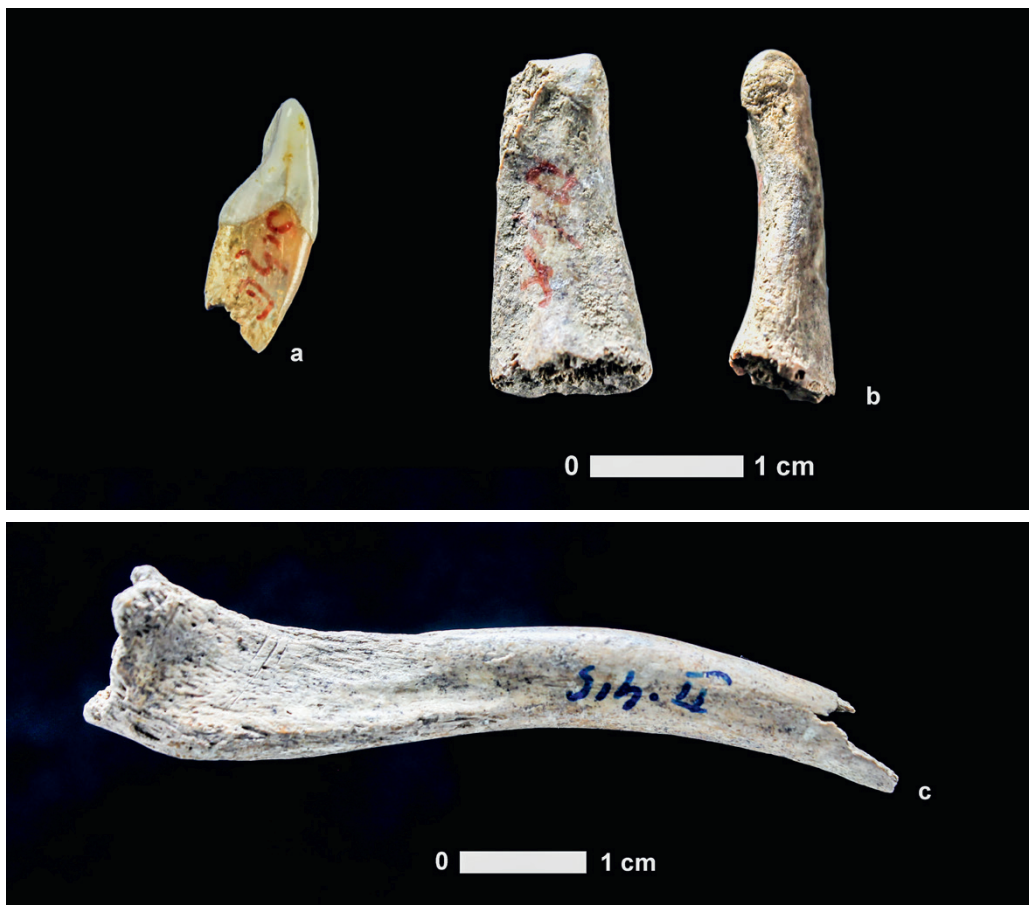


Fig. 9: Schafstall II. Human remains. a incisor; b phalange; c clavicle with cutmarks. Photo: Maria Malina.

Another human skeletal find is a clavicle belonging to an infant of class 2 in Martin's (1928) system of recording, which corresponds to an age between 7 and 13 years (Fig. 9c). The bone, labeled in blue ink, preserves several deep, well-defined cutmarks that are not from the excavation and are likely related to the handling of the corpse and perhaps butchering or dismembering. A detailed taphonomic study of the clavicle and the other skeletal remains may provide further information with relevance to the ongoing debate on the nature of funerary practices during the Late Pleistocene of southwestern Germany (Gieseler and Czarnetzki 1973; Orschiedt 1999; Sala and Conard 2016), although the state of preservation casts some doubt on the Paleolithic age of the clavicle.

Finally, a middle phalange of a juvenile, labeled in red ink, appears to be another human skeletal find (Fig. 9b), although its incomplete preservation and missing proximal articular surface makes the identification not entirely secure. In contrast to the incisor which was identified in 1948, the other two remains are new identifications that raise the prospects of further skeletal remains being present among the fauna from Schafstall II. Based on the many successful studies of stable isotopes and ancient DNA from the caves of the Swabian Jura (Bocherens et al. 2011; Posth et al. 2016), we are hopeful that these finds may yield additional information about the lives and deaths of the Paleolithic occupants of the Lauchert Valley.

Faunal material

Analyses of the faunal material from the Lauchert Valley sites have just begun in the context of a doctoral thesis authored by Giulia Toniato. Previous work by Peters (1936, 190-194) and Rathgeber (2004) have not discussed the fauna from Schafstall II, and as far as we are aware Toniato's work will be the first systematic research on the topic. Previous studies have focused on taxonomic lists and paleontological analysis, and much work remains to be done on the zooarchaeology of the Veringenstadt sites.

Conclusions

This paper presents some initial results on the study of Schafstall II. We view the paper and the master's thesis by Markus Schumacher (2014) as long overdue impulses to help initiate a new phase of research on the Paleolithic prehistory of the Lauchert Valley. More specifically, we undertook this study to prepare the way for future fieldwork that will begin in the fall of 2016, which we hope will be just the beginning of a new period of active fieldwork and research at Veringenstadt. Given the exceptional discoveries in recent decades in the Ach and Lone valleys, we are cautiously optimistic that research in the Lauchert Valley will yield similar results. Scholars have long known that this valley contains a wealth of evidence about the life ways, subsistence, technology and settlement dynamics of Neanderthals and early modern humans. This is exemplified by the statue of a Neanderthal erected in 1965 on the bridge over the Lauchert in Veringenstadt. This statue is based on a three-dimensional reconstruction by Adolf Rieth and was crafted by the sculptor Eduard Raach-Döttinger. Unfortunately, since Peters' death in 1948, precious little research has been conducted in Veringenstadt. At present we are not reliably able to assess whether new research will lead to important results, but this preliminary study has motivated us to move forward with research, and in future years we hope to make additional contributions to the Paleolithic prehistory of the Lauchert Valley.

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