

TIVADAR VIDA, DANIEL WINGER (Eds.), *Szólád I. Das langobardenzeitliche Gräberfeld: Mensch und Umwelt*. Römisch-Germanische Forschungen 76 = Monumenta Germanorum Archaeologica Hungariae 7. Reichert Verlag, Wiesbaden 2022. XVI+358 pages, 184 colour and 2 b/w illustrations, 4 diagrams, 29 tables, 73 plates, linen, ISBN 9783752006544.

The site of Szólád is situated in the Komitat Somogy, Hungary, 5 km south of Lake Balaton. After the discovery and excavation of the first Lombard period graves in Szólád-Kertek mögött in 2003 in the context of *a priori* excavations to the construction of the M7 highway, research on the multi-period site became a model example of German-Hungarian scientific cooperation.

The Lombards or Longobards make their first appearance as a gens inhabiting the lower Elbe region in northern Germany during the 1<sup>st</sup> century AD in Strabo's *Geographica* (book VII). After disappearing from the sources in the 2<sup>nd</sup> century AD, in the late 5<sup>th</sup> century AD, Prokop describes the gens of the Longobards inhabiting the region north of the middle Danube. Pannonia is considered the primary settlement area of the Lombards in the 6<sup>th</sup> century AD. The question as to how the connection between the Lombards of the 1<sup>st</sup> and those of the late 5<sup>th</sup> century AD can be characterized has remained unresolved for the past decades.

Szólád represents one of the few – circa 40 are currently known – Lombard period cemeteries (6<sup>th</sup> century AD) in Pannonia. According to the geophysical prospection and excavations, its extent has been uncovered completely<sup>1</sup> and, furthermore, most graves have been found to be intact.<sup>2</sup> Additionally, Szólád is part of a Lombard period site complex, including several settlements and cemeteries that are located close to the present-day shore of Lake Balaton as well as two cemetery clusters in the south and the northeast of the lake.<sup>3</sup> The high significance of Szólád for archaeological research on the one hand derives from these archaeological characteristics, as well as favourable natural preservation conditions for skeletal material, and on the other hand is based on the research design, which has been international and multidisciplinary, with a focus on natural scientific analyses, from an early project phase onward. Particularly

noteworthy is the participation of the cooperation partners, including the Romano-Germanic Commission (RGK) of the German Archaeological Institute (DAI) in Frankfurt am Main, Germany; the Committee on Archaeology of the Hungarian Academy of Sciences in Budapest, Hungary; and the Institute of Anthropology of the University of Mainz, Germany, in the local excavation campaigns from 2005 to 2007 (see details below).

The preface by the editors Tivadar Vida and Daniel Winger, '*Szólád I. Das langobardenzeitliche Gräberfeld: Mensch und Umwelt*' summarises and contextualises the process from the discovery and excavation of the site to its implementation as a Hungarian-German joint research endeavour. The volume is understood as the first part of the comprehensive multidisciplinary analysis of the burial site and its finds, encompassing a rich variety of spatial, environmental, archaeobotanical, pedological, and osteological analyses, as well as the presentation of burial constructions and features. However, a delay in the restoration and documentation process<sup>4</sup> has led to the production of a burial site publication without the archaeological find examination. Considering common publication practices for burial sites, this is unusual, but due to the individual articles contained in 'Szólád I', which are written by well-established authors in their respective fields, the volume in sum succeeds in providing a wealth of information unavailable for many other burial sites.

The bibliography on the Lombard period cemetery at Szólád preceding the articles presents a multilingual publication strategy, with a strong natural scientific focus (aDNA, stable isotope analyses) in the most recent<sup>5</sup> of the 22 publications. A publication of genomic analyses before the publication of the archaeological burial data, including a catalogue with the 'features' ('*Befunde*') and objects from the graves, again stands out as unusual. In the preface by the editors, this is explained by varying levels of complexity in

1 p. 64.

2 The authors assume that this is due to comparatively little grave robbery ('*Grabraub*') in Antiquity, although the recent debate was not integrated in this interpretation (for example, compare ASPÖCK et al. 2020).

3 Map, p. 2.

4 pp. VIII, XIV.

5 Published in 2014 and thereafter.

raising the funding for different analyses<sup>6</sup> and this will be returned to in the concluding remarks.

In the following paragraphs of this review, the separate articles are presented with a particular focus on the archaeological and osteological topics, which are the core competences of this reviewer. The articles are written in either English or German, and each article provides an abstract in English, German and Hungarian, which is a consistent and welcome choice for an international project such as Szólád.

Due to their scope, the main articles of this volume are ‘*Grabanlagen und Befunde in dem langobardenzeitlichen Gräberfeld von Szólád*’ by Uta von Freeden and ‘*Anthropologische Untersuchung der menschlichen Skelettreste aus dem langobardenzeitlichen Gräberfeld von Szólád*’ by Christian Meyer, Isabelle Kollig and Kurt W. Alt.

The chapter ‘*Der weite Blick der Ahnen – Lage, Ausgrabung und Umfeld des langobardenzeitlichen Gräberfeldes von Szólád, Komitat Somogy, Ungarn*’ by Péter Skriba, Tivadar Vida and Daniel Winger addresses the key question of localisation and the relationship between the multi-period finds. To answer this question and to completely capture the extent of the Lombard period cemetery of Szólád, excavations took place between 2005 and 2007 as a joint venture of the Romano-Germanic Commission (RGK) of the German Archaeological Institute (DAI) in Frankfurt am Main, Germany, and the Committee on Archaeology of the Hungarian Academy of Sciences in Budapest, Hungary, under the supervision of von Freeden and Vida. In 2010, Daniel Peters provided additional supervision, while Skriba acted as a research assistant and de facto excavation technician. From 2006 to 2007, the Institute of Anthropology of the University of Mainz, Germany, represented by Alt and associates, was directly involved in the excavation for *in situ* sampling and preparation of the physical-anthropological, isotope-chemical, and molecular-biological analysis of the skeletons.<sup>7</sup> As already mentioned, it is this foresightful early multidisciplinary cooperation that, besides the ‘archaeological factors’, contributes to the significance of the burial site.

Several maps and photographs provide an overview of the excavated area. The authors describe the various detected structures dating from the prehistoric to early medieval period, with a focus on the Lombard period cemetery. Two traditional questions are pursued: Firstly, the authors seek to locate a possible contemporary settlement associated with the burial site; and secondly, a possible continuity

between the Lombard period cemetery and both earlier and later structures is discussed.

Based on three Lombard settlements (Balatonkeresztúr, Balatonlelle, Zamárdi, Map 2) already found on the southern shore of Lake Balaton between 106 and 110 m asl., the authors attempted to locate another settlement close to the burial site of Szólád in a similar position. Pursuant to Merovingian finds, they assumed that a settlement associated with the Lombard period cemetery can be expected to lie a few hundred metres uphill. Geomagnetic prospection of the terrain between the cemetery and the marsh/lake revealed a diffuse picture, which is why the hypothesis could not (yet) be proven.<sup>8</sup> The question of whether a transfer of Merovingian settlement and cemetery patterns is permissible also remains open but might be answered by the integration of the already known Lombard sites in a comparative study.

Regarding the question of continuity, the authors conclude that a conveyance of land had taken place after settlement activities during Late Antiquity (from the 1<sup>st</sup> to the 4<sup>th</sup> century AD), allowing for a new settlement process in the Lombard period (from the 5<sup>th</sup> to the 6<sup>th</sup> century AD). The authors additionally stress the intensive use of the area in the Avar period (from the 6<sup>th</sup> to the 9<sup>th</sup> century AD), with comparatively little destruction/disturbance of the Lombard period cemetery. In general, the shore of Lake Balaton has been populated throughout the ages, and the detection of movements (including abandonment and resettlement in the vicinity) remains a task for future research.

The articles ‘Environmental history of an embayment of Lake Balaton near Szólád from the Late Glacial of the Migration Age’ by Sándor Gulyás, Tünde Törőcsik, Balázs P. Sümegi and Pál Sümegi, and ‘*Analyse der Pflanzenreste einer Blockbergung aus Grab 13 von Szólád: Polsterung des Grabes – Rekonstruktion der Landschaft*’ by Károly Penksza both aim to reconstruct the environment of the area around Szólád. The first article provides a detailed description of the paleoenvironmental evolution, including the detection of transformations in water level of the lake and afforestation/deforestation from the Late Glacial to the Migration period, based on sedimentary core sequence analysis. In comparison to the Iron Age, a restoration of woodlands was detected for the Migration period, which is hypothesised to reflect decreasing human activities and/or climatic change in the area. The second article focuses on the analysis of a layer of plant remains found in Grave 13 of the Lombard period cemetery of Szólád, revealing a wetland/

<sup>6</sup> p. XIV.

<sup>7</sup> p. 2.

<sup>8</sup> pp. 8–10.

marsh character of the area around Szólád during this period. To understand the conditions under which the population represented in the Lombard period cemetery chose and settled in Szólád, it would be interesting to further investigate the reciprocal environmental and anthropogenic influence on the landscape, especially in the phase of transition between the Iron Age and the Migration period.

In the article 'Results of the archaeobotanical analysis of anthropogenic sediment samples from Szólád' by Ferenc Gyulai, Dénes Saláta and Ákos Pető, 41 pieces of anthropogenic sediment samples were subjected to macro-archaeobotanical analysis. Various species of uncultivated weeds were detected, which the authors interpreted as a sign of a spread of disturbance-tolerant plants due to anthropogenic intrusion in the area. In the coffin of Grave 6, traces of a (possible) bread crumb were found, which are cautiously discussed at the end of the article.<sup>9</sup> According to this article, plants did not play an important role in the funerary rites in Szólád.<sup>10</sup> This conclusion must be specified, when the results of the article '*Grabanlagen und Befunde in dem langobardenzeitlichen Gräberfeld von Szólád*' by von Freeden are taken into account (for a detailed description see below). From an archaeological point of view, wooden vessels and animal remains (bones, eggs) as well as their position in, above and beside the graves were detected.<sup>11</sup> Despite this knowledge, some of the graves with evident vessels and food remnants were not sampled for macro-archaeobotanical analysis (for instance, graves 4, 8 and 34) or the samples were taken from positions in the grave where no food remnants were detected archaeologically – for instance, for Grave 3 several sediment samples were taken from the grave filling, but archaeologically, the food remnants were detected in a position in the west of the burial, above the skull and likely on top of the coffin.<sup>12</sup> Grave 31 is an exception in which the sediment sample was taken directly from the ceramic vessel associated with food offerings, but no traces of cultivated plants were found here either. Further methodological challenges and potential biases in the archaeobotanical analysis cannot be discussed in this review, but it is important to

note that they remain a topic of current debate.<sup>13</sup> The archaeobotanical analysis of sediments from Szólád makes an important contribution to the field by highlighting the need to improve sampling strategies further.

The article '*Szólád – Ergebnisse der bodenkundlichen Untersuchungen 2007*' by Heinrich Thiemeyer briefly summarises the results of a pedological analysis, which was carried out to characterise the soil in the area surrounding the Lombard period cemetery. The author observes that the area is covered with carbonate-containing loess in which chernozem soils ('*Schwarzerden*') developed. Partially, a strong erosion was documented (often 0.5 m), which nonetheless left the preservation of the deeper-lying burials unaffected. Samples taken from exploratory boreholes on the southwestern edge of Szólád identified the potential presence of cultural (occupation) deposits but did not suffice to locate a potential settlement associated with the Lombard period cemetery.<sup>14</sup>

In the article '*Kartierung des Magnetfeldgradienten zur archäologischen Prospektion eines Gräberfeldes bei Szólád im März 2005 und im März 2007*' by Tim Schüler and Mark Opelt, the results of geomagnetic prospection with a single-channel fluxgate magnetometer are presented. The prospection has been carried out in preparation for the excavation campaigns and aimed to capture the extent and location of the Lombard period cemetery, which was successfully achieved.<sup>15</sup> Furthermore, a cluster of anomalies was found in the area and indicated the intense anthropogenic activity that was later confirmed by the excavations.

'*Grabanlagen und Befunde in dem langobardenzeitlichen Gräberfeld von Szólád*' by von Freeden represents one of the two main articles of the volume, including a catalogue of the Lombard period soil features ('*Befunde*') with detailed descriptions of their character in various plana<sup>16</sup> and corresponding graphs.<sup>17</sup> The article provides an unprecedented depth of burial construction study that features

<sup>9</sup> 'It can be assumed that this remain entered the grave while the funerary practice occurred, however it cannot be adjudged whether food was placed consciously into the coffin [...] or whether it just accidentally fell in the coffin', p. 42.

<sup>10</sup> p. 46.

<sup>11</sup> pp. 107–111.

<sup>12</sup> Discolorations and a ceramic vessel were found alongside the remains of eggs and animal bones. They are interpreted as an arrangement of offerings on a tray or serving board that was placed on the coffin (pp. 108–109).

<sup>13</sup> For example, compare MARSTON, D'ALPOIM GUEDES, WARINNER 2014. – VAN DER WARKER et al. 2016.

<sup>14</sup> p. 53.

<sup>15</sup> pp. 64–65.

<sup>16</sup> pp. 144–177.

<sup>17</sup> pp. 178–250. The quality of the catalogue's graphs varies immensely from state-of-the-art software-based graphs, such as the overview plan of the burial site with colour-coded excavation campaign areas or the graphics related to Grave 1 (pp. 178–179), to drawings by hand of the various plana that were produced by students during the excavation campaigns. Variation in the quality of the drawings is attributed to the individual skill sets of the students involved. They were kept in the catalogue so as not to add additional work and delay publication (p. 68).

and consolidates the results already published.<sup>18</sup> The first section of the article<sup>19</sup> informs about the excavation process and techniques, necessary adjustments and site-specific challenges, which is essential to understand the results presented thereafter.

The Lombard period cemetery of Szólád shows a combination of burial features that in many regards can be considered outstanding because of the small number and/or geographical distance of known parallels. Especially remarkable is the high number of graves with burial depths above 220 cm.<sup>20</sup> With critical consideration of various aspects,<sup>21</sup> an interregional comparison is carried out, including examples from western Hungary, Moravia, and Lower Austria to (central) Germany. Based on 888 graves,<sup>22</sup> a significant pattern with an increase in burial depths from Moravia and central Germany (8 % of burials > 220 cm), across Lower Austria (10 % of burials > 220 cm) to western Hungary (36 % of burials > 220 cm) is revealed. The author explores various explanatory models. Even if a chronological bias might be included in the comparison, the high percentage of graves with burial depths above 220 cm in western Hungary is remarkable. For Szólád, the author discusses the upholding of old local traditions that already existed in Pannonia when geographically foreign individuals joined the burial community of the Lombard period cemetery, practices including various stages of the burial, and the need for additional protection of the dead of a highly mobile society as possible causes.<sup>23</sup>

The 34 so called 'ledge graves' ('*Absatzgräber*') with ledges in the side walls of the burial pits, and especially their relative number in contrast to graves with straight burial pit walls (3:1), are another specific feature of Szólád. In some cases, wooden plank boards or roof-like constructions were documented covering the 'burial area' below

the ledge, which contained the coffins with the skeletal remains.<sup>24</sup>

Due to the favourable preservation conditions in Szólád, traces of wooden vessels and vertical wooden constructions inside the burial pits could be documented. They reflect organic components that often deteriorate, and for whose presence only a small number of sites are known, taking into account the total number of excavated sites. Burial sites of the 6<sup>th</sup> century AD regularly include vessel and food offerings at the western end of the burial pit or in the area around the head/skull.

The two cases of rectangular enclosures surrounding graves 4 and 5 represent a unique find in Lombard period sites north and south of the Danube. Only few parallels can be found (Hemmingen-Hiddestorf, Germany, and Saint-Vit, France) if the English sites dating to the 7<sup>th</sup> century AD are excluded.<sup>25</sup>

Furthermore, the article considers the position of the skeletal remains, burial orientation and disturbances, and in the last section provides a detailed study of burials with beheaded horses that lie on a separate level above human skeletal remains (focusing on the 6<sup>th</sup> century AD). Similarities to the grave with horse burial in Szólád (Grave 13) are known from Zeuzleben, Bavaria, Germany, and central Germany, and represent a small yet remarkable group of burials. The (inter)regional comparisons with regard to the various aspects covered by the article, as well as the use of clear definitions at the beginning of several sections, help to contextualise the burial finds from Szólád. Short summaries at the end of several sections help in maintaining an overview of the various results.

The search for the possible origins of certain burial practices ('*Herkunft*'/'*Vorbilder*'),<sup>26</sup> as attempted for ledge graves<sup>27</sup> or rectangular enclosures surrounding graves<sup>28</sup> by the article, cannot be resolved satisfactorily. Burial practices are, beside other aspects, a multicausal, complex construct, a dynamic negotiation of shared identities, social memory, traditions and claims to power, prestige and/or influence of the burying community.<sup>29</sup> They can be transformed within short spans of time, while the causes for these

<sup>18</sup> For instance, compare VON FREEDEN 2008. – VON FREEDEN, VIDA, WINGER 2020.

<sup>19</sup> pp. 67–71.

<sup>20</sup> p. 81. – A correlation between burials with deep burial pits and ring ditches ('*Kreisgräben*') is assumed: VON FREEDEN, VIDA, WINGER 2020, 100.

<sup>21</sup> For instance, variation in the measurement technique due to the use of different reference points of depth measurement, variation in chronology and size of the cemeteries or soil properties (pp. 79–80, 90).

<sup>22</sup> The database includes five cemeteries from western Hungary (n=241), three cemeteries from Moravia (n=245), five cemeteries from Lower Austria (n=190) and six cemeteries from central Germany (n=212). Burials from southwest Germany are considered in the discussion but not included in the database.

<sup>23</sup> p. 90.

<sup>24</sup> In all 45 Lombard period graves, traces of coffins – either tree-trunk coffins or plank/chest-like coffins – were documented (p. 102).

<sup>25</sup> pp. 127–128.

<sup>26</sup> pp. 76, 124, 127–128, 132–133.

<sup>27</sup> The question of whether ledge graves represent a genuine feature of Lombard period cemeteries in the central Danube region, or where (and when) a possible origin can be assumed, is discussed: pp. 76–77.

<sup>28</sup> pp. 127–128.

<sup>29</sup> See, for example, HÄRKE 1997. – WILLIAMS 1998. – GRIFFITHS, HARRISON 2011.

transformations are difficult to track. Moreover, burials can be considered complex entangled/hybridized things. The assumption of ‘pure’ – genuine/original – for example Lombard burial practices, can only be an artificial construct created by archaeological analysis.<sup>30</sup> Parallels in burial practices between different and far-apart geographical regions are – in contrast to natural scientific analysis (stable strontium, aDNA) – no reliable indicator for a shared geographical origin or a shared identity. For Szólád, natural scientific analyses were carried out, and revealed various contemporaneous small groups of both related and unrelated members that are interpreted as households. ‘The results of the interdisciplinary analysis of the archaeological and anthropological data support the hypothesis that the population moved as a group whilst also integrating unaffiliated individuals’.<sup>31</sup>

The article does not include these results, but instead sticks exclusively to an archaeological comparison of burial phenomena. Many follow-up questions remain undressed. For example, the community of Szólád was proven to be genetically and geographically heterogenous in origin. How can the decision process of how – according to which practices – individuals were buried be described? A variation regarding certain aspects, for instance burial pits with and without ledges, was already observed at the burial site. Can this be explained with an actual or socially constructed variation in geographical/genetic origin? How influential was the geographical origin of a person for the way they were buried, and do other aspects, such as kinship, overrule them, perhaps after some time spent in a new region?

The Lombard period cemetery of Szólád is among the few sites for which such analyses are possible, and after the foundation was laid with this volume, hopefully these will be carried out in subsequent studies (compare the concluding remarks at the end of the review).

In the chapter ‘*Anthropologische Untersuchung der menschlichen Skelettreste aus dem langobardenzeitlichen Gräberfeld von Szólád*’ by Meyer, Kollig and Alt, the results of the osteological analysis of all Lombard period individuals (n=44)<sup>32</sup> from Szólád are presented and contextualised with other contemporary sites. The authors use a broad state-of-the-art spectrum of methods to conduct analyses of the human skeletal remains, and consider

challenges of current osteological research, for instance the interpretation of nonmetric trait variation (also known as epigenetic or discrete traits),<sup>33</sup> accordingly. Remarks on the possibilities and limits of osteological interpretation are provided and guarantee the comprehensibility of the article for scientists unfamiliar with the details of human biology/osteology. In several sections the importance of comparability to other studies is mentioned, and methods are chosen accordingly. The recording of pathologies focuses on the works of various experts in the field, for instance Donald J. Ortner,<sup>34</sup> since no international standards have been established thus far. Initiatives such as the Global History of Health Project<sup>35</sup> have only been launched within the last decade and will hopefully provide even better – easily applicable and accessible – guidelines for pathological recording in the future.

The authors classify three quarters of the skeletons as medium to very well preserved. Additionally, the number of subadult individuals (43.2 %) is comparatively high for an early medieval burial site, an observation that was also made for a few other Lombard period cemeteries in western Hungary (Hegkö, Rácálmás).<sup>36</sup> Considering the short time span in which the Lombard period cemetery of Szólád was used,<sup>37</sup> the impression of a realistic reflection of a living population in the skeletal series is reinforced.

Despite the small sample size, the observations on male and female demography in particular hold key information for the understanding of the population of Szólád. Women were at greater risk of dying at a younger adult age than men, a pattern that also emerged for other early medieval burial sites and is often explained by risks related to pregnancy and childbirth. Furthermore, females seem to be underrepresented in the juvenile as well as in the subadult age groups.<sup>38</sup>

<sup>30</sup> Compare STOCKHAMMER 2012.

<sup>31</sup> ALT et al. 2014, 11.

<sup>32</sup> The individual from Grave 1 (found in 2003) was not available for the examination. The chronological context of Grave 44 remains uncertain due to a lack of objects in the grave; the type of burial construction, however, was classified as similar to the Lombard period burials, which is why the individual was included in the study.

<sup>33</sup> p. 258.

<sup>34</sup> ORTNER 1998.

<sup>35</sup> STECKEL et al. 2018.

<sup>36</sup> Other Lombard period sites in western Hungary, such as Tamási or Vörs, revealed subadult ratios below 20 %, compare pp. 261–262.

<sup>37</sup> ‘Based on stylistic elements the grave goods were dated to between the second third and second half of the 6<sup>th</sup> century A.D.’, furthermore ‘[...] there was no indication of any chronological differentiation within the cemetery’, both in ALT et al. 2014, 2. In the same article ALT et al. 2014, p. 10, a three-phase model with a very short period of occupation of the site (circa 20 years) is suggested. In the preface of the reviewed volume, the detection of three generations is mentioned (p. XII), while in VON FREEDEN, VIDA, WINGER 2020, Szólád is described as a society ‘[...] that settled for only one generation at Lake Balaton’ (pp. 5, 12).

<sup>38</sup> According to the osteological analysis, all three juvenile individuals are male, and out of the 19 subadult individuals, 13 were genetically determined to be male as well (pp. 261, 289).



The authors state that this disparity cannot be explained due to the short time span of the Lombard period cemetery of Szólád and a lack of similar observations for other sites. Two studies<sup>39</sup> including stable isotope and/or genetic analyses suggest a patrilocal residential system for Szólád, in which female individuals moved into the community of men. Despite being featured in the bibliography and catalogue, these results are not included in the discussion of the results of the reviewed article but would make an essential contribution to the osteological analysis.

The results of the recording of pathological changes on the skeletal material are, with some exceptions, within the usual range of early medieval burial sites. The frequency and intensity of caries lesions are comparatively low, and traces of interpersonal violence are only found in male individuals.<sup>40</sup> A summary presenting remarkable finds and the overall health status of the population of Szólád is given on pages 289 to 290 as well as 308 to 309 (abstract). Especially for researchers unfamiliar with the field, a more detailed discussion of the results would have been very interesting. For instance, possible causes for and consequences of the observed differences between males and females as well as the pathological changes, such as *cribra orbitalia* or the bone cysts of the carpal bone, could have been provided. Due to the thorough methodological selection and solid analytical results, individual life courses and general living conditions in Szólád (and beyond) can be reconstructed in more detail by future studies.

The catalogue at the end of the article informs about all individuals included in the study. Almost every individual is represented with a photo that gives a good impression of the inventory and preservation of the skeletal material. However, the photography, with changing perspectives and backgrounds, other non-material related elements visible in the images and no scales for reference, could have benefited greatly from a more coordinated approach and contrasts with the high-quality photos of, for example, the pathological changes in the article.

The three articles 'Mammalian and bird remains from the Langobard period cemetery of Szólád' by Erika Gál, 'A horse skeleton from the Langobard period cemetery of Szólád: An archaeozoological study' by Kyra Lyubyanovics and 'Fish remains from the Langobard period cemetery of Szólád' by László Bartosiewicz cover the results of the archaeozoological analyses (osteology). All three articles contain excellent graphs. In parts, other

studies carried out on Szólád are included in the discussion of results, which creates overarching insights into the burial site.<sup>41</sup>

The first article gives an overview of the animal finds. Thirty-one graves contained complete skeletons and/or individual bones from fish (see below), cattle, sheep/goats, pigs, domestic hens, and geese as well as horses. Differences in the slaughtering age and the number of deposited skeletal elements were detected.<sup>42</sup> Szólád is the first Lombard period site in Pannonia for which cattle remains have been identified. Artefacts made from animal remains or secondary animal products (eggs) were found in several graves. The author suggests that all 15 individuals whose graves contained eggs were buried between late winter and late summer, due to the seasonal limitation of egg laying in pre-modern hen husbandry.<sup>43</sup> A correlation was found between male individuals and the deposition of goose remains, tusks – presumably from wild boars and interpreted as helmet decoration (Grave 6) – and objects made from antlers, interpreted as 'symbolic grave goods'<sup>44</sup> or containers for certain materials, such as salt or ointment (graves 10, 22, 27). The burial of a 5- to 6-year-old child, genetically identified as female, contained an elephant ivory bracelet (Grave 38), a, thus far, unique find in Lombard period Hungary.<sup>45</sup>

The detailed analysis of the horse skeleton found in Grave 13 (second article), and its contextualisation with other Lombard period horse burials in Hungary, makes a significant contribution to the field, since most skeletal animal remains from such burials were neither kept nor analysed.<sup>46</sup> Based on the examination of four horse skeletons available from Lombard period contexts in Hungary, the author assumes a homogenous population of massive-legged horses, of small size (130–140 cm height at the withers) compared to other Migration period horses. Several spinal lesions and an inflammation of the hock joint, as well as a variation in the vertebral column (shortened) detected in the horse skeleton from Szólád are interpreted as a possible cause for the selection of the (assumed) stallion for burial deposition. A short summary of the multifaceted aetiology of pathological changes in the vertebral column at the end of the article

<sup>39</sup> ALT et al. 2014. – AMORIM et al. 2018.

<sup>40</sup> pp. 275, 289.

<sup>41</sup> For example, see the article by L. Bartosiewicz, discussion pp. 348–351, and Fig. 2 (plan of the location of burials with animal remains).

<sup>42</sup> pp. 316–318.

<sup>43</sup> p. 321.

<sup>44</sup> p. 324.

<sup>45</sup> p. 321.

<sup>46</sup> pp. 329, 331.

cautions against drawing hasty conclusions between activity and pathological changes in animal skeletons.<sup>47</sup>

The third article analyses the fish remains found in four graves in Szólád. They are – to date – the largest fish bone assemblage detected in any archaeological context in Hungary. As has been pointed out in several studies, however, fish bones tend to be underrepresented in archaeo-faunal samples, due to their sensitivity to taphonomic conditions, especially to acidic soil chemistry, and excavation techniques, with sieving as the primary recovery method.<sup>48</sup> Thus, these finds once more highlight the high level of effort put into and the quality of the excavation process at Szólád. The four graves each seem to contain one fish of a small species of the carp family.<sup>49</sup> Two aspects are especially remarkable. Firstly, despite the proximity of Lake Balaton, the fish are assumed to originate from other bodies of water, which likely were available in close proximity to the site. Secondly, the author states that these fish presumably were not available throughout the whole year, but rather during spring/summer, which, in part, overlaps with the main egg-laying peak in March/April, and might hint at the season in which the corresponding individuals were buried. The author thus impressively emphasises the contribution that archaeozoological analysis makes to the interpretation of burials. Furthermore, it is pointed out that three of the burials with fish remains also contained eggs (graves 5, 27, and 38) and cluster at the central section of the cemetery near to each other. While an interring in spring/early summer of the same year cannot be proven, the author emphasises the spatial coincidence as remarkable.<sup>50</sup> By including other studies, the author also concludes that freshwater fish were unimportant to the subsistence strategy of the population burying their dead in Szólád and points towards a possible, not yet statistically reliable, predominance of fish in the Lombard period burials of male individuals. In addition, he points out that in Szólád, all burials containing fish remains are among the deepest graves of the site (Grave 38 is among the deepest child burials), which might indicate a somewhat special position.<sup>51</sup>

The end of the volume is made up of an index of all mentioned sites.

As has been stated in many other publications before, research regarding Szólád undoubtedly marks a milestone in Lombard period archaeological studies. Previously

published results, especially those of a natural-scientific character,<sup>52</sup> have already contributed to the essential discourse that revolves around the question of the ethnogenesis and continuity of ‘the Lombards’ referenced in sources of the transitional phase between the Roman Republic and the Roman Empire.<sup>53</sup> The volume under review adds a detailed (bio-)archaeological context to these publications, but neither integrates their results nor merges the results of the separate articles in this volume into a bigger picture. The volume lacks an overarching interdisciplinary conclusion that is eagerly awaited for the next (second) volume in the *Römisch-Germanische Forschungen / Monumenta Germanorum Archaeologica Hungariae*.<sup>54</sup> Considering the remarkable results presented in ‘Szólád I. Das langobardenzeitliche Gräberfeld: Mensch und Umwelt’, as well as the already existing body of literature, an extensive synthesis holds immense potential. In view of the spectacular results, it is to be hoped that Szólád gains the scientific recognition the finds undeniably deserve.

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<sup>50</sup> p. 349.

<sup>51</sup> p. 351.

<sup>52</sup> For example, see AMORIM et al. 2018.

<sup>53</sup> Compare Strabo, Tacitus, Velleius Paterculus, Cassius Dio, Prokop, Paulus Diaconus (for example, see JARNUT 1982, POHL 2008).

<sup>54</sup> The synthesis in the second volume is announced on p. VIII.

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