Athletics in ancient Macedonia

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SCHOOL OF HUMANITIES
A thesis submitted for the degree of Master of Arts (MA) in the Classical Archaeology and the Ancient History of Macedonia

January 2020
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I hereby declare that the work submitted is mine and that where I have made use of another’s work, I have attributed the source(s) according to the Regulations set in the Student’s Handbook.

January 2020
Thessaloniki - Greece
Abstract

This dissertation was written as part of the MSc in Classical Archaeology and Ancient History of Macedonia at the International Hellenic University. The aim of the proposed thesis is to examine athletics in ancient Macedonia. It especially focuses on the athletic establishments (dromos, stadium, hippodrome, gymnasia, palaestrae) on the region of Macedonia during the Hellenistic period. First of all, there is a brief reference to the appearance of the first gymnasia and of the athletic contests from the 8th c BC until the Hellenistic period. In the first part I refer to the various aspects of the function and the meaning of the athletic facilities (gymnasium, palaestra) within the Hellenistic city and mostly focus on the function of the Hellenistic gymnasium as a state institution and on the architectural type of the gymnasium as a building with special function. Moreover, it is necessary to present to you the administrative, financial and educational management of the gymnasium through the officials and the trainers as well as the participants of the athletic activities in order to have an overall view of the operation of the gymnasium.

In continuation, I refer to the archaeological remains of the athletic facilities that have been found in the region of Macedonia and describe meticulously the gymnasium of Pella, Beroia and especially of Amphipolis. Furthermore, I make a short reference to the information that we received through the study of the gymnasialarchical law of Beroia and the ephebarchical law of Amphipolis. In addition, I refer to and describe some examples of gymnasium that exist in other Greek cities. In the end, I make a comparison between the gymnasium in the region of Macedonia and those that function in other Greek cities thus arriving at some very interesting conclusions.

Keywords: gymnasium, palaestra, Amphipolis, Pella, Beroia.

Dalampouras Asterios

29/01/2020
Preface

Connected to my role as an archaeologist and clearly linked to my passion for understanding the past and for the architecture of ancient societies and cultures, this is my thesis exploring athletics in ancient Macedonia. It specifically focuses on the athletic establishments (dromos, hippodrome, stadium, gymnasia, palaestrae) that existed and functioned in the Macedonian cities during the Hellenistic period and the objective of the current study is to provide a comprehensive review of literatures to anyone who is interested in this topic.

In addition, this thesis is primarily addressed to anyone who is interested in athletics in ancient Macedonia and wants to learn more details about the functions and the structure of the athletic facilities. Thus, if my thesis can help any person by providing information, I will feel that the purpose of my study has been fulfilled. Of course, as is usual, all errors and oversights are entirely my own. Though I have tried my best to keep the coursework free from errors, I apologize if any error is found which was not deliberately made. Finally, I would like to thank my supervisor Professor Ioannis Akamatis who provided me with all the appropriate information and bibliography that I needed to carry out my study and for encouraging me into choosing this subject and instructing me with his endless knowledge. He was always present to direct me and to address any questions or concerns about the subject. I would especially like to thank Dr. Nikolaos Akamatis for his great guidance throughout my MA studies.

Last but not least, I want to thank my family for their support and understanding and my colleagues and great friends for making this MA Course even more interesting.
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Introduction

To begin with, by the 8th c BC at least, there had been athletic contests in full sway at Olympia, although their appeal and their participants seem to have been only local. But unfortunately for this sudden appearance of athletic endeavor, we are left totally without historically discernible precursors and there is very little literary evidence contemporary with these early events. Thus, we must admit that the reasons for this initial manifestation are unclear (Glass, 1967, 41). There is a significant gap in information between the traditional first Olympiad in 776 BC and the more numerous fragments of evidence which suggest that Greek gymnastic establishments were in full operation on the 6th c BC. This gap is filled only with the detailed Olympic victor lists which reveal the growing popularity of athletic contests in this intervening period. It is probable then that we have to deal with an evolution from a point at which formal athletic events and exercises were practiced by ever increasing numbers to that point at which they became the primary interest and objective of a more or less formal system of education and acquired, in the process, a distinctive, descriptive designation, the gymnasium (Glass, 1967, 42). The only gymnasium of the 6th c BC which are known to us by name are the three famous establishments in Athens: the Academy, the Lykeion and Kynosarges. Of these, only the Academy’s location is surely known, but the remains of structures found there are of uncertain date and purpose. These early gymnasias were probably all located outside the city walls in the proasteion respectively to the north-west, to the east and to the southeast. These were the traditional and well-known gymnasias of the polis, which were deeply-rooted in the religious, military and civic life and served as centers for educating young citizens. Since the Archaic ages, these gymnasias probably also served as gathering points for political groups and during the Archaic and Classical ages were developed from large open spaces with running tracks, places for wrestling, a water supply and groves, into more elaborate facilities. Furthermore, from the 6th c BC they became the seats of concurrent philosophical schools and several palaestrae were built in Athens. In the Hellenistic age, two more gymnasias were added to the urban landscape of Athens: the
Diogeneion¹ and the Ptolemaion². Unlike the old gymnasia of the polis, they were given a central position in the town, thus following a trend in Greek city planning of the 4th and 3rd c BC (Mania, Trümper, 2018, 216-217).

Thus it was not until the 6th c BC that athletic contests became popular and the victors themselves received disproportionately lavish rewards and laudations. By this time the military aspect of athletics had become submerged and was even opposed to physical training. The establishment of new local and panhellenic contests led to the creation of schools that could produce young men trained in the various aspects of the games. Thus the idea of what later Greeks called gymnastics and gymnasia was created by a new set of ends which had relatively little application to the original idea, although the rise of athletic endeavor in general may have originated from the military benefits to be derived thereby (Glass, 1967, 56-57).

More specifically, by the middle of the 6th c BC, the four great Panhellenic festivals had a full program of athletic contests. More local festivals, such as the Panathenaia, appear to have followed suit. Thus we could assert that some sort of training for the contests was available by the 6th c BC although there is no certain evidence that would allow us to confirm this. Furthermore, there were some particular athletic events, such as the discus and javelin throw, which were certainly practiced by the 6th c BC and which certainly required considerable practice and an open area in which to perform them with safety. The references that are remaining to us, do speak of athletic areas—gymnasia and palaestrae—existent in the 6th c BC and this could coincide neatly with the rise in popularity of the competitive games. Unfortunately, little more can be said of the nature of such areas other than that they were at least independently and topographically defined as such. (Glass, 1967, 63-64)

The early gymnasium of the 6th and 5th c BC did not constitute facilities for the practice of hoplites, but a place of aristocratic culture. The reason for the institutionalization of this athletic pattern is the development of the polis. As the individual range of action of the individual was affected by the rise of the city-state,

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¹See Mania - Trümper, 2018, 219.
²Ibid., 220.
Athletism grew in importance as a stage for aristocratic competition, resulting both in the foundation or reorganization of the panhellenic games and in the rise of the gymnasia (Mann, 1998, 21).

In the 5th c BC there seems to have been a proliferation of gymnasia and palaestrae, or at least our information on this score becomes wider and clearer. On their aspects, however, relatively little information is available. Until the arrival of the first well preserved gymnasium of reasonably assured date – that of Delphi in the 4th c BC – the evolutionary pattern of athletic structures, is broken entirely. Therefore, our interest is mainly focused on the Hellenistic period which is defined usually from the death of Alexander the Great in 323 BC, when are evident the effects of the radical overthrow that was brought upon the Greek world by his expedition to the East, until August’ victory at Actium in 31 BC which seals the abolition of the Ptolemaic state, the last of the kingdoms that is founded by the Successors of Alexander. My thesis and research is focused on this period for which I will present the archaeological remains of the athletic facilities and their meaning and function.

**Athletic facilities**

Athletic events were particularly important in ancient Greek culture: competitions were central to religious festivals, especially at the great Panhellenic centers of Olympia and Delphi and athletic training was a key component of education and military preparation. Over time, facilities for training and for staging athletic events seem to have become an expected component of any Greek city or large sanctuary. The vocabulary for Greek athletic structures (dromos, stadion, hippodrome, palaestra and gymnasium) appears at least as early as the 6th c BC, which was also the time when the earliest athletic structures were built and are visible in the archaeological record.

**Dromos and Stadion**

The dromos was the racecourse for athletes to exercise or a simple place for athletes to compete and, as such, it could be found without facilities for spectators. The distance between the starting lines of the dromos was 600 feet, although the
absolute measure of distance varied from sanctuary to sanctuary, since the foot measure differed from site to site. At Corinth, for instance, a dromos as an area of competition was constructed circa 500 BC, together with a unique curved starting line (Romano, 2016, 316).

The Greek word *stadion*, which probably derives from the Greek verb ἱστημι, “to stand”, originally denoted a unit of measure. Later it had also the meaning of the architectural structure, the footrace of 600 feet in length, which was the standard track event at Greek athletic festivals, as well as the linear distance of 600 feet. The stadium’s “600-foot” lengths varied from site to site, since, just as with the dromos, the foot used to measure the linear distance varied (Romano, 2016, 315). Thus *stadion* was an architectural facility that combined the dromos with a spectator area from which that athletic contest could be viewed. In its earliest form, the stadion was a flat, usually rectilinear, space 600 feet long and 50–100 feet wide, often bordered by natural or artificial embankments of earth for the accommodation of the spectators. The architectural evidence for Greek stadia first appears in the 6th c BC (Olympia, Isthmia) and over the course of many centuries these stadia had a growth and evolution of design. At Olympia, for instance, there are the partial remains of two successive stadia; a third (earlier) stadium is hypothesized but the 5th c stadium at Olympia, despite the fact that it was modified in different ways over the course of many centuries, remains one of the best known of all ancient stadia (fig.37). Other examples of spectacular Hellenistic stadia that have been excavated and studied offer the Peloponnesian city Messene and the city Nemea (Winter, 2006, 112-113).

On the Macedonian region there were also stadia. At Dion, for instance, a stadium was constructed NW of the sanctuary of Zeus. The big embankment of this stadium, north of the theatre, has its axis vertical to the south wall of the city and its sphendone was on the south. From the stadium has revealed the boundaries of the track and rows of low earthen steps. What is more excavations at Demetrias, a city founded by Demetrios Poliorketes when he was king of Macedonia in the early 3rd c

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3 See Romano, 2016, 316-318.
4 For the stadium at Olympia see Romano, 2016, 317.
have revealed one end of a stadium. Unfortunately no other stadia have as yet been found at Pella, Aigai, or on other Macedonian cities.

Architectural features of all these stadia included a number of common elements. These elements are the followings: 1) One end of the dromos and one of the starting lines, was often located near the altar of the deity in whose honor the contests were held (Olympia, Isthmia). 2) Many stadia of later times were rounded at one end (Delphi); the other end was normally open (Olympia) to provide a processional entrance for judges (Hellanodikai) and contestants. 3) The floor surfaces were usually composed of smooth clay that had been prepared, rolled, and provided a comfortable surface to run on barefoot. 4) Water facilities (stone water channels and basins) typically line the racecourse floor and would have been used to maintain the track surface. 5) Some tracks also included storm channels and drains for large amounts of rainwater (Romano, 2016, 319). 6) Stone starting lines, balbides, placed at the ends of the dromos limited the length of the track. These balbides, which were composed of stone blocks with starting positions (single or parallel starting grooves for the toes of the front left and rear right feet of the starting athlete), vary somewhat over time, but the basic idea was to provide a starting position for each athlete at the start of the footraces who would stand stationary and motionless in a very specific place during the start. During the Hellenistic period, an additional apparatus was added to the starting line, known as a hysplex (pl. hyspleges), a spring loaded mechanism that automatically raised or lowered a bar or a cord to allow the athletes to start simultaneously the race (Valavanis, 1999, 143). The remains of hysplex have been found only in four stadia in the northeastern Peloponnesos (Epidaurus, Isthmia, Nemea and in the track of the Forum at Corinth). Moreover there are some indications that there were starting mechanisms in other stadia (Olympia, Delphi, Priene) that seem to be relevant to the hysplex mechanism (Valavanis, 1999, 57-59). 7) Another significant and integral part of the architectural design of stadia was the formal entrances which over several centuries took a variety of different forms. From the 5th BC onward, there are examples (Isthmia, Sanctuary of Zeus at Mt. Lykaion) of open-air entrances that channeled the athletes toward the track. Later, in the Hellenistic period, were constructed vaulted
entrances which were larger and more complicated constructions and were constructed to create an artificial formal and dramatic entrance for athletes to arrive into the stadium (Olympia, Nemea, Delphi, and Epidaurus) (Winter, 2006, 112).

Hippodrome

Equestrian events were probably the most popular of all of the athletic events from ancient Greece and the installations for watching them accommodated possibly more spectators than were available for watching the track and field events of Greek athletics. The hippodrome was a construction with a common structure in Greek sanctuaries, as well in Greek cities and towns. The hippodrome was a stadium-like structure used for horse racing and chariot racing. The word hippodrome derives from the ancient Greek word “hippos” meaning horse and "dromos” meaning path or racecourse. Its construction was shaped like a large U with a closed end. It was rectangular in shape, but the end on one of its short sides could be rounded. There were tiers of seats for the spectators on the two long sides, around the flat track. There are many references by ancient authors to hippodromes in Olympia, Delphi, Nemea, Isthmia, Thebes, and Athens but there is only one example that can be seen today, at the Sanctuary of Zeus at Mt. Lykaion. Visible Greek hippodromes are scarce because they required so little architectural support, and as a result, leave little archaeological trace in the ground (Romano, 2016, 324). Pausanias gives us the most thorough literary account of a hippodrome with his description and details about the starting arrangements of the hippodrome at Olympia (6.20.7–10). The Olympic hippodrome, or chariot-racing arena was probably merely an enlarged version of the stadium but the floods of Alpheios river at Olympia have long since swept all traces of the hippodrome. The archaeological remains from the Sanctuary of Zeus at Mt. Lykaion gives us more details about the architectural composition of a hippodrome (Romano, 2016, 324-326).

On the Macedonian region have been found archaeological remains (corridors, some of the vaulted and structures under the tiers of seats) of the Hippodrome at Thessaloniki, an indivisible part of the Galerian complex, under the present-day
square of the same name. The Hippodrome (fig.38) was built south of the main street that passed below the Arch of Galerius, between the city walls and the east boundary of the palace and its construction dates to the early 4th c AD. Its operation continued probably until at least the 6th c AD. This location allowed the emperor to enter via the palace buildings the imperial box (*kathisma*), located on the west side of the Hippodrome between the “Apsidal Hall” and Basilica and to watch the chariot races.

**Gymnasia and palaestrae**

Firstly, it would be well to present the connotations that the word gymnasium bore in antiquity. To the ancient world, the noun “γυμνάσιον” and the verb “γυμνάζω” had inseparable conjunctions with “γυμνός” i.e. “naked”. The words themselves seem to indicate that gymnasion is a general term and palaestra a specific one and because it is difficult to assert a priority for either the gymnasion or palaestra due to problems of origins, I will present to you below some certain standard distinctions customarily made between the gymnasion and the palaestra. These are the followings: 1) the gymnasion seem to be undoubtedly public, but palaestrae may be either public or private, regardless of whether or not they are sections of gymnasion. On the one hand, the gymnasion as a sports-ground was usually outside the city; it was a public institution and open to all citizens. Young boys were training there in running, or throwing the spear, exercises for which there was no room in the palaestra, but its main use was as a training-ground for the ephebes. There the athletes could train themselves for the public games, while men of all ages could take such exercise as suited them (Gardiner, 1930, 73). On the other hand, the palaestrae in the gymnasion were public institutions, but the majority of palaestrae were owned by private individuals, often by schoolmasters. Schoolmasters with only a few pupils would take them in their own houses and provide them with physical training, but those with the larger schools had palaestrae of their own where they gave all their instruction. When not required for school purposes the palaestra could be used by older pupils and even by men. But the palaestra was mainly the place where boys received physical training. It was usually within the city, and its privacy
made it more suitable for this purpose. 2) Although a gymnasium cannot exist without a palaestra, the palaestra on the one hand is a specialized and different structure which is an integral part of any gymnasium but on the other hand can also be an independent structure. This is obvious, for example, from the fact that the words palaestra and gymnasium themselves indicate an elemental diversity of purpose with the former intended for a very specific activity and the latter embracing a far more general idea. 3) The palaestra is the wrestling-school and is basically a building with many common characteristics with the ordinary Greek house with an open courtyard in the centre and some provision for undressing, washing and for exercising while gymnasium is not a building but an athletic ground whose essential part is the running-track, but like the palaestra it requires undressing-rooms and bathrooms, and therefore it usually contains a palaestra.

The gymnasium had arisen in the 6th c BC as the place for physical training, but they quickly became places with a special meaning for the citizens. The gymnasium was, as a response to a new military technique, the phalanx, the place where the members of the hoplite class could become and stay fit. Fitness they may have offered, but it seems unlikely, however, that the archaic and classical gymnasium were primarily focused on specific military training. Thus the gymnasium were also associated with other physical activities and for this reason it was also the place where citizens honed their athletic skills and physical prowess, which they presented in local festivals, as well as in international Panhellenic festivals. Although the gymnasium were never limited to the aristocracy, they were always dominated by a leisure class who had the time, money, and tendency to dedicate themselves to the gymnasium. Some of these men would triumph at the great festivals of Greece and a greater number would have played a leading role in local competitions. These gymnasium were mostly large open spaces at the edges of the cities and as a result they weren’t very impressive buildings, although there were temples and some functional buildings, like the apodyteria, where athletes took off their clothes and prepared their bodies for exercise (Van Nijf, 2013, 316).
In the Hellenistic period no Greek city was complete without one or more gymnasia and the gymnasia of this period were of a totally different nature: they were moved from the margins to the very heart of the cities and whoever paid for them (generous kings and local benefactors or by public means), gymnasia became rich multifunctional buildings with palaestrae, xystoi (roofed running tracks), practicing rooms, but also libraries and small auditoria designed for public lectures, as well as for meetings of the neoi or other associations that were based in the gymnasium. They had facilities for physical training, intellectual formation, festive occasions, relaxation, entertainment, and for a wide range of civic activities. At the same time, the gymnasium occupied a central place in the institutional life of the polis which is concluded from the fact that everywhere the gymnasia were subject to increasing control by the civic authorities. Thus the gymnasium was undoubtedly a fundamental institution of the Hellenistic world (336–30 BC) and during this period it played a very important role also as educational centre and as a means of socializing and integration in the cultural life. The “men of the gymnasium” represented the leading social groups in the old and new polis of the Hellenistic oikoumene and in this period was adopted the new concept of paideia as an especially pleasant activity. So the main venue for men and boys to meet and spend time together, and for men to educate boys in the arts of warfare, sports, and philosophy, was the gymnasium (Troncoso, 2009, 74).

Military training seems to have been a major concern. There are specialized instructors in several places who were appointed to instruct the young citizens and ephebes in riding, archery and combat. Even though these gymnasia were not the boot camps for the Hellenistic armies, cities still had some fighting to do. The cities still wanted to express an image of themselves as being able to raise a citizen army and this seems from the ephebes’ duties as peripoloi, and particularly the presence of the neoi in armor at various civic occasions. At the same time, however, athletic training continued to be an important part of gymnasium life. As before, this was the facility where the younger citizens would exercise to join an increasingly internationally oriented class of ‘professional’ athletes, who toured the growing

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5 Delorme, 1960.
number of Panhellenic festivals in the Hellenistic world (Van Nijf, 2013, 319).

Training in the gymnasium was in itself a public activity but you did not have to be a great champion to be able to play a public role in the gymnasium. All *ephebes* and *neoi* could (and even had to) enter the many contests that were organized in the contexts of the gymnasium, and in particular the so-called judgment contests, as euexia, eutaxia, and euandria that invited younger citizens to display the civic qualities that were expected of all under the gaze of their fellow citizens⁶(Van Nijf, 2013, 322).

In conclusion it should be obvious that the gymnasium was not like a school in the modern sense and those that had access to the facilities of the gymnasium were mainly boys, but older men were also welcome. Thus the age groups that dominated most gymnasia were the *ephebes*, and, of course the *neoi*, which means most citizens between roughly the age of 20 and 30. Membership of the gymnasium appears to have been relatively restricted and the ‘people of the gymnasium’ were recognized as a special status group (Van Nijf, 2013, 320). More important than social status is the importance of the gymnasium for civic status. The role of the gymnasium was only partly to prepare the younger generation for their future role as citizens; rather, the gymnasia seem to have offered a place where individuals could already participate and become involved in public life. This would have been most relevant for citizens, but *xenoi* could be admitted by special permission (Van Nijf, 2013, 321).

**Gymnasium as an institution and as an architectural part of the Hellenistic city**

The special interest that the ancient writers have shown in the institution of the gymnasium and the corresponding monumental buildings has been repeatedly documented in today’s historical research⁷. The inscriptions of the late classical and

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⁷ For the collected references to ancient writers who expressed the importance of gymnasium among the other public institutions of the Greek city, see Forbes, 1945, 32 et seq., Gauthier, 1995, 1.
especially of the Hellenistic period reveals that the function of the gymnasium was not uniform in all its aspects in every Greek city, nor the development of the institution was uniform over the years: its targets, the organization and implementation of the educational program, its administrative and financial organization are different in each period and each city. This phenomenon is understandable when considered in the context of the autonomy of each Greek city in antiquity with regard to its particular political, institutional, religious or social traditions. As a rule, however, the gymnasium was an organized institution from the 4th c BC which was functioned by specific regulations that were systematized and defined under formal decrees (Kazakidi, 2015, 37).

References to laws are preserved on inscriptions from different cities but the most complete sources derived from Hellenistic Macedonia. The most complete surviving gymnasiarchical law of Beroia(fig.1) that was probably voted between 180 and 175 BC \(^8\) and the ephebarchical law of Amphipolis(fig.2) of 24/23 BC\(^9\) give us systematic information already known from many texts of various origins and allow us, despite their peculiar Macedonian character to observe important aspects of the function of a Hellenistic gymnasium(Kazakidi ,2015 , 38).

The students of gymnasium were generally male offspring of free citizens. The admission to the gymnasium was controlled\(^10\) and the function hours of gymnasium were specific\(^11\). The students were classified on the basis of their age at different levels that were determined by similar terms. Most commonly found in the sources

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\(^8\) SEG XXVII 261 (200-166 BC). Gauthier – Hatzopoulos ,1993, 35 et seq. (for the chronology).


\(^10\) We led to this conclusion from the detailed testimony of Beroia’s gymnasiarchical law, on which are appointed strict restrictive rules of entry into the gymnasium, the violation of which had as a result high fines (SEG XXVII 261, A pp. 26-32). By law, the entry into gymnasium was restricted to slaves, the freedmen or their sons, those who were prostituted, sentenced, drunk, those who for some reason were incapable of training, but also for some inferior social groups, such as craftsmen and traders, see in detail Gauthier - Hatzopoulos 1993, 78 et seq.

\(^11\) See the law of Beroia, SEG XXVII 261, B on. and Gauthier – Hatzopoulos ,1993, 59 et seq.
the terms *paides* (children), *epheboi* (adolescents) and *andres* (men)\textsuperscript{12}. The ancient terms themselves as well as the age limits vary according to the city or the period (Kazakidi, 2015, 38). What is more important, all full members of the city community were expected to belong to the gymnasium. For continental Greece there is evidence that membership excluded (among others) slaves, liberated slaves, their sons and those involved in dishonorable business. Probably these rules in newly established cities practically excluded almost all those who were considered non Greeks. This means that gymnasium was one of the key institutions on which Greek city culture was based.

The separation of trainees into age groups meant, depending on the case, separate exercise either at different hours\textsuperscript{13} or perhaps in different areas of the same complex or in different buildings in the case of cities with a larger population. The separation of children and ephebes from older adults was considered necessary in order to avoid phenomena such as disorder in the completion of the daily program or even pederasty\textsuperscript{14}. Thus everybody in the palaestra participated in working tasks of preparation for training. The young men in palaestra and gymnasium, except for the physical activities directed at preparation for war and sports competitions, had also daily physical activities of working character. It could be said that young men in palaestrae and gymnasia, through a whole day of planned physical activity (working and training tasks), were qualified for later very efficient realizations on the field of

\textsuperscript{12} Forbes 1933, 2.

\textsuperscript{13} From the laws of Beroia and Amphipolis seems that the daily schedule of gymnasia is organized in such a way as to serve the different ages of practitioners. However, the joint exercise of ephebes and young people under the supervision of a gymnasiarch is often attested, Forbes, 1933, 45. In addition in Beroia the ephebes were practicing together with those that were younger than 22, SEG XXVII 261, v. 11.

\textsuperscript{14} For the education of children in gymnasium see Gauthier 1995, 4 et seq. According to Gauthier, the *paides* were generally alone (i.e. without the presence of the *ephebes* and the *neoi*) when they were exercised on palaestrae, except of course of some special cases. Paides co-existed with ephebes and neoi only at festivals such as the Hermaia. See Gauthier - Hatzopoulos, 1993, 70.
manifestation of physical abilities in war and at sports competition. (Ioannidis, Stefanovic, Kario, Siljak, Mijatovic, 2008, 80).

The functions of gymnasium

Gymnasium played a significant role in preparing the young for competitions in the Olympic Games of ancient Greece through the physical education that was carried out at practicing areas but it had also an important role from a military point of view. Apart from the fact that the usual program of gymnastic training in many cities included or even emphasized exercises of a military character, there are many indications that the gymnasium was occasionally pressed into service for other military ends (Forbes, 1945, 37). For example in wartime emergencies it was possible to devote the gymnasium wholly to military drill and tactical studies or it might be utilized as a camp ground, a fort, or a base of military operations (Forbes, 1945, 37-38). Many other uses of the gymnasium were due to its being a large structure, capacious enough to contain a throng of people. Thus it was the perfect place for a public feast. As long as they found pleasure and recreation in active physical exercise and in listening to lectures, the Greeks maintained the gymnasium principally for these purposes. Eventually, as their minds and bodies grew softer and craved softer forms of recreation, the gymnasium began to resemble the modern country club or the over-grown and pretentious Roman thermae (Forbes, 1945, 39). Rather late in the Hellenistic period public banquets took place in a gymnasium. The gymnasium might provide on extraordinary occasions a courtroom, a room for judicial hearings, a senate chamber, or a place of assembly for a public ceremony. Thus it was a place of resort for idlers, loungers, and spectators; a place of sport, recreation, education, and worship; a place of life, activity, and animation (Forbes, 1945, 42).

In conclusion it is important to mention that there was syncretism of two spaces (gymnasium and palaestra) – for exercising and for competition, which had a link of human being with something they consider sacred, spiritual and divine. Thus the athletes could not behave religiously only in competitions, since it is generally known that sport and religion were two significant social factors that formed social environment in life of all people of ancient Greece.
Goals and content of the gymnasialarchical education

Except for the older prevailing view that sought the beginnings of gymnasium in the military organization of the 7th and 6th c BC and the creation of the phalanx, recent research has shown that physical exercise and athletic competition were among the most important manifestations of Greek culture, initially associated with the social expression of the aristocratic class. The main goal of the gymnasium has remained throughout the ages the learning of fighting art: the physical education (that is the physical exercise to acquire sporting skills such as speed, physical endurance, muscular strength and flexibility) as well as gymnastic training (that is the learning of the techniques and rules in the sports of the naked games).

The achievement and preservation of a good physical fitness, as well as the virtues of discipline and diligence (philoponia) were obvious prerequisites for the preparation of the warrior. In cities and periods where ephebeia was considered to have primarily a military character, the study of the ephebes in gymnasium was a preparation for their main military education. After all, the training of ephebes (in some cases of the neo15) in military weapons, such as weapon fighting, archery, javelin and catapult use, which took place in the open spaces of the gymnasium, has been repeatedly documented16.

At the same time, we know that at least at some gymnasium were given lectures of scholars, mostly philosophers or orators. This began in classical Athens, where gymnasium as a place of youth gathering and education attracted the great philosophers. The philosophical teaching was systematized when the two of the newly founded private philosophical schools of the 4th c BC, Plato’s Academy (ca. 387 BC) and Aristotle’s School (by Theophrastus ca. 335 BC) were located in close proximity to the city’s great gymnasia, the Academy and the Lyceum respectively, whose public spaces they used for their teaching (Kazakidi, 2015, 42). But we don’t

15 In Beroia, however, at the beginning of the 2nd c BC they are trained daily together with the ephebes and the neo15 up to twenty-two years old in military exercises; Gauthier – Hatzopoulos, 1993, 68 et seq.
know when and to what extent is incorporating the teaching of theoretical lessons in the public gymnastic program, funded by the city. However, by the middle of the 2nd c BC the teaching of philosophy, rhetoric and other sciences, such as physics, geometry, astronomy or medicine, sponsored by the gymnasium authorities, is known from various gymnasia of the ancient Greek world. These courses were probably individual lectures by wandering teachers or were, in some cases, a series of lectures or courses which were depended on the financial capabilities of gymnasium and the intentions of the gymnasiarch (i.e. the responsible official of the educational program).

The ephebes

The first case of the institution of ephebeia is known by the Athenian state. The purpose of the institution was the compulsory, two-year, military training of men who completed the age of eighteen with the expense of the state. Their tenure included guard duty and patrolling the fortresses of Piraeus and the border of Attica and common feeding. The beginning of the institution in Athens (before the law of the Epicrates), its adoption by other Greek cities, as well as its evolution during the Hellenistic and imperial times until the middle of the 3rd c AD, when it seems to be abolished, are issues that have been a matter of research for a long time. Regardless of when exactly the institution first appeared, it seems to have been redefined by the Law of ephebes of the Epicrates that is dating to 336/5 BC (or 334/333 BC), and was soon adopted by other Greek cities. Regarding the city of Athens, from the beginning of the 3rd c BC significant changes were observed in the institution, such as the termination of compulsory service and its reduction to one year. This had as a consequence the gradual decrease in the number of ephebes during the 3rd c BC, while from the end of the 2nd c BC foreigners became accepted into the institution of ephebeia. In the first pre-Christian century the institution of ephebeia had

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17 Most of the information comes from Athens and the post-Hellenic decrees. See Marrou, 1961 (sporadically).
18 For the institution of ephebeia, see RE V (1905) 2737 et seq. Marrou 1961, 165 et seq., 204 et seq. and Pelekidis, 1962.
changed a lot and differed from city to city. In any case, a significant part of ephebes’ gymnastics, military training and wider education was accomplished in gymnasia (Kazakidi, 2015, 40).

**The neoi**

The term *neoi*, except for its general meaning which refers to young persons, was used in sources from the late 4th c BC until the middle of the 3rd c AD as a technical term that describes the young men's club of a city, which is formed under the instruction of the gymnasiarch. The gymnasia were the base of such clubs. Those who went beyond the stage of puberty (this was usually considered to happen at the age of eighteen or after completing their adolescence) entered into the youth club and remained until the age of thirty without, however, this limit to be necessarily the rule. Youth clubs are attested in a large number of Greek cities. The *neoi* often had their own fund, which was supported by contributions of the community members’, gymnasiarch' donations or a variety of benefits.

**Officials and trainers**

The gymnasium, being public institutions, were usually under the control of public officials, the *gymnasiarchs*. The *gymnasiarch* appears as a sort of minister of education. Sometimes he is a duly appointed magistrate but often he is one of those honorary magistrates chosen from the ranks of the wealthier citizens to perform expensive public services. In both cases he was expected to spend his own money freely, in organizing exhibitions and competitions, in improving the gymnasium, especially in providing oil and, in later times, fuel for the furnaces to heat the hot baths. But the actual training was given by the *paidotribes* and the *gymnastes* who were usually under the general supervision of the *gymnasiarch* and who provided specialized theoretical and technical training in gymnastic and military arts. The physical and athletic training were generally undertaken by *paidotribes*, who is

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19 Forbes, 1933, 16 et seq.
usually coupled with the schoolmaster and who taught the sports of the athletic games and had specific knowledge of the kinesiology of the human body and the nature of the exercises, depending on the age of the trainees. He was a private teacher often with his own palaestra. Paidotribes were also employed in the gymnasia to train the ephebes. At the same time there were the gymnasts, who had a broader field of knowledge as coaches of professional athletes. In Hellenistic period they had a number of assistants for special exercises, such as the sphairistes who taught ball play, the oplomachoi who gave lessons in the use of arms, the akodistai (spearman) and toxotai (archers) who gave instruction in the use of the javelin and the bow, the aphetai and the polodamastai; also other officers such as the aleiptai and iatraleiptai (Kazakidi, 2015, 49). The paidotribes may sometimes have trained athletes, but this was properly the work of the gymnastes. The earliest gymnastes were boxers and wrestlers who gave practical instruction in these exercises, but in the 5th century they developed a science of training or gymnastic which aimed, by means of rules for diet, massage, and exercise, at producing the physical condition required for athletic success. Furthermore, sports training involve coaches’ specialists, people from sports medicine, scientists and others. Thus gymnasium was not only the place where a person would occasionally drop in to warm up, but educational upbringing institution which cherished the culture of body and mind.

Other persons with special responsibilities were also involved in the function of the gymnasia, usually under the general supervision of the gymnasiarch. From the 3rd c BC more often is attested the paidonomos21, who is generally considered to have undertaken the education of the children, in proportion to the gymnasiarch who supervised the youth. By the late 3rd c BC is attested epigraphically the ephebarch who was in charge of the education of the ephebes. The age of adoption of the office varies by region and period. Sometimes the ephebarch was elected among the ephebes themselves, while

21 In Hellenistic period the responsibilities of the paidonomos are quite varied. Paidonomoi appear for example as responsible for the selection of teachers, the conduct of children or even for the education of girls, see Nilsson, 1955, 57 et seq. Marrou, 1961, 172.
at other times the ephebarcheia was a public authority given to an adult, possibly of a young age\textsuperscript{22}. In some cases, other officials or city officers are involved in the function of the gymnasium. For example the function of youth organizations was sometimes served by secretaries or grammatophylakes\textsuperscript{23}, who kept the youth records; also the tamies, argyrotamies or logistes, who sometimes took over the management of the youth common fund which was sometimes used to reward honorable persons (precious wreaths and statues) (Kazakidi, 2015, 41).

Since the late Hellenistic period and especially during the Imperial period, usually in cases where it seems that there was difficulty for someone to undertake the expensive principle of gymnasiarch, some of the gymnasiarhs’ responsibilities related to the management of the gymnasium and the cover of the necessary expenses were undertaken by other officials such as episkopoi, epistatai\textsuperscript{24}, elaionai\textsuperscript{25} or epimeletai\textsuperscript{26}. The cooperation of more officials in the administration of gymnasium is attested by their common votives on gymnasium. Concerning the organization of the games during the festivals of the city or gymnasium, an important role was that of the agonothetes, who were mainly responsible for the awards and the organization of agonothesia (Papakonstantinou, 2016, 110). Finally, personnel were also appointed for the daily care and function of the gymnasium.

\textsuperscript{22} In some cases the ephebarch took over the position of the gymnasiarhs in the education of the youths. Forbes, 1933, 34. The duties of the ephebarch are mentioned detailed in the unpublished ephebarchical law of Amphipolis. In some cases there is no ephebarch, but the gymnasiarhs was responsible for the ephubes. For the beginning of the ephebarcheia see generally Marou, 1961 and Delorme, 1960, 254 note 10.

\textsuperscript{23} Forbes, 1933, 35.

\textsuperscript{24} The institution of epistasia, which is one of the most important institutions of the ancient Greek city, varies greatly depending on the city and the season. Specifically about the presence of epistates in gymnasium, see Robert, 1935, 449 et seq. and Gauthier - Hatzopoulos, 1993, 150 et seq.

\textsuperscript{25} They were responsible for supplying the oil with which the athletes were anointing, see Nigdelis - Souris, 2005, 42 with note 58.

\textsuperscript{26} For epimeletes in gymnasium, see Robert, 1960, 295 note Sand Forbes, 1933, 36.
and its facilities. The *paleastrophylax* was the key keeper and conservator of the building, while the *xystarches* was responsible for the xystos (Kazakidi, 2015, 48-49).

**Administrative and financial management of gymnasium: The gymnasiarch**

The administrative and financial management of the gymnasium was undertaken by the *gymnasiarch*. The term *gymnasiarchia*\(^{27}\), found in written sources from the 5\(^{th}\) c BC, describes fully the activities of the *gymnasiarch*, initially in relation to the organization of the gymnastic games, and furthermore in relation to the function of the gymnasium. The duties of the *gymnasiarch* were expanded from the second half of the 4\(^{th}\) c BC, when the first monumental gymnasias were established, since except for organizing the games, the *gymnasiarch* was responsible for the management of the gymnasium. During the Hellenistic period, *gymnasiarchia* seems to have progressively evolved in most Greek cities to a single elected annual axiom with institutionalized rights and obligations.

The activities and responsibilities of the *gymnasiarch* were the following: the supervision of the practice all of the trainees in the gymnasium, the appointment of specialized trainers, the payroll of trainers, the conservation and the repair of the building facilities and their necessary equipment, the decency, the supply of oil and/or timber, the organization of the sacrifices, the organization of the games, the determination and procurement of the rewards for the winners of the games, etc. In some cases the city assigned to the *gymnasiarch* or to *tamias* the management of its revenue in order to cover the various costs of the gymnasium. Significant financial support for the function of the gymnasium was also provided by the *gymnasiarches* themselves when practicing their own axiom, which required their financial well-being. A *Hypogymnasiarch* is sometimes referred to as an assistant coach of the gymnasarch.

The lack of financial resources during war and post-war periods, the mismanagement of gymnasium property or other symptomatic or unforeseen causes, such as

catastrophic earthquakes, rising of oil prices, etc., could cause malfunction to gymnasia. These problems were occasionally dealt with benefactions of the rulers or donations by the gymasiarches themselves or by other prominent citizens and various benefactors. It should be noted that we do not know on what administrative and financial basis functioned the gymnasia that were incorporated in sanctuaries, such as those of Olympia and Delphi.

**Festivals and competitions as part of the educational process**

An integral part of the educational process was the record control of the students through regular competitions that were normally nude games (road racing, pentathlon and heavy sports), but also other equally important competitions, such as those of euexia, eutaxia, and philoponia. We do not know much about the nature of these competitions. These were, however, games of physical condition (eutaxia), demeanor or discipline (eutaxia) and philoponia in sports records. Other competitions are also occasionally mentioned in relation to gymnasium, such as music competitions or educative competitions, such as that of erudition.

The various competitions attended by gymnasium students were either embedded in the city's official festivals and cult events or were conducted during the festivals of the gymnasion. The festivities with the various cult events played an important role in the life of the gymnasion, just as in every aspect of ancient Greek daily life.

Hermes and Hercules were worshipped as patrons of gymnasium and Hermaia was the most important religious event of the gymnasion. Hermaia was a celebration in honor of Hermes in the last month of the year and it lasted at least two days. The celebration signified the end of the gymnasion year and the tenure of the gymasiarch. It included nude games (mostly street and torch race) and euexia, eutaxia, and philoponia competitions. The beginning and the end of the games were signaled by purification sacrifices and bloody sacrifices of oxen respectively. The

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feast was completed by a banquet. Furthermore, are witnessed celebrations in honor of other gods that were worshipped in gymnasium such as *Heracleia, Herotideia* and *Museia*. There are also celebrations that are related with the integration of the *ephebes* into the society, such as are the *Apatouria* and *Xanthika* in Macedonia. At the same time, already from the first half of the 3rd c BC are witnessed festivals in honor of benefactors who have made significant donations for the function of the gymnasium, such as were initially the rulers and later other political persons, citizens or foreign benefactors. All of the above celebrations usually included competitions, sacrifices and banquets and took place inside the gymnasium.

Moreover, another significant fact is that *paides, ephebes* and *neoi*, under the supervision of their officials attended or played a significant role in public events of the city, mostly in religious but also in political events such as anniversary celebrations, processions and sacrifices, worships of heroized deceased and public burial ceremonies of prominent personalities (Kazakidi, 2015, 52).

**The architectural type**

The total number of gymasia that have been collected and have been studied by J. Delorme is impressive29. However, the number of the buildings, which have been full excavated and have been systematically published are comparatively extremely small. Thus our knowledge of the form of gymasia in archaic and classical period is limited and derived almost exclusively from the laconic references of the literary tradition which refer that the distinction of two areas with a different function within the gymnastic complex, namely the area for the exercise of wrestling and the area for street exercise, characterizes the gymasia already in those two periods.

The earliest reference to gymnasium comes from Athens, during Solon era30. The gymasia of Athens of the 6th c BC are developed in connection with sacred shrines

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29 See Delorme, 1960, 33 et seq.
(temenos) dedicated to the worship of the gods (Academy, Kynosarges, and Lyceum). They are described on the sources as enclosed outdoor areas with a precinct, which are outside the city, usually near its walls and in places with stream, necessary for their function. They have a corridor for the running training, the dromos, and possibly some auxiliary buildings (Kazakidi, 2015, 55).

Some of the new gymnasia that are established in the early Hellenistic period are still built on the edge of the city, near its walls, but usually in close proximity to other public buildings with a cultural function, such as the theater or the stadium (Amphipolis, Eretria). This location in the periphery of the city is still selected for gymnasia that are established in the 3rd and 2nd c BC (Argos, Demetrias, perhaps Halkida). In some cases, from the end of at least the 3rd c BC, the proximity of gymnasion with stadium was evolved into an architectural connection of the two buildings in order to form a single complex (Priene). At the same time, probably from the end of the 4th c BC, when the agora is transformed into the socio-political core of the Greek city, gymnasia are also established in the city center, in the area of agora or near agora (Upper gymnasion of Priene)(Kazakidi, 2015, 57).

The architectural type of palaestra appears in Athens, according to written sources, from the first half of the 4th c BC, perhaps even earlier. However, in the last decades of the century, when the oldest building remains are dated, the type has become widespread, as attest the examples in Delphi, Athens (Academy, Lyceum), Eretria and Amphipolis. The type of building with an inner peristyle is generally employed for the palaestra. Behind one or more sides of a rectangular central peristyle courtyard are arranged symmetrically closed rooms or with a colonnade on the façade. The concept of symmetry in the arrangement of closed rooms and rooms with colonnade on the facade around all the four sides of the peristyle appeared already developed in the Amphipolis palaestra, which is one of the earliest surviving

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31 The fact that the function of the palaestra is adapted to the type of building with peristyle, an architectural type chosen in Greek architecture for buildings with a variety of public or private functions, makes it difficult to identify a building with palaestra / gymnasion in the case that other archaeological data are absent, e.g. the finding of baths, xystos or indicative movable findings.
examples and dating not much later than that of Delphi. A similar tendency for symmetry is found in the arrangement of the rooms in the palaestra of Olympia of the early 3rd c BC. The palaestra building is accompanied by other autonomous installations, each of which had its own function. From the second quarter of the 3rd c BC (Delphi), and perhaps earlier (Amphipolis), next to the palaestra, is constructed a stoic building, the xystos, and a parallel to this outdoor space, the paradromis; moreover other facilities are added, such as independent baths, outdoor altars or other auxiliary buildings. Thus in terms of floor plan, size and monumentality, the extant gymnasia vary widely. The small number of fully preserved gymnastic complexes in Greece (Delphi, Amphipolis) and the variety that these present make it difficult to group and classify them into individual types.

In the 2nd c BC the development of the gymnasium seems to be influenced by the tendency for regularity and unified design. As a result, all the necessary areas of the gymnasium that once constituted autonomous sections were composed in a single architectural design. Thus, in the new buildings of this era the stoa of the xystos ceases to be an autonomous building and is incorporated into the palaestra building (lower gymnasium of Priene). Finally, from the middle of the 1st c BC in the oldest Hellenistic gymnasia, are often added hot baths, following the example of the Italian baths (Delphi) (Kazakidi, 2015, 59).

### The architectural parts of gymnasium

The term gymnasium is used to specify a complex of buildings which consisted of palaestra, xystos, paradromis, peripatoi and other auxiliary buildings. To begin with the access to the gymnasium was possible through one or more entrances, which from the 2nd c BC were often formed as monumental propylon (Olympia, lower gymnasium of Priene, Amphipolis). In continuation the names, form and use of the rooms that were developed around the peristyle of the palaestra were described with more or less clarity by the written sources. Reception and preparation rooms were the paidagogeion (waiting area)\(^{32}\), the apodyterion (dressing room)\(^{33}\), the

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\(^{32}\) Delorme, 1960, 330 et seq.

\(^{33}\) Ibid., 296 et seq. and Nielsen, 1990, 153.
elaiothesion (room for anointing of the athletes)\textsuperscript{34}, the aleipterion (oil coat room)\textsuperscript{35} and the konima or konisterion (room in which the athletes covered themselves with powder or sand to an oiled body)\textsuperscript{36}. Specially designed spaces with appropriate equipment were used for the exercise of various sports: the korykeion (room for boxing and pankration exercises with the korikos hanging in the middle)\textsuperscript{37} and the sfairisterion (room for/with ball games). Special constructions, such as the sandbox or the plethron, facilitated the exercise of the long jump\textsuperscript{38} and wrestling\textsuperscript{39}. In the open spaces of the gymnasium the trainees practiced on javelin and discus throw. Moreover there were special facilities for the street games (stadio, dolichos, diaulos and hoplites dromos), at least where there was plenty of available space: 1) the xystos or dromos, a stoeic structure, which was a roofed track, initially independent of the palaestra, with length of one stadium (600 feet) and thirty-two feet in width and which was used by runners at bad weather. 2) Parallel to xystos was usually the paradromis, an outdoor oblong track of similar dimensions to the xystos for the same games, when the weather was good (Kazakidi, 2015, 61). The gathering of the students and their theoretical teaching took place on exedrae. These were rooms of the exedra type, with a colonnade on the façade that opened to the peristyle of the courtyard. Usually there were stone benches along their walls. These rooms are the most common in gymasia. According to Vitruvius (5,11,1), the exedrae were offered for discussion and teaching of philosophers and orators. Another room was the ephebeum (room where various lectures were held) which had the form of exedra and which according to Vitruvius (5,11,2) was the largest and most important room of the palaestra. From the 3\textsuperscript{rd} c BC is attested epigraphically the auditorium, a room also for the theoretical teaching. In one sense, the Hellenistic auditorium, whose form is not known with certainty to us, is


\textsuperscript{35} Delorme 1960, 301. Nielsen 1990, see on Appendix.

\textsuperscript{36} Ginouvès, 1998, 128.

\textsuperscript{37} Delorme, 1960, 280 et seq.

\textsuperscript{38} Ibid., 292.

\textsuperscript{39} Ibid., 71.
standardized on Imperial period as a room with semicircular benches namely, the known in modern bibliography odeion. In addition, from the 2nd c BC is attested, in some gymnasias, the function of libraries or the availability of smaller collections of books.

Another essential element for the operation of a gymnasium was the stream water, the supply of whose was necessary in every building of similar purpose. The written sources mention fountains inside the palaestrae. At the gymnasium of Delphi, for instance, in the late 4th c BC the bathroom is built in the outdoor space to the west of the palaestra. Very soon, however, it seems that in other gymnasias one or more rooms in the palaestra are formed as baths. The bath was generally cold according to Greek custom. The loutron (room for bath taking after the training) had basins placed along the walls and a proper water supply and drainage system. In some cases, however, there are rooms for hot baths, such as the pyriaterion (room with hot and cold water) and the circular laconicon. In other cases there were bathing facilities outside the palaestra, usually fonts, rectangular or circular, built in outdoor neighboring spaces.

Also, there should have been places for the worship. On the written sources there is reference to such spaces in proportion to gymnasia as naos (temple), naiskario, oikos and temenos, which were occasionally places for the worship of the palaestra gods or the dead heroes. Moreover, we could assume that worship was traditionally served in the gymnasias primarily by Hermaic stelai.

When Vitruvius (5,11,1) describes the arrangement of the individual spaces around the peristyle of the Greek palaestra, it is unknown whether he has an actual example of the last decades of the 1st c BC as a model or an ideal model. So according to Vitruvius, in the center of the north side of the palaestra, there is the ephebeum; on the left the elaiothesion, while on the right the korykeion and next to it the

40 Bathrooms in good condition and part of their equipment are maintained in the gymnasias of Amphipolis, Eretria and Priene.

41 The oldest bathroom construction of this kind is dated to around 400 BC in Olympia. Also, outdoor bath constructions of the classical period were discovered in the gymnasias of Delphi and Amphipolis.
konisterion; the two corners of the same side occupy the bath-rooms; on the rest of the stoae are arranged exedrae with seats. Despite the precise description of Vitruvius, the surviving buildings are diverse in terms of the number, size, and arrangement of the rooms around the peristyle of the palaestra, as well as the overall design of the complex, the layout, that is, of the individual installations. Thus there is usually a difficulty in recognizing the function of the palaestra's rooms and, consequently, are created reservations about their identification (Kazakidi, 2015, 63).

Gymnasia on the Macedonian cities

Almost every Greek city had a gymnasium among the other public buildings. On these building complexes took place the physical and spiritual education of the young people of every city but their role was more complicated and versatile. They were places of athletic and military training and at the same time schools with educational gradation but they were also political, religious and cultural centers. Thus their function was connected with the everyday life of the city. The only gymnasium of the Hellenistic period for whose function we are sure and that has been uncovered is the Gymnasion of Amphipolis (fig.7). The excavation of the gymnasium of Amphipolis had begun by the archaeologist D. Lazaridis and continued by K. Lazaridi. Furthermore, two buildings from the acropolis of Pella (fig.8) are interpreted by archaeologist P. Chrysostomou as the gymnasium of its palace and in the roman colony of Philippi is excavated the palaestra of the city (fig.9) which was constructed in the heart of the colony on the west side and was connected with the forum (Vasileiadou, 2011, 463).

The rest of the Macedonian cities which had gymnasia, according to the epigraphic sources, are: 1) Thessaloniki on which the location of gymnasion was probably in

the area of the church of S. Demeter, below a building of roman bath, close to the city’s stadium. 2) Beroia which probably had a gymnasium and on which has been found an inscription with its gymnasialarchical law. 3) Apollonia on which region has been found an inscription that refers to the construction of gymnasium on this area. 4) The ancient Dion (the sacred city-sanctuary of Macedonians) where the existence of a gymnasium that functioned at least during the Hellenistic period and was probably inside the city’s walls, is attested by the historian Polybius and which is the 1st known gymnasium that unfortunately was destroyed by the Aetolians of Scope during the Alliance war, in 219 (Historia 4.62.2). In conclusion, according to the epigraphic sources there are more gymasia in many other cities but unfortunately they are unidentified by the archaeological research.

Gymnasium of Pella

The large-scale grandiose building north of building II, with more than one building phases, has been conventionally designated as building V and has been interpreted as the palaestra or the gymnasium of the palace (fig.8). The gymnasium of Pella’s palace is the only example of a gymnasium that is incorporated in a Hellenistic palace. At Aigai/Vergina, where we have found the only other palace in the Macedonian region, have not been found a common space for exercise. At the palace of Aigai have been revealed the central peristyle surrounding by rooms, banquet rooms (andrones), antechambers-waiting rooms, corridors, the Tholos, storage rooms, kitchens, sanitation facilities, staff residencies and stables but no gymnasium or any other athletic facility. Thus the “royal palace” of Philip II at Aigai was probably not planned to house the private family life of the king. There are no spaces as was the athletic facilities for the athletic and military training that reflect

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44 For the gymnasium of Thessaloniki see Makaronas, 1948 and Robert, 1949, 123.
45 Nigdelis and Souris, 2005, where is collected all the relevant bibliography about the gymnasium of Beroia.
48 For the Macedonian gymasia known from the epigraphical sources see Hatzopoulos, 1993, 154-176.
the traditional privacy and introverted nature of the usual Greek house. There is no space for family life beside the public life and political action which were the palace’s proper sphere.

On the other hand it has been revealed at Pella the gymnasium of the palace. More specific this building served the exercise, entertainment and the education of the occupants of the palace (royal paides) and of the “των περί των ἄλλων νεανίσκων”, the offsprings of hetaira. Here exercised apparently also the guard of the palace, the king and his friends, his guardians and his guests. Thus we could suppose that the neoi and ephebes residents of Pella were exercised on another gymnasium which would be located somewhere inside the city and which has not been found yet. The co-existence of more than one gymnasium in the same city is not something unusual as we have seen for example in Athens. For this reason and because as I have already mentioned the gymnasium of the palace was only for the occupants of the palace the existence of another gymnasium in Pella is not impossible. But this is just an assumption and we can’t be sure because we don’t have enough evidences.

The dimensions of building V(fig.14) at Pella are 63.50 × 70 which are close to the size of the one at Olympia and much larger than the one at Amphipolis. The core of the palaestra consists of a large peristyle (50 × 38 m) courtyard surrounded by stoae that was decorated with monuments, of which remain only traces of the foundations. Thus opening off to the north stoa were eight rooms, most of them evidently serving purposes connected with athletics and education. These rooms are the followings (from East to West): the kolymbethra, konisterion, korykeion, ephebeum, epistasion, elaiothesion, apodyterion and the loutron49.

More specifically, behind the north stoa there was a second internal stoa (in case of storms and rain) and in its background there was a row of large rooms which were built in the early Hellenistic years. On the northeast corner of the building came to light the kolymbethra(7 × 5 m × 1.65 m deep)(fig.11) which communicated with the hypostyle space of the loutron (building IV) and with the palaestra creating in this way a unified bathroom complex that is designated as the "Grand Baths" of the

49See AEMTH 13(1999), 492-494.
palace. Its walls and floor were finished with hydraulic cement and it had a set of steps leading down into the water in one corner (Koukouli-Chrysanthaki, 2011, 401). Thus the kolymbethra for the cold bath is placed on the northeast corner of the palaestra while on the northwest corner(fig.13) are located the spaces for the cold and warm bath respectively. Judging from the room that has been revealed on the east of the oblong corridor, on the south of the kolymbethra, this can be interpreted as the apodyterion\(^{50}\). Furthermore, north of the building and close to the edge of the south stoa were revealed two drains\(^{51}\) which were full of architectural parts and ceramic. Thus the excavations have revealed enough evidence which is related to the water supply and sewage system of these spaces that comprise these bathroom installations, which occupy as it looks part of the buildings V and IV of the palace complex and were abandoned in 168 BC (Kaiafa, 2008, 70-71).

South of the kolymbethra was revealed a rectangular room that communicates through a door without a threshold with the space that was found behind the north stoa of the palaestra. This room communicated through an entrance with the loutron which was revealed on the northwest corner of the building IV. On the west of the kolymbethra was revealed an oblong room which on its last phase was separated into three smaller spaces. On the floor of these spaces were found three circular carvings where there were placed wooden columns in order to support the accessories for boxing. Thus this room could be interpreted as the korykeion(fig.12) where there were the korykoil(punching bags). Furthermore, on the west was revealed another rectangular room which communicates with the previous room with an entrance without a threshold. On the west of this room were excavated the east part of a big room which is probably the ephebeum (teaching room) and which was in the centre of the north side of palaestra. This room was an exedra with wooden seats on which the ephebes of the courtyard were seated and attended lessons by philosophers, teachers, orators etc.

\(^{50}\)See AEMTH 10A(1996), 114-119.

\(^{51}\)See AEMTH 10A(1996), 119.
West of the *ephebeum* of the palaestra a wall was revealed in 1997 in axis E-W with white mortar. The subsequent wall divided the unified room into two smaller rooms which connected with each other with a door on the eastern side. On the west of this room there was another room that could be interpreted as the *elaiothesion*, according to Vitruvius (5, 11,2). Thus between the *ephebeum* and the *elaiothesion* there was a smaller luxurious room that could be interpreted as the *epistasion* if the room on the east side of the internal stoa is an *apodyterion* or the seat of the trainers and *paidotribes*. Thus according to the excavating data and the information of Vitruvius the arrangement of the spaces of palaestra is the following: On the left (west) of the *ephebeum* is placed the *apodyterion*, *aleipterion* and the *elaiothesion*. On the right (east) of the *ephebeum* is placed the *konisterion* and next to it the *korykeion*.

In conclusion, on the west of the building II and of the palaestra is found and excavated a long corridor in axis S-N which started behind the west wing of the palace and ended on its north edge on a stone staircase (fig. 10) that leads to building VI and to palaestra which were located on an upper terrace. This corridor could be employed as the *xystos* of the gymnasium of Pella’s palaces, according to the archaeologist P. Chrysostomou, that is the long covered corridor (115 × 5.5 m) that permitted exercise in winter (Vasileiadou, 2011, 466).

**Gymnasium of Beroia**

The first mention of the gymnasium in Beroia appeared in a Hellenistic inscription from the Greek city of Beroia, the *gymnasiarchical* law, that was established before the Roman conquest (167 BC), with the aim of reorganization of the institution, the definition of the rights and obligations of the *gymnasiarch* but also of the trainees and the regulation of the games and cults that took place there. This indorse stele is very significant because it informs us about the operation of the Hellenistic...
gymnasium but mainly for the understanding of the Macedonian society, the institutions and its morals (Deflassieux, 1999, 87).

The gymnasium of Beroia was probably located in the southeast area of the city (fig.4), outside the walls, near the road to Pieria. The gymnasia were placed outside the walls because they were mainly used for military exercises and were established in vast spaces, with gardens and streams, which were necessary for their baths and tanks. Only from the 3rd c BC the gymnasia were separated from its rural environment and incorporated in the urban web. Thus the gymnasium of Beroia is probably dated in an earlier era, since it is outside the walls. Close to the gymnasium were also accidentally found the foundations of an ancient stadium on which were found rows of seats, the limestone foundation, marble benches and the remains of three small structures. What is more, it remains unknown if there was a second gymnasium in Beroia.

It is also probable that there was one or more palaestrae if we consider that in the fourth line of the second side of the gymasiarchical law it is stated that whoever frequents the gymnasium cannot practice in another palaestra of the same town. If this text is addressed to all the cities of the Macedonian kingdom (royal diagram), it doesn’t constitute evidence for Beroia. But if it only applies for Beroia then it confirms the existence of at least one palaestra in town. The palaestra was originally a simple part of the gymnasium, consisting of a square courtyard surrounded by stoae but during the Hellenistic period was transformed on the major cities into an independent building, private or public (Deflassieux, 1999, 90).

The gymasiarchical law of Beroia

The gymasiarchical law of Beroia (fig.1) is inscribed on both sides of a marble stele decorated with horizontal crowning and cymatium (Fig. 1-3). The law consists of 217 lines containing the legislative process for the adoption of a law related to the conduct of the gymnasium and the text of the law itself. There is a complete loss of

53 AA Δ 31 (1976), 256.
43 lines from Side A, while Side B is more legible (Hatzopoulos, 2016, 33). It was discovered in 1949 at “Palaioforos” region (location of the ancient gymnasium) to the north of the city, where it was reused as a tomb cover in the paleochristian era. It has a size of 1,755m length × 4,0468m width and it is attributed to the Hellenistic period, from approximately 200 to 168 BC.

The law regulates by order mostly administrative matters related to the proper conduct of the gymnasium: (1) the election process of the gymnasiarch (EKM I 1, ll. A 1-25), (2) the oath and the required skillset of the gymnasiarch (EKM I 1, ll. A 25-63), (4) the disciplinary rights and responsibilities of the gymnasiarch, of the trainers and of the athletes (EKM I 1, ll. B 1-26, 39-45), (6) the admission criteria (EKM I 1, ll. B 26-39), (7) the conduct of Hermaia and other contests (EKM I 1, ll. B 45-71), (8) the selection of lampadarchs (EKM I 1, ll. B 71-84), (9) the selection of umpires (EKM I 1, ll. B 84-87), and (10) the accounts, the revenues and the debts of the gymnasium (EKM I 1, ll. B 87-110).

Gymnasium of Amphipolis

The only Gymnasium of the Hellenistic period for whose function we are sure and that has been uncovered is the Gymnasium of Amphipolis (fig.7). The excavation of the Gymnasium had begun by the archaeologist D. Lazaridis and continued by his daughter, K. Lazaridi. Thus the excavations of 1982 uncovered the first large public building which was identified from epigraphic evidence as the gymnasium. The gymnasium is located inside the city and not outside the walls, as was happened until the end of the 5th c BC (as the gymasia of Athens) neither in the center of the city, as was happened on the 2nd c BC. More specific it is located in the south-east sector of the city, between the wall encircling the Acropolis and the outer enceinte of the long wall (Lazaridis, 2003, 52). The site of the gymnasium next to a gully in which once flowed the water that is necessary for the function of the building, dominates the entire region, from the east side of the city to the mouth of the Strymon. In this way, it is connected with the natural environment of gymnasium with the groves, the flowing waters and the idyllic landscape although it belonged to the urban environment of the city. Moreover, its panoramic and strategical location
is very useful for its defense, since the city is not naturally fortified from the river Strymon on its east side. Its vicinity with a building probably related with the worship of Dionysus, and with the theater of the city (north of the gymnasium) is not a coincidence; this is also deducted from its ephebarchical law, in which is mentioned the contribution of theater to the education of the young men. (Vasileiadou, 2011, 464)

The complex of the gymnasium (fig.5) is composed by the rectangular palaestra building, the building with tanks for water supply, the xystos, the paradromis and a rectangular oblong altar. The western boundary of the gymnasium was identified with the outer west wall of the palaestra and was extending to the NW corner. There was revealed a building with a tank (fig.21) and on its east side was extended a stoic building that identified with the xystos. Between gymnasium and palaestra has been found also a limestone altar (fig.20) which was employed for sacrifices before the beginning of the games and for apposition of symposia. Directly connected with the gymnasium building complex, and beyond this, there seems to have been the "new building", a three-storey space to the north of xystos which was connected to gymnasium by a 2.00m wide corridor (fig.15) (Kaiafa, 2008, 433-446).

One of the most important parts of gymnasium was the palaestra in its SW (fig.6). The palaestra (1,600 m²) is a rectangular building (fig.16) with a central courtyard (46.80 m. X 36.10 m.) with Doric peristyle (six Doric columns on the north and south side and eight on the east and west sides) for exercise, which are surrounded by a north and south stoa and double stoae east and west. Sixteen large and small rooms are opened on its four sides (Lazaridi, 1990, 247). The courtyard and the North and West stoa (fig.17) were the more crowded spaces in both building phases. The entrances of the gymnasium were one on the west (I) and one on the east side (X). Along the west side of the building was revealed a stone-paved street which lead to the west entrance. A third entrance to the Ionic propylon type, which leads to the north part of the complex, is formed on the north wall of room XII. But the main entrance to the gymnasium was probably on the east side and consisted of a monumental staircase (fig.23), 8.70 m wide, of which twelve steps are still in situ and which is framed by a supporting wall and a bilateral naiskos-style space in the south
dedicated to the worship of Hermes and Hercules (Kaiafa, 2008, p.436); these led to the internal rooms of the building, the dimensions of which are 46.80 x 36.10 m. Parallel to and behind the staircase was uncovered a wall with very well made isodomic masonry. Behind the west stoa opened an oblong stoic room (exedra) with a pentastyle limestone Doric colonnade on its east side (III). An opening might have been on the south wall of the exedra. Along its back wall were revealed six stone bases of benches\(^{54}\). In front of the second and third northbound base was revealed a semi-circular clay floor. A corresponding exedra was probably behind the eastern stoa, of which is preserved today only the sub-foundation of the southwestern part of the stylobate (VIII). At the west end of the north stoa, to the north of the west entrance, is formed a small area (XV) of 3.10 x 4.80 m, probably open on its east side to the north stoa. Four rooms are opened behind the north and south stoa. The NE and SW angular rooms are rectangular parallelogram, while the rest are nearly square\(^{55}\) (only the foundations are actually preserved from the rooms that are opened behind the southern stoa). The NE room preserves the paved floor (Kazakidi, 2015, Catalogue 37, 73).

A large bathroom (fig.18) was uncovered in the north-east corner with dimensions of 12x7 m, and with marble stands along the walls that supported marble basins: four of these basins (fig.22) have been found in the floor in second use. The basins were supplied with water by a conduit, preserved in the north wall, and by springs. The overflow from the basins ran over the floor, which was paved with poros slabs and was led out of the bathroom and away from the building by clay conduit that started beneath the threshold of the room (Lazaridis, 2003, 52). A second bathroom was uncovered in the north-west corner of the building and outside from the palaestra which was divided into two parts - the west with the tank and the east that remains unidentified (Kaiafa, 2008, 446-449). This was smaller than the first and badly damaged, but functioned in the same way and had the same drainage system. Based on this evidence we can conclude that the bathrooms were an integral part of the architectural structure of the Hellenistic gymnasium. This functional part of a

\(^{54}\)See the opinion of D. Lazaridis, PAE 1982, 46. Himself, Ergon 1982, 15.

\(^{55}\)See K. Lazaridis, PAE 1984, 35 et seq., PAE 1985, 71 et seq.
gymnasium is modified a lot during the Imperial period mainly due to the technological evolution in the construction of the baths. Thus from the building complex of palaestra with the Thermae is created the new architectural type of the Gymnasia-Thermae, since the military and athletic character of the gymnasium began to decline. Thus, with this way the gymnasia were converted in luxury amusement buildings of high architectural conception (Vasileiadou, 2011, 464).

Between the two bathrooms were two other rooms. Four rooms with the same dimensions as those on the north side were revealed in corresponding positions in the south side of the building (Lazaridis, 2003, 52-53). On the west side was uncovered a stoa with a colonnade of five columns, which led to the interior open-air area that was used for practice and games. Close to the middle of the north side of the stoa is a floor of clay slabs in a semicircular-elliptical shape (fig.19), 3-4 m length, which was used for some athletic event, probably wrestling. Except of this floor three more ellipsoid spaces were revealed which were paved with clay slabs or roof tiles but unfortunately only that on the west exterior stoa was intact (Lazaridi, 1990, 251). For the same purpose was employed another special room, the konisterion, whose floor was covered with a thick sand layer. The elaiothesion is another room that has also been identified based on the inscription that was found in situ that mentions a sponsorship of greasing and functioned as a storage room for oil with which the ephebes were coated before their exercise on wrestling (Kazakidi, 2015, Catalogue 37, 74).

Concerning the masonry of gymnasium its exterior walls were built with the isodomic masonry and are preserved on the height of 3 m. The interior walls on the SE side of the building were built on the natural bedrock with the masonry on the shape of abacus on their stereobytess (Lazaridi, 1990, 245). Furthermore the

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57 See also PAE(1982), 45, fig.1, board 20a and Ergon (1984), 22, fig.16.
58 See PAE(1982), board 20b, 21a, 22a.
stereobytes of the two walls of the east entrance were built on the abacus system while their foundation with the isodomic system and the same happened with the east wall of the interior courtyard. Thus these two masonry systems were used on the walls of gymnasion.

The internal spaces of the palaestra were decorated with many sculptures and inscriptions. From the excavated Macedonian gymnasia only in the gymnasium of Amphipolis have been found parts of its mobile equipment. From the other gymnasia of the Hellenistic world we know and we can conclude that the *epheboi* athletes were honored with marble statues and they are usually depicted naked. Thus, the statues’ figures of the games winners were naked, while the figures of the benefactors, gymnasiarchs and the officials were dressed. Some sculptures were oversized and some others were bronze. For example, the statue of the gymnasiarch Philip from Amphipolis, which is erected in his honor by the youths in the most important place of gymnasium, was probably made by bronze and next to it was erected a stone stele with the relevant youth’s decree. The statue figures depict also other eponymous and anonymous men and even women of the city. At the gymnasium of Amphipolis have been found many statue fragments of male and female figures (Vasileiadou, 2011, 465). Furthermore, on the west stoa was erected Hermaic stelai. Several bases have been found there, five of them along the wall on the west side, and a sixth moved of the stoa. What is more, a large inscribed statue base was found *in situ* in front of the north wall of a small room on the north of the west stoa. This was erected by the young athletes in honor of their patron and gymnasiarch, Apellas son of Diogenes. Below the inscription, which dates back to the early Imperial period, there is a relief olive wreath tied with a ribbon (Lazaridis, 2003, 54). Moreover, a number of votive inscriptions have been found in the gymnasium which were dedicated to the gods Hermes and Heracles, patrons of the games, and also to known historical figures holding high office –Publius Cornelius Scipio, Kotys, king of Thrace, and others. The place of worship for the two gods (Hermes and Heracles) was a naïskos-house at the palaestra of Amphipolis in which have been found their statues and Hermaic stelai. But they worshipped also other
gods like the Egyptian Gods and the patron gods both in the gymnasium and also in the city (Vasileiadou, 2011, 465).

During the Imperial period the statues of the founders of the gymnasium and their families are depicted on the sculptures of gymnasia which usually decorated the *ephebeum*, the *exedra* and stoae i.e., the crowded places of the palaestra and also the fountains. These sculptures in the gymnasium of Amphipolis were placed at the north and west wing of the palaestra and decorated mostly the stoae and the courtyard. Moreover, some of the most important findings from gymnasia are the inscriptions on marble stelai, the engraved inscriptions on the walls of the buildings and the graffiti which give us very important information. These were mostly votive inscriptions but there were also engraved games on the architectural parts of the buildings, with which the youths used to be entertained. For example, parts of clay slabs with engraved board games, chess pieces and *astragaloi* have been found at the gymnasium of Amphipolis which probably belonged to ephebes (Vasileiadou, 2011, 465).

The gymnasium building must have been built during the Hellenistic period, or probably at the end of the Classical period, as is attested by the isodomic masonry, the Hellenistic and several Classical sherds discovered in the deepest levels, the coins, several of which are of Philip II and Alexander the Great, and the inscriptions discovered on the site (Lazaridis, 2003, 54). According to the excavator the dating of the earliest mobile findings and the common masonry system of the individual installations of the gymnasium indicate that they should not be chronologically spaced. If this view is true, then the xystos of Amphipolis is the earliest known. Moreover At least two phases of function of the complex are stratigraphically observed. According to the terminus post quem given by the surviving inscriptions of the Hellenistic period, the destruction of the gymnasium is dated in the 1st c BC (Koukouli-Chrysanthaki, 2011, 433). Historically the first destruction of the gymnasium has been linked to the Thracian uprisings against the Romans during the

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59 See Lazaridis, PAE 1987, 171.
Mithridatic wars (88-63 BC)\textsuperscript{60} or with their attacks along the Egnatia Road in the year 57/56 BC\textsuperscript{61}, which is probably the cause of the destruction of other Hellenistic buildings in Amphipolis\textsuperscript{62}. Thus it was in use until the early Imperial period with some extensions and additions, when it was probably destroyed by a great fire, as demonstrated by the 0.40 - 0.60 m thick destruction level that has been found inside the west stoa and which consists of tiles from the roof mixed with ash and charcoal. Similar evidence of destruction was uncovered by the trenches opened along the outer walls, in other parts of the building, even outside it.

During the early Imperial period, which was the second phase of the building’s operation, the east entrance must have been sealed, since a built conduit, which starts from the atrium, passed over the monumental staircase. At the same period a new entrance was constructed on the north side of the building; it consists of a propylon with two Ionic columns (fig.16) and a staircase which led down into the building. This Roman propylon leads to a room with dimensions of 7.20x7.05 m, which connects with the north stoa of the gymnasium through an entrance.

In 1985, after the death of D. Lazaridis, the first excavator of Amphipolis’ gymnasium, the task of continuing the excavation was assigned to his daughter, K. Lazaridi. These excavations have shown us that the gymnasium was not confined to the palaestra, but that it was extended to the area around it, forming a unified building complex. On the northwest of the palaestra has been revealed a system of reservoirs to supply the athletes and the building with water, which consists of lead and clay conduits leading the water from the reservoirs to the buildings. To the north of the palaestra was uncovered a section of a stoa – the xystos (covered running track) (fig.24) which the athletes used for training in bad weather. This building had an inner wall of 7,10 m and a Doric colonnade on the front south side, as required for its function (Kaiafa, 2008, 449). Later the excavations of 1988 and 1989 revealed the xystos to a length of about 80 m, and two trial trenches uncovered that it continues

\textsuperscript{60} See Bakalaki, 1940, 27.
\textsuperscript{61} Ibid., 27-28.
to the east part of the gymnasium complex, giving a total distance of a stade. The width of xystos was 7 m and could accommodate 6 runners but for the exercise of *diaulos* or *dolichos* it seems that the track was proportionally adapting. The sports of *diaulos* and especially of *dolichos* required multiple tracks and for this reason, the number of the contestants was reduced from 6 to 3 because the runners should turn again on the starting point and they should continue to run in order to cover the distance of their sport. Remains were found both of the *aphesis*, or starting gates of the xystos, and of the anchors for wooden posts separating the individual lanes from each other, as well as of the starting line for the *paradromis*, the open-air track, parallel to the xystos (fig.15), for training during good weather\(^63\) (Lazaridis, 2003, 58-59).

The Ephebarchical law of Amphipolis

During the Macedonian era, at the beginning of the *ephebarchical* law of Amphipolis (fig.2) there is the date “In the year E and K and P” which is inscribed in a band. Beneath this inscription, there are relief symbols (fig.3) of the palaestra: an one-handled vase, an olive wreath tied with a ribbon, a palm branch, a strigil, and a shot or discus (Lazaridi 2015, 1). The law itself consists of 139 lines and the inscription, after the introduction regarding the duties and obligations of the *ephebarch*, is divided into 16 sections giving information about the education of the *ephebes*, the society of Amphipolis – customs of the period, public offices - and the topography of the city, referring to the Agora, workshops, a road network, the Theater and so on.\(^64\) The monument was a donation by the ephebarch Adaios to the youths frequenting the gymnasium. It has a size of 2,645m length × 0,75m width and it was discovered in front of the Roman propylon along with its base during the


summer of 1984 at the north portico of the gymnasium by D. Lazaridis (Lazaridi 2015, 1). The text as it stands has close affinity with an older and perhaps fuller regulation of Amphipolis’ *ephebes*-training regime, issued probably after a royal diagramma (Arnaoutoglou, 2015, 3). This stele dates from the last quarter of the 1st c BC.

More specifically, as in the gymnasium of Beroia, the *ephebarchical* law regulates by order numerous matters concerning the organization and function of the *ephebate*: (1) the disciplinary rights and responsibilities of the *ephebarch* (II. 1-13), (2) the financial criteria for the admission of the *ephebes* (II. 14-19), (3) the selection of the teachers (II. 15-32), (4) the care of the *ephebes* and the type of training (II. 16-32), (5) the time span of the *ephebic* service and the dressing (II. 32-36), (6) the good conduct of the *ephebes* (II. 36-51), (7) the attendance of the *ephebes* (II. 51-59), (8) the gymnastic training of the *ephebes* (II. 59-72), (9) the contests for the *ephebes* (II. 73-86), (10) the competitors (II. 86-90, 103-110), (11) the oath (II. 90-103), (12) the fines to teachers (II. 111-117) and others (II. 117-123), (13) the spectacles (II. 123-130), (14) the processions (II. 130-133), (15) the immunity of the *ephebes* (II. 134-136) and (16) the expeditions (II. 136-139).

The structure of the inscribed text reveals that its central aim was to (re)frame *ephebeia* as a focal point in the activities of the gymnasium by (re)organizing their internal affairs and by controlling the image *ephebes* projected to the wider society (Arnaoutoglou, 2015, p. 5). The inscription from Amphipolis confirms that *ephebeia* in Hellenistic Macedonia lasted for two years and the participation of young Amphipolitans to *ephebic* training was obligatory for all those not excluded from the gymnasium, as the gymnasialarchical law of Beroia provides, but *ephebic* training could not have been imposed on families with no or limited assets. Assuming that the rules of admittance to Beroia’s gymnasium were applied in Amphipolis, then slaves, freedmen and their sons, individuals with physical disability or mental illness, drunkards, persons involved in trade and in procuring themselves to prostitution were excluded. (Arnaoutoglou, 2015, 9).
Gymnasia on other Greek cities

At this point it is necessary to refer some gymnasia, which were functioned on some other Greek cities, in order to have a general view of their operation and architecture and to make some comparisons with those on the region of Macedonia. Thus we will understand better their function and will note if there are similarities and differences between them and the gymnasia on the Macedonian region.

The Gymnasium at Epidaurus

No ancient author mentions this gymnasium (fig.33) and its structure indeed doesn’t have any visible facilities for running. But no one doubts the propriety of a gymnasium for the sanctuary at Epidaurus or that this complex, whatever it may have been termed in antiquity, was designed for the use of athletes (Glass, 1967, 103).

The palaestra (fig.32) is located in the south-central sector of the sanctuary itself and forms a large rectangle which consists of an interior peristyle with 16 unfluted Doric columns on each side. On the back of the aisles of the peristyle there are rooms on all four sides. The line of what would have been the façade was occupied by a row of 20 Doric columns which formed a double colonnade in front of the long northern room J. The main entrance was on the north side, just inside the northwest corner and was in the form of an elaborate propylon whose gatewall was the north wall of the palaestra. This was pierced by a doorway with two piers in antis. The propylon passage or hall had Ionic columns distyle in antis to the north and south. It is from the columns of the peristyle that Kabbadias proposes a date on stylistic features for the entire structure at the end of the 4th or the beginning of the 3rd c BC (Kabbadias, 1900, 116).

Nonetheless it was probably not a palaestra, but rather a series of dining and meeting rooms for the use of visitors to the sanctuary, whether they came as sightseers, for treatment, or to take part in athletic contests. Winter, 2006, 123.
Two other entrances to the complex were provided by doors leading through the east wall of the palaestra into the interior northern and southern aisles. Of the rooms themselves, the most impressive is the long room J to the north which is located behind the double colonnade and just east of the main propylon. A small niche, roofed, or perhaps vaulted, was built out from the north wall. According to Kabbadias this room was an *apodyterion*\(^{66}\) despite the fact that, according to Vitruvius, the room should be an *ephebeum*\(^{67}\). Another room that Kabbadias has identified as the *loutron*\(^{68}\) is room K, at the northeast corner, which had two stone basins lying loose on the floor. To this identification, Delorme objected and calls attention to the interesting group of four rooms, F, F', E, E', located just south of the north corridor extension H and whose excavations revealed a water conduit system (Delorme, 1946, 110). According to him this group of rooms is indeed a bathing establishment. Of the other rooms only O, T and D are in any way distinctive. Each bears either benches, upright supports for benches, or cutting for the emplacement of the latter. These rooms, then must have functioned as kinds of *exedrae* for lectures and general gatherings\(^{69}\). Of the remaining of the palaestra, nothing more can be said (Glass, 1967, 111).

**Olympia**

The gymnasium and palaestra at Olympia are located to the Northwest of the Altis, to the West of the Heraion, and abutting the Kladeos River whose changing course to the west of the entire complex has as a result the preservation of the plan of the palaestra to a surprising degree but also the removal of the northern, western and southwestern sections of the gymnasium. The gymnasium plan(fig.26) lies slightly inclined, but the rectangular construction lies on a north-south axis. Its dimensions are 220x120 m and consist of four covered stoae enclosing a large rectangular area.

\(^{66}\)Kabbadias, 1900, 145.

\(^{67}\)Vitruvius 5, 11, 2.

\(^{68}\)Kabbadias, PAE, 1901, 49-51.

\(^{69}\)Ibid., 50-51.
The south stoa of the gymnasium, whose purpose is undetermined and which was fronted with late Doric columns (fig. 27), is used as the north rear wall of the palaestra. The west wall of the palaestra is missing and an exedra-like area was built in the east side of the palaestra (fig. 25). Directly north of the exedra-like area was constructed an elaborate, gabled propylon – Corinthian tetrastyle amphiprostyle – which according to its stylistic features could be dated at the end of the 2nd or early 1st c BC. The North Stoa has been only partially excavated, and the West Stoa has been lost in its entirety to the Kladeos River. The four stoae have small variations but all include an inner Doric colonnade facing the open lawn.

The plan of the palaestra, though intended only for the use of athletes at the festival, agrees for the most part with Vitruvius’ description and could be considered as typical of most Greek palaestrae. The palaestra itself was on a lower level (some 74 m) than that on which the gymnasium was placed directly to the north. It consists of a Doric peristyle (41 meters square) lining the courtyard which is surrounded on all sides by rooms which open directly on to the aisles, either through Ionic columns in antis or through simple doorways. The central colonnade was built of the Ionic order, while the in antis openings from the corridor to the outside rooms were built of the Doric order. The courtyard was covered with fine sand for the convenience of wrestlers and was surrounded by a covered colonnade which probably served as a running-track. In particular, the palaestra consists of three adjoining rows of rooms on the north, east, and west sides, with a stoa and entrances comprising the southern border. The nineteen rooms surrounding the courtyard are accessible through openings and three of the largest rooms, one on the north and two on the east, were characterized as having a stone bench around the interior of the room (Romano, 2016, 323). The use of these rooms is unknown; however excavation reports (findings of ash, fireplaces, altars, winners’ inscriptions) indicate that there were possible honorary statues throughout the palaestra rooms.

There were three entrances to the building, two small entries on the south side (with curious Corinthian columns, distyle in antis) and a large one to the west. Each doorway led into a small bench-lined room and thence into a small anteroom opening directly on to the southern aisle. (Glass, 1967, 144-145) Between the two ante-rooms there is a long shallow hall faced by a row of Ionic pillars. This was
probably the apodyterion or undressing-room, which was usually close to the entrance and functioned as a meeting-place for athletes and their friends. These entrance systems, including the anterooms, occupy the entire southwestern and southeastern corners of the palaestra. Opposite, on the other side of the court, is another large hall in the center of the north site (XII) which was probably the *ephebeum*, a sort of club-room (Graef, 1890-1896, 114-115).

It is impossible to say what the other rooms were used for. Some of them opened into the courtyard by doorways, but only one in the south-east corner had a door and was probably the porter’s lodge. Other rooms were employed for the storage of oil and athletic apparatus. Most of these rooms were open in front, and several of them were provided with benches. They probably served as lounges where visitors could sit and watch the athletes practicing (Gardiner, 1930, 73).

In the north-east corner is the bathroom which contains a large tank. In particular, the two isolated rooms at the northern corners (XIV and X) were apparently both employed for bathing but at different periods. The narrow room XVI has now been recognized as a well room with drainage provisions in its western wall. Another room which is probably connected with some hygienic purpose was room XV, the room between XIV and XVI which one should regard as an *elaiothesion* or *conisterium* (Glass, 1967, 149).

Finally, north of the propylon and forming the eastern edge of the gymnasium is a long *xystos*. The *xystos*, a full stadium length long, included stone starting lines at both ends, forming the eastern part of a large rectilinear enclosure of the 2nd c BC. On the basis of stylistic analysis (diverse types of architectural members, particularly the column capitals) plus the fact that the south stoa was clearly added to the existing palaestra, we would date both gymnasium structures sometime in the end of the 3rd or the beginning of the 2nd c BC 70(Glass, 1967, 150).

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70 See also Graef, 1890-1896, 128.
The Lower Gymnasium at Priene

Two gymnasia have been discovered at Priene, the lower and upper gymnasium. The upper gymnasium, situated at the center of the city between the agora and theater, was almost completely destroyed by a Roman bathing establishment. The lower gymnasium (fig.30), is located in the southernmost point of the city, just a few meters north of the southern side of city wall, and is still well preserved and dated in the 2nd half of the 2nd c BC. The complex consists of a palaestra and, abutting against it at the northeast corner, a running track and stoa (fig.31). Neither the stoa nor the "stadion" (running track) – as the excavators name it – are oriented like the palaestra but are extended more northeast to southwest following the natural ridges of the slopes and thus the lines of the city wall. Due to the precipitous nature of the slopes, both the palaestra and its adjacent running areas were terraced. The stoa, entered at the northeast corner of the palaestra, was constructed at the same level as the latter. The "stadion", however, parallel to the stoa, was terraced at a lower level (Glass, 1967, 189). The running area is entered from the north aisle of the peristyle and the long Doric stoa with a broad terrace below it is strongly reminiscent in plan and dimensions of the xystos and paradromis at Delphi, although no starting lines have been found to confirm this suspicion71. Thus this complex is fitted to the topography at Priene.

The palaestra consists of an interior Doric peristyle courtyard with one end containing a double colonnade and with 8 rooms to the north and west sides, though they do not radiate around the entire structure. The square peristyle (34.35x35.11 m) was constructed with 15 Doric columns per side and its interior was probably of tamped earth for the comfort of the athletes exercising there (Glass, 1967, 190). One passed through this 2nd colonnade into a long narrow area running the entire east-west breadth of the palaestra which area could be another enclosed aisle thus forming the central support for a double-aisled hallway. There are five rooms of varying dimensions behind the north of this 2nd aisle and opening on to it. The largest, in the northeast corner, has three separate doorways that lead us to

71 See Wiegand-Schroder, 1895-1899, 258 et seq.
suppose that more than one room once occupied the area. We cannot be sure and
draw certain conclusions about the use of this room but because in the western wall
were discovered some cuttings, some scholars suggest that these cuttings were
shelves in an *apodyterion*\(^2\). The 2\(^{nd}\) room to the west is located just west of the
center and is clearly the most important room on the north side. Entered through an
Ionic distyle in antis façade, it was surrounded on its remaining three sides by
wooden benches on upright marble supports. The walls are inscribed with hundreds
of names which seems to indicate that this room was an important gathering place
for young men. For these reasons (the names and the room’s elaboration) this
room could be identified as an *ephebeum* (Glass, 1967, 198-199). The room on the
northwest corner was the bathing establishment and there were two other rooms
on the north side, one between the bathing room and the “*ephebeum*” and one
between the latter and the large room in the northeast corner. Nothing more is
known of them and no further indications of purpose are possible. Directly to the
north of this three-room group is an impressive propylon consisting of a Doric distyle
in antis façade on the exterior and interior of the palaestra and a gate wall pierced
by three doorways of equal width. This was clearly the main entrance and the north
cross-wall of the *propylon* forms the south wall of an *exedra*. We don’t have any
indications of the area’s purpose except for the remains of marble benches
apparently along all three walls which led the excavator to issue to it the title
“*exedra*” (Glass, 1967, 194-195).

**Gymnasium at Delphi**

The gymnasium at Delphi(fig.28) is the earliest undisputed and preserved
gymnasium which lies in two terraces between the Kastalia spring and the temenos
of Athena Pronaia, extending in a north-south line. The Pausanian evidence (10,18,4)
and the epigraphical information lead us to conclude the following :1) The
gymnasium(fig.29) was originally within the city limits of Delphi, and two stairways
gave access to the Pleistos ravine and the city below 2) The gymnastic complex was

in existence from at least the 2nd half of the 4th c BC. 3) It seems to have been the only gymnasium at Delphi and to have served the city as well as the Delphic amphictyony since. 4) The area was occupied by earlier structures (remains at the southern end of the xystos between the northern wall of the xystos and the Kastalia ravine, and under the west side of the palaestra) but the date and purpose of these structures remains uncertain. 5) The complex consists of running tracks (xystos, paradromis), a palaestra (peristylos) equipped with several rooms (sfairisteria, konima, apodyterion) and a well-constructed water system with bathing place. 6) The cults of the complex included those of Hermes, Herakles, Artemis, Athena, and Apollo, for which neither temple nor altar is attested but there was, however, an actual cult area of Demeter, the Damatrion (Glass, 1967, 86). The entire region has been badly damaged by the earthquakes and landslides. However the basic elements that are still visible are these: an upper terrace with a long colonnaded building (the xystos—the roofed running track); an open-air running track in front of the xystos (the paradromis). The xystos consisted of a Doric portico, including columns, triglyphs, and metopes. The xystos was employed as a covered practice dromos on which athletes could exercise, but it could have been used also for activities other than running since sand was found as the floor surface in the dromos. No starting-line blocks were found as a part of the xystos. The paradromis provided an uncovered practice dromos that was found together with a starting line at both the north and south ends and with several square post-holes which were employed to identify the lanes, as well as turning posts. In addition, a ground-level water channel bordered the paradromis to the west and at the north end of the upper terrace are the remains of an earlier small temple, possibly dedicated to Demeter. The lower terrace has the shape of an irregular trapezoid and consists of a palaestra or peristylo to the south and a bath or loutron to the north which may be the somewhat moot kolymbethra. The palaestra itself, at the southern end of the terrace, is a square structure with a central open court with an Ionic colonnade and several rooms (seven peripheral rooms on two sides of the central courtyard) that open onto the courtyard. Inside the peristyle court there were water basins and a water channel at ground level. The main palaestra entrance was a distyle in antis.
porch facing southwest and the rooms led off the central court to the west and the north. On the south side of the internal court was a large room with four columns in antis, which was probably the *apodyterion*, or the dressing room. Two other rooms on the west side of the courtyard were probably the *sphairisterion* and the *konima*. The *sphairisterion* was the room in which boxers and pankratists trained with sand-filled bags and in *konima*, or *konisterion*, the athletes covered their bodies with fine sand. In addition, there was another room off the central peristyle that may have been employed as a classroom. To the west of the palaestra, and joined by a corridor from the interior court, is a nearby outdoor area that is characterized as a flat terrace that includes a circular pool with steps (five steps lead into the bottom), and an area for large washbasins on supports (10 basins grouped into two series of five with waterspout probably in the form of bronze lion heads) (Romano, 2016, 321-322). The entire complex clearly demonstrated two periods of construction—the original Greek gymnasium of the 3rd quarter of the 4th c BC (334–327) and a Roman Empire period of repair, reconstruction, and remodeling from the 1st quarter of the 2nd c AD. (Glass, 1967, 87).

**Gymnasium at Eretria**

At Eretria the site consists of two palaestrae which are dated to the end of the 2nd c BC. This site houses two palaestrae but no extant gymnasium or stadium. The Lower palaestra (fig.34) consists of a central courtyard with only a complete inner colonnade on the west side but also with some partial colonnades on the north and south sides of the courtyard. It seems to have gone through three different phases (Winter, 2006, 126). The small rooms east of the court, mostly taken over from earlier buildings, may have been *loutra* and dressing rooms. On the north side of the court was a large two-aisled room, probably the *ephebeum*. The rooms adjoining actually take the place of the covered walkway. The Upper palaestra (fig.35) has a central courtyard but only with three or four rooms at the north end and with a bath in the triangular area north of the rooms (fig.36). The largest room to the north is open with a colonnaded entrance. Thus the plan of the complex covers an area of about 100x150 feet with a square peristyle with aisles on all four sides (Richardson,
Rooms behind the aisles, however, are to be found only on the north and those are scattered haphazardly. The open court has preserved only the course below the stylobate. Moreover, a wide doorway in the western wall leads to the palaestra, if such the peristyle court may be called, from which three low, poros, stuccoed steps led up to the level of the western aisle. (Richardson, 1895, 188)

A large room F occupies two-thirds of the length of the northern aisle beginning at the western wall. To the north of room F there is a large oval enclosure G with walls of poros, enclosed in turn by an irregular pentagon. The purpose of this room is uncertain but Richardson suggests a hot bath (Richardson, 1896, 165). To the northwest of F lies a much smaller enclosure H whose rear wall forms a section of the irregular pentagon that surrounds oval G. It was constructed with a cobbled floor and it has an entrance to the west. In the center was discovered a statue base of Eleusinian limestone which Richardson proposes that supported a statue of Theopompos, son of Archedemos—the donor of a large sum for the gymnasium oil supply (Richardson, 1896, 159). Thus that room H must have been the elaiothesium. North of H lies a long, rectangular room I with its long sides running north and south. The complete absence of any western wall lead us to identify it as an exedra, although it is difficult to be sure.

On the northeastern side of the palaestra there are three rooms (B, C, and D reading from north to south) which all appear to be part of the bathing facilities. According to the drain that Richardson found to the west of the court beneath the poros steps, one could suggest that the water ran around the inside of the peristyle stylobate (as for example at Olympia and Delphi) and out the western side. The inscriptional evidence and building techniques suggest that the complex is no later and not earlier than the end of the 2nd c BC (Glass, 1967, 229-230).

Conclusions

The ancient Greek world proved to have special interest in exercise, health and physical well being due to the fact that both sport and physical education gave the ancient Greek world a youthful and strong character. Thus the ancient Greeks loved
the physical effort and the competition like no other people. Wherever they arrived, in the colonies or in the distant Hellenistic kingdoms, they took with them the love of education and competition. Kings and poleis used the *agones* as a platform to demonstrate victoriousness, to declare loyalty and to negotiate status (Mann, 2018, 447-479). For this reason they built gymnasia in order to practise and establish games to exercise and to highlight their diversity. In the ancient Greek world there couldn’t be a city without its own gymnasium, not even a settlement without its own palaestra. Thus every important Greek city organized games with rewards.

Therefore, we can claim that athletics were an important part of Macedonia’s cultural life especially during the Hellenistic and imperial times and that the athletic games were also an important part of religious festivals, so it is likely that the structure reflects this association by using some, not all, elements of temple architecture. Thus we could imagine the use of temple architecture in an area like the Olympic gymnasium as an intentional act to raise a civic space to a civic-spiritual structure.

The excavations in the region of Macedonia revealed two unique inscriptions that offer a lot of information about the administration and organization of the ancient Greek gymnasium but also for the educational character of the institution of *ephebeia*. These are the *gymnasiarchical* law of Beroia and the *ephebarchical* law of Amphipolis. This confirms that the Greek athletic institutions of *gymnasiarchia* and *ephebeia* were adopted by the Macedonian cities and that the gymnasium was also in this area a basic foundation that contributed substantially to the physical activity of *ephebes*, their military training, socialization and their general education (Almpanidis, Anastasiou, Schoinas, Mouratidis, 2008, 1-2).

The gymnasium as an institution appeared at least from the 6th c BC. They were centers of collective athletic and military training for the youth of a community. Another aspect of the education in gymnasium was the philosophical teaching that is noted in the gymnasia of important cultural centers, as in Athens (since the 4th c

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BC), or in other, smaller cities a little later, and which was systematized and specialized in the Late Hellenistic period. From the 4th c BC are clarified on our sources some aspects of its institutional function. The administrative and financial management was undertaken by elected city officials, usually the gymnasiarchs with a typically annual tenure. Other officials, such as hypogymnasiarchs, paidonomos etc., operated under their management. Various benefactors also contributed to the operation of gymasia. The educational goals were addressed to male offspring of free citizens from infancy to adulthood (mainly the paides, ephebes and neoi). The athletic (and therefore military) skills and virtues of discipline and diligence remained diachronic values of the apprenticeship in Hellenistic gymasia. Teachers with specialized technical training, such as paidotribes and gymnasts, undertook the education of young people. The incorporation of the theoretical teaching into the formal program of the gymasia of some cities has been documented only since the mid-2nd c BC and onward.

The main function of the gymnasium was the initiation of young members of the city into the adult political body. Along with the physical education and intellectual cultivation of the young members of the city, the aim of the gymnasium was to initiate them into the city's public affairs, religious traditions and political values. The gymnasium itself was the center of the social activity of the paides, ephebes and neoi during the organization of the festivities and games. The role of the gymnasium in the socialization of young people was particularly strengthened when the city's collective interest for the gymnasium is expressed with clarity and more specifically when the latter appointed for the management of the gymnasium a public elective archon, the gymnasiarch, through which the city maintained the control of its overall function. However, the real social extent of the education in gymnasium within the context of the city and the way in which the social character of the gymnasium has been developed over time remains unknown in the research as it is not usually possible to answer clearly the question if, when and where the character of ephebeia or the participation of the youths in gymnasium was...

75 For the gymnasium as an initiated institution, see Forbes, 1933, 52. Gauthier, 1995, 7 et seq. Robert, 1960, 296-298, 369.
The obligatory or not character of the institution of the gymnasium would determine the education accordingly either as a prerequisite for the acquisition of citizen’s rights or as a special feature of a privileged class of citizens\(^\text{76}\). However, one of the most interesting aspects of the institution remains the fact that in gymnasium was cultivated during the Hellenistic period the consciousness of a common Greek culture, independently of the peculiarities of the politically autonomous city-state (Kazaki, 2015, p. 53-54). Thus the gymnasium was not simply a place for the socialization of young citizens but it was a place of permanent education in how to perform at civic festivals. The rise of the gymnasia was not a sign of the de-politicization, but of the continuation of politics by other means (Van Nijff, 2013, 334).

The three fundamental elements common to most, but not all, gymnasium complexes are a track (also referred to as *xystos or dromos*), the gymnasium or enclosed area for practice, and palaestra. Some of the gymnasium that I have already mentioned are composed of all three elements (Olympia, Delphi, Amphipolis, Priene), however some other examples are made up of a combination of one or two of these components (Epidaurus, Eretria). The other common feature of all gymnasia complexes is that they are associated with a temple or sanctuary. Moreover, from all the above we can conclude that gymnasium is usually an enclosed rectangular structure which contained space for athletes to practice, one or more stoae, and at least one or more tracks. The palaestra on the other hand is more uniform throughout the ancient world; it is most frequently a square enclosed space with a large central courtyard, peristyle, and rooms on all or some sides of the building for the athletes to use for various activities such as applying oil, powder, or for bathing.

The development of the architectural style of the gymnasium from an open-air enclosure near the city walls during the archaic and early classical period to a building with an inner peristyle in the 4th c BC and perhaps already from the end of the same century in a building complex in the periphery or downtown, reflect the evolution of the institution’s function and the importance of the gymasiarch

\(^{76}\) For the dilemma, see Gauthier, 1995, 7. Gehrke, 2007, 417 et seq. (note 90).
institution for the city. The change of the role that the gymnasium plays in the education of young people with the additional educational functions that it provides since the end of the 4th c BC in Athens, and gradually in the rest of the Hellenistic cities, causes the relocation of the gymnasium from the periphery of the city to its center. The diversity in the educational function of the gymnasium from the 4th c BC, as is noted by the study of the institution, is also reflected in the ground plan of the architectural type of the gymnasium, as we have described it above: rooms of athletic exercises coexist with classrooms and gatherings rooms, such as the *exedra* or *ephebeia* and the auditorium with stoae, footpaths and libraries. In addition, the buildings of the gymnasium, which are usually large-scale architectural compositions that are developed in the heart of cities and are themselves important monuments, characterize to a certain extent the city's own physiognomy. The remains of gymnasia in various cities reveal the imposing character of these buildings, which would be full of sculptural votives.

The gymnasia at Delphi and Amphipolis are the only of the sites studied in this work that have been definitely published. Of actual gymnasia we have three specific examples –those at Delphi, Olympia and Priene. The complexes at Eretria and Epidaurus are still a moot point. In addition, for the gymnasium at Beroia we rely only on the epigraphic sources (*gymnasiarchical law*) and at Pella the archaeologist P. Chrysostomou has interpreted building V as the palaestra of the complex. Thus we rely on the athletic sites of Delphi and Amphipolis that are definitely published and the others may be used for purposes of general comparison but we must have always in our mind that either their identifications are not completely clear or that their publication is, in some respect, incomplete (Glass, 1967, 247).

Further problems are created by the extensive amount of rebuilding and/or reuse of all complexes although the damage or changes by such rebuilding varies from site to site. Elsewhere, there are variations in plan such as the room changes and variations of room purposes (Olympia and Eretria). Some of these establishments replace earlier structures which were probably very early athletic complexes, but the available evidence is too ephemeral to admit of any such hypothesis (Glass, 1967, 249).
The gymnasium of Amphipolis is a typical sample of palaestra and it can be compared with those on Delphi, Olympia, Eretria, Priene, and Epidaurus which are dated from the 4th-2nd c BC. Thus these complexes do share some general similarities. For example, all these gymnasia have running facilities (indoor and outdoor) associated with them and they all have as central point a square or rectangular courtyard which is usually oriented to the cardinal points of the compass except for the gymnasium at Delphi which, due to the topographical demands of the site itself, forced very severe strictures on the builders in the gymnasium. These courtyards which have columns on four or three sides are termed peristyles. The peristyles themselves vary in size and for their columns the Doric order was employed, which was almost universally preferred and in this way they followed the usual Hellenistic practice for such stoae. The only exception to this is the Ionic columns at Delphi. The surface of the peristyle and of the aisles have not been paved or in any way specially treated and thus we could assume that their surfaces were normally of earth, perhaps leveled and tamped and for these reasons the athletes were able to wrestle on this surface without fear of abrasions. What is more, each of the peristyle courts had rooms behind the aisles, but those rooms were situated in different areas and in varying quantities. During the Hellenistic period the purposes of the gymnasia increased and apart from athletic rooms they offered also lecture rooms, dining facilities, exhibition rooms etc. One would assume, then, that rooms which once served athletes exclusively were put to a much greater variety of uses (Glass, 1967, 258). Furthermore, there were specialized rooms around the peristyle for specific purposes and more specifically we have to deal with some separate areas whose purposes vary (loutron, apodyterion, exedra, sfairisterion, aleipterion, konisterion). Beyond this, little can be said about the room position or room type. The loutron complex in each installation is easy to place and that one in the Delphi palaestra was truly monumental (Miller, 2004, 179). The general features include a system of drains for induction and

77 Tomlinson, 1963, 133-145. He suggest that the Doric order was especially popular in building such as a stoa which required a large number of columns because Doric, especially in its more sever Hellenistic form, was simpler than Ionic and thus cheaper to produce.
evacuation of water, a plastered or bricked floor, and a system of rectangular tubs placed contiguously along a wall so that one overflows into the next. The formation and development of the drainage arrangements was, of course, dependent on the local conditions. As a general rule the most baths were placed in such a way as to afford the greatest possible privacy and to achieve this the easiest way was to place a bath in an angle of the peristyle. Thus the gymnasia and palaestrae of the Hellenistic period seem to have followed the basic plan of similar establishments in the 5\textsuperscript{th} and 6\textsuperscript{th} centuries.

To sum up, one can say that these complexes have a pattern which is generally similar from one monument to the next although with few details which can be said to be canonical. Thus all these gymnasia have running facilities of greater or lesser complexity. The palaestrae within them, or those that exist independently of them, are almost similar to each other in terms that they are simple courts of varying sizes enclosed wholly or partially by single-storey colonnades. The gymnastic complexes vary greatly depending on the topography of the site from each other in size and complexity and their plan is not limited to one model, but this variation is not related to chronological position. (Glass, 1967, 269).
1. The gymasiarchical law of Beroia (Deflassieux, 1999, 87, fig.39).
2. The ephebarchical law of Amphipolis

3. The ephebarchial law of Amphipolis (Lazaridi, 2015, 2).

4. The urban plan of Beroia with the gymnasium (no.7) (Deflassieux, 1999, 98, fig.44).
5. Plan of the gymnasium complex of Amphipolis (Lazaridi, 1988, 318, fig.1).
6. The gymnasium of Amphipolis. The north-east side of the palaestra with the large bathroom and marble basins (Lazaridis, 2003, 55, fig. 30).


11. Pella. The kolymbethra on the northeast corner of the palaestra (Kaiafa, 2008, 73, fig. 4.27).

15. Amphipolis. The north part of the gymnasium (xystos, paradromis, the new building) (Lazaridi, 1989, 551, fig.1).

17. Amphipolis. The double west stoa of the palaestra (Lazaridi, 1987, 323, fig. 5).

18. Amphipolis. The large NE bathroom of the palaestra (Lazaridi, 1987, 323, fig. 6).
19. Amphipolis. The ellipsoidal part of the west stoa of the palaestra (Lazaridi, 1987, 323, fig. 7).

21 Amphipolis. The building tank (Lazaridi, 1987, p.325, fig.11).

23. Amphipolis. The monumental staircase to the palaestra (Lazaridis, 2003, 53, fig.29).

25. Olympia. East side of the gymnasium
(http://odysseus.culture.gr/h/2/gh2562.jsp?obj_id=592&mm_id=3272).
26. Olympia. The plan of the gymnasium
(http://odysseus.culture.gr/h/2/gh2562.jsp?obj_id=592&mm_id=5064).

27. Olympia. The Doric colonnade of the palaestra
(http://odysseus.culture.gr/h/2/gh2562.jsp?obj_id=537&mm_id=4085).
28. Delphi. The plan of the gymnasium
(http://odysseus.culture.gr/h/2/gh2562.jsp?obj_id=5077&mm_id=3772).

29. Delphi. View of gymnasium, 4th c BC, with Roman additions (Romano, 2016, 321, fig. 22.4).
30. Priene. Plan of the Lower gymnasium

31. Priene. The palaestra-gymnasium with seats for spectators between the xystos and the paradromis-stadium (Miller, 2004, 183, fig.267).
33. Epidaurus. The gymnasium
(https://el.wikipedia.org/wiki/%CE%95%CF%80%CE%AF%CE%B4%CE%B1%CF%85%CF%81%CE%BF%CF%82#/media/%CE%91%CF%81%CF%87%CE%B5%CE%AF%CE%BF:20100408_epidaure05.JPG).

37. Olympia. Stadium with reconstructed embankments, circa 450 BC (Romano, 2016, 318, fig. 22.2).

Abbreviations

AEMTH = Archaiologiko Ergo ste Makedonia kai Thrake

AEph = Archaiologike Ephemeris

AJA = American journal of Archaeology

BCH = Bulletin de correspondance hellénique

CJ = Classical Journal

JdI = Jahrbuch des Deutschen Archäologischen Instituts

JHS = Journal of Hellenic Studies

ISHPES = International Society for the History of Physical Education and Sport

PAE = Praktika tes Archaiologike Ephemeris

RE = Realencyclopädie der Classischen Altertumswissenschaft

REA = Revue des Études Anciennes

SEG = Supplementum Epigraphicum Graecum

ZPE = Zeitschrift für Papyrologie und Epigraphik

AΔ = Archaiologikon Deltion
Bibliography


• Bakalaki G., “Θρακικά Χαράγματα” , Θρακικά , 13 (1940),27-28.


• Chrusostomou P. , “Το ανάκτορο της Πέλλας” , AEMTH 10a (1996), 105-142.


- Forbes C. A., A Contribution to the Greek Associations, American Philological Association, 1933.


• Kabbadias P. , “Ἀνασκαφαὶ ἐν Ἑπιδαύρῳ”, ΡΑΕ 56 (1901), 49-51 .
• Kabbadias P. ,Το Ιερόν του Ασκληπιοῦ εν Επιδαύρῳ και η θεραπεία των ασθενών , Athens , 1900 , 143-154 .
• Kazakidi N. , ΕΙΚΟΝΕΣ ΕΝ ΓΥΜΝΑΣΙΟ: Έργα γλυπτικής και η λειτουργία τους στο ελληνιστικό γυμνάσιο, Thessaloniki , 2015 , 22-63.
• Krischen F. , “Das hellenistische Gymnasion von Priene” , Jdl 38-9(1923-4) , 133-150.
Lazaridi K., "Ανασκαφές και έρευνες Αμφιπόλεως υπό Καλλιόπης Δημ. Λαζαρίδη", PAE 140a (1984), 33-38.
Lazaridi K., "Ανασκαφή Γυμνασίου Αμφιπόλεως υπό Καλλιόπης Δημ. Λαζαρίδη", PAE 140 (1985), 69-75.
Lazaridi K., "Ανασκαφή Γυμνασίου Αμφιπόλεως υπό Καλλιόπης Δημ. Λαζαρίδη", PAE 141 (1986), 132-140.
Lazaridi K., "Ανασκαφή Γυμνασίου Αμφιπόλεως υπό Δημητρίου Λαζαρίδη", PAE 143 (1988), 125-134.
Lazaridi K., "Το Γυμνάσιο της Αμφίπολης", AEMTH 3 (1989), 547-552.
Lazaridis D., "Ανασκαφαὶ καὶ έρευναι εἰς Ἀμφίπολιν ὑπὸ Δημητρίου Ι. Λαζαρίδη", PAE 115 (1960), 72.
Lazaridis D., "Ανασκαφαὶ καὶ έρευναι εἰς Ἀμφίπολιν ὑπὸ Δημητρίου Λαζαρίδη", PAE 120 (1965), 48-49.
Lazaridis D., "Ανασκαφές καὶ έρευνες Ἀμφιπόλεως υπὸ Δημητρίου Λαζαρίδη", PAE 137a (1981), 18-25.
Lazaridis D., "Ανασκαφές καὶ έρευνες Ἀμφιπόλεως υπὸ Δημητρίου Λαζαρίδη", PAE 139a (1983), 35-41.
• Makaronas Ch., “Μνημόσυνον Ν.Γ. Παππαδάκι”, Επετηρίδα της Φιλοσοφικής Σχολής της Θεσσαλονίκης 6(1948), 293-308.
• Palaiologou Kl., “Dromos”, in N. Yalouris (eds), The Olympic Games in Ancient Greece: ancient Olympia and the Olympic games, Athens, 1982, 155-175.
• Pantermalis D., Δίον, Αρχαιολογικός Χώρος και Μουσείο, Athens, 1997, 9-11.
• RE VII, s. v. Gymnasium, Stuttgart 1912, 2005-2008 (Oehler J.).


  [https://digi.ub.uni-heidelberg.de/diglit/wiegand1904/0003/image](https://digi.ub.uni-heidelberg.de/diglit/wiegand1904/0003/image)


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Pausanias, *Description of Greece*, 6.20.7–10; 10.18.4.


Vitruvius, *On Architecture*, 5.11.1; 5.11.2.