

**The March of the Muses:
The Development of Higher Education in Athens
from Pericles to the *Paripatos***

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Western society has been greatly influenced in numerous ways by ancient Greek society and culture, not the least of which was the Greek educational system. Alexander the Great's conquests relied in many ways upon technology, philosophy, and mathematics taught in Greek institutions of higher learning. How ironic then, that even two centuries prior to Alexander the Great, in the fifth century BC, a clear concept of higher education had yet to be developed. The development in Greek and Hellenistic education from the fifth to the third centuries BC bordered on the miraculous: from having no higher education whatsoever, Greek society developed and built a fairly complex system. This essay will attempt to take a closer look into the development of Greek education itself, focusing on several key movements and characters.

Before going much further, it seems necessary to define the scope of education with which this essay will be dealing. Homeric writings trace education back to the gods. Artemis, for example, taught hunting to Scamandum, Apollo taught Calchas to prophesy, and Athena taught Phereclus the art of shipbuilding. Other examples of skill-related education are well established in Homer's writings as well.¹ However, the Athenian education that emerged during the sixth century BC was considerably different from previous forms. Earlier, education was largely based on the model of a master with only one or two apprentices, to whom he taught the skills of his trade. Usually, he would teach his apprentices at his place of business, which could be located anywhere throughout the city. The education that emerged in the sixth century, on the other hand, was based on the model of a full time, professional teacher with a class of several students in a centralized location that was usually devoted to education. This newer education focused much more on a cultural training that was designed to strengthen citizenship, character, and virtue, rather than trade skills.² It is this newer cultural education upon which this essay will focus.

At its origin during the sixth century BC, Athenian education was primarily designed to teach leisure-time activities to the children of the wealthy aristocracy. Athenian aristocrats devoted their days to athletic contests and their evenings to entertaining each other with songs and recitations at drinking parties, or *symposia*. Schools were designed to educate privileged children, usually boys, in the necessary music and literature, or *mousike*, as well as the necessary physical contest skills, or *gymnastika*, aiming not only to achieve excellence in these fields, but also to attain moral excellence. The end goal was to form the child into a good person, a useful

¹ Frederick A. G. Beck, *Greek Education 450-350 BC*, (New York: Barnes and Noble, 1964), 49.

² Beck, 72.

citizen, and a good conversationalist.³ Perhaps Xenophon sums up the need and purpose for education among the aristocracy best in his *Memorabilia*.

Nor does it satisfy the parents merely to feed their offspring, but as soon as the children appear capable of learning anything, they teach them whatever they know that they may be of use for their conduct in life; and whatever they consider another more capable of communicating than themselves, they send their sons to him at their own expense, and take care to adopt every possible course that their children may be as much improved as possible.⁴

The first of the two major subject areas of old Athenian education, *Gymnastike*, consisted largely of physical training and wrestling, which were necessary military skills, but also skills necessary for aristocratic contest. The students would receive physical instruction from their *paidotribes* and be expected to practice their skills on their own. Ironically, *gymnastike* instruction did not necessarily require the use of a gymnasium. Instead, they took place in *palaestra*, or sport halls, which were located all over Athens, including within the three gymnasia. Although often the terms *gymnasia* and *palaestra* are used interchangeably, it is important to note several important differences. Whereas *palaestra* were sport halls dedicated purely to physical activities, gymnasia held a much broader use. Additionally, while gymnasia were publicly owned and open to all Athenian citizens, *palaestra* were mostly privately owned, with the exception of those located within *gymnasia*.⁵

The second major portion of the “old education” was *mousike*, which consisted of the areas of education inspired by the muses. These included music, prose and poetry, largely from the works of Homer, and occasionally painting and sculpture. Additionally, children had to learn their language and learn it well, which may not have been such an easy task, as word forms and conjugations were even more numerous than they are now.⁶ Any structure or open space served well for the study of music and letters, but there were also *didaskaleia* built as classrooms.⁷ Such structures were not necessary, though, particularly in the Mediterranean climate. Classes could be held in the country, without even the minimal protection provided by the colonnades of city streets.⁸

School was never compulsory, and a child’s eligibility to participate in a school depended entirely on his parents’ ability and willingness to pay for it. Therefore, much of Athens’ old education was a decidedly private matter, and beyond that was considered a luxury, rather than a necessity. In short, education was seen, at its root, as a toy for the rich.⁹ Elementary education was completed upon a boy’s passage to manhood at puberty, which was officially

³ John Patrick Lynch, *Aristotle’s School: A Study of a Greek Educational Institute*, (University of California Press, 1972) 33.

⁴ Beck, 84.

⁵ Lynch, 34.

⁶ Martin P. Nilsson, *Die Hellenistische Schule*, (Munich: Verlag C.H. Beck, 1955) 14.

⁷ Lynch, , 34.

⁸ Raffaella Criatore, *Gymnastics of the mind* (Princeton University Press, 2001), 27.

⁹ Nilsson, 42.

recognized during his fourteenth year. Upon completion of their formal education in schools, children were expected to continue informally in the city.¹⁰

A clear need was developing for higher education in Athens, fed in part by the social trends and developments of the time. Greece of the fifth century BC surpassed all previous periods in agriculture, industry, and trade. Public building programs restored temples destroyed by the Persians on a tremendous scale. All of these developments were paralleled by increases in elegance, comfort, and luxury for Athenian citizens, and private affluence was much greater than for prior generations of Athenians. This is not to say that poverty was eliminated at any given point, but Athens was transitioning from a local economy to an imperial one, meaning that poverty was certainly on the decline.¹¹

The democratization of Athens with the constitutional reforms of 462/461 further increased the need for higher education. Instead of only a privileged few holding power, the entire citizenry of Athens had a say, meaning much more widespread literacy became necessary. The bureaucracy of democratic government also meant increased opportunity for common people to hold paid positions of authority where they could advise and act on the behalf of the people. Such offices could only be entrusted to those qualified to handle their responsibilities.¹² With increasing numbers of students, the necessity for a democratized elementary education that would serve needs beyond those of the aristocracy also became apparent, leading to many significant changes during the fifth and fourth centuries. Education grew to encompass not only the aristocratic elements of *gymnastika* and *mousike*, but also more practical elements such as mathematics.¹³ Advances in technology made papyrus more widely available, and thus increased the accessibility of literature. With the decreased reliance on stone tablets, the writing style also changed and simplified, which democratized writing.¹⁴

This greater emphasis on academics had the effect of shifting the balance between *mousike* and *gymnastike* to bring intellectual development to the forefront, while at the same time deemphasizing physical training. Around 450 BC, for example, physical education played a central role in Athenian education. A mere century later, around 350, physical education had been relegated almost completely to the peripheral, a secondary function merely for the purpose of keeping the body fit enough to profit from intellectual stimulation and culture. Again, this trend was largely due to democratization. Because sporting was open to all classes, and no longer simply to the nobility, a new class of professional athletes developed. Xenophanes, for example, in about 530 BC, noted that a successful Olympic athlete could expect to live out his days in luxury at public expense, which, considering the athlete's overall impact on the Athenian standard of living was miniscule compared to that of an intellectual.¹⁵ These sentiments were echoed by Isocrates in his *Antidosis*.

¹⁰ G. B. Kerferd, *The Sophistic Movement* (New York: Cambridge University Press, 1981), 17.

¹¹ *Ibid.*, 15.

¹² *Ibid.*, 16.

¹³ Randall R. Curren, *Aristotle on the Necessity of Public Education*, (Rowman and Littlefield Publishers, Inc., 2000) 12.

¹⁴ Nilsson, 13.

¹⁵ Beck, 141, 137

Worst of all, although they assume the soul is more important than the body, despite knowing this, they welcome those who engage in gymnastics more than those who engage in philosophy. Surely it is irrational to praise those who engage in a lesser activity rather than a higher activity. Everyone knows that Athens never accomplished the remarkable deeds for which it is renowned through physical training, but that it became the most blessed and greatest of all the Hellenic city states through man's intellect.¹⁶

The general attitude toward professional athletes gradually began to shift as well as people came to the realization that a finely trained athlete was as good as useless in war due to his excessive muscle specialization and sensitive dietary needs. Athletic training came to be seen as a counterproductive endeavor to the city. Furthermore, as Aristotle explained in his *Politics VII*, intellectual and physical development were in direct competition with one another and therefore wholly incompatible.

For it is impossible for the mind and body both to labor at the same time, as they are productive of contrary evils to each other; the labor of the body preventing the progress of the mind, and the mind of the body...

...Now, there is no occasion that anyone should have the habit of body of a wrestler to be either a good citizen or to enjoy a good constitution, or to be the father of healthy children; neither should he be infirm or too much dispirited by misfortunes, but between both these. He ought to have a habit of labor, but not of too violent labor, nor should that be confined to one object only, as the wrestler's is; but to such things as are proper for freemen.¹⁷

In other words, Aristotle argued that while physical fitness was indeed important for one's wellbeing and intellectual performance, gearing physical training toward athletics would actually harm academics. Moreover, he argued that physical contests such as wrestling held no place in society. Records indicate that not everyone agreed with Aristotle's assessment. Writers of the late fifth century, for example, complained that their traditional places of exercise had been "emptied" or "spoiled."¹⁸ Nevertheless, the educational philosophy had definitely changed.

Higher education emerged in the latter half of the fifth century BC thanks largely to the efforts of Pericles, a wealthy intellectual whose closest associates and only friends were artists, intellectuals, and philosophers.¹⁹ He had himself received an education from two Sophists, Claomenae and Damon.²⁰ Pericles, greatly influenced by Sophist ideas, used his wealth to attract many Sophists, including Protagoras, to Athens to teach. The Sophists brought with them the

¹⁶ Isocrates, *Antidosis*, 25, in translation from David C. Mirhady and Yun Lee Too, *Isocrates I*, (Austin: University of Texas Press, 2000) 251.

¹⁷ Beck, 140.

¹⁸ Lynch, 38.

¹⁹ Kerferd, 18.

²⁰ Isocrates, *Antidosis*, 248.

initial elements of higher education. They revolutionized and professionalized the education system, bringing the general old education terms of *scholē* and *diatribē* to mean places of higher education.²¹ These developments helped put Athens on the fast track to becoming the intellectual and artistic hub for Greece, which served to attract even more Sophists and intellectuals.²²

The term *Sophist*, at its root, referred to the wise. Homer and Hesiod, for example, were referred to as Sophists, along with musicians, diviners and seers, and the Seven Wise Men. Not limited to wise men, the term *Sophist* was also applied to Prometheus, the Titan who brought fire and invention to humanity. The Sophists from the latter half of the fifth century likely labeled themselves to capitalize on the title's then overwhelmingly positive connotations.²³

Sophists specialized largely in teaching communication, rhetoric, and argumentation skills, which were certain to bring their users significant political power through their ability to speak authoritatively about just about anything. According to Plato's *Gorgias*, for example, the Sophist Gorgias explained quite clearly the power of rhetoric to Socrates.

I have often in the past gone with my brother and the other doctors to some sick man refusing to drink a medicine or let the doctor cut or burn him; when the doctor couldn't persuade him, I persuaded him, by no other craft than rhetoric. And I tell you, if a rhetor and a doctor went into any city you like and had to compete in speeches in the Assembly or in any other gathering about which of them should be chosen a doctor, the doctor would end up nowhere, but the man powerful at speaking would be chosen if he wanted it.²⁴

In short, through skills in argument and rhetoric, one could expect to obtain a higher position in the bureaucracy of the Athenian democracy. Beyond that, though, during a city meeting, one could expect to be treated as an authority on virtually any subject, even if his actual practical experience was next to nil. This posed some problems to Socrates, as he noted that there was absolutely no guarantee that a rhetor would use his skills justly and virtuously.²⁵ In another conversation from another Platonic work, *Protagoras*, Socrates discussed his views on the importance of qualification for responsible positions with Protagoras, another Sophist. In Athenian meetings, Socrates noted when issues such as shipbuilding were discussed, a shipbuilder's experiences were taken seriously. If a layperson were to act as an expert in shipbuilding, he would be jeered out of the meeting. In discussions of political issues, on the other hand, almost all Athenians felt qualified to speak out, even before the emergence of the Sophists. In short, Socrates according to Plato, felt that while at worst, the Sophists' product was dangerous, at best, it was merely superfluous.²⁶

²¹ Lynch, 39.

²² Kerferd, 19.

²³ *Ibid.*, 24.

²⁴ Plato, *Gorgias*, 456 b-c, in translation from Terence Irwin, (Oxford: Clarendon Press, 1979), 23-24.

²⁵ *Ibid.*, 461a.

²⁶ Plato, *Protagoras*, 319 a-e, in translation from C.C.W. Taylor, (Oxford: Clarendon Press, 1976) 11-12.

Another major objection that Plato and Socrates held against the Sophists was that they charged money for their services. For the valuable skill of rhetoric, the Sophists, starting with Protagoras, expected quite a price. Higher education under the Sophists, although certainly fed by the functions of Athenian democracy, was itself far from democratic, and proved to be a way for the wealthy and powerful to secure and enhance their positions. Nevertheless, the Sophists found that there was a great deal of money to be made in Athens.²⁷ In Plato's *Protagoras*, for example, the young Hippocrates lamented to Socrates that to take classes from the Sophist Protagoras, it would cost him not only every cent he had, but anything his friends had as well, and in addition would need a strong recommendation.²⁸

Because they were selling a service, Sophists had to recruit their own students. This meant that they were often to be seen in public places, advertising and recruiting. Once they had found their students, they would recede to private places to conduct their classes.²⁹ According to Isocrates, some of the methods Sophists used to attract students were less than honest.

It is not only these teachers who deserve criticism, but also those who offer skills in political speeches. They have no concern for the truth but think that their art consists of attracting as many students as possible by the smallness of their fees and the grandness of their instruction and of being able to learn something from them. They themselves are so senseless—and they assume others are as well—that they write speeches that are worse than private citizens might improvise, and they promise to make their students such good orators that they will miss none of the possibilities in their cases.³⁰

Twenty-six or more Sophists are known to have taught in Athens from the period from about 460-380 BC, which marked the height of their activity and importance.³¹ Quite probably, that meant that there were also 26 different curriculums and disciplines. Sophistic higher education was disorganized almost to the point of dysfunction. Each Sophist had his own area of interest and focus, which was often quite limited. The system was further complicated by a lack of any sort of method for teacher certification. Essentially, this meant that a uniform structure was out of the question, and also that anyone who wanted to become a teacher had only to recruit willing students.³² In his *Panathenaicus*, Isocrates confirms the low standards that some of the Sophists held, saying that they gather with their pupils in the Gymnasium, “discussing the poets, especially Hesiod and Homer, saying nothing original about them, but merely reciting their verses and repeating from memory the cleverest things that others have said about them in the past.”³³

²⁷ Kerferd, 19.

²⁸ Plato, *Protagoras*, 310 e.

²⁹ Lynch, *Aristotle's School*, 39.

³⁰ Isocrates, *Against the Sophists*, 9, in translation from David C. Mirhady and Yun Lee Too, *Isocrates I*, (Austin: University of Texas Press, 2000) 63.

³¹ Kerferd, 42.

³² Beck, 142.

³³ Cribiore, 34.

Also influential during the Sophist Movement was Socrates. Clearly, Socrates was an opponent of quite a few Sophistic ideals. However, it is also important to note that he was, in many ways, a part of the movement in spite of himself. Much of Socrates' methodology, for example, was borrowed from the Sophistic Movement, including his dialectical approach. The balance between Socrates' originality and the degree to which he was influenced by the other Sophists is unanswerable.³⁴ Nevertheless, Socrates differed from the Sophists in several key areas.

Whereas the Sophists tended to advertise and promote themselves to excess in order to gain more pupils, Socrates tended to take a much more humble approach. Under no circumstances was one to boast about his own intelligence. For example, Socrates contended that the Spartans were truly wise, because despite their possessing the best education and greatest wisdom in Greece, they went out of their way to keep it secret.³⁵ The idea that one could teach someone something new was, to Socrates, rubbish. From his dialogue with Meno, as recorded by Plato, Socrates' role was not so much that of a teacher, but as a midwife assisting in the recollection and rebirth of forgotten knowledge.

These opinions have now just been stirred up like a dream, but if he were repeatedly asked these same questions in various ways, you know that in the end his knowledge about these things would be as accurate as anyone's. —It is Likely.

And he will know it without having been taught but only questioned, and find the knowledge within himself? —Yes.

And is not finding knowledge within oneself recollection? —Certainly.³⁶

Socrates believed that one can embark on a journey to find truth only by first acknowledging his own ignorance. In conversation with Gorgias, for example, Socrates notes the importance of arguments in beating out the truth rather than beating up each other. He points out the danger of allowing an argument to become personal as opposed to factual.

If they dispute about anything, and one says that the other is speaking wrongly or obscurely, they are annoyed, and think he is speaking from jealousy towards them, competing for victory, not inquiring into what is proposed in the discussion; and some end up by parting in the most shameful way, covered in insults, when they have said and heard such abuse of each other that the people present are annoyed for themselves that they have seen fit to give a hearing to characters like these.³⁷

³⁴ Kerferd, 34

³⁵ Plato, *Protagoras*, 342b.

³⁶ Plato, *Meno*, 85 b-d, in translation from G.M.A. Grube, *Plato: Five Dialogues* (Indianapolis: Hackett Publishing Company, Inc. 1981), 75.

³⁷ Plato, *Gorgias*, 457d.

Along with Socrates' disdain for Sophistic pride and vanity, he also had issues with their formality. While Socrates did support the idea of higher education, he also supported the tradition of Athenians educating themselves in public places around town. He would spend his days in the public walks of the gymnasia, where he would be likely to find as much company as possible. Plato, for example, writes that the Lyceum gymnasium was one of his favorite haunts.³⁸ Anyone who was willing to submit to his questioning could be his student, regardless of age or social status. Particularly the young were attracted to him. The city of Athens, however, was not. He was sentenced to death for corrupting the youth.³⁹

At the end of the Sophistic Movement, higher education in Athens had indeed come a long way. However, a complete and total lack of coordination between the Sophists as well as a general lack of organization kept the movement from reaching its full potential. There was no governmental regulation whatsoever, and even consistency within the Sophists themselves was impossible, as their schools were far from permanent.⁴⁰ A turning point in Athenian education came with Isocrates, who became the first known well-known teacher to establish a permanent institution of higher learning in Athens in about 390 BC.

Isocrates was a student of rhetoric under Gorgias of Thessaly. Isocrates saw the disorganization within Athenian higher education as quite problematic. He held great disdain for the Sophists, whom he believed to be self-serving and capable of great dishonesty in order to recruit students to their schools, most notably with their false guarantees for their students' mastery of rhetoric. In his *Against the Sophists*, Isocrates noted that those "who dare to make boasts with too little caution have made it appear that those who choose to take it easy are better advised than those who apply themselves to philosophy." He also complained about the Sophists' hypocrisy, claiming that while they preached against the value of money, they still felt no shame in charging their students money, while at the same time all but promising them immortality to attract them.⁴¹ Indications are that Isocrates' problem was more with the Sophists' dishonesty than their rate schedule: like the Sophists, he charged fees for his education.⁴²

However, Isocrates' school was far more successful financially and in other ways than any school extant in Athens to that point. His improvements resulted from basic philosophical changes within his higher education structure. Firmly a student of rhetoric, Isocrates liked presenting examples and having his students practice them. He used many Sophistic methods to teach, but unlike the Sophists, he dealt far more with actual practice than with theory.⁴³ Practicality dictated much of Isocrates' work as a teacher, as well as his recruitment of students. Isocrates refused to rush things or set unrealistic expectations. Instead of providing "jiffy" courses as the Sophists did to students who wanted the skills, but not the time commitment,

³⁸ Plato, *Euthyphro*, 2, in translation from G.M.A. Grube, *Plato: Five Dialogues* (Indianapolis: Hackett Publishing Company, Inc. 1981), 6.

³⁹ M.L. Clarke, *Higher Education in the Ancient World*, (Albuquerque: University of New Mexico Press, 1971), 58. Lynch, 42.

⁴¹ Isocrates, *Against the Sophists*, 1, 9.

⁴² John W.H. Walden, *The Universities of Ancient Greece*, (Freeport, NY: Books for Libraries Press, 1909), 32.

⁴³ Horst-Theodor Johann, *Erziehung und Bildung in der heidnischen und christlichen Antike*, (Darmstadt: Wissenschaftliche Buchgesellschaft, 1976), 237.

Isocrates insisted on a longer terms of commitment from his students, even three or four years. Furthermore, he made no great promises, as the Sophists did, or making outstanding rhetors of anyone who came to him. He recognized that not everyone was born with the same level of talent. While everyone could improve and benefit from education, not everyone could expect to achieve greatness.⁴⁴ Isocrates did not teach a canned course as he accused the Sophists of doing, but instead taught a philosophy that could be adapted to the aptitudes and abilities of his individual students.⁴⁵

Further, Isocrates successfully combined the effective use of rhetoric, as extolled by the Sophists, with a moral conscience for their correct use, as demanded by Socrates. Whereas the Sophists had promised to arm interested citizens with the rhetorical skill and equipment necessary to achieve powerful positions in the city, Isocrates promised to turn his students into insightful governors and responsible citizens. Takis Poulakos and David J. Depew eloquently illustrated the need for such reform.

In an age of intense individualism, the command of logos was often put in the service of reprehensible ends. The failings of the city-state were reinforcing the perception that the happiness of the individual was at odds with that of the state; it soon became apparent that being a good citizen did not amount to being a successful or happy person. Isocrates tried to reverse this perception by positioning a fundamental interdependence between personal and public well-being. This reversal turned into a powerful argument for his school, which needed a *raison d'être*.⁴⁶

Isocrates emphasized the necessity for a leader to simultaneously be a normal citizen. The leader's wealth, status, and oratory are sufficient to draw suspicion from his constituents if he does not exercise his authority with justice and temperance.⁴⁷ When Isocrates died at 98 years of age, his school died with him. He had neither chosen a successor nor was the education he offered designed to produce one. Nevertheless, his methods survived and strongly influenced all rhetorical teaching thereafter.⁴⁸

When Plato returned to Athens in 387 BC, he began teaching in the gymnasium known as the Academy, which was located about three quarters of a mile from the Dipylon gate.⁴⁹ Plato's school, which took the name of the Academy gymnasium in which it was located, proved to be quite innovative. The Academy was much more complex than any previous school, including a community of advanced members as well as younger students. Instead of the typical Sophist structure with one expert and many pupils attempting to research his teachings, the more

⁴⁴ Isocrates, *Against the Sophists*, 14-15.

⁴⁵ Walden, 32.

⁴⁶ Takis Poulakos and David J. Depew, *Isocrates and Civic Education*, (Austin: University of Texas Press, 2004), 7, 76.

⁴⁷ Takis Poulakos, *Speaking for the Polis: Isocrates' Rhetorical Education*. (Columbia: University of South Carolina Press, 1997), 27.

⁴⁸ Walden, 34.

⁴⁹ Clarke, 59.

advanced students would also be able to lead studies. Plato, as a teacher, tended to favor informality. He took a role as director of studies for his Academy rather than a lecturer. Instead of reading lessons to his students, he would set problems for them and offer advice and criticism for their solution. Students were expected to look into the problems themselves and come up with their own ideas, using their own thoughts. Historians speculate that Plato's *Republic* and his *Laws* were products of the Academy, rather than texts taught there.⁵⁰

Little is known about the teaching philosophy Plato actually used at the academy, as there is no written record of it. In general, Plato viewed writing as an inadequate compensation for a poor memory.⁵¹ It is known, however, that Plato's public speaking skills left much to be desired. The one lecture of which any definite trace is left, was a complete flop. Plato announced that he would be speaking on "The Good." He had a large audience, expecting to hear about health, wealth, and friendship, which they considered to be the good. Instead, Plato talked about arithmetic and geometry and astronomy, discussing the One as the Good. The lecture itself was so enigmatic that the majority of the audience left in disappointment and confusion. The only records from this lecture come from some of Plato's more advanced students who tried to take notes.⁵²

Much of the Academy's focus was dedicated to finding the good, which was a fairly complex task, as evidenced by the numerous fields of study available at the Academy, and proved a major dividing point from the Sophists. Sophist discussions held "the good" as a weapon of persuasion in discussion and debates. Plato, on the other hand viewed the good as the method of highest wisdom, the basic principle of all value. Finding the good would make the achievement of ultimate truth possible.⁵³ In the effort to find "the good," the academy focused on mathematics, numbers, geometry, and astronomy. Although there was no tuition required of the Academy's students, Plato would not accept students who did not have a general background in these areas.⁵⁴

Like Isocrates, Plato intended for his institution to be a permanent establishment. As a citizen of Athens, he was able to own property within the city, so he bought a small tract of land close to the Academy for 34000 drachmae.⁵⁵ Like some other teachers before him, Plato used a public gymnasium for many of his classes, which allowed for public recruitment and maintenance of a fairly large academic body. On the other hand, the gymnasium's public status meant that anyone could use it for other activities and purposes at any given time. Plato's private property, however, meant a permanent base of operations near the gymnasium, and thus a permanent presence. When Plato died, he left the Academy along with his house and garden to his nephew, Speusippus, who in turn left it to his pupils, or in a trust under his successor Xenocrates.⁵⁶ Plato's Academy continued as an institution for nearly 900 years.⁵⁷

⁵⁰ Lynch, 55.

⁵¹ Clarke, 66.

⁵² Kenneth J. Freeman, *Schools of Hellas*, (New York: Teacher's College Press, 1969), 197-198.

⁵³ Johann, 162.

⁵⁴ Freeman, 196.

⁵⁵ Clarke, 59.

⁵⁶ Walden, 27.

⁵⁷ Clarke, 60.

Aristotle attended Plato's Academy from the age of 17 until he was 37, first as a student and then as a teacher. When Plato died, he left Athens with Xenocrates in about 348 BC for Atarneus, where he and some other Academics, as Academy members and alumni were known, formed a circle centered around the tyrant Hermeias of Assos. After three years there, Hermias was killed by the Persians and Aristotle accepted an invitation from Theophrastus to go to Mitylene, where he formed another philosophical circle that also had close ties to the Academy. In 343 BC, when Aristotle was 42 years old, he went off to Philip's court in Macedonia to tutor the young Alexander the Great. During the latter part of this time, Aristotle went with Alexander to Stagira, a town that Philip had destroyed. With Philip's permission, Aristotle regrouped the population, rebuilt the town, and drew up laws for it. Close by, in Mieza, Aristotle founded the Nympeum, a school patterned after the Academy, where he continued to teach Alexander along with other students including the young Theophrastus. In all, by the time Aristotle arrived back in Athens in 335 BC, he had spent 23 or more years in the company of Academics, and had a great deal of teaching experience. This, no doubt, held an enormous influence on his thinking about how an institution of higher learning ought to be.⁵⁸

Even after Aristotle left the Academy, he was still considered to be an Academic, and was therefore eligible to teach or even to serve as *Scholarch* if so elected. However, Aristotle chose to form his own school instead. There are two very different traditions concerning why Aristotle formed his own school, the *Paripatos*, at the Lyceum upon his return to Athens. One, according to Diogenes Laertius, was that he formed the school as a protest against the leadership under Xenocrates, and in the other, according to Cicero, he built his school as a kind of branch of the academy, in a spirit of friendship with Xenocrates. In all likelihood, the real answer lay somewhere in the middle: Aristotle had simply developed different interests than the ones served by the Academy. As a member of the Academy and not a *Scholarch*, Aristotle would have been in no position or authority to change the Academy's academic pursuits.⁵⁹

Certainly, though, Aristotle's *Paripatos* was vastly different from the Academy. Like the Academy, the Lyceum was organized as a complex and diverse community, rather than a simple group of master and pupils, but unlike the Academy, the Lyceum included other philosophers, such as Theophrastus, who were Aristotle's contemporaries and colleagues. The Lyceum had several levels of faculty besides the *Scholarch*. Faculty concerned with teaching and research formed the *presbuteroi*, and faculty concerned with learning constituted the *neaniskoi*. Additionally, as students progressed through their studies, gained confidence and achieved intellectual independence, they were encouraged to become teachers themselves, as Aristotle had previously done at the Academy in his 20s. There was no contractual obligation for anyone, and the philosophers of the school commonly referred to one another as "friends."⁶⁰

Aristotle was a strong proponent for public education. He believed that education was absolutely necessary for the survival and wellbeing of a democracy and indeed the state. In Book V of his *Politics*, Aristotle describes education as "the one good thing" or "sufficient" to achieve the city's ends, in that education would create well-informed, reasonable citizens who

⁵⁸ Thomas Davidson, *Aristotle and Ancient Educational Ideals*, (New York: Burt Franklin 1892), 156.

⁵⁹ Lynch, 72.

⁶⁰ *Ibid.*, 78.

could plainly see what laws are necessary for a city and how that city can be most successfully run.⁶¹ Thus, the *Paripatos* did not charge tuition. Further aiding students were job opportunities around the *Paripatos* to help pay their living expenses while they were in attendance. The famous Stoic Kleantes, for example, was a former boxer from Assos who arrived in Athens with only four drachmas, but was able to support himself by working in Zeno's Stoa by watering gardens and crushing meal at night.⁶² Public education, Aristotle believed, was a public matter, and one that the city, as an institution, ought to concern itself with.

And since the whole city has one end, it is manifest that education should be one and the same for all, and its care public and not private—not as at present, when everyone looks after his own children privately, and gives them private instruction of the sort which he thinks best. The training in things which are common interest should be made common.⁶³

For the curriculum, Aristotle made great strides in making his *Paripatos* considerably more scientific than anything previously known in Athenian education. He developed systematic methods for collecting and analyzing literature, which enabled surveys of entire fields of knowledge. Furthermore, the *Paripatos* was instrumental in developing a scientific method for analysis and data gathering. Whereas previous scientific efforts had relied upon testing a hypothesis with logic and theory in a method similar to a geometric proof, Aristotle used scientific experimentation. In doing so, he appealed to a historic consciousness and endeavored to find truth through harmonizing and complementing data with a further appeal to the outer world.⁶⁴ In his work *On Coming into being and Passing Away*, Aristotle offered analysis into the contrast between the two methods.

The reason for our inability to comprehend admitted facts is simple lack of experience. For that reason those who have lived in close contact with natural phenomena are better equipped to formulate broad generalizations, but those who debate at great length and are blind to the facts are easily shown to have very limited views. Witness the difference between those who do research empirically and those who do it dialectically.⁶⁵

Much of Aristotle's scientific findings were recorded in his numerous works and treatises, which included *Logic*, *Metaphysics*, *Ethics*, and *Politics*, among others. Most of these works were written during his time at the *Paripatos* in Athens, at a time when Aristotle had gathered enough data to feel confident about coming to conclusions and writing them.⁶⁶ As

⁶¹ Curren, 49.

⁶² Lynch, 79.

⁶³ Curren, 126.

⁶⁴ Davidson, 162.

⁶⁵ Lynch, 86.

⁶⁶ Davidson, 158.

recorded in his *Ethics*, Aristotle believed that true scientific knowledge had to have its roots well known as well as its results.

Scientific knowledge is, then, a state of capacity to demonstrate, and has the other limiting characteristics which we specify in the *Analytics*; for it is when a man believes in a certain way and the starting-points are known to him that he has scientific knowledge, since if they are not better known to him than the conclusion, he will have his knowledge only incidentally.⁶⁷

Aristotle's institution required far more structural facilities than any previously established school because of the large quantities of data stored there. Aristotle's *Paripatos* was the first school to require such a library of data. Aristotle was the first to recognize the value and importance of organizing a library for a philosophical school.⁶⁸

Despite its fantastic achievements, Aristotle's *Paripatos* at the Lyceum was, nevertheless, in a constant state of political uncertainty. Aristotle was born in Strageira in Macedonia. He did not even venture to Athens until he began his studies in Plato's Academy at the age of 18.⁶⁹ He was not an Athenian, and therefore held no rights to land ownership as Plato did. Furthermore, he was closely connected with Alexander the Great, which made him quite unpopular in Athens. Particularly after Alexander smashed Thebes in 335, there was great suspicion surrounding Aristotle and his school, which had been established only shortly thereafter. He was treated respectfully, however, if only to avoid incurring the wrath and punishment of Alexander and Macedonia. When word of Alexander the Great's death reached Athens in 323, Aristotle became an obvious target. He was arrested for trumped-up charges of impiety, which were sure to raise high emotions and even louder cries from the populace for his blood. Aristotle fled to Chalkis, which was protected by a Macedonian garrison, proclaiming that the Athenians should not be allowed to "sin against philosophy a second time." He died shortly thereafter.⁷⁰

Although Aristotle's work was abruptly brought to an end, his school at the Lyceum continued; he left it in the hands of Theophrastus. Despite its precarious nature as a wholly public institution, according to Theophrastus' will, the *Paripatos* was a well-organized body with considerable property, despite the fact that neither Theophrastus nor Aristotle had Athenian citizenship.⁷¹ This citizenship issue, however, continued to plague the *Paripatos* throughout its existence, as did the Lyceum's precarious location, which was outside the Athenian city wall. During times of war and invasion, all education suffered, but the *Paripatos* was particularly badly hit. Nevertheless, the school continued in existence until AD 529, when the emperor Justinian closed all philosophical schools in Athens.⁷²

⁶⁷ Aristotle, *Ethics*, VI.3, in translation from David Ross, *The Nicomachean Ethics*, (Oxford University Press, 1980), 141.

⁶⁸ Lynch, 97.

⁶⁹ Davidson, 155.

⁷⁰ Lynch, 94-95.

⁷¹ Clark, 61.

⁷² Morison, William, "The Lyceum," *The Internet Encyclopedia of Philosophy*, (<http://www.iep.utm.edu/lyceum.htm> 2001) Accessed 24 April 2005.

With the conquests of Alexander, the Greek educational system spread throughout the entire Hellenistic Empire. Schools were the grounds on which Greek culture was built. Throughout the empire, wherever Greeks had a sufficient population to support them, gymnasia were built, particularly in the Seleukian and Ptolemaian areas.⁷³ Although certainly there was wide variation in teaching methods and structures, higher education had progressed to the point that students from around the empire could effectively compare their work with one another.⁷⁴

The developments in Athenian higher education from the sixth to fourth centuries BC were certainly striking, especially considering that before the sixth century, there was none whatsoever. The successive changes and developments arose from need for the support of democracy and the betterment of society, but also through the influences of key figures and movements. The educational systems, largely established at Athens, became a model for the rest of the Hellenistic world, and even today, nearly two and a half millennia later, the thought generated there continues to be influential.

⁷³ Nilsson, 82.

⁷⁴ Criboire, 37.