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Hellenistic Funerary Culture in Pergamon and the Aeolis: Current Approaches, New Results, and the Outline of a Synthesis

Felix Pirson – Stéphane Verger

Introduction

The necropolises and the great tumuli of Pergamon and the Aeolian cities of Aigai, Kyme and Elaia are a precious archaeological heritage and a primary source for our understanding of the social, political, and cultural dynamics in a key region of Hellenistic Asia Minor. They relate to a wide range of societal contexts, including most strata of society from the Attalid court and the prosperous citizens to the more modest sections of the population. Furthermore, Pergamon and the neighbouring Aeolian cities were characterised by diverse political, economic and cultural environments: Pergamon as the royal seat of the Attalids and a regional centre with connections both to the Aegean and Anatolia, Aigai as an Aeolian country town flourishing thanks to its agricultural resources and its connectedness with Pergamon and the coast, Kyme as the major city of the Aeolis which remained under Seleucid control until the late 3rd century BC, and finally Elaia as an Aeolian city and naval base of the Attalids and major port of Pergamon. This particular constellation formed the basis for the project »From Royal Gravemounds to Civic Necropolises: Modern Funeral Archaeology Investigating Social Stratigraphy and Local Identities in Hellenistic Pergamon and the Eolic Cities« (NekroPergEol) which was carried out between 2014 and 2018 by an interdisciplinary and international team generously funded by the Deutsche Forschungsgemeinschaft and the Agence national de la Recherche[1]. The present volume provides an overview of the final results of this project, flanked by contributions on two other major necropolises in the Aeolis.

The NekroPergEol project aimed to gain new insights into the relations between social structures and funerary practices, the impact (or non-impact) of Attalid Pergamon on the funerary culture of autonomous poleis, and the potential transformation of social memory and civic identities under the influence of Hellenistic kingdoms in the 3rd and 2nd centuries BC. A key term in this context is ›funerary culture‹, which comprises necropolises, graves and burials, the dead body and its treatment, grave goods, grave markers, funerary inscriptions, rites and practices related to death, burial, and remembrance, social memory etc., and finally funerary landscapes as a category that embraces many of the elements just mentioned and at the same time establishes a relationship with the natural environment.

The focus of the project was on the funerary cultures of individual cities, but also on two larger spatial entities: Pergamon and the Aeolis. The latter has recently been described as a fluid region of a fictional common (Greek) origin with some shared traditions as elements of diverse civic identities[2]. Pergamon, itself located on the western fringes of Mysia, assumes the role of the rising regional power in the Hellenistic period which was closely connected to the neighbouring cities of the Aeolis – some of them even belonged to the Pergamon Micro-region[3] – and increasingly ex-

1 Under the direction of Felix Pirson (DAI Istanbul) and Stéphane Verger (ENS-PSL, UMR 8546 »Archéologie et philologie d'Orient et d'Occident«). Among others, we are particularly indebted to Ersin Doğer and Yusuf Sezgin for the cooperation with the Aigai Excavation, and to the Ministry of Culture and Tourism of the Republic of Türkiye for granting the permits for our work.

2 Cf. Mohr – Rheidt – Arslan 2020, 1–3. 38–39; Schuler 2016, 314–319; Heinle 2015. See also the contribution by U. Kelp and R. Pace in this volume.

3 For the definition of the Pergamon Micro-region see Pirson et al. 2020, 158. Its coastal part belongs to the Aeolis and includes the poleis Elaia, Pitane, Kane, and Atarneus.

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erted influence on their political, social, economic, and cultural life. This has been discussed recently from various angles, most explicitly in a conference with the telling title »L'Eolide dans l'ombre de Pergame«[4]. Contributions in the respective publication showed, among other things, that the biggest group of foreigners attested in Hellenistic Pergamon by means of inscriptions and coinage came from cities in the Aeolis[5]. It is also in this publication that Rossella Pace for the first time made the attempt to characterise the specific funerary culture of an Aeolian city (Kyme) in relation to its neighbouring cities in northern Ionia[6].

Against this background and in consideration of the initial aims of the NekroPergEol project (see above), one might expect from the present volume another contribution to the discussion of common cultural traditions in the Aeolis, their overlaying and replacement by other influences as well as their occasional revitalisation. However, unlike the rich and intensively studied architectural heritage which is the focus of the volume »Urbanism and Architecture in Ancient Aeolis« published in 2020[7], our knowledge of funerary culture in Pergamon and the Aeolis still resembles a largely blank map which does not yet allow for a genuine synthesis. With the presentation of various recently discovered or newly studied funerary contexts from the NekroPergEol project and beyond, the volume rather contributes to what Christof Schuler called for in 2016 with regard to the regional study of the Aeolis: »Current efforts are inevitably still very much in the field of basic research, obtaining data and describing contexts«[8]. However, compared with the situation described by Schuler, there is at least some progress: The synoptic presentation of particularly well studied necropolises such as those at Antandros and Mytilene[9], the first discussions of the funerary landscapes of Aigai, Elaia and Pergamon[10], the general remarks on the funerary inscriptions from Kyme, Myrina and Pergamon[11], and finally a preliminary synthesis on burial practices in the study region[12] brings us step by step closer to a more complete picture of funerary culture in Hellenistic Pergamon and the Aeolis (see below).

In the study area of the NekroPergEol project, i. e. Pergamon and the neighbouring Aeolian cities (see map p. VIII), funerary evidence is particularly well attested for the Hellenistic period (3rd–1st century BC). However, several contributions in this volume also include earlier contexts, which facilitate the identification of new trends or even fundamental changes in the Hellenistic period. But even if there is insufficient evidence for the Pre-Hellenistic periods, a recent article by Ute Kelp provides at least a general picture of elite burial culture from the 6th to the 4th century BC in the lower Kaikos plain (Bakir Çay) and in the surroundings of the Aeolian city Elaia, which was characterised by »Lydian Graeco-Persian variety«[13]. The creative and flexible integration of diverse cultural traditions in the funerary culture and in related processes of identity construction continued in the Hellenistic period as can be illustrated now by the particularly significant ensemble from Tumulus 2 in Pergamon[14]. The partial unravelling of the enigmatic Yığma Tepe contributes to our understanding of the role monumental tumuli played in the formation of social memory in Attalid Pergamon, where references to the mythical past of the city, the landscape, and the ruling dynasty were of vital importance[15].

In addition to the thematic aims mentioned above, the NekroPergEol project also pursued the goal of an interdisciplinary methodology in the study of funerary culture. Alongside conventional methods of field archaeology and archaeological hermeneutics, archaeothanatology, palaeopathology, and geophysical prospection formed the methodological triad of the project. Starting from different academic traditions, the conception initially was that the French team should work according to the aims and guidelines of »archéothanatologie«[16], while the methodological contribution of the German team would lie in geophysical prospection, particularly of large-scale tumuli, and palaeopathology. However, in the daily routine of the international team, such a division was not strictly followed, and the deviation from the initial plan proved to be beneficial for the cooperation and its outcome. The methodological focus of the project remained, re-

4 Savalli-Lestrade 2016. See also Heinle 2015 and Mohr – Rheidt – Arslan 2020.
5 Chameroy – Savalli-Lestrade 2016.
6 Pace 2016, esp. 194 f.
7 Mohr – Rheidt – Arslan 2020.
8 Schuler 2016, 313.
9 See the contributions by K. Yağız (Antandros) and Y. Kourtzellis – Th. Kyriakopoulou (Mytilene) in this volume.
10 See the contributions by S. Verger, Y. Sezgin and R. Pace (Aigai), and F. Pirson (Pergamon) in this volume.
11 See the contributions by C. Biagetti (Kyme and Myrina), and U. Kunnert and V. Walser (Pergamon) in this volume.
12 See the contribution by R. Pace and U. Kelp in this volume.
13 Kelp 2020, 323.
14 See the contribution by U. Kelp, S. Verger, A. Pirson, N. Reifarth, W.-R. Teegen and J. Wiethold in this volume.
15 See the contribution by M. Meinecke, R. Mecking, W. Rabbel, E. Erkul, A. Keweloh-Kaletta, and F. Pirson in this volume.
16 Duday 2009; Duday 2012. See also the contribution by W.-R. Teegen in part I of this volume.

sulting in a section devoted to methods in the present volume (part I)[17], followed by case studies from the Aeolis and Pergamon (parts II and III) and finally comparative approaches (part IV), including the evaluation of human remains as a source for demography and health status in the Hellenistic period[18].

Naturally the study of Hellenistic funerary culture by the partners of the NekroPergEol project ended neither with the conference »Funerary Archaeology in Anatolia: Recent Discoveries and Current Approaches« held in June 2018 at Istanbul, nor with the publication of several papers presented on that occasion in this volume. While the geophysical prospection of Yığma Tepe have already been published in two articles, the final presentation and discussion of the excavations at the monumental tumulus form part of a PhD project[19]. The geophysical prospection of other gravemounds at Pergamon such as X-Tepe and Tavşan Tepe is still ongoing; first results can be found in this volume as well[20]. The major outcomes of the examination of the burial ensembles from Tumuli 2 and 3 from Pergamon and their discussion are published in this volume[21]; the presentation of the entire dataset is to proceed within the framework of the online resources of the Pergamon Excavation of the German Archaeological Institute. The study of the necropolises of Aigai is been continued by a French-Turkish team on the basis of results achieved within the NekroPergEol project[22]. After the completion of the project in 2018, a section of a Hellenistic grave road with at least two preserved precincts was discovered on the northern slope of Pergamon's city hill. One of these was excavated in 2020. Since these discoveries profoundly enriched our knowledge about the Hellenistic funerary culture at Pergamon, the decision was made to include their preliminary evaluation and discussion in this volume[23], which is one reason for its late publication.

Current Approaches and Their Results

Section I on methods is opened by William Van Andringa, who emphasises the importance of field archaeology in the reconstruction of funerary practices. Referring to a case study from Pompeii, he shows how the meticulous stratigraphic observation and documentation of depositional sequences during the excavation of a burial ground enables archaeologists to retrace every single step from the arrival of the funeral procession, the burning of the dead, the collection of the burnt bones to their burial and post-funeral rites. On this basis, funerary rituals and their individual variations can be reconstructed and interpreted as elements of a common ritual knowledge. Thanks to the archaeological perspective, the role of objects such as lamps, perfume bottles, or coins is highlighted in this context. Together with their practical functions, they embodied the collective knowledge tied to the rituals. Van Andringa's contribution is a strong plea for the rigorous application of a sophisticated methodology in every burial site excavation, following the principles of archaeothanatology. Even beyond the exceptional conditions of preservation in the Vesuvian cities, the question arises as to how the potential of the large number of funerary contexts being excavated daily can be best used for the production of new knowledge? As a first step, a basic, multi-lingual manual, which highlights the potential of burial sites as historical sources and introduces the respective field methods, should be made available to the large community of archaeologists who have to work under conditions far away from the ideal world of well-funded research excavations. But even there, the awareness of the potential of the detailed reconstruction of funerary processes can be further raised by the examples given in Van Andringa's contribution.

The same applies to the field of palaeopathology, which has several interfaces with archaeothanatolo-

17 With contributions by W. Van Andringa (archaeology of funerary practices), W.-R. Teegen (palaeopathology and archaeothanatology), and W. Rabbel, E. Erkul, R. Mecking and H. Stümpel (geophysical prospection).

18 By W.-R. Teegen.

19 Mecking et al. 2020; Mecking et al. 2021. Ongoing PhD project by Mathias Meinecke (Leipzig University). See also the preliminary reports by M. Meinecke, R. Mecking, W. Rabbel, E. Erkul, A. Keweloh-Kaletta, and F. Pirson in the bibliography of this volume.

20 See the contribution by W. Rabbel, M. Aksan, E. Erkul, İ. Kaplanvural and F. Pirson in this volume.

21 See n. 14.

22 See n. 10 for a preliminary presentation and discussion of some of the most significant results.

23 See the contribution by J. Krasel, F. Pirson, S. Japp, A. Pirson, and W.-R. Teegen in this volume.

gy. Wolf-Rüdiger Teegen illustrates this with brief introductions to both disciplines, stressing the fact that the same methods can reveal traces of pathological alterations as well as post-mortem body treatment. Furthermore, the reconstruction of the osteo-biographies of the deceased includes information on demography, nutrition, and health. This data is relevant for the evaluation of the funerary context, as it also provides additional information for the social assessment of the deceased individual. Teegen describes the application of palaeopathological methodology in the context of the NekroPergEol project, which provided a good example of the potential and limitations of a research excavation with a field laboratory and secondary access to further analytical methods. However, also in the case of palaeopathology there is a clear need for a basic field manual to ensure a common minimum standard in the excavation and documentation of human remains at as many excavations as possible.

The third pillar of the NekroPergEol project was geophysical prospection using a wide array of methods. The focus was on monumental burial mounds, which still pose a particular challenge in this respect. Wolfgang Rabbel et al. develop a prospection concept which is differentiated according to three types of targets: (1) Grave chambers and *dromoi*, (2) stratigraphy of tumuli, and (3) near-surface archaeological targets such as secondary burials. All of them are of major interest for the interpretation of tumuli as architectural structures, places of burial, and monuments in the landscape. However, due to the sheer size of many tumuli, the problem of locating and classifying objects and structures of relatively small size at depths of up to tens of metres needed to be addressed by the NekroPergEol project. Since most sounding methods applied in archaeological prospection do not have the necessary resolution and range, only seismic reflection and refraction measurements are promising for the exploration of built structures and the stratigraphy of monumental tumuli. This was corroborated in a case study of the monumental Yığma Tepe at Pergamon, where depths of up to 40 m had to be reached. Drawing on the experience of interdisciplinary cooperation within the NekroPergEol project, Rabbel et al. strongly recommend the examination or ›ground truthing‹ of geophysical subsurface structures by means of excavation. So far this has only been possible for near-surface anomalies; but it is to be hoped that in the future also minimally invasive investigations of the deeper anomalies of the Yığma Tepe will be technically feasible without damaging the burial mound itself, which is part of the UNESCO World Heritage Site of Pergamon/Bergama[24].

Part II of this volume includes four case studies from the Aeolis, starting with the contribution by Stéphane Verger et al. on the funerary landscape of Aigai. On the basis of the surveys, geophysical prospections and excavations by the NekroPergEol project and of previous investigations, a first comprehensive picture can be drawn. Chronologically, the development of the extensive burial ground, which covers approximately the same size as the walled city, spans one millennium of urban history from the 7th century BC to the 3rd century AD. Topographically the large North-Eastern Necropolis stretches from the main gate of the city over a ridge ca. 800 m to the northeast. The terrain is divided by the natural relief into a southern and a northern part and further structured by a connecting track to the nearest overland road and by paths to several extra-urban sanctuaries. Another sacred area seems to have formed the centre of the early necropolis with several tumulus burials. In the Hellenistic period the burials shifted north towards Pergamon and Elaia and were arranged alongside the now paved connecting road, which became a proper tomb-lined street (›Gräberstraße‹). While such dynamics seem to reflect major steps in the political and societal development of Aigai, a strong sense of tradition and stability is attested by the use of exceptional monuments such as the so-called orientalising tumuli for burials over many centuries, followed by their transformation into places of worship. This particular situation made the necropolises a great ›lieu de mémoire‹ for the community of Aigai since its origin. Thanks to natural topography and spatial organisation, the stratification of the monuments of the urban elite was displayed against the silhouette of the city for everybody approaching Aigai from the main access route.

Claudio Biagetti presents inscriptions as another eminent source for not only funerary culture, but also for demography, social organisation and political life of communities and their inclusion in regional or supra-regional networks. On the basis of an updated overview of the funerary epigraphy from Kyme and Myrina he proposes the establishment of an onomastic koine on a local level. Connections with more distant neighbours such as Pitane on the northern shore of the Gulf of Elaia (Çandarlı Körfezı) are also significant, as they indicate particularly close relations between the old Aeolian settlements. Onomas-

24 Bilgin Altınöz et al. 2016.

tics and the prevalent use of dialectal forms in Hellenistic funerary inscriptions point to a shared Aeolian heritage at least at a linguistic level. The unusual practice of attaching inscribed metal plates to the bodies of the deceased, which has been found both in the two southern Aeolian towns and in Pitane, provides a first indication of shared funerary customs among the old Aeolian communities. Closeness and networking among the Aeolian cities and beyond is attested by the joint dedication of funerary monuments by more than one demos. In the context of the NekroPergEol project, the dedication of one single monument by the demoi of Myrina, Pitane, Elaia, Aigai, and Pergamon is particularly significant. Such a concentration of honours contributed not only to the public afterlife of the individual deceased, but also to ideas of connectedness in the social memory of the communities.

The next two contributions, on the necropolis of Antandros (Altınoluk-Edremit) on the Gulf of Adramyttion and on the burial grounds of Mytilene (Μυτιλήνη), go beyond the NekroPergEol project but significantly broaden and deepen our knowledge of funerary culture in the Aeolis. Kahraman Yağız presents the results of nearly two decades of excavation in a necropolis west of Antandros with more than 500 burials from the 8th to the 1st century BC, nearly 200 of them from the Hellenistic period. This data allows a longue durée perspective on the development of funerary practices of one particular community. In the framework of the present volume, it is of great interest that with the beginning of the Hellenistic age significant and at the same time rather abrupt changes without a period of transition are noticeable, most prominently the (re-)introduction of cremation burials, which are represented in large numbers throughout this phase. Yağız explains this situation with the influx of new groups to Antandros; such immigration is historically attested for the neighbouring town of Gargara. The new appreciation of cremation burials, which went out of fashion during the 5th and the 4th century BC, appears clearly due to the elaborate architectural design of at least some graves with Π-shaped or circular structures, interpreted by Yağız as altars. Among many observations on funerary customs, the regular gift of coins as Charon's fee in the case of primary cremations points to specific habits as discussed by Andringa for Pompeii in this volume.

Yannis Kourtzellis and Thaleia Kyriakopoulou offer an overview of the necropolises and burials of Mytilene, which have been studied for more than 150 years. The earliest burials date to the 10th–9th century BC, but only after the 5th century BC did coherent necropolises develop alongside arterial roads leaving the main gates of the new fortification. The existence and maintenance of some of the grave monuments over centuries highlight their function in the formation of the social memory of the community and recalls the situation observed at Aigai (see above). In contrast to Antandros (see above), the burial customs appear stable, and cremation was continuously practised alongside the more frequent inhumation. The Late Classical and Hellenistic periods generated a particularly rich funerary culture, characterised by large-scale monuments of various architectural types, sculptural decoration, and wealthy and articulated grave goods. This latter feature in particular is considered by Kourtzellis and Kyriakopoulou to be the result of a Macedonian presence on the island of Lesbos and then of Hellenistic ruling dynasties, most prominently the Ptolemies. Together with the integration in the Aegean network of trade and communication, this made Mytilene a very special and probably also international place compared with Pergamon or Aigai, whereby evidently also the funerary culture of the Lesbian polis was influenced as well.

Part III of the present volume takes us to Pergamon, where a different picture emerges compared with the Aeolian cities mentioned so far. This is mainly due to the extremely fragmented preservation and thus limited knowledge of Hellenistic burials at Pergamon. Apart from the eye-catching burial mounds, only a few other graves are known let alone adequately documented and published. This is why Felix Pirson, in an initial assessment of Pergamon's funerary landscape, directs his attention also to Elaia, the closest neighbour of the capital and main port of Pergamon. But even the broad perspective cannot entirely compensate for the lack of detailed knowledge, and many interpretations remain hypothetical for the time being. However, it is possible to show that the funerary landscapes both of Hellenistic Pergamon and Elaia were characterised by an astonishing diversity, which resulted in multi-faceted social memory. In order to be recognised, the burial sites sought the proximity of prominent locations such as major city gates, sanctuaries, or exceptional burials, a placement alongside important processional routes or on hilltops or other visually conspicuous places. Pirson is able to show how the appearance and atmosphere of individual cemeteries varied considerably according to their natural environment and the way in which the sites were embedded in different suburban infrastructures and activities. Furthermore, the funerary landscapes articulated territorial claims both on an individual and a community level. This becomes particularly evident in the case of the out-

standing tumuli, which were important elements within the visual region of Pergamon and hence contributed significantly to the cohesion of the territory.

The article by Jakob Krasel et al. enriches our knowledge of non-monumental graves at Pergamon, since it presents for the first time a Hellenistic burial precinct as part of a tomb-lined street (›Gräberstraße‹), which was excavated in 2020 on the northern slope of the city hill. The precinct consists of two circular buildings and a terrace between them, formed by cist and pit graves containing cremations. The excavation yielded detailed information about burial practices and post-burial activities, and its evaluation is still ongoing. The same applies to the study of the cremated remains of the deceased, which already provided new clues about significant variations in cremation processes. Within the boundaries of the precinct, fresh graves and already partly collapsed monuments must have existed side by side. Apparently, the site was not characterised by the careful preservation of old monuments, but by its constant (re-)use from the 3rd/2nd century BC to the 1st century AD. While the integrity of previous burials was neglected, Krasel et al. suggest that a desire for spatial continuity as the motivation behind such behaviour. A golden earring with zoomorphic decoration from a disturbed burial shows that luxurious funerary goods were not limited to the exceptional tumuli burials at Hellenistic Pergamon. The closest parallel is thought to come from the Gulf of Elaia and hints at parallels both in the material culture and in funerary ensembles between the capital and its port city.

The most extensive and best preserved funerary assemblages from Hellenistic Pergamon are still those excavated in 1906 by Wilhelm Dörpfeld and documented by Paul Jacobsthal in the undisturbed sarcophagus burials of Tumuli 2 and 3 on the Kaikos plain close to the monumental Yığma Tepe. As part of the NekroPergEol project, the material stored at Bergama and in the Archaeological Museum Istanbul was re-examined by Ute Kelp et al. employing a wide range of analytical methods. Dating towards the middle of the 3rd century BC, the burials can be identified as those of a male warrior (Tumulus 2) and of a female (Tumulus 3). The few preserved skeletal remains indicate a late adolescent or early adult age at least for one of the deceased. Particularly revealing is the assemblage from Tumulus 2, which is characterised by an unusually good preservation of organic remains and prestigious grave goods including a gold wreath and a richly decorated sword, which show hybrid forms stemming from various cultural traditions. According to Kelp et al., the combination of Macedonian-Greek funeral objects with an ensemble of Celtic offensive weaponry wrapped in fabric, thus following La Tène burial rites, places the deceased in the milieu of mercenaries attested in various parts of the Mediterranean in the early Hellenistic period. The custom of sarcophagus burials in tumuli, however, follows a regional tradition. Such a variety characterises the deceased as a cosmopolitan member of the Pergamenian elite and considerably widens our knowledge about the fluidity of personal identities among the local aristocracy in the early years of Attalid rule.

The iconic Yığma Tepe is not only by far the biggest tumulus at Pergamon, but also the most enigmatic. Even after several years of excavation between 1905 and 1909 by Dörpfeld applying mining technologies, neither the date nor the purpose of the monument could be clarified. This posed a particular challenge for the NekroPergEol project, which was met by a joint archaeological and geophysical strategy presented together with the main results in the article by Matthias Meinecke et al. A combination of several methods of prospection revealed not only the piling of the mound in several layers, but also some anomalies deep inside the filling, of which one in particular is a potential candidate for a (collapsed) burial chamber with dromos. A compacted layer was found beneath the top of the mound, and was subsequently verified both by prospection and excavation; this find indicates a built structure, perhaps the base of a statue. Particularly revealing are insights into the complex process of constructing the tumulus. According to Meinecke et al., pebble walls stretching both radially and circumferentially around the mound supported the regular shaping of the tumulus, helped to organise the building process and may also have had a static function. Although several trenches behind the krepis and on top of the mound produced very few datable finds, the building of the Yığma Tepe can now be attributed to the late 3rd or early 2nd century BC with some confidence. Pottery fragments mainly of late Hellenistic and early Roman Imperial origin from surface layers presumably were related to ritual activities. This is in accordance with the eminent position the Yığma Tepe most probably had in the ancestral cult of the Attalids and in the formation of the civic identity of the Pergamenians.

In order to broaden and deepen our knowledge of the interior structure of the tumuli at Pergamon, the large X-Tepe tumulus was also examined. The results of the magnetic survey and its archaeological interpretation are presented by Wolfgang Rabbel et al. The comparatively large magnitudes of the prospected anomalies indicate that the magnetic sources are most likely composed of the strongly magnetised local andesite. After performing an inversion computa-

tion on the magnetic field data in order to determine the contours of the magnetic bodies at depth, more regular structures appeared in the context of the natural bedrock (of andesite), which is also visible on the surface surrounding the mound. Comparisons with excavated Hellenistic tumuli from Macedonia suggest that X-Tepe contained several graves or burial chambers with a maximum exterior height of four metres cut into the bedrock and constructed of the same volcanic material. The most significant structure is oriented toward the city hill of Pergamon. Since the same is true for the main structure prospected in the interior of the neighbouring Yığma Tepe, Rabbel et al. consider this orientation to be an overarching construction principle of the major tumuli at Pergamon.

The Pergamon section in the present volume is completed by a first assessment of the funerary inscriptions by Ursula Kunnert and Victor Walser. Their general findings are not very encouraging, though: The number of funerary inscriptions is unusually low, particularly in relation to the large total number of epigraphic finds. This is aggravated by the fact that all known funerary inscriptions from Pergamon are stray finds and hence cannot be related to specific graves. In the context of the NekroPergEol project, however, it is important to note that the non-metrical funerary inscriptions of Hellenistic Pergamon do not differ from those of the neighbouring poleis. They also include the characteristic formula χαῖρε, which implies a direct communication with passers-by and thus a placement by the roadside or another busy place. Foreign names attest to a certain diversity of the population, stimulated perhaps by the presence of mercenaries in the Attalid army. One metrical inscription testifies to the commemoration of the dead in songs during annual celebrations at the grave and hence provides a rare insight into performative elements of funerary customs which are otherwise lost in the archaeological record[25]. Walser and Kunnert conclude that the inhabitants of Hellenistic (and Roman) Pergamon seem to have left fewer traces with funerary inscriptions than those of other poleis. However, this should not encourage the premature postulation of a specific ›epigraphic habit‹, since other explanations cannot be excluded yet. At least for the Hellenistic period the epigraphic evidence seems to be consistent with the archaeological record, which is also characterised by a very low rate of preserved burials (see above).

The last section offers two comprehensive views on the Hellenistic funerary culture of the study area, and on new information regarding the Hellenistic population based on the skeletal evidence from the burials. Ute Kelp and Rossella Pace discuss grave monuments, burial practices and funerary representation against the spatial, political and cultural sectionalism which they regard as characteristic for the Aeolis and Pergamon. On the one hand they point to common features in the Hellenistic period such as a prevalence of inhumation compared to cremation, a set of standard grave types, a lack of overall spatial organisation in the necropolises and a segmentation into grave precincts instead, the gifts of mirrors and strigiles as preferred status symbols, or the use of older tombs and the veneration at tumuli as memorial practices. A particularly close relationship is indicated between Aigai and Pergamon by the erection of circular monuments[26]. The dominant characteristic, however, is a persistent particularity in the burial practices of the region: Cremation seems to be more widespread in coastal cities, grave monuments and grave markers can differ locally, grave goods were particularly rich in Kyme, while the deposition of terracotta figurines was most common in Myrina and Aigai – to name only some examples of local peculiarities. Kelp and Pace conclude from these preliminary observations on a longue durée in local burial traditions, which attests to the fragmentation of regional networks despite the emergence of new powerful actors such as Pergamon in Hellenistic times. Such inferences are important milestones in an ongoing discussion and need to be tested in the future on the basis of broader evidence also from areas other than funerary culture.

Strictly speaking the last paper goes beyond funerary culture and looks at the health status of the deceased and the demography of the study area. However, as the author Wolf-Rüdiger Teegen has stated himself in his contribution in Part I of this volume, the osteo-biographies of individuals are crucial for the social evaluation of their burials, too, and form

25 See in this context also a Hellenistic inscription (3rd cent. BC) with legal requirements on mourning customs from the eastern lower Kaikos plain (Stauber 2022, 143–145 no. 922): Mourning women should wear grey, not torn clothing. The same applies to men and children, who may wear white clothing instead. Traditional customs for the deceased should be completed after three months at the latest. Men should end their mourning after four months, women after five months. Women are to leave the funeral ceremony and go out only to the funeral processions that are considered necessary according to the laws (after Stauber).

26 A context from the south necropolis of Pergamon can be added here, although its interpretation is not entirely clear: Pirson et al. 2013, 107 fig. 29.

part of a comprehensive approach to death and burial. Furthermore, advanced dating methods such as ^{14}C AMS measurements, which were widely used in the study, can reveal funeral practices like the reuse of older burials. The social status of the 60 examined individuals can be cautiously inferred from the respective grave types, ranging from tumuli of various sizes to elite monuments or more common forms presumably used by middle and lower strata of society. As expected the mortality rate is considerably higher in females due to childbirth. Very common diseases include inflammatory processes of the paranasal sinuses and dental caries. Degenerative diseases of the spine and the body joints are widespread, too, while trauma is rare in the study sample. The high incidence of non-specific stress markers in skeletons also from élite burials indicates diseases in infancy and childhood through all social strata. However, the chances of survival seemed to have been higher for the better off. The common infections of the paranasal sinuses can be explained by emissions due to heating and indoor cooking, which affected all parts of the society. Stable isotope analyses revealed a higher protein intake in people buried in monumental tumuli, sarcophagi, and stone cists when compared to individuals coming from other burial types. This confirms the importance of dietary habits as a marker for social inequality in our study area.

Hellenistic Funerary Culture at Pergamon and the Aeolis: Outline of a Synthesis, Open Questions, and Perspectives

It was stated at the beginning of this introductory chapter that the evidence for funerary culture in the Hellenistic Aeolis and Pergamon is still too fragmented and heterogeneous to draw a comprehensive picture or even a synthesis, including an evaluation of common traits versus local traditions and trends. However, the previous evaluation of the contributions to this volume and the results of the NekroPergEol project in general allow at least for an outline of a synthesis that has to be further consolidated in the future and will certainly also be modified. The essential precondition, however, is the collection, evaluation and, above all, publication of additional old and new data. In their interpretation, the thoughts formulated below could be taken further. In this context, especially the extensive rescue excavations of recent years in the necropolises of Kyme promise new insights[27], but also the continuation of the research at Aigai. While the consideration of funerary culture in a regional context beyond single cities and their individual territories has hopefully proved to be illuminating, other regions from the Hellenistic world need to be included in comparative approaches covering larger geographical and cultural entities[28]. Regrettably, this was beyond the scope and possibilities of the NekroPergEol project and this volume.

In their comprehensive overview in this volume, Kelp and Pace found common features in the Hellenistic funerary culture of Pergamon and the Aeolis, but certainly no uniformity. The inclusion of Mytilene and Antandros confirms this image: Concerning burial practices for instance, inhumation is prevalent at these two places, too, but cremation is also well attested. While this relation between the two practices is characteristic for Mytilene and Kyme even in earlier periods[29], the sudden reappearance of cremation at Antandros in Hellenistic times after a break in the Classical period is striking and needs explanation. However, since we do not have sufficient data for Pre-Hellenistic burials at Pergamon or the other sites apart from Antandros, Mytilene, and Kyme, we cannot determine if continuity as in Mytilene and Kyme or discontinuity as in Antandros represents the norm – if such a thing was a regional characteristic at all. At the moment, however, Antandros rather seems to be the exception. Similarly, it is not yet possible to answer the crucial question of whether the common developments of the Hellenistic period towards larger territories, networks and a cultural koine resulted in a more homogeneous funerary culture on the regional level as well. What is certain, however, is that the persistence of local traditions contributed to the

27 See Kelp – Pace, p. 234 (n. 32) in this volume.

28 Ancient Caria, among other regions, is characterised by a diverse and at the same time well studied funerary culture, and is therefore particularly suitable for a comparison. See for instance Henry 2009; Nováková 2010.

29 For Kyme see Pace 2016, 178 f.

non-uniform and diverse picture appearing from the contributions in this volume. This finding is an important argument against the idea of strong unifying effects in funerary culture caused by an alleged Aeolian tradition or by strong Pergamenian influence. On the contrary, an increase in mobility and the influx of new people characteristic for the Hellenistic period and attested in Pergamon by Thracian names in funerary inscriptions contributed to even more variety in funerary culture[30]. Tumulus 2 at Pergamon with Celtic elements is a prime example of this, while the voussoir vault of the 3rd century BC tumulus at İlyas Tepe adds a distinctive Macedonian element to the regional tradition of burials in tumuli. In the case of Antandros it has been assumed that an influx of foreigners caused a sudden change in burial practices in the Hellenistic period (see above).

Non-uniformity and diversity in funerary culture are phenomena that need to be discussed not only at the level of regions or micro-regions, but also of single poleis. This applies especially to the larger cities with several spatially separated necropolises. In the case of Kyme, for example, differences in the use of precious materials for grave goods between the South and the Southwest Necropolis have been noted[31], which can be explained by differences in the willingness and in the ability to mobilise resources for grave goods between certain groups of the society. However, taking the entire funerary landscapes of Elaia and particularly of Pergamon as a whole into account, it has become clear that there was an astonishing variety also in natural environment, appearance, and spatial atmosphere between individual cemeteries. The same is probably true for Kyme, where relevant studies are still lacking. However, the presence of large and conspicuous tumuli only in the Northern Necropolis of the city can already be regarded as a distinguishing and at the same time exclusive feature in relation to Kyme's other cemeteries[32].

We do not know for certain which criteria motivated individuals or social groups to choose a specific cemetery, but we have to assume that the variety described here contributed to a similar variety in social memory, in reference to the proximity to specific parts of the city or countryside, or to the closeness to sanctuaries or burial monuments of urban dignitaries or important ancestors. Compared to larger cities such as Kyme or Pergamon, the burial grounds of Aigai, which basically stretched over one coherent area and primarily show chronological variation, might reflect the civic homogeneity and cohesion of a small country town. However, the impact of the natural terrain on the formation of urban funerary landscapes should not be underestimated here and probably was the decisive factor for the development of a large, coherent necropolis at Aigai.

A strong sense of local tradition has already been mentioned several times as characteristic of the funerary culture of the Aeolian cities. In the case of Pergamon, however, Kelp and Pace relate the sudden appearance of tumuli in Hellenistic times to the prestige value of older gravemounds at Aigai and elsewhere in the region. Noah Kaye cites the burial mounds of Gordion (9th century BC) and the Lydian tumuli (6th century BC) as the main references for the Attalids and argues for an Anatolian origin[33]. The recent discovery and study of three prestigious Phrygian fibulae dating from the 9th–8th century BC and from the mid-8th century BC, respectively, indicate the presence of rich burials, probably in tumuli, within the Southern Necropolis of Pergamon (Archaic to Byzantine Period) already in the Pre-Archaic Iron Age and even before the so-called Orientalising Tumuli at Aigai[34]. Hence we can assume a longue durée of burials in tumuli at Pergamon, too, which might have inspired the creation of funeral monuments linked to the mythological past such as the Tumulus of Auge (Yığma Tepe?) under the Attalids[35]. A sense of tradition that continued in the Roman Imperial period is also reflected by the reuse of graves and the veneration at older tumuli, attested at Aigai, Elaia (Seç Tepe) and probably also at the Yığma Tepe. These observations add to the overall picture of an integrated funerary culture at Pergamon and the Aeolian cities, which was not divided by fundamental differences between poleis with a fictional common (Greek) origin and a Hellenistic capital in Mysian lands, but diversified by a variety of factors, among them individual local traditions.

30 For Thracians (mercenaries?) in Pergamon see Kunnert – Walser in this volume.

31 Pace 2016, 179 f. 189.

32 See Pace 2016, 180–183 for Kelebek Tepe (5th cent. BC) and another unnamed tumulus of unknown date.

33 Kaye 2022, 300–320.

34 Pirson – Ustura 2022.

35 See the contribution by M. Meinecke, R. Mecking, W. Rabbel, E. Erkul, A. Keweloh-Kaletta, and F. Pirson in this volume.