Lighting devices from the so-called Episcopal Church from the Kirchbichl in Lavant (Lienz, Austria)

Svetila iz tako imenovane škofijske cerkve na Kirchbichlu nad Lavantom (Lienz, Avstrija)

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Izvleček


Ključne besede: Avstrija; Vzhodna Tirolska; pozna antika; zgodnjekrščanska cerkev; svetila

Abstract

The Early Christian churches of the Late Antique hilltop settlement in Lavant (Lienz, Austria) have been investigated for almost a century. In recent years (2017–2021), a large conservation campaign took place within the ruins of the so-called Episcopal Church. During this campaign, it was possible to carry out targeted excavations inside the Early Christian church to understand the consecutive building phases and their dating better. In addition to new insights into the history of the building, several new finds also came from these excavation campaigns, providing further information about the church’s interior. In the following, all objects associated with lighting are presented.

Keywords: Austria; Eastern Tyrol; Late Antiquity; Early Christian Church; Lighting Devices

The late antique hilltop settlement on the Kirchbichl in Lavant, which has been excavated since the 1950s, consists of several residential buildings and two churches (Fig. 1). One Early Christian church was found in the 1990s during renovation work in the baroque church of St. Ulrich.1 A comprehensive analysis of the excavation results on the settlement’s residential area was published in 2011.2 However, a full analysis of the excavations in the so-called Episcopal Church that took place from the 1950s3 until the 1980s4 has yet to be written.

2 Kainrath 2011.
3 Miltner 1950; Miltner 1953; Miltner 1954; Miltner 1956–58.
Due to the long history of excavations of the Episcopal Church and the hilltop settlement, several problems in their proper study exist. In addition to backfilled trenches and often misleading restorations of some walls, many archived objects lack proper stratigraphic information. Some of the older small finds are missing, and many of the remaining ones that have been published can only be associated with a building (or building complex) but not with a specific layer or stratigraphic unit. Thus, the individual buildings, including the church, can only be roughly dated, and a chronological classification of the individual construction phases is not possible. To address this desideratum, additional excavations were carried out in and around the so-called Episcopal Church between 2017 and 2022 by the University of Innsbruck under the direction of Martin Auer.

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5 Kainrath 2011; Rodriguez-Mattel 1986a; Rodriguez-Mattel 1986b.

6 A detailed evaluation of the excavations is still in progress (principal investigator: Martin Auer, Institute of Archaeologies, University of Innsbruck).
This was possible because the walls of the church, which is accessible as an open-air museum, were badly damaged, and restoration work was needed, resulting in a major combined research and restoration project. The scientific goal was to confirm or disprove previously published thoughts on the phases of the church, its layout and its dating that have, until now, lacked adequate archaeological evidence. In addition, new finds from a reliable stratigraphic context were expected to provide information for more precise dating. It was possible to correct the proposed reconstructions of the church and to distinguish four building phases

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7 Project partners: Federal Monuments Authority Austria (BDA), Federal State of Tyrol, Municipality Lavant and the University of Innsbruck.

8 This lack of evidence has already been addressed: Sydow 2001, 42.

9 For example: Ubl 1982, 310–311; Alzinger 1985, 114–115; Glaser 2003, Fig. 9.
(Fig. 2) as well as the remains of a dry-stone wall dating to the late Iron Age. In its first phase, the church closed off to the east with a straight wall and a small extension to the southeast, which contained a tomb that most likely belonged to the founder of the church. In the second phase, an apse was added in the east, and the sacristy was built. It can be assumed that the apse formed the first memorial chapel, which is indicated by the raised floor level. The third phase brought a substantial redesign of the church: the priest’s bench and the presbytery were extended to the west, and the altar was also resituated. A memorial church was added in the east; therefore, the apse was removed, and the founders’ grave was reduced to a stone sarcophagus. The memorial church was accessible via steps from the main church, and the former eastern wall disappeared under the new floor of the Memoria. In its last building phase, the church complex was monumentalised. The remodelling brings substantial enlargements of the main church’s presbytery and the priest’s bench. The former rectangular ambo was replaced by a round one further west. The extensive use of large marble blocks can be observed in this phase; most of them can be identified as Roman spoila.

However, the narthex and the three rooms of the baptistery in the west cannot be clearly related to a specific construction phase. A disused heating system, including a praefurnium underneath the floors of the baptistery and the narthex, suggests that parts of a residential building were integrated into the church. The baptistery itself was also monumentalised in its last phase, including marble columns. Due to new finds, including several coins dating to the 2nd half of the 4th century, from the levelling layers underneath the church, it was possible to establish a terminus post quem for the first building phase dating to the end of the 4th or beginning of the 5th century AD. Among the new finds were some objects connected to the church’s lighting, including an almost complete copper alloy polyangistron, which form the starting point of this paper (Fig. 3). Most of them were found in undisturbed layers and, therefore, can be assigned to a specific area inside the church: The polyangistron itself was found underneath the youngest floor, right next the ambo suggesting its use in during the third phase. A few additional finds are included that come from older excavation trenches inside or around the presbytery. Since these were backfilled with the same material that was inside before, these objects can also be roughly located; however, their stratigraphic context is lost. In the following, the individual objects are presented, and some considerations are made about the illumination of the church.

The Polyangistron with its pendants (Fig. 3)

In the immediate vicinity of the ambo, a polyangistron, a three-armed chain suspension for hanging lamps made of non-ferrous metal, was discovered on the burned clay floor of the church. The chain suspension was found together with three pendants that belonged to the same artefact. All objects had a thick and hard corroded crust that was interspersed with charcoal. The original surface was in bad condition, marked by pitting corrosion. In some parts, it was completely destroyed, showing red cuprite layers. The heterogeneous patina, as well as the overall poor condition of the metal, indicate a strong exposure to fire. This is consistent with the find context, which is characterised by a burned layer with much charcoal.

This suspension (Fig. 3a) consists of three separate chains connected with a ring. The ring (24 mm in diameter) is formed from a wire (round cross-section with approx. 2 mm in diameter) by twisting the two ends crosswise and then wrapping each end once around the wire itself. Each chain consists of several (nine, ten, and eleven) chain links with a long hook attached to the lower end. The links are S-shaped, but in some cases, one part is bent by 90 or sometimes 180 degrees, forming more of a B-shape. They vary not only in their form but also in their technical execution: wires with a round cross-section or a square cross-section, as well as flat hammered wires with an oblong or slightly oval cross-section, were used for the chain links. There is no recognisable system either in the arrangement of the different shapes (S or B) or in the use of the varying wires. The chains are formed by connecting the upper hoop of one chain link with the lower hoop of the next one. The hooks

10 The following description forms a rough summary of the primarily results that will be published soon by Martin Auer.
11 Miltner 1953, 80–81.
12 A reexamination of the marble blocks, which provides new insights in their origin and dating is in preparation by Lucia C. Formato.
13 The detailed analysis of the findings will be published soon by Julia E. Rabitsch.
which are attached to the last link are fabricated out of a flat hammered wire with a rectangular cross-section. The different wires, as well as the varying execution, give the impression that scrap material was (re)used for manufacturing the chains.

A fourth chain (Fig. 3b) was found in close proximity. The size and material of this chain links correspond to those described above; only the structure of the chain differs: in every second link, the eyelets were not hooked loop in loop,
but the loop was wrapped around the crossing point of the previous double eyelet. As a result, the chain has increased in stiffness and stability, which is needed for carrying a heavier weight. This fourth chain was most likely part of the aforementioned chain suspension used for hanging the whole device. This assumption is supported by the fragmented hook linked to one end of the chain, which is also reminiscent of the long hooks at the bottom of the three chains.

Three pendants were found in the same context. The first one (Fig. 3c) has an almost triangular shape with a double-serrated bottom edge and can be recognised as the Greek letter ‘Alpha’. The second pendant (Fig. 3d) is best described as two curved volutes pointing out and upwards (one of them fragmented) and can be interpreted as the Greek letter ‘Omega’. The third one (Fig. 3e) is partially destroyed; only an oblong object with a fractured edge is preserved. From the context, however, it can most probably interpreted as part of a cross, a Staurogram or a Christogram. The first two pendants are quite thin, measuring only 2 mm at the top and approx. 1 mm at the bottom. The third one has a consistent thickness of 4.2 mm. Each one is perforated once, and inside these holes, there is
also a chain link. Even though these chain links are fragmented and bent out of shape, they can be recognized as the same S-shaped links that form the copper-alloy chains. The closest comparison to those pendants is part of a monogrammatic cross, a Staurogram, from Aquileia (Fig. 4a) dating to the 4th or 5th century AD. The Alpha and Omega pendants are attached to the horizontal bar of the cross, one on each side of its vertical part. Further, a similar omega-shaped pendant (Fig. 4b) was found in the context of an Early Christian church in Keszthely-Fenékpuszta (Hungary). It is attached to a rather long chain that is thought to be a decorative part of some liturgical equipment.

All the above-described objects belong to the same polyangistron. Even though most known polyangistra chains consist of one or two long wire-like links with just a few chain links on the lower end for each arm. There is no evidence against the interpretation of the present item since they generally seem to be individually crafted pieces. The suspensions of polycandela, in contrast, primarily consist of chains with small links; however, they are generally firmly attached to the ring- or disc-shaped lamp holders. The big hooks are a typical feature of suspensions for singular hanging lamps with handles. There is also proof for the use of crosses and other religious symbols integrated into these lighting devices: most common are small crosses, perforated on two sides and used as chain links, but Staurograms and Christograms also occur. However, as evidenced by a polycandelon from Greece, some crosses were perforated on all four ends (Fig. 4c), indicating additional pendants attached to it. This leads to the proposed reconstruction of the polyangistron using a Staurogram with the smaller pendants attached to it (Fig. 5). This combination of the letters Alpha and Omega with Staurograms or Christograms, symbolizing Christ himself occurs fairly frequently from the 4th century onwards. Moreover, the use of monogrammatic crosses in

Fig. 5: Kirchbichl in Lavant. Proposed reconstruction of the polyangistron. Scale 1:2.
connection with lighting devices is often found and is suggested to be an allegory of Christ’s self-testimony (Book of Signs 8:12).²²

…and its associated finds (Fig. 6–7)

In the soil adhering to the chain suspension, five carbonised threads, consisting of fibres wound in an S-twist (with a thickness of 0.37–0.85 mm) were detected (Fig. 6). The fibres are very brittle and covered with soil residue and partly also with greenish corrosion layers from the chain links. It was not possible to determine the material of the fibres using a transmitted light microscope due to the strong charring, which resulted in a lack of translucency.²³ The stalky structure and the varying thickness of the fibre bundles indicate plant fibres. Given their slight twisting and their partially irregular oval to flat cross-sections (approx. 13–60 µm), nettle fibres (Urtica dioica) are very likely. The contexts of the finds (i.e., threads together with the polyanistrion) suggest their interpretation as a wick. Plant-based fibres (mostly hemp or linen) were preferred for wicks as they do not have such a strong smell as keratin fibres (hair, fur) while burning.²⁴ However, not many wicks are preserved, and even fewer of them have been properly studied; therefore, no conclusions can be drawn about the frequencies of nettle fibres compared to other plant-based fibres.

Next to the polyanistrion, three pieces of deformed glass were found. The glass was exposed to such great heat that the original shape of the object(s) is no longer recognizable. However, out of their context, they can be interpreted as parts of a glass lamp that was hung with the chain suspension. The colour of the glass is blue, with traces of red (Fig. 7). It is uncertain whether its discolouration was due to particles adhering from the chain suspension or contact with red glass. There are also particles of sediment and small stones fused to the glass originating from the clay floor. Even though glass lamps were primarily made of transparent material, sometimes appearing greenish or yellowish, coloured appliques such as handles or stems could be attached for decorative purposes.²⁵

²² Xanthopoulou 2010, 70; Pülz 2014b; Nikolić 2019, 81.
²⁵ Olcay 2001, 86; Nikolić 2019, Fig. 19.
Just north of the bema, another hook was found (Fig. 8a). It has similar dimensions as those from the polyangistron, indicating it could be part of an additional suspension chain. However, the hook is fabricated from a copper alloy sheet of metal (0.7–0.9 mm thick) rolled up into a narrow tube (3.6 mm in diameter), which was then bent into its shape instead of a flat hammered wire like the aforementioned ones. The upper part is flattened slightly, but the end is fragmented to the degree that any potential attachment holes for a chain or another device cannot be verified. The varying manufacturing of this hook emphasises the theory that singular pieces were produced on demand and scrap material was recycled.

A fragment of a non-ferrous metal band, circular-shaped with two round holes (Fig. 8b), resembles the disk-shaped parts of polycandela, and the holes were used to hold glass lamps. Although the distance between the holes seems too short to fit two lamps next to each other, the object could also have had another yet unidentified function.

### Indication of further metal devices for hanging lamps

Even though there are many glass rim fragments that resemble glass lamps, most of them cannot be identified as such with certainty. The fragments are too small, which makes it almost impossible to distinguish them from late antique beakers. However, two objects can be recognized as lamps due to their significant features. The first one (Fig. 9a) is most probably a wall fragment from a three-handled glass lamp (Uboldi type I.3). The small preserved handle on this fragment fits the measurements of the suspension hooks. Lamps with handles vary significantly in their shape from goblet-like vessels to bowl-like vessels. Nevertheless, they can be roughly divided into two groups: those with handles on the edge of the rim and those with handles on the body. Both variants occur at the same time; however, the first group with handles close to the rim is more common in

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26 Xanthopoulou 2010, Fig. 81; Lightfoot 2019, Fig. 10.
This type of lamp first appeared at the end of the 4th century AD and was in use at least until the 6th century. The second lamp can be almost fully completed (Fig. 9b), as numerous fragments of it were found. It is a small stemmed lamp or funnel-shaped lamp (Uboldi type IV.2) that was used in a polycandelon. The lamp is best described as tulip-shaped with a hollow stem. The transparent glass has a yellowish colour and is decorated with dark blue dots, which were attached before the glassblowing, since they appear stretched and elongated, mimicking the stretching and forming of the hot glass mass. Funnel-shaped lamps originated in the 5th century and remained in use until the 17th century. Based on the context, we can assume a late antique date for this example. Unfortunately, both lamps were found in layers dating shortly after the church’s active phase, during which two fireplaces were installed in the narthex. However, they correspond to the known late antique types and thus may have been originally used in the Early Christian church, perhaps in the adjacent baptistery.

In all the trenches around the presbytery, especially in those next to the priests’ bench, a significant amount of fragmented window glass was found (Fig. 10). Most of the pieces show traces of exposure to great heat, which stems from a destructive fire in the church. The concentration of window glass in this area, as well as the lack of it in the trenches in the nave along the outer walls of the building, indicates that only specific parts of the church were illuminated.

CONCLUSION

The recent excavation in the so-called Episcopal Church not only brought new light into the church’s building phases, but also new small finds were discovered that aid in interpreting and understanding the features. Most especially, the finds which can be classified as ‘lighting devices’ play a significant role in this context. The objects that can be identified as (parts of) chain suspensions...
were found in close proximity to the bema walls. In addition to these, a large amount of fragmented window glass that shows signs of heat exposure was found around the bema walls and the priests’ bench. This emphasizes the idea of the specific use of natural light inside the church. In addition to these newly excavated objects, some glass lamps are known from the earlier excavations. Most of them were found in close proximity to the altar of the church, correlating with the assumption that artificial light was used primarily to illuminate special areas inside the church, such as the altar and the presbytery. The glass lamps from the recent excavations were found in the southern part of the narthex. This area can be associated with a medieval (?) after-use of the building, where fire-places were located inside the narthex that were built with repurposed marble stones which originated from decorative and/or architectural pieces. Therefore, it is uncertain if these lamps were originally used in this area or brought there later. Even though we know of only a few lighting devices from the Kirchbichl in Lavant, they allow a small glimpse into the liturgical life of the Early Christian church.

33 Milavec 2017, 211.  
34 Rodrigue-Mattel 1986b, Pl. 98: 27, 30, 33; same Kainrath 2011, Pl. 121: F108–F110. Some base fragments of glass vessels found in the older excavations could also originate from funnel-shaped lamps (Kainrath 2011, Pl. 122: F134–F139). However, since these are mostly small fragments, a clear distinction between lamp and balsamarium is not possible. In my opinion, at least for those that have been found near the presbytery, the reference as lamps is assumable.
Svetila iz tako imenovane škofijske cerkve na Kirchbichlu nad Lavantom (Lienz, Avstrija)

Povzetek
Izkopavanja na poznoantični višinski naselbini na Kirchbichlu nad Lavantom (sl. 1) potekajo že od petdesetih let prejšnjega stoletja, tako da so bivalne stavbe in obe zgodnjekrščanski cerkvi že dobro znane.1 Ena od cerkva, tako imenovana škofijska cerkev, raziskana v petdesetih in osemdesetih letih,2 še ni bila primerno ovrednotena. Ne glede na to je mnogo raziskovalcev na podlagi načrta in na terenu prezentiranih ruševin poskušalo predlagati rekonstrukcijo in gradbene faze.3 Med letoma 2017 in 2021 je na škofijski cerkvi potekal velik raziskovalno-konservatorski projekt.4 Raziskovalni cilj je bil bolje razumeti datiranje in gradbene faze cerkve. Uspelo je, ne le popraviti predlagano rekonstrukcijo cerkve, ampak tudi razlikovati med štirimi fazami gradnje (sl. 2) in železnodobnim suhim zidom pod cerkvijo.5 Na podlagi novih najdb iz plasti izravnav smo lahko določili terminus post quem za prvo gradbeno fazo na koncu 4. oziroma začetku 5. stoletja.6

Poliangistron z obeski in pripadajočimi najdbami
Med novimi najdbami je skoraj celoten poliangistron iz bronaste zlitine (sl. 3), tridelni viseči sistem za obešanje svetilk. Ležal je poleg prižnec pod najmlajšimi cerkvenimi tlemi, po čemer sklepamo, da je bil v uporabi v tretji fazi. Verižice so zaradi izpostavljenosti ognju slabo ohranjene. Členi verižic se razlikujejo po tehnični izvedbi in kovini, kar kaže na (pre)uporabo starejšega materiala. Skupaj z verižicami so bili najdeni trije poškodovani obeski, v katerih lahko prepoznamo grški črki alfa in omega ter del križa ali stavrograma. Večina poliangistra je sestavljena iz dolgih, čičatih čljenov7 medtem ko se manjše verižice iz prepletenih delov pojavljajo na polikandelonih.8 Veliki kavlji na koncu verižic so posebej značilni del za obešanje posameznih svetilk, zato lahko predstavljeni predmet interpretiramo kot polyangistron.9 Glede na primerjave9 (sl. 4) predlagamo rekonstrukcijo poliangistrona (sl. 5), katerega del je monogramski križ, precej pogost od 4. st.10 V prsti, ki se je držala verižica, je bil najden zoglenel stenj (sl. 6), izdelan iz rastlinskih vlaken. Vrste ne moremo natančno določiti,11 a glede na preseke in rahlo uvijanje vlaken, gre najverjetneje za koprivo (Urtica dioica). Iz istega konteksta so tudi trije kosi modrega stekla, ki so bili zaradi izpostavljenosti visokim temperaturam deformirani (sl. 7). Interpretiramo jih lahko kot kose steklene svetilke, katerih del so bili pogosto barvni ročaji ali tulci.12

Drugi kovinski deli sistemov za obešanje, odlomki svetilk in okensko steklo
V cerkvi so bili v bližini beme najdeni tudi drugi kovinski deli svetil (sl. 8), med njimi še en kavelj za obešanje.

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4 Projektin partnerji: Bundesdenkmalamt Österreich (BDA), Bundesland Tirol, Gemeinde Lavant in Universität Innsbruck. Vodja raziskav: Martin Auer, Institut für Archäologien, Universität Innsbruck.
5 Obširno analizo zidanih ostankov pripravlja za objavo Martin Auer.
6 Objavo terenskega izvida in datiranja škofijske cerkve pripravlja Julia E. Rabitsch.
9 Šagi 1961, t. 14: 4; Pülz 2014d.
10 Pülz 2014a.
Stekleni svetilki (sl. 9) sta bili najdeni v narteksu, pri prvi gre za odlomek svetilke s tremi ročaji (tip I.3 po Uboldijevi13), druga je konične oblike s tulcem (tip IV.2 po Uboldijevi14), okrešena z modrimi pikami. Žal sta obe iz plasti, ki sta datirani v čas po opustitvi cerkve, ko so v narteksu vgradili ognjišča.

V sondah okrog prezbiterija, posebej blizu klopi za duhovščino, je bila najdena znatna količina okenskega stekla. Njegova koncentracija v tem delu in pomanjkanje v drugih sondah ob zunanjih zidovih daje misliti na premišljeno uporabo naravne svetlobe v cerkvi.15

Zaključek

Nova izkopavanja v zadnjih letih nudijo tako nove vpogled v gradbene faze škofijske cerkve, kot tudi nove drobne najdbe, ki pripomorejo pri datiranju in razumevanju stavbe. Ena izmed takih skupin najdb je ognjena steklo, ki je bilo odlomki okenskega stekla najdeni le blizu oltarja.16 Velika količina okenskega stekla z območja okrog prezbiterija še bolj poudarja liturgično uporabo svetlobe.

14 Uboldi 1995, 123–125.
15 Milavec 2017, 211.
16 Rodriguez-Mattel 1986a, 67.

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Illustrations: Fig. 1 (graphic: Institute of Archaeologies, University of Innsbruck). – Fig. 2 (graphic: Nicole Obinger). – Fig. 8a (photo and drawing: Ulrike Janovsky-Wein). – Fig. 10 (photo: Caroline Posch).