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Funerary Assemblages and Personal Identities. The Case Study of Tumuli 2 and 3 in Pergamon

Ute Kelp – Stéphane Verger – Andrea Pirson – Nicole Reifarth – Wolf-Rüdiger Teegen – Julian Wiethold

Funerary assemblages are a rich source for funerary practices and mortuary rituals. Figuratively speaking, an assemblage is more than the inventory of the objects in a burial. A funerary assemblage in the sense of a burial context is key to understanding burial traditions as well as personal choices of the deceased and his or her relatives, and allows an estimation of the varying individual investment into burial. Scientific research methods open new fields and deepen our understanding of a burial context. Beyond that, an accumulation of objects, mixed in material, style or other ways, and the practices retrievable in such an assemblage may extend the cultural and social reach of an object by decoding and recoding its meaning¹. Taking this concept one step further, an

assemblage can also describe an object with its various material components and immaterial associations². Finding an undisturbed funerary assemblage also generates its own history and our paper deals with the possibilities to work with old finds by the combination of archaeology, bioarchaeology, archaeometry and museum studies³. Dissecting object entities has its benefits to describe the complexity of a material funerary assemblage. Setting the analysis in general within actor-network theory (ANT)⁴ helps to grasp variation and developments in research and interpretation as well. Against this theoretical backdrop we present a reassessment of the assemblage of Tumuli 2 and 3 in Pergamon including preliminary results of the archaeometric investigations⁵.

Location and Grave Type

In the Kaikos (Bakır Çay) plain south of the city of Pergamon two relatively small tumuli, known as number 2 and 3, were excavated by Wilhelm Dörpfeld in 1906⁶. They are similar in size with a diameter of about 30 m and a height of 3.5 m (fig. 1). Each of them is heaped around a single burial in a plain andesite

sarcophagus⁷. In western Asia Minor, tumuli with a central stone sarcophagus containing a burial have been known since at least the late Archaic period. These include the Gümüşçay burial mound in the Troad and the Kelebek Tepe at Kyme in Aeolia, both dated to the early 5th century BC⁸. Following a tradi-

¹ Based on Deleuze – Guattari 1980, 629 f. and Deleuze – Guattari 1992, 698–700; developed into an »assemblage theory« by De Landa 2006.

² Harris – Cipolla 2017, 138–146: these approaches have been assembled under the term New Materialism. In archaeology, e. g. Schreiber 2018.

³ Kelp 2018; Reifarth – Tamburini 2018; Teegen 2018, 176 f.

⁴ As one possible handle on ANT: Belliger – Krieger 2006; see also Harris – Cipolla 2017, 129–134; Schreiber 2018, 146–148 with n. 599. ANT has inspired symmetrical archaeology: Harris – Cipolla 2017, 134–138.

⁵ We thank Anja Klöckner (Frankfurt) for helpful comments on the paper.

⁶ Dörpfeld 1908b, 365 f.; Conze et al. 1912/1913, II 240. See also Pirson (in this volume) p. 127 fig. 1.

⁷ Radt 2011, 268; Schwarzmaier 2011; Kelp – Pirson 2020, 325–329.

⁸ Gümüşçay mound: Sevinç 1996; Sevinç 1999; Rose 2019 (with bibliography on the iconography of the sarcophagus reliefs). – Kelebek Tepe: Verger – Pace – Jolivet 2013.



1 Pergamon, Tumulus 2. Sarcophagus in situ

tion well established in the region⁹, the krepis of Tumulus 2 was made of rubble walls and in Tumulus 3 of an ashlar wall. The latter was brought to light in 1996 and is still visible¹⁰. Their location more than 2 km from the city in the Kaikos plain and probably along the road to the coast¹¹ differed significantly from other tumuli of the 3rd century BC. At the time, they were generally situated on surrounding hilltops and slopes¹². The sarcophagus in Tumulus 2 was near-

ly 30 cm longer than the one in Tumulus 3¹³. As we will see, the architectural effort for the two tumuli was inversely proportional to the opulence of the respective grave goods belonging to these two previously untouched burials. Only the preservation of numerous fragments of objects made of organic material made it possible, thanks to modern methods, to obtain clues about the original burial equipment, grave goods, and perhaps even clothing.

Research History and Current Approach

Not only the state of preservation of the findings is to be emphasised as exceptional, but also their documentation with in situ photographs (fig. 2) and a detailed contextual publication by Paul Jacobsthal that was exemplary for the time¹⁴. He was 26 years old, had just finished his dissertation and gained some excavation experience during his ›Reisestipendium‹, the prestigious travel grant of the German Archaeo-

logical Institute. He never excavated again, but became the first professor of classical archaeology at the University of Marburg¹⁵.

The well-preserved finds were due to be sent to the Archaeological Museum of Istanbul – but one object created a scandal that provoked Osman Hamdi Bey, the founding director of the museum, to take drastic measures. Here a short summary of the sto-

⁹ For similar tumuli, see e.g. Atarneus (Zimmermann 2009, 178 f.; Zimmermann 2010, 172 f.) or Hatipler Kalesi (Zimmermann 2011a, 155); see also Kelp – Pirson 2020, 325. For an assessment of such tumuli within the Iron Age tumulus tradition, see Mohr 2015, 94 f.

¹⁰ Radt 2011, 268 f.; Kelp 2011b, 182 f. fig. 56; Kelp 2014, 353–355.

¹¹ For a current reconstruction of the road network, see Ludwig 2020.

¹² Kelp 2022, 191. Two circular foundations recently excavated in the north necropolis on the slope of the city hill date to the Hellenistic period, possibly even to the 3rd cent. BC, see Pirson et al. 2021, 6–21; J. Krasel et al. in this volume.

¹³ Dörpfeld 1908b, 366; Jacobsthal 1908b, 428 f.: The sarcophagus chest being slightly larger than its lid, the gap was closed with a lime mortar containing small stones.

¹⁴ Jacobsthal 1908b, 428–436.

¹⁵ Jagust 2012; for his time in Oxford after being exiled from Nazi Germany, see also Ulmschneider – Crawford 2017.



2 Pergamon, Tumulus 2. Burial in the sarcophagus in situ

ry as Theodor Wiegand told it¹⁶: The gold oak wreath unearthed in Tumulus 2 caught the eye of the son of the governor general of the provincial district, Said-Pascha, who had compromised himself by favouring brigandage in the region. He wanted to get back into the good graces of the sultan in Istanbul by sending him the wreath as a gift. Planning to use his cousin, at the time Kaimakam (local governor) of Pergamon, to get hold of the object, he prepared for any resistance by writing a denunciation note to the Ministry of Education claiming that Osman

Hamdi Bey intended to sell the gold wreath to Alexander Conze, the German excavator. Asked to justify himself, Hamdi Bey furiously clarified the facts, handed in his resignation and saw to it that the wreath arrived in Istanbul.

In the end, all finds from Tumuli 2 and 3 whose state of preservation permitted transport were stored in the Archaeological Museum in Istanbul – but not the entire assemblage, as was assumed in the following decades¹⁷. Nine Ottoman cigar boxes and one larger box labelled Tumulus 3 emerged from the Pergamon

¹⁶ According to a report conveyed by Theodor Wiegand from Constantinople to Wilhelm Bode in Berlin on 15/16 November 1906, in: Berlin, ANT, Archiv, Kasten »Rep. 1, Abt. D, Korrespondenzen, Kor 1–49«, Kor 41; transcript in extracts dated 22 November 1906, typewritten, the accompanying letter with handwritten

signature of Christoph Bosse. Wiegand takes a colonial view of the events, which is the only account we know of so far. We owe our knowledge of this source to Gabriele Mietke (Berlin).

¹⁷ Jacobsthal 1908b, 431; Pfrommer 1990, 241 f. FK 72; 305 f. HK 62; Schwarzmaier 2011, 297.



1906 Gr 02. 003

3 Pergamon, Excavation depot. Cigar box (early 20th century) for the storage of finds from Tumuli 2 and 3



4 Istanbul, Archaeological Museum Inv. 3218–3225. Selection of finds from Tumuli 2 and 3

depot in 2013 (fig. 3). They contained heavily fragmented finds and many organic remains¹⁸. A match between an iron piece from the Pergamon depot and one in the museum in Istanbul proved that some pieces of Tumu-

lus 2 also were still in Pergamon, stored in the same boxes (fig. 13). The grave inventories could only be attributed in part to one of the sarcophagus burials. Thus, one of the main tasks was to attribute the finds

¹⁸ Kelp 2018, 170 f.

to their respective burials. This is also true for the dental and bone remains. Our archaeometry group¹⁹ started working in the museum in 2017 and during our

exceptional cooperation with the Archaeological Museum of Istanbul²⁰ several more finds belonging to the assemblage were identified (fig. 4)²¹.

The Human Remains

Some of the cigar boxes retained (badly preserved) human remains of the deceased buried in Tumuli 2 and 3. A few fragments are preserved in the Istanbul Archaeological Museum. These findings will be discussed in the following paragraphs. The methods applied are described in another paper in this volume²².

The Istanbul Archaeological Museum preserves an upper premolar (fig. 5). It consists only of the enamel crown in a good state of preservation. The crown shows no pathological alterations and only a slight degree of attrition²³. This seems consistent with a late adolescent or early adult age (20–30 years)²⁴. Although, theoretically, the age of the early adult individual could also be 10 to 20 years or more. It is worth mentioning that dental attrition is in particular status dependent – in prehistoric, ancient, and historic times. This means the teeth of people belonging to the ancient élite are much less worn than those of the ›normal‹ population. The same trend can be observed in modern western populations²⁵.

The élite consumed products (bread and cakes), where the flour was fine milled and cleaned²⁶. White bread (*panis candidus*)²⁷ was typical for the élite from antiquity onwards up to the middle of the 20th century AD. It caused less dental attrition – in contrast to *panis secundarius* of middle quality or the rough flour consumed by the ›normal‹ population in the form of the *panis acerosus* or *plebeius* or *rusticus*²⁸.

The latter, bread of the lowest quality, regularly contained small stone fragments which often caused a high degree of dental attrition.

A few dark stained bone fragments could possibly belong to a second individual in Tumulus 2 or to the individual from Tumulus 3.

The human remains from Tumulus 3 are quite badly preserved. Present are mainly skull bones. The form of the internal lamina, e. g. the frontal bone, is still recognisable for the most part, while the external lamina is destroyed. The bone is mostly decayed into the mineral phase – into the brushite (fig. 6). The preservation is so bad that also the enamel is completely decayed.

The skeletal remains were first studied in 2013, and then again in 2017²⁹. They belong to a late juvenile to early adult individual of about 18 to 21 years of age: The third molar has not yet reached the occlusal plane. Traces of pathological alterations were quite difficult to observe. Probably, there was a slight inflammatory process in the frontal sinus.

Further skeletal elements could be identified in other cigar boxes, like a pelvis fragment and a very badly preserved femoral head. Unfortunately, they could not contribute to a sex determination.

A small fibre fragment was discovered on the pelvis fragment. Nicole Reifarth sampled and microscopically studied it³⁰. Unfortunately, the poor state of preservation did not allow for an identification. Fur-

¹⁹ Namely textile specialist Nicole Reifarth and archaeobotanist Julian Wiethold.

²⁰ Especially with curators Gülbahar Baran Çelik and Mine Kiraz Vancı, including also conservator İrmak Güneş Yüceil.

²¹ As early as 1906, the proximity of Tumuli 2 and 3 to the Maltepe Tumulus resulted in a misunderstanding concerning the origin of the sarcophagi with the findings, also present in the correspondence of scientific circles at the time (Alexander Conze and Halil Edhem Bey, 3 October 1906, in: Berlin, DAI, Central Archive, Estate Halil Edhem Bey, Folder 2 of 2. – Otto Puchstein and Reinhard Kekulé von Stradonitz, 10 October 1906, in: Berlin, DAI, Central Archive, Estate Kekulé von Stradonitz, Box 5).

²² See the contribution by W.-R. Teegen, Demography and health status of Hellenistic people from Pergamon, Elaia and Aigai.

²³ The attrition is grade 3 according to Perizonius – Pot 1981, 379 fig. 9. This is quite low in comparison to the old man from the İlyas Tepe Tumulus, where the attrition is grade 5+ or 4+, respectively (Teegen 2011b, 152 tab. 6).

²⁴ According to Lovejoy 1985, 48–53 with figs. 1.2; Constandse-Westermann 1997, 276 fig. 1.

²⁵ Lavelle 1970, 828.

²⁶ Multiple grinding and sieving (cf. Teegen et al. 1990; Währen – Schneider 1995).

²⁷ Währen – Schneider 1995.

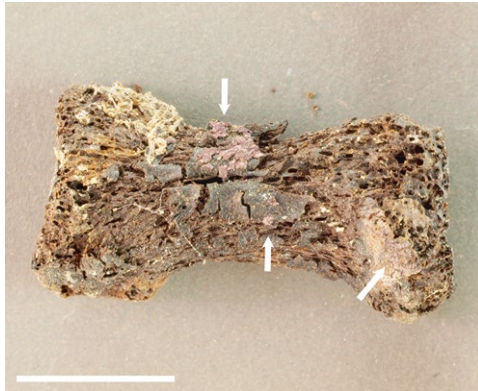
²⁸ Währen – Schneider 1995. Binsfeld – Kelp – Teegen 2022 also discuss this topic.

²⁹ Teegen 2018, 176 f.

³⁰ Reifarth – Tamburini 2018; Nicole Reifarth was at the time Humboldt fellow at the British Museum, London.



5 Pergamon, Tumuli 2 and 3. Crown of a right upper premolar (M=F, 20–30 years)



7 Pergamon, Tumulus 3. The first proximal phalanx of the right foot of an adult individual (F>M, 16/20+ years). The purple stains (arrows) belong to marine purple. Scale = 1 cm



6 Pergamon, Tumulus 3. Frontal bone, internal lamina (F=M, 18–21 years. Scale = 1 cm)

thermore, the human remains from two other cigar boxes were recorded and measured. The length³¹ and the relative gracility of the first proximal phalanx of the right foot (fig. 7) could indicate a possible female individual³². This skeletal element shows deposits of purple colouration (fig. 7). Diego Tamburini³³, who studied a tiny sample from a chemical point of view,

revealed in fact murex purple in his analysis. In this case, textiles and/or shoes could have been dyed with this precious dyestuff. The murex purple dye on bones that originate from Tumulus 3 and on leather and textile fragments from one or both tumuli are counted among the grave goods that went unidentified until recent archaeometrical studies.

The Sarcophagus Burial in Tumulus 3

Jacobsthal describes how the contents in the sarcophagus in Tumulus 3 crumbled to dust at the slightest touch. His account highlights basic similarities between the two tumulus burials differing only in the significantly greater wealth of grave goods,

namely of metal finds, in Tumulus 2³⁴. However, the findings in the cigar boxes also point to possible discrepancies and/or lacunae in the description. The fragment of a bronze needle could be either one of the three metal pins from Tumulus 3 mentioned by

³¹ Case – Ross 2007, 267 tab. 2 B; 3 B.

³² A lengthy discussion on this topic will be part of the final publication.

³³ British Museum London.

³⁴ Jacobsthal 1908b, 428 f. This might also be the reason why no in situ photograph was taken of the burial in Tumulus 3.

Jacobsthal³⁵ or the head fragment of a make-up device (fig. 4, 1)³⁶. Hitherto unknown and possibly assignable to Tumulus 3 is a considerable quantity of gold thread (fig. 4, 2) which was also part of the remains, originally worked as a decorative weft insertion into a precious fabric which is no longer preserved. Jacobsthal's description of textiles in Tumulus 3 – a finely woven, violet undergarment and a coarser, brownish fabric over it – can be linked to organic remains in the cigar boxes.

Describing the grave goods, Jacobsthal counted fragments of ten alabaster scattered throughout the sarcophagus and gilded terracotta beads (fig. 4, 3)³⁷. Except for a gilded grape (fig. 4, 4), they were of the same type as their counterparts in the burial of Tumulus 2 (see below). Presumably, they also belonged to wreaths of mixed materials.

A fully preserved insole (fig. 4, 5) is the most notable of the few finds Jacobsthal did not mention. Its exact provenance from one of the burials is unknown. In accordance with the length of the sarcophagus and the few remaining bones, the insole

for the right foot made of cork oak (*Quercus suber* L.), 22.2 cm in length and 7.25 cm in width³⁸, probably originates from the sarcophagus in Tumulus 3. It shows signs of use, but it is difficult to say how it was attached to the shoe. Thus, it is unclear whether a single sole was added as *pars pro toto* to the burial, or if the remaining piece is due to an incomplete transmission of the assemblage. Because of its size, the insole may be a further hint underlining Jacobsthal's identification of Tumulus 3 as a female burial³⁹. Another possible interpretation of the insole is based on Jacobsthal's observation that the leather remains which adhered to an *in situ* rider's spur of Tumulus 2 could be interpreted as boot remains. In addition, he describes the spurs with a width of only 5.5 cm as unusually delicate. Thus, an alternative interpretation of the cork sole as the inner sole of such a boot cannot be excluded⁴⁰.

Additionally, Jacobsthal's description of a brownish substance adhering to the facial bones⁴¹ of the deceased fits well with the well preserved cranial bones in the analysis of the human remains.

The Sarcophagus Burial in Tumulus 2

Several alabaster were part of the assemblage of Tumuli 2 and 3; one was better preserved than the others (fig. 4, 6) and was placed on its lid outside of the sarcophagus in Tumulus 2⁴². Such alabaster made of alabaster are attested in aristocratic tombs of the region from the end of the Archaic period onwards. Our type – with a wide convex disk-mouth and two rather small horizontal lugs – is particularly known from Macedonia, for instance from Potiaia⁴³. These alabaster were found in greater quantity than in Tumulus 2, e. g. in Tomb B of Derveni and in Tumulus A in Aineia in the late 4th century BC⁴⁴. Furthermore, some iron

fragments, a considerable number of gilded terracotta beads and copper leaves were deposited outside the tomb, leaving gold marks on the lid. Again, they were part of gilded wreaths of mixed materials. Inside, the lid showed remains of red pigment. Concerning the osteoarchaeological remains, the excavators observed some bone fragments mixed with ashes 2 m from the sarcophagus towards the middle of the tumulus. Together with some pieces of iron and a bronze ring, they attest to an offering for the deceased⁴⁵.

The assemblage of Tumulus 2 contains at least one object type of local production: the two unguentaria

³⁵ Jacobsthal 1908b, 430. Found above the head and on both sides of the thigh, they were used to fasten the robe that covered the deceased.

³⁶ From the southeast necropolis in Pergamon originate two comparable decontextualised bronze pins.

³⁷ Jacobsthal 1908b, 435 f. Adherent to the fragments was a blackish paste, the remainder of their original content. Their form is identical with the alabastron from Tumulus 2, see below n. 42.

³⁸ This corresponds approximately to EU shoe size 35.

³⁹ Jacobsthal 1908b, 435 f., where he also took into account the length of the sarcophagus and the reduced number and opulence of the grave goods.

⁴⁰ Jacobsthal 1908b, 435. Since the spur is located in the area of the ankle, it is narrower than the sole.

⁴¹ Jacobsthal 1908b, 430.

⁴² Jacobsthal 1908b, 429, together with fragments of an unknown number of such alabaster.

⁴³ Sismanidis 1997, 102 f. pl. 8 β. An elaborate example was found in the tomb of King Seuthes III. in the Golyama Kosmatka burial mound in Thrace (near Shipka, Bulgaria), see Spier et al. 2024, cat. 54.

⁴⁴ Derveni, Grave B, Typ A: Ignatiadou 2015, 103 f.; Aineia, Tumulus A, Graves II and III: Vokotopoulou 1990, 63 f. 131 f. pls. 16 γ. 8; 36. 37.

⁴⁵ Jacobsthal 1908b, 429.



8 Istanbul, Archaeological Museum Inv. 4222 and 4223. Unguentaria from Tumulus 2

made of Pergamene grey ware (fig. 8) that were placed above the head of the deceased. These date the tomb to the 2nd quarter / middle of the 3rd century BC⁴⁶. The same type belongs to the grave goods of cist grave A, the earliest of the so-called Kunisch graves in the south necropolis of Pergamon and contemporaneous to Tumuli 2 and 3⁴⁷. A drachme of Alexander the Great, reportedly found in Tumulus 2, provided a terminus post quem, but is now missing from the assemblage⁴⁸.

A good example of the re-contextualisation of some of the finds are the decorated plant stem spirals from the burial in Tumulus 2 (figs. 4, 7; 9). The fragments of these finds, referred to by Jacobsthal as water lily stems⁴⁹, were distributed in several find boxes in Istanbul and Pergamon, but can be reconstructed as one group of objects. They formed seven spirals of 10 cm in

diameter placed in the area of the lower legs of the individual buried in the sarcophagus of Tumulus 2. Their extremely fine decoration with cuticle gold makes it possible to distinguish three decorative forms consisting of ribbons, diamonds and stars. Jacobsthal mentioned a tumulus in Thessaly (Pilaf Tepe)⁵⁰ containing wreaths of vines decorated with gold foil, which may be comparable to the water lily stems.

On the body were placed several gilded wreaths of mixed materials with a loop larger in diameter than a human head. They comprise wood and lead trephines⁵¹ decorated with gilded copper leaves and gilded terracotta beads (fig. 4, 3)⁵². We can distinguish three types of trephines, two types with pieces of wood bent into shape (fig. 4, 8, 9) and one using a lead strip (fig. 4, 10). Common to all three types is a second layer of flat oak wood strips that enhances the stabil-

⁴⁶ See Kelp – Pirson 2020, 326 f. with n. 21. Unguentaria are regular finds in Hellenistic graves of the region, most prominently in the sarcophagus of the İlyas Tepe Tumulus, see Japp 2011.

⁴⁷ Kunisch 1972, 94–96 fig. 4. In sarcophagus D, a specimen of this type is associated with unguentaria of a more recent type, see Kunisch 1972, 100–102 fig. 8.

⁴⁸ Both coins of the assemblage remain missing, apart from the drachme in Tumulus 2, an ancient fake of an electron coin from Phokaia in Tumulus 3: Jacobsthal 1908b, 436; Conze et al. 1912/1913, II 240; Kelp – Pirson 2020, 326.

⁴⁹ Jacobsthal 1908b, 433: *Nuphar lutea* (L.) Sm., belonging to the *Nymphaeaceae*.

⁵⁰ Jacobsthal 1908b, 432.

⁵¹ For this term, see Asderaki – Rehren 2008. Not to be confused with the medical instrument for trepanation.

⁵² Jacobsthal 1908b, 431 f. In the sarcophagus of Tumulus 2, he distinguished at least five wreaths. In contrast to the less detailed documentation of the burial in Tumulus 3, their position can be roughly determined from in situ photographs.



9 Istanbul, Archaeological Museum Inv. 3224. Fragments of water lily stems with gold decoration



10 Istanbul, Archaeological Museum Inv. 3221. Selection of gilded copper leaves from Tumuli 2 and 3

ity of the trephine (fig. 4, 11). Both layers are perforated and tied by tufts; each tuft consists of a bunch of copper wire. The trephine is additionally wrapped with copper wire, which sometimes is used for the attachment of leaf stalks as well. Although we have numerous fragments of wide and narrow lancet-shaped copper leaves (fig. 10), no oak or vine leaves exist in the assemblage. Due to the properties of lead, the fragments of the lead trephine vary in width. Some end plates are pierced, others remain without perforation⁵³. The wood trephines differ in type as well. In accordance with its larger diameter, one type with a semi-circular cross-section (fig. 4, 8) is thicker and wider while the cross-section of the smaller and thin-

ner trephine is rectangular (fig. 4, 9). Terracotta acorns (fig. 4, 12) – a few small ones and numerous large ones, all with gilded nuts – are associated with the larger wood trephine. In a better-preserved segment, a terracotta acorn is still attached to the copper wire tuft. Other fragments of this type of trephine have tufts with lancet-shaped leaves⁵⁴. Globular terracotta beads are preserved in large numbers (fig. 4, 3). Identified as myrtle berries (*Myrtus communis* L.), they determine the species of most wreaths⁵⁵. They come in three different sizes and have a white slip. Mounted on copper wire, the small and medium-sized beads were made using a sheet-gold overlay of almost square shape, while the large beads are semi-gilded.

⁵³ Among them, presumably the two perforated lead strips identified by Jacobsthal 1908b, 435.

⁵⁴ Because of the lack of fitting leaves, instead of the gilded oak wreath assumed by Jacobsthal 1908b, 432, a wreath with various species seems more likely.

⁵⁵ Jacobsthal 1908b, 431 f. See for example a myrtle wreath from Demetrias: Asderaki – Rehren 2008, 507 f.



11 Istanbul, Archaeological Museum Inv. 3218. Detail of the gold oak wreath with winged figure and ›knot of Herakles‹, front and rear side

Elongated beads for laurels or olives are absent from the assemblage. Apart from the grapes (fig. 4, 4)⁵⁶ and acorns, other shapes of terracotta pieces include partially gilded flowers (fig. 4, 13) and cone-shaped buds (fig. 4, 14). They can belong to a myrtle wreath as well as to a wreath that incorporated various species⁵⁷. Out of the ordinary is a limited number of smaller pieces produced of a light clay and forming red-coloured blossoms (fig. 4, 15).

Seemingly produced in Pergamon or its region, gilded wreaths of mixed materials were widespread in the Greek world and its margins from the second half of the 4th century and throughout the 3rd century BC⁵⁸. They come from rich tombs, but not necessarily exceptionally rich tombs⁵⁹. The number of wreaths deposited in the Pergamene sarcophagus is large compared to what is known elsewhere. This probably reflects the importance of the deceased and the honours paid to him by his family or the community during the funeral.

A precious gold oak wreath (fig. 4, 16) accompanied these modest gilded wreaths. It was placed prominently on the head of the deceased. Small holes in the tubular stem of gold leaf serve to attach branches with gold oak leaves and stalks with golden acorns. The type is characteristic of the early Hellenistic period and is found mainly in exceptionally wealthy tombs in Thrace and Macedonia⁶⁰ and, to a lesser extent, in Magna Graecia⁶¹. The shape of the leaves is similar to the leaves of two particular oak species, Valonia oak *Quercus ithaburensis* ssp. *macrolepis* (Kotschy) Hedge & Yalt. (syn. *Quercus macrolepis* Kotschy) and Macedonian oak *Quercus trojana* Webb. (syn. *Quercus macedonica* A.DC.), the latter identified with φηγός in ancient Greek. Both species are native to the Balkans and the eastern Mediterranean, but *Quercus macedonica* seems to be limited to western and southwestern Turkey and does not reach the Levant⁶². As a special feature, a ›knot of Herakles‹ and a winged figure presenting a laurel wreath (fig. 11) were added at a later stage

⁵⁶ In view of a certain number of preserved grapes, Jacobsthal's recording of only one terracotta grape in the sarcophagus of Tumulus 3 (Jacobsthal 1908b, 435) raises the question if all grapes belong to the burial in Tumulus 3. Some wreaths in Tumulus 2 possibly contained grapes, too.

⁵⁷ For a wreath with grapes, flowers and berries, see e. g. an example from Potidaia: Sismanidis 1997, 102 f. pl. 8 a (associated with alabastra of the same type as in Pergamon, see n. 37).

⁵⁸ In general, see: Jeffreys 2019. For southern Italy, see De Juliis 1985, 91–93 cat. 20; Guzzo 1993, 111.

⁵⁹ On this topic, see Pencheva 2022 (for Macedonia, Thrace and the Greek apoikiai on the Black Sea coast).

⁶⁰ Kyriakou 2014; Ignatiadou – Tsigarida 2011.

⁶¹ De Juliis 1985, 100–108; see also Guzzo 1993, 275–279; e. g. the wreath of Armento: Lullies 1982; De Juliis 1985, 100 f. cat. 32; Guzzo 2009/2010; Wünsche 2010, 44 f. For the only example in Thrace, see Tonkova 2016, 489 f. fig. 16; Spier et al. 2024, cat. 54a; Stoyanov 2024, 72.

⁶² Herzhoff 1990; Dakares 1994. According to ancient sources (e. g. Hes. Frg. 240, 8 and 319; Paus. 1, 17, 5), the holy oak tree in the oracle sanctuary of Dodona belonged to this species. On the discussion whether the ruling Molossian kings expanded this main sanctuary in Epirus from the late 4th cent. BC onwards, see Emmerling 2012, 229–237 with references in n. 1435.

to the original wreath after removing some branches of oak leaves in the centre. The figure is placed in front of the Heracles knot covering most of it. The knot is formed by two simple loops of gold wire while the small gold figure is more complex. The hair dress with an applied bun matches the 'melon style'. The figure is naked apart from a mantle draped over the outstretched arms and swinging wide behind the legs. The child-like body is cast in gold while the wings and the drapery are made of incised gold sheets. The extended wings – soaring high above the head – were soldered to the back and the whole figure is fastened with a gold wire to a solid tetragonal gold stake. The stake punctures the tubular stem of the oak wreath. Due to the female hair dress and without definite sexual characteristics, Jacobsthal identified the figure as Nike⁶³. These characteristics, together with a child-like body⁶⁴, also occur in jewellery types with Eros⁶⁵. Therefore, the identification of the figure is controversial⁶⁶. Considering the long coat behind the figure's legs, otherwise known from Nike iconography, a mixing of types is rather obvious. Looking at gold wreaths, Eros as well as Nike figures appear in the centre⁶⁷. Unlike the figure from Tumulus 2, those Nike figures are dressed, while the Eros figures adorn various wreaths and diadems that are not oak wreaths⁶⁸. The design of the knot and the figure clearly differ from the standardised oak branches of the wreath. Their later addition, possibly implying two periods of use, explains the chronological gap between the time of the manu-

facture of the wreath – probably in the last 3rd of the 4th century BC – and the time of its deposition towards the middle of the 3rd century BC.

Apart from funerary wreaths and containers of ointment inside and on top of the sarcophagus, the deposition of weaponry distinctively adds to the image of a warrior. Laid on his back on a kline with a wooden frame (fig. 4, 17)⁶⁹ the deceased had his weapons set next to him: an iron sword on his left side (figs. 2, 4, 18), an iron spear on his right side (fig. 4, 19), and in addition several iron and bronze riding spurs (fig. 4, 20).

The deceased was wearing one pair of spurs and had more pairs as grave goods⁷⁰. Regarding their function in the assemblage, the number of spurs indicates that this is the equipment not only of the deceased, but also of several other equestrians. They may be the spurs of warriors dependent on the deceased or of defeated enemies.

Primarily, the deceased was accompanied by his offensive weaponry. This consisted firstly of an iron sword⁷¹ (fig. 4, 18) in an iron scabbard. It is a La Tène type of sword, typical of north Alpine Europe and belongs to a type dating to the first half of the 3rd century BC⁷². Secondly, associated with the sword is another blade, which initially was identified as a dagger⁷³ but is, in fact, a large spear point (fig. 4, 19). The casing is no longer preserved but the in situ photograph shows fragments of it. The weapons are wrapped in strips of textile as is often the case in La Tène burials

⁶³ On the identification, see Jacobsthal 1908b, 431; followed by Kelp – Pirson 2020, 327 f.

⁶⁴ Typical for Eros is, for example, the small stature, a baby-like overhanging belly and the plastically accentuated inguinal cord (e. g. LIMC III [1986] 916 no. 780 a pl. 654 s. v. Eros [A. Hermay – H. Cassimatis]; Picón et al. 2007, 206 fig. 240), see also the known genre figure of a child strangling a goose (Kunze 2002, 142–155 figs. 60. 62). By contrast, the design of the belly is different for naked female bodies (e. g. LIMC II [1984] 77. 103 nos. 683. 1013–1015 pls. 68. 99 s. v. Aphrodite [A. Delivorias et al.]). We are grateful to Ursula Mandel (Frankfurt), especially for the helpful discussion of the Pergamene gold figure.

⁶⁵ e. g. a few pieces in London, British Museum: earrings (Inv. 1856,1226.1378, see Marshall 1969, 207 cat. 1898 pl. 32, and Inv. 1917,0601.1908, see Marshall 1969, 208 cat. 1908); finger-rings (Inv. 1867,0508.414, see Williams – Ogden 1994, 73 cat. 29; Inv. 1917,0501.92, see Marshall 1968, 20 cat. 102 pl. 4; Inv. 1917,0501.99, see Marshall 1968, 20 cat. 99 pl. 4). For a finger ring in Taranto, see De Juliis 1985, 289 cat. 208.

⁶⁶ Jackson 2006, 121 cat. 2 pl. 1 versus e. g. LIMC VI (1992) 884 no. 422 s. v. Nike (U. Grote). Deppert-Lippitz 1985, 229 fig. 165, referred to a figural gold earring in Istanbul originating from a sarcophagus in Izmit as a female genius; Pfrommer 1990, 251 f. FK 100 pl. 6, 4, considers the figure of the gold earring from the Pangaion complex in Berlin as female, either as a genius or as Nike. Further examples are a gold figure from Athens in Paris, see LIMC VI (1992) 884 no. 421 pl. 591 s. v. Nike (U. Grote) or a gold

earring in London (<https://www.britishmuseum.org/collection/object/G_1921-0511-2>; last access 19.12.2022); see also Marshall 1969, 200 cat. 1849. 1850 pl. 32.

⁶⁷ Eros: e. g. in a diadem from one of the Sedes Tombs (Tomb Γ'), see Kotzias 1937, esp. 876–878; Kypraiou 2000, 86 f. fig. 91; Ignatiadou – Tsigarida 2011, cat. 14. – Nike: e. g. a wreath from the tumulus tomb of Golyamata Mogila near Malomirovo-Zlatinitza in Bulgaria, see Agre 2011, 31–36; Tonkova 2016, 489 fig. 14, see also a wreath from Pantikapaion: Wünsche 2010, 60 f. The wreath from Armento in Southern Italy with Nike as a central figure contains not less than four flanking Erotes and two more female figures, see Lullies 1982; De Juliis 1985, 100 f. cat. 32; Guzzo 2009/2010.

⁶⁸ Castor 2017, 235 f., connected these gold wreaths and diadems with the female sphere.

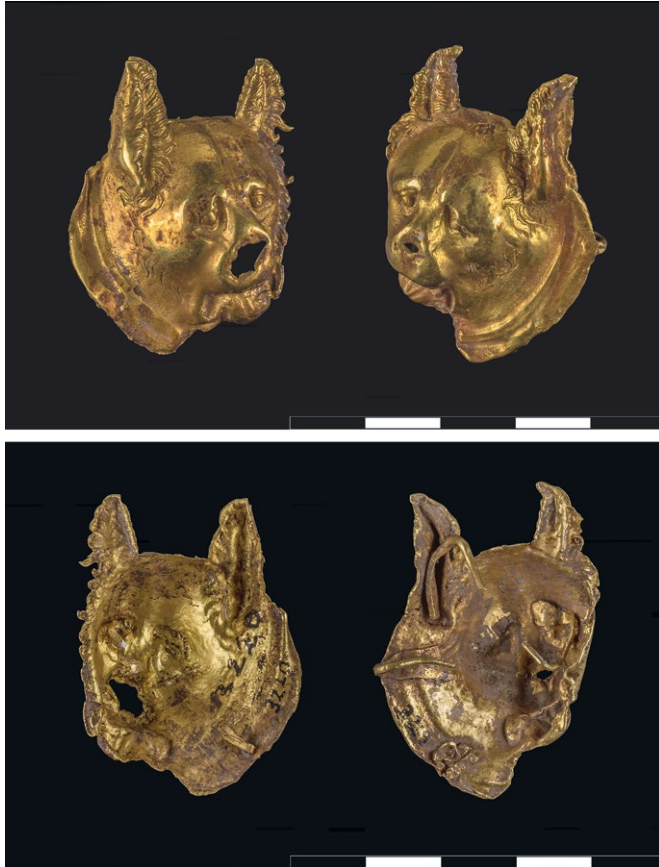
⁶⁹ Jacobsthal 1908b, 430. Remains of the planks of the kline – a soft, light-coloured cypress wood attached to large iron nails – appeared along the edge of the sarcophagus.

⁷⁰ Jacobsthal 1908b, 435: Two more pairs of spurs appeared next to the sword, the thorn of a single spur between the thighs and one pair in the lower left corner of the sarcophagus.

⁷¹ The matching upper end of the sword mandrel and several smaller fragments of the blade remain in the Pergamon excavation depot.

⁷² La Tène B2/C1, see Lejars 2007; Lejars 2008, esp. 145 f. fig. 14.

⁷³ Jacobsthal 1908b, 434.



12 Istanbul, Archaeological Museum Inv. 3219 and 3220. Appliqués in the shape of heads of Molossian dogs, front and rear side



13 Istanbul, Archaeological Museum. Partial reconstruction of the iron sword (La Tène B2/C1) with gold dog appliqués on the handle, in addition matching fragment of the sword mandrel in the depot of the Pergamon Excavation (Inv. 1906.KT.KF10)

from Gaul and Italy. The combination of these two weapons is characteristic of the weaponry of Celtic⁷⁴ warriors of the first half of the 3rd century BC. This type of weaponry is documented throughout the north Alpine La Tène area as well as in northern and central Adriatic Italy and in parts of the Balkans⁷⁵.

Apart from the gold oak wreath the most valuable finds from Tumulus 2 are two gold appliqués shaped as heads of Molossian dogs (figs. 4, 21; 12). One head was found in close proximity to the sword⁷⁶. The work-

manship of the embossed gold sheet is excellent, Greek in style and dates to early Hellenistic times. In the back, each of the antithetic pieces has hooks to attach them to a support made of perishable material⁷⁷. To date, these appliqués are without comparison and their function is also uncertain. The round collars at the lower edge of the appliqués, however, perfectly fit into a groove in the cross-guard of the blade (fig. 13). Thus, we propose reconstructing the heads as part of the lost wooden handle of the La Tène sword. In line

⁷⁴ On the term as describing various communities sharing a similar lifestyle, see Rieckhoff 2012. On the consequences of ethnic interpretations of burials using ethnic labels conveyed by ancient sources, see Nowak 2014, a case study on the interpretation of South Italian burial rituals.

⁷⁵ On the topic see Baray 2014; Baray 2016; Baray 2017.

⁷⁶ Jacobsthal 1908b, 434 f. The other head only came to light during sieving the material from the sarcophagus.

⁷⁷ Jacobsthal 1908b, 435. A pitch-like mass had been moulded into the cavity on the rear of one head. This black solidified mass was detached without losing its shape.



14 Istanbul, Archaeological Museum Inv. 3221r. Rivets, attributable to the handle of the iron sword

with this hypothesis are the remains of six wooden rivets (fig. 14)⁷⁸ suitable to fix the wooden handle onto the iron mandrel of the sword. Such rivets are a common feature of Celtic swords. Nevertheless, golden Molossus heads are a very unusual decoration on this type of weapon. However, animal head appliques on weapon handles are reminiscent of the most valuable versions of Achaemenid akinakes⁷⁹. At the same time, such a transfer of the Near Eastern tradition of animal decorations into Greek iconography, where dogs were common guardian figures, is in line with an established practice of Hellenistic elite circles in Iran to express their cosmopolitan taste⁸⁰. Not least, the Achaemenid Empire had its impact on Thrace, too, including the production of objects that combine Achaemenid, Greek and indigenous elements⁸¹. The sword in Tumulus 2 corresponds to this eclectic design and is thus a mixture of Celtic, Greek and Oriental cultures.

The choice of the Molossian guard and hunting dog to decorate a *La Tène* sword, the main weapon of the deceased warrior, cannot be coincidental in the first half of the 3rd century BC. In the Hellenistic period, this large dog breed was considered superior to other

breeds in size and courage⁸² and specifically associated with the kingdom of the Molossians of Epirus⁸³.

Attached to the iron armament in Tumulus 2 are remains of a finer cloth over a coarser woollen fabric. They belong to the remnants of textiles that are significant components of the burials in Tumuli 2 and 3. In the cigar boxes, numerous small brown multi-layered leather fragments are preserved (figs. 4, 22; 15) and some of them have stitching holes. Greenish corrosion residues were found on the inside of some leather fragments, presumably caused by the original contact with bronze and copper objects. This could be a reference to the leather remains in the rider's spur observed by Jacobsthal⁸⁴, which probably originated from riding boots. Gold leaf and violet-coloured deposits adhered to the outside. As mentioned above, the latter were also found on bone remains and have been identified as dye residues from the family of *Muricidae* sea snails⁸⁵. The original leather items remain to be identified; another of the various possibilities is to relate them to the remains of the *kline*⁸⁶. Also noteworthy are small remnants of fine basketry (figs. 4, 23; 16) made of plant fibres, which Jacobsthal did not mention.

⁷⁸ Five preserved in the Archaeological Museum of Istanbul and one in the depot in Pergamon (Inv. 1906.KT.KF 3).

⁷⁹ Moshtagh Khorasani 2006, 72–74. Ancient authors tell of Celtic envoys in Babylon at the court of Alexander the Great: *Di-od.* 17, 113, 2; *Arr. Anab.* 7, 15, 4, see Emilov 2015, 369.

⁸⁰ Kawami 1986. On dogs as guardian figures in Greek art, esp. p. 262 f. and e.g. Stroszeck 2014, 199 f. no. 41 (funerary enclosure in Athens).

⁸¹ Rehm 2010a; Rehm 2010b, esp. 170–174. 177–179. For economic exchange systems, see also Blichert-Toft et al. 2022.

⁸² *Aristot. hist. an.* 9, 1.

⁸³ In this period, the kings of the Molossians, such as Alexander and Pyrrhos, distinguished themselves in the Balkans and in

southern Italy, and Celtic armies settled in the Balkans (Emilov 2015, 368–371). During the 3rd cent. BC, mythological ties to Pergamon developed through the myth that Molossos was the brother of Pergamos, born of the union of Neoptolemos and Andromache following their settlement in Epirus: *Erat. Schol. Od.* 3, 188; *Paus.* 1. 11, 1.

⁸⁴ Jacobsthal 1908b, 435.

⁸⁵ Reifarth – Tamburini 2018.

⁸⁶ *Hom. Od.* 23, 200–205: Odysseus stretched on his home-made bed a »thong of ox-hide, bright with purple« (translation Murray 1919), see Laser 1968, P6.



15 Pergamon, Excavation depot. Leather fragments (Inv. 1906.KT.KF7)



16 Istanbul, Archaeological Museum Inv. 3221. 3224. 3225. Fragments of basketry

On the Interpretation of the Burial in Tumulus 2

The main burial of Tumulus 2 in Pergamon contained the remains of a cosmopolitan élite member of the Hellenistic period. The assemblage is very consistent with Hellenistic funerary rites: most prominently, the placement of the gold wreath and the two unguentaria at the head of the deceased, as well as the choice of other grave goods such as the wreaths of mixed material, the bangles from the leg area formed by a decorated water lily stem, etc. Furthermore, a regionally well-known grave type and the prominent location of Tumuli 2 and 3 suggest nothing less than a locally established mercenary leader⁸⁷. The exceptional decoration of his main weapon suggests relations with the Balkans and the Adriatic domain and possibly even refers to the Molossian royalty of Epirus. The numerous gilded wreaths associate him with the large community of Hellenistic dignitaries, be they of Greek or non-Greek origin. The gold oak wreath links him more specifically to the Macedonian aristocracy or closely related circles. In Macedonia, only graves of the royal family and highest élite contain a gold oak wreath⁸⁸. The modification of this wreath with the addition of a Nike figure could be an allusion to a glorious episode in the life of the character. It is in any case an enhancement and an appropriation of the original wreath. Additionally, the remains of murex purple dye attest to the wealth of the assemblage and, more in general, to conspicuous consumption⁸⁹. Finally, the funeral rites and the tumulus monument indicate that the deceased was well integrated into élite circles of western Asia Minor at the time of the foundation and first development of the kingdom of Pergamon.

Unique within the Pergamene context is the association of Macedonian Greek grave goods with a La Tène weapon set. Within the wider context of Hellenistic funerary rites in the Mediterranean, these characteristics place the deceased of Tumulus 2 in the cosmopolitan milieu of mercenaries of the early

Hellenistic period. The sword, the blade and the hilt can be attributed to the central European La Tène culture or to craftsmen working in La Tène tradition. In the second half of the 4th century and the first half of the 3rd century BC, there is a series of comparable burials on the fringes of the Greek world, which combine La Tène-style weaponry⁹⁰ with Hellenistic-style furnishings. This is the case of the equestrian tombs of La Pedrera⁹¹ in the northeast of the Iberian Peninsula. Another example is Tomb Benacci 953⁹² in Bologna, which also combines a gold wreath with La Tène armament. To these we can add the so-called Senone Tombs⁹³ in the necropolis of Montefortino in central Adriatic Italy which are contemporaneous with the Pergamene tumulus. Thus, in the Mediterranean, such a burial has parallels, yet their interpretation depends on the conceptual frame.

La Tène weapons are occasionally known from eastern Anatolian sites where they attest to the continued importance of this burial custom. In Boğazköy, an area where Celtic tribes had to settle after their defeat by Antiochos I in 268 BC, the Hellenistic cist grave no. 3 in the area of Temple 1 contained a weapon set with similar components to those in Pergamon: an iron sword, its scabbard, a spearhead and a ring⁹⁴.

Conceptually, the material evidence offers more than one direction for the interpretation of the assemblage. The first option is to take the differing origin of the grave goods as the starting point. For the interpretation of La Tène objects in burials in the Mediterranean, the discussion of such finds in Thrace is instructive⁹⁵. Instead of the scenario of a strategically planned Celtic expansion and settlement in compact Celtic enclaves, not least driven by the narratives of ancient literary sources⁹⁶, a model that favours the migration of small groups and tribal segments has become more prevalent. For the interaction between newcomers and locals, not only warfare, but also a network of various agreements including

⁸⁷ Cf. Schwarzmaier 2011, 297 («Verstorbener aus der Aristokratie Pergamons»).

⁸⁸ Kyriakou 2014.

⁸⁹ Veblen 2007.

⁹⁰ Hauschild 2010. Baray 2011, 327, noted the «européanisation des panoplies que l'on retrouve désormais à l'identique sur l'ensemble de territoires occupés ou atteints par les porteurs de la culture La Tène».

⁹¹ Graells i Fabregat 2009–2011; Graells i Fabregat 2011.

⁹² Baray 2014, 96–111.

⁹³ Baray 2014, 96–111.

⁹⁴ Kühne 1969, 38 f. fig. 8 a; Boehmer 1972, 148 cat. 1337 pl. 48. Several of the cist graves in this necropolis are surrounded by stone circles, the krepeis of small tumuli (particularly in the so-called South Area), see Kühne 1969, suppl. 9.

⁹⁵ See Megaw 2005; Emilov 2015, esp. 373–376 with further references.

⁹⁶ Liv. 38, 16, 1, see Mitchell 1995, 13–19.

exogamy is considered⁹⁷. From the 4th century onwards, mercenaries of Celtic origin moved throughout the Mediterranean⁹⁸, where they encountered Greek culture even before marauding in Greece and Asia Minor⁹⁹. In early Hellenistic times, Hellenistic rulers recruited Celts as mercenaries and, as a result, they reached Asia Minor. According to written sources, Celtic groups migrated from the southern Balkans¹⁰⁰, but archaeologically, this migration has been difficult to grasp¹⁰¹. Apart from La Tène fibulae and bracelets discovered in early Hellenistic settlements, La Tène objects have been found in tumulus burials in Thrace associated with Hellenistic grave goods and fibulae of so-called Thracian type. Instead of labelling all those cases in an ethnic interpretation as indications for Celtic presence, they are understood as part of a process of adapting and integrating La Tène elements into male and female local costume¹⁰².

Also in Thrace, La Tène swords in burials have been associated with mercenary graves¹⁰³. Cautioning against a self-evident equation of La Tène objects in burials with a respective origin of the deceased is the Mal-tepe tholos tomb near Mezek. Jacobsthal – the very same scholar who excavated Tumuli 2 and 3 in Pergamon – identified these La Tène objects and tied them to the chariot burial of a Galatian chieftain of Tylis, the centre of Galatians in Thrace¹⁰⁴. The contextual analysis of those objects revised his view and interpreted them as a conscious selection of items deposited as trophies after a victory of Antigonos Gonatas¹⁰⁵. It is a curious historiographical coincidence that the author of the fundamental work on early Celtic art found La Tène weaponry in Asia Minor

during his first and only excavation, but was too early in his career to identify it himself.

Research on Galatians in Thrace provides some assumptions that help define criteria for the interpretation of the assemblage of Tumuli 2 and 3 in Pergamon. Ancient narratives call for a critical reading of literary sources to reveal the range of contact situations between newcomers and locals¹⁰⁶. This applies to Pergamon and the Attalid narrative of barbarian Galatians as well¹⁰⁷. The Attalids fought Celtic tribes, but also employed mercenaries of Celtic origin throughout the 3rd century BC, even after Attalos I claimed his Galatian victories¹⁰⁸. Thus, also in Asia Minor not all Galatians need to be foes in every encounter. Finding La Tène objects in a burial does not prove Galatian presence; an ethnic interpretation is just one of many options of understanding and a very unsuitable starting point¹⁰⁹. Key for understanding a burial assemblage is its contextual analysis. In the process of ›close reading‹ indications for personal objects, ritual practices¹¹⁰, and variations of all kinds help to build up a comprehensive picture. For the Pergamene Tumulus 2, the topographical setting provides such a variation from local funerary practices. Situated in a prominent, yet not elevated location, the tumulus lies in close range of the city, but further out than any other burial of the time, as far as we know¹¹¹.

Because of its composition and placement in the burial, we consider the weapon set in the sarcophagus of Tumulus 2 as personal armour¹¹². The deceased is buried with his La Tène type weaponry, as would be expected for a Celtic warlord of the first half of the

97 For a valuable item like the gold neck ring from Gorni Tsibar (Bulgaria, see Delev 2024, 94 fig. 51), the traditional interpretation of booty from fighting against Celtic groups has been called into question recently in favour of seeing the piece as a possible political gift in an early stage of encounter or even as the result of exogamy of a high-status woman, see Emilov 2015, 368 f.

98 Xen. Hell. 7, 1, 20–23; Diod. 15, 70, 1, see Hannestad 1993, 15 f.; Mitchell 1995, 13; Strobel 1996, esp. 18; Hauschild 2010; Baray 2014; Baray 2017.

99 On the so-called Danegeld paid to Celtic tribes to prevent plundering, see Emilov 2015, 371–373. Originally received in precious gifts (Polyb. 4, 46, 3), the tribute was later paid in gold coins and talents; see also Hannestad 1993, 20 f.

100 Strobel 1996, 236–252 with n. 368, most importantly citing Liv. 38, 16, 1–15 (referring to a lost passage of Polybios) and the Early Imperial historiographer Memnon F 11, 1–7 from Heracleia Pontike (whose source was a compatriot predecessor, Nymphis). The topos of a Galatian invasion of Asia Minor remains popular, e. g. Paus. 10, 15, 2–3 (on an alleged oracle predicting the events).

101 Schönfelder 2010; Baray 2014, 75–95.

102 Tonkova 2006; Emilov 2007; Emilov 2010; Emilov 2015, 373. This, however, combined with some artisanal mobility. There are

numerous examples of such practices, e. g. fashionable βαρβάρων ὑφάσματα like the Persian kandys in Athens in the late 5th/early 4th cent. BC (von Lorentz 1937, esp. 198–212; Miller 1997, 243–258).

103 Emilov 2015, 37 f.

104 Jacobsthal 1969, 98. 151 f. 185 f. cat. 164. 176 pl. 103. 112. 248 a; 260 g. On Tylis: Polyb. 4, 46, 1–3 (see n. 99).

105 Emilov – Megaw 2012.

106 Emilov 2015.

107 Schalles 1985; Winkler-Horaček 2011.

108 Hannestad 1993, 19 f.; Mitchell 1995, 21–26; Strobel 1996, 239–243.

109 This is, by now, a commonplace statement, see e. g. Brather 2004. Maybe less commonplace is the view that avoiding the subject is less productive than analytical rigour in tackling those questions.

110 See Van Andringa 2021.

111 See the map in Pirson (in this volume) p. 127 fig. 1.

112 According to Baray 2017, 171–178, Celtic mercenaries had to be armed at the time of their enrolment.

third century. He is possibly presented as a member of a small troop of equestrians¹¹³.

Archaeological and archaeometrical investigations have brought organic traces of grave goods to our attention, which are of importance for understanding the burial rite. Following this line of reasoning, the extensive use of textile as documented on the iron sword but also recorded by Jacobsthal in his description of organic finds¹¹⁴ – a burial rite best known from La Tène weapon graves¹¹⁵ – indicates the amalgamation of the La Tène burial rite of wrapping grave goods with Hellenistic funerary practices. This provides precious indications for the understanding of the Pergamenian aristocratic milieu of the first half of the 3rd century, before the crystallisation of the clashes between the Attalid kingdom and before the Galatian tribes settled in Asia Minor.

Following the argument of ›close reading‹, the most striking and singular features of the burial in Tumulus 2 are the hybrid forms of its prestigious grave goods. The first piece is the gold oak wreath with the unparalleled later addition of the Herakles knot and the winged figure of solid gold, but of lesser craftsmanship, no less Greek in style. This figure is a typological hybrid between Nike and Eros and the gender ambiguities are inherent to the type. Though figural decorations with Eros or Nike were regularly chosen for gold wreaths and diadems, the Nike-Eros hybrid is an unusual choice for a gold oak wreath that is closely connected with the highest ranks of Macedonian aristocracy.

The second item is the iron sword with – according to our reconstruction – its unique handle decoration in the form of two golden heads of Molossian dogs. These Greek style protomes of highest craftsmanship embellish a La Tène type sword, thus adapting Hellenistic fashion to La Tène construction¹¹⁶. Conventionally, that makes Tumulus 2 an excellent example of the material manifestation of a composite set of beliefs, thus documenting the fluidity of personal iden-

tities and the mental mobility of migrating individuals such as mercenaries. To say the least, a burial in the style of La Tène weapon graves of the middle of the 3rd century BC in a tumulus in Pergamon is evidence for the military mobility of that period.

However, in order to approach the identity of the deceased individual, we need to transcend the dichotomies of local/non-local, Greek/non-Greek, etc. and diminish the importance given to the origin of the deceased. Therefore, we propose, as a second option, a completely different conceptual frame for the interpretation of the assemblage. Better suited to represent an assemblage with such overall contradicting features is actor-network theory (ANT)¹¹⁷. ANT considers three theoretical dimensions: the network, the actor and the process that relates actors within a network¹¹⁸. Apart from a theoretically informed terminology, ANT offers a reflexive perspective on its methodology. Bruno Latour¹¹⁹ imagined the world as a laboratory that, in our case, includes a setting where each find of the assemblage and each step of the scientific process from the excavation to this written account is part of a network of circular references.

To represent just the latest chapter of the scientific process, we can describe our network building in ANT terms as a sequence of actions¹²⁰. Our research started with the lack of knowledge on the ancient necropoleis of Pergamon. The Pergamon Excavation tackled this problem by initiating an individual research project on grave monuments and burials within the scope of a larger research programme¹²¹. Hence, the researcher¹²² who revisited old finds and archives in Pergamon, Berlin and Istanbul collaborated with other members of the excavation team. As more researchers got involved, the shared awareness produced a depot find¹²³ – the famous cigar boxes – that caught the interest of other specialists¹²⁴ who in turn enrolled colleagues¹²⁵ to formulate a comprehensive analysis of the mix of organic and non-organic finds. Thus mobilised, the resulting cooperation became

¹¹³ A small group with its own leader in a leading position among the mercenary contingents of Pergamon corresponds to the analysis of ancient sources regarding Celtic mercenaries, see Baray 2017.

¹¹⁴ Jacobsthal 1908b, 429 f. 433.

¹¹⁵ e. g. in the graves at Vix (Côte d'Or, France): Moulherat 2003, and at Glauberg (Hesse, Germany): Peek 2018. Here, textile wrapping of grave goods is documented and, in addition, textile remnants point to the covering not only of the deceased but also of all grave goods. Further examples: Haffner 2015.

¹¹⁶ There is another object said to be executed in an eclectic Graeco-Celtic style: a Middle La Tène scheme fibula from Sashova Mogila at Shipka in Thrace. The gold double-spring fibula is dec-

orated in gold filigree and granules and inlaid with cloisonné enamel, see Marazov 1998, 102 no. 12; Treister 2004, 195; Emilov 2015, 375.

¹¹⁷ e. g. Belliger – Krieger 2006.

¹¹⁸ Belliger – Krieger 2006, 24.

¹¹⁹ Latour 2000.

¹²⁰ Belliger – Krieger 2006, 40–42.

¹²¹ By F. Pirson.

¹²² U. Kelp.

¹²³ By A. Pirson.

¹²⁴ W.-R. Teegen.

¹²⁵ N. Reifarh and J. Wiethold.

part of the multinational project NekroPergEol¹²⁶ and the new expertises led to the identification of the La Tène weapon set¹²⁷ as well as to a number of other insights, summarised in this paper.

Every researcher processed the available information within the confines of his or her expertise. Since the archaeological as well as the cultural context translates in countless ways into the modern scientific process, our research selected sequences of actions considered relevant. From the topographical context of the tumulus burial to the chronological and typological classification of each item, various connections could be made. Key problems are reassembling fragmented artefacts, locating each object in the assemblage of Tumulus 2 and 3 respectively, relating the two burials to each other, as well as determining possible functions of fragmented items, e. g. the leather fragments. The archaeometric analysis added further layers to the understanding of the assemblage, e. g. the use of textiles including the equipment with refined fabrics.

As a result, this scientific process relates in various ways to the assemblage. Yet in contrast to other epistemologies, ANT transforms the semiotic sign system into a real network to define functional relations within that network¹²⁸. Accordingly, the assemblage relates not only directly to its archaeological and cultural context, but also to the network of modern science. In this integrated network, actors get roles ascribed by other actors. They gain these roles by a selective process of translations that forms the sequence of actions¹²⁹. Thus, a network relation equals a network translation. The translation efforts of an actor form an action programme. Intermediaries in this process are the finds in our assemblage, the tools we use to study them and the modes to display the results of our examinations. Tools are the shovel used to excavate, the camera used to document the finds in situ, or the scanning electron microscope (SEM) used to investigate the materials. Modes of display are descriptions, photographs, charts, etc. Multilateral translations constitute the network dynamics. Nothing in a sequence of actions can exist in itself or has a permanent starting point, hence the term circular reference. Meaning is articulated not only by lan-

guage, while every actor incorporates at the same time material and immaterial elements. Translations work towards concretion as well as abstraction. Within the networks of circular references, any intermediary or referent can become an actor in a process of translation.

This leads to a focal point, because applying ANT means rethinking basic subject–object dichotomies. Rooted in the so-called communications of Luhmann's theory of social systems¹³⁰, ANT conceptualises every actor within a network as hybrid constituted by different elements. Each actor and each of the elements assembled in an actor are networks in their own right. Depending on the experiment or the research question, networks can become hybrid actors, just as hybrid actors can become networks. Consequently, the floor is opened for non-human acting, which is more difficult to grasp within a conventional concept of acting. ANT regards anything that happens or is experienced as acting. Thus, the cause of any effect may become an actor. That is why actors may be human or non-human and actions of actors need not be intentional¹³¹. In the burial of Tumulus 2, the deceased and his remains as well as any grave good can become an actor. According to this definition and in the sense of a concrete translation, the affordance of an object such as a sword or a spear but also of a wreath or a vessel is an action. In an abstract translation, these things are intermediaries acting in the process of transmitting meaning. The most valuable metal objects in our burial with their hybrid origin become effective actors in their time but also in our interpretation. On the one hand, a personal weapon including Greek and non-Greek aspects, with traits possibly selected by the owner himself, is the result of a sequence of actions. On the other hand, the weapon acts as a materialised symbol of an individual self-conception that defines and promotes an identity previously undocumented in Asia Minor. So far, this does not seem a major shift compared to interpreting the meaning of our assemblage in its particular cultural setting in Pergamon¹³².

The strength of this approach emerges when we venture into including more of the contradicting traits of the assemblage as well as the different inter-

¹²⁶ DFG-ANR project »Von den Grabhügeln der Herrscher zu den Nekropolen der Bürger: Moderne Funeralarchäologie im Dienste der Erforschung sozialer Stratifizierung und lokaler Identitäten im hellenistischen Pergamon und den Städten der Aiolis« (Principal investigators: F. Pirson and S. Verger; <<http://www.nekropergeol.org/>>), cooperating with the Istanbul Archaeological Museum, namely its curators G. Baran Çelik and M. Kiraz Vancı.

¹²⁷ By S. Verger.

¹²⁸ Belliger – Krieger 2006, 24–30.

¹²⁹ Belliger – Krieger 2006, 37–42.

¹³⁰ Luhmann 1984.

¹³¹ Belliger – Krieger 2006, 30–37.

¹³² Harris – Cipolla 2017, 146–148.

pretations associated with it. Following ANT, networks are highly instable; many translation processes therefore aim to stabilise functioning actors within a network. ANT offers the term black box to explain such efforts to stabilise actors and to reduce the complexity of networks¹³³. A black box describes a network relation, where a certain input always produces the same expectable output by following a defined script. Scientific paradigms as well as methodologies are examples of black boxes. Key to stable actors is the number of black boxed network relations. The higher the number of black boxes in a network, the more solid it will be¹³⁴. A black box remains stable only if any number of actors accept the script for a specific translation. Paradigms work similarly. Human and non-human actors have inscribed black boxes which in turn become prescriptive for other actors. Any viewpoint includes black boxes. Identifying and describing a black box within a network opens possibilities, either to stabilise that black box further or to question it. Notably, transformations affect every actor in the network in one way or another.

We have stated above that actors get roles ascribed by other actors. To store roles in black boxes helps to fix these roles. Ascribed roles, or attributable actions, are the most difficult to analyse in the past without the immaterial knowledge relating to a material assemblage such as our burial. Within the sequence of rediscovering the stored finds from Tumuli 2 and 3, recognising published pieces and re-examining them, the identification of a La Tène weapon set was a crucial moment. This weaponry

triggered the re-evaluation of the assemblage and affected all further research. What role can be ascribed to a La Tène weapon set in a prestigious burial in Pergamon? Immaterial knowledge on Galatians in Asia Minor is transmitted in ancient sources. The ancient literary tradition constitutes a black box conveying a picture of marauding Galatian tribes in Asia Minor, finally forced to settle in the backwaters of Inner Anatolia¹³⁵. Attalid monuments celebrate victories against barbarian Celtic foes¹³⁶. By implying a migration in consistent numbers and settlements in separate enclaves, ancient literary tradition has created a paradigm that contradicts the archaeological record¹³⁷.

ANT integrates quantitative and qualitative components and – again referring to system theory – allows the world to be perceived as contingent. How the world is, follows selective translations according to the performance of any actor in the network. In line with the semiotic model, differential relationships produce meaning. Applied to our assemblage, fracturing subjects and objects into flexible networks related by various meanings creates a multidimensional picture. Such a conceptual frame helps to bridge gaps in our knowledge and allows for an open mind, depending, for instance, on the implemented black boxes or any of the actors involved. Keeping various circular references in reach, we aim to identify further material and immaterial elements of the assemblages of Tumuli 2 and 3, not least by applying archaeometric methodologies. Yet, Tumuli 2 and 3 in Pergamon may become an occasion to question unilateral interpretations of the ›Galatian‹ presence in Asia Minor.

Abstract

Funerary assemblages as a rich source for funerary practices and ›gestes funéraires‹ allow for a contextual analysis yielding indications for personal objects, ritual practices, and variations of all kinds. As a result, a comprehensive picture of the cultural and social setting as well as personal beliefs emerges. In 1906, Tumuli 2 and 3 in Pergamon were excavated

and two previously untouched sarcophagus burials dating to the mid 3rd century BC provided a variety of grave goods including a La Tène weapon set and substantial organic material. The finds are preserved in the Archaeological Museum of Istanbul and in the Pergamon depot. Finding an undisturbed funerary assemblage generates its own history and our paper

¹³³ Belliger – Krieger 2006, 43–45.

¹³⁴ Moreover, as any actor consists of a network, the number of black box translations within a network determines the size of an actor. Institutions, for example, are huge actors shaped by their location, the employees and determined workflows.

¹³⁵ Mitchell 1995, 11–26.

¹³⁶ Hannestad 1993, esp. 21–33; Winkler-Horaček 2011. Kaye 2022, 286, argues against reducing the universalism of the Attalids to an antithesis of Greeks and Barbarians.

¹³⁷ See Nowak 2014, esp. 93 f., for complications with ethnic labelling in the interpretation of the archaeological record.

centres on working with old finds by the combination of archaeology, bioarchaeology, archaeometry and museum studies. The re-examination and ›close reading‹ of the grave goods set within the conceptual framework of actor-network theory (ANT) led to a re-evaluation of the burials. The archaeological evidence points towards a composite set of beliefs, thus

documenting the fluidity of personal identities in the Hellenistic world and the mental mobility of migrating individuals such as mercenaries.

Keywords: Pergamon, tumulus burial, La Tène objects, Hellenistic mercenaries, bioarchaeology, actor-network theory

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