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BIRGITTA EDER – HANS-JOACHIM GEHRKE – EROFILI-IRIS KOLIA –
FRANZISKA LANG – LEA OBROCKI – ANDREAS VÖTT

A multi-dimensional space: Olympia and its environs.
Results of the campaigns 2015 to 2017 and first historical
conclusions

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A multidimensional space: Olympia and its environs

Results of the campaigns 2015 to 2017 and first historical conclusions

BIRGITTA EDER – HANS-JOACHIM GEHRKE – EROFILI-IRIS KOLIA –
FRANZISKA LANG – LEA OBROCKI – ANDREAS VÖTT

Ein multidimensionaler Raum: Olympia und seine Umgebung. Ergebnisse der Kampagnen 2015 bis 2017 und erste historische Schlussfolgerungen

ZUSAMMENFASSUNG Der Beitrag liefert die ersten Ergebnisse eines seit 2015 laufenden Projekts, dessen Kern der sogenannte Olympia Area Survey darstellt. In diesem Rahmen wurde der Fundplatz Olympia erstmalig systematisch in seinem regionalen Umfeld (geo)archäologisch kontextualisiert und in seiner historischen Relevanz für die Entwicklung der regionalen Kulturlandschaft beleuchtet. Die Arbeiten haben einen deutlichen Gesamteindruck der Siedlungsstruktur vermittelt: Intensive Nutzung und dichte Besiedlung verbanden sich mit extremer Kleinteiligkeit. In dieser Umgebung bildete das Heiligtum von Olympia ein ganz spezifisches Zentrum. Diese Zentralität spiegelt sich auch in der antiken Raumwahrnehmung und im »*espace vécu*« wider. In vielfältiger Weise war das Heiligtum in rituellen Praktiken und mythischen Erzählungen mit seiner Umwelt verflochten. Um dieses herum hatte sich eine besondere sakrale Landschaft voller »*lieux de mémoire*« gebildet. Zugleich trugen die Verflechtungen wesentlich zur sozialen und politischen Integration der Region und damit auch des Verbandes von Elis im Gefüge der panhellenischen Welt bei.

Schlagwörter Elis; Alpheios; Regionaler Survey; Geoarchäologie; Mythhistorie.

ABSTRACT This contribution presents the first results of a project that has been running since 2015, the core of which is the so-called Olympia Area Survey. Within this framework the site of Olympia was for the first time systematically set in context with its (geo)archaeological environment and its historical relevance for the development of the region's cultural landscape has been highlighted accordingly. The work has provided a clear overall impression of the settlement structures: intensive use and dense human occupation combined with extreme fragmentation. Within this environment, the sanctuary of Olympia formed a highly specific centre. This centrality is also reflected by the ancient perception of space and by the »*espace vécu*«. The sanctuary was in many ways intertwined with its environment through ritual practices and mythical narratives. A special, sacred landscape charged with »*lieux de mémoire*« evolved around the sanctuary. At the same time, these interconnections significantly contributed to the social and political integration of the region and hence also of the political union of Elis into the fabric of the Panhellenic world.

Keywords Elis; Alpheios; regional survey; geoarchaeology; myth history.

Ένας πολυδιάστατος χώρος: Η Ολυμπία και τα περίχωρά της. Αποτελέσματα των ερευνών πεδίου κατά τα έτη 2015 έως 2017 και πρώτα ιστορικά συμπεράσματα

ΠΕΡΙΛΗΨΗ Το άρθρο παρουσιάζει τα πρώτα αποτελέσματα ενός εν εξελίξει προγράμματος που ξεκίνησε το 2015 και εστιάζει στη λεγόμενη Olympia Area Survey, την «Έρευνα του χώρου της Ολυμπίας». Στο πλαίσιο του προγράμματος αυτού, η αρχαιολογική θέση της Ολυμπίας τοποθετήθηκε για πρώτη φορά συστηματικά στα (γεω-)αρχαιολογικά συμφραζόμενα του τοπικού της περιβάλλοντος, ενώ παράλληλα αναδείχθηκε η ιστορική της σημασία για την εξέλιξη του πολιτισμικού τοπίου της περιοχής. Χάρη στις εργασίες του προγράμματος, προέκυψε μια σαφής συνολική εικόνα της δομής των οικισμών: η εντατική χρήση και η πυκνή κατοίκηση συνδυάζονταν με έναν ακραίο κατακερματισμό. Σε αυτό το περιβάλλον, το ιερό της Ολυμπίας αποτέλεσε ένα εντελώς ειδικό κέντρο. Ο κεντρικός του ρόλος αντικατοπτρίζεται στην αντίληψη του χώρου κατά την αρχαιότητα αλλά και στο »*espace vécu*« [τον «βιωμένο χώρο»]. Το ιερό συνδέθηκε ποικιλοτρόπως με το περιβάλλον χώρο του τόσο σε τελετουργικές πρακτικές όσο και σε μυθικά αφηγήματα. Γύρω από αυτό είχε δημιουργηθεί ένα ξεχωριστό ιερό τοπίο γεμάτο από »*lieux de mémoire*« [τόπους μνήμης]. Ταυτόχρονα, οι συσχετισμοί αυτοί συνέβαλαν σημαντικά στην κοινωνική και πολιτική ενσωμάτωση της περιοχής, άρα και της ένωσης της Ηλίδος, στον ιστό του πανελλήνιου κόσμου.

Λέξεις-κλειδιά Ηλεία. Αλφειός. »*reginal survey*«. Γεωαρχαιολογία. Μυθολογική ιστορία.

»Nicht nur des Alpheios stille Bauthätigkeit, sondern mehr noch
des Erderschütterers gewalthätiges Wirken hat der Forschung die Aufgabe
erschwert, in den veränderten Zügen des heutigen Bildes dieser Küstenland-
schaft die Grundlinien der antiken Topographie wiederzuerkennen«¹.

1 OLYMPIA AND ITS ENVIRONS: INTRODUCTION AND STATE OF RESEARCH

The importance of the sanctuary of Olympia and its cults for Greek history and culture is beyond question. However, as research focused on this site, its environs have been increasingly neglected. This was not always the case. Already the *Expédition de Morée* of 1829, which emphasised an interdisciplinary approach and brought about qualitative progress in the research on the geography and geology of the Peloponnese², offered important topographical descriptions. As part of the German Olympia excavations starting in 1875, Joseph Partsch and then several important and still relevant maps by Partsch himself and Johann A. Kaupert created a systematic overview of the wider environment³. In 1882, Bücking published a detailed geological map of Olympia and the surrounding area, which took the results of the excavations into account and provided a sound framework explaining the formation of sediments in Olympia. The landscape was still considered a genuine subject of historical and archaeological research, a perspective that was represented not least by Ernst Curtius, the spiritus rector of the excavation.

With the increasing specialisation of scholarship, investigations of the environment of Olympia developed from specific questions. Thus, after the first phase of the excavations, Wilhelm Dörpfeld, guided by his interests and theories on Homeric geography, began his thorough studies of the surrounding region and related sites. His observations as well as the map which was created on his behalf by Konrad Graefinghoff⁴ are the important documents of this endeavour. Shortly thereafter, Ernst Meyer and William Kendrick Pritchett distinguished themselves as pioneers in the exploration of the historical topography of the area. In addition, there were a number of individual scholars focusing on archaeological remains,

In addition to the standard abbreviations of the German Archaeological Institute, the following are employed:

IvO W. Dittenberger – K. Purgold, *Die Inschriften von Olympia*, Olympia 5 (Berlin 1896)

LH Late Helladic

NIO Siewert – Taeuber 2013

Sch. Scholion, Scholia

Research was carried out in the framework of the DFG project LA 1183/9–1. We would like to thank the following institutions and individuals for their continuous support: The Greek Ministry of Culture and Sports (Υπουργείο Πολιτισμού και Αθλητισμού) for the relevant permit for conducting the landscape survey, the German Research Foundation (DFG) for funding, the German Archaeological Institute (DAI) and Reinhard Senff, director of the Olympia Excavations, for manifold assistance and support throughout. We gratefully acknowledge the support of Georgia Chatzi-Spiliopoulou, former director of the Ephorate of Antiquities of Elis, during the planning stages of the project until her retirement in 2014. Mark Marsh-Hunn (Freiburg) took on the tedious task of correcting the English text, and we are very indebted to him for his careful work.

We remain happily inconsistent in the transliteration of

Ancient and Modern Greek names. On the one hand, in many cases we try to stay close to the Greek original (e.g. Alpheios), on the other hand, we often keep the latinised forms of familiar names as they are established in English. However, the transliteration of Greek place names follows the following rules: Modern Greek spelling refers to the modern place names and the ancient Greek version is applied, if ancient texts refer to the site. Thus e.g. Epitalio is used for the modern village (formerly Agoulénitsa), but Epitalion, if this place appears in ancient sources.

¹ Partsch 1897, 15: »Not only the quiet building activities of the Alpheios River, but even more the earth shaker's violent actions have made it difficult for research to discern the basic lines of the ancient topography in the altered features of the present day coastal landscape« (own translation).

² Cf. Gehrke 1992, 31–36. In addition, even before the beginning of the large-scale excavations, travellers not only visited the site, but also described the environs. The following text takes their information into account.

³ Kaupert 1882.

⁴ Dörpfeld 1918, pl. IV.

such as Jerome Sperling and above all representatives of the Greek Archaeological Service, namely Nicholas Yalouris and Eleni Papakonstantinou⁵. Furthermore, the Minnesota Mesenia Expedition of the 1960s marginally touched the region around Olympia. In this context, the most recent survey in the adjacent region of Triphylia in the south, under the aegis of Joachim Heiden and Corinna Rohn in cooperation with the Greek Archaeological Service, is also worth mentioning⁶.

In addition, in recent years numerous individual research projects have been carried out that were primarily guided by historical questions touching on the political organisation, social integration and spatial structure of Elis and Olympia. They mark the current state of research in these fields. For the work of the present project, the following are particularly relevant (in alphabetical order): Birgitta Eder, Hans-Joachim Gehrke, Maurizio Giangliulio, Mait Kõiv, Massimo Nafissi, James Roy, Claudia Ruggeri and Julia Taita⁷. In addition, Peter Siewert and Sophie Minon have offered important epigraphic and dialectological studies and the commentary on the relevant books of Pausanias supplies very valuable information as well⁸.

Summing up, major survey projects have never systematically covered the landscape around the sanctuary of Olympia. Archaeological projects were spatially limited and focused on individual sites. The numerous and plentiful results of the local archaeological fieldwork are mainly the product of the tireless work of the Ephorate of Antiquities in Elis (former 7th Ephorate of Prehistoric and Classical Antiquities), now directed by Erophili-Iris Kolia. The results of rescue excavations or chance finds generally suggest a treasure that has not yet been fully retrieved. In other words, the space in question has not yet been systematically explored with modern methods of historical geography or landscape archaeology, i.e. in an interdisciplinary approach combining methods of archaeology, geoscience and historical studies⁹.

Due to this academic void, the authors have undertaken a systematic study of this micro-region. The greater question of the role of Olympia in the immediate and wider environs, and especially its importance in shaping and maintaining Greek identity at the local, regional and Panhellenic level formed the starting point of the project. After detailed preparations¹⁰, work began on site in 2015. Our team of project directors is made up of specialists in the fields of archaeology, geography and history: Franziska Lang (Technical University Darmstadt), Birgitta Eder (Austrian Academy of Sciences, Austrian Archaeological Institute, Athens), Andreas Vött (University of Mainz) and Hans-Joachim Gehrke (University of Freiburg). Of particular significance is the cooperation with the Ephorate of Elis of the Greek Archaeological Service (directed by Erophili-Iris Kolia) and the Olympia Excavations of the German Archaeological Institute (directed by Reinhard Senff, and, as of fall 2022, by Oliver Pilz). In addition, academic staff and students are directly involved in the fieldwork and processing of finds. Further individual cooperations supplement the work of the project. The project was funded by the German Research Foundation and has been carried out as an official cooperation with the Ephorate of Antiquities in Elis. Fieldwork comprised mainly geomorphological and geoarchaeological studies of landscape formation and a historical and archaeological target area survey (see below). As the different aspects of space are central here, we prefer to refer to the study region as the multidimensional space of Olympia.

⁵ Sperling 1942; cf. Williams 2004; Yalouris 1972; Παπακωνσταντίνου 1992.

⁶ McDonald – Rapp 1972; Rohn – Heiden 2009; Heiden – Rohn 2015; Heiden et al. 2020.

⁷ Eder 2003; Eder 2011; Gehrke 2005; Giangliulio 2009; Kõiv 2013; Nafissi 2003; Roy 2002; Ruggeri 2004; Taita 2007; Taita 2009; Taita 2013.

⁸ See esp. Siewert – Taeuber 2013; Minon 2007; Maddoli – Saladino 1995; Maddoli et al. 1999.

⁹ Lang 2019.

¹⁰ Two explorative workshops took place in Olympia and Berlin (October 2009 and 2010) and an international exhibition on Olympia was organised in Berlin (August 2012 – January 2013). Cf. Heilmeyer et al. 2012 with the contributions by Lang 2012; Hoppe et al. 2012b. – For preliminary reports and interpretations see Eder et al. 2015/2016; Eder et al. 2017; Gehrke 2019.

This survey project is different from other similar undertakings insofar as it does not focus on the environs of a city but those of a famous sanctuary. Structurally, an urban environment consists of the city as the core, surrounded by a suburban environment – with tombs and / or farmsteads – and agricultural land follows with increasing distance. These different zones interact in variable forms, and in this system, the city remains dependent on the surrounding area.

In general, sanctuaries constitute places with a specific, dedicated significance, and their norms and rules deviate from those of profane areas. A cult site often lies at the core of urban foundation myths. The Olympic sanctuary in particular is a Panhellenic sanctuary with a local, regional and supra-regional radius of agency. This is true for Pheia, the port of Olympia, which was located about 30 km to the west, as well as for the city of Elis, which managed the sanctuary and lay about 50 km to the northwest. The oracle of Zeus in Olympia had a specific kind of longer-distance effect through its seers of the Iamid family (see below). These were religious experts, who were engaged by military commanders to accompany their military campaigns. The mythistorical tradition is also mapped on the local topography and oscillates between local foundation story and (supra-)regional genealogies with ›migrating ancestors‹ (see below).

The requirements of a sanctuary like Olympia differ from those of a city insofar as Olympia is subject to different temporalities. Unlike a city, which relies on a year-round supply, communal needs in Olympia followed the festival calendar, which set the times of catering for a variable number of visitors. In addition to the customary operation of the oracle and the sanctuary that must be assumed for Olympia, altar processions such as those described by Pausanias¹¹ took place at monthly intervals¹². Annual festivals were held for Artemis Alpheionia or Alpheiousa¹³ and for the heroine Hippodameia¹⁴, and the Heraia with running competitions for girls in the Olympic Stadium were organised for Hera every four years¹⁵. The Olympic Games took place at the same intervals, creating exceptional circumstances for the region. During this period, an estimated 40 000 visitors came together in Olympia, a figure that corresponds to about ten times the population of an average-sized Greek polis. Within a very short time frame, supplies had to be organised and provided for all local, regional and national visitors, the athletes with their followers as well as the numerous animals¹⁶.

These examples illustrate the high variance of requirements that are subject to large fluctuations and differ significantly from those of a city. Does this mean that the relational system ›sanctuary – environs‹ is configured differently from that of ›asty – chora‹? If so, what structural differences can be expected in the organisation of an internationally renowned sanctuary? Is it possible to demonstrate the intertwining of the political and sacral topography that is peculiar to Olympia? Does Olympia take on the functions of a city? In general, one has to ask whether the usual models for urban-rural relations are transferable to the present constellation or if there are intrinsic configurations at work.

The answers to these questions represent some of the goals of this project. Representatives of various disciplines carried out the Olympia Environs Survey from 2015 to 2017. The

¹¹ Paus. 5, 14, 4–15, 10.

¹² There may also have been annual festivals for Kronos (›Kronika‹). This information is contained in a bronze inscription from Olympia, of which one part is published as ›NIO 1‹ in Siewert – Taeuber 2013. We owe this reference and a copy of the important text to the generosity of Peter Siewert (Vienna), see now Siewert 2017. In this context, it is worth recalling

Paus. 6, 20, 1 mentioning Elean βασιλῆαι who sacrifice to Kronos at the spring equinox (Roy 2015c, 149).

¹³ Str. 8, 3, 12.

¹⁴ Paus. 6, 20, 7.

¹⁵ Paus. 5, 16, 2–4.

¹⁶ Cf. De Ligt – De Neeve 1988.

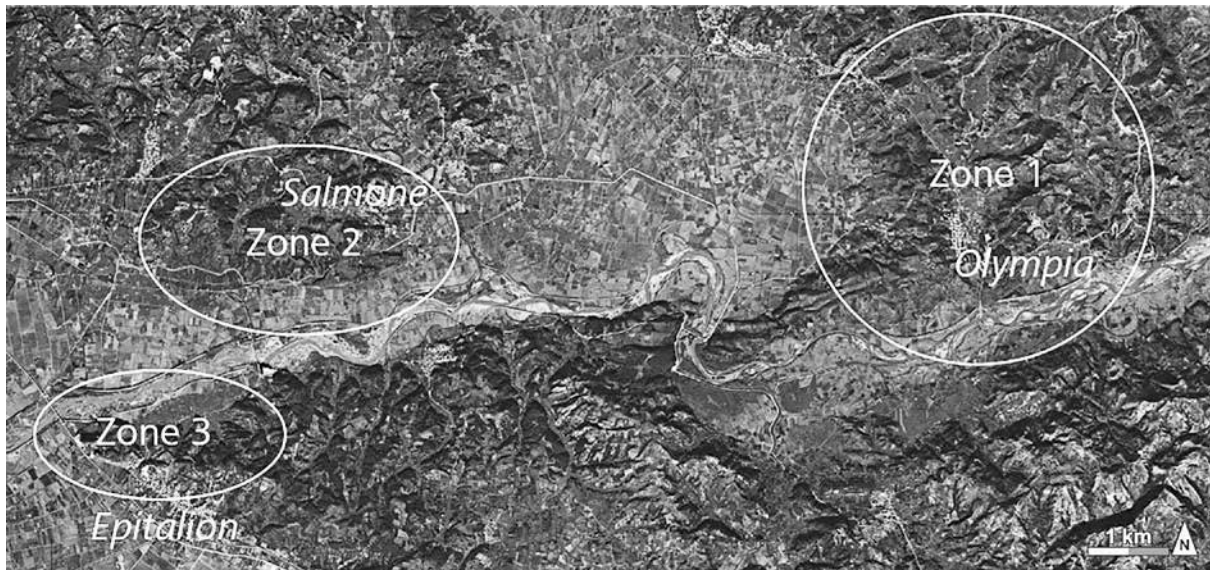


Fig. 1 Survey region with location of zones 1–3

core areas of investigation consist of three zones, which were determined by preliminary studies¹⁷. They are located (1) in the area around the sanctuary (Kladeos River valley and Archaia Pisa), (2) on the ridge west of the village of Salmoni (formerly Koukoura) and (3) around the settlement Epitalio close to the mouth of the Alpheios River (*fig. 1*). The area south of Olympia beyond the Alpheios River was omitted from these studies, since it had already been the subject of an extensive survey in the framework of the DFG Priority Programme 1209 ›Die hellenistische Polis als Lebensform‹¹⁸.

The project is generally concerned with the various aspects of space and their interrelations, and in particular aims to consider and view the conditions of the physical geography together with the various human ways of designing, creating and perceiving the landscape. Three key aspects characterise the first part, which essentially presents the current state of our knowledge. Space and settlement: (1) natural conditions and potentials, (2) communication in space, (3) social formation of space. Regardless of the fact that a survey covers all recognisable artefacts from different epochs and that geomorphology covers much longer periods, our research concentrates on a limited time frame.

The following perspective governed the choice of the period from about 1200 to 400 B.C. for more detailed studies. Current research suggests the emergence of the different patterns of communication and organisation in the Late Bronze Age and Early Iron Age transition that proved of particular significance for the following centuries. This time span marks the final years of the Late Bronze Age, in particular LH III C, until the end of the war between Sparta and Elis, which also had lasting effects on the history of the landscape. It should be noted that the evidence concerning political, social, and cultural constellations as well as physical conditions is not always easy to date, although we tried, when possible. Otherwise, we had to restrict ourselves to general descriptions, which may reflect some later constellations. Especially religious practices that form a focus of our studies may suggest the persistence of traditions and thus possibly an older age.

¹⁷ Lang 2012.

¹⁸ See now Rohn – Heiden 2009; Heiden – Rohn 2015; Heiden et al. 2020.

1.1 Space and settlement: natural conditions and potentials

The investigated area essentially describes the micro-region on the lower reaches of the Alpheios, i.e. the south of the ancient region of Elis, and the modern administrative district of the Nomos Ilias largely follows this outline. For pragmatic reasons (the previous Triphylia Survey, see above, covered selected areas to the south) our research focused primarily on the zone north of the Alpheios. When looking at the physical geography of the region, it immediately becomes clear that it has undergone major changes both in the past as well as in the present that affect our current research. The geomorphological conditions hamper archaeological investigations in terms of visibility of finds and sites, especially because the area is extremely susceptible to soil erosion. Under these circumstances, archaeological investigations in this region rely on geomorphology and earth sciences. The first connoisseur of this scenery, the classically educated geographer Joseph Partsch, vividly described this thus: »Unter solchen Verhältnissen gewinnt die Forderung sorgfältigsten Terrainstudiums eine ungewöhnliche Bedeutung auch für die Altertumskunde. Wo der Mangel deutlicher Reste die Forschungen im Bereich der Vermutungen zurückhält, bleibt das Relief des Landes oft der einzige brauchbare Ratgeber. Da ist es ein Glücksfall, daß dieses Relief trotz der bescheidenen Höhenunterschiede [...] keineswegs eine gleichgültige charakterlose Physiognomie trägt, sondern scharfe Züge von einschneidender Beredsamkeit«¹⁹.

The relief of the landscape has been caused by strong uplifts²⁰ determined by the tectonics of the earth, in particular by the subduction of the African under the Aegean plate, which is part of the Eurasian plate²¹. Deposits that had formed in the Late Tertiary (Neogene) and even thereafter, especially in the Pliocene and Pleistocene, i.e. over more than 5 million years, mainly in coastal waters, brackish water zones, but also in lakes and river areas, form a plateau. These deposits consist essentially of marls, clay, silt and sandstones (the Pliocene Cholongon and Chelidoni stages), which are highly susceptible to erosion. In certain areas, there exist also more recent continental sediments and conglomerate beds from the Pleistocene (the Lalas stage), for instance in the range of hills on either side of Olympia north of the Alpheios River. Shelly limestone occurs in such zones. Within the framework of the ›Olympia and its Environs‹ Project, it has been possible to gain a better understanding of the extent of the tectonic uplift: It must be assumed that in the period of the last 6400 years, i.e. since the mid-Holocene, an uplift of at least 13–20 m has taken place²². However, it is still unclear whether these strong neo-tectonic dynamics took place gradually or rather at certain intervals, nor is it clear when they began exactly. It cannot be ruled out that even more recently, e.g. in the Middle Ages, abrupt tectonic uplifts of several metres have taken place in connection with strong earthquakes.

In general, the intensive erosion of topographical highlands as well as the closely related deposition of heavy sediment accumulations in the lowlands characterise particularly

¹⁹ Partsch 1897, 2; own translation: »Under such circumstances, the demand for the most careful study of the terrain acquires an unusual significance for the study of antiquity as well. Where the lack of clear remnants reduces research to conjecture, the relief of the land often remains the only useful guide. It is fortunate that this relief, in spite of the modest differences in height [...], carries by no means an indifferent characterless physiognomy, but sharp features of drastic eloquence«. For the character of the natural environment see esp. Leake 1830a, 3 f.; Philippson 1892, 313–324; Curtius also gives a vivid description of the historical area on

the lower Alpheios in the preface to Curtius – Adler 1882.

²⁰ E.g. Papanikolaou et al. 2007 estimate vertical crustal movements near the coast to 30–60 m for the entire Holocene, which corresponds on average to a change in the relief between 7.5–25 m since the Bronze Age. The western Peloponnese is one of the most highly uplifted areas in the world, as evidenced by raised quaternary marine terraces (Kelletat et al. 1976; Athanassas et al. 2013).

²¹ This and the following after Hoppe et al. 2012a; Hoppe et al. 2012b (with further references).

²² Vött et al. 2015.

the landscape of the western Peloponnese, especially along the river valleys. During heavy rains, which are characteristic of the Mediterranean climate, one can watch the surface being washed away. In this context it seems particularly noteworthy that the Olympia terrace consists of historical deposits. This terrace is known from the Kladeos Valley and accompanies the Alpheios River from around Olympia to Epitalio near the present coast²³. Apart from the history of the sedimentary burying of Olympia, it stores information on the river and landscape formation including the coastal development.

West of the central Peloponnesian limestone mountains in southern Elis, a highly structured relief was created from these erodible sediments increasing in ruggedness in the east-west direction. Partsch aptly described this: »Je weiter man westwärts geht, desto zerrissener erscheint die Tertiärplatte und desto wilder und unruhiger werden bei beständig abnehmenden Höhen die Formen der Landschaft. Die Thäler erweitern sich, aber ihre Wände bewahren eine ungewöhnliche Steilheit. Vielfach, besonders beim Auftreten der über den Mergeln und Sanden liegenden mächtigen Nagelfluhbänke [Konglomerate], unterbrechen felsige Abstürze, weit in einem Gehänge fortstreichend dessen regelmäßige Böschung [...]«²⁴. In this context, it is worth noting that the landscape near Olympia displays significant relief energy despite the aforementioned fact that the soil is highly susceptible to erosion. This also reflects the strong and possibly very recent tectonic uplift of the region.

The Alpheios River, which drains large parts of southern Arkadia and receives regular influx from karst springs, is one of the few perennial and one of the largest rivers in Greece²⁵. Like its tributaries, it has cut its course deep into the tableland and thus determines the relief of the landscape. In its lower reaches, the wide riverbed was unsuitable for agricultural purposes; marginal areas were endangered by floods and considerable obstacles impeded the crossing of the river. The coastal zone features a strong lagoon formation combined with the increasing development of sand dunes with corresponding vegetation. This had already been witnessed in antiquity²⁶. Here we may envisage fishing (as well as in the inland waters, see below)²⁷. By the 19th century, the Alpheios River had formed a broad band of gravel in the micro-region around Olympia, framed by areas that were sometimes swampy or threatened by paludification²⁸. However, there also existed fertile alluvial soils, partly along the Alpheios River and especially in the area around Pyrgos, as well as hills mainly covered by pines²⁹.

²³ Vött 2013.

²⁴ Partsch 1897, 3: »The farther west one goes, the more broken up the tertiary plate appears, and the wilder and more uneven the landscape shape becomes with ever-decreasing heights. The valleys expand, but their walls preserve an unusual steepness. In many cases, especially where mighty conglomerates lie atop the marls and sands, rocky cliffs break up its regular embankment, [...]« (own translation).

²⁵ On the Alpheios cf. now Taita 2013, 368–371; for the ancient perception see below. – For information on sedimentary deposits in and around Olympia see also: Hoppe et al. 2012a; Hoppe et al. 2012b, with further references; Vött et al. 2011a; Vött et al. 2011b; Vött et al. 2013; Willershäuser et al. 2011; Willershäuser et al. 2015.

²⁶ Str. 8, 3, 19; Paus. 5, 5, 7; 5, 6, 4.

²⁷ The reference to the worship of Apollo Opsophagus (»fish lover«) by the Eleians in Polem. Hist. Fr. 70 (Ath. 8, 346 b) can be considered as an indication of the importance of fishing already in antiquity that is known to have taken place in the lagoons in the 19th century. The importance of tuna fishing may be indicated by the striking detail in the paintings

of Kleanthes in the Temple of Artemis Alpheiousa (Ath. 8, 346 b–c, see below n. 266); cf. generally Curtius 1852, 5 f.

²⁸ For the extent cf. Cockerell 1903, 70 (August 1812: Pyrgos lay »just above the marshes that border the Alpheios«). Whether the perils of mosquitoes and febrile fever (Stanhope speaks of the dangers of malaria, 1824, 4) that the 19th century travellers report can also be assumed for antiquity, or to what extent a similar situation is to be envisaged remains open; after all, there are indications for at least temporary plagues of insects, such as the sacrifice for Zeus Apomyios (»fly repellent«) in Olympia, which allegedly had been set up by Herakles according to Paus. 5, 14, 1 (for further information see Maddoli – Saladino 1995, 259 f., see also the vivid description of the mosquito plague in Chandler 1776, 289 [with reference to the ancient sacrifices], also Curtius 1852, 5).

²⁹ See the description by Philippson 1892, 313 f.; also Chandler 1776, 288; Sibthorpe 1820, 76. 79; Leake 1830a, 23; Leake 1830b, 67 f. 69 f.; Leake 1846, 8; Buchon 1843, 500: mainly grain (wheat, corn) and grapes were grown.

Apart from the unfavourable zones along the Alpheios River and on the coast, the conditions for agricultural usage – i.e. the primary economic activity – were rather good: The soils that developed from the Neogene deposits are generally among the more fertile soils in Greece³⁰. This situation is further improved by the relatively high level of rainfall in the west of the Peloponnese, on the windward side of Greece. Around Olympia, the local silt-dominated sediments almost give the impression of loess layers. Locally, sand is also present. Theophrastus already spoke of »slightly sandy land« (χώρα ὑπαμμος)³¹. Water is abundant³². Corresponding references to the agrarian wealth of the region can be found in ancient sources. This applies to both arable land and pastureland. Additionally, there was a lot of forest, including oak. Xenophon's description of his own home near Skillous, south of Olympia (west of modern-day Makrisia) proves particularly characteristic:

From the proceeds of his share in the booty deriving from the »March of the Ten Thousand«, Xenophon bought a piece of land for the Ephesian Artemis as a tithe deriving from a vow he had made earlier. »As it chanced, there flowed through the plot a river named Selinus and at Ephesus likewise a Selinus river flows past the temple of Artemis. In both streams, moreover, there are fish and mussels, while in the plot at Scillus there is hunting of all manner of beasts of the chase. Here Xenophon built an altar and a temple with the sacred money, and from that time forth he would every year take the tithe of the products of the land in their season and offer sacrifice to the goddess, all the citizens and the men and women of the neighbourhood taking part in the festival. And the goddess would provide for the banqueters barley meal and loaves of bread, wine and sweetmeats, and a portion of the sacrificial victims from the sacred herd as well as of the victims taken in the chase. For Xenophon's sons and the sons of the other citizens used to have a hunting expedition at the time of the festival, and any grown men who so wished would join them; and they captured their game partly from the sacred precinct itself and partly from Mount Pholoe – boars and gazelles and stags. The place is situated on the road which leads from Lacedaemon to Olympia, and is about twenty stades [3.7 km] from the temple of Zeus at Olympia. Within the sacred precinct there is meadowland and tree-covered hills, suited for the rearing of swine, goats, cattle and horses, so that even the draught animals which bring people to the festival have their feast also. Immediately surrounding the temple is a grove of cultivated trees, producing all sorts of dessert fruits in their season. The temple itself is like the one at Ephesus, although small as compared with great, and the image of the goddess, although cypress wood as compared with gold, is like the Ephesian image«³³.

On the other hand, there appears to be a shortage of natural resources that, however, is not so important given the state of ancient technology. Theophrastus mentions the occurrence of lignite on the Mountain Road from Elis to Olympia, and Partsch³⁴ refers to lignite seams on the right edge of the valley of the Kladeos River³⁵. A more serious issue was the

³⁰ Cf. Sauerwein 1980, 42; Gehrke 2003, 17–19.

³¹ Thphr. Fr. 400 (Edition: Fortenbaugh et al. 1992, 205), cf. Curtius 1852, 3. 93 n. 1.

³² This also follows from etymological explanations of the name Pisa (whether they apply or not), see the notes in Daude et al. 2013, 302 f.

³³ X. An. 5, 3, 8–12 (Translation: Brownson 1961); for the agrarian wealth, cf. esp. X. HG 3, 2, 26; Plb. 4, 73, 5–9; 4, 74, 8; 4, 75, 1; for agrarian use cf. also Paus. 5, 6, 6 (for hunting, probably from X. An. 5, 3, 8); 6, 22, 1 (cultivation of grapevines immediately east of Olympia, see also the wine press in the reuse of the Eileithyia-Sosipolis temple); generally on the fertility of Elis see Paus. 5, 4, 1; 5, 5, 2; 6, 26, 6 (agricultural

wealth, especially flax, see Maddoli – Saladino 1995, 203); on pastureland cf. Taita 2007, 25–29 (with important observations on the possible transhumance, Drouva is in the 19th century »winter station of the shepherds from the high mountains«, Ross 1848, 191) and generally see Puillon Boblaye 1835, 119; Curtius 1852, 3; Gehrke 1986, 103. 186; cf. Yalouris 1996, 132; Zoumbaki 2001, 47–49; Sinn 2004 242 f.; Bourke 2017, 11–15. 40 stresses the aspect of pastoralism.

³⁴ Partsch 1897, 6.

³⁵ Thphr. Lap. 16; on this and on the exploitation of lignite in the region see also Taita 2013, 374 with n. 150; Partsch relied on Bücking 1882, 318; worth adding are the exact observations of Fiedler 1840, 376 (at

lack of good stone for the construction of sophisticated buildings. Thus, even the Temple of Zeus was essentially built of local, so-called Neogene shelly limestone that was also widely used elsewhere.

1.2 Spatial Communication

Due to the known difficulties in the identification of ancient routes, which result mainly from the problematic nature of our sources, physio-geographic conditions form the main guide in the reconstruction of such connections. This is especially true in view of the aforementioned fragmented character of the relief in southern Elis and the special role of the Alpheios and other rivers. To a certain extent, pre-modern travel descriptions from the 18th and 19th centuries can be used, but given the dynamics of landscape development this is not without problems³⁶.

The Alpheios River forms the major factor in landscaping. It is obvious that the river was difficult to cross³⁷. During winter, this was almost impossible. Even in the summer months, during the dry season, crossing was probably only possible in certain places. According to the current state of research, we must assume at least two fords that are explicitly mentioned in our sources. One lay near the mouth of the river at the site of Epitalion on the road along the coast: Homer spoke of a ford (πόρος) of the Alpheios River³⁸, and Strabo located this place at Epitalion, where the river could be crossed on foot (πεζῇ περατός)³⁹. Pausanias mentions another ford just south of the sanctuary on the way to Triphylia and on to Messene and Sparta⁴⁰. It must have had a special significance for the sanctuary, its organisation and its visitors. In addition, it is likely that this was generally an important crossing point, which was also economically significant (e.g. for livestock husbandry)⁴¹. This river crossing could be explained by the considerable backwater effect of the natural bedrock barrier at the modern-day Alpheios dam, at the point where the river breaks through the Drouva hills in a south-north direction. The calming backwater effect extended upriver just to near Olympia where waters of the dammed water body were shallowest. Provided that this constellation existed also during historical times, this would have enabled an easy passage across the Alpheios River on foot. Recent geomorphological investigations support this possibility (see below).

When reconstructing road connections, one must generally consider that, so far, we should not expect evidence for paved roads⁴². In this context one needs to have in mind that movement took place essentially on foot, possibly with pack animals. Members of upper

the Kladeos near the homonymous site, then Stravrokephalo). 380 f. (further north at Goumero).

³⁶ Taita 2001, 118 f. with n. 47 is quite optimistic in this respect.

³⁷ Cf. Taita 2001, 117 f. with further references.

³⁸ Hom. Il. 2, 592.

³⁹ Str. 8, 3, 24: »Ἀλφειοῦ δὲ πόρον φησὶν, ὅτι πεζῇ περατός εἶναι δοκεῖ κατὰ τοῦτον τὸν τόπον: καλεῖται δὲ νῦν Ἐπιτάλιον τῆς Μακιστίας χωρίον.« (»He calls it ›fording-place of the Alpheius‹ because the river could be crossed on foot, as it seems, at this place. But it is now called Epitalium [a small place in Macistia]«, Translation: Jones 1927). This is confirmed by the reports of the operations of Agis against Elis (401 B.C.) and Philip V (218 B.C.) in X. HG 3, 2, 25; 3, 2, 29 and Plb. 4, 73, 4; cf. also Taita

2001, 122 with n. 66 and Taita 2013, 379.

⁴⁰ Paus. 5, 6, 7. This may be indicated by the πόρος in Pi. O. 1, 92; 2, 13 (in contrast to 12, 48), cf. Taita 2001, 127 f.; more on fords in Taita 2013, 369.

⁴¹ See esp. Taita 2007, 25–29 with further references. This also applies to the river system as a whole, which was well explored through practices of transhumance (Taita 2007, 27 f.), also with regard to communication routes in general. The reference to wet meadows near the Alpheios in X. An. 5, 3, 11 (obviously on the north side of the Artemis sanctuary donated by Xenophon that provided suitable pasture for the draught animals of the festival participants) is also important.

⁴² This is not even implied by the milestone from Epitalio (see below).

social classes may have travelled on horseback or – provided the quality of the paths allowed it – in coaches. Xenophon mentions »draught animals« of the visitors to the Olympic Games⁴³. In addition, we must assume numerous local connections that linked different sites in walking distance, and these short and direct connections, which were adapted to the fragmented terrain, often remain impossible to track. The movement in the field under modern-day conditions, however, gives an idea of how efficient such short distance connections could actually be. This also gives a direct impression of how differently space was perceived if one used these paths. It also means that the partial ruggedness of the relief did not completely inhibit communication under pre-modern conditions.

After all, we have sufficient evidence to identify the most important roads, among which the »Sacred Road« (ἱερὰ ὁδός) or »Processional Way« (πομπικὴ ὁδός) stands out⁴⁴. It led from Elis, probably from the local »Old Gymnasium«⁴⁵, to Olympia, where it ended in a special entrance, the πομπικὴ ἔσοδος⁴⁶. Its total length from Elis to Olympia was 300 stades (about 55.8 km⁴⁷), from Elis to the place Letrinoi 180 (about 33.3 km), and from there to Olympia 120 (about 22.2 km)⁴⁸.

It is important to note that this connection was not only of practical significance, but also indicates that the topography was religiously charged (cf. below 3.2). As a »sacred« road and place of solemnisation in the form of regular processions⁴⁹, it also created a cultic link between the political centre in the north and the central sanctuary in the south. In view of the peculiar organisation of the political union of the Eleans, one cannot distinguish between the centripetal and the centrifugal form of the procession. No hierarchical order differentiates both endpoints, as is the case in distinct polis cults elsewhere. A noteworthy characteristic in this regard is the presence of a spring located on this route, the Piera, where the Hellanodikai, the officials responsible for the Olympic Games and the games in honour of Hera (Heraia), as well as the Sixteen Women, performed their purification rituals⁵⁰. In or near Letrinoi a side road apparently led to the harbour site Pheia (modern-day Agios Andreas), which represented an important connection between Olympia and the sea⁵¹.

⁴³ X. An. 5, 3, 11.

⁴⁴ Paus. 5, 25, 7; cf. also 5, 15, 2; 5, 15, 7; 6, 20, 7. It is almost automatically equated with the »road through the plain« (Paus. 6, 16, 8; 6, 22, 8; cf. Str. 8, 5, 6 and Scholia Pl. R. 462 e, p. 164 [Ruhnken 1800] on the distance), already by Partsch 1897, 6 and cf. also Taita 2001, 119 with n. 48. 49; Sinn 2004, 128 f. For its course Partsch 1897, 6 f. remains fundamental.

⁴⁵ Sinn 2004, 128 f. On the old gymnasium, see Paus. 6, 23, 1–3.

⁴⁶ Paus. 5, 15, 2; 5, 15, 7; 6, 20, 7. This entrance at the time of Pausanias is identified by Mallwitz 1972, 123 (see also Maddoli – Saladino 1995, 270) with the south-west gate in the Roman enclosure wall of the Altis. Sinn 2004, 129 thinks of an entrance further north (near the Palaestra), but assumes a course south of the South Stoa in later times (see also Mallwitz 1972, 122 for the main entrance southeast of the Temple of Zeus in Greek times). – The question needs a more detailed clarification.

⁴⁷ We calculate the stade with 185 m. Admittedly, this is not a fixed measure in the sense of a calibrated ancient unit of measure (see esp. Janvier 1993), but it is based on the most common conversion, namely of the Roman mile (almost exactly 1480 m) to the Greek stade. The rate is often (e.g. in Pliny the Elder) calculated 1 : 8 (see also Şahin – Adak 2007, 120. In general,

one has to take into account that these measurements pertain to country routes where greater precision was possible). According to Str. 7, 7, 4 this ratio was commonly applied, cf. Janvier 1993, 12 f.; Arnaud 1993, 241, where also other variants are given, esp. to Polybius's 1 : 8,33 that Str. 7, 7, 4 mentions as a special case (for possible changes in this respect, cf. the ideas of Potheciary 1995).

⁴⁸ Paus. 6, 22, 8. On the location of Letrinoi, probably at modern-day Pyrgos or the monastery Ag. Ioannis, see below 2.3.3.1; on the further course of the road (south of modern-day Salmoni, formerly Koukoura, thus approximately along the railway line) see Partsch 1897, 7.

⁴⁹ On the significance of walking for the sacralisation of geographical spaces, cf. Michaels 2006, 278; for Greece see esp. Nilsson 1951; Graf 1995; Graf 1996 (where the distinction between centripetal and centrifugal processions is made, which only applies in the framework of a strict definition of polis; on the problem of confinement to polis religion, see Kindt 2012); see also generally Bekker-Nielsen 2009.

⁵⁰ Paus. 5, 16, 8 (on the Plain Road); on the possible location south of Amaliada, on the border between the δῆμοι Elis and Letrinoi at that time, see Partsch 1897, 7.

⁵¹ See now Taita 2013, 346–348, with further references.

The so-called Mountain Road (ὄρεινὴ ὁδός) or road ›through the mountains‹ formed another connection between Elis and Olympia⁵². In contrast to the route in the plain, this formed the direct link between these places by crossing the mountainous or hilly country in between. It led first up the Peneios River to the confluence with the Ladon, where Pylos was located at a distance of 80 stades from Elis. Then it followed the Ladon River as far as possible before crossing the watershed between the Peneios and Alpheios Rivers at the modern-day village of Mouzaki. From there, it trailed along the catchment area of the Lestnitsa River, the main tributary of the Alpheios in this area. Here the road also passed the settlements of Alasyaion and Herakleia, the latter of which was probably located at modern-day Pournari⁵³. Further along it will have led through the modern-day villages of Pelopion and Platanos to Olympia. One might possibly locate the settlement of Dysponton on this section of the road, as it lay ›in the plain and on the road that leads from Elis to Olympia‹⁵⁴.

There existed yet other routes of transport and communication: North of the Alpheios a road led from Olympia to the east in the direction of Heraia and thus on to southern Arkadia, its initial section generally lying north of the Alpheios⁵⁵. Near Harpina another road branched off to the north or north-east, into the area of modern-day Lalas on the Pholoe plateau, whence it continued to Pheraia / Pharaia and into northern Arkadia⁵⁶.

In the south, there was an important route towards Samikon and the Anigros River and on to southern Triphylia and Messenia. Thanks to Pausanias, one may get some idea of this route: From Olympia, near the ford across the Alpheios, one finds the cliff of Typaion, which also served as a place of execution for Olympia. The road then left Skillous (west of modern-day Makrisia) to the right and approached the coast, where the area was ›sandy and rich in pines‹⁵⁷. In the area of Skillous, where the sacred grove of Artemis dedicated by Xenophon was located, about 20 stades (3.7 km) south of Olympia, the road to Sparta branched off to the east or southeast⁵⁸.

Another important route ran from Samikon directly along the coast across the aforementioned Alpheios ford at Epitalio and further north, and is directly attested by a milestone of Emperor Trajan from the year 117⁵⁹. Indeed, the Alpheios itself served as a traffic route and was navigable almost nine kilometres upstream of its estuary. There was a harbour at its

⁵² Str. 8, 3, 10; Paus. 6, 22, 5; Thphr. Lap. 16 (δὲ ὄρεος); on its course cf. the very vivid description by Partsch 1897, 4–6; for further information see Taita 2001, 120 with n. 51. The lignite deposits at Kladeos and Goumero (see above n. 35) are not specific enough to define the localisation more precisely (see Partsch 1897, 6). After all, at Goumero we are not too far from the course of the route assumed by Partsch. – Radt 2007 ad loc. (with reference to Leake 1830, vol. 2, 187) considers the possibility that the distance of ›less than 300 stades‹ between Olympia and Elis according to Str. 8, 3, 30 could point to the Mountain Road (if it is not only a deviation due to the rounding off the length of the Plain Road).

⁵³ The location of Alasyaion on this road is directly attested (Str. 8, 3, 10), that of Herakleia indirectly from the context of Paus. 6, 22, 5–8. On the location of the places (for Alasyaion Partsch 1897, 4 considers the area around Karatoula) cf. below 2.3.2.2; 2.3.3.1.

⁵⁴ Str. 8, 3, 32. On the basis of the wording one would assume a location on the Plain Road, but Meyer 1950, 1737 thinks of the Mountain Road, which always appears as a link between Elis and Olympia in Strabo, as the author would otherwise not have explicitly

added the specific reference to the plain. Incidentally, this would not match the other topographical data (see also Mandl – Ruggeri 2000, 47 n. 15; Roy 2002, 234 f.; Ruggeri 2004, 193). See also, in the light of our research, below 2.3.3.2.

⁵⁵ Lucianus Peregr. 35; D. Chr. 1, 52. Paus. 6, 21, 3–22, 1 takes it as a guide for orientation from east to west, from the Erymanthos River at the border to Arkadia to Olympia or to the Hippodrome. For a better understanding of the passage and the course of the road in relation to the Alpheios River (here already Wilamowitz had difficulties) see the enlightening remarks by Maddoli et al. 1999, 357 f.; cf. generally Taita 2001, 120 with n. 52.

⁵⁶ Str. 8, 3, 32; see Partsch 1897, 8 with n. 1; Pritchett 1989, 35 f.; Taita 2001, 121.

⁵⁷ Paus. 5, 6, 1; 5, 6, 4; 5, 6, 7 (in the opposite direction); on the course see esp. Partsch 1897, 11 f.; Meyer 1957, 47–49. 63–66 (still fundamental); further information in Maddoli – Saladino 1995, 210 f.; Taita 2001, 123–125.

⁵⁸ X. An. 5, 3, 10 f.; Taita 2001, 123 f. with n. 70.

⁵⁹ References in Taita 2001, 122 n. 64; see now Kolb 2013, 116 f. with fig. 2.

mouth and, at the appropriate point, one must also assume the existence of an inner river port⁶⁰. Upstream, one could imagine that boats and ships had to be towed, while downstream transportation on the Alpheios was facilitated by the existing current. The towing of ships with the help of draught animals certainly required roads close to the river course. It seems conceivable that a polygonal wall near the early 20th century railway bridge across the Alpheios, in combination with geoarchaeological investigations, provides an indication for the existence of towpaths and port facilities (see 2.1.2.2; 2.2.2.4).

1.3 The social formation of space

The following is about how space was socially designed, i.e. primarily through the coexistence of people who inhabit and manage it. Research has focused mainly on the political geography, i.e. on the organisation of the most important political power for the space in question, the union of the Eleans, residents of Elis. In addition, however, aspects of the sacred topography have occasionally received attention. We have focused on these in the context of the project, guided by phenomenological spatial concepts and in particular by the idea of ›existential space‹. This will be discussed in detail in the second part⁶¹.

At least from the 6th century onwards the ›tribe‹ or ›ethnos‹⁶² of the Eleans figures in history and appears as a well-organised political entity. Their name ›Waleioi‹ = ›people of the valley‹ indicates that the ethnogenesis took place in the area⁶³. Groups that formed the elite carrying ethnic traditions (›Traditionskern‹)⁶⁴ had apparently migrated from the area of Aetolia⁶⁵. In any case, this can be deduced from the stratigraphy of mythistory, as in the Homeric Iliad the region essentially still appears as the land of the Epeians. These groups from Aetolia settled mainly in the fertile valleys and peripheral areas around the Peneios River and its tributary Ladon, and certainly mixed with the people already living there. The question must remain open if and when they penetrated to the lower reaches of the Alpheios. At least the Peneios Valley around the town of Elis remained a significant centre⁶⁶.

⁶⁰ For the use of the estuary as a harbour cf. also Stanhope 1824, 55; Leake 1830, vol. 1, 45 f.; Curtius 1852, 4, 73. For the length of the river section Plin. HN 4, 6, 14 (›VI milia passuum‹); generally see Paus. 8, 14, 11; Philostr. VA 8, 15; cf. Taita 2001, 121. 130 and above all the detailed study by Taita 2013. She assumes a river port at the mouth and (due to the length given by Pliny) an inland port ›almost‹ in the area of the confluence with the Lestenitsa River (367). This may have been located near the modern railway bridge, see below 2.1.2.2; 2.2.2.4.

⁶¹ On ›existential space‹, cf. Tilley 1994, 16 f., see generally below 3.2.

⁶² The problematic term is used here in the sense of the Greek *ἔθνος*. Again, this concept is not clear-cut, but can be combined with modern notions of ›ethnicity‹ (which, however, is in itself problematic, as Ruby 2006 [esp. 43 f. 52] has highlighted in his detailed discussion of current approaches. One should not proceed too schematically). After all, it can be said that it refers to a political community which thinks of itself as a community of descent, which is bound to a living environment, which of course does not primarily constitute the community (in its emic perspective), as the group can survive migrations and may, if necessary, merge with groups of different origin and location.

⁶³ See already Gschnitzer 1969, 277; on this and the following cf. Gehrke 2005. – The new beginnings, which are implied by the literary-mythological material, correspond to the new start of activity as the excavations both in Elis and in Olympia document: In Elis Submycenaean and Protogeometric finds cover the second half of the 11th and early 10th centuries (Eder 2001a). There is less evidence for the 9th century; but then there are clearer signs of habitation from the late 8th century onwards (Eder – Mitsopoulos-Leon 1999).

⁶⁴ For the term cf. Wenskus 1961, 5–9; Steinacher 2012, 98 f. points to the problem arising from connecting this concept with certain notions of ethnicity and above all from a misunderstood reception of Wenskus' concepts. However, that does not alter the fact that it offers a differentiating concept that is helpful to describe processes of social integration from an ethnical point of view (›Ethnogenese‹) – and such processes are incidentally highly effective from an historical-empirical perspective.

⁶⁵ However, cf. Fowler 2013, 130 f.

⁶⁶ We also speak of ›hollow Elis‹ (for *κοιλὴ Ἠλῆς* see Th. 2, 25, 3; Str. 8, 3, 2; 8, 3, 3; 8, 3, 4; 8, 3, 17; 8, 3, 24; 8, 3, 26; 8, 3, 30; 8, 5, 6; Istros FGrHist 334 Fr. 40; Paus. 5, 16, 6); and according to Nafissi 2003, 24 with n. 15 the term relates to the Peneios Valley.

According to M. Nafissi⁶⁷ ›Waleioi‹ forms the opposite term to ›Akroreioi‹ (›people from the mountains‹) in the adjacent higher eastern and south-eastern regions around the Pholoe⁶⁸. This area was mythistorically occupied by Pholos and the Centaurs⁶⁹. It was incorporated into the region of Elis – although the period is not known – but remained a peculiar ensemble within the Elean union even in the Classical period⁷⁰.

However, in the present context the political geography on the lower Alpheios River is more important. This micro-region has its own profile, but despite the fragmentation of the landscape, it was neither markedly separated from the ›hollow Elis‹ nor the Akrorea. The discussion of the routes of communication has highlighted this point. At least by the 6th century, two administrative and political regions had emerged. Pisa (or the Pisatis, the area immediately around Olympia) and Triphylia, the zone south of the river towards Messenia⁷¹. The territory of Pisa was an integral part of Elis, while the Triphylian sites and settlements were considered Elean *perioikoi* (›dwellers around‹) and had the status of Elean allies (σύμμαχοι)⁷². In our research area, we must consider here Epitalion, Letrinoi, Amphidolia and Manganai.

At least from the 6th century onward, Pisa, the area immediately adjacent to Olympia, belonged to the territory of Elis, and thus was not merely part of the hegemonic symmarchy⁷³.

⁶⁷ Nafissi 2003, 40.

⁶⁸ It lies »vicinissima a Olimpia« (Nafissi 2003, 40) or »above it«, Str. 8, 3, 32.

⁶⁹ Pholos, son of Silen and a nymph, was one of the Centaurs living in the oak forest of Pholoe, who entertained Herakles with wine from a barrel that Dionysus had given to a Centaur four generations earlier with the requirement to open it only when Herakles would pass by. The smell of the wine attracted other Centaurs, who rushed in and started fighting for the wine. They were expelled by Herakles with his poisonous arrows. While Pholos took care of the dead, he was accidentally injured when he pulled out an arrow and died (Stesich. PMGF S 19 = 181 p. 162 [Davies 1991]; Theoc. 7, 149; Diod. 4, 12, 3–8; Verg. Georg. 2, 456; Aen. 8, 294; Käppel 2000, 949; Nafissi 2003, 40 n. 129) – The story could reflect the original discrepancy between the settlers or population groups – exaggerated to a cultural divergence in the *imaginaire* of the Greeks: The Centaurs (= people in the mountains) could not enjoy the pleasures of the symposium in moderation. In contrast, in Olympia from the very beginning symposia and wine consumption were common (Eder 2003; Eder 2006 on the remains of drinking vessels from the ›black layer‹). It seems plausible that a reminiscence of these Centaurs (possibly as relatives of the Thessalian ones) is present in the west pediment of the temple of Zeus, as a ›second reading‹ or subtext and thus as additional evidence of the polyvalent readability of the work of art, which merges various versions or provides a new conglomeration of different versions and semantics (for this aspect cf. Heiden 2003). On the relations between Elis and Thessaly cf. below 3.2.

⁷⁰ In the 4th century, it consisted of four poleis, Thraistos, Halion, Eupagion, Opous (Diod. 17, 8; cf. X. HG 7, 4, 12–14 with Nafissi 2003, 26 n. 32).

⁷¹ The term is used for the sake of convenience. One has to take into account that the notion of Triphylia as a

region emerged only around 400 B.C., according to Nielsen 1997.

⁷² This hegemonic symmarchy of the Eleans results from Ebert – Siewert 1999 = Siewert 2006, 49–51 (no. 4) (525–500 B.C.), line 5: Elis »καὶ τὰς συμ<α>χίας«; see now also Bourke 2017, 109–111 (with slightly different views). In detail, these probably included the sites mentioned below. A criterion for the affiliation with the symmarchy seems to have been that the Olympian Zeus appears in IvO 10 (Minon 2007, no. 14) and 11 (Minon 2007, no. 12) as warranting the legal acts (bibliography in Wolff 2010, 102 n. 552). The question whether it was an ›allied‹ place or a subunit of Elis is not always easy to answer, and one can also expect that this changed occasionally: Skillous: Paus. 5, 6, 4; 6, 22, 4; IvO 16 = van Effenterre – Ruzé 1994, Nr. 56 = Minon 2007, no. 22, mid 5th century testified as dependant, Wolff 2010, 97 with n. 515; Ewa: Meiggs – Lewis 1989, no. 17 = van Effenterre – Ruzé 1994, Nr. 52: Ewaioi (formerly also Heraioi) (c. 500 B.C.): actually *foedus aequum*, but required penalties are due to Zeus of Olympia (thus indirectly to Elis, cf. tribute Lepreon); Anaitioi and Metapioi: IvO 10 (van Effenterre – Ruzé 1994, Nr. 51 = Minon 2007, no. 14), with Nafissi 2003, 42 with n. 146; Triphylia: Lepreon and Pylos, and Epeion bought for 30 talents according to X. HG 3, 2, 30 (Wolff 2010, 100); furthermore probably (however, only according to a certain interpretation of Hdt. 4, 148, see Wolff 2010, 96 f.), Makistos, Phrixa, Pyrgos, Noudion, Epitalion (Wolff 2010, 97); see also other places named on the occasion of the Elean-Spartan War (402–400 B.C.): Akrorea (but see above), Letrinoi, Amphidolis, Marganeis, Lasion (Nafissi 2003, 26, on these cf. also below 2.3.3.1); cf. also the list of Elean places in Roy 1999, and Roy 2004, 489–504 and Ruggeri 2004. – On the ›Aetolian‹ Erxadieis (van Effenterre – Ruzé 1994, Nr. 55) see Wolff 2010, 80 f. n. 426.

⁷³ Still fundamental Meyer 1950; cf. also esp. Roy 2002.

According to ancient – albeit not uniform – tradition or perception, there had been a ›polis‹ or, more cautiously, an ethno-political unit that had founded and organised the Olympics before the Eleans, who around 580 B.C., in the wake of military conflicts finally wrested control of the games. Under the protection of the powerful Arkadian Confederation and in the context of the reconstitution of their state, the Pisatans organised the Olympic Games of 364 B.C. before finally making their peace with the Eleans.

Already in the 19th century, Benedictus Niese had questioned the authenticity of the traditions of an early ›Pisatan‹ phase of the Olympic Games and considered it as retrojection from the time around 364, and after the addition of further arguments, this position has largely prevailed⁷⁴. It has more recently been questioned again⁷⁵ and therefore forms part of our agenda (see below 3.1).

First of all, we must consider which assumptions we can make about the structure of the Elean union at the end of the 6th century. This collective, which had formed only after the groups from the area of Aetolia or northwestern Greece had settled around the Peneios River⁷⁶, expanded to the south, east and southeast, to the mountains and the zones on the lower reaches of the Alpheios. Its organisation took a relatively loose and very complex form, albeit coupled with a high degree of coherence. According to Greek terminology, it formed an *ethnos*. Internally it was governed, apparently initially, by a strict aristocracy; this entailed the rule of the dominant families with a council of ninety nobles⁷⁷, which perhaps included the members of the old ›traditional core‹ elite. This was probably replaced in the course of the 6th century by a broader order (a moderate oligarchy or agrarian democracy according to Aristotle)⁷⁸.

More important than the question of the participation in power is the one in regard to the spatial organisation. The determining factor is formed by the markedly loose settlement pattern, which is said to consist of »villages« (κωμηδόν) and »many communities« (πολλοὶ δῆμοι), etc.⁷⁹ We have to imagine a very diverse arrangement of various settlements, villages,

⁷⁴ For the discussion about Pisa, see Möller 2004; Nielsen 1997; Roy 2002; Giangulio 2009 (modified) and esp. Nafissi 2003, 28–30, see now also (particularly sceptical) Zingg 2016, 238–266 (with extreme parallelism of the mythistory and the events around 364 B.C.); Bourke 2017, 53–68.

⁷⁵ Kōiv 2013; cf. the critical remarks in Bourke 2017, 61–62.

⁷⁶ However, cf. above n. 65.

⁷⁷ Arist. Pol. 5, 5, 1306 a 12–18.

⁷⁸ Arist. Pol. 6, 2, 1319 a 12–19 (possibly a law for the protection of smaller farmers); IvO 2 (Minon 2007, no. 20, after Jeffery 1990 475–450 B.C., see the inscription NIO 5, which appears rather similar but a little older, Nafissi 2003, 44 f., who also recognises a mixture of local and central elements); IvO 3. 11 (500–475 B.C. after Jeffery 1990) with census-type (?) restrictions (IvO 11 = Minon 2007, no. 12, 3 f., cf. Nafissi 2003, 44) and »council« (the Five Hundred) and »people« (Nafissi 2003, 46). This would match Paus. 4, 28, 4 (»Ἡλεῖοι γὰρ τὰ μὲν παλαιότατα εὐνομώτατοι Πελοποννησίων«). – Nafissi 2003, 46 f. takes insufficient account of the changes mentioned in Aristotle and attributes this step of expansion to the *synoikismos*. If one does not favour a democratic interpretation and connect it with the change in the 5th century, it seems better to at least link the council of the 500 (IvO 7 = Minon 2007, no. 4), which is larger than the »90«, with this enlargement

in the sense of a moderate oligarchy or something similar. – Hypothetical reconstruction of the internal constitutional development in Gehrke 1985, 365–367, partly to be modified according to Nafissi 2003, 42–48, who also assembles the most important sources of the ethno-federal structure. Cf. now also Roy 2015a, who points out that Elis was not a federal state in the technical sense. Instead, he rightly speaks of a »complex structure«, which he however modifies with his assumption of a »polis Elis with a very large territory by Greek standards, and a network of allies subordinate to it« (284). – The following problematic issues remain: The question of dating the inscriptions (e.g. the criterion for early dating [zeta for delta] following Dittenberger – Purgold on IvO 1, p. 3 is no longer valid), the correspondence between the developments that are inferred in the inscriptions and those contained in the literary sources (esp. Arist., Str.), and the individual interpretation of the documented institutions (e.g. of the council). On the constitution of Elis see now also Bourke 2017, who underestimates, however, the abovementioned character of the Elean political union and the degree of its complex internal organisation (29–30. 88–92), thus placing special weight on the *synoikismos* (92–95) and dating the council of the 90 to 400 B.C. (171 f.).

⁷⁹ Str. 8, 3, 2. Plb. 4, 73, 5–8 also emphasises the rural structure and the preference for life in the countryside.

hamlets, farmsteads and sanctuaries which were also organised and managed in their own way. Nevertheless, all of these existed under the control of a relatively central, greater entity, probably with intermediate tiers of community organisation and governance. This is best captured by Strabo, who speaks of a σύστημα δήμων⁸⁰. Two places (at least from the 2nd half of the 6th century onward) represented centrality, the capital of Elis and the sanctuary of Zeus in Olympia.

At the latest from the 6th century on there existed an agora in Elis⁸¹. From the middle of the 6th century legal texts pertaining to the ethnos of the Eleans and its subunits were published in bronze in Olympia⁸². Olympia, or rather the sanctuary, thus formed a »secondo polo«⁸³ for the whole of Elis, and this found its cultic expression in the great procession between the two centres. This certainly favoured the plurality and flexibility in the rather loosely knit union and thus promoted integration. There was no annexation by a powerful polis centre, but an indirect integration that was also mediated via the sanctuary of Zeus. The respective local elites and populations had their own position in the union as a whole.

Texts dating from as early as the 7th century point to a clear self-conception of the ethnos of the Eleans, and by the 6th century at the latest there was a distinct political-administrative (»ethnic« in the sense of ethnos) and quite modern organisation that is visible in the textualisation of rules and laws. The Eleans were able to expand their highly complex union in an adequate way, and finally to develop a considerable expansionary force, enhanced, as it were, by the prestige and wealth that the organisation of the games and the operation of the oracle provided. A wealth of laws and decisions allows us to gain a clear insight into the organisational structure at the central and local levels as well as between the different units. One could refer to this structure as tribal-federal in nature⁸⁴, and we are inclined, for instance, to use the Swiss canton of Graubünden in its historical structures as a possible model.

In addition, all our information points to a relatively high level of stability (especially when compared to other Greek communities) even in times of change. This suggests that the elite was sufficiently open and gently moderated the process of change. At the same time, there was a relatively broad »middle class« on a largely agrarian basis, within which no significant social differences, tensions or frictions can be discerned.

In this context, a democratisation or further opening of the constitution is to be assumed, or at least conceivable, even if the evidence remains meagre⁸⁵. The dating is unclear. Indeed, one could make a tentative connection with the *synoikismos* of 472/471; this, however, needs to remain hypothetical⁸⁶.

In general, one should not overestimate the significance of the *synoikismos* in view of the already achieved degree of organisation and stability. In any case, it was merely a question of settlement organisation and did not involve a constitutional change. Perhaps it was a catching-up in terms of »modernisation«, primarily led by the need for an adequate representation of a prominent state which considered itself eminent. It was now fashionable for

⁸⁰ Str. 8, 3, 2 (Edition: Jones 1927).

⁸¹ Siewert 1994, 26; Siewert 2001; Eder – Mitsopoulos-Leon 1999, 24–35 – at an earlier time (in the 9th/8th, if not even in the 7th century), there still lay (some) tombs: Nafissi 2003, 24 with n. 11.

⁸² Siewert 1994.

⁸³ Nafissi 2003, 48, cf. Yalouris 1996, 70; on Olympia within Elis, but also beyond see Roy 2013.

⁸⁴ The federal aspect has recently been highlighted by Nafissi 2003, based primarily on IvO 3. 7. 11 (Minon 2007, nos. 13. 4. 12); see also Alonso Troncoso 2013,

211 (with further references). – The significantly decentralised aspects also become apparent in Polybius' comments on the local jurisdiction (Plb. 4, 73, 8).

⁸⁵ Gehrke 1985, 366.

⁸⁶ Against the correlation of democratisation and *synoikismos* see Hölkeskamp 1999; 97–103; Roy 2002, 258; cf. the summary in Wolff 2010, 93 with n. 487. In contrast, Bourke (2017, 95–101) associates the *synoikismos* with the establishment of a radical type of democracy.

states to feature an urban centre, and if necessary, this could have been combined with a more pragmatic ›revision‹ of the constitution⁸⁷.

In any case, according to our sources the complex interaction between the centre and the various subunits as well as the *perioikoi* continued without any serious changes. Perhaps the establishment of local phylai as intermediates between the centre and the subunits (demes) helped to restructure the interactions between the different levels, in a way similar to Athens. However, the period of introduction of these phylai remains unclear, and only for the year 368 is their local character testified with any degree of certainty, although this merely marks a terminus ante quem⁸⁸.

What has been said about Elis in general can be assumed in a more condensed form for Olympia and the surroundings of the sanctuary in particular, i.e. in the area of Pisa. This is of considerable importance for our work and its interpretations. Firstly, the centrality of the sanctuary itself needs to be emphasised. As we have seen, it applies to the Elean union itself (disregarding the Panhellenic importance for the time being), but also for the immediate environment. Here the sanctuary functions as a centre. At the local level, there exists a clear complementary relation between Olympia and the surrounding area of Pisa. They belong together and can be understood as a single unit in the sense of ›centre and environment‹. This has been addressed as ›two sides of one and the same coin‹⁸⁹. One might also say that Pisa is ›la zone profane et habituée qui entourage le lieu sacré, c'est à dire le lieu géographique, par opposition à Olympie, qui désignait le sanctuaire‹⁹⁰. In addition, according to current knowledge, before systematic and comprehensive investigations took place, there existed no major settlements, but rather scattered hamlets and villages⁹¹. This accords with the impression the Spartans gained around 400 B.C., who considered the inhabitants χωρίται, or ›peasants‹, and therefore unsuitable to host the Olympic Games⁹². On the other hand, references exist to the Pisatan ὀκτάπολις⁹³. In the following section, we shall discuss whether our current research has produced any new results in this regard.

2 FIELD REPORTS AND PRELIMINARY RESULTS

The work is essentially tripartite: fieldwork, the documentation and processing of the respective finds and findings (in the museum stores, in laboratories, virtual); and, finally, the evaluation according to superordinate questions and perspectives. The project participants have carried out numerous preliminary studies, especially in connection with the large Olympia exhibition at the Gropius-Bau in Berlin (2012/2013), including workshops in Olympia and Berlin. Geoarchaeological investigations using geophysics and terrestrial laser scanning (LIDAR – Light Detection and Ranging) enabled the specific documentation

⁸⁷ In view of what Aristotle (see above n. 78) writes on agrarian democracies, and because of the preceding development, this did certainly not amount to a radical cut.

⁸⁸ The oldest document is NIO 5 A (Minon 2007, no. 16), 1, see also Aristodem. FGrHist 414 Fr. 2 a. b and esp. Paus. 5, 9, 4–6. For the evidence of the local character of the phylai in the year 368 see Bultrighini 1990, 146–162. Because there were ten phylai in a previous period (Paus. 5, 9, 5) and there is a possible parallel to Athens (council of 500), one could – with a conjecture of Paus. 5, 9, 5 – arrive in the year 472 B.C. and the time of the *synoikismos* (Gehrke 1985, 366 f.). Bultrighini 1990 (esp. 172) considers the number of

eight phylai to be feasible even for the 6th century due to the ›Sixteen Women‹ of the Heraia in relation to eight phylai (Paus. 5, 16, 2–8). For the phylai cf. also Gschnitzer 1958, 12 f.; Jones 1987, 142–145; Maddoli 1991, 165 f.; Maddoli – Saladino 1995, 225–227; Nafissi 2003, 49; Ruggeri 2004, 44–53.

⁸⁹ Giangiulio 2009, 76.

⁹⁰ Minon 2007, 90.

⁹¹ See esp. Meyer 1950, 1750; Yalouris 1972, 95 f.; Maddoli et al. 1999, 304 f.; Mandl – Ruggeri 2000, 51; Ruggeri 2004, 190.

⁹² X. HG 3, 2, 31.

⁹³ Meyer 1950, 1737–1739; Roy 2002.

of previously unknown archaeological remains, as was the case in the area of the Bronze Age cemetery at Kioupia in Mageiras in the context of preliminary explorations in cooperation with the Ephorate of Elis in spring 2014. Here, within the planned future survey area, previously unknown chamber tombs were discovered, and tombs that had already been excavated were measured in detail.

2.1 Archaeological Survey

The archaeological programme consisted of fieldwork and the analysis of artefacts. The following presents a preliminary account of the results achieved so far. An essential part of the working programme of the first three years of the project consists of the implementation of an archaeological and geoarchaeological survey taking into account all categories of finds and periods. The detailed geomorphological study of the development of the landscape and the fine-grained chronological reconstruction of the paleoenvironment are of fundamental importance, as they allow the reconstruction of the landscape by identifying and taking into account all anthropogenic interventions and activities. Three archaeological and three geomorphological campaigns took place. The former took place in the autumn months after the end of the maize and grain harvest, the latter were carried out more intensively in spring, as the more humid conditions favoured core drilling.

The selected zones of the survey area exhibit a heterogeneous nature whose variables are, on the one hand, the geological and geomorphological character, the landscape types and the topography. On the other hand, anthropogenic activities have led to changes in the environment. Throughout the study area of the ›Olympia and its Environs‹ Project all variables appear in various forms. Olive trees are grown to varying degrees, often entailing considerable changes in the landscape. Olive cultivation is one of the effective postdepositional processes as it is associated with terracing measures, which often involve the stripping of up to 2 m of topsoil. This can result in the removal, burial or exposure of more ancient traces of anthropogenic activity.

In spite of the aforementioned time frame (about 1200–400 B.C.) forming the focus of our primary epistemological interest, in the first project phase the documentation of the survey results and finds adheres to strict criteria to ensure the greatest comprehensiveness possible. The collected data and finds will thus be available for future research using different questions and angles. For instance, interesting findings have evidently emerged for the Byzantine period.

Of crucial importance is the close integration of archaeological and geoscientific methods forming a geoarchaeological framework. Landscape archaeology and historical geography thus gain new opportunities. Particularly significant is the combination of archaeological findings with multi-proxy data, which are relevant for the paleoenvironment. As the potential or previously known settlements in the core of the survey area are sites of erosion, adequate sedimentary records in this area are lacking. Therefore, geological data were obtained from directly adjacent sedimentary basins, where adequate geological stratigraphies are available as a basis for deciphering the landscape history.

2.1.1 Methods

The intensive archaeological grid survey took place with two groups each consisting of five to six people in annual campaigns of approximately 30 days each. The survey area was divided into a regular grid of 100×100 m squares that were walked by teams in parallel tracks (*fig. 2*)⁹⁴. The larger sites were subdivided into collection fields of 20×20 m.

A two-stage process forms the basis of the documentation. In the field, observations and information were recorded in diaries or on maps (1 : 5000); landscape features, finds and findings were documented in photographs. For orientation the surveyors had handheld GPS devices, topographical maps and satellite images. In general, ground visibility varied considerably, and this was taken into account in the evaluation (visibility factor).

During the systematic prospection (grid with tracks), the immobile findings were sketched and the diagnostic find material (as expected, mainly pottery fragments and tiles) was collected from the surface and brought to the depot for evaluation. All finds with a chronological, typological and / or functional significance are considered diagnostic.

This survey project distinguishes between archaeological ›sites‹ and ›off-sites‹. ›Sites‹ are defined by artefact clusters of variable size. Minor scatterings of material or single finds in an otherwise empty area are termed ›sites‹, and the same applies to the clustering of finds in an environment with considerable ›background noise‹. The type of artefacts – e.g. ceramics or stone tools – is not a defining criterion.

The data obtained in the field were then digitally documented. All these parameters have been incorporated into the database model designed by C. Hickel (TU Darmstadt) (*fig. 3*). In the depot, A. Sieverling was responsible for the sorting of the finds according to collection squares (collections) as well as for the photographic documentation. Subsequently, F. Lang and A. Sieverling carried out a first chronological assessment of the collections, which forms the basis for the present temporary mapping of the sites according to periods.

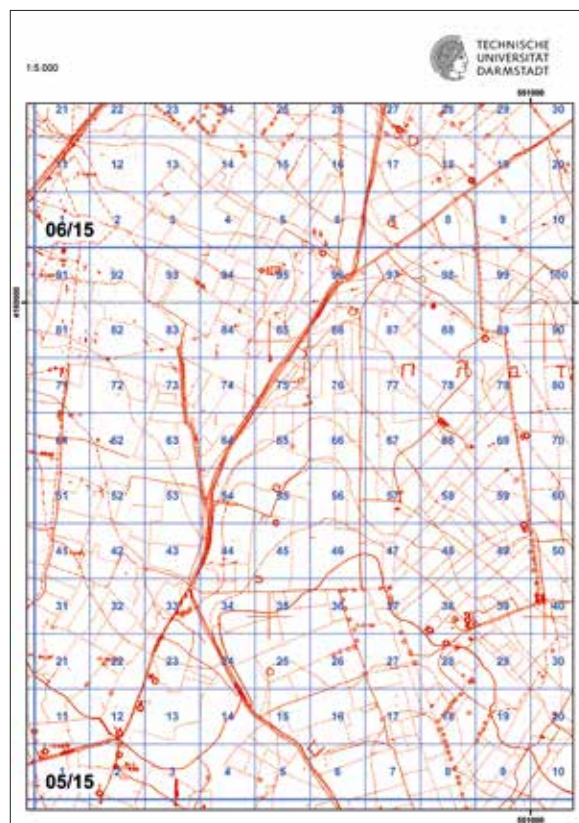


Fig. 2 Survey grid system

⁹⁴ Staff: Archaeological team of German and Greek students, 2015: L. B. Balandat, A. Galeano Araque, C. Herbig, V. V. Hoft, M. Kalisch, F. Kotzur, G. Koutsimanis, M. Papoutsakis, M. F. Rönnberg, K. Weber, R. Winter, A. W. Xilakis; 2016: J. Göbel, M. Gras, M. Kalisch, E. Karampourniotis, E. Karathanou, E. Kirkilesi, S. Manicke, M. Marsh-Hunn, R. P. Metz, P. Patouni, M. Riepe, D. L. Rogall, Ch. Sakareli,

A. Sieverling, E. Theodorou, R. Winter, A. W. Xilakis; 2017: J. Göbel, M. Gras, M. Kalisch, E. Kirkilesi, L. Korbach, M. Marsh-Hunn, P. Menti, R. Metz, M. Riepe, D. Syrmalis, R. Winter, K. Wörzler – Geoarchaeology: L. Obrocki, B. Röbbke, I. Korinski, N. Becker – Ephorate: D. Klephtonikolos, S. Lampropoulos, Z. Leventouri, Ch. Liangouras, K. Loumiouti.

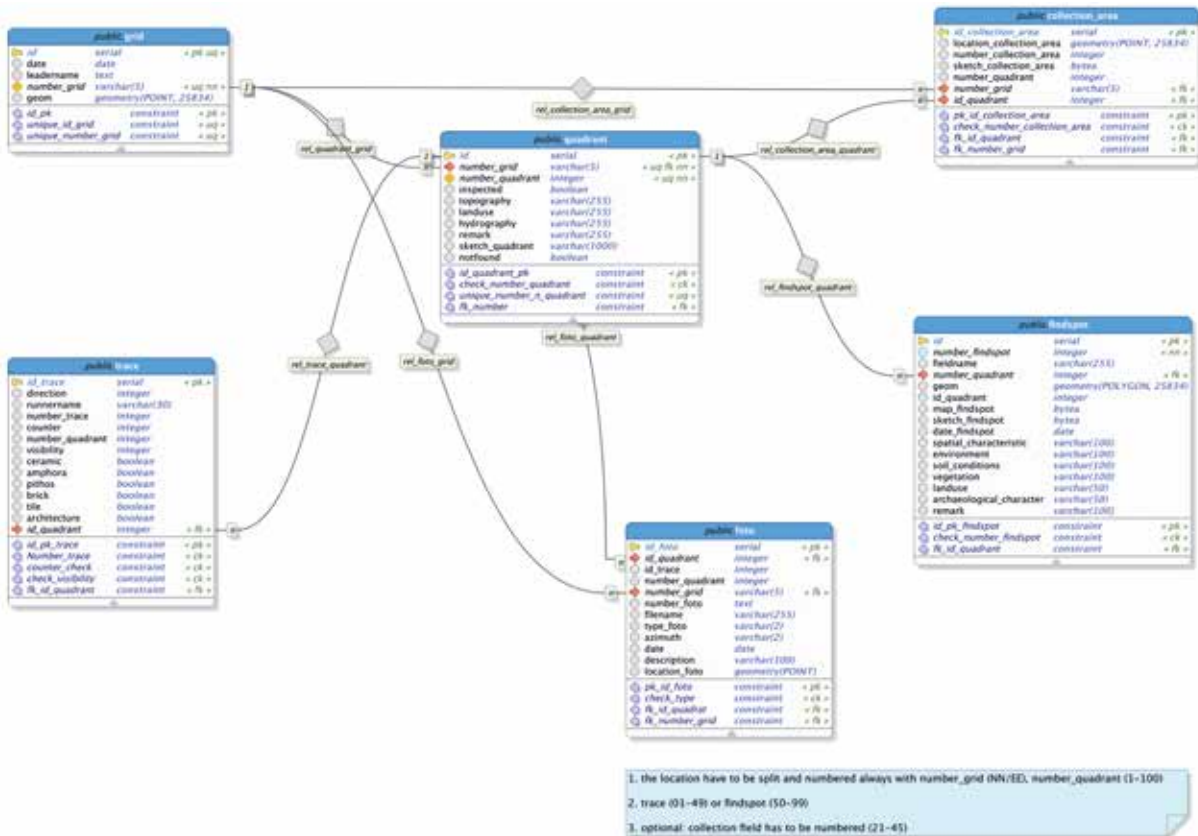


Fig. 3 Survey Data Model

The finds from the numerous excavations of the region such as those from the sanctuary of Olympia served as chronological reference material for the dating of the ceramic finds. The first review of the material allows for a preliminary chronological overview of the sites.

2.1.2 Archaeological results

The following sections present the results of a first evaluation of the archaeological survey data. The official permit covered a maximum of 30 square kilometres of which 13 were intensively surveyed (fig. 4). The landscape as well as anthropogenic interventions influenced the visibility and accessibility of the prospection areas as well as the conditions for the survival and visibility of archaeological finds. Areas under cultivation, severe erosion, settlement activity or fenced areas, where access was sometimes denied, at times limited survey activity.

Concerning the preservation of individual artefact types, it should be noted that hardly any lithic artifacts and very few remains of pre-modern architecture were found in the entire survey area⁹⁵. Nevertheless, the many terracotta tiles are indirect witnesses of the ancient built environment. Pottery and tiles clearly dominate the range of discovered items. In a few cases the quality of the surface pottery was remarkably good.

⁹⁵ No expert of lithics was part of our team.



Fig. 4 Surveyed areas 2015–2017

2.1.2.1 ZONE 1: KLADEOS VALLEY – ARCHAIA PISA (FIG. 5)

Zone 1 includes firstly the Kladeos River valley running north from Olympia, and secondly the areas east of the sanctuary of Zeus up to the village of Archaia Pisa (formerly Miraka) and its surroundings. An irregular rolling country characterises the landscape, where the streams of the Kladeos and Pilalistra flow through the western part of the survey area. In its lower reaches, the Kladeos is confined east and west by ridges before it joins the Alpheios River west of the sanctuary. The sanctuary of Olympia was set up near the confluence of these two rivers, south of Kronos Hill and not centrally in the Kladeos Valley. In the north-east, the terrain framed by mountain ranges widens around the village of Kladeos. Here and in the Kladeos Valley, the ridges are succeeded by flat areas that are suitable for cultivation and where olives, grapes and vegetables are grown today.

The Kladeos forms a striking natural boundary that separates the area around Olympia into a western and an eastern part. The Kladeos River has over time cut its course in places down to 10 m into the sandy marl. The geoarchaeological investigations were able to prove that its course changed over the centuries (see below). Thus, the crossing of the Kladeos was apparently not always a trivial undertaking. The river also had, according to eyewitness reports, significance as source of drinking water well into the 20th century.

In contrast to zones 2 and 3, the natural deformation is particularly strong in Zone 1 (*fig. 6*). The Kladeos Valley is heavily modified by development; the tourist infrastructure has made a lasting contribution to the transformation of this area over the decades, not least by extensive road construction measures. The agricultural use as well as the high degree of erosion of the sandy marls also influence the landscape dynamics.

The survey area in the Kladeos Valley stretches from the hills north of the villages of Platanos and Mageiras to the sanctuary in the south (*fig. 5. 7*). Expanding villages, farms of various sizes, fenced farmland as well as greenhouses hampered walking in this zone.

East of Olympia, about 30 hectares are occupied by the IOC's International Olympic Academy site, which is fenced and therefore could not be prospected (*fig. 7 no. 13*). Small-scale fertile settlement areas characterise the ambit of the modern village of Archaia Pisa, where today, apart from olives and grapes, fruit and vegetables are grown (*figs. 5. 7*). The modern village is located on a plateau, which slopes steeply on its western side. On the wide and flat valley floor below, there are two winter streams.

In Zone 1, the northern area within the triangle of the villages of Koskinas, Mageiras and Platanos, as well as the area around Archaia Pisa proved particularly rich in finds (*fig. 27*). To

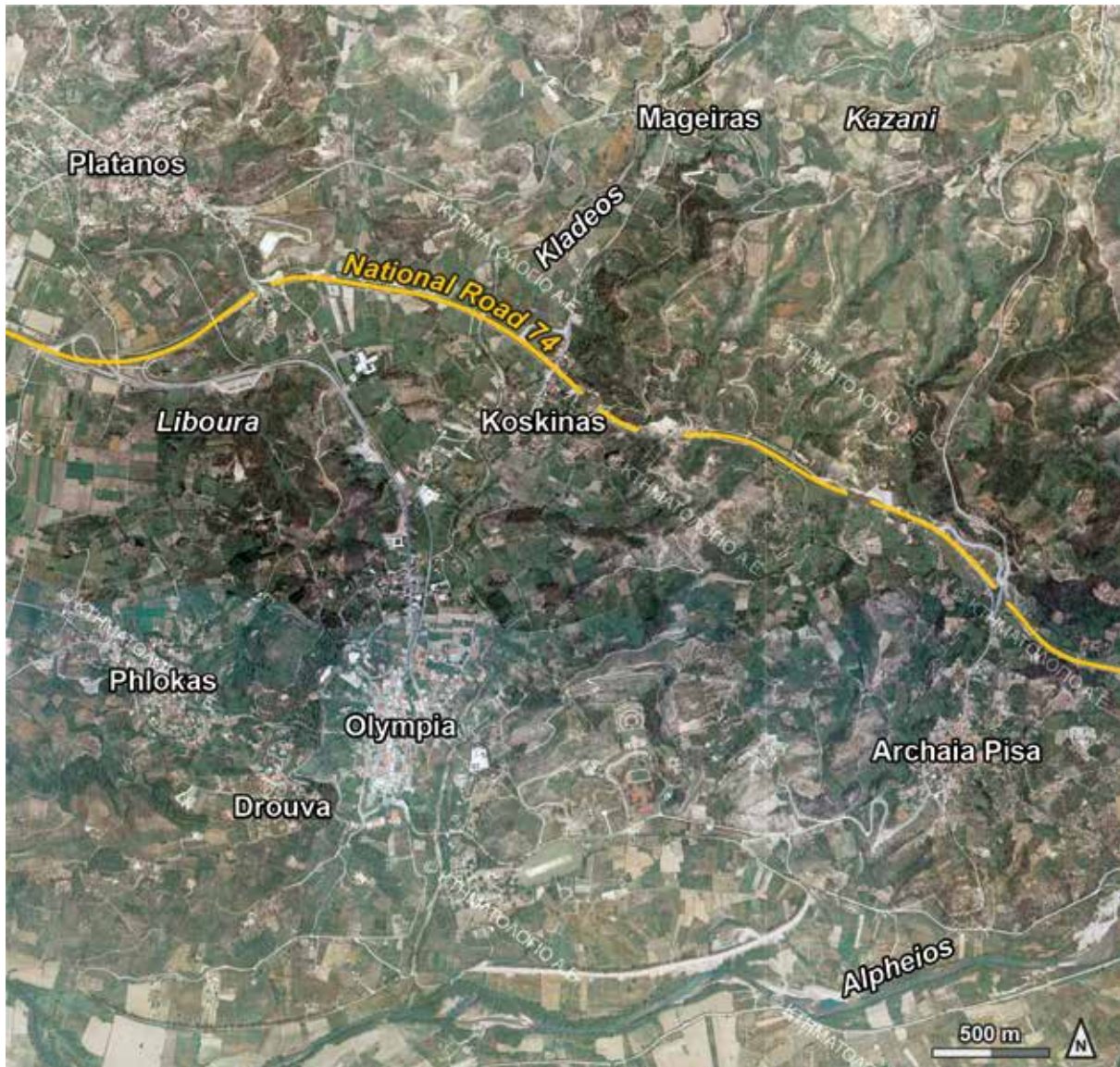
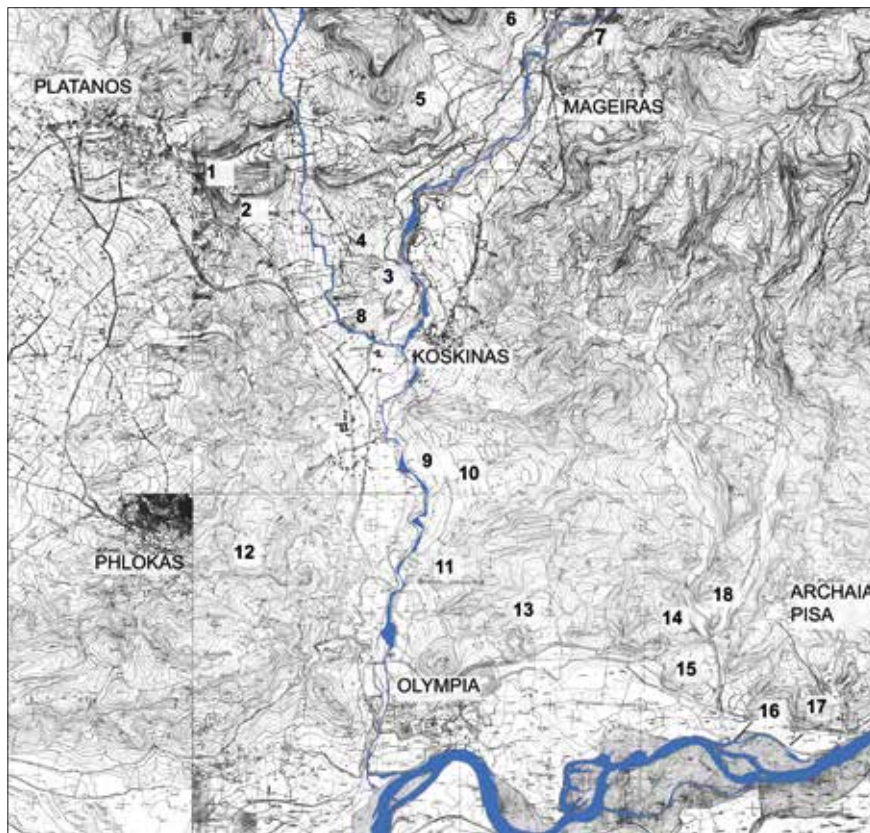


Fig. 5 Areas located in Zone 1, Kladeos Valley and Archaia Pisa

the southeast of the village of Platanos rises a prominent hill where a quarter of the summit was levelled for the construction of a helicopter landing place in 2004 (*figs. 6 no. 1; 7 no. 1*). The finds on the hill and on its slopes date back to various periods (continuous from the Bronze Age to the Classical period; *fig. 8*), and among them was the fragment of a firedog (*fig. 9*). At the southern foot of this hill in a field called Renia, where a tunnel of the National Road 74 is today located, Mycenaean chamber tombs came to light (*figs. 6 no. 2; 7 no. 2*).

Northwest of the village of Koskinas and between the villages of Mageiras and Kladeos the evidence for sites increases (*figs. 6 no. 3; 7 no. 3; 27*). In Koskinas, two nearby sites are particularly interesting. At a place on the eastern spurs of a hill near the western banks of the Kladeos a large quantity of primarily Classical-Hellenistic pottery was found. The assemblage of finds suggests that this was once the place of an ancient settlement. Approximately 250 m northwest of this site, beyond a pass, lies another hill. At the summit of this hill and on its western slopes primarily Roman and post-ancient material was collected, possibly deriving from a village that was destroyed, according to information provided by a local



△

Fig. 6 Zone 1, Olympia to Koskinas – view from east to west

Fig. 7 Zone 1, location of find spots

farmer, in the late 18th century and of which no remains are visible (figs. 6 no. 4; 7 no. 4). If this is true, the destruction could be linked to the suppression of the 1770 uprising by Albanian troops⁹⁶. Two models are conceivable to explain the relationship of these neighbouring sites to each other: on the one hand, the existence of a large, more or less continuous settlement; and on the other, the shift of the settlement focus from the east to the northwest in Roman times. North of these sites, the finding of a *tegula mammata* indicates the existence of a Roman bath, where these tiles served the circulation of hot air (figs. 7 no. 5; 10).

⁹⁶ On the uprising of the Peloponnesian Greeks in the Russo-Turkish war from 1768 to 1774 during the Russian naval operation under the Orlov brothers see in particular Παπαδόπουλος 1975, 58–85; for the suppression and the role of the Albanian troops in the northwest of the Peloponnese 70–73. On the impor-

tance of Albanians as representatives of Ottoman rule after 1800 see also Gell 1817, 34; Leake 1830a, 3. 46; Cockerell 1903, 71. Sibthorpe 1820, 80 f. offers a vivid description on the occasion of a visit of the Aga of Lalas on March 2nd/3rd 1795.



Fig. 8 Collection of prehistoric sherds from site no. 1 near Platanos

Among the sites in the wider area of Mageiras lies Kioupia Hill, where in 2007, after the great fire, an exceptionally large cemetery of Mycenaean chamber tombs with valuable burial gifts was discovered and subsequently excavated (*fig. 7 no. 6*)⁹⁷. In its closer and wider surroundings, the survey team documented Archaic as well as Classical pithoi or tiles that may belong to tombs (*fig. 11*).

Opposite Kioupia on the eastern side of the Kladeos to the northeast of Mageiras lies a multi-period site (*fig. 7 no. 7*), where huge blocks of a brick-mortar wall lie scattered in the terrain. They derive from a former monastery, which is said to have been demolished in the 18th century, according to the information provided by an employee of the Ephorate.



Fig. 9 Fire dog from site no. 1 near Platanos

⁹⁷ Mageiras-Kioupia: Vikatou 2012; Βικάτου 2014a; Βικάτου 2014b; Βικάτου 2014c; Βικάτου 2016.



Fig. 11 Mageiras-Kioupia,
Archaic pithos grave



Fig. 10 Tegula mammata

In the 19th century, a church was built here for Agios Nikolaos, which is currently being renovated.

In the 19th century, some villages were established in this area, partly due to population relocation. The residents of Kazani left their village in the mountains and moved to Koskinas (fig. 5). In the villages of Koskinas and Mageiras, a church was built after 1860 for which ancient spoils of shelly limestone, probably from ancient Olympia, were used (fig. 12). At Koskinas, west of the Kladeos, the remains of a watermill still exist today (figs. 6 no. 8; 7 no. 8; 13). According to the information provided by the owners, it dates back to the 19th century. A short distance away, the Pilalitra River flows into

the Kladeos River. Consulting old maps shows that in the year 1882 the Pilalitra joined the Kladeos approximately 600 m further south (as the crow flies), where there was another mill. This provides evidence for river regulation, which has led to a considerable change in the water infrastructure of the area.

A hitherto unknown and possibly looted Mycenaean chamber tomb deserves to be mentioned among the sites discovered by the survey teams between Koskinas and Olympia. It was cut into a low hill not far from the Kladeos River (figs. 6 no. 9; 7 no. 9; 14. 16). As in the case of Kioupia there is evidence of Early Iron Age and Archaic tombs nearby, and here the fragment of a painted thin-walled vessel of the Archaic period was found (fig. 15). In terms of location, this example illustrates that not only prominent hills, such as Kioupia, were selected as sites for Mycenaean chamber tombs (fig. 16). Not far to the east of this cemetery, a potential Byzantine farmstead once stood on a low hill, which offered a good view of the Kladeos Valley (figs. 6 no. 10; 7 no. 10; 16). A few Roman finds were also made. To the south, a dirt road leads east to the area of the village of Archaia Pisa.

Fig. 12 Koskinas, church with ancient spolia from Olympia (?)



Fig. 13 Koskinas, aqueduct of 19th century



Southern Kladeos area: The modern town of Olympia developed only as the importance of the sanctuary for tourism grew (*fig. 5*). Hardly any sites have been registered in its immediate surroundings as the deformation caused by the modern village has almost completely sealed the surfaces (*fig. 5*). On the hill northeast of the New Museum, ceramics and tiles testify to Middle Bronze Age, Mycenaean, Hellenistic and Roman activities (*fig. 7 no. 11*). According to an employee of the Ephorate, Bronze Age walls were uncovered on the north side.

In comparison with the other survey zones the Kladeos area produced the largest quantity of Roman tiles which indirectly refer to buildings or tombs (*fig. 18*).



Fig. 14 Kladeos Valley, site no. 9: stomion of Mycenaean tomb



Fig. 15 Kladeos Valley, site no. 9: fragments of Laconian type vessel



Fig. 16 Kladeos Valley, sites nos. 9–10: view to Mycenaean tomb and Byzantine farmstead

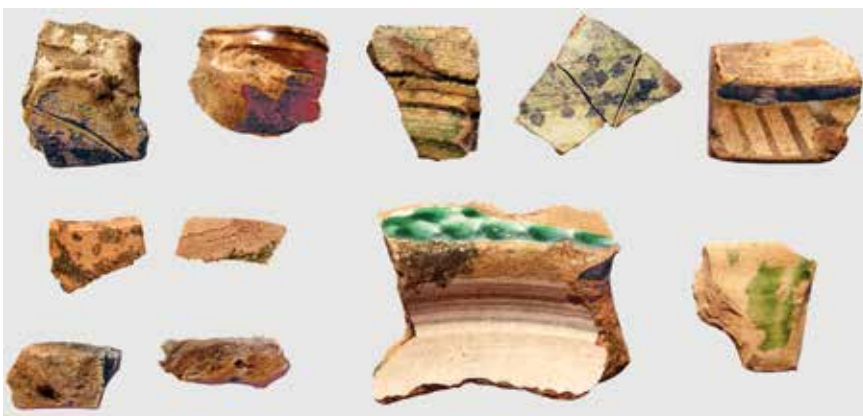


Fig. 17 Drouva – Flokas, collection of post-antique pottery fragments

Drouva – Flokas

West of the Kladeos, the number of sites is significantly lower than in the rest of the study area (*fig. 27*). Around the villages Flokas and Drouva, where few significant finds could be made due to recent construction activities and numerous fenced plots, hardly any sites of ancient times and only a few of post-antiquity have been observed (*figs. 5. 7. 17*). There is a striking number of stone-lined wells in this area.

Drouva rises above the western Kladeos Valley, from where one enjoys a good view of the Kladeos Valley and the sanctuary of Olympia⁹⁸. Flokas, however, lies on the western slope of this ridge offering a view across the Alpheios River plain to the sea⁹⁹. The summit of the hill above Flokas, with the Prophitis Ilias church, affords a view of both the Kladeos Valley and the sea (*figs. 6 no. 12; 7 no. 12*). In the first half of the 20th century, a path still led from Flokas passing Drouva to the Alpheios riverside, whence a ferry provided passage to the other side.

To the west of Drouva, a ridge runs parallel to the Alpheios River and terminates at its western end at a point where the course of the Alpheios changes direction to the north and where a dam was built in the 1960s (*fig. 19*). In this plot called Αγκόν(ι)α lies a convenient pass from the north towards the Alpheios (*fig. 19 no. 19*). This could be interesting with respect to the localisation of the Sacred Road.

Archaia Pisa (Miraka)

Significant construction activity (buildings and roads) characterises the area of Archaia Pisa¹⁰⁰ (*fig. 5*) east of Olympia, and increased erosion with significant shifts is partially associated with this. On the slope directly west below Archaia Pisa, near a fountain, remains of Bronze Age (Mycenaean?) tombs (including bones) and Hellenistic, but mainly Roman and Byzantine era fragments have been uncovered. The ruins of a Roman aqueduct bridge are preserved north of the road to Archaia Pisa (*figs. 7 no. 14; 20*).

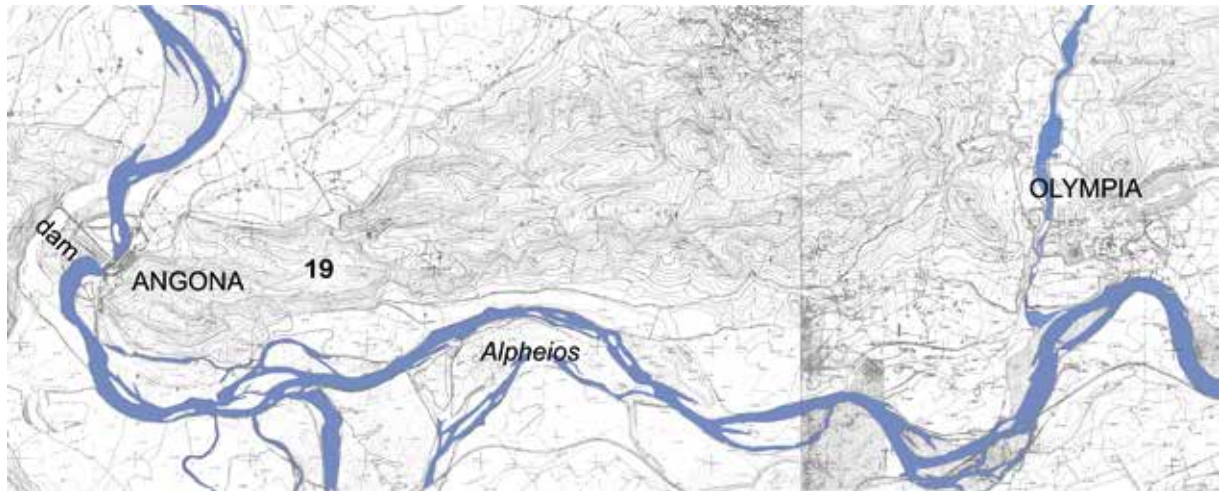


Fig. 18 Kladeos Valley, fragment of Roman brick

⁹⁸ It was still a »winter station of shepherds from the high mountains« in the 19th century (Ross 1848, 191; translated from German text).

⁹⁹ The village of Flokas is already mentioned by travelers in the early 19th century and is apparently even older.

¹⁰⁰ For prehistoric finds in the Miraka area cf. also Παπαχατζής 1979, 384 f. and generally see esp. Παπακωνσταντίνου 1992 no. 37 (Classical-Hellenistic-Roman cemetery) and nos. 38–47 (LH III A–B or Mycenaean, Classical to Late Antiquity).



△

Fig. 19 The area of Angona



Fig. 20 Archaia Pisa, part of Roman aqueduct



Fig. 21 Aerial photograph of Frangonisi



Fig. 22 Roman tomb
at Frangonisi



Fig. 23 Brick with
Homeric verses



Fig. 24 Pre-Roman cist
grave at Frangonisi



Fig. 25 Frangonisi, part of Roman (?) aqueduct

South of the road and about 1 km east of Olympia (*figs. 5. 7 no. 15*) lies the so-called hill of Pisa (nowadays known as Oinomaos Hill). Its summit was not accessible for the survey team due to the dense vegetation. W. Dörpfeld had previously carried out excavations here in 1908. On the upper slope of this prominent hill, a large quantity of mainly (Middle) Bronze Age but also Hellenistic, possibly also Roman remains were found in the dense shrubs within a relatively small area. In the thicket nearby a ditch probably represents remains of Dörpfeld's excavation at the site, where he discovered remains of walls, children's graves, as well as prehistoric and Classical Greek pottery¹⁰¹. In Dörpfeld's opinion, this was the site of a prehistoric settlement. For later periods, he merely assumed the existence of a »building or altar«. Due to the dense vegetation, no further details are currently recognisable. Bronze Age, Archaic-Classical and Hellenistic-Roman sites have been discovered in the wider area.

The Roman necropolis near Frangonisi, south of Archaia Pisa, yielded remarkable individual finds (*figs. 7 no. 16; 21*)¹⁰². The Roman graves in some cases consist of elaborate tombs set in bricks (*fig. 22*). Some tombs feature benches and niches, and one tomb even contains remnants of a mural painting. In this cemetery, cist and tile graves of older periods had also been excavated (*fig. 24*), and a team of architects has recently conducted an architectural survey of this cemetery. During these investigations, a sensational find came to light. Verses from the Odyssey were engraved on a Roman brick, making it their oldest record (*fig. 23*)¹⁰³.

Following the road south of this archaeological site towards the east, one arrives on the east side of a hill (*fig. 7 no. 17*), at the foot of which architectural remains and the line of an open Roman (?) aqueduct are visible (*fig. 25*). Only a more detailed investigation will allow for a final assessment of the function of this system.

Post-ancient periods are abundantly present in the area (*fig. 27*). Many sites are located on the lower slopes of hills or in the valley near the winter streams; these however do not constitute material relocated by natural processes. In the small settlement areas to the west, there are numerous indications of Byzantine and later settlement.

The remains of a large pottery kiln provide evidence of local ceramic production (*figs. 7 no. 18; 26*). So far, no comparative examples are known that enable a chronological classification. Its construction suggests a post-ancient date. The structure appears unusual insofar as parts of the kiln are covered with mortar, which could indicate a secondary – and as yet unknown – use.

¹⁰¹ Pisa: Dörpfeld 1908; Dörpfeld 1935, 273–275, Beilage 23. 24 plate 23.

¹⁰² Γιαλούρις 1966, 171; Θέμελης 1967, 212.

¹⁰³ We gratefully acknowledge the financial support of the Regula Pestalozzi Foundation in carrying

out this work. – <https://www.archaeology.org/issues/323-1901/features/7196-top-10-discoveries-of-2018>; for the publication of the brick, see Summa et al. 2021.



Fig. 26 Archaia Pisa, site no. 18: part of post-antique kiln

The diachronic mapping of the provisionally dated sites provides a first impression of the anthropogenic use of the Kladeos Valley and the area around Archaia Pisa (*fig. 27*). Sites are concentrated in two zones: in the northern Kladeos Valley and around Archaia Pisa.

In Zone 1, the representation of individual periods varies between the Kladeos Valley and the area around Archaia Pisa. Sites with Bronze Age pottery were found mainly in the northern part of the Kladeos Valley and become increasingly fewer in the direction of Olympia. However, in the wider area of the village of Archaia Pisa Bronze Age sites are also known.

The archaeological surface finds belonging to the Early Iron Age and Archaic period do not reflect the importance of the sanctuary in these phases. One of the reasons lies in the change in cultural practices in relation to the Mycenaean period: for example, the change in burial customs involved the change from elaborate chamber tombs to small and sometimes isolated cist graves, each with a different degree of archaeological visibility and survival rate. The sites lie mainly in the northern Kladeos Valley. It is interesting that the Early Iron Age and Archaic finds most often appear in places that were already in use in the Bronze Age.

The number of sites increases in the Classical-Hellenistic period. They are located in the north of the Kladeos Valley and in the surroundings of Archaia Pisa. The greatest density of Roman sites lies in Zone 1 when compared to Zones 2 and 3. In the Byzantine era, the number of sites continues to increase. They occur more frequently in the area of Archaia Pisa than in the Kladeos Valley. A corresponding picture emerges for the 19th–20th century. The few Ottoman sites are located only in the west and north of the Kladeos Valley. Overall, the current state of evaluation illustrates different preferences in the settlement areas. The

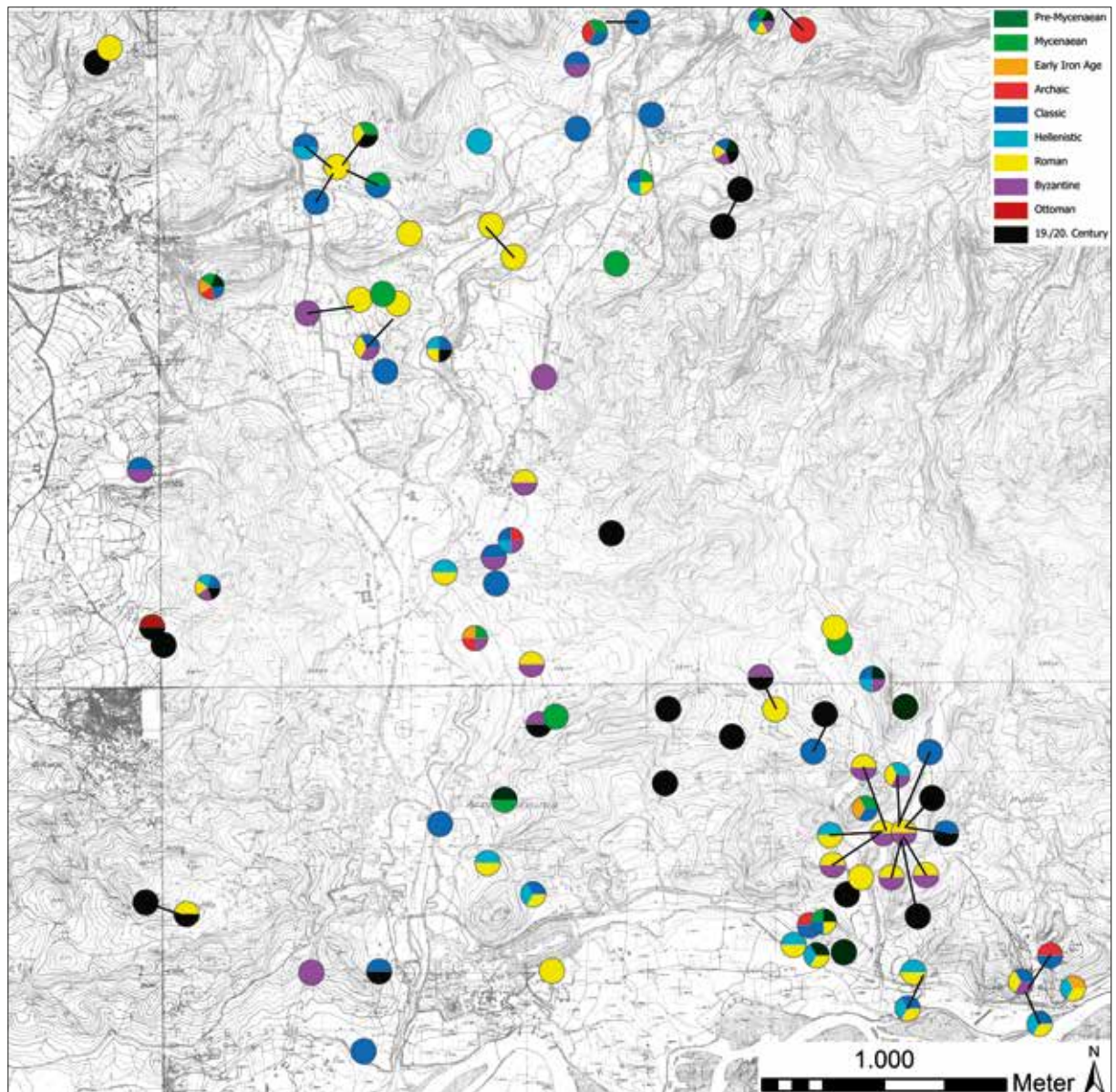


Fig. 27 Zone 1 – distribution of preliminarily dated find spots

Kladeos Valley is dominated by prehistoric and ancient sites, while post-ancient sites are more prominent in the area of Archaia Pisa. The sites within the Kladeos area are completely oriented towards the valley. Platanos occupies a mediating position between the closed Kladeos Valley and the wide western Alpheios River Plain; Flokas, however, clearly looks towards the west.

As the Kladeos area forms a rather closed settlement area, routes within and through the area to the sanctuary are particularly important. The Kladeos River – as already stated above – forms a natural obstacle and can pose more or less of a challenge depending on the season. Beyond the Mountain Road and the Sacred Road (see above 1.2 and below), which are mentioned in ancient sources, the natural topography and the distribution of the sites offer indications of possible roads. In the northern Kladeos Valley, the sites are located in places that can be classified as passes in the broadest sense. Near the hill south of Platanos (*figs. 5. 7 no. 1*), the terrain offers a good link between the Kladeos Valley and the western

Alpheios plain, precisely where one might suspect the Mountain Road. Farther to the south-east, sites (*figs. 7 nos. 3. 4; 27*) of different periods concentrate on and between two hills, which form a pass of sorts. It may not be a coincidence that the newly built National Road No. 74 (*cf. fig. 5*) follows this route. In the northeast near the modern villages of Mageiras and Kladeos (formerly Stravrokephalo) ancient as well as post-ancient sites cluster on both sides of the Kladeos. Old maps and travel reports¹⁰⁴ indicate that roads led through both villages to the east in the direction of Lalas.

According to the current state of the present analysis, it should be considered whether the accumulation of the sites (*fig. 7 nos. 3. 4*) indicates the possible location of a crossing of the Kladeos. In the early 20th century, the Kladeos River could be passed on a bridge near Mageiras. Until then – judging by the maps – there was only one bridge leading to the excavations of the sanctuary in the south. The construction of the bridge near Mageiras at the end of the 19th or early 20th century suggests an increase in the importance of the route from Platanos in the west to the eastern part in the direction of Lalas.

2.1.2.2 ZONE 2: SALMONI (*FIGS. 1. 28. 29*)

The second prospection area is located in the west, just north of the lower reaches of the Alpheios River, which connects this area with Olympia, near the modern village of Salmoni (formerly Koukoura). Here is a solid rock base with several ridges and a geological bottleneck on the lower reaches of the Alpheios. Place names in ancient written sources as well as the question of the navigability of the Alpheios River lead to this area (see below). Particularly prominent is the hill immediately south of Salmoni with the church of *Prophitis Ilias* at its summit. South of this hill, the more than 1 km long plateau of *Palaiopyrgos* extends in an east-west direction. At the foot of the plateau runs the railway line *Pyrgos-Olympia*, which was completed at the beginning of the last century. With the exception of the village of Salmoni, the building density in this hilly landscape is low. Anthropogenic interventions in the landscape are mainly due to intensive olive cultivation.

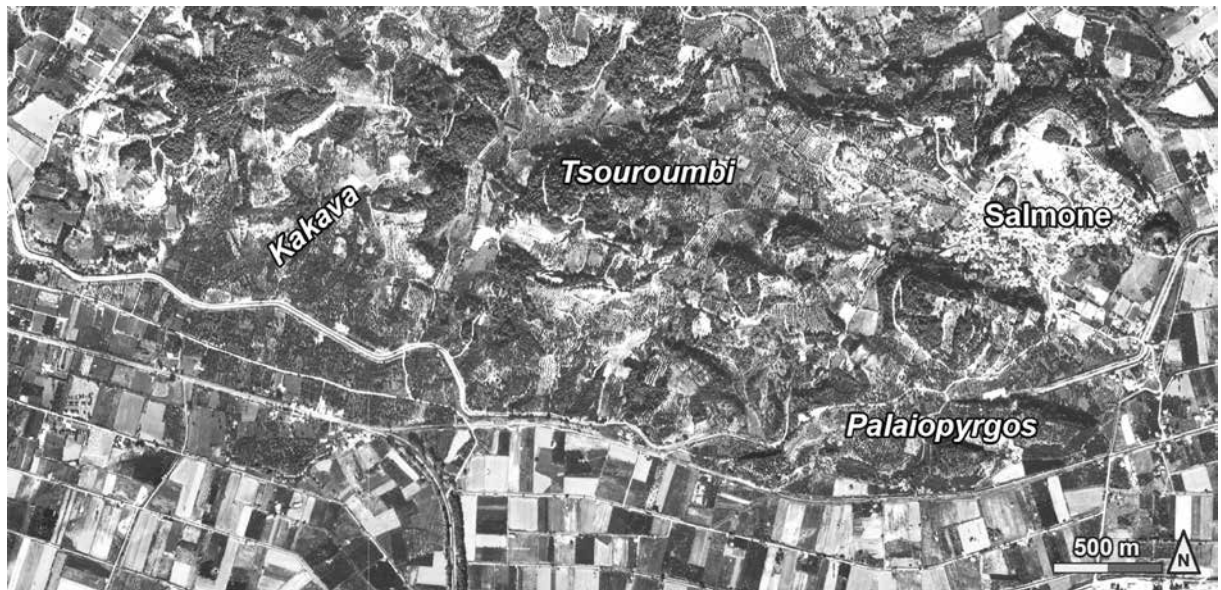
The sites in Zone 2 are located to the west and south of the village of Salmoni, especially in the areas of *Palaiopyrgos*, *Tsouroumbi* and *Kakava* (*fig. 28*). On the prominent hill with the church of *Prophitis Ilias* (*fig. 29 no. 1*) W. Dörpfeld assumed a temple of the Classical period¹⁰⁵. Even today, surface finds include, in addition to ancient pottery, ancient blocks of local shelly limestone as well as Corinthian and Laconian roof tiles (*figs. 30. 31*). However, the anomalies of the geophysical surveys (see above) did not reveal any clear indication of a building, and only the stone blocks together with the Corinthian tiles support Dörpfeld's hypothesis, who at the time may have had access to more remains than exist today.

In the wider area west of Salmoni, the finds are associated with graves. On the one hand, there were indications of ancient tombs on the southwestern spur of the hill with the church of *Prophitis Ilias* (*fig. 29 no. 2*). On the other hand, a previously unknown Byzantine necropolis was found to the northwest of the hill (*fig. 29 no. 3*). The tiles scattered in this area can be identified as cover of graves due to nearby bone finds.

¹⁰⁴ Esp. Sibthorpe 1820, 80; Leake 1830a, 25 (path on eastern side); Fiedler 1840, 377 f.; apparently because of this connection, the plain around Olympia was called »Antilalla« in the early 19th century (see

e.g. Gell 1817, 35 f.; Dodwell 1819, 333, who otherwise speaks of the »neighboring town of Lalla«, 335); Stanhope 1824, 7 f.

¹⁰⁵ Dörpfeld 1913, 115.



△

Fig. 28 Areas located in Zone 2 near Salmoni

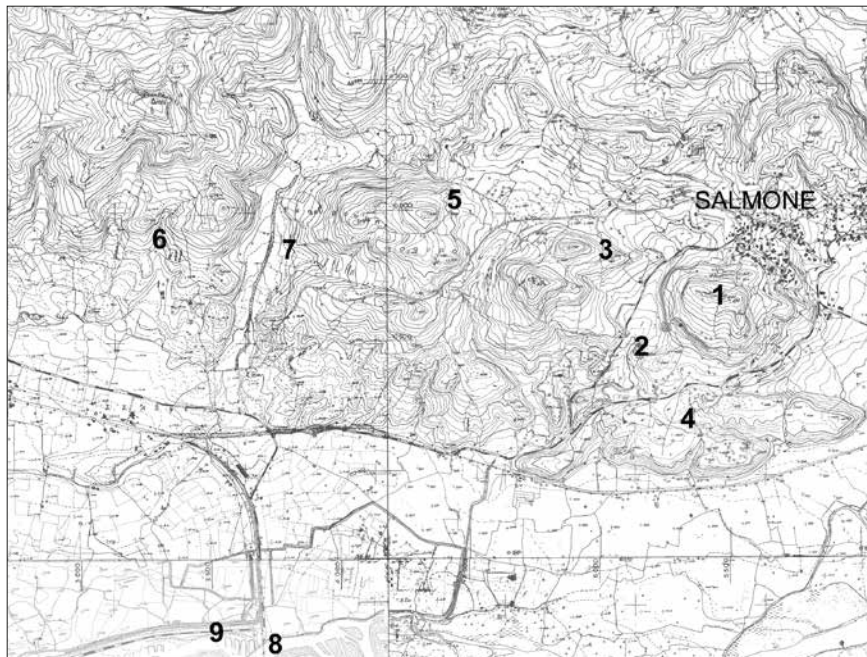


Fig. 29 Zone 2: location of find spots



Fig. 30 Prophetis Ilias, ancient dressed stone

Palaiopyrgos

The ridge of Palaiopyrgos to the south of the Prophitis Ilias hill was particularly rich in finds (*figs. 28. 29 no. 4*). The plateau of the hill is ideal for settlement, with the partially rugged slopes offering a degree of natural protection. The total area of the plateau is measured at about 17 hectares. Despite intensive clandestine excavations, many finds, especially tiles, were still visible on the surface. Their chronological range covers the Middle Bronze Age to the Byzantine era, with a preponderance on prehistoric, Classical, Hellenistic and Byzantine times (*figs. 32–34*)¹⁰⁶. A few worked blocks of local shelly limestone are probably ancient because of their toolmarks and size. A landowner had removed such limestone blocks, which in his opinion came from houses, from the soil of his plot, as they prevented him from planting his olive trees (*fig. 35*). Therefore, part of this olive grove was selected for geophysical prospection (see below).

On the southwest side of the hill, several looted Hellenistic pithoi were found, and one of them lay still in situ (*fig. 36*). The modern-day road, which runs between the Prophitis Ilias and Palaiopyrgos hills, crosses a bridge from the 19th or early 20th century.

Tsouroumbi

West of the village of Salmoni, at the foot of Tsouroumbi Hill, several sherds of Middle Helladic pottery were found, most likely dating to the transitional period to Early Mycenaean, i.e. the so-called Shaft Grave Period (*figs. 28. 29 no. 5; 38. 39*). One bichrome fragment could represent an import, but further analysis is needed to test this hypothesis (*fig. 38*). The range of vessel shapes suggests that these pottery fragments derive from a settlement context. This settlement can probably be located on the plateau of the hill, which could not be surveyed due to dense vegetation. This site lies in a remote location yet offers a panoramic view inland to the east as well as to the west and the Ionian Sea.

Kakava

In the area called Kakava (*figs. 27. 29 no. 6*) skeletons together with tiles attest the existence of graves. One of the skeletons lay in the middle of a dirt road and had been halved lengthwise when the path was made. There was a bronze ring attached to the finger of one hand (*fig. 37*). In the course of a rescue excavation, the Ephorate unearthed another largely intact tile grave with a skeleton immediately adjacent to the first one. The tombs can be dated to Byzantine times. A looted ancient cist grave (*fig. 40*) is located nearby, and further stone slabs of cist tombs in the vicinity confirm the funerary use of this area also in ancient times.

The construction of a track with spoils as an access road to an olive grove appears quite unusual, and the same is true for the fact that the marble spoils, some with ornamental decoration, come from Pyrgos, according to the landowner (*figs. 29 no. 7; 41*). He did not state the exact origin of the spoils, which should be of post-ancient date according to the ornamentation.

In Zone 2 around Salmoni one encounters extensive infrastructural works. By comparing maps from various periods one can trace the change or continuity of traffic routes. Roads and riding trails were used for a long time. An innovation was the railway line from Pyrgos to Kyparissia or Olympia in the early 1900s, built for the increased exports

¹⁰⁶ Older discoveries offer additional information on the chronological range of ancient activities. A (Late) Protogeometric pithos burial was discovered during road works in 1960, published by Eder 2001a, 43 f.



Fig. 31 Prophitis Ilias,
roof tiles of Corinthian
type



Fig. 32 Palaiopyrgos,
prehistoric and Archaic
sherds



Fig. 33 Palaiopyrgos,
Classical-Hellenistic
sherds



Fig. 34 Palaiopyrgos, post-
antique tiles

Fig. 35 Palaiopyrgos,
ancient dressed stones



Fig. 37 Kakava, bronze
ring from skeleton

Fig. 36 Palaiopyrgos,
Hellenistic burial pithos





Fig. 38 Tsouroumbi,
Middle / Late Helladic
pottery



Fig. 39 Tsouroumbi,
Middle / Late Helladic
pottery

of local raisins. In 1909, the railway bridge over the Alpheios River was completed (*figs.* 29 no. 8; 42).

During the Junta period (1967–1974), comprehensive water infrastructure measures were implemented. They involved the regulation of the Alpheios River, the construction of a dam near the area called Angona (*fig.* 19), the drainage of the Alpheios plain between Flokas and Salmoni by means of an extensive system of canals, thus freeing up areas for agricultural use, which at the same time entailed massive encroachments on the landscape.



Fig. 40 Kakava, ancient cist grave



Fig. 41 Kakava, road paved with spolia



Fig. 42 Railway bridge across the Alpheios between Salmone and Epitalio

During site inspection in August 2015, a section of slope masonry (*fig. 43*) of the embankment on the north side of the railway bridge across the Alpheios River attracted our attention, as it was apparently built of polygonal boulders without mortar – unlike other walls that are connected to the bridge or dam. Geophysical measurements by means of Electric Resistivity Tomography (ERT) revealed that the wall extends westwards over a length of at least 1.3 km, mostly covered by fluvial deposits (*cf. below 2.2.2.4*). Further measurements were carried out to the north of the outcropping wall at a distance of about 70 m. They in-



Fig. 43 Polygonal wall near northern end of railway bridge

dicating that there is an identical, parallel wall there. The dating of the wall is still pending. More information will be gained from ^{14}C dating of organic samples retrieved from sediment cores drilled between the two parallel walls, and, if possible, by searching the archives regarding the construction of the railway bridge. The continuation of the wall to the east of the railway bridge was visible after a fire in 2017. Here a gabion was placed in front of the polygonal wall, i.e. a wire basket filled with stones.

Sediment cores were drilled to the immediate south and north of the wall complex in order to determine the character of the sediment deposition concerning the course of the Alpheios River. The cores show significant stratigraphic differences: While coarse gravel was found to the north of the wall structure, several decimetres of still water deposits were found south of it. The latter dates to Roman times according to the radiocarbon analysis. Therefore, the possibility that the site was used as a river port on the Alpheios cannot be ruled out. This is also supported by the considerations of Julia Taita (2013) regarding the navigability of the Alpheios River, which also lead into this area.

The number of archaeological sites in Zone 2 is lower than in the Kladeos zone (*fig. 44*). Their distribution according to chronological periods illustrates the presence of Early and Middle Helladic and Mycenaean sites. The sites are located in places that were not easily accessible; however, they command a good all-round view of the surrounding countryside. Early Iron Age and Archaic sites are sparse, and Classical sites clearly dominate in this zone. They, as well as the Hellenistic sites, are located around Prophitis Ilias and Palaiopyrgos. Among the post-antique sites, the Byzantine ones prevail.

The topographical situation begs the question whether the Palaiopyrgos site was a single larger settlement with the Prophitis Ilias hill used as an acropolis (Marganai? See below; *fig. 29 nos. 1. 2. 4*), or whether the acropolis formed the core and ›suburban‹ structures extended south and west. The detailed analysis of the archaeological data will provide further insights. The latter scenario would fit well with findings on the southwest slope (*figs. 28. 29 no. 2*), where tombs had probably been laid out. The Byzantine sites are absent from the central survey area and cluster west of Salmoni. The question whether the Classical-Hellenistic cist graves and the Byzantine tiles tombs belong to settlement contexts or farmsteads (*fig. 29 no. 6*) will be addressed in the context of the detailed analysis of the data.

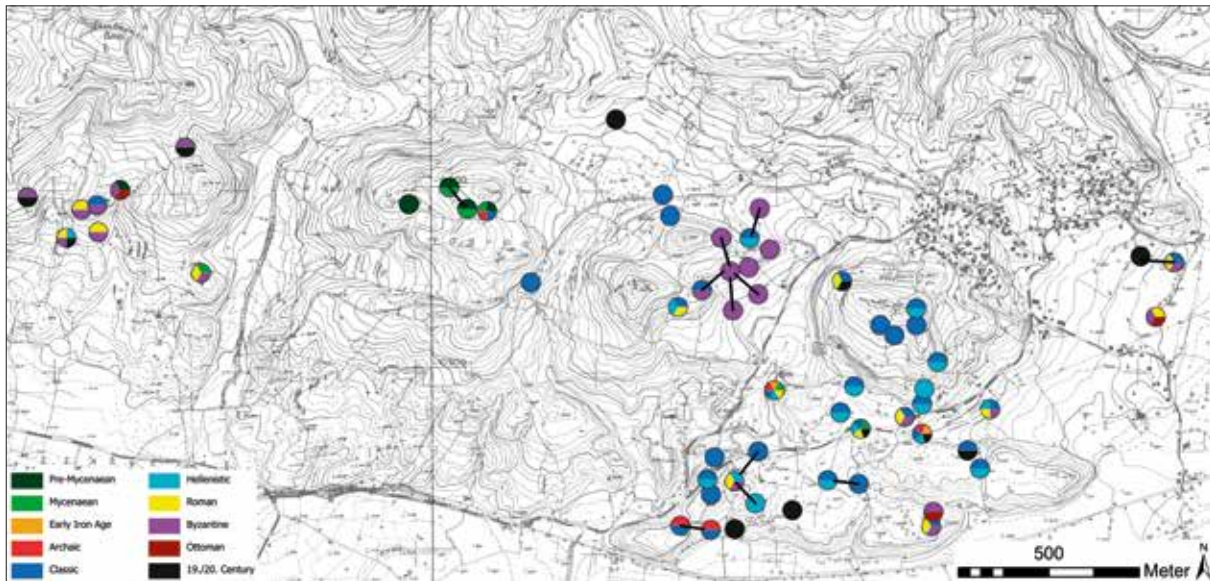


Fig. 44 Zone 2, distribution of preliminarily dated find spots

2.1.2.3 ZONE 3: EPITALIO (FIG. 45)

South of the Alpheios a range of hills near the coast borders the National Road to Kyparissia, and the modern village Epitalio (formerly Agoulénitsa) lies in the plain near the northern foothills. Over the millennia, the landscape around Epitalio has changed significantly due to, for instance, enormous tectonic uplifts or shifts of the coastline, which also affected the lower reaches of the Alpheios. About half a century ago, lagoons near Epitalio and Katakolo characterised the landscape as evidenced by old maps, photographs or information provided by the inhabitants of the region. The drainage in the 1960s made additional agricultural land available, for instance for tobacco growing, and eliminated the mosquito plague. However, the inhabitants of the area also lost the fish of the lagoons as a source of food.

Near Epitalio the Pyrgos-Kyparissia railway line runs through a ravine, which separates a group of four hills in the northwest (Agiorgitika (2), Hill A, Barkeika) from the southeastern ridges. This area is wooded, and agricultural use – olive growing, for the most part – does not appear to play a major role. North of Epitalio, a modern road bridge leads across the Alpheios River, where the ford of an ancient north-south route may have been located. In any case, Epitalio forms an important hub where roads lead to the north, south and east. Via the Alpheios River, Epitalio thus provided a good link between Olympia and the coast.

Previous research in the area has produced, for the most part, Bronze Age material, for example the remains of a Mycenaean settlement, but also Roman findings as well as findings from Late Antiquity¹⁰⁷. The survey has focused on the ridge just east of the modern village of Epitalio (Agoulénitsa). Five different locations around Epitalio yielded particularly remarkable results: Agios Georgios (Agiorgitika), Hill A, Barkeika, East Area and Dartisa. The hill north of Agios Georgios is heavily overgrown apart from a plateau with an olive grove that is devoid of finds.

¹⁰⁷ Cf. Παπαχατζής 1979, 222–224; Pritchett 1989, 75 f. (with further bibliography), see also McDonald – Hope Simpson 1961, 227 f. site 12 Ayios Georgios, site 13 Dardiza.



Fig. 45 Areas located in Zone 3 near Epitalio

Agiorgitika

In the area immediately around the church of Agios Georgios only tiles (medieval and later; *figs. 45. 46 no. 1*) were found. Not long ago, the present church replaced a very old one and the plateau was levelled; the tiles were probably part of the previous building. Mycenaean chamber tombs have long been known in the area around the church; the survey team identified some remains of looted chambers on the northern slope of the hill. South of the Agios Georgios church lies Hill A where the access road from Epitalio leads to the church (*figs. 45. 46 no. 2*). Pottery, tiles, and bones were clearly visible in the scarp on the eastern side of this access road and allowed for the identification of graves (*fig. 47*): a Mycenaean chamber tomb (*figs. 47–49*) and Classical-Hellenistic tile graves in the layers above it (*figs. 47. 50*)¹⁰⁸. This site was apparently considered suitable for burials in various periods.

Hill A

On the plateau of Hill A, which is partly covered by olive trees and partly dense shrubs, tiles (including such of the Corinthian type) and pottery of different periods (Bronze Age, antiquity, mostly Archaic) are scattered across a large area. On the north side of Hill A, there was a large scatter of Mycenaean pottery, which was probably unearthed in the course of the construction of a dirt road (*fig. 46 no. 3; 51*). The pottery is in good to excellent condition, and it may be thus reasonably assumed that it comes from destroyed tombs. However, before the present survey, no graves were recorded in this area, and the construction of the road may possibly have cut through previously unknown chamber tombs. The detailed

¹⁰⁸ Cf. McDonald – Hope Simpson 1969, 129, site 12 Ayios Georgios, where they mention finds of Mycenaean pottery along the access road to the church.

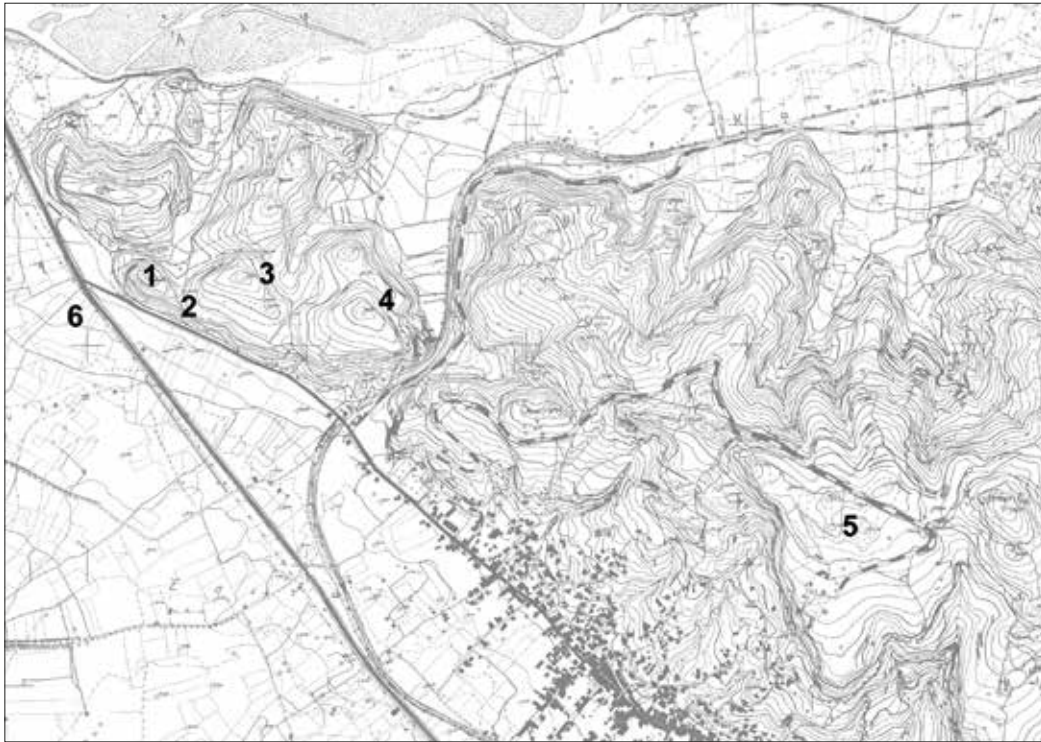


Fig. 46 Zone 3, location of find spots



Fig. 47 Agiorgitika, layers with Mycenaean and ancient graves



◁ Fig. 50 Agiorgitika, human bones and ancient tile grave

▷ Fig. 48 Agiorgitika, find context of Mycenaean stirrup jar

▽ Fig. 49 Agiorgitika, Mycenaean stirrup jar



analysis of the finds from Hill A will clarify, whether the plateau was the location of a settlement in different periods that is to be associated with the graves on the slopes. A small body sherd of a gritty, red micaceous fabric is characteristic of coarse ware pottery from the island of Kythera that was exported to the southern and southwestern Peloponnese in the Late Bronze Age¹⁰⁹.

Barkeika

Barkeika Hill lies immediately east of Hill A (fig. 45). On the plateau, a Mycenaean house with LH II A–III B pottery was excavated¹¹⁰. On the southern slope, a trench (probably from

¹⁰⁹ Kiriati 2003.

¹¹⁰ Mycenaean finds from the excavations of a Mycenaean house at Epitalion-Barkeika: Themelis 1968a; Θέμελης 1968b; Νικολέντζος 2011, 324 f.; Huber

2013. The presence of chamber tombs as indicated by McDonald – Hope Simpson 1961, 227 f., has not been confirmed.



Fig. 51 Hill A, collection of Mycenaean pottery

the Second World War) is still visible. On the hill, there were relatively few surface finds (Mycenaean to Hellenistic) and no evidence of the Mycenaean tombs. On the northeast slope, about 15 m below the top, a lot of material was found in an olive grove (*fig. 46 no. 4*), including stone artefacts as well as pottery from prehistoric (Middle and Late Helladic), ancient (Early Iron Age – Roman) and post-ancient periods. This material was most certainly washed down from above and forms good evidence of post-depositional processes at this place.

East Area

Beyond the ravine, in the wider area east of Barkeika, only few Mycenaean pottery finds had been made in the past (*fig. 45*). All the more surprising was a discovery made during the prospection in the area north of the road leading to the monastery Zoodochou Pigis. Mycenaean pottery fragments (*figs. 52, 53*) were found here together with evidence of a dromos of a Mycenaean chamber tomb. Subsequently, the geoarchaeological team applied ERT as an explorative method that produced images of cavities of high ohmic values indicating intact burial chambers or cavities filled with substrate. The ERT analysis on site indicates the presence of at least eight Mycenaean chamber tombs. Geophysical tests of a transect (see below) confirmed the ERT measurement. These results now for the first time provide evidence of an unknown Mycenaean cemetery in this area of Epitalio¹¹¹. This discovery raises the question of whether one can expect a similar density of Mycenaean sites east of the ravine as on the hills to the west (*fig. 59*).

To the east of this site more tile graves were found, of which mainly the tiles were preserved, and small quantities of datable pottery which can be generally classified as Classical (*fig. 54*). Of note is also the fragment of a drinking cup with Corinthianising decoration (*fig. 55*), which was found further east. The clay of this sherd is reddish and does not correspond to the pale yellow clays attributed to products from Corinth.

¹¹¹ Cf. below 2.2.2.7, and Obrocki et al. 2019.



Fig. 52 East Area, find spot of Mycenaean pottery



Fig. 53 East Area, fragments of Mycenaean pottery



Fig. 54 East Area, ancient tiles grave

Dartisa

On the west side of Dartisa Hill and around the monastery Zoodochou Pigis lies one of the largest sites of the project (*figs. 45. 46 no. 5*)¹¹². Material was collected from 15 squares of $100 \times 100 \text{ m}^2$ (= 15 hectares). The chronology of the finds (*figs. 56. 57*) ranges from prehistoric to Ottoman times with many fragments of better quality, such as kraters (Archaic Laconic column-krater, Classical calyx-krater) or black glazed plates with palmette stamps (*fig. 58*). Interestingly, the proportion of so-called household or cooking pots appears low. This is a site with a dominance of materials from the Archaic to Classical periods. At the eastern end of the site, where the road makes a big turn, a small elevation is visible in the sloping terrain. This area was investigated by means of the ERT geophysical method, but no evidence of graves was found (see below 2.2.2.8).

The prominent place of Dartisa is a special ›candidate‹ for Epitalion, which is well attested in Xenophon (see below 2.3.2.1). If the other sites around Dartisa do not constitute separate settlements, they could belong to this place as suburban districts or cemeteries.

According to oral tradition, the post-ancient history of the village of Epitalio developed in three phases (*fig. 45*): the old village, Agoulenitsa (village 1), lay on the southern slope

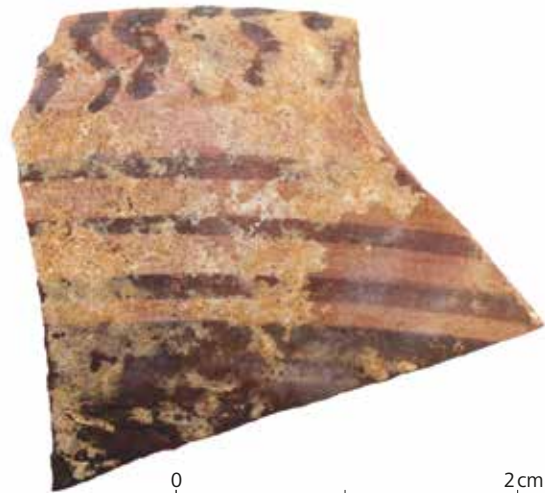


Fig. 55 East Area, fragment of Corinthianising vessel

¹¹² Already known to Meyer 1957, 50; McDonald – Hope Simpson 1961, 228 site 13 with a sketch of the site.



Fig. 56 Dartisa, Bronze Age pottery fragments



Fig. 57 Dartisa, fragments of Classical-Hellenistic tiles and vessels

near the monastery. Then it moved to the foot of the mountain (village 2) and from there to the northwest (village 3), which forms the modern-day village centre. Nowadays, village 2 is inhabited by the poorest – the *ὑσιγγάνοι*.

To the west of the village of Epitalio (*fig. 45. 46 no. 6*) and west of the National Road excavations revealed Classical-Hellenistic remains (buildings, tombs, ceramics, small finds), a Roman bath, a cistern, a large pottery kiln and other finds from the 3rd and 4th centuries A.D.¹¹³



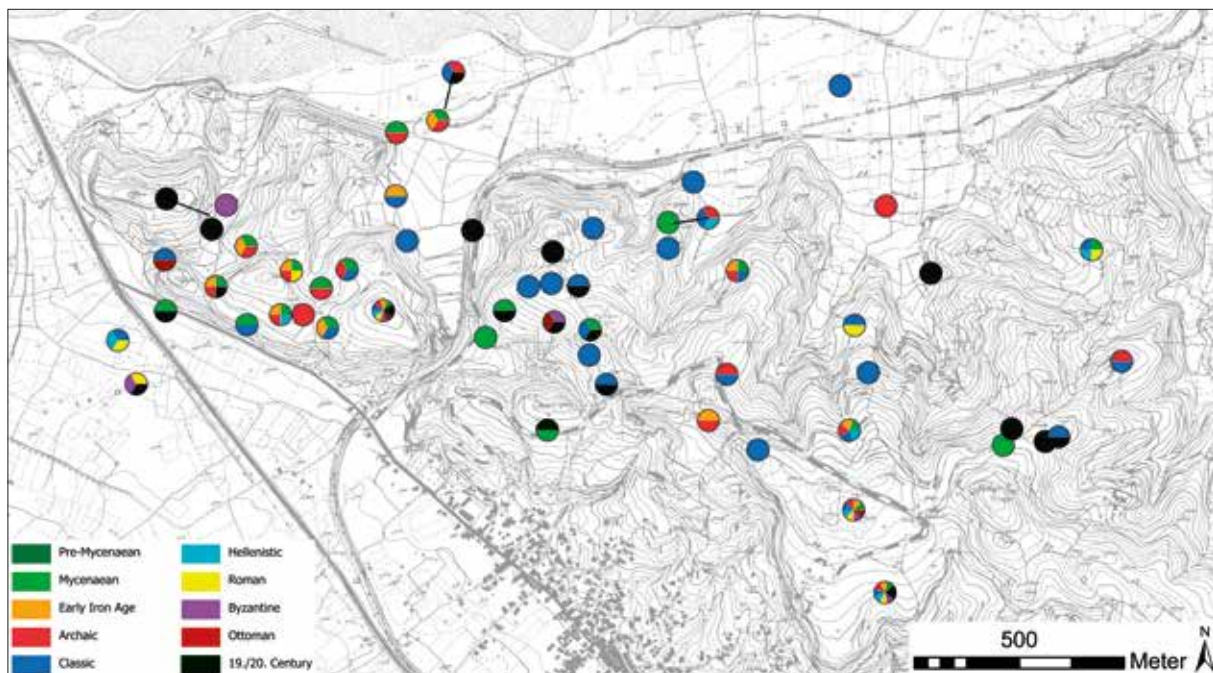
Fig. 58 Dartisa, fragments of Archaic-Classical pottery

One aim of the survey was to obtain information on the extent of this site. However, only few surface finds were made due to significant natural and anthropogenic changes. The level of the excavation lies 2 m below the present surface.

Due to the chronological distribution of the sites, settlement dynamics appear more clearly in Zone 3 than in Zones 1 and 2. Mycenaean sites exceed in number those of the Early and Middle Helladic periods, and are mainly located in the western region (*fig. 59*). It became clear during the survey that this picture might change when new Mycenaean chamber tombs were discovered in the eastern part of Zone 3. While evidence for the Early Iron Age and Archaic period is more abundant in the western part of Zone 3, the sites especially of Classical times are increasingly distributed in the eastern area. In general, Zone 3 yielded more sites of the Early Iron Age and the Archaic period, when compared to Zones 1 and 2.

Noteworthy is the settlement at Dartisa with a commanding view across the Alpheios Valley to the north as well as of the coastal zone and the sea to the south. West of the National Road, the excavations testify to another settlement that existed from Classical times and exhibits successive phases of the Roman period and Late Antiquity. The small number of post-classical sites in Zone 3 is a conspicuous feature in comparison to Zones 1 and 2.

Fig. 59 Zone 3, distribution of preliminarily dated find spots



¹¹³ Themelis 1968a, 1; Θέμελης 1968b.

2.1.2.4 SUMMARY

The survey has conveyed a clear overall impression of the settlement structure, which is only briefly summarised here: We discovered only two major sites that can be considered candidates for closed – though not large – settlements. They are located at Epitalio, west of Olympia in close proximity to the Alpheios River, especially on the hill of Dartisa in Zone 3, and in the area of Salmoni (Koukoura) immediately north of the river in the Prophitis Ilias and Palaioipyrgos areas in Zone 2. They can be associated with the ancient communities of Epitalion (almost certainly) and Marganai (with great probability).

Essentially, there are indications of intensive use and relatively dense settlement. However, this is characterised by an extremely small scale. Even around the sanctuary of Olympia itself, no major settlement centre emerged, unless the two sites at Koskinas once formed a larger settlement. This confirms the characterisation of the residents as *χωρῖται* as attested by Xenophon. Therefore, we have to envisage an ensemble of smaller sites, villages and hamlets or individual farms, certainly also in the vicinity of the sanctuary. The latter, however, formed something akin to the centre of a spider web.

2.2 Geomorphological and geoarchaeological field work

Geomorphological and geoarchaeological studies in Olympia and its environs were carried out in several target areas. The study of the landscape development in the individual areas – based on geoarchaeological methods – provides the largest possible perspective on landscape history of the entire project area. We studied both vertical changes in the relief, i.e. erosion effects affecting the highly erodible hills associated with sediment deposition in associated lowlands and basins, and horizontal changes of sedimentary environments and geographical features, such as changing river courses or coastlines.

2.2.1 *Methods*

Near-surface exploration was initially carried out using surface-bound geophysical prospecting methods, in particular by means of Electrical Resistivity Tomography (ERT). This helped, for example, to record the local bedrock topography, but also conspicuous, especially coarse-grained layers in the stratigraphic sequence. The prospection results represent the base for selecting suitable vibracoring sites. The sediment cores retrieved from the study area cover each expected type of sedimentary facies suggested by the ERT results. For coring, we used an automotive drill rig, occasionally also a percussion hammer. The drill rig allows coring in dry, consistent sediments and, due to the higher impact power, shows lesser amounts of core loss caused by collapsing boreholes. Also, sediment deformation effects are significantly reduced.

Starting in 2016, Direct Push (DP) measurement techniques were also applied in order to record different in situ parameters in the project area. These techniques allow compaction-free and lossless, high-resolution measurements of selected physico-chemical parameters that can be used as paleoenvironment proxies. In addition, the combination of surface-bound geophysical methods and DP-applications has significantly improved the quality of the prospection results. Also, the latter can be extrapolated to a larger area¹¹⁴.

¹¹⁴ Fischer et al. 2016.

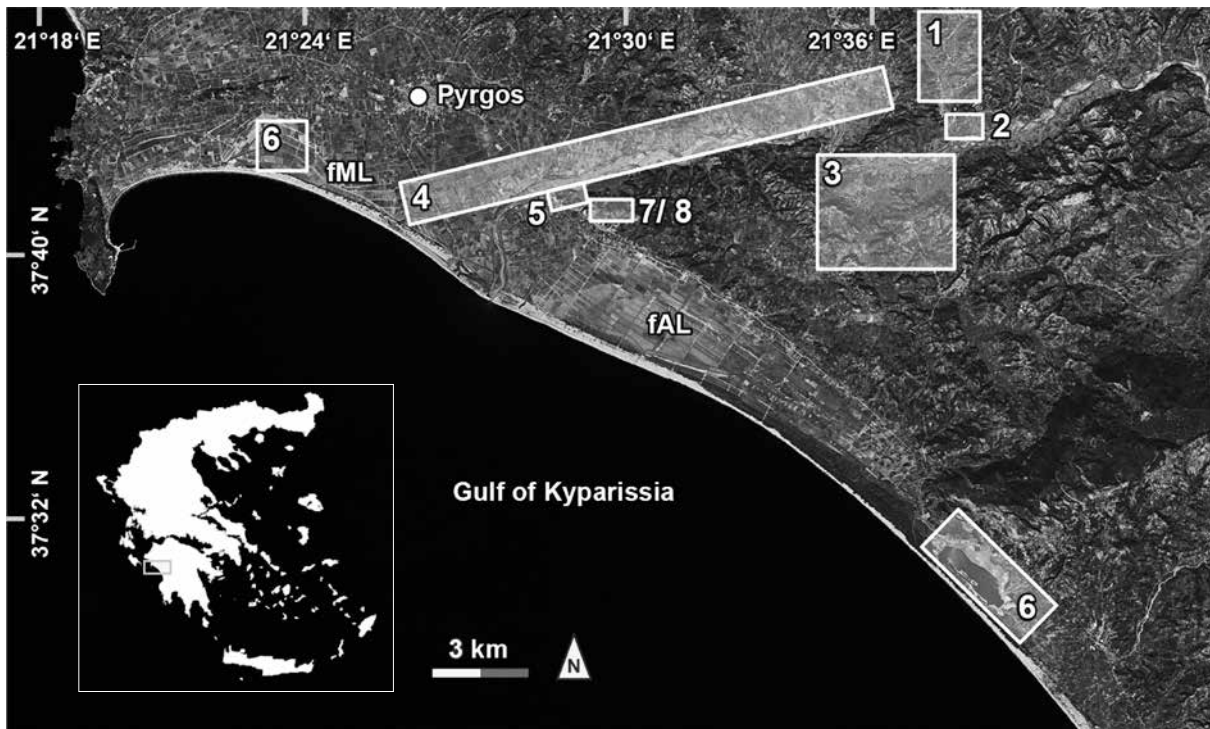


Fig. 60 Topographical overview of the areas investigated within the framework of geoarchaeological and geomorphological studies. Boxes 1 to 8 indicate individual focus sites

Sediment cores were obtained by means of half-open probes. At selected points, we also used closed probes and plastic inliners. The photographic documentation and the description of pedological and sedimentary features took place either in the field or after opening the plastic inliners in the laboratory. The project made use of a multi-proxy approach as a base for paleoenvironmental reconstruction. In the context of geochemical analyses, total content determinations by means of Inductively Coupled Plasma-Optical Emission Spectrometry (ICP-OES) and X-Ray Fluorescence Spectroscopy (XRF), magnetosusceptibility measurements, determinations of sediment colours, and analyses of grain size as well as geochronological analyses were carried out. The latter include both radiocarbon age determination and the application of Optical Stimulated Luminescence (OSL) dating techniques.

Furthermore, sediment samples from selected cores underwent a comprehensive micro-faunal analysis. Shell residues of unicellular organisms such as ostracods and foraminifera were used to characterise and differentiate between sedimentary environments. In addition, geochemical and micropalaeontological studies helped to separate gradual landscape changes from abrupt changes associated with high-energy events. A differential GPS was employed to determine coordinates and elevations for geophysical transects and vibracoring sites. At selected sites, a LIDAR scanner was used to provide high-resolution measurements.

In addition to ERT measurements, Ground-Penetrating Radar (GPR) and seismic measurements were applied by the research group of W. Rabbel from the Christian Albrechts-Universität zu Kiel.

The selection of target areas was based on a consideration of the extent of the Olympia Terrace (OT) that had buried the archaeological remains of Olympia. Previous studies had already shown that the OT is made up of a thick sequence of silt-dominated sediments that were repeatedly intersected by high-energy event layers consisting of coarse-grained sand and gravel. The latter represent major flood events that hit the area. Comprehending the formation of the OT thus means at the same time understanding the history of the

sedimentary burial of Olympia, that started to be used as a cult site in the 11th century B.C. Near Olympia, the upper edge of the OT lies up to 6–8 m above the present Kladeos and Alpheios river lowlands. In the course of our systematic geomorphological surveys, remains of the terrace were found in the middle Alpheios Valley opposite the confluence of the Kladeos River, in the basin of Makrisia and along the Alpheios River until just before it flows into the Gulf of Kyparissia at Epitalio¹¹⁵. Upstream from Olympia, the OT extends through the upper Kladeos River valley to the village of Kladeos. Overall, geomorphological and geoarchaeological investigations were carried out in the following target areas (*fig. 60*).

2.2.2 Results

2.2.2.1 THE KLADEOS RIVER VALLEY UPSTREAM FROM OLYMPIA

Geomorphologic and geoarchaeological investigations were carried out from north to south in the surroundings of the villages of Kladeos, Mageiras and Koskinas (*fig. 61*). To the west of Mageiras, the opposite terrace edges of the OT are up to 200 m away from each other and the terrace surfaces cover widths of up to 250 m. Here, it becomes evident that the origin of the OT as well as its present fragmentation cannot be explained with recent discharge conditions in the Kladeos River valley.

The OT was not incised where a prominent side valley meets the Kladeos Valley at Koskinas. Here, neither vertical nor horizontal erosion occurred. Instead, considerable accumulation of silt-dominated sediments took place. Vibracores upstream from Olympia show predominantly clayish-silty deposits. Across several kilometres, core profiles are stratigraphically and geochronologically consistent and characterised by several intersecting coarse-grained high-energy layers in the form of sand and gravel layers.

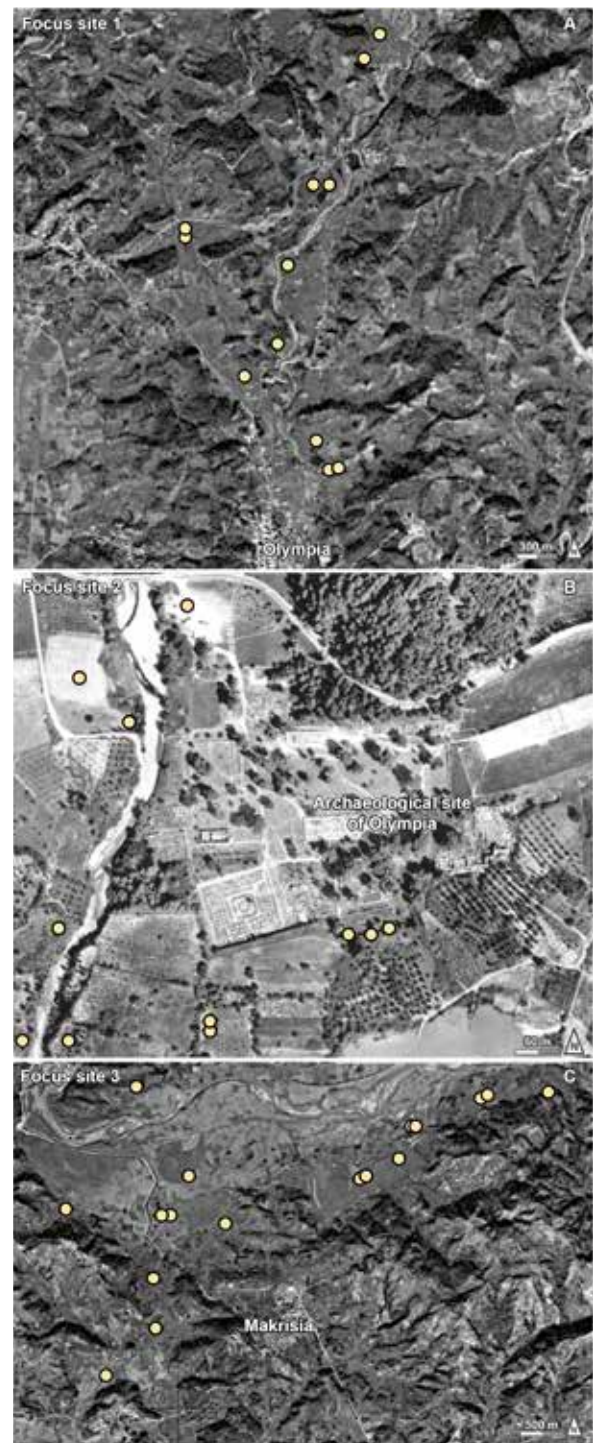


Fig. 61 Topographical overview of focus sites 1 to 3. A. Focus site 1: Kladeos River valley. – B. Focus site 2: Archaeological site of Olympia and its surroundings. – C. Focus site 3: Makrisia Basin and Ladiko Valley. White dots mark vibracoring and Direct Push sites and areas of geophysical investigations

¹¹⁵ Vött 2013.

2.2.2.2 THE SANCTUARY OF OLYMPIA AND ITS IMMEDIATE SURROUNDINGS

In the sanctuary of Olympia itself, geoarchaeological work was initially carried out near an excavation area close to the stadium. Again, systematically recorded and sampled profiles allowed differentiation of geomorphological phases of activity from those of stability and the ceramic fragments in the sediment offered reference material for dating (*fig. 61*).

Drilling took place in the courtyard of the gymnasium in cooperation with the Ephorate, and south of the southern stoa in cooperation with R. Senff, director of the German Olympia Excavations. The stratigraphies of the three sites examined show highly consistent sequences and are in line with the results obtained upstream from Olympia in the Kladeos Valley. In the area of the south stoa, the local sedimentary record proves that until at least the 2nd millennium B.C. a lake existed in this section of the Alpheios Valley. Overall, the stratigraphic studies provide clear evidence that the area south of Kronos Hill had been subject to seven high-energy, catastrophic flood events since the mid-Holocene.

Not far from the ancient site, systematic geophysical explorations of the subground were conducted on the western OT to the west of the Kladeos sidewall using ERT techniques. In the course of these studies, a multi-phase high-energy channel was discovered. This wide channel, first running from north to south, is associated with multiple breakthroughs through the Kladeos sidewall and was finally redirected in an eastern direction towards the workshop of Phidias and the Temple of Zeus by an emerging marly ridge of the local bedrock.

Geoarchaeological observations on the column drums of the Temple of Zeus itself and the stratigraphies found indicate that the temple was not destroyed by an earthquake alone, as is often suggested¹¹⁶, but that at the same time as the collapse occurred the columns were embedded in a silty to sandy sedimentary cover. The latter seems to be derived from a mud-flow that had reached the ancient site through the passage through the Kladeos sidewall and hit the Temple of Zeus from a westerly direction.

2.2.2.3 THE BASIN OF MAKRISIA AND LADIKO

In the basin of Makrisia, southwest of Olympia, investigations were carried out in numerous locations (*fig. 61*). Retained by the natural bedrock barrier at the modern dam near Flokas, an extensive lake existed here from the mid-Holocene onward. Deposits of this lake were traced through an opening of just a few hundred metres width located to the west of Makrisia towards the basin of Ladiko¹¹⁷. Furthermore, the investigated geological archives prove that the lake was affected by the same high-energy events that have already been detected in the Kladeos River valley and in the area of ancient Olympia. Interestingly, the sediment cores from almost all the sites studied display clear hiatuses (layer gaps) spanning several millennia, which document interruption of sediment accumulation or erosion of already deposited layers¹¹⁸.

The remains of the lake, which still existed not far from the south stoa of Olympia in the 2nd millennium B.C., suggests a contiguous water body extending upstream from the modern dam at Flokas at least to modern Olympia. The fact that a large lake existed for thousands of years at the confluence of the Kladeos and the Alpheios Rivers may have played a certain role in the choice of this site as a place of later cult and local water supply for humans and animals. This role will be examined in more detail. The height of the barrier at the bot-

¹¹⁶ E.g. Higgins – Higgins 1996.

¹¹⁷ Vött et al. 2019.

¹¹⁸ Vött et al. 2019.

tleneck at Flokas, where the Alpheios River breaks through the east-western chain of hills of Drouva, is of central importance to the water level in the lake of Makrisia.

2.2.2.4 THE BASIN OF FLOKAS, THE LOWER ALPHEIOS REACHES AND THE ALPHEIOS RIVER DELTA

Further studies on the Holocene landscape formation along the Alpheios River were carried out at selected locations in the Flokas Basin and at the lower reaches of the river (*fig. 60*). Moreover, sections of a polygonal wall structure, visible for several dozens of metres near the northern end of the railway bridge across the Alpheios River, were the subject of detailed investigations¹¹⁹. ERT measurements show that this wall structure exists over more than 1 km along the river under a partly several-metre-thick layer of fluvial sediments. In addition, a parallel wall at a distance of about 70 m to the north was detected by means of ERT studies and corroborated by seismic measurements. Also at this site, the structure is covered by more recent sediments. Hypothetically, if the ancient date of the wall can be confirmed, this would offer evidence of ancient river engineering measures, possibly related to a harbour situation. Vibracoring in the immediate vicinity of the visible section of the wall provided evidence of fine-grained, silt-dominated sediments deposited in a low-energy quiet-reach environment during Roman times. Further investigations need to be carried out in order to determine the course of the northern parallel wall in more detail and to record and sample potentially ancient sediment layers enclosed by both walls.

Further vibracoring was carried out in the lower reaches of the Alpheios River and in the former Alpheios River delta in order to obtain information on the mid- to late-Holocene alluvial stratigraphy and sedimentation history. Vibracores recovered from the west of Epitalio yielded evidence that the Agoulenitsa Lagoon, which had been drained in the 1960s, had been in existence for several millennia and that the Alpheios River, at least temporarily, flowed into it.

2.2.2.5 SECONDARY VALLEYS NEAR EPITALIO AND AGIOS GEORGIOS

Detailed geomorphological studies were carried out in two secondary valleys not far from Epitalio (*fig. 62*), both aligned in an approximate south-north direction towards the lower Alpheios River valley and terminating in a distinctive edge of the OT along the Epitalio-Alphiousa road. Based on these detailed investigations, it can be demonstrated that the hilly country east of Epitalio reaching eastwards at least until Olympia represents a region of tectonic uplift. Specifically, the uplift amounts at least to 12–13 m up to a maximum of 30 m for the last 6400 years alone¹²⁰. It is obvious that this strong uplift, the dimension of which was unknown so far, has a large influence on landscape formation, namely on fluvial processes and sea level stands.

Based on recent studies and taking into account the major uplift, it was possible to reconstruct potential mid-Holocene shorelines and conclude that tsunami events – representing a well-known phenomenon in the Gulf of Kyparissia during the entire Holocene (and probably beyond), were able to penetrate much farther into the Alpheios River valley than suggested by modern-day topographic conditions¹²¹. The tsunami flow patterns reconstructed on the basis of numerical simulations are consistent with the stratigraphic sequences and geomorpholog-

¹¹⁹ See above p. 135 f., cf. Eder et al. 2017.

¹²⁰ Vött et al. 2015.

¹²¹ Röbbke et al. 2013; Röbbke et al. 2015; Röbbke et al. 2016.

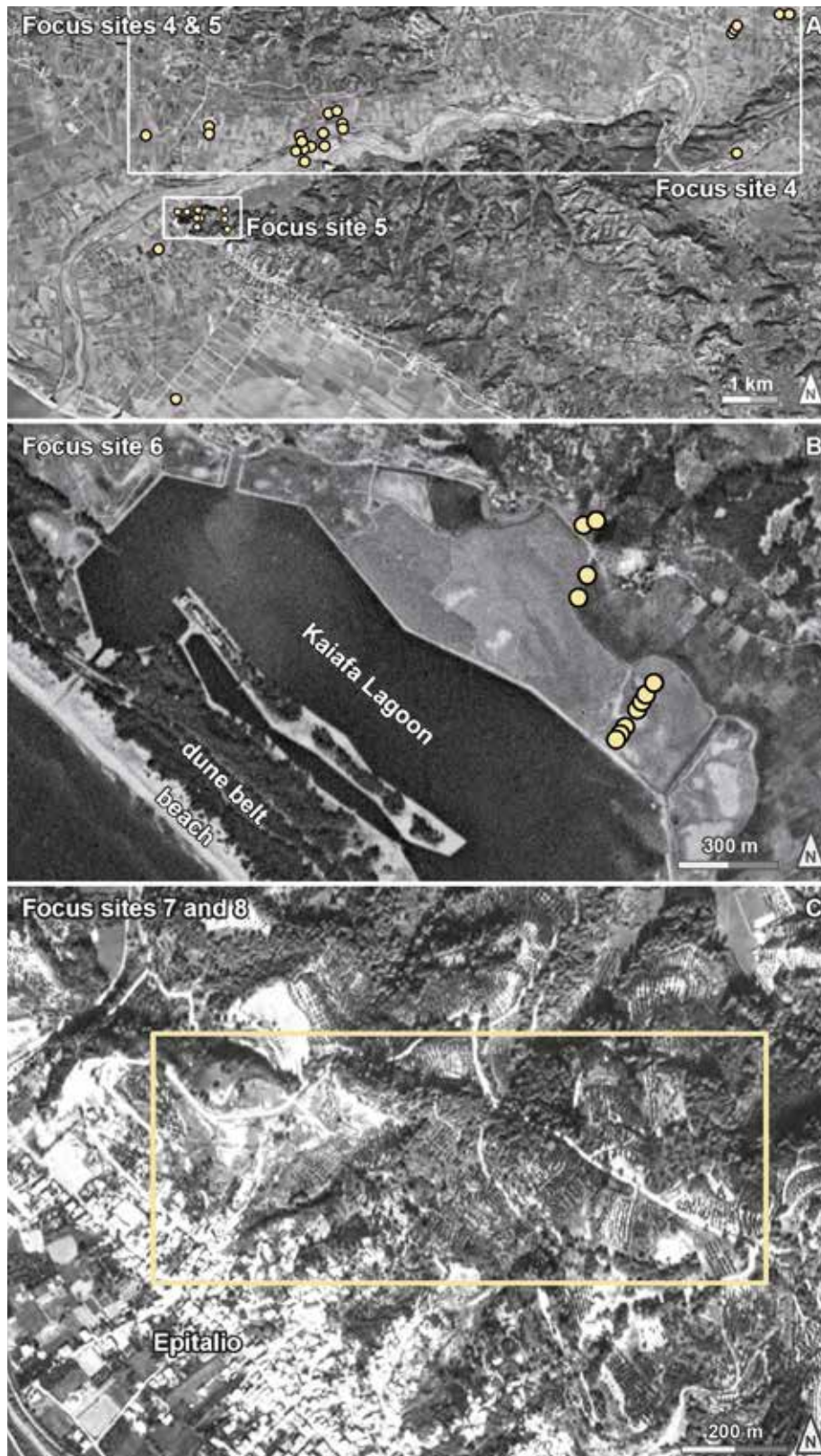


Fig. 62 Topographical overview of focus sites 4 to 8. A. Focus sites 4 and 5: Lower Alpheios River valley. – B. Focus site 6: Kaiafa Lagoon. – C. Focus sites 7: Epitalio and Dartisa. White dots mark vibracoring and Direct Push sites and areas of geophysical investigations

ical-sedimentological evidence found in the two secondary valleys. Overall, it can therefore be expected that at least some of the older high-energy flood events recorded for Olympia and the Kladeos Valley were connected with the effects of far-inland tsunami inundation¹²².

2.2.2.6 THE EASTERN SHORE OF THE KAIIFA LAGOON

We also investigated the influence of more recent tsunami events on the coastal development, sufficiently remote from any fluvial influences from the hinterland. These investigations were carried out on the eastern shore of the Kaiafa Lagoon (*fig. 62*). Our studies were realised exactly where convincing geomorphological, sedimentological and palaeontological evidence for tsunami events had already been found and described in detail¹²³.

On the basis of preliminary results, it can be assumed that several strong tsunami events, only several hundreds of years ago, hit the coastal lagoons existing at that time, flooded them with large amounts of water from the sea side and led to the deposition of up to 200 m wide sandy overwash structures on the east side of the present lagoon¹²⁴. Due to the superlocal nature of tsunami waves, the events that affected the Kaiafa Lagoon certainly had similar impacts on the Alpheios River delta and the lower reaches of the river and caused widespread flooding. Detailed radiocarbon dating of tsunami-related sediments is in progress. We finally aim at comparing the geochronological pattern found for high-energy flood events around Olympia with age data of clear tsunami evidence on the coast. Doing so, direct (tsunami) or indirect (seismo-tectonic) influence of earthquake-related processes can be either identified or ruled out.

2.2.2.7 THE HILLS ABOVE EPITALIO

Interesting archaeological finds collected during the archaeological survey to the north of the village of Epitalio suggested the existence of chamber tombs. Therefore, the site was systematically explored using geophysical ERT measurements (*fig. 62*, see above, East Area). Comparable methods had already been applied at Kioupia in the Kladeos River valley upstream of Olympia, where Bronze Age chamber tombs with rich burial gifts were found¹²⁵. Similar ERT-based evidence was obtained near Epitalio testifying to the existence of several chamber tombs¹²⁶. Ground radar measurements (GPR) confirmed this assessment. Thus, in the framework of the ›Olympia and its Environs‹ Project, a hitherto unknown site of a Mycenaean chamber tomb cemetery was discovered and examined in its spatial dimensions¹²⁷. Current rescue excavations by the Ephorate confirmed the results by unearthing a chamber tomb close to the road.

2.2.2.8 THE PLATEAU AT DARTISA

Geophysical prospection was also carried out on the Dartisa plateau to the east of the newly discovered chamber tomb cemetery (*fig. 62*). In the course of the archaeological survey, a concentration of surface finds with a chronological focus on the 1st millennium B.C. in-

¹²² See Vött 2013; Vött et al. 2019.

¹²³ Koster et al. 2015.

¹²⁴ Obrocki et al. 2020.

¹²⁵ Mageiras-Kioupia: Vikatou 2012; Βικάτου 2014a; Βικάτου 2014b; Βικάτου 2014c; Βικάτου 2016.

¹²⁶ Obrocki et al. 2019.

¹²⁷ Obrocki et al. 2019.

dicates a settlement area. High-resolution ERT, seismic and GPR measurements on a flat, shield-shaped hill rising on the plateau revealed evidence of cist graves near the surface (ERT). However, no evidence for further chamber tombs has been found so far¹²⁸.

2.3 Historical research

Within the framework of the project, historical research emphasises a fresh analysis of the written sources according to the historical-philological method with special consideration for concepts drawn from discourse analysis and religious history, as well as to phenomenological concepts. Klaus Hallof (Berlin-Brandenburg Academy of Sciences and Humanities, *Inscriptiones Graecae*) has agreed to analyse any new epigraphical finds. Two areas receive special attention: On the one hand, all ancient sources relevant to the project work are compiled in a file (currently, August 2018, largely completed). It includes translations as well as a commentary which is constantly updated by the project participants. This file will be integrated into a topographically structured gazetteer, which allows a swift correlation of texts with material remains and geoarchaeological conditions.

On the other hand, the results of the interpretations of the ancient sources are constantly updated with respect to the current results of the survey and the geoarchaeological investigations – and vice versa. To refine the interpretation, especially with consideration toward the anthropogenic design of space, recent concepts of spatiality are applied. In particular, phenomenological approaches following Maurice Merleau-Ponty's *Phénoménologie de la perception* (1945) have proved helpful (see 3.2). In conjunction with the analysis of mythistorical discourses and perspectives on religious history, they allow new insights into specific ancient spatial concepts that become tangible in the study area.

2.3.1 Topographical research and identifications: Methods

This section presents the results that have been achieved so far in the study of the historical topography. They are part of a rather detailed discussion which provides, as it were, a network of coordinates for the assessment of space, namely in respect of the localisation of places that are attested in the sources and the identification of sites with traditional names. The following section summarises the results of research in recent years that has amplified or modified the traditional perspective.

Due to the sources available, in particular due to the importance of Strabo, some basic methodological comments need to be made in advance. The prominence of the Homeric geography in the work of this author entails a very specific problem that pertains particularly to the region of interest to us and can be explained very well on the basis of Strabo¹²⁹. This

¹²⁸ Obrocki et al. 2019.

¹²⁹ Strabo 8, 3, 24: »ἦν δὲ λέγει νῦν Θρύον, ἐν ἄλλοις καλεῖ Θρυόεσσαν ἔστι δὲ τις Θρυόεσσα πόλις, αἰπεῖα κολώνη, ἢ τηλοῦ ἐπ' Ἀλφειῷ. Ἀλφειοῦ δὲ πόρον φησὶν, ὅτι περὶ περατὸς εἶναι δοκεῖ κατὰ τοῦτον τὸν τόπον: καλεῖται δὲ νῦν Ἐπιτάλιον τῆς Μακιστίας χωρίον. τὸ εὐκτιτον δ' Αἶπυ ἐνιοι μὲν ζητοῦσι πότερον ποτέρου ἐπίθετον, καὶ τίς ἢ πόλις, καὶ εἰ αἱ νῦν Μαργάλαι τῆς Ἀμφιδολίας: αὗται μὲν οὖν οὐ φυσικὸν ἔρυμα, ἔτερον δὲ δείκνυται φυσικὸν ἐν τῇ Μακιστίᾳ. ὁ μὲν οὖν τοῦθ' ὑπονοῶν φράζεσθαι ὀνομά φησι τῆς πόλεως τὸ

Αἶπυ ἀπὸ τοῦ συμβεβηκότος φυσικῶς, ὡς Ἔλος καὶ Αἰγιαλὸν καὶ ἄλλα πλείω: ὁ δὲ τὴν Μαργάλαν τοῦμπαλιν ἴσως. Θρύον δὲ καὶ Θρυόεσσαν τὸ Ἐπιτάλιον φασιν, ὅτι πᾶσα μὲν αὕτη ἡ χώρα θρυώδης, μάλιστα δ' οἱ ποταμοί: ἐπὶ πλέον δὲ διαφαίνεται τοῦτο κατὰ τοὺς περατοὺς τοῦ ῥέιθρου τόπους. τάχα δὲ φασι Θρύον μὲν εἰρῆσθαι τὸν πόρον, εὐκτιτον δ' Αἶπυ τὸ Ἐπιτάλιον: ἔστι γὰρ ἐρυμνὸν φύσει: καὶ γὰρ ἐν ἄλλοις αἰπεῖαν κολώνην λέγει ἔστι δὲ τις Θρυόεσσα πόλις, αἰπεῖα κολώνη, ἢ τηλοῦ ἐπ' Ἀλφειῷ, πυμάτη Πύλου ἡμαθόεντος.»

is not least because the geographer's description, as is often the case, is »undoubtedly«¹³⁰ based on Apollodorus' commentary on the Catalogue of the Ships. This creates a problem with the temporal assignment of the traditional place names, since even in antiquity the location of the places mentioned by Homer was unclear. In other words, our ancient informants were faced with similar questions of identification as we are.

In order not to lose track in this labyrinth, we need to distinguish three stages in this exemplarily selected section (as well as in other corresponding passages):

1. the Homeric text, which is frequently quoted, which we however first and foremost need to view simply as Homeric text. The beginning of this section refers to a passage from the Catalogue of the Ships, which describes the ›kingdom‹ of Nestor.
2. the later (Archaic-Classical-Hellenistic) references (cf. the »vũv« in Strabo).
3. the interpretations of Homer by later authors, not least Strabo, who established – partly in a similar way as we do – identifications based on various indications.

First of all, one needs to clearly differentiate between these, as in this case there existed no direct ancient links between these three stages, for example in the continuity of the settlement or the tradition of names (the problem would otherwise not have occurred). Moreover, as is the case with Pylos, these names may scatter locally, be identified with different sites or occur several times. In the present passage, we have (1) a Homeric layer with places called »Thryon« (also »Thryoessa«) and »Aipy Euktiton«¹³¹. In addition, there is (2) a later layer or toponymy, which in this case enables a clear localisation, also due to the existence of a parallel tradition (see below). Moreover, there exist (3) Strabo's (or Apollodorus' and others') conjectures as to which places can be associated with the Homeric names: in this case, the Homeric Thryon (or Thryoessa) is identified with Epitalion by Strabo due to the ford at the Alpheios (a) and because the area there is »reedy« or »θρυνώδης« (b). Strabo (or his source) also considers it possible that Aipy (unless he intends to read it as an adjective to Euktiton, which he apparently rejects) also refers to this area; then Thryon would lie in the plain at the mouth of Alpheios and Aipy on the hills above modern-day Epitalio (Agoulénitsa).

In the present context, our primary focus must rest on the names mentioned in the first and second stages. The ancient interpretations (stage three) carry no more weight than our own. In this specific case, this means that we need to deal with three unrelated toponyms in the literary sources: besides the Homeric places Thryon and Aipy (Euktiton) there is Epitalion, known as such from Classical times. Of these places the references indicate the location of Thryon and Epitalion at a ford across the Alpheios, namely at its mouth (at least in the case of Epitalion, see below).

»The city which the poet now calls Thryum he elsewhere calls Thryoessa: ›There is a certain city Thryoessa, a steep hill, far away on the Alpheius‹ [Hom. II. 11, 711. 712]. He calls it ›fording-place of the Alpheius‹ because the river could be crossed on foot, as it seems, at this place. But it is now called Epitalium (a small place in Macistia). As for ›well-built Aepy‹, some raise the question which of the two words is the epithet and which is the city, and whether it is the Margalæ [editorial comment by H.-J. Gehrke: the spelling of the manuscripts is probably incorrect, and one should read Marganae with e.g. Radt 2007] of today, in Amphidolia. Now Margalæ is not a natural stronghold, but another place is pointed out which is a natural stronghold, in Macistia. The man, therefore, who suspects that the latter place is meant by Homer calls the name of the city ›Aepy‹ from what is actually the case in nature (compare Helus, Aegialus, and several other names of places); whereas the man who

suspects that Margala is meant does the reverse perhaps. Thryum, or Thryoessa, they say, is Epitalium, because the whole of this country is full of rushes, particularly the rivers; and this is still more conspicuous at the fordable places of the stream. But perhaps, they say, Homer called the ford ›Thryum‹ and called Epitalium ›well-built Aepy‹; for Epitalium is fortified by nature. And in fact he speaks of a ›steep hill‹ in other places: ›There is a certain city, Thryoessa, a steep hill, far away on the Alpheius, last city of sandy Pylus‹« (Translation: Jones 1927).

¹³⁰ Radt 2007, 412.

¹³¹ In the case of Aipy Euktiton, it is not clear which part of the compound designates the proper name and which the epithet, as both are originally adjectives (›steep‹ and ›well-founded‹).

¹³² The basic topographic conditions are discussed by Meyer 1950. The area south of the Alpheios belongs (at least from the Classical period) to Triphylia, name-

Aipy provided a challenge already to the ancient authors: it was identified with Marganai, but also with a steep rock in the Makistia (between the Alpheios and the Lapithos)¹³². Strabo's idea to place it in the immediate vicinity of Thryon, which was supposedly situated in the plain, and to identify it hypothetically with Epitalion, appears rather unlikely: The Catalogue of the Ships offers an overall view of Nestor's contingent, and that should pertain to a much larger territory.

When we try to name or identify sites in our survey, we must accordingly also clarify whether we can clearly relate the ›Homeric‹ names to Mycenaean, Submycenaean, possibly even Protogeometric settlements, as is the case in the ancient texts, without having to assume settlement continuity. For example, Thryon (not Aipy, see above) could be paired with a Mycenaean site at Epitalio. Petros Themelis has interpreted the Mycenaean remains on the Agiorgitika hills in this way (see above 2.1.2.3)¹³³. The Classical (and possibly even Archaic) Epitalion could then be associated with the rich site at Dartisa¹³⁴. However, it should be clarified whether the find complexes of the survey can be differentiated in this way.

2.3.2 Direct identifications

2.3.2.1 EPITALION

The example chosen for the basic notes on the method is ideal in that the location of Epitalion can be regarded as unambiguous. The starting point must be Xenophon's reports of the Spartan campaign against Elis in 401 B.C.¹³⁵. When the Spartans (and their allied contingents) under King Agis II approached Elis from the south, first Lepreon, then Makistos and finally Epitalion split from Elis (they were Elean *symmachoi*). Afterwards, the invading army crossed the river (namely the Alpheios), whereupon the ›Letrinoi, Amphidoloi and Marganeis‹ joined them as well. Then Agis was able to sacrifice to Zeus in Olympia and continue his march directly towards Elis¹³⁶. Retreating at the end of the campaign, he again crossed the Alpheios, leaving a garrison in Epitalion, »near the Alpheios« (πλησίον τοῦ Ἀλφειοῦ)¹³⁷. From there the latter devastated the Elean territory during the winter, so that the Eleans eventually sued for peace¹³⁸.

From this report, the position of Epitalion (at least the Classical one) emerges with sufficient clarity: it is linked to the territory of the Makistians, who settled in the Triphylian area south of the lower Alpheios¹³⁹. The Alpheios River could be crossed near Epitalion. There

ly to the Makistia; the range of hills that runs parallel to and south of the Alpheios thus forms a border between the Makistia and the Pisatis (see Str. 8, 3, 13).

¹³³ See the references in Παπαχατζής 1979, 223; Pritchett 1989, 75 f. (with further bibliography), cf. also McDonald – Hope Simpson 1961, 228.

¹³⁴ The results of the survey (see 2.1.2.3) confirm and expand the observations of Meyer 1957, 50, who assumes »a safe ancient location« here. Later, this place would have been extended or shifted towards the plain to the west of the Agiorgitika hills, where it would have remained until Roman times (as the excavations of P. Themelis have shown, see Παπαχατζής 1979, 223). This is also the findspot of the Roman milestone (see above 1.2 with n. 59).

¹³⁵ On the date of the Elean-Spartan War (402–400 B.C.) cf. Gehrke 1985, 53 with n. 7; we are here in its second year, 401 B.C. (X. HG 3, 2, 24 f.)

¹³⁶ X. HG 3, 2, 25.

¹³⁷ X. HG 3, 2, 29.

¹³⁸ X. HG 3, 2, 30.

¹³⁹ Cf. above n. 133. It is not certain how far this area extended geographically at the time of Xenophon. The centre, Makistos, is located at Skillountia (Mazi) and marked by the remains of an impressive Doric temple for Athena (for this, see Νακάσης 2004, and the information in Taita 2007, 44 with n. 12), cf. Minon 2007, 186–189 (with further references); Heiden – Rohn 2015, 333. The inscription found in the temple (Minon 2007, no. 28) with a grant of civil rights by the Makistians is also crucial for the purpose of localisation. Meyer 1957, 67 f.; Siewert 1987, 276 and still Taita 2007, 44 with n. 13 (with further details) identify Makistos with Samikon, see however Minon 2007, 187 n. 60. In addition to the argument of the find spot of the inscription, it should be noted that this localisation does not suit the topographical information on Samikon very well. The relationship between the Makistians and Samikon can also be explained differently.

was also a good place for a garrison that could cause serious damage to the territory of Elis in the course of the armed conflict¹⁴⁰. The information points to the area of modern-day Epitalio (Agoulenitsa). This matches the references to the »ford« and the proximity to the Alpheios estuary in Strabo¹⁴¹ as well as the »mountains of Triphylia separating the Makistia from the Pisatis« mentioned there¹⁴². This pertains to the chain of the hills that begin at Epitalio and then continue eastwards south of the Alpheios¹⁴³. This corresponds with the account of Polybius¹⁴⁴, who names Epitalion alongside Phrixa, Stylangion, Aipion, Bolax and Pyrgos as the cities who voluntarily joined Philip V after his occupation of Samikon (218). Apart from Pyrgos, which lies to the south, all of these are counted among the Triphylian cities north of the Lapithos¹⁴⁵.

As we have already seen, the archaeological constellation of finds corresponds well with this localisation. However, their detailed definition and in particular their relation to the Homeric or Mycenaean topography remains problematic. One would have to ask whether the Homeric topography (Thryon, Aipy) can be separated or isolated from the later ones. There is also an important note in Strabo¹⁴⁶ that at the Alpheios estuary there is a grove of Artemis Alpheionia or Alpheiousa, which is 80 stades away from Olympia. In this regard a comment by Joseph Partsch¹⁴⁷ deserves attention: »A landowner told me that at the end of the Katarachi (a slight and elongated soil elevation southwest of Pyrgos)¹⁴⁸ at a short distance from the modern-day mouth of the Alpheios River, he had lifted large poros blocks of an old building from the ground and used them for building.«

2.3.2.2 HERAKLEIA AND SALMONI

The sites, both of which are clearly distinguished in the sacral and memorial topography of Pisa, lay close together¹⁴⁹. According to Diodorus Siculus¹⁵⁰ Salmone was located »beside« or »near« (»παρά« with accusative) the River Alpheios. One should not overstretch this point, but the place cannot be too far away from the Alpheios River or from its plain. Even more important is the aforementioned proximity to Herakleia, because this can be located with a high level of probability. It lay 40 (according to Strabon¹⁵¹) or 50 (according to Pausanias¹⁵²) stades away from Olympia¹⁵³, and it was close to the river Kytherios / Kytheros, which was fed by a spring where a sanctuary of the Ionidian nymphs was located. The water of this spring supposedly cured various pains and states of exhaustion¹⁵⁴. For good reasons, the sanctuary has been linked to the sulphur spring of Loutra near the small village of Pournari (one is reminded of the well-known springs near the Kaiafa Lagoon), and the site of Herakleia has been supposed to lie in the nearby field of Marmara (between Pournari and Pelopion)¹⁵⁵. This accords with the distances mentioned and also offers an indication for the

¹⁴⁰ Cf. also, succinctly, the modern »classics« Meyer 1957, 49 f. 60 f. and Pritchett 1989, 75 f.

¹⁴¹ Str. 8, 3, 12; 8, 3, 24.

¹⁴² Str. 8, 3, 12.

¹⁴³ This is why Strabo here speaks of the northern side of the Pisatis in a broader sense. This identification was already made by Partsch 1897, 14 with n. 1.

¹⁴⁴ Plb. 4, 80, 12 f.

¹⁴⁵ Walbank 1957, 533.

¹⁴⁶ Str. 8, 3, 12.

¹⁴⁷ Partsch 1897, 14.

¹⁴⁸ See the Partsch map. – On the question of the Artemis sanctuary and the problem of the distance values see below n. 165. 168.

¹⁴⁹ Str. 8, 3, 32; in general, on both places cf. Roy 2004, 492. The to date oldest preserved lease agreement between private individuals (IvO 18 = Minon 2007, no. 25, ca. 425–400 B.C.), which deals with land in Salmone (Salamone, line 3 f.), does not add to the question of localisation.

¹⁵⁰ Diod. 4, 68, 1.

¹⁵¹ Str. 8, 3, 32.

¹⁵² Paus. 6, 22, 7.

¹⁵³ The difference should not be overemphasised, cf. Maddoli et al. 1999, 373.

¹⁵⁴ Str. 8, 3, 32; Paus. 6, 22, 7.

¹⁵⁵ First and foremost, Panayotopoulos 1991, 275–277 (276 f. for instructive information on the modern

course of the Mountain Road, which one would have to assume here. The river Kyther(i)os would then have to be identified with the modern-day Pournariko, into which the aforementioned spring flows.

It is said of Salmone that it lies close (»πλησίον«) to a spring of the same name which was also the source of the Enipeus River, something which is also firmly associated with its mythistory. Since it is very common to identify the most important tributary of the Alpheios River in the area with the Enipeus, Salmone has been located near Neraida, at the source of the Lestenitsa River¹⁵⁶. However, taking into account the two relative indications of Salmone's location, i.e. the proximity to the Alpheios and to Herakleia, it immediately becomes apparent that this localisation is unacceptable¹⁵⁷: The distance from Marmara to Neraida is longer than from Marmara to Olympia.

One therefore needs to seek alternatives and consider the river Manna, which has its source near modern Herakleia (Brouma)¹⁵⁸. There, Partsch saw strong springs, which in his opinion – he identifies the place with Herakleia – join to become the Kyther(i)os stream¹⁵⁹. In addition, he refers to information from locals that »some decades ago [there were] remains of an old building«; and he took with him from this place a small lamp with the inscription »Πασφόρου«. One could thus identify the Manna River with the Enipeus and would thereby find a good site for Salmone (near Herakleia = Marmara, with the Kytherios = Pournariko).

A major objection, however, is the size of the rivers: There is no reason to associate the name of the powerful Thessalian river with this modest watercourse, and this is the reason why the Lestenitsa River has been considered a more appropriate candidate. It has already been emphasised that this causes other difficulties. Partsch may offer a solution: he considers one of the strong springs south of Landzoï / Latzoï which are counted among the sources of the Lestenitsa a good candidate; it would suit all aforementioned criteria¹⁶⁰. In general, one has to keep in mind that we do not know enough about the development of the hydrogeographical conditions since antiquity to draw far-reaching conclusions about the course and water level of rivers or even streams. Since the area in question is not part of our survey area, no further observations can be contributed from our perspective. While Herakleia can be identified with some degree of certainty, the case of Salmone remains obscure, as Claudia Ruggeri succinctly remarks: »La questione della localizzazione sembra quindi difficile da risolvere«¹⁶¹.

2.3.3 *Relative topography*

The observations and interpretations presented here allow the identification of at least two places in the region of interest with a degree of certainty. In addition, a new analysis of the relevant sources in comparison with the topographical conditions and the results of the survey enables the establishment of two topographical sequences. The order in which certain places are reported apparently corresponds to a spatial arrangement. This produces a kind

bathing activity between 1909 and 1972, of which the current state hardly gives any idea); cf. Ruggeri 2004, 195.

¹⁵⁶ Panayotopoulos 1991, 277–281. For the identification of the Lestenitsa with the Enipeus see Partsch 1897, 4–6; Taita 2013, 367.

¹⁵⁷ Cf. also Mandl – Ruggeri 2000, 52 f. and Ruggeri 2004, 195.

¹⁵⁸ For the localisation of Salmone in this place, cf. also Ruggeri 2004, 196 with n. 641.

¹⁵⁹ Partsch 1897, 5 f. He also speaks of a stinking spring in a field south of Brouma, with which he associates the place name.

¹⁶⁰ Partsch 1897, 5. For the location of Latzoï, cf. the plan in Panayotopoulos 1991, 279.

¹⁶¹ Ruggeri 2004, 196.

of relative topography which at the very least enables us to narrow down the area in question for the localisations. This is particularly evident in the area west of Olympia towards the mouth of the Alpheios River.

2.3.3.1 WEST OF OLYMPIA

Here, too, Xenophon provides us with the key text, namely his account of the Spartan invasion¹⁶²: the Epitalians had already joined Agis, as we have seen. He then crossed the Alpheios (obviously at the ford at Epitalion), and then the people of Letrinoi, Amphidolia, and Marganai went over to his side¹⁶³. Accordingly, they were located north of the Alpheios, and everything indicates that the arrangement is topographical in terms of direction¹⁶⁴: first Letrinoi, then Amphidolia, then Marganai; afterward, Agis sacrificed to Zeus in Olympia.

In addition, there are clear indications that Letrinoi lies furthest to the west: it can be accommodated near the Alpheios or possibly also at the Alpheios estuary, because of the temple of Artemis Alpheiaia¹⁶⁵. Even more important is the information provided by Pausanias¹⁶⁶ that Letrinoi lies on the Plain Road 120 stades from Olympia and 180 from Elis¹⁶⁷. This leads to the area of Pyrgos or the monastery Agios Ioannis, where Letrinoi has previously been localised¹⁶⁸.

That the other places mentioned lie further to the east is also very plausible; for in their campaign against Elis in 365 B.C., the Arkadians move through the Akroreia to Olympia, then take Marganai by betrayal and finally attack Elis¹⁶⁹. This may indicate that Marganai

¹⁶² X. HG 3, 2, 25.

¹⁶³ They remained in league with Sparta for a while (until Leuktra): All three are mentioned together as Spartan allies (with a total of 400 slingers) in the battle near the Nemea Stream in 394 B.C. (X. HG 4, 2, 16). The low number of combatants and their military function shows that they obviously did not act as major poleis.

¹⁶⁴ Meyer 1950, 1736, cf. Niese 1910, 10, who also sees a connection, and now Ruggeri 2004, 171.

¹⁶⁵ Paus. 6, 22, 8–10; the relation of this temple to the sanctuary of Artemis Alpheiousa and Alpheionia (Str. 8, 12, 12) should be considered (see Maddoli et al. 1999, 374; Ruggeri 2004, 175 f.; however, otherwise Partsch 1897, 6; Taita 2013, 379 f.), if one takes Paus. 6, 22, 8 to refer to the territory of Letrinoi (see also above). Older travel reports show that before the great changes of the last century the broad floodplains of the Alpheios came close to Pyrgos (see esp. Cockerell 1903, 70, quoted above in n. 28).

¹⁶⁶ Paus. 6, 22, 8.

¹⁶⁷ This suits Str. 8, 3, 30, who gives 300 stades from Olympia to Elis, cf. also Maddoli et al. 1999, 374 and see also above.

¹⁶⁸ The previous localisations are not compelling, but roughly plausible: At Pyrgos (already Partsch 1897, 6) or at the monastery Agios Ioannis between Pyrgos and Katakolo (Leake 1830, vol. 1, 33; Buchon 1843, 503 with the most detailed information; Curtius 1852, 73; Curtius 1882, 7; Meyer 1950, 1736), further references in Παπαχατζής 1979, 392 n. 1; Maddoli et al. 1999, 374; Roy 2004, 499 f.; Ruggeri 2004, 171; Taita 2007, 47 with n. 20. According to

Str. 8, 3, 12, however, the port of Pheia (where the distance is shortest from the sea to Olympia) lies 120 stades from Olympia (see Taita 2013, 346 f.), and this would rather support a localisation of Letrinoi at Agios Ioannis. However, Taita 2013, 349 puts the distance into perspective. She localises Letrinoi at Pyrgos, and that is why (she calculates a stade to cover 180 m) she considers Pausanias' indication an ›overestimation‹ (120 stades = 21.6 km instead of ›real‹ 19.6 km). Apart from the fact that this specification is not supported by any archaeological evidence, one could then also consider Agios Ioannis. However, Agios Ioannis is a relatively far distance from the assumed route of the Plain Road, as well as from the ridge of Katarachi, which connects Pyrgos with the Alpheios estuary (see n. 266). In general, however, as the comparison with Strabo and other examples in our region (see above) show, the ancient numbers, which are typically rounded, leave certain margins for calculation. The lake mentioned in Paus. 6, 22, 1 can no longer be identified; Chandler 1776, 287 refers to a lake near the monastery of Panagia Skaphidia north of Katakolo; Curtius 1882, 7 identified this with the northern part of the Mouria Lagoon (and localised Dysponton near Pyrgos, further details in Taita 2013, 366 n. 99), Partsch 1897, 6 of the Mouteli depression south of Pyrgos; according to Παπαχατζής 1979, 394 n. 1, the lake came into contact with the Lagoon of Mouria and has since accordingly been drained. All of this remains quite uncertain; on Letrinoi cf. also Roy 2004, 499 f.

¹⁶⁹ X. HG 7, 4, 14.

was immediately adjacent to Olympia and was near the Mountain Road, closer to it than Amphidoloi. Thus, Marganai would also be located near Alasyaion. However, taking into consideration Xenophon¹⁷⁰, one should not move too far away from the Alpheios River. In any case, Amphidoloi also borders Alasyaion¹⁷¹, which in turn can be associated with the Akroreia, quite in the sense of a direct neighbourhood¹⁷². In reference to Xenophon¹⁷³ one could draw a line: Letrinoi – Amphidoloi – Marganai – Alasyaion (on the Mountain Road)¹⁷⁴.

Thus we have a topographical sequence Letrinoi (= Pyrgos / Agios Ioannis), then eastwards Amphidolia – Marganai – Alasyaion – Akroreia¹⁷⁵. Specifically, besides the location of Letrinoi near Pyrgos / Agios Ioannis, one could suggest the following correlations: Amphidoloi may have been located northeast of Pyrgos, to the north of Vrochitsa, where remains from the early 4th century B.C. have been identified¹⁷⁶. In view of the ambiguities, one should apply a wider perspective and follow Ernst Meyer's consideration of the »hilly country of Varvasaina-Labeti«¹⁷⁷.

Another candidate for Amphidolia could also be Salmoni (Koukoura). However, because of the close proximity to Olympia, which is evident from Xenophon's¹⁷⁸ report on the Arkadian attack of 365 (see above), one should associate this place with Marganai. The findings and observations made in our campaigns support this perspective¹⁷⁹. Alasyaion

¹⁷⁰ X. HG 3, 2, 25.

¹⁷¹ Str. 8, 3, 10; see in general Roy 2004, 247.

¹⁷² Nafissi 2003, 25 n. 17 (west of Lasion on the slopes of the Pholoe); on the neighbourhood see Meyer 1950, 1737.

¹⁷³ X. HG 3, 2, 25.

¹⁷⁴ Amphidolia or Amphidolis (Str. 8, 3, 24 and 8, 3, 9) probably addresses the territory of the polis Amphidoloi (X. HG 3, 2, 30 – without textual change – and St. Byz. s. v.). According to Strabo (24) Marganai also belonged to it. This creates a problem for the topography, because we have to use the term Amphidoloi in a stricter or broader sense (for this distinction, see also Nafissi 2003, 25). How to explain the relationship between the two remains open (see also Ruggeri 2004, 170, esp. 172). If one assumes the Amphidoloi to have been a small federation, Marganai would have been a part, as well as Alasyaion. However, this is not very plausible as both (Amphidoloi and Marganeis) are mentioned side by side as distinct units in Xenophon (25 and 30). One could think of a later »incorporation« or something of the sort, but the most plausible explanation is to assume that Str. 8, 3, 24 follows the category of order used by Apollodorus: Amphidolia as an Elean perioicic area and part of Triphylia north of the Alpheios (in distinction to the Makistia south of the river (Meyer 1950, 1740 f.); see also Ruggeri 2004, 170, who in consideration of Str. 8, 3, 24 supposes that in the Hellenistic era Amphidolis was much larger than in the Classical period. In any case, for the time of Xenophon we should consider Amphidolia or Amphidoloi a polis territory (see also Roy 2004, 494).

¹⁷⁵ Cf. Nafissi 2003, fig. 2.

¹⁷⁶ Ruggeri 2004, 172, 189; similar Taita 2007, 47 with further references.

¹⁷⁷ Meyer 1950, 1736.

¹⁷⁸ X. HG 7, 4, 14.

¹⁷⁹ Esp. the Classical-Hellenistic remains on Palaiopyrgos, see above; for the identification cf. Roy 2002, 230 with further references; Roy 2004, 500. However, one has also to consider the information of

Str. 8, 3, 24 on Homeric Aipy and its identification – as advanced by others – with Marganai: According to Strabo Marganai was not a naturally fortified place (»ἔργμα φυσικόν«) and not located on a steep hill. This would speak against the identification with Palaiopyrgos. However, one has to keep in mind that the information that was shaped by subjective perceptions and local impressions leaves a certain measure of wiggle room. Because of the Greek character of the landscape, a »natural bulwark« suggests a rather rugged elevation. On the other hand, the Arkadians got hold of Marganai by »surrender on the part of some« (X. HG 7, 4, 14), that is by betrayal (365), cf. also Ruggeri 2004, 169 (»efficacemente difeso, forse di mezzo di mura, o almeno per la posizione geografica strategica che lo rendeva difficile da prendere«; own translation: »effectively defended, perhaps by means of walls, or at least because of its strategic geographical position, which made it difficult to take.«). However, she also notes the possible contradiction to Strabo (170). Remains of walls have not been found so far, but there may have existed wooden fortifications. However, the connection with Salmoni (Koukoura) is not unattractive: the site in question (the hill Palaiopyrgos, possibly including the hill with the church of Prophetis Ilias), is on the one hand not a steep rock (especially according to the aforementioned criteria for steepness), but not entirely without defences, even without fortification walls (examples of which have not yet been detected anywhere in the entire region), so that for the Arkadians betrayal was still more economical than an attack. This is also supported by the fact that Diod. 15, 77, 4 uses the term polis in view of Marganai as well as of Kronos Hill (X. HG 7, 4, 14) that had just been »fortified« by the Arkadians (Bölte 1930, 1681). – Meyer 1950, 1736 (following Bölte 1930, 1681) brings the plain between Strephi and Flokas into play, cf. also Ruggeri 2004, 171 f. However, a localisation in the plain is not very plausible in view of the extent and activity of the Alpheios.

lay »near Amphidolia [...] on the Mountain Road from Elis to Olympia«. It had »earlier« belonged to the Pisatis¹⁸⁰. In all likelihood, it also bordered on the Akroreia¹⁸¹. In general, Alasyaion is located at the upper reaches of the Lestenitsa¹⁸². Since this zone was outside of our survey area, we have no further information to offer.

2.3.3.2 NORTH AND EAST OF OLYMPIA

Here, a relative topography may likewise be deduced, albeit not with the same degree of certainty. The starting point is a note in Strabo¹⁸³, which suggests that the places Harpina, Kikysion and Dysponton formed a line: Harpina, which belonged to the »Eight Cities« (*oktapolis*) of the Pisatis and through which the Parthenias River¹⁸⁴ flowed, was on the road leading to the Pholoe and Pharaia / Pheraia (see above). There (»αὐτοῦ«) also Kikysion (also belonging to the *oktapolis*) and Dysponton were located. The location »there« is not exactly precise. However, Dysponton is also said to lie on the road from Elis to Olympia, in the plain. Since Harpina is situated on the road to Arkadia, and Dysponton towards Elis, one may conclude that Harpina is the easternmost, Dysponton the westernmost site. We could then draw a line between the two with Kikysion in the middle.

The well-known story of the suicide of Peregrinus Proteus after the Olympics of A.D. 165 in Harpina, which drew quite some attention at the time, makes it possible to add further details¹⁸⁵. Lucian offers precise information on the distance – 20 stades (3.7 km) – this place lay east of Olympia¹⁸⁶. The passage can be regarded as very reliable because the event attracted a lot of attention and the location is integrated firmly into the narrative. Of the three candidates proposed so far for the place of Harpina – a hill on the right bank of modern-day Viliziko / Vilizeiko¹⁸⁷, the hill of Frangonisi south of

¹⁸⁰ Str. 8, 3, 10.

¹⁸¹ Roy 2002, 230. Meyer 1950, 1737 reached this conclusion from the joint dedication IvO 258; Roy's arguments against it (2002, 230), with the spatial distances Amphidolia-Alasyaion-Akrokreia, are not compelling.

¹⁸² Ruggeri 2004, 150 f. 196; Taita 2007, 47, similar to Partsch 1897, 4, who takes into consideration the »convergence of the sources of the Enipeus [= Lestenitsa] near Karatula« [mentioning a local »fort« Xylakastro east of the pond Mavroli].

¹⁸³ Str. 8, 3, 32.

¹⁸⁴ One problem lies in the mention of the two rivers Parthenias here in Strabo and Paus. 6, 21, 7 as well as in the designation of the river at Harpina as Harpinates by Paus. 6, 21, 8: According to Strabo the Parthenias flows through Harpina, which according to Pausanias apparently flows into the Alpheios from the south (Maddoli et al. 1999, 360). Following Paus. (8) the Harpinates runs next to the ruins of Harpina. Firstly, it should be noted that one has to remain to the right of the Alpheios (see above all Bölte 1912, 2408, and for explanation, see Maddoli et al. 1999, 357 f.). The difference between Parthenias and Harpinates could be explained by assuming two different streams in the territory of Harpina (Bölte 1912, 2408 and Maddoli et al. 1999, 360). In contrast, Baladié 1980, 297 identifies the Harpinates of Pausanias with the Parthenias of Strabo. – The Parthenias is usually identified with the modern-day Bakireiko, which originates in the Lala area and

flows into the Alpheios near Mouria (Graefinghoff's map; Puillon Boblaye 1835, 129; Bölte 1912, 2408; Meyer 1949; Pritchett 1989, 35 f.; Maddoli et al. 1999, 360; Roy 2002, 235 with n. 18). This however would be too far to the east for the aforementioned localisation of Harpina according to Lucian (see below). The Harpinates is equated with the Vilizeiko further west originating in Pefkes (formerly Viliza or Veliza) and flowing into the Alpheios east of Miraka (Puillon Boblaye 1835, 129; Bölte 1912, 2408; Παπαχατζής 1979, 382 n. 7; Maddoli et al. 1999, 361 have Viliziko, similar to Graefinghoff's map where it is named Parthenias). This again is further east than Lucian's description would allow. In the small area in question, next to the Vilizeiko and the Bakireiko there is yet another stream, which flows directly west of Panagia (Curtius – Adler 1882 and Graefinghoff's Harpinates). The identification of the rivers sadly does not enable the establishment of clear criteria for localisation due to the problems associated with them. The key must remain Lucian. – For Harpina cf. also Roy 2004, 492.

¹⁸⁵ According to Paus. 6, 21, 8 there were only »ruins« (ἐρείπια) and altars, but because of Lucian the place must have had some importance.

¹⁸⁶ Lucianus Peregr. 35.

¹⁸⁷ Near the village of Linaria (former Saraka): Παπαχατζής 1979, 382 n. 7, 8; Maddoli et al. 1999, 361. However, because of Lucian's statement (though one should not overstretch it), the distance would be too far away from Olympia.

Miraka¹⁸⁸, and the church of Panagia¹⁸⁹, – this information seems to suggest the latter as the most plausible due to its distance from Olympia.

Moving northwest from Harpina according to this reconstruction, Kikysion came first and finally Dyspontion. The path indicated on Partsch's map (1897) suggests that Kikysion could be sought in the area of Archaia Pisa (Miraka), Mageiras or Koskinas¹⁹⁰ and Dyspontion in the area of Platanos¹⁹¹. At any rate, Kikysion was the largest among the places of the *oktapolis*, and was near a spring called Bisa¹⁹². Dyspontion is no longer attested in the sources for the period after 570 B.C. and therefore had probably been abandoned already in the 6th century B.C.¹⁹³.

In this respect, our research allows for some tentative conclusions: Within the area of the relative topography, only in the area northwest of Koskinas (see *figs. 6 no. 3. 4; 7 no. 3. 4; 27*) a sufficiently large find complex with documented Classical-Hellenistic material which could indicate a site was located. We consider this a serious candidate for Kikysion. The dominating site in the fertile and extensive area of the middle reaches of the Kladeos suits Strabo's statement¹⁹⁴ that Kikysion was the largest community of the *oktapolis*, and the land distribution that is mentioned in a recently published inscription¹⁹⁵ may well pertain to this area.

The connection between the Kladeos River valley and the Alpheios Plain to the west (see *fig. 7 no. 1*) near Platanos can be associated very well with the Mountain Road, as is visible already on the map by Partsch of 1897. To the west and on a lower level, one could then tentatively assume the location of Dyspontion, that is between Platanos and Pelopion (formerly Kriekouki)¹⁹⁶, which already comes close to the place assumed for Herakleia (see above).

¹⁸⁸ Roy 2002, 235 with n. 18, citing McDonald – Rapp 1972, 320 no. 723; 306 no. 323 f. The site would be only about 2 km away from Olympia.

¹⁸⁹ Just east of the first stream east of Miraka: Map Curtius – Adler 1882; Map Partsch 1897 (Graefinghoff records Harpina on a hill further north on the same river, which he calls Harpinates), cf. Bölte 1912, 2408 and see also above n. 184. Ross 1841, 108 n. 63, also because of Lucian, considers a location near a »little river east of Miraka« (translated from German text), and Gell (1817, 37) notes before crossing the first stream he mentions after Miraka »fragments of tiles«.

¹⁹⁰ For the remains near Miraka (now »Archaia Pisa«) documented so far see above n. 100; for those of Koskinas see Παπακωνσταντίνου 1992, nos. 22. 23. 34. 48 (tombs of LH III A–B and of Hellenistic-Roman chronology, with Hellenistic pottery in the surrounding area), for Mageiras see Παπακωνσταντίνου 1992, nos. 29. 31–33: »prehistoric«, LH III, Classical-Hellenistic tombs).

¹⁹¹ According to Str. 8, 3, 32 it lies »on the way from Olympia to Elis in the plain«. This obviously refers to the Mountain Road, where its course runs through the plain (Meyer 1950, 1737, cf. above n. 54); otherwise that would not have been explicitly stated, nor would it fit the other topographical indications; also Roy 2002, 234 f.; Ruggeri 2004, 193. One would thus arrive in the area of Platanos, for finds there see Παπακωνσταντίνου 1992, nos. 24–28. 30 (LH III B, early Archaic, Roman, Late Antiquity). Curtius 1882,

8 had suggested Pyrgos, because he understood the name as »coastal town, which had no favourable seaside location«; Partsch 1897, 7 had thought of the area of Salmoni (Koukoura): The name could indicate that the Alpheios at Dyspontion (about 50 stades from its mouth) stopped »[being] a navigable river. That points to the area of Koukoura.«

¹⁹² Str. 8, 3, 31; Mandl – Ruggeri 2000, 53 hypothetically suggest the place of Neraida / Persaina, which corresponds to a larger settlement site. Although this cannot be excluded, it must remain open given the archaeological documentation as a whole and the relatively long distance from Olympia.

¹⁹³ Roy 2002, 34 f.; Roy 2004, 494.

¹⁹⁴ Str. 8, 3, 21.

¹⁹⁵ For this assignment see NIO 5 A (= Minon 2007, no. 16), 3 f.

¹⁹⁶ There was an old road (see Map Partsch 1897) from Pyrgos to Lalas (across the pass at Platanos and then up the Kladeos); this is well documented in Sibthorpe 1820, 79: The Oxford botanist was on his way from Pyrgos to Lalas, when at »Cracouchi« (i.e. Kriekouki = Pelopion) a broken bridge (across the stream west of the village, which was heavily swollen – on March 2nd, 1795) delayed his journey. He apparently crossed the pass at Platanos, made a detour to Olympia and then moved via »Stavrokephalo« (today Kladeos) along the Kladeos upstream towards Lalas. He notes that after the passage at Kriekouki »the size of the mountains increased«, and mentions »pine trees of majestic height«.

3 FIRST HISTORICAL CONCLUSIONS

3.1 Olympia and Pisa

In his 10th Olympic Ode, Pindar¹⁹⁷ sings of Herakles' deeds after his victory against Augeias, the king of Elis¹⁹⁸: »But the brave son of Zeus gathered the entire army and all the spoils together in Pisa and measured out a sacred precinct for his supreme father. He enclosed the Altis all around and marked it off in the open, and he made the encircling area a resting-place for feasting, honouring the stream [i.e. the ford]¹⁹⁹ of the Alpheios along with the twelve ruling gods. And he named the Hill of Kronos«.

We should certainly not read this text as a report on the establishment of the cult of Zeus in Olympia, nor should we look for a historical kernel communicating past events in mythical guise. However, the text contains information on the situation at the time of Pindar. We can easily recognise the ford of the Alpheios River, the Altis and Kronos Hill. The author had previously already mentioned the »tomb« of Pelops there, which refers to the Pelopion²⁰⁰. Above all, however, the text – and this is of crucial importance here – offers a view of how space was perceived and manipulated at the time (and certainly not only in the time of Pindar). The essential point is the following:

The area bears the name Pisa. There is a sacred place in it, a τέμενος marked and enclosed as such²⁰¹. It has the name Altis. With the establishment of the cult, the (nearby) ford (πόρος) of the Alpheios, in addition to the Twelve Gods, is particularly honoured. The surrounding land (πέδον) is intended for the ritual meal. A hill, which is apparently also located here, is named after Kronos. At the same time, there is a venerable cult place, the tomb of the hero Pelops. The geographical indications refer to the landscape itself, the Alpheios ford and an apparently distinctive hill. Qualitative categorisation takes place through the specific definition of a »sacred«, »divine« (ζάθρος) place, from which an activity (the meal) connected with the cult but separated from the numinous place is excluded. The fact that this extends »in a circle« around the sacred place forms a classification in terms of the qualitative assessment of the area and appropriately emphasises the centrality of the sanctuary in relation to its immediate surroundings²⁰².

If we now take the aforementioned »meal« metaphorically in terms of the activities associated with the cult in a broader sense, this amounts to a kind of operational description for the small-scale settlements located »in the circle«, thus all around. This is what the scho-

¹⁹⁷ On this text and other passages in Pindar (including the ones used subsequently) see also Ulf 1997, 13–25.

¹⁹⁸ Pi. O. 10, 43–50 (Translation: Svarlien 1991).

¹⁹⁹ The πόρος of the Alpheios also appears in Pi. O. 1, 92 (with reference to the Pelopion) and 2, 12 f. (with reference to Kronos Hill). Taita 2001, 127 f. points out that in the poetic language πόρος can indicate not only the ford but also the bed of a river as a whole, but rightly sticks to the meaning of »ford«. There is a clear spatial reference to the three places, and the extension to the »bed«, i.e. the course of the river or the whole river, would make no sense in view of the desired local precision, which has a poetic-literary function. In addition, such a striking point of passage could quickly acquire a sacred meaning (for Olympia in this context, see Eder 2019, 39 f. If there was a lake in the immediate vicinity (see above 2.2.2.2), this could have enhanced the effect. In any case, in the Archaic literature (and possibly also in

the legal language) there was a clear correlation between Olympia and the Alpheios (Alonso Troncoso 2013, 219 with corresponding references; regarding the Alpheios as a sacred figure see below) – Paus. 6, 20, 1 testifies to a cult for Kronos, in which priests named Βασίλαι carried out sacrifices for the god; for potential »Kronika« see above n. 12. The Olympics were also traced back to a wrestling match between Kronos and Zeus (Paus. 8, 2, 2).

²⁰⁰ Cf. Kyrieleis 2012/2013, 52.

²⁰¹ On the meaning of such a »staked space«, see generally Michaels 2006, 280, with reference to Ernst Casirer; on the ambivalence of such areas, which we also have to consider here, Michaels 2006, 282. On ritual spaces in ancient Greece see Cole 2004, 30–65, and on different degrees of the sacred within the sanctuary of Olympia Cole 2004, 61.

²⁰² On the role of the centrality of sanctuaries, see Cole 2004, 75–79; on Pindar's passage cf. Eckerman 2013, 28 f.

liast to Pindar already said with reference to authors named Aristodemos²⁰³, Leptines, and Dionysius²⁰⁴, as follows: »It is not in Elis where those banquet who have come to the festival [πανηγυρίς], but Pisa; because the area, »in the circle« [κύκλος] around the sanctuary« is occupied by hostels [καταγωγαί]«²⁰⁵. The term Pisa thus refers to the landscape around the sanctuary of Olympia, in the complementary sense already mentioned (see above 1.3).

These important relations gain a starker profile in the light of modern concepts of spatiality²⁰⁶, which go back to phenomenological concepts, in particular to M. Merleau-Ponty and his »Phénoménologie de la perception«. The »experienced space« or »espace vécu« interacts with the human being and his body and is perceived, classified and evaluated in many ways and in constant interaction. Irrespective of its objective, physically given presence, and yet closely related to it, this space is thus an »espace existentiel«²⁰⁷.

Individuals move within this space and their perception of it is shaped not least by the society which they are part of. Thus, this space may also be referred to as »a sacred, symbolic and mythic space replete with social meanings wrapped around buildings, objects and features of the local topography providing reference points and planes of emotional orientation for human attachment and involvement«²⁰⁸. We therefore have to assume a corresponding understanding of space. The locality of Olympia was heavily charged with sacred meaning²⁰⁹ which already became manifest in the early cultic practices. We may therefore also assume that this was of special significance even for the social organisation of the inhabitants in the immediate surroundings. Indeed, their primary habitat, their vital living environment was related to the sanctuary.

One could also speak of »amphictyons«, as it were *avant la lettre*, for the concept of an amphictyony presupposes the existence of ethnic-political units that share the organisation of a cult or sanctuary²¹⁰. Conversely, we must remember that the sanctuary or cult in Olympia precedes or substantially shapes the social organisation²¹¹. This leads to another, hypothetical, conclusion, especially when we think of the aforementioned Pisa problem. We should not from the outset – as most recently M. Köiv²¹² – assume or ask whether Pisa or the Pisa-

²⁰³ One is tempted to identify him with the historian Aristodemos (Schwartz 1895a, 925; FGrHist 414), but F. Jacoby did not include this quotation in his collection. Since it is essentially a text-critical note, it may also refer to the philologist A. of Alexandria (Schwartz 1895b, 925) who commented on Pindar.

²⁰⁴ Cohn 1905, 984.

²⁰⁵ Sch. Pi. O. 10, 55 b; own translation. For an interpretation in the sense of area see esp. Meyer 1950, 1737, cf. also Niese 1910, 28 f. (Pisa is an »area«, »it is as much as Olympia«). As such, as an area in the southern part of Elis, Pisa may also appear as ἀκροτήριον Ἀλίδος in Pindar (O. 9, 7). That someone can receive land »in Pisa« (IvO 11 = Minon 2007, no. 12, 5) may refer to the area, but could also refer to the territory of a settlement (which is less likely, however, if it was not a »real« polis; and that is not the case, at least on the basis of what we know about the region through texts and archaeological observations). The scholiast continues: »but Pisa lies three stades away from Olympia«. This is contradictory insofar as he himself speaks of the environment, thus of no fixed point. Sch. Pi. O. 1, 28 b has Pisa as χωρίον next to Elis, at a distance of 50 stades (sic!). Herodian (Hdn. Gr. vol. 1 p. 226, 19–22) calls Pisa »polis and source of Olympia«, but also speaks of a »chorion in which the Temple of Zeus is built and the Olympic contest

is organised«. These late and contradictory statements are unhelpful and ultimately worthless when compared with what can be linked to Pindar.

²⁰⁶ Cf. the important overview in Hofmann 2014/2015.

²⁰⁷ Merleau-Ponty 1945, 337, cf. esp. Ingold 1993, 152. 154; the recent criticism of Ingold's phenomenological approach (Hicks 2016, with the following discussion) concerns methods and working procedures of current archaeology, not the approach to the – past – life-world.

²⁰⁸ Tilley 1994, 16 f., on these perspectives cf. also Bintliff 2009.

²⁰⁹ For such »strong places«, cf. also Dally – Metzner-Nebelsick 2006, 205 (with further references); Michaels 2006, 278.

²¹⁰ On this distinction, see now the very clear statement of Funke 2016, 20–22. This difference is also a major reason why the idea of an amphictyony around the sanctuary of Olympia, which was developed by Kahrstedt 1927 and last advanced by Siewert in 1994 (see Ebert – Siewert 1999) and Taita 2000, has not become accepted; cf. already Gauthier 1972, 43–45.

²¹¹ Schlesier 2000, 146 n. 9, has rightly pointed out the significance of religious phenomena prior to the formation of the polis; cf. now also Funke 2016, 19 f.; Eder 2019.

²¹² Köiv 2013.

tans were an ethnic or political entity, but initially apply an open, unspecified term of social group or ›number‹, ›amount‹.²¹³ The centrality of the sacred place, which they were most aware of and which had a significant impact on their existence, was probably essential for their formation. The religious sphere (in its relation to a certain area²¹⁴, i.e. a ›strong place‹ and its surroundings) here obviously became constitutive for community building.

In specific terms, however hypothetically, one could envisage the following scenario: The descendants of the post-palatial warlords and their neighbours (and maybe newcomers from the northwest), who are archaeologically attested in the surroundings of Olympia²¹⁵, were particularly aware of certain topographical features which were also important for their everyday lives: a ford across a powerful river (where it might have expanded to a lake in former times), a conspicuous hill nearby with some remains of earlier use²¹⁶, but also a flat mound covered with limestone slabs that looked like a burial tumulus. Therefore, they revered the place where all this was concentrated as especially numinous²¹⁷. It became a ›hub‹, a ›crystallisation point‹²¹⁸. There they worshipped gods from the 11th century onwards, consulted an oracle, met in peaceful athletic competitions, sacrificed and shared their sacrificial meals, joined in celebrations, processions and dance – and organised themselves according to rules that provided the necessary framework. The area they set out for communication and competition was particularly dependent on such rules that had to be accepted by the participants²¹⁹. This was also the way to promote inner coherence, without necessarily becoming the basis of a more far-reaching, political-ethnic collective organisation. Cult and oracle received attention beyond the site²²⁰ and expanded

²¹³ Consider, e.g., the sort of neutral concept of the ›multitude‹, which Bernbeck 2012 introduced to the archaeological discussion. On the role of local groups in the formation of pre-state communities, cf. the references in Ulf 2006, 27 (who, however, does not pursue this track because of his focus on the ›big men‹).

²¹⁴ However not the area as such, cf. Simmel 1908, 688: »Nicht der Raum, sondern die von der Seele her erfolgende Gliederung und Zusammenfassung seiner Teile hat gesellschaftliche Bedeutung. Diese Synthese des Raumstücks ist eine spezifisch-psychologische Funktion, die, bei aller scheinbar ›natürlichen‹ Gegebenheit, durchaus individuell modifiziert ist; aber die Kategorien, von denen sie ausgeht, schließen sich allerdings, mehr oder weniger anschaulich, an die Unmittelbarkeit des Raumes an.«

²¹⁵ LH III C warlords at Mageiras: cf. Vikatou 2012; see above 2.1.2.1 with n. 97; Mycenaean settlement in Elis: Βικάτου 1999; Νικολέντζος 2011; on Late Mycenaean and Early Iron Age finds in and close to Olympia: Eder 2001b; Eder 2003; Eder 2006; Eder, forthcoming. In the meantime, our research project has provided more material (see above 2.1.2).

²¹⁶ Kronos Hill: Mycenaean pottery in alluvial layers suggests some sort of Mycenaean occupation on and around Kronos Hill. However, Kronos Hill has suffered from extensive erosion over the course of the centuries and the nature of the Late Bronze Age use of the site must therefore remain obscure. Even in view of the head of a Mycenaean figurine found in the northern bank of the stadium, the existence of a Mycenaean cult place on Kronos Hill can neither

be effectively substantiated nor totally excluded. Cf. Eder 2001b, 202; Eder 2006, 189–192.

²¹⁷ Is it a coincidence that in the three relevant passages in Pindar (O. 1, 20; 2, 12 f.; 10, 24. 43–50) the Alpheios Ford, Kronos Hill, and the Pelopion (this was the venerable ruin) are mentioned? The sacred-numinous quality ascribed to certain places is normally preserved over long periods of time. On ford and hill cf. Taita 2001, 126 f.; on the role of crossroads, passes and fords in this context see Eder 2019, 39 f.; on Pelops, the Pelopion and the Bronze Age remains, above all the partly still visible tumulus from the middle of the 3rd millennium B.C. (Early Helladic II) in the area of Pelopion see esp. Kyrieleis 2006, 55–61. 79–83; cf. summaries in Rambach 2002; Kyrieleis 2002b; Kyrieleis 2011, 22.

²¹⁸ Such terms are used in Georg Simmel's sociology of space (Simmel 1908, 706–708).

²¹⁹ For this constellation in the Late Bronze / Early Iron Age transitional period, see now generally Eder 2019, 39–42. – On the role of competition among the Greek elite of the Archaic period cf. Stein-Hölkeskamp 2015, 187–189; for the ›socialising force‹ of such rivalry see Hölkeskamp 2017, 118 f., who draws on the insights of Georg Simmel: »Die Normierung des Kampfsportes ist oft eine so rigorose, unpersönliche, beiderseitig mit der Strenge des Ehrenkodex beobachtete, wie Vereinigungen zu Kooperationen sie kaum aufweisen« (Simmel 1908, 304 f.).

²²⁰ According to Kiderlen 2010, the tripod dedications that range from the 11th to the 8th century B.C. illustrate the (supra)regional significance of the sanctuary at Olympia.

in importance in the 8th century in ever-larger dimensions, as the dedication of bronzes demonstrates²²¹.

Using the example of sacred spaces in the Himalayas, Axel Michaels has shown that the particular numinous uniqueness of a place can be combined with »eine[r] Öffnung nach außen und damit Pluralität. [...] Daher kann die *sakrale* Kraft eines Ortes zu Vergrößerungen, Ausdehnungen und komplexen Strukturen führen; zu Göttergruppen, Wallfahrten, Verbindungen von Dörfern, Tempeln oder Häusern. Fokussierung und Öffnung wirken zusammen, wenn es zu Vorstellungen von sakralen Landschaften kommt«²²². A similar opening to the outside seems to have taken place relatively early in Olympia.

In this context it is necessary to mention the role of those who played a significant part in the practical expression of this *imaginaire*. No direct information is available from the area of our concern, but phenomena that are otherwise known from Greek cultural and literary history provide a clear idea. We need to consider those who inhabited this area and worshipped the gods here, during their symposia, but also in the frame of the festivals and athletic competitions²²³. They did so with increasing outside perception paired with the external relations so characteristic of Greek elites. Singers visited their homes and farmsteads, comparable to the Homeric Phemios or Demodokos or the later real-world Bacchylides and Pindar. These, usually mobile in their turn, captured their clients' religious experiences and memories in words, sounds and rhythms, thus shaping and designing them. In view of the growing importance of the cult, the prominence of such heralds certainly grew, and they, too, progressively contributed to the expansion of the network of the sanctuary.

As mentioned before, already at an early stage of its development it had gained more than local importance. However, when the sanctuary and its cult became more and more prominent as a centre of Panhellenic significance from the 8th century onwards, the local people, the people of Pisa, may have reached their limits in organising a rapidly growing and increasingly complex festival. One needs to merely consider the enormous effort of announcing the games by the *theoroi*²²⁴. In the course of the expansion of the »people of the valley« the cult came under the control of the well-organised Eleans. In other words, the moment the cult obtained a particular superregional importance, the dimension of the activities was subjected to the regulations of a contemporary and professional organisation. This is by no means a compulsory, but a hypothetical line of argument which all our observations, concepts, and considerations fit best.

This assumption can be related to what can be said about the flexible and yet effective sociopolitical and administrative structure of the Elean union. The local groups were able

²²¹ Gehrke 2012, 30. For the beginning of the Olympic Games, the currently prevailing argument is based on Mallwitz's observations on the use of the temporary wells in Olympia (see Mallwitz 1988; Mallwitz 1999, 193–199; cf. now also Kyrieleis 2012/2013, 64 f.). The reflections and observations of Christesen 2007 point in the same direction (around 700 B.C., 158 f.). On the other hand, the overall complex of finds and their range make one rather sceptical in this respect, especially since one can imagine accommodation of participants and guests (and thus the existence of ephemeral water supply) in other areas as well. In fact, the Early Archaic wells close to the stadium merely indicate that the games from ca. 700 onwards attracted such a large number of people that provisions for their supply with water had to be made in advance. The prominence of Early Iron Age charioteers among the votive figurines may

suggest that also chariot races were part of the early games (from the start in the 11th century) that added to the attraction of the Olympic festival. – Stein-Hölkeskamp 2015, 206–213 offers an important overview of Olympia and its development under the aspect of an elite lifestyle.

²²² Michaels 2006, 278.

²²³ For the symposium, the role of agonism and the performative aspects in this context, Rossi 1997, 762–767 offers vivid details (and emphasises that Odysseus as guest of the Phaeacians – i.e. in the 8th song of the Odyssey – was honoured by young men through athletic competitions, dances and the performance of epic poetry, 760); on the role of poetry and poets in the symposium see Stein-Hölkeskamp 1989, 112–116 and now also Wecowski 2014, 9 f. 48 n. 108 (with rich bibliographic references).

²²⁴ Cf. Gehrke 2013.

to participate in political life at an appropriate level, in well-respected autonomy, and to express their identity in the framework of mythistorical ideas, such as the eponymous figures Pisos and Pise. Pisos, the son of Perieres, son of Aiolos²²⁵, appears on the chest of Kypselos, i.e. in the 6th century²²⁶, as one of several competitors in a chariot race during the funeral games for Pelias, a first (but ultimately the only) indication for a certain independence of the Pisatans. Pise, on the other hand, another well-known eponymous figure²²⁷, was considered the daughter of Endymion, who played a key role in the genealogy of the Eleans²²⁸. Apparently, such openness in the organisation of the games, which extended well beyond Elis²²⁹, contributed to the fact that this cult was not perceived as a specific (polis, ethnos) cult of Elis, but as a general one – despite the role that Elis played in it.

Against this background, the concept of the *oktapolis* of Pisa, which is attested only later, can also be easily classified. J. Roy has made sufficiently clear that these were not poleis in the literal sense²³⁰. They were, however, some of the small villages and hamlets which formed a characteristic part of the landscape and which, even in 400 B.C., to the Spartans appeared unsuitable as being the organisers of the games. However, one can well imagine that the people in the area felt challenged by this negative assessment (which classified them as *χωρίται*), so that they themselves chose to speak of eight ›poleis‹, created an appropriate past, and finally, taking advantage of a favourable foreign political constellation established their own state, with everything that belonged to it. During a state crisis in Elis, in 364 B.C. things went so far that they eventually hosted the Olympics, which they claimed rightfully belonged to them – admittedly only as a puppet of the Arkadian Federation. Thus, the Pisatan moment of glory was quickly over, when the Arkadians withdrew from the fight for Olympia out of religious respect and the Eleans proceeded to pursue a policy of reconciliation, which also included the Pisatans²³¹.

3.2 Aspects of a sacred-memorial topography: rivers, gods and heroes

It is worthwhile to continue in the chosen direction. The multidimensionality of the space around Olympia emerges under the perspective of an environment that was shaped by historical, so to speak emic ideas, not least by myths²³² that related the sacred and the ritual with the narrative and thus simultaneously attached memories to the landscape, memories usually of a mythical-religious character. This »mythical phenomenon« is characterised by the fact that it »*n'est pas une représentation, mais une véritable présence*«; »*Toute ›apparition‹ (Erscheinung) est ici une incarnation*«²³³. Trees, springs, watercourses are not (just) natural

²²⁵ Paus. 5, 17, 9; 6, 22, 2 (Perieres as son of Aiolos already Hes. Fr. 10 [Merkelbach – West 1967]); according to another version (Sch. Theoc. 4, 29–30 b), a generation later, as son of Aphareus, son of Perieres (Apollod. 3, 10, 3–4). Other versions are later: Phleg. FGrHist 257 Fr. 1 (cf. Sch. Pl. R. 465 d p. 230) mentions Peisos as one of the first founders of the Olympic Games, alongside Pelops and Heracles. According to Giangiulio 2009, 71 f. this version is related to the *παλαιαὶ ἀποδείξεις*, which the Pisatans compiled around 400 B.C. in order to justify their claims to the organisation of the games (cf. Köiv 2013). Oros ›ethnica‹ apud EM 623, 16 f. (more in Giangiulio 2009, 69 n. 30) refers to Pisos as husband of Olympia, who is a daughter of Arkas. This is certainly a reflection of the alliance between Pisa and Arkadia around 364 B.C., cf. Giangiulio 2009, 69 and

esp. 72 f. and, more recently and explicitly, Zingg 2016, 245 f.

²²⁶ This has been more recently met with scepticism by Zingg 2016, 243–245.

²²⁷ Polem. Hist. Fr. 121 = Sch. Pi. O. 1, 28 d; Sch. Theoc. 4, 29–30 b.

²²⁸ Gehrke 2005, 28–32.

²²⁹ Gehrke 2013.

²³⁰ Roy 2002.

²³¹ For the events in the 4th century see esp. Ruggeri 2004, 197; Giangiulio 2009, 75–78; Köiv 2013, 352–355.

²³² Illuminating in this respect Vernant 2007, 1957–1960 (»La mythologie constitue, pour la pensée religieuse des Grecs, un des modes d'expression essentiels«, 1957); so quoted by Kyrieleis 2012/2013, 109.

²³³ Merleau-Ponty 1945, 342 f.

phenomena or emotionally and romantically perceived phenomena, but are independent living beings with numinous power. They can be virtually imagined as gods, demons, spirits, etc.²³⁴ From our etic perspective we have to re-enchant the scholarly disenchanted space in order to advance to an understanding of the landscape as a lifeworld²³⁵. Everything in it, not only the physical, but also the man-made, was »full of gods«²³⁶. The myths and stories in turn lead into this world, indeed forming a kind of royal road toward it²³⁷.

When examining this dimension of the landscape, one engages – as always in the perspective of religious history – with rituals. The attached explanations are usually covered in myths that the social agents themselves have found or passed on. We may therefore speak of a sacred-memorial topography. The sacral bond among these agents is reinforced by the fact that it is embodied in figures and stories that the participants relate to themselves. This orientation to sacral aspects of space has occasionally been the subject of research in the area around Olympia as well²³⁸. The relatively widespread concept of the *lieux de mémoire* has also been applied to Greek sanctuaries²³⁹. However, one must take the implications of mythical interpretation quite seriously. Unlike the modern understanding of memorial sites where museum-based, (historical-)political, ideological or propagandistic, in any case rather secular aspects predominate, we have to consider that in our case the memorial topography is deeply rooted in the religious sphere. In that sense, these places were also an integral part of experienced reality. Upon closer inspection, we are convinced that one can transcend the current state of research. We summarise our first impressions as far as they relate to the area under study. They illustrate how features of the physical geography of the Lower Alpheios Valley evoked mythical stories that were part of the ancient perception of the surrounding landscape, which we study under very different perspectives.

3.2.1 *The Alpheios River and the Seers of Olympia*

Regardless of the specific significance of the aforementioned location of the ford across the Alpheios, this river plays a special ritual and mythical role²⁴⁰. Because of the abundance and quality of its waters²⁴¹, it stood out among the Greek rivers, »the loveliest among the

²³⁴ This also makes possible, for instance, the geoarchaeological-geomythological interpretation of the Acheloos-bull-man myth, see Vött et al. 2017.

²³⁵ Merleau-Ponty 1945, 345: »Comprendre le mythe n'est pas croire au mythe, et si tous les mythes sont vrais, c'est en tant qu'ils peuvent être replacés dans une phénoménologie de l'esprit qui indique leur fonction dans la prise de conscience et fonde finalement leur sens propre sur leur sens pour le philosophe.« – One is tempted to add in our case: for history. Incidentally, this does not mean that, in this understanding, space is purely imaginary. At the same time, it is always also effective in its tangible, physical and to this extent objective reality. Especially the interdependence of existing ambience and interpretation is characteristic (see Merleau-Ponty 1945, 340 f. and see also Michaels 2006, 276–278).

²³⁶ Thal. 11 A 22 [Diels – Kranz 1951], cf. esp. Schlesier 2000, 144. On the aspects of religion and landscape in classical studies cf. recently also the edited volumes of Olshausen – Sauer 2009 and Käppel – Pothou 2015; on Olympia see Eckerman 2013, 13.

²³⁷ »Telling a story is not like weaving a tapestry to

cover up the world, it is rather a way of guiding the attention of listeners or readers into it« (Ingold 1993, 153).

²³⁸ The important works of religious history by L. Weniger remain a significant starting point; recently see esp. Sinn 1981; Sinn 2004, passim; Taita 2001; Taita 2009; Moustaka 2002; Μουστάκα 2009/2010; Kōiv 2013, 338–349, cf. also the overview by Roy 2015b.

²³⁹ Cf. e.g. Haake – Jung 2011.

²⁴⁰ On the Alpheios cf. Wentzel 1894; Palagia 1981; Griffith 2008; Eckerman 2013, 5–13 – Johannes Bernhardt (Mannheim – Karlsruhe) is preparing a study on the river and its mythistorical form. See also Gehrke, forthcoming (a slightly extended and differently focused version of the following observations).

²⁴¹ Pausanias mentions (5, 7, 1) that its waters are »in abundance much [πλήθει πολύ] ... and very sweet [ἡδιστον]«; in Bacchylides (3, 6 f.) it is called (very appropriately capturing its extension and current in one expression) »whirling wide« (εὐρυδίνας) and »tirelessly flowing« (ἀκαμαντορόας); on the quality and importance of the river see also the sources quoted in Taita 2013, 368 n. 110; 371 n. 128.

rivers»²⁴². At the central point of the cult in Olympia, on the ash altar itself, this water had a special meaning: On a fixed day of the year, about the end of March or early April, i.e. in the context of the spring equinox (the 19th Elaphion, sacred to Artemis²⁴³), the seers of the sanctuary mixed the ashes of the sacrificial animals kept in the prytaneion with water of the Alpheios and thus shaped the ash altar. The fact that they were the seers reminds us of the important role of the oracle that was directly attached to this altar and operated through burning (so-called fire oracle). Pausanias, to whom we owe this information, adds that for this reason the Alpheios was considered »of all the rivers the favourite of Olympian Zeus«²⁴⁴.

Over time, the connection between the Alpheios River and the power of divination was reinforced in a very distinctive narrative, as the sixth Olympic Ode of Pindar illustrates. This was composed for Hagesias of Syracuse on the occasion of his victory in the mule-cart race (472 or 468 B.C.)²⁴⁵. He belonged to the Olympic family of seers, the Iamids, who enjoyed particular prominence at the time. Pindar's Ode refers to his progenitor, Iamos, grandson of Poseidon and son of Apollo, who as he reached adolescence, that is as an ephebe, »went down into the middle of the Alpheios« and called on his grandfather Poseidon and his father Apollo at night (57–59). Apollo then brought him to »the steep rock of the lofty hill of Kronion« (64 f.) and gave him »the double treasure of the art of divination [μαντοσύνα]«. He could understand Apollo's unerring voice and in the very moment Herakles founded the games, he commanded him »to establish an oracle on the highest altar of Zeus« (70 f.). Thereafter, the family of the Iamids enjoyed the highest fame (»πολύκλειτον γένος«) among the Greeks.

Here again we meet the connection of the specific place with the competitions, but at the same time, the oracle is also anchored quite concretely in the centre of the sanctuary at the great altar. In ritual as well as in mythical respect, both are seamlessly connected to the Alpheios. A rather indirect, but still clearly recognisable relationship connects the Alpheios to the equally famous seer and healer (both qualities often come together) Melampous²⁴⁶, the son of Amythaon, grandson of Aiolos. The Klytiads, the other renowned family of seers of Elis and Olympia, traced their origins (via Amphiaraios and his son Alkmaion and grandson Klytios) back to Melampous. One could therefore plausibly identify figures in the eastern pediment of the Temple of Zeus with the ancestors of these seer dynasties, Iamos (left) and Klytios (right), as well as the paradigmatic seer Melampous²⁴⁷.

According to mythistory, Melampous (together with his brother Bias) is related to the area of Triphylia and Pisa before moving to Argos²⁴⁸: Near the sanctuary of the Anigriad nymphs at Samikon, Melampous purified the daughters of Proitos – which was thought to explain the smell around the sulphurous springs at the Lagoon of Kaiafa (which is still noticeable today)²⁴⁹. The springs were supposed to help against white rash (ἀλφός), as were

²⁴² D.P. 410.

²⁴³ Paus. 6, 20, 1; it was the »spring month« with the equinoxes, cf. Maddoli – Saladino 1995, 258; Trümpy 1997, 199–201; on that vividly Weniger 1907, 96 f.

²⁴⁴ Paus. 5, 13, 11.

²⁴⁵ On Pi. O. 6, see now Adorjani 2014, esp. 34–37 (on Hagesias, cf. also Luraghi 1997); 53–55 (on the date); 78 f. 125. 233 f. 241 (on divination and the fire oracle); 101. 222 (on the water and the Alpheios).

²⁴⁶ See already Hom. Od. 11, 285–297; 15, 225–255. For more information, also for his family tree, see Maddoli et al. 1999, 304, cf. also Kōiv 2013, 340 with n. 170.

²⁴⁷ Fundamental Simon 1968, 157–165, see now also Kyrieleis 2012/2013, 77, who proposes for the

(right) bearded seer, whom Simon had identified as Melampous' father Amythaon, the eponyms of Klytios instead, which seems likely because of the parallel to Iamos. The so-called adolescent seer (figure E) was identified as Melampous by Simon 1968, 161 f. (affirmative now also Kyrieleis 2012/2013, 79), who points his finger at his eponymous foot.

²⁴⁸ Str. 8, 6, 10.

²⁴⁹ Str. 8, 3, 19; Paus. 5, 5, 10.

²⁵⁰ Str. 8, 3, 19. The water of the Alpheios is also said to have been effective against epilepsy (Sch. Hom. Od. 3, 489). On the connection of the Alpheios with the root »white« see Pilz 2020, 38 with further references (n. 274). – Another explanation goes back to Günther Neumann, who thought of an -es root

the waters of the Alpheios thus explaining the name of the river²⁵⁰. Melampous was said to have become the best seer after his encounter with Apollo at the Alpheios²⁵¹.

The healing powers of the sulphurous waters in the sanctuary of the Anigriad nymphs remind us of a similar spring that was situated near the Pisatan village of Herakleia. This was the place of the Ionidian nymphs, who were also connected to the Alpheios. They were said to have offered violet wreaths to their namesake Ion, after he had taken a bath in the Alpheios. Perhaps this is the reason why the river received the learned name Iacon in Callimachus' Hymn to Zeus (22)²⁵². And thus, one need not wonder at a folk custom that is documented at least for later times: During the Olympics, gifts were thrown into the river, who presented them to his beloved Arethusa as a bridal gift²⁵³.

3.2.2 *Alpheios as personified deity*

Alpheios, associated with the powers of healing and divination, was at the same time an important deity, a son of Okeanos and Thetys, to whom already Nestor had sacrificed a bull²⁵⁴. The phenomenon of nature or in our case landscape thus met the numinous-divine. For Iamos who had grown up on its riverbank, the Alpheios was evidently at the same time a *kourotrophos*, i.e. a deity protecting and promoting children²⁵⁵. Such divine beings remained part of nature, but could also be imagined as deities and appear as such, according to Greek concepts, in anthropomorphic guise, and thus as social agents such as for example mothers and fathers²⁵⁶. This is specific to the mythical-religious interpretation of the landscape. The divine could not only be experienced as a natural force, but also take shape as a person and therefore as a figure in a narrative and participant in an event. It could therefore also be imagined quite concretely as an actor in the landscape. It was a physical part of it, but also a part of its mythistory and at the same time a religious figure worshipped in a cult²⁵⁷.

and an adjective ἀλφειός derived from ἀλφῆσιος. That would suggest the meaning ›profit‹ (the verb ἀλφάνω means ›yield‹), Alpheios would be thus the ›profitable‹ (Weiß 1984, 227 n. 901). Furthermore, the root ἀλφι- in the sense of barley flour has also been considered (and the month Ἀλφιῶνιος dated accordingly, see below with n. 276) (Minon 2007, vol. 1, 179); but all of this remains uncertain.

²⁵¹ Apollod. 1, 9, 11.

²⁵² On Ion, see Nic. Fr. 74 [Gow – Scholfield 1953] (apud Ath. 15, 683 a. b). For the connection with Iacon (as Arkadian river also in D.P. 416 [GGM II 128]) cf. the conjecture of K. Müller ad loc. This is supported by a literarily suggested etymology of Iamos, who according to Pi. O. 6, 89–93 was exposed among violets after his birth.

²⁵³ Ach. Tat. 1, 18, 2; see also Nilsson 1906, 425. On the mythical explanation see below.

²⁵⁴ Hes. Th. 338; Hom. Il. 11, 728. In Euripides' ›Iphigenia in Aulis‹, Nestor's ships have at the stern a sign (›σημα‹) with the illustration of the ›neighbouring‹ Alpheios with bull's feet (273–276).

²⁵⁵ Weiß 1984, 134; Griffith 2008, 5, this is further supported by the sacrifice of hair of Oinomaos' son Leukippos, see below; for this aspect see also Pilz 2020, 141 with further references.

²⁵⁶ For the Alpheios as ancestor see Weiß 1984, 139 f.

²⁵⁷ For this polyvalent character, see Weiß 1984, 14 f.

with reference to Nilsson 1955, 237, who speaks of the ›Verbindung der Gottheit mit ihrem Natursubstrat‹ (cf. also now Saloway 2017). In Ovid's ›Metamorphoses‹ (5, 586–609), this forms the point of an erotically charged story: suffering in the heat, the nymph Arethusa gets rid of her clothes on the river banks of the Alpheios and bathes naked in the water. This arouses his sexual desire, he speaks to her in the murmur of the water. She flees, and he then pursues her in human form through Arkadia and Elis. – Alpheios was revered as a god in various places besides Olympia: ›eine Art Trauerfest‹ for Alpheios took place in Elis (Wentzel 1894, 1632), during which the Eleans, in tears, symbolically escorted the Alpheios on its journey (Him. 12, 7 Colonna, this is about the pursuit of Artemis / Arethusa, see below). Alpheios also had a cult in Heraia (Plb. 4, 77, 5; 4, 78, 2; St. Byz. s. v. Heraia); and the image of the god represented the Alpheios in human form (Ael. VH 2, 33). A recently published Archaic cult calendar from Arkadia (we owe the reference to Oliver Pilz) mentions animal sacrifices (ram, piglet) for the Alpheios (Carbon – Clackson 2016, 122, lines 1. 4. 12; 125. 134). In Asea, wreaths were apparently dedicated to the Alpheios (Str. 6, 2, 9). More on this (especially with reference to a dedication to Alpheios in a spring of the Sarandopotamos in Tegea) in Pilz 2020, 141.

Accordingly, the east pediment of the Temple of Zeus of Olympia features the personification of the Alpheios. There he appears on the left side, clearly marked by his position in the south²⁵⁸. The artistic execution also emphasised its importance: »Der breite, durch die Ebene strömende Alpheios ist durch eine Gestalt charakterisiert, die ruhig daliegt, ihre ganze Körperbreite dem Betrachter darbietet und ihren rechten Arm entspannt auf der Hüfte ruhen lässt. Der Kopf ist bequem auf die Hand gestützt, die ganze Gestalt strahlt Gelassenheit und ruhige Fülle aus.«²⁵⁹ In general, the Alpheios is associated with Oinomaos and the chariot race. His son Leukippos allegedly did not shave his hair in honour of the god²⁶⁰. On a picture, which survives in the description of the sophist Philostratus²⁶¹, Alpheios hands Pelops the olive wreath, the prize for the winner at Olympic Games. Accordingly, Alpheios appears on Roman sarcophagi together with Pelops²⁶².

3.2.3 *Alpheios and Artemis: mythical stories of the lower Alpheios Valley and beyond*

In addition to the aforementioned ritual acts, Alpheios the god was at the centre of very specific stories, which in turn related to certain ritual acts and cult sites. They do not always testify to classic ›serenity‹. For the region around Olympia his love for Artemis appears particularly characteristic: Alpheios fell in love with the virgin goddess, according to Pausanias²⁶³, but he could neither convince her by the power of persuasion (»πειθῶ«) nor by wooing her to marry him and therefore tried to rape her. Thus he went to Letrinoi, where the goddess celebrated a nocturnal feast (»παννυχίς«) together with the nymphs of her entourage. However, Artemis had already entertained suspicion and therefore smeared her own face and the faces of her companions with clay, so that Alpheios withdrew again without having achieved anything. The Letrinians therefore called the goddess Artemis Alpheiaia²⁶⁴.

Here we have an *aition* for the temple of Artemis Alpheiaia in Letrinoi and a nocturnal cult practised there by unmarried women, as well as a very strong indication of a close connection of the aforementioned deities Artemis and Alpheios. In addition to Zeus, his mother and his wife in Olympia itself as well as the important river god, Artemis was a dominant deity throughout the region west and south of Olympia, very often associated with Aphrodite and the nymphs. Numerous groves and sanctuaries in the fertile and water-rich country were dedicated to them²⁶⁵. This included a grove of Artemis Alpheionia or Alpheiousa

²⁵⁸ Paus. 5, 10, 7 with Weiß 1984, 126–141; Kyrieleis 2012/2013, 57. 63 (with further references). Paus. 5, 24, 7 refers to a dedication of a statue in Olympia by the Cherronesian Knidians representing Zeus flanked by Pelops and Alpheios, cf. Kahn 1970, 202; Kyrieleis 2012/2013, 66. Ael. VH 2, 33 apparently also refers to this representation of Alpheios.

²⁵⁹ Kyrieleis 2012/2013, 63: »The wide Alpheios, flowing through the plain, is characterised by a figure lying quietly, presenting his full body width to the observer and letting his right arm rest relaxed on his hip. The head is comfortably supported by the hand, the whole figure radiates serenity and calm fullness« (own translation) – For the Alpheios and the Kladeos on Elean coins of the Hadrianic period see Weiß 1984, 131 f.

²⁶⁰ Paus. 8, 20, 2 f.

²⁶¹ Philostr. Im. 1, 17, 4.

²⁶² Palagia 1981, 577 no. 10–12, see also Weiß 1984, 135 and for the connection with Pelops (in Pindar) see Griffith 2008, 1 f.

²⁶³ Paus. 6, 22, 8–10.

²⁶⁴ According to Sch. Pi. N. 1, 3 and Sch. Pi. P. 2, 12 the epithet was Alpheioa or generally Potamia. To Curtius 1852, 73 the story with the mud reflects episodes of flooding caused by the Alpheios. – For the *παννυχίς* see Weniger 1907, 105; he considers a dance with the re-enactment of the attack of the Alpheios and his disappearance in the sea, with reference to Luc. Salt. 45, according to whom this was a particularly good dancing motif, which is easy to imagine.

²⁶⁵ Str. 8, 3, 12; Sinn 2004, 87–89; Taita 2013, 383, cf. also the references in Maddoli et al. 1999, 364; Moustaka 2002, 304; on the general connection of Artemis with river gods see Weiß 1984, 117; with further references 219 n. 769. On the connection between topography and the cult of Artemis see Cole 2004, 175–197 in particular: Although she does not elaborate on the cultic and narrative connection between Artemis and Alpheios, the elements she considers characteristic (meaning of the location in dangerous transitional zones, especially near the sea, the importance of water in general, inside and outside, centre and periphery, 184 f. 191–197) can be observed here particularly well.

at the mouth of the Alpheios. This sanctuary, which may be identified with that of Artemis Alpheiaia in Letrinoi, housed three famous images of the Corinthians Kleanthes and Aregon depicting the conquest of Troy, the birth of Athena, and Artemis on a griffin. They apparently belonged to the 7th century B.C.²⁶⁶.

An annual festival for Artemis Alpheionia / Alpheiousa took place in Olympia itself²⁶⁷. In addition, not only the Alpheios had an altar in Olympia, but there was also a common altar of Alpheios and Artemis, which could relate to the aforementioned story in Letrinoi and was included in the monthly sacrifices of the Eleans²⁶⁸. One can clearly see how the two deities, who were so important for the whole region, related to each other – even if the goddess had to keep her virgin status. One remembers the similarly imperfect connection between Hephaestus and Athena on the Athenian acropolis. Just as these two deities connected to τέχνη and handicraft appeared side by side, those here stood for nature, a wild and dangerous nature. The cult was designed to soothe and appease it. At the same time, here too one may understand how the sacred shaping of the landscape and its attachment to mythical-religious figures can influence social cohesion and interaction²⁶⁹.

This applies not only to the links between the centre of Olympia and the surrounding micro-region, i.e. the lower reaches of the Alpheios with its estuary, but also to the special connection with the comparatively important place of Letrinoi, which characteristically lay on the ›Sacred Road‹. The oldest evidence consists in a dedication »of the Letrinians« (Λεδρίνῳν / Ledrínōn) to the Olympian Zeus, a bronze wine strainer, which is dated to the time between 525 and 475 B.C.²⁷⁰. The place, which Pausanias calls »πόλισμα« and of which only »few buildings« existed apart from the aforementioned temple of Artemis, certainly had its own tradition. It was considered the foundation of Letreus, son of Pelops, and according to Lykophron (53 f. with scholion) the bones of Pelops were kept there (he speaks of Letrina)²⁷¹. Letrinoi was friends with Elis »from the beginning«²⁷². During the Spartan-Elean war, the place split from the Eleans and remained independent for a time; the events around 402–400 B.C. indicate that Letrinoi belonged to the Elean allies²⁷³.

²⁶⁶ Str. 8, 3, 12; Ath. 8, 346 b. c (with the bizarre clue that in the illustration of the birth of Athena Poseidon presents a tuna to Zeus ›in labour‹); on the dating of these works of art Taita 2013, 378 (with further references, on further cultic aspects with regard to Poseidon and Artemis Taita 2013, 383–387); for the sanctuary and cult see also Weniger 1907, 103–108 (with partly speculative thoughts on the connection with the cult of Dionysus). Walbank 1957, 525 plausibly connects this sanctuary with the Artemision mentioned by Plb. 4, 73, 4. Letrinoi is most likely to be located in the area of modern Pyrgos or Ag. Ioannis (see 2.3.3.1), and its territory should have reached, adjacent to Epitalion, to the mouth of the Alpheios. Therefore, one can consider the identification of the temple of Alpheiaia (Paus. 6, 22, 8–10) with the sanctuary or grove of Artemis Alpheionia or Alpheiousa (see Maddoli et al. 1999, 374 and Ruggeri 2004, 175 f.), if one relates Paus. 6, 22, 8 to the territory of Letrinoi (Partsch 1897, 6 argues against it, and also very decidedly Taita 2013, 379 f.). The different distance values are also problematic. Paus. 6, 22, 8 indicates 120 stades from Olympia to Letrinoi, Str. 8, 3, 12 from the Alpheios estuary to Olympia 80 stades. However, Taita 2013, 360 rejects the last statement with reference to the important observations of Partsch 1897, 6. 13 f. on ancient remains on

the terrain ridge Katarachi southwest of Pyrgos (cf. also Sperling 1942, 85 no. 33 and see above 2.3.3.1).

²⁶⁷ Str. 8, 3, 12.

²⁶⁸ Herodot. FGrHist 31 Fr. 34 (Sch. Pi. O. 5, 10); Paus. 5, 14, 6 (thereto Maddoli – Saladino 1995, 213 with Weniger 1907, 98–101. 108 f.); Sch. Pi. N. 1, 3, cf. also Maddoli et al. 1999, 376; Ruggeri 2004, 175 f.; Sinn 2004, 175 f., who incidentally considers an annual procession between the Artemis Alpheiaia temple and Olympia (Sinn 1981, 41). At the mouth of the Kladeos in 1975 the mask of a river god was found, which one could associate with the Alpheios cult (Μουστάκα 2009/2010, cf. Pilz 2020, 139 f.).

²⁶⁹ On the connection between geography and politics in the artistic representation of river deities cf. Weiß 1984, 21–25, for another example (Strymon) see Tiverios 1991, 133–136. On the relationship between river and territory in general, see also Cole 2004, 29.

²⁷⁰ NIO 207, cf. Taita 2007, 47.

²⁷¹ According to Lyc. 158 f. (with Sch.) Zeus sent Pelops to the area of the Letrinians, and nearby the chariot race with Oinomaos took place cf. Taita 2007, 139; generally for the young Pelops see Pache 2004, 84–94).

²⁷² Paus. 6, 22, 10.

²⁷³ X. HG 3, 2, 25; 3, 2, 30; 4, 2, 16; 6, 5, 2; cf. Gschnitzer 1958, 12–14; Maddoli et al. 1999, 375.

This case illustrates very well how this community connected not only to Olympia, but also related to Elis or was part of the connection between Elis and Olympia. In addition to the course of the ›Sacred Road‹, Artemis Alpheiaia again shows this particularly well: The Eleans had a cult for Artemis Elaphiaia, which was so important to them that an Elean month was named (Elaphion) after the epithet of the goddess²⁷⁴. They now associated this cult and its activities with that of Artemis Alpheiaia, so that it was also called Elaphiaia²⁷⁵. Both rituals thus merged, signifying a high degree of cultic, but also socio-political integration. Significantly, however, the Elean calendar also contained a month named Alphiōios, which refers to a corresponding cult²⁷⁶. The entanglement was thus reciprocal, and at this point one may comprehend very well the types of mechanisms with which the Eleans internally held together their complex union²⁷⁷. One is reminded of Axel Michaels' comments quoted above (p. 165) on the links in sacred landscapes. At the same time, it should be noted that such connections were reinforced again and again, especially through ritual processions²⁷⁸.

However, the links reached even further, to the island of Sicily and to Syracuse, and its main spring on the Ortygia, the Arethusa. At the beginning of Pindar's 1st Nemean Ode for Chromios of Syracuse, close follower and brother-in-law of Hieron of Syracuse, victor »with the horses«, 476 B.C.?) Ortygia is called a »venerable resting place« (ἄμπνευμα σεμνόν) of the Alpheios and »bed« (δέμνιον) of Artemis²⁷⁹, at the beginning of the 2nd Pythian Ode on Hieron himself, winner in the chariot race, 470/469 B.C. »seat« (ἔδος) of Artemis Potamia²⁸⁰. Apparently, in the centre of ancient Syracuse, and in relation with the important Arethusa spring, there was a temple of Artemis²⁸¹. Moreover, in the same place we also find the Alpheios!

The scholia to the passages in Pindar offer the mythistorical explanation²⁸², where the love story continues to develop: Alpheios has not unsuccessfully absconded in this version, but has pursued Artemis through the sea²⁸³, and the hunt ends only in Ortygia. Just at this point lies the spring of Arethusa. She is also imagined as a hunter and worshipper of Artemis²⁸⁴ and apparently a surrogate of Artemis. At the same time, the waters of the Alpheios supplied the spring²⁸⁵ – something like a symbolic union of the lovers²⁸⁶.

²⁷⁴ Paus. 6, 20, 1; cf. above n. 243. By the way, besides the Alpheiaia and the Artemis Daphnia she also had an annual festival in Olympia, Str. 8, 3, 12.

²⁷⁵ Paus. 6, 22, 10.

²⁷⁶ Weniger 1907, 108; Trümpy 1997, 199–201; Ruggeri 2004, 174 f. with n. 556; Pilz 2020, 139, who considers the related cult to be »undoubtedly old«. Could it be related to the aforementioned mourning ritual?

²⁷⁷ A similar example may be Eurykyda, who was worshipped in a grove near Samikon in Triphylia (Str. 8, 3, 19), i.e. in the Elean territory of the *symmachoi*: Eurykyda was on the one hand imagined as the lover of Poseidon, who was the dominant deity at Samikon (Str. 8, 3, 13). At the same time, however, she was also considered to be the daughter of Endymion (Paus. 5, 1, 4), who already relatively early occupied a central position in Elean mythology (see Gehrke 2005, 28 f. with further references, cf. also Köiv 2013, 338 with n. 141).

²⁷⁸ Cf. above 1.2 and see generally Nilsson 1951; Graf 1995; Graf 1996.

²⁷⁹ Pi. N. 1, 1–3.

²⁸⁰ Pi. P. 2, 7.

²⁸¹ Likewise Sch. Pi. P. 2, 12; cf. also Diod. 5.3.5, where Artemis receives Ortygia as her share of Sicily, and for her sake the nymphs there create a spring. See also Ov. met. 5, 640 f.; on the 1st Nemean in this context see also Griffith 2008, 3 f.; Morgan 2015, 384 f. For the important temple of Artemis on Ortygia (which one could connect with these passages), see Cic. Verr. 2, 2, 118 and cf. the overview in Mertens 2006, 244–247, with further references. On Pindar cf. Eckerman 2013, 8–13.

²⁸² Sch. Pi. N. 1, 3; P. 2, 12.

²⁸³ The oldest version of the escape of Artemis from Alpheios appears in Telesilla of Argos (early 5th century), Fr. 1 Page.

²⁸⁴ Ov. met. 5, 577–579; Paus. 5, 7, 2.

²⁸⁵ Paus. 5, 7, 3; Sch. Pi. P. 2, 12. For the Syracusan tetradrachms of Gelon illustrating a river god, which is most likely to be identified with Alpheios, see Morgan 2015, 62 f. This also serves as further evidence for the old age of the story (see also Griffith 2008, 3–6, and see below on Ibycus).

²⁸⁶ The very popular love story is then developed further, but related to Alpheios and Arethusa,

The story of the Alpheios, who crosses the sea and emerges in Syracuse, was widely known. The earliest reference can be found in Ibycus, i.e. already in the 6th century B.C., who mentioned a bowl originating from Olympia and appearing in the Arethusa spring, which proved that the water really was that of the Alpheios²⁸⁷. Strabo²⁸⁸, who quotes the beginning of the first Nemean and refers above all to Timaeus²⁸⁹, rejects the story as ψεῦδος. However, it was powerful²⁹⁰. It is obvious that it was not fictitiously created without reason. Rather, it dresses a particular issue in a mantle of sacred relations that are explained narratively.

Nautical experience may be behind the idea that one can reach Syracuse from the mouth of the Alpheios by a direct route across the sea²⁹¹. This experience must have contributed to the already abstract perception of space which transcends the immediately visual and perceptible. Such a process takes place in the artistic-intellectual milieu, where social and religious experiences were exchanged and negotiated in the interplay between the poets and their audience, especially the elites.

That is why it still seems very plausible – despite some scepticism – that there was a direct relationship between Olympia, Elis and Syracuse²⁹². The oracle for Archias, quoted by Pausanias²⁹³, is doubtful in respect of its authenticity²⁹⁴. But the reference to a Syracusan Iamid, Hagesandros, in Pindar's 6th Olympic Ode (see above), could nevertheless be interpreted as an indication that there was a special relationship between Elis and Olympia on the one hand and Syracuse on the other²⁹⁵, possibly in connection with the founding of the colony, and that this was preserved in ritual-cultic form and mythical narrative. After all, Hagesandros is almost presented by Pindar as »co-founder [συνουκιστήρ] of the famous Syracuse«²⁹⁶.

in a story of metamorphosis. In Paus. 5, 7, 2 f. Alpheios and Arethusa are hunters; she did not want to marry him and escaped from him to the island of Ortygia. Eventually she turned into a spring, the Alpheios into a river. This is also suggested by a Delphic foundation oracle for Archias of Corinth, which mentions Ortygia, »where the mouth of the Alpheios pours out and mingles with the springs of the beautifully flowing Arethusa«. According to Ov. met. 5, 487–501, 572–641 (see above) Alpheios was already a river when the nymph and huntress Arethusa bathed naked in his waters, which aroused his lust and led to the long flight of Arethusa from him to Ortygia, where eventually the »mingling« took place. Apparently even later, the story becomes »civilised«: Alpheios becomes a decent bridegroom and approaches Arethusa with a »wreath from Olympia« (Stat. silv. 1, 2, 208; Nonn. D. 13, 344; 37, 170; Anth. Pal. 9, 362, 1; Apoll. Sid., Carmina 9, 101–105) or a κότινος (Mosch. 7, 2), and he brings her leaves, flowers and »holy dust« as bridal gifts (Mosch. 7, 3, Nonn. D. 37, 173); this is evidently the background for the throwing of gifts into the Alpheios (Ach. Tat. 1, 18, 2); for the other versions see also Wentzel 1894, 1635.

²⁸⁷ Ibyc. Fr. 323 = Sch. Theoc. 1, 117 (p. 67 f. Wendel), with Str. 6, 2, 4; see also Braswell 1992, 32, 34; Morgan 2015, 89 f.; Gehrke 2019; Pilz 2020, 140.

²⁸⁸ Str. 6, 2, 4.

²⁸⁹ Tim. FGrHist 566 Fr. 41. Jacoby has mentioned additional versions in his commentary.

²⁹⁰ Maddoli – Saladino 1995, 212 f. offer an excellent overview of the story and its implications (also with reference to comparable »rivers below the sea«); for the different versions on the whole see Wentzel 1894, 1634.

²⁹¹ See now Bilić 2009, who assumes concrete nautical practices behind the story. Stanhope 1824, 55 considered the idea that the whitish colouring of the river water was visible for a while in calm seas and contributed to the formation of these stories. – In this context it may be taken into account that according to ancient geographical conceptions the »Sicilian Sea« encompassed a large part of the Peloponnese (Str. 2, 5, 20; D.P. 85, 100–102; 85, 401–402).

²⁹² See the references and considerations in Maddoli – Saladino 1995, 213 and cf. Griffith 2008, 3–6; Morgan 2015, 89 f.; for a more sceptical approach, see Luraghi 1997.

²⁹³ Paus. 5, 7, 3, cf. above.

²⁹⁴ Strabo also has other versions (6, 2, 4).

²⁹⁵ Cf. Weniger 1915, 68 f.; Hönle 1968, 68–76; Griffith 2008, 4; Kyrieleis 2012/2013, 80 f.; Gehrke 2013, 48 with n. 51. – Two fragments of kerykeia from Olympia in the Museum of Arts and Crafts in Hamburg dated to the 2nd quarter of the 5th century are epigraphically evident as public property of the Syracusans (Hornbostel – Hornbostel 1988). They may also reflect this special relationship, but may of course be explained differently.

²⁹⁶ Pi. O. 6, 8 f. Cf. also Sch. Pi. O. 6, 8 a.

This indicates a further dimension of space around Olympia, which already leads beyond the closer (Pisa) and further (Elis) surroundings, into the Panhellenic orbit²⁹⁷. In other words, the connection between Olympia at the Alpheios to its mouth and Letrinoi, which we have already mentioned, extends with the further flow of the Alpheios (the departure, which Elean ritual commemorates) far into the distance. The mouth of the Alpheios, where there was, after all, a harbour (see above 1.2), becomes a symbolic ›gateway to the world‹.

3.2.4 *The Kladeos and Enipeus Rivers*

In the context of our region the two tributaries of the Alpheios, the Kladeos and the Enipeus, also deserve to be mentioned. At the northern end of the eastern pediment of the Temple of Zeus, the Kladeos is clearly related to the Alpheios (on the south side), and its representation stresses the sometimes torrential and ›unpredictable‹ character of the river »durch die schraubenförmige Bewegung des Körpers, die aktive und aufmerksame Haltung des Kopfes und die energisch vorwärtsdrängende Bewegung der Arme«²⁹⁸. In this context, Pausanias mentions that the Eleans also worshipped the Kladeos most among the river gods after the Alpheios²⁹⁹. Near the Heraion he had an altar, incidentally also close to an altar of Artemis³⁰⁰. Immediately west of the Kladeos, opposite the gymnasium, the alleged grave of Oinomaos was located, and above (ὑπέρ) the remains of a wall were considered his horse stables³⁰¹.

Even more interesting is the Enipeus, which in turn leads us beyond the purely local context. In addition to the aforementioned overseas connection to Syracuse, the mythical figures, previously mentioned in connection with Alpheios and the Elean-Olympian seers, show clear links within the Peloponnese³⁰²: Pitane, the grandmother of Iamos, a daughter of Eurotas, points to Sparta. Her daughter Euadne, Iamos' mother, grows up with Aipyros, a leading Arkadian mythical figure³⁰³. The seer Melampous finally moves with his brother Bias to Argos, where they gain a share in ruling (see above). At the same time, heroic figures indicate connections with Messenia, but also beyond the Peloponnese, to Boeotia and Thessaly, the latter via Amythaon, son of Kretheus and grandson of Aiolos³⁰⁴.

This Thessalian connection is of great significance for Elis and Olympia in general, as a variety of quite different elements illustrate, above all place names and important mythical narratives. The battle of the Lapiths and Centaurs in the west pediment of the Temple

²⁹⁷ Another track leads to Kroton: The Iamid Kallias had served here first the Sybarites, then the Krotoniates, and his descendants still had possessions in Croton at the time of Herodotus (Hdt. 5, 44 f., cf. Kyrieleis 2012/2013, 81 n. 70 with further references).

²⁹⁸ Kyrieleis 2012/2013, 63. Own translation: »through the helical movement of the body, the active and attentive posture of the head and the energetic forward pushing movement of the arms«.

²⁹⁹ Paus. 5, 10, 7.

³⁰⁰ Paus. 5, 15, 7.

³⁰¹ Paus. 6, 2, 3; the remains have been identified with older finds at Drouva (where earlier travellers had already reported remains, see e.g. Dodwell 1819, 336; for the trenches of N. Yalouris, which are said to have contained much Mycenaean pottery, see Herrmann 1987, 432, cf. Maddoli et al. 1999, 355), but this is purely hypothetical. Whether Oinomaos had a

cult connected to his tomb is a matter of conjecture (loc. cit.). His grave may well have looked like the Pelopion (loc. cit.).

³⁰² Cf. also Kyrieleis 2012/2013, 81.

³⁰³ Pi. O. 6, 46–61. Aipyros was the son of Elatos and grandson of Arkas, ruler of Arkadia (see esp. Paus. 8, 4, 16 f.).

³⁰⁴ Rhian. FGrHist 265 Fr. 11 (= St. Byz. s. v. Amythaonia): »The Amythaonia was a part (μοῖρα) of Elis, named after Amythaon, the son of Kretheus«; Hom. Od. 11, 259 (Amythaon was a son of Tyro, daughter of Salmoneus); Diod. 4, 68, 4; 4, 68, 6 (from Aglaia he had the sons Melampous and Bias). He is to be found (in addition to his sons) also in Pylos, Triphylia and the Pisatis (Str. 8, 6, 10, cf. 8, 3, 19 and Paus. 5, 5, 10) and is also considered one of the founders of the Olympic Games (Paus. 5, 8, 2); he is related to the strongly Elean Endymion, who was

of Zeus expresses this in an emblematic manner³⁰⁵. There are the Lapiths in Thessaly and a Lapithos mountain in Triphylia, and Centaurs live in Thessaly as well as on the plateau of Pholoe in Elis (see above 1.3), and much more³⁰⁶. These include the river names, the important Peneios, main river in Thessaly and in the ›hollow Elis‹, but also the Enipeus, which we meet in Thessaly and near Olympia, as a tributary of the Alpheios.

A special love story is also attached to him and features time-honoured mythical figures as protagonists. Already Homer testifies to its essential ingredients. When Odysseus comes into the underworld and shades of women cluster around him, he meets as ›the first‹ Tyro, ›offspring‹ (ἐκγονος) of Salmoneus and wife of Kretheus, son of Aiolos³⁰⁷. She loved the Enipeus, by far the most beautiful among the rivers, whom she visited often. Poseidon, who desired her, therefore took his shape, slept with her and then told her that she would give birth to two sons. So she gave birth to Pelias, who was at home in ›wide Iolkos‹, and Neleus, who lived in ›sandy Pylos‹³⁰⁸. She then had three other sons with Kretheus, namely Aison, Pheres and the ›horse-fighter‹ Amythaon.

The story spread early, also in the context of the dramatic demise of her father Salmoneus, a famous evildoer, who had challenged Zeus and was plunged by him together with his house into Tartarus, except for Tyro, who loved the gods³⁰⁹. The question that interests us in the first place is the localisation of this story in space. Which Enipeus River is referred to? In the oldest texts, in Homer and Hesiod or the Ehoiai, this is not specified. Because of the importance of the two rivers – the Thessalian one is decidedly larger and particularly characteristic for its area³¹⁰ – but also because of the role of the descendants of Aiolos in the story, their connections with Thessaly³¹¹ and the proximity to Iolkos, one has to think of Thessaly.

However, there are versions according to which Tyro's father, Salmoneus, moved from Thessaly to Elis and founded the city of Salmone next to or at (παρά with accusative) the Alpheios³¹². According to Strabo the place Salmone even lies at the eponymous source of the Enipeus and is now called Barnichios³¹³. For the fact that Salmoneus had lived there, Strabo refers to the ›Aiolos‹ of Euripides (Fr. 14): Consequently, in Ephorus he is a king of the Epeians and Pisatans³¹⁴. As a result, the Enipeus, with whom Tyro fell in love, is the Elean-Pisatan one. It must, however, be doubted that this localisation of Salmoneus is original³¹⁵. Apart from the aforementioned arguments for an original settlement in Thessaly, the par-

his cousin (Paus. 5, 8, 2, for Endymion's stemma see Gehrke 2005, 30 with n. 41, and Endymion's tomb was located in the stadium of Olympia near the starting-mark, where he enjoyed cultic worship, Paus. 5, 1, 5; 6, 20, 9 with Taita 2000, 183 f.); see also Kōiv 2013, 339–341 and see below.

³⁰⁵ See now esp. Kyrieleis 2012/2013, 94–108.

³⁰⁶ See esp. Yalouris 1996, 17 f.; Heiden 2003; Gehrke 2005, 40 f. n. 77; Simon 2006; Kyrieleis 2012/2013, 96 f. – It remains to be considered how these massive (and also wide-ranging) similarities can be historically explained, see below.

³⁰⁷ Hom. Od. 11, 235–237.

³⁰⁸ Hom. Od. 11, 238–259.

³⁰⁹ Hes. Fr. 10 [Merkelbach – West 1967] (Sch. Pi. P.4, 235), esp. 30 (POxy. 2481 Fr. 1; 2484 Fr. 2; 2485 Fr. 1 coll. I Lobel) (agrees with Homer, cf. also Apollod. 1, 9, 7; 1, 9, 10; Diod. 4, 68, 1–4; Str. 8, 3, 32; further information in Wagner 1905). Salmoneus see Kōiv 2013, 338 f., cf. also Simon 1994. A satyr play of Sophocles was about him (TGF IV Fr. 537–541 [Radt

1999]), apart from two tragedies titled ›Tyro‹ (TGF IV p. 463–472 [Radt 1999]).

³¹⁰ It has its source in several headstreams in the Othrys Mountains, then flows through the western Thessalian plain and meets the Peneios somewhere between Triikka and Larisa (Philippson 1905).

³¹¹ According to Apollod. 1, 7, 3 Aiolos, the progenitor, is located in Thessaly; cf. Kōiv 2013, 339.

³¹² Apollod. 1, 7, 3 and Diod. 4, 68, 1. However, according to Apollodorus it was destroyed in the course of the punishment of Salmoneus. How does one explain its continued existence?

³¹³ Str. 8, 3, 32. It is commonly identified with the modern Lestenitsa River, mainly because of its importance. However, this creates topographical difficulties, see above 2.3.2.2. – The passage in Strabo probably goes back to Apollodorus, cf. Meyer 1950, 1739–1741.

³¹⁴ FGrHist 70 Fr. 115.

³¹⁵ Most recently again Kōiv 2013, 339 n. 156 with further bibliography.

tially contradictory line of the story in the later sources also argues against it: Both in Apollodorus and Diodorus Salmoneus actually comes from Thessaly, from where he moved to Elis. Why should one locate him in Thessaly in the first place, if he originally belonged to the Alpheios region?

These authors also locate the story of his grandchildren Pelias and Neleus in Thessaly, as Neleus, after a conflict with his brother, who was based in Thessalian Iolkos, was forced to flee to Messenia, where he founded Pylos. Incidentally, he is said to have taken along his half-brother Amythaon and his sons Melampous and Bias, as well as other people from Achaea Phthiotis and Aioliens³¹⁶. How do the children of Tyro come from Elis to Thessaly? The stories thus always make sense in Thessaly, but in their Elean surroundings they always refer to Thessaly. The movement regularly goes from Thessaly to Elis. All this argues in favour of the idea that the whole story was later relocated to the Alpheios area – certainly before the »Aiolos« of Euripides³¹⁷. Apparently, the similarity of the names of the village Salmone (with Salmoneus) and the Enipeus³¹⁸ played a relevant role. What is decisive, however, is that now the place, the area and the river gained a special nimbus through these mythistorical reminiscences and through the divine reference, and that relations with Thessaly, which was perceived in a certain way as a homeland, received a special profile. In any case, the status of the area around Salmone was thus greatly enhanced.

The question of what lies behind this transfer is unclear. If we choose to attempt to answer this question, and assume that these Thessalian-Elean relations reflect the migration of bearers of Thessalian-Aeolian traditions, or think of a reflection of certain relationships that were thus clad in a specific mantle, we could make sense of this relationship by taking into account the Pisatans. The inhabitants of the surroundings of Olympia (Pisa, the Pisatans) tended to refer to Salmoneus as their own king, who was of course a particularly suspicious figure! He was at least able to lend more prominence to one of their most important rivers. Of course, one might equally consider the larger community, Elis and the Eleans. For example, Amythaon, who plays a minor role in the stories outlined here, is in any case a »migrant« and as such neither specifically associated with Pisa or Elis. He belongs to the Pisatis or Triphylia, but is also related to the rather Elean Endymion.

In summarising the Thessalian references in a general perspective, we offer another explanation which, however, has to remain highly hypothetical. We present it here as a first suggestion, since the whole Thessalian-Elean or rather Thessalian-West-Peloponnesian connection needs further study. This explanation has to do with the role Elis played during the games, but especially with their increasing Panhellenic character. We can certainly begin with the Enipeus River, which, as we saw, plays a significant role. Its sources in the Othrys Mountains are situated in the area of Achaea Phthiotis, which belonged to the Thessalian perioecic region³¹⁹, and it takes its course mainly through the Thessalian Phthiotis, which has Pharsalos as its centre. In general, Thessaly, especially the east and the area around the Gulf of Pagasai, was an important area in Greek mythology³²⁰. This is certainly related to the important Mycenaean centre(s) in the area of Volos, which should be identified with the legendary Iolkos. There was, as we have seen, also the home of Pelias, son of Tyro and brother of Neleus. The Catalogue of the Ships in the Iliad mentions »Phthia« in addition to

³¹⁶ Diod. 4, 68, 4.

³¹⁷ Cf. also Gehrke 2005, 42.

³¹⁸ It is also conceivable that it only got this name because of the relocation of the story; after all, it was called differently in Strabo's times (or those of his source).

³¹⁹ Cf. Th. 8, 3, 1; Arist. Pol. 2, 9, 1269 b 6, and see now Bouchon – Helly 2015, 233.

³²⁰ According to Visser 1997, 644 the Spercheios Valley and the area around the Gulf of Pagasai, i.e. the southeast of Thessaly, formed »mythologisch ausgesprochen prominente Gebiete«. On the connection between myth and landscape from a primarily Thessalian perspective, see now Aston 2017.

»Hellas of the beautiful women«³²¹. It belongs to the »kingdom« of Achilles³²² and was identified already by ancient authors with Pharsalos³²³. Thus the great hero controlled much of southern Thessaly.

The inhabitants are also called »Myrmidons, Hellenes and Achaeans«, according to the Catalogue of the Ships as well³²⁴. This is the key, as one immediately recognises a special combination of groups of different quality. The Myrmidons are rather a legendary people with no visible connection to later *ethne* or *poleis*. With them, however, both an older (Achaean) and more recent (Hellenic) collective concept of the Greeks emerge, and, characteristically, Hellas was primarily located in the Phthiotis³²⁵. This region of Thessaly could therefore represent all Greeks or the whole of Greece. Although this ambivalence caused great confusion already in antiquity³²⁶, it has remained intact. In fact, very early and elemental events in Greek mythistory were located in Thessaly. Even Deucalion, the son of Prometheus and husband of Pyrrha, daughter of Epimetheus and Pandora, was ruler of Phthia. Together with his wife, he survived the Greek flood in a box. This affected most of Greece. The mountains of Thessaly had broken apart and all of Greece outside the Isthmus had been flooded. After their rescue, Deucalion and Pyrrha had a son, Hellen, the eponymous ancestor of the Greeks. This paradigmatic Greek figure belongs to Thessaly as well³²⁷.

If we are looking for an explanation for the Thessalian connections in the area of Elis and Olympia, then we should perhaps not primarily – as in the case of the well-documented and also for other reasons plausible Aetolian element³²⁸ – think of some kind of migration from (southern) Thessaly, but rather consider a transmission of Panhellenic elements. This, of course, is likely to be related to the development of the sanctuary. The local or regional elites and the singers and artists would have associated widespread or general Greek narratives and figures with their region, and thus give it a common Greek character beyond its micro-regional or certain supralocal framework and at the same time link it to old layers of myth. The »Thessalian« would refer here to the »Hellenic«. The Panhellenic dimension would become tangible in the narratives of a micro-region: a kind of Greek »glocalisation«!

This may have played a role in the early connection with the Endymion saga (via Amythaon³²⁹). Moreover, the figure of Melampous could be mentioned in this context, who represents something like the exemplary Greek seer, who already has a clear profile in the Odyssey³³⁰ and appears there already attached to the area of Pylos. Via Amythaon he also points to Thessaly (see above), but he also appears as a ruler in Argos. At the same time, he is already genealogically embedded in Homer³³¹ and associated with later seers. Therefore, a prominent mythical figure without any apparent local attachment was integrated into various regional mythistorical traditions and transformed into a native character, especially in the southwestern Peloponnese and around Olympia.

Naturally, we have to leave many issues unresolved. However, an equally Panhellenic figure could provide not only a parallel, but also offer a reference to a specific component

³²¹ Hom. Il. 2, 683.

³²² Hom. Il. 1, 155, cf. 16. 594–596, where Hellas and the Myrmidons are joined; see also Th. 1, 3, 3. Accordingly, Peleus is localised here, Stenger 2000. For the area of Achilles according to the Catalogue of the Ships and possible equivalences in historical times, see Stählin 1936, 78 f. Cf. now also Visser 1997, 649–655, for Hellas and Phthia (653–655); generally see also Morgan 2003, 102–105.

³²³ Stählin 1924, 135 f.

³²⁴ Hom. Il. 2, 684.

³²⁵ Th. 1, 3, 2; Heraclides Criticus 3, 2.

³²⁶ Cf. e.g. Heraclides Criticus 3, 1–8 (thereto Arenz

2006, 162–166. 223–230); generally see esp. Hall 2002, 125–133.

³²⁷ The story follows Apollod. 1, 7, 3; cf. also Hes. Fr. 2–4. 6 f. [Merkelbach – West 1967]; Hecat. FGrHist 1 Fr. 14 (there also the reference to the Thessalian connection of Deukalion's offspring; further information in Jacoby FGrHist ad loc.)

³²⁸ Gehrke 2005.

³²⁹ See above n. 304.

³³⁰ Hom. Od. 15, 225–246.

³³¹ Hom. Od. 15, 240–246; on his descendants see above.

of the memorial space around Olympia, behind which one can at least hypothetically recognise a particular intention, namely a connection of the Panhellenic to the regional and local, ultimately Elean. The fact that this relation is less connected to the original local constellation finds its expression in its sparse, or even absence of, ritual presence. It certainly has a ›setting in life‹, but rather in the intentional history than in the sacrally grounded and ritually embodied understanding of space. When we return to Olympia and its surroundings, we begin to grasp the connection between the sacred and the memorial in the configuration of a complex founding activity as charter myth and its concrete local-ritual setting.

3.3 Oinomaos of Pisa, Hippodameia and Pelops

The observations and ideas of Helmut Kyrieleis, both archaeologically and historically sound, form an ideal starting point. Following his line of arguments, the Pelopion together with a cult of Pelops was set up only in the course of the restructuring of the sanctuary of Olympia by the Eleans in the 6th century B.C. A hero, who was not yet tied to a specific Greek region, an emphatically Panhellenic figure, who gradually obtained a strong Peloponnesian character³³², was claimed now by Elis as a kind of ›state hero‹³³³.

This also invests the story that establishes and explains the rule of Pelops over Olympia and its surroundings, the Pisatis, with a character of its own. The earliest traditions of Oinomaos and Hippodameia speak of the victims of Oinomaos, the dead suitors of Hippodameia. The Ehoiai had apparently 13 names, the Great Ehoiai 16³³⁴. The names are not very characteristic³³⁵, especially not for the immediate area; in part, they point to Arkadia, Sparta and to Aetolia, the latter of which is important in view of the mythical origins of the Eleans.

After the restructuring of the sanctuary, the mythical events become more focused and reach their climax in the chariot race between Oinomaos and Pelops, as the eastern pediment of the Temple of Zeus demonstrates in a grandiose and expressive manner. The race is located in space, almost becoming anchored in the landscape: Pindar names the place metonymically ›racetracks of Pelops‹ (δρόμοι Πέλοπος)³³⁶. Oinomaos is in a very specific way the king of this land, the king of Pisa. He lived there, kept his horses, founded cities, and, after his defeat, died there³³⁷.

Moreover, these events and their agents were ›inscribed‹ into Olympia and its closer surroundings in various ways. Their stories and destinies were related to certain points in the topography, which one could visit and where one performed cultic actions. This created a special memorial space, which also carried elements of a sacred space. It was particularly prominent in the immediate vicinity of Olympia, in Pisa. We cannot determine precisely when each of these marks were set. What is certain, however, is that they follow the special emphasis on the character and the cult of Pelops. So they do not represent older traditions (it is conceivable, however, that there were local traditions here and there). They cannot be taken as evidence of a solid, peculiar development of Pisa in early times, that is, in the time

³³² Th. 1, 9, 2.

³³³ For relics in Olympia associated with Pelops, see Paus. 5, 13, 4–6 (shoulder, cf. below); 6, 19, 6 (a knife with golden handle in the treasury of the Sicyonians, interpreted as sacrificial knife, see Maddoli – Saladino 1995, 318, with further references; for the chronology loc. cit. and Hartmann 2010, 80 n. 177, with further bibliography). For Pelops east of Olympia see below; for Pelops in Letrinoi see above 3.2).

³³⁴ Hes. Fr. 259 a [Merkelbach – West 1967] (Paus.

6, 21, 10 f.; Sch. Pi. O. 1, 127 b); for the division between the two texts see Maddoli et al. 1999, 362 f.

³³⁵ Cf. already Paus. 6, 21, 10.

³³⁶ Pi. O. 1, 94–95. For the reasons given by Krummen 1990, 166 f., we prefer to connect δρόμοι with Pelops; hyperbaton κλέος...Πέλοπος (93–95) is possible too (Gentili 2013, 383). In the end, the difference is not critical for our purposes.

³³⁷ For the horse stables and the tomb see above 3.2; for the foundation of Harpina see below.

when Pisa allegedly hosted the Olympics before the Eleans. However, these traditions describe a peculiarity of the space around Olympia, that is to say the localities which, like the so-called *oktapolis*, can be associated with Pisa – a place that is included in the mythistorical-sacral conception of the Eleans, which, however, gave the local dimension its own place.

In detail, the following *lieux de mémoire* can be pointed out in this memorial-sacral topography: First, in the sanctuary itself the Pelopion as well as the tomb and the stables of Oinomaos were already mentioned. In addition, remnants of the house of Oinomaos were visible, which had been destroyed by a thunderbolt of Zeus, and next to its ruins an altar of Zeus Herkeios (protector of the house within the fence) and Zeus Keraunios, the »hurler of the thunderbolt« were situated. In addition, a wooden pillar of this house was allegedly preserved, framed by metal rings and covered by a canopy with four pillars, located on the route from the ash altar to the Temple of Zeus, approximately south of the Metroon and east of the Pelopion. Even by the time of Pausanias a bronze inscription bore witness to the house and the events³³⁸. Moreover, when a Roman senator erected a victory monument there, they found weapons, reins and kerbs during the excavation work for its base. Pausanias himself allegedly witnessed this³³⁹.

Furthermore, there was a sacred precinct of Hippodameia, the Hippodameion, an open sanctuary of about 30 × 30 m, which was located within the Altis at the entrance of the Processional Road and was surrounded by an enclosure wall. Only women were permitted access once a year to make sacrifices in honour of the heroine and to perform ritual acts³⁴⁰. Hippodameia is also said to have set up the penteteric festival for Hera, the Heraia, in gratitude for her marriage to Pelops. The major Elean priestesses' college of the Sixteen Women hosted this festival³⁴¹. In the Temple of Hera Pausanias saw a couch which was considered a dedication of Hippodameia. She herself – she had been involved in the murder of a son of Pelops born to a nymph – allegedly fled to Midea and died there. However, on the basis of an oracle the Eleans retrieved her bones and buried them in Olympia³⁴². In the Temple of Zeus itself, the barriers that sheltered the throne of Zeus had been painted by Panainos, probably a brother of Phidias³⁴³, and there, amongst others, Hippodameia was represented with her mother Sterope. The illustrations of both women in the eastern pediment of the Temple of Zeus should merely be mentioned in this context.

Significantly, at one end of the hippodrome, at the turning point of the Meta associated with the finish of the race, was a bronze statue of Hippodameia, who was about to tie a band around the head of the victorious Pelops³⁴⁴. In the hippodrome, the legendary chariot race for the hand of Hippodameia and the rule of Olympia and its surroundings could sym-

³³⁸ According to philological arguments, the text belongs to the Hellenistic period, Hartmann 2010, 158 n. 675.

³³⁹ Paus. 5, 14, 7; 5, 20, 6–9; for the location Maddoli – Saladino 1995, 307 and cf. esp. Brulotte 1994. The Roman senator is identified with L. Minicius Natalis Quadronius Verus, who won the chariot race in A.D. 129 (IvO 236) and after his proconsulate in Africa (A.D. 153) had the statue built (Gurlitt 1890, 421 n. 37; Habicht 1985, 183–185, Maddoli – Saladino 1995, 308) – a (not undisputed) identification important for the dating of Pausanias' stay in Olympia (see Maddoli – Saladino 1995, pp. XXIII–XXV).

³⁴⁰ Paus. 6, 20, 7; on the localisation cf. Mallwitz 1972, 245; Maddoli et al. 1999, 338. For the entrance gate in the Processional Road see above 1.2; for the cult cf. Maddoli et al. 1999, 335 f. with further references.

³⁴¹ Paus. 5, 16, 2–4, cf. 6, 24, 10 and Maddoli – Saladino 1995, 284 with further references; on the Sixteen Women of Elis cf. also 1.2.

³⁴² Paus. 6, 20, 7; for other versions and a possible date for the transfer of the bones (McCauley 1997/1998) see Maddoli et al. 1999, 338 f.; cf. now also Neri 2010, 141–146.

³⁴³ On Panainos cf. Maddoli – Saladino 1995, 241. Incidentally, he had painted the picture of the Battle of Marathon in the Stoa Poikile in Athens.

³⁴⁴ Paus. 6, 20, 19; it is also mentioned in the Byzantine metrological text that gives the dimensions of the hippodrome, on that Maddoli et al. 1999, 345 f. (with further bibliography); for a translation see Sinn 2004, 136. The place lay apparently west of the Meta, opposite the Taraxippos (see below).

bolically be repeated every four years during the games. That is why this race was always present in the hippodrome:

Near a passageway through one of the earthen banks that framed the hippodrome, probably at the eastern end of the Meta, there was an altar of Taraxippos (»horse disturber«), a hero who disturbed the course of the horses and thus personified one of the great dangers of the chariot race, the accident in the hot phase of the competition. Here the charioteers sacrificed to appease the hero and thus to ward off the danger. Pausanias lists various explanations and derivations explaining the character of the hero, some of which are related to the famous chariot race. Thus it may have been a cenotaph of Oinomaos' charioteer Myrtilos built by Pelops. According to an old and popular version he had supported Pelops through deceit by removing the linchpins from the chariot of his master or replacing them with wax. However, the victor had him thrown into the sea, and Myrtilos was said to have uttered a curse. Other versions relate Taraxippos directly to Oinomaos and his victims, the suitors of Hippodameia³⁴⁵. Of course, in this context one is reminded once again of the scenes in the east pediment of the Temple of Zeus. In this form, the sanctuary was literally overflowing with memories, which at the same time could be celebrated in the cult and ritually revived in various forms of religious re-enactment.

The same was hardly less true for the surrounding area. Let us start with the places attributed to Pisa or the Pisatis, first of all the ones belonging to the *oktapolis*: Harpina, located about 20 stades to the east of Olympia³⁴⁶, conspicuously stands out: Oinomaos is said to have founded the city and named it after his mother³⁴⁷. For Ares had begotten him in Pisa with Harpina³⁴⁸, a daughter of Asopos, the river god of Phlious³⁴⁹. A little further east was the Parthenias River, named after Parthenia, one of Marmax's two horses (the other named Eripha), which was buried there. Marmax had been the first suitor killed by Oinomaos³⁵⁰. West of Harpina in the direction of Olympia even the tomb of the suitors was evident, »a high mound«³⁵¹. The suitors had been only hastily buried by Oinomaos³⁵². Only later did Pelops have a sanctuary erected in honour of them and as a favour to Hippodameia, and annual sacrifices were offered to the dead³⁵³.

³⁴⁵ Paus. 6, 20, 15–19; for the localisation Maddoli et al. 1999, 346. For Myrtilos see Heinze 2000; for his fall into the sea between the Alpheios estuary and the port of the Eleans see Paus. 8, 14, 12 (cf. also Taita 2013, 351). On the connection between Pelops, the hippodrome and the Alpheios (at least in Pindar) see Griffith 2008, 1 f.

³⁴⁶ Luc. Peregr. 35; it is probably to be found near the church of Panagia (as indicated on the maps of Curtius – Adler 1882, sheets 2 and 3), for more see above 2.3.3.2.

³⁴⁷ Paus. 6, 21, 8.

³⁴⁸ Diod. 4, 73, 1; for Harpina as daughter of Asopos see also Paus. 5, 22, 6, who characteristically features in a dedication of the Phliasians in Olympia (Asopos and his daughters), cf. also Kyrieleis 2012/2013, 114; according to Diod. 4, 73, 3, there was even a racing track from Pisa to the altar of Poseidon at the Isthmus of Corinth (does this reflect a connection between the Olympic and Isthmian Games?); for further relations of Oinomaos to the northeastern Peloponnese, especially to Argos, see Maddoli et al. 1999, 361. According to Paus. 5, 1, 6 the father of Oinomaos was, in one version, Alxion; but according to Maddoli – Saladino 1995, 186 this is to be interpreted as an epithet (from ἀλκίη) of Ares; the same is likely to be valid for Hyperochos who is mentioned in Tzetzes,

Sch. in Lyc. 219 (Maddoli – Saladino 1995, 186); for other mothers of Oinomaos see Fiehn 1937.

³⁴⁹ Maddoli et al. 1999, 361.

³⁵⁰ Paus. 6, 21, 7; for the river and the topography see above 2.3.3.2 on Harpina. For Marmax see also the further references in Maddoli et al. 1999, 363.

³⁵¹ Paus. 6, 21, 9. »Not far« (οὐ πολὺ) from Harpina: The older maps in Curtius – Adler 1882 (see above) locate the mound southeast of Miraka; but this is far from certain. One could also imagine a position further to the west in the area of Frangonisi and the hill connected to Pisa (see Παπαχατζής 1979, 384 with reference to Dörpfeld 1908, 192) (see above 2.1.2.1); because Harpina can be placed farther west than is usually the case. In any case, our on-site investigations have documented Hellenistic and possibly Roman remains there (see 2.1.2.1).

³⁵² Paus. 6, 21, 9; according to others he had dismembered them and nailed their heads to his house (S. TGF IV Fr. 473 [Radt 1999]; Ps.-Apollod. Epit. 2, 5).

³⁵³ Paus. 6, 21, 9; 6, 21, 11. Philostr. Im. 1, 17, 4 refers to a representation of the chariot race between Oinomaos (who, incidentally, is called Arkadian in 17, 1) and Pelops, where Alpheios leapt from his waters and presented Pelops with a wreath of the wild olive tree as a prize and sign of victory. This happened near the »tombs at the racetrack«, where the

Nearby, there were two other significant places of worship and memory: the sanctuary of Artemis Kordaka lay only one stade from the so-called Hill of the Suitors to the west. Here, as the aetiological explanation has it, the victory of Pelops was celebrated, with the Kordax dance, which was said to be customary in his home country in Asia Minor, on Mount Sipylos (»ἐπιχώριος«)³⁵⁴. In this case the small space, which was specifically construed and designed, was again related to a broader framework and connected with the immigration of the hero. At the same time, his death was also remembered in the immediate vicinity, because not far (»οὐ πόρρω«) from this sanctuary was a large house with a bronze box (»κιβωτός χαλκή«) containing the bones of Pelops³⁵⁵.

Taking everything into consideration, one can observe the clear marking of the area with memorial and cultic sites in a zone merely 3000–4000 m east of the sanctuary. Even just in the vicinity of the Tombs of the Suitors, we have the impression of a certain ›burial landscape‹, where significant concentrations of burials can be pointed out, even down to Roman times, if one considers the important Roman cemetery near Frangonisi (see above 2.1.2.1)³⁵⁶. Therefore, it is perhaps no coincidence that after the games of 165 the notorious cynic Peregrinus Proteus committed suicide in this area, in Harpina, as he had already announced at the Olympics of A.D. 161. One could envisage beforehand that this would become a new memorial place of numinous events – which in this case was also staged as such³⁵⁷. The landscape, with its corresponding connotation, already endowed with memories of this kind, could be considered a particularly suitable setting for theatrical suicide. This would indicate that this area was mythically, numinously charged.

In this context, one may also think of the shrine of Demeter Chamyne a short distance away near the eastern end of the hippodrome, which has recently been excavated³⁵⁸. The cult, whose priestess held a prominent position in Olympia, had a decidedly chthonic character. The aetiological explanation (the verb χάνειν, gape, is connected with the epithet of the goddess) has it that here the earth had opened up for the chariot team of Hades and closed again³⁵⁹.

suitors, thirteen in number, were buried. This may refer to the same place, because the aforementioned hippodrome does not necessarily refer in a technical sense to the structure built in Olympia, but to the site of the race itself. Incidentally, the distance between the mound of the suitors and the hippodrome was not very great.

³⁵⁴ Paus. 6, 22, 1; for the dance see Warnecke 1922; Calame 1977, 297–304; for the cult see also Weniger 1907, 112 f. In his description of the Pelopion in Olympia Pausanias (5, 13, 7) mentions that Pelops had a throne on the summit of the Sipylos mountain and that on the occasion of his marriage with Hippodameia he founded a sanctuary of the Mater Plastene there (on this and the situation there, and at the same time on the meaning of this information for the biography of Pausanias see the references in Maddoli – Saladino 1995, 256).

³⁵⁵ Paus. 6, 22, 1; for the bones of Pelops in Letrinoi see above 2.3.3.1 (Lyc. 53 f. with Sch.); that such ›relics‹ could be multiplied (if one does not want to dismiss Lykophron as learned speculation, though this is not easy, especially after Hornblower 2015), should not be surprising. In one case, it concerns the direct ties to Olympia, in the other the connection between Elis and Letrinoi. Then there is the complex story of the artificial shoulder of Pelops (see Paus. 5, 13, 4–6; cf. Neri 2010, 100–116 and Gehrke 2013, 47 f. n. 48, with

further references). According to Plin. HN 28, 34 it should have been in Elis, but that obviously stands for Olympia, for Paus. 5, 13, 4–6 speaks of it in connection with the Pelopion in Olympia (even though nothing was to be seen of it in his time, Paus. 5, 13, 6). The stories about this shoulder point to the old Panhellenic meaning of Pelops (here for the Trojan War), but also to other relationships (between Elis and Eretria).

³⁵⁶ Fittingly, in this area Roman finds stand out particularly.

³⁵⁷ Luc. Peregr. 28–39 with Hartmann 2010, 400 f. – Gell 1817, 36 saw east of the crossing of the stream west of Miraka »a spot where are several ancient sepulchres«, likewise Dodwell 1819, 336 (both travelled together here, Dodwell 1819, 308). The scholars of the Expédition de Morée note Turkish tombs in the area of the so-called Pisa hill.

³⁵⁸ Liangouras 2012.

³⁵⁹ Paus. 6, 21, 1. In addition, there was (loc. cit.) an explanation that was anchored in the mythistory of Elis and Pisa (but recognisably represents a late and anachronistic construction and was developed from the epithet of the goddess): The tyrannical ruler Pantaleon of Pisa killed his opponent Chamynos, who opposed his apostasy from Elis, and from his fortune donated the temple. – For the priestess and the cult cf. Paus. 6, 20, 9; Sinn 2004, 91–93.

It is important to note that Pausanias³⁶⁰ in connection with Pelops' ossuary points to the absence of walls and remains that one would have to assume for an urban settlement of Pisa: but there were only vineyards (ἄμπελοι). However, this is exactly what reflects the particular character of this landscape, which is determined by agricultural use and scattered settlement. Polis centres did not shape this specific character, but rather sacred places and memories of mythical-numinous events did.

Three other places that are explicitly attested as part of the Pisatan *oktapolis* also provide interesting insights. They transcend the major theme of the chariot race and offer other mythological and cultic references. We have already mentioned Salmone with its legendary founder Salmoneus and his daughter Tyro and the transplantation of the related stories from the Thessalian mythological cycle (above 3.2). And just as the river (god) Enipeus, who featured prominently in these stories, was linked as a tributary to the Alpheios, the Pisatan Herakleia is also connected with it, through the Ionidian nymphs and their gifts of violet wreaths to Ion (see above 3.2).

A mythical genealogy indicates an interesting relationship between Herakleia and Alasyaion, which probably also belonged to the *oktapolis*: Ion, the son of Gargettos, who actually belonged to Athens and went from there to Elis³⁶¹, appears in connection with one version of the origin of Alesios, the eponym of Alasyaia³⁶². Alesios figures here also as a son of Gargettos and a companion of Pelops. Ion of Herakleia, the namesake of the local Ionidian nymphs, and Alesios, the eponymous hero of Alasyaion, were thus brothers.

For Kikysion, the largest place in the *oktapolis*³⁶³, we are forced to make assumptions. After all, a relationship can be established with the hero Amythaon, the son of Tyro and the Aeolid Kretheus, the father of Melampous and Bias (see above), and thus with the region of Amythaonia³⁶⁴. Hipponax has a Kikon, who appears as son of Amythaon³⁶⁵. He could thus have featured as the eponym of Kikysion. Apart from the fact that this reasoning is already hypothetical, one must certainly consider that the information on the father is not based on Hipponax himself, but relies entirely on the late-antiquity lexicographer Hesychius³⁶⁶, and may thus represent a later variant.

Two places commonly counted among the ›Eight Cities‹³⁶⁷ are again associated with the Oinomaos-Pelops constellation: Alesios, the namesake of Alasyaion, is regarded, as we have seen, as either the son of Skillous and suitor of Hippodameia or the son of the Athenian Gargettos and companion of Pelops³⁶⁸. The eponym of Dysponton, Dysponteus or Dyspontos appears – transparently enough – as the son of Oinomaos³⁶⁹ or Pelops³⁷⁰.

We have already seen (cf. above 3.2) that the Amythaonia was considered »part of Elis«, which was named after Amythaon, son of Kretheus. The region of origin of his sons, Melampous and Bias, is explicitly referred to as »Pisatis and Triphyli« by Strabo³⁷¹, and one could

³⁶⁰ Paus. 6, 22, 1.

³⁶¹ Paus. 6, 22, 7.

³⁶² St. Byz. s. v. Alesion; the other version recognises him as a suitor of Hippodameia and son of Skillous; but he does not appear in the lists of suitors (Hes. Fr. 259 [Merkelbach – West 1967]; Paus. 6, 21, 10 f.). However, a connection to Triphylian Skillous should not be dismissed, consequently we are probably dealing with competing variants.

³⁶³ Str. 8, 3, 31.

³⁶⁴ Roy 2002, 236 with n. 22 brings the following connection as one possibility into play.

³⁶⁵ Hippon. Fr. 4, possibly 4a [West 1971].

³⁶⁶ s. v. Kikon; from this Friedrich Wilhelm Schneidewin ingeniously deduced the Hipponax fragment 4a

(because of the second part of a choliambic verse) and joined with Fr. 4 (where Hipponax is explicitly cited by Tzetzes).

³⁶⁷ Cf. Roy 2002, 233–237; Meyer 1950 cautiously limits his suggestions to two more places, Alasyaion and Dysponton, which, significantly, are also related to Oinomaos and Pelops. Roy's other candidates (236 f.), Lenos (Phleg. FGHist 257 Fr. 7, St. Byz. s. v.; see Roy 2004, 499) and Pharaia (Plb. 4, 77, 5; Str. 8, 3, 32) provide nothing mythistorical at all.

³⁶⁸ Cf. also Toepffer 1893.

³⁶⁹ Paus. 6, 22, 4.

³⁷⁰ St. Byz., s. v. Dysponton.

³⁷¹ Str. 8, 6, 10.

identify it with the small region Amythaonia. However, one would expect it rather in the area of Pisa, because Amythaon was considered one of the first organisers of the Olympic Games and a relative of Endymion³⁷². Melampous on the other hand was, as we have seen, the progenitor of the family of seers of the Klytiads; as such he was in all likelihood represented in the eastern pediment of the Temple of Zeus. The sacral and mythological relations are therefore particularly pronounced in the area immediately surrounding Olympia that can be identified to a large degree with Pisa.

From Istros' Eliaka, a place named Phaisana has been inferred in Pisa³⁷³. This would have been located near the Alpheios, have been connected with the Arkadian Aipyros and thus related to the aforementioned Iamos, the progenitor of the Iamids. However, the identification and localisation of the place remains unclear. The affiliation of Phrixia, with which Phaisana has been associated, is also uncertain: the city, located near the knee of the Alpheios at Mouria, about 9 km east of Olympia, probably belonged to Triphylia for most of the time³⁷⁴. It also has a very different mythological profile from that of Elis and Pisa: originally, it was said to be Minyan, and its eponym is the famous Phrixos, who is associated with the story of the Golden Fleece³⁷⁵. However, even here we find a reference to the chariot race in Pisa: at the temple of Athena Kydonia in Phrixia Pelops is said to have sacrificed to the goddess before the race against Oinomaos³⁷⁶.

Let us summarise our reflections on the conception of sacred and memorial space. They related to the religious-cultic formation of social interaction and organisation around the sanctuary of Olympia itself. This pertains to the immediate vicinity as well as to the emerging ethnic-political and at the same time cultic unity of Elis that appear to have been established from the 6th century B.C. onward (3.1). In addition, the landscape and the corresponding practice of communication were perceived and interpreted as a divinely interwoven and mythical space (3.2), where the major event of the chariot race of Oinomaos and Pelops was firmly inscribed, especially in Olympia and Pisa (3.3).

The stories that recount the various phenomena and interpretations seem complicated to us – especially in their mostly fragmentary tradition – and appear difficult to understand. However, one has always to remember that for the ancient contemporaries they described parts of their lives, even a particularly important, indeed the most important part: It was about the worship of the gods, the exploration of their will, images pertaining to their lives and their interventions. Equally important was their connection with demigods and humans: later generations thus considered themselves related to them, as relatives and descendants, and grouped themselves accordingly.

As inaccessible and unclear as all these narratives, versions and variants may seem to us, they imply a vital world of gods and men, a mythical-sacral space as a separate reality and at the same time as part of the experienced reality of the historical agents and thus indissolubly connected³⁷⁷. Last but not least, social relationships existed in this complex space, primarily in a mythical-ritual way, within and between communities, in close proximity as

³⁷² Paus. 5, 8, 2.

³⁷³ FGtHist 334 Fr. 41 (Sch. Pi. O. 6, 55 a). However, the place has also been identified with Phrixia (Roy 2000, 153 n. 24, with the pertinent bibliography) or localised in Phrixia (Meyer 1950, 1743).

³⁷⁴ Nielsen 1997, 131 f.; for the location at the hill Palaiophanaro see Pritchett 1989, 70 f.

³⁷⁵ Hdt. 4, 148; 7, 197; Pl. Min. 315 c; Apollod. 1, 7, 2 f.; 1, 9, 1 f.; Paus. 9, 24, 1; 9, 34, 5; Sch. A. R. 2, 513, cf. also Kōiv 2013, 342 with n. 182.

³⁷⁶ Paus. 6, 21, 6; for a possible pictorial representation see Maddoli et. al. 1999, 360.

³⁷⁷ Plb. 4, 73, 9–4; 4, 74, 8 also points to the sacral character of life and landscape in Elis – even if the asylos mentioned there did not formally exist (thus Walbank 1957, 526 with further references). Ernst Curtius had already seen that the numerous shrines »der ganzen Landschaft [this refers to the region of the lower reaches of the Alpheios] einen gottesdienstlichen Charakter gaben« (Curtius 1852, 7).

well as in the framework of an overarching entity, in Pisa and above all in Elis. Internally, everything was interrelated, and externally there existed an intense network of connections: community was endowed and affirmed in multiple ways, especially through the cohesion of firmly believed myth and strictly practised ritual. The point where everything crystal-
lised was the sanctuary of Olympia: the awe-inspiring place at the ford, the hill, the plain, the monument where a sacred place was marked and ›performed‹. This was the centre of a truly sacred landscape.

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