

Yet, She Stands: A New History of Women, Gender and Power

The history you know is missing half the story. By presenting a picture of the past without any women, the histories we teach today prop up the male monopoly over definition. This book gives students and readers new points of reference for understanding women, gender and power. This is history through the female gaze. Each chapter homes in on a key point in history: Moments of reckoning for gender and power. Roads open to women. Others close. Power is used against them in new ways. These case studies exemplify the ways women navigated the rules of power around an important activity.

Chapter 4 **415 CE, Alexandria: Writing**

What is at stake?

In its 700 year lifespan, Alexandria's library became the foundation of the West's text-centered cultural tradition, amassing, at its peak, as many as half a million works. But the name of only one female author comes down to us through history: Hypatia. Nonetheless, women led and contributed to some of the most innovative mathematics, philosophy and medicine of the day. In this chapter we explore the barriers and limitations on women writing and later efforts to preserve their work. How have women navigated these barriers to cultivate rich intellectual lives and lead scholarly communities? What tactics, from violence to shame and deliberate neglect, were used against women who dared distinguish themselves as public intellectuals? In contemplating the traces of women's legacies, we explore the limitations of focusing too narrowly on the written word and seek other ways for reconstructing and understanding the past.

Writing – Alexandria, 415

Alexandria, Egypt in the early fifth century was still a city of action, art and philosophy—but one that was self-consciously in decline. The best days of Alexandria, the students, teachers, and philosophers wrote to each other, were the days *before*. Before the Serapeum was destroyed. Before the Jews were expelled. Before the grim-faced and black-cloaked Christians patrolled the streets demanding proof of faith from even the most powerful citizens.

The leadership of Alexandria was at a stalemate. On one side, Orestes, appointed by the Roman Emperor as the prefect of the city. He stood with the philosophers, a mixture of pagans and Christians, dedicated to the art of public debate and the pursuit of knowledge. Hypatia, the city's most prominent teacher and philosopher, stood with him, regularly holding court with the young, the ambitious, and the curious who would lead this generation and the next.¹ In fact, our sources tell us, it was not so much Hypatia who stood with Orestes, but rather he who stood with her, enjoying the shine of Hypatia's prestige and influence. On the other side was Cyril, the bishop of Alexandria, who commanded little loyalty in the city itself, but held influence over groups of increasingly militant Christians. Orestes resented the sway Plato, Aristotle and the other old thinkers held over his citizens. They were too preoccupied with mathematics, astronomy, and metaphysics. He was not a man for nuanced debate and discussion. As one critic put it, his answer to any philosophical argument was "Believe" full stop.²

¹ Maria Dzielska, *Hypatia of Alexandria*, Trans. F Lyra (Cambridge, Harvard University Press: 1995) pp. 27-65.

² Michael Deakin, *Hypatia of Alexandria: Mathematician and Martyr* (New York, Prometheus Books: 2007) p. 153.

Hypatia rode forth into the city's narrow and crowded streets where she greeted her students, Christian and pagan alike. Hypatia clothed herself in the white tribon of the philosopher. It was a simple linen garment that distinguished its wearer, usually a man, as a professional intellectual. She held court in prominent houses. Before her murder at the hands of Cyril, she influenced a generation of leaders around the Mediterranean.

Yet, we know nothing of her personal thoughts or inner life. We know her only through the words of the men around her. More than 1500 years after her death, we perceive her distantly through the kaleidoscope of men's writing about her— their admiration, impressions, their perspectives. Our best source for Hypatia's life and scholarly influence are the letters of one her students, Synesius of Cyrene. 156 of his letters survive. Some address Hypatia herself. Many others contain references to her work. As explorers of the past, we have to glean what we can from these letters and a smattering of contemporary accounts, most of which focus on her death, to reconstruct who Hypatia was and what she accomplished.

Her words echoed along the streets, as eager students “united under the star of Hypatia” and clamored for room in her courtyard. She gathered her followers to conduct, as one Synesius put it, “inquiry into the whole imaginative soul”³ In Hypatia's presence, her students found a fellowship of like-minded thinkers to discuss the mysteries of the universe. “We are united in mind, which is the best part of us, to honor each other's qualities.”⁴

From about 390 onwards, just as Christian bishops were destroying pagan shrines and cutting public funding for pagan teachers, the most influential voice in Alexandria was that of a woman.⁵ The increased chaos of the city did little to deter Hypatia or her students. Hypatia

³ Synesius in his letters, quoted in Deakin, p. 155. Deakin includes all letters relevant to Hypatia in his book. For a more complete translation, commentary and summary of Synesius's letters, see Augustine Fitzgerald, *The Letters of Synesius of Cyrene* (1926).

⁴ Deakin, p. 155.

⁵ Dzielska, p. 83.

must have been used to heading out into streets littered with cracked stones and broken statues.

What distinguished Hypatia was not only her mathematical acumen and expertise in astronomy and philosophy, but her public standing. She was the leading intellectual of the day. The historian Damascius describes her as “in speech articulate and logical, in her actions prudent and public-spirited, [the] rest of the city gave her suitable welcome and accorded her special respect.”⁶ She maintained the tradition of acting as an impartial advisor on matters of governance. “The archons [local leaders] handling the affairs of the city would always go see her first... for if the practice of philosophy had declined, still its reputation was seen to be revered and respected by those managing the important affairs of the state.” With Hypatia’s help, the city’s prefect, Orestes, was able to maintain the scholarly community of Alexandria even as Christian militants grew in numbers.

Hypatia’s Education & Career

Hypatia first established her reputation in the 370’s and 380’s by working with her father, Theon, to copy and write helpful commentary on Euclid’s *Geometry*, the foundational text of Western Mathematics. Theon was the last known member of the Museum of Alexandria, the spiritual descendent of the great library. There, scholars stored and consulted scrolls. Socrates Scholasticus, a fifth-century historian, wrote that Hypatia received her scholarly training in formal and informal assemblies of thinkers. They met under the colonnaded pathways of the Museum and the Serapeum, a pagan temple that doubled as a library, and in the courtyards of private villas.⁷ She read the great works of celebrated mathematicians, heard them discussed and eventually came to offer her own insights.

⁶ Damascius in Deakin, p. 141.

⁷ Socrates Scholasticus in Deakin, p. 143.

Philosophy in the Greek tradition encompassed mathematics, astronomy, and even engineering. Hypatia distinguished herself in all these realms. She taught a range of subjects from conic sections and infinite series of fractions, to Neo-Platonic philosophy. She constructed astrolabes and medical instruments. The extant sources, meaning the written sources that survive until today so that we can read and analyze them, all agree and even take for granted that she was a brilliant and famous thinker. One contemporary critic wrote that she lacked the sophistication of a true philosopher and was a mere “geometer.”⁸ Embedded in that jibe is corroboration of her skills as a mathematician. None of the ancient authors comment on a woman teacher as a novelty. Her gender did not preclude her from learning, teaching and advising.

Scholarly traditions have differed on Hypatia’s birth year and age at her death. We know her birthplace with certainty; in fact, she probably never left Alexandria for any significant period of time.⁹ But Western preoccupations with female youth have affected estimates for her birthdate. The same scholars and Romantics that would never present Socrates as anything less than an old man always portray Hypatia as a young woman. Think of Raphael’s “School of Athens.” In another famous portrayal of Hypatia, a Victorian novelist Charles Kingsley casts Hypatia as a young prodigy involved in romantic intrigue as much as philosophy. He describes her youthful body at the time of her death.¹⁰

For hundreds of years, scholars and students alike followed the date implied in the *Suda Lexicon*, a tenth-century Byzantine Encyclopedia, that she was born around 370.¹¹ Damascius calls her a young woman—as well as beautiful and chaste and well-proportioned.¹² That would have made her a teenage prodigy since we know she was leading scholarly assemblies before

⁸ Deakin, p. 65.

⁹ Dzielska, p. 66.

¹⁰ Charles Kingsley, *Hypatia* (London, 1853).

¹¹ *The Suda* as quoted in Dzielska, p. 67.

¹² Damascius in Deakin, p. 141.

390. One of her greatest critics, John Malalas, says that she was an elderly woman of 60 when she was killed in 415, meaning she was born around 355.¹³ But then, he may have been using her advanced age as an insult. That said, he was probably right. It is likely that Hypatia was at least 30 by the time she became the leading intellect of her city in the 380's, and was therefore born around 355.¹⁴ This aligns with the most recent estimates for her father's lifespan.¹⁵

There is strong evidence to suggest that Hypatia and her father embraced Egyptian conventions around womanhood which supported female autonomy, learning and financial independence much more than Greek traditions did. Theon was referred to as "Aigytiōs" as often as he was "Alexandros."¹⁶ Further evidence of Hypatia's Egyptian heritage and mentalities are all the incidental ways that Hypatia conducted herself – moving freely and unaccompanied about the city in her own chariot and, it certainly seems, in possession of her own house where she could host assemblies and converse with city leaders. Such things were much more common for Egyptian women than for Greek women.

While Hypatia's legacy has survived in the self-consciously Western, European and white traditions of history, her roots may lie more deeply in Asiatic and African traditions of female leadership.¹⁷ In fact, several historians have noted that women of the Ptolemaic period in Alexandria often weighed the benefits of legal independence (more Egyptian) against social standing (more Greek).¹⁸ It is possible that in the slow landslide of Greek culture in the city and the rising influence of new types of prestige, including Christian ones, that Hypatia didn't have to make those kinds of trade-offs. She could conduct herself with typical Egyptian egalitarianism that, in earlier eras, may have been a strike against women of similar skill and ambition.

¹³ Dzielska, p. 68.

¹⁴ Deakin, p. 173.

¹⁵ Deakin, p. 50.

¹⁶ Dzielska, p. 69.

¹⁷ Ivan van Sertima, *Black Women in Antiquity* (New Brunswick, N.J. : Transaction, 1989).

¹⁸ Gillian Shephard, "Women in Magna Graecia" in Sharon James (ed) *A Companion to Women in the Ancient World* (Wiley Blackwell: 2005) p. 326.

Before the end of her life, Hypatia would write on a number of complex mathematical subjects including stereographic projection and new methods for long division in her father's name. She prepared (and possibly composed) the only text on record as being part of the library of Alexandria that acknowledges a female contribution: "Theon of Alexandria's commentary on the [third] book of the Mathematical Syntax of Ptolemy, the edition having been prepared by the philosopher, my daughter Hypatia."¹⁹

While we know that Hypatia came to be the most respected philosopher of her day in Alexandria, we don't know how Hypatia came to have so much knowledge and command such wisdom. As a woman, her path to learning and scholarly authority would not have been straightforward. Did his young daughter happen to overhear gatherings of mathematicians in their courtyard? Did Theon notice his daughter's especially sharp mind and make it his priority to educate and mentor her? Did he provide for her direct instruction or was he surprised one day when someone posed an especially difficult question and Hypatia spoke out into the silence of a thoughtful room?

Female education in the ancient world

For girls in the ancient world, education was an idiosyncratic affair, usually done in the home and dependent on the whims and tastes of her parents, especially her father. If Hypatia's educational training was anything like that of the other educated women of Antiquity, it was a mixture of formal tutelage and mentorship from her parents and their circle. Perhaps her mother taught her to read. This was a common, if not widespread, practice in the Greek-speaking world. Usually girls who were taught to read sat in on the lessons that parents provided for their sons.

¹⁹ Deakin, p. 158.

It was therefore far more likely for a girl to read if she had a brother. This is a convention that held true well through the 18th-century.²⁰ Hypatia is an exception to that trend since she had no brother that we know about.²¹ That said, there is plenty of evidence that women in antiquity were active readers. Some of the earliest evidence we have for girls and women reading come from vase paintings, which show girls reading scrolls just as often as they show boys doing so.²²

Boys of the elite class were educated for leadership, business and civic life. Girls and women were nominally (but not actually) barred from these realms. Ancient texts are rife with warnings from men to other men that women should be kept in the home: “If you prosper, found your household, love your wife with ardor, fill her belly, clothe her back, ointment soothes her limbs. Gladden her heart as long as you live! She is a field, good for her lord. Keep her from power, restrain her.”²³ Read in the context of the evidence we have for women’s participation in public life, these warnings were more aspirational than descriptive.

Women nonetheless acknowledged these conventions even as they went ahead and educated themselves and their daughters anyway. Often, women noted their desire to educate their sons as the reason they learned to read themselves: “Eurydice of Hierapolis set up this tablet, when she had satisfied her desire to become learned; for she worked hard to learn letters, the repository of speech, because she was a mother of growing sons.”²⁴ Very few sources explicitly say that women learned to write for other reasons, but they certainly had other reasons. Kasia Szpakowska, a historian of Egyptian women in antiquity, has found

²⁰ Holt Parker, “Women And Humanism: Nine Factors For The Woman Learning” *Viator*, 35, pp. 581-616.

²¹ Deakin p. 50.

²² “Sheila Dillon,” “The Hellenistic and Late Republican Periods” in Sharon James (ed) *A Companion to Women in the Ancient World* (Wiley Blackwell: 2005), pp: 229-230).

²³ Find a a better extortion.

²⁴ ““ Eurydice of Hierapolis set up this tablet, when she had satisfied her desire to become learned; for she worked hard to learn letters, the repository of speech, because she was a mother of growing sons ” (*Moralia* 14b– c, cited in Lefkowitz and Fant 2005: 166). Education that was, if not public, at least subsidized, was set up in many cities and “ it is clear from the epigraphical evidence that young girls as well as boys benefited from these local schools ”— for example at Teos and at Pergamon — see Cole (1981: 231). But, while boys were learning not only reading and writing but also mathematics and rhetoric, girls were still excluded from instruction in those subjects.”

“documentary evidence from letters, administrative texts, and scene captions reveals that in reality women held important positions outside the home as priestesses, temple workers, managers, and producers of linen — one of the most important commodities of the time.”²⁵ Women learned to read and write to enrich their intellectual lives, ensure their professional success and conduct their daily business.

Hypatia, at the center of her thriving philosophical circle, was one of many learned women. She had considerable influence over political affairs and matters like property disputes, perhaps as much as Orestes, the patriarch of the city, did.²⁶ Just as she was able to navigate the division between the domestic and the public, she danced between pagan and Christian worlds. Synesius recounts that she was able to gain protection from Theophilus, an obdurate Christian, for some of her followers.²⁷ As Damscius said, “when an archon was elected to office, his first call was to her.”²⁸ It seems, like the city she dwelt in all her life, Hypatia was able to mix and explore elements of disparate and competing cultures. Other women may have been able to do the same.

Through her teaching and advising, Hypatia participated in building the bridge from Classical culture, specifically Neoplatonic views, to Christian culture.²⁹ Hers was a period of changing norms, a falling away of older power structures. Many wondered how to make sense of Christianity’s emerging moral and political system. To their confounded, “philosophically frantic” minds, Hypatia brought wisdom and comfort. She reconciled contradictions, she applied sound principles to difficult problems. She ensured the survival of vital mathematical knowledge. And she did so in an intellectually vibrant and engaging way.

²⁵ Kasia Szpakowska, “Hidden Voices: Unveiling Women in Ancient Egypt,” in Sharon James (ed) *A Companion to Women in the Ancient World* (Wiley Blackwell: 2005) p. 26

²⁶ Dzielska, p. 43.

²⁷ Dzielska, p. 38-39.

²⁸ Damascius in Deakin, p. 142.

²⁹ Deakin, p. 153.

The City of Alexandria

Hypatia's pluralism reflected the oldest traditions of Alexandria. For seven hundred years, the city was a center of cosmopolitanism. Citizens blended ideas and architectural motifs from as far west as Spain and as far east as the Himalayas. Descend into any of the city's tombs like the famous Kom El Shoqafa and depictions of canopic jars float over images of Persophone's abduction. In one carving, the Egyptian god Anubis wears the garb of a Roman soldier. Strabo, a travel writer from the early first century, tells us that if you looked at the city from the mountains above you saw tall white towers framing the central harbor. Municipal buildings and temples in red, yellow, and gray stone swept like a scarf between the harbor to the northeast and Lake Mareotis to the southwest.³⁰ The Alexandrian harbor was known for its depth. Large ships could moor closely to the docks, where storehouses waited in orderly rows for the cargo to be unloaded. Out of these ships came the wine, statues, books, and ideas that sustained the city's ever-changing tastes.

Art Historians may raise their eyebrows at tomb decorations where Egyptian soul birds fly over Greek sirens, but cultural blending was part of the essentially Alexandrian ethos.³¹ Even in decline, it was a place of cultural mixing, where Jewish populations didn't have to study Hebrew so closely because there was a perfectly good translation of their scriptures into Greek.

To the east of the city, on the southern shore, stood the symbol of the Alexandrian way: The Serapeum. Serapis was the principal deity of the city for more than 700 years. He was a mixture of Osiris, Apollo, Ra and any other god that inspired his followers. He was the quintessential syncretic god: if you had a deity in mind, Serapis could absorb that deity into himself. When early Alexandrians built his temple under the first Ptolemy, they laid bilingual

³⁰ Strabo, *Geography* XVII 1. 6. (London: Heinemann, 1917-32: The Loeb Classical Library).

³¹ "General Findings," *Journal of the American Research Center in Egypt* Vol. 25 (1988), pp. 71-91.

Egyptian and Greek foundation plaques at its base. Serapis was both wholly Egyptian and wholly Greek—making him wholly something else entirely.

The Serapeum stood tall and majestic— as long across as two football fields.³² Roman architects with their typical penchant for grandeur and order had expanded on the Greek building, already 300 years old, and added another row of columns in red granite. A fourth-century visitor said only the Roman Parthenon was more impressive.³³ A Christian commentator of the fifth century said that it looked expensive, which was of course the point.³⁴

Surrounded by colonnades, hallways and classrooms, stood the temple itself, barely large enough to contain a statue of Serapis that, by some accounts, was six meters wide and grazed the temple walls.³⁵ The statue was made of wood, gold, silver and bronze. A small window had been placed in the statue’s sanctuary in such a way that, as the sun rose, it shone on the statue’s metallic lips so that people said the God Serapis “was receiving the kiss of the sun” every morning.³⁶ Every night, as the shine of the statue glowed orange then dimmed into blue black darkness, Alexandrians said to one another, “the sun has bade farewell to Serapis,” content in the knowledge that the cycle would begin again, as sure as the sun would rise.

Just as Hypatia was coming to prominence, things in the city began to change. In 391, the emperor, Theodosius, issued policies to limit pagan worship in favor of Christianity.³⁷ One by one, Christians took over the old shrines. At first, they did so peacefully. Christians moved their assemblies from beyond the city walls and began holding them in homes around the city.

³² Judith S. McKenzie, Sheila Gibson and A. T. Reyes, “Reconstructing the Serapeum in Alexandria from the Archaeological Evidence” *The Journal of Roman Studies*, 2004, Vol. 94 (2004), pp. 73-121.

<https://www.jstor.org/stable/4135011>

³³ Aphthonius, “A Description of the Temple of Alexandria” quoted in “Reconstructing the Serapeum in Alexandria from the Archeological Evidence,” p. 104.

³⁴ Mackenzie et al, p. 109.

³⁵ Rufinus, Hist. eccl. 11.23 from Die lateinische Übersetzung des Rufinus, ed. T. Mommsen, in *Eusebius Werke*, ed. E. Schwartz, vol. 2 (1908), 1026-7.

³⁶ Rufinus, 11.23.

³⁷ Errington, R. Malcolm (1997). "Christian Accounts of the Religious Legislation of Theodosius I". *Klio*. 79 (2): 398–443.

Gradually, they removed the statues from the shrines, for, in the words of Christian Chroniclers, “it would not be easy otherwise to convert them from their former religions.”³⁸

In 395, the emperor banned public worship of any god other than the Christian God. Under the watchful eyes of the Alexandrian bishop, the conversion of sacred spaces from Osiris or Isis-Aphrodite became rougher, more violent. Priests weren’t just ignored or told to stop performing their rites. They were beaten. Occasionally, they were killed.³⁹ Monks from the nearby monasteries of Nitria patrolled the narrow streets to demand signs of Christian faith from passersby.⁴⁰ Alexandria, the legendary center of pluralism, famous for its heady mix of religions, traditions and ideas, acquired a new reputation for violent mobs.⁴¹

Scholars debate the exact year the Serapeum was destroyed, but by the year 400, it was gone. Headless columns cut dark silhouettes against the clear blue sky. The stones were dismantled for a future church. The statue of the great Serapis was melted down into cups for the mass and reliquaries for saints’ bones and splinters of the cross Jesus died on.⁴² Christians left the colonnade and the floor stones, claiming that the latter were “too heavy” to move. These, they said, would become the entryway for a magnificent new Church to the west.

Next came the writing campaign to discredit the cult of Serapis. Christian scholars wrote far and wide to dispel the aura surrounding the god and his statue as nothing but tricks of light and games with magnets.⁴³ They gloated about the church they would build in place of the Serapeum. The destruction of this great pagan shrine was license to the most militant Christians that they could bully whom they pleased. The days when they had to vent their frustrations in

³⁸ Sozomen, *Historia Ecclesiastica*, 7.15.

³⁹ Mar Marcos, “Religious Violence and Hagiography in Late Antiquity,” *Numen*, 2015, Vol. 62, No. 2/3, Special Issue: Religion and Identity Politics: Defining 'Acceptable' and 'Unacceptable' Religion (2015), pp. 169-196. <https://www.jstor.org/stable/24644758>

⁴⁰ Socrates Scholasticus in Deakin, p. 146.

⁴¹ Socrates Scholasticus, Book VVi, Chapter XIII, in Deakin, p. 143 and Heschius’s *Onomatologus* as quoted in Deakin, p. 140.

⁴² Hemingway, Sean "Posthumous Copies of Ancient Greek Sculpture: Roman Taste and Techniques." *Sculpture Review* 60, no. 2 (Summer 2002), pp. 26–33.

⁴³ Rufinus 11.23

furtive punches and attacks were over. They could destroy what they wanted. They could do it in public. They could do it in broad daylight.⁴⁴

When Hypatia held court in the open air, the streets were lined with the pieces of the old buildings waiting for their new positions in half-completed churches. Hard-pressed citizens could sort through the rubble to snatch up a few old tiles to patch a leak in their roof or find a stone prop up a leaning wall. Meanwhile, the incessant stream of feet gradually wore shattered tiles into a fine orange dust which swept across the sandy streets.

You can destroy a building and melt down statues. It is more difficult to silence a conversation. Amidst the squabbling and violence, the streets of Alexandria continued to be full of philosophy. Lovers of knowledge still came to Alexandria. They spoke and gathered where they could, mixing and mingling with the more adamant Christians just as they had mixed and mingled with sailors, traders and thinkers since Alexander the Great founded the city. Scholars like Hypatia thrived even as the city's architecture changed.

Walk north from the old Royal quarter towards the water and you would hear voices of groups of people still gathered to talk and to listen: to explore the mysteries of the physical world as well as those things they could not see and feel. They spoke in Egyptian and Greek dialects, formal Latin of the Western Empire, along with various versions of Latin typical of port cities along the North African and Asiatic coasts of the Mediterranean. They stood outside of philosopher's houses in groups, straining to hear the answers to the most pressing questions of the day. Men and women rushed about the streets, clad in simple linen robes, heads bent together in deep conversation— gesturing inward and upward as they puzzled aloud the nature of the permanent and the impermanent, the ideal and the example. They argued loudly about the possible relationships between the movements of the stars and the inner workings of the souls. Did all of creation emanate from a single being? Was that being the Christian god? These

⁴⁴ Marcos, p. 170.

were the questions of the day: How could you reconcile the pagan way of thinking with the revelations of Christianity?⁴⁵ These were the questions that spurred Hypatia and her students to discussion, even as they infuriated the local Christian leaders.

Hypatia's contributions to philosophy, science, and mathematics

It is her father, Theon's name, that appears throughout conventional histories as the last member of the Museum of Alexandria, but Hypatia had the superior mind. Philostorgius, her near-contemporary, stated that intellectually, she greatly outshone her father.⁴⁶ There are no records of his influence on any major leader of the day, whereas we have ample evidence of Hypatia's Alexandrians coming to her for wisdom and advice. The letters and historical accounts we have attest to a vibrant, mostly male, cohort of philosophy-enthusiasts who would go on to hold public offices of considerable influence, first in the governmental sphere and later, as religious and secular governance merged, in the Church. Her most notable disciple was probably Athanasius of Alexandria who drew on Neoplatonic teachings to shape Christian doctrine and become one of the most important church fathers. Other disciples include Theotecnus, Theodosius, and Gaius— all notable, if not widely influential scholars.⁴⁷ Another of Hypatia's disciples was Flavius Taurus Seleucus Cyrus, a famed epic poet, and influential Christian bishop.⁴⁸ Through her influence on these men, Hypatia shaped the intellectual development of her city and even Christianity.

⁴⁵ Socrates Scholasticus in Deakin, p. 147.

⁴⁶ Deakin, P. 108.

⁴⁷ Synesius, epistle 5, 16 quoted in Dzieska, p. 37.

⁴⁸ Dzielska, p. 31.

In addition to her influence over the spiritual lives of her pupils and the communities they came to lead, Hypatia contributed significantly to the mathematical work of her day. With Theon, she transcribed and clarified two foundational texts of western mathematics: Euclid's *Elements* and Ptolemy's *Almagest*. These new editions ensured that the knowledge would be available for study and elaboration by future generations. The *Suda Lexicon* indicates that she also wrote commentaries on Diophantus, Appolonius's *Conics* and the astronomical *Canon*, a method for using long division to approximate the positions of celestial bodies. No direct copies of these works survive, but scholars who have studied the substance and style of the extant manuscripts believe Hypatia's editions were integral to the preservation of these works.⁴⁹

Elegance and clarity of expression, in both writing and speaking were virtues Hypatia instilled in her disciples.⁵⁰ Synesius once complained in a letter addressed to her that, "Some of those who wear the white or dark mantle [professional philosophers and Christian clergy respectively] maintain that I am faithless to philosophy, apparently because I profess a grace and harmony of style."⁵¹ It is her style and elegance that modern historians have used to put forth a convincing argument that Hypatia is the actual author of all of Theon's most lucid work on Euclid's *Geometries*. Wilbur Richard Knorr and Michael Deakin have carefully compared Theon's earlier works with his later ones, those he most likely completed with Hypatia's help, and found that the later works reflect a more sophisticated, literary mind and notably different writing style. Theon's earlier work lacked the style and clarity that made the later commentaries on Euclid invaluable.⁵²

Hypatia constructed instruments with practical purposes such as astrolabes and hydrosopes. Once again, Synesius is our source for this information. In one letter to a

⁴⁹ Deakin gives the specifics for each of these works, along with the names of the mathematicians and historians, especially Wilbur Richard Knorr, who have examined them closely on pp. 87-101.

⁵⁰ Dzieszka, p. 30.

⁵¹ Synesius, quoted in Deakin, p. 93.

⁵² Deakin, p. 93 drawing on the earlier work of A. Rome.

colleague, Paeonius, describes an astrolabe he made with Hypatia's help. Astrolabes are devices for observing the movements of the stars and have many applications in navigation and keeping the time. The use of the hydroscope is more obscure. In a letter to Hypatia herself, Synesius asks for her help in constructing an instrument to measure the density of liquid. From the letter, we can infer that he had a medical purpose in mind. The poor man was on his deathbed and perhaps wanted to distill a liquid medicine or, more likely, measure the density of his own urine to calculate the required dosage of a diuretic. We do not know if Hypatia ever answered him. But the evidence suggests a woman actively philosophizing, debating, numerating, constructing, writing and generally participating in every aspect of intellectual life. The only difference between Hypatia and a man of similar talent, energy and ambition is that he would have taken on an official position in religious or civil life the way so many of her students did. He would have signed his work under his own name.

Women in the larger scholarly life of the Greco-Roman World

In fact, it was not at all strange to have a woman participate in the scholarly life and work of Greco-Roman Antiquity. Hypatia was exceptionally talented and perhaps unique in other ways, but she was by no means the only woman participating in the practice, oration and conversation that was the essence of philosophical inquiry in the ancient world. Contemporary accounts, and a few dating back to as early as the third century CE, make casual reference to women's participation in these scholarly circles. Contrary to her 21st-century reputation, Hypatia is not the first female mathematician of record. As the records stand, the first female philosopher-mathematician about whom we have information was Aesara. Her fragmentary work "On Human Nature" explores the tri-partite soul, similar to the Platonic division. She argues that a soul should balance its many disparate elements in order to balance the household,

which in turn, balances society.⁵³ Aesara was probably not alone. There is strong evidence that Pythagoras had a wife and daughters who participated and contributed actively to his work in the third century BCE, seven hundred years before Hypatia.⁵⁴

One realm of intellectual and public activity in which women actively participated was medicine. While we have only one extant manuscript authored by a woman, there are numerous traces of their contributions. Evidence points to women as experts in obstetrics, meaning professional midwives, as early as the fifth century BCE. In the fourth century BCE, we find references to female doctors treating any number of ailments in both men and women. Medical literature and documentary evidence, things like bills, administrative records and even casual jokes, indicate that female physicians were common in the ancient world.⁵⁵ Women were granted civic honors for their medical practice and received municipal funding to do their work. Many epigraphs, tomb inscriptions, corroborate the trend. In one example from the third century, Geminia was called a “savior of all through her knowledge of medicine.” Pantheia of Pergamum died around 150 BCE and her husband, Glycon, a fellow doctor, commissioned this epitaph for her: “You raised high our common fame in the art of medicine, and even though a woman, you did not fall short of my skill.” Iulia Saturnina who died around the same time was called “the best doctor.”⁵⁶ Pliny the Elder, the historian, and Paul Aegineta, a noteworthy medical writer, among others, describe the work of female physicians.⁵⁷

One particularly useful source on what work female physicians were doing comes from Antiquity’s most well-known physician: Galen who lived from about 130 to 210 CE. Galen’s

⁵³ Holt Parker, “Women in Medicine, “ in Sharon James(ed) *A Companion to Women in the Ancient World* (Wiley Blackwell: 2005) p. 432.

⁵⁴ Margaret Deslauriers, “Women, Education and Philosophy,” in Sharon James(ed) *A Companion to Women in the Ancient World* (Wiley Blackwell: 2005) Ibid, p. 346

⁵⁵ Holt Parker, “Galen and the girls: Sources for Women Medical Writers Revisited,” *The Classical Quarterly* Vol. 62, No. 1 (MAY 2012), pp. 359-386

⁵⁶ Holt Parker, 'Women doctors in Greece, Rome, and the Byzantine empire', in L.R. Fürst (ed.), *Women Healers and Physicians: Climbing a Long Hill* (Lexington, KY, 1997), 131-50, especially pages 135-138.

⁵⁷ Parker (1997), p. 137.

enduring reputation rests on the large body of texts he left behind that were copied again and again. In these texts, he cites numerous female physicians for their expertise. From these citations, we know that women were by no means exclusively bound to the messy informal, workaday world of bodily care. Galen's criteria for citation was above all efficacy and experience.⁵⁸ He valued written authorities on medicine because, for Galen, medical tradition was a distillation process that eliminated imperfections and mistakes through trial and error. A woman's name attached to a medical recipe (prescription or formula for a remedy) could serve as a mark of approval or sign of efficacy as well as a man's name could.⁵⁹ Women participated in the highest discourses on medicine. They could be medical authorities.

One manuscript by a female medical authority in the ancient world survives.⁶⁰ The author was Metrodora and the manuscript dates from some time between 100 and 300 CE. Of the two original books, only one survives, called "Concerning the feminine diseases of the womb." Metrodora does not cover obstetrics but concerns herself exclusively with diseases. She divided her work into sixty-three chapters in seven general sections. It is a highly organized, cogent medical text that draws on the knowledge of the most sophisticated medical authorities of her day and offers new insights. It is possible but unlikely that Metrodora was the only woman of the period to put her expertise in writing. Her manuscript offers evidence that women may have been writing about medicine much more than the extant sources indicate.

Hypatia and everyone in her circle would have known of and perhaps consulted female physicians. And while we might confer a medical doctor similar or even more respect than we would a doctor of philosophy, it was not so in the ancient world.

⁵⁸ S. Vogt, "Drugs And Pharmacology," In R.J. Hankinson (Ed.), *The Cambridge Companion To Galen* (Cambridge, 2008), 316-17.

⁵⁹ Parker 2012, p. 383.

⁶⁰ The following discussion is based on Holt Parker 1997 pp. 138-140.

Medicine was by no means an elite practice. Alexandria, like Egypt in general, was teeming with physicians at every level: from the casual purveyor of herbs and remedies to the court physicians. These practitioners of healing came from every social class and had every degree of education. Some were even slaves. But women doctors, even elite ones, were clearly well-known.⁶¹ Their numbers were small, but not so small as to warrant any sort of commentary. They cared for men and women alike, and concerned themselves with bodies both healthy and in distress. Hypatia would not have seen herself as the same type of person as a mere doctor, but, as the letter Synesius wrote her asking for advice on constructing a medical instrument shows, she was not above concerning herself with the body.

Where medicine was more bookish—meaning it involved the study and comparison of written theories and remedies rather than examining and treating bodies—women were less involved. They were less involved as medical writers and less likely to be the subjects of written medical inquiry. The result, in history, is that despite evidence of women’s widespread involvement in medicine, we have relatively few sources that give us the details of what exactly they were doing. There was a whole world of female medicine and care, for daily and monthly ailments, as well as for major health concerns, about which we have little information.

The same may be true for the world of philosophy and mathematics. Hypatia, after all, was a philosopher who never wrote down any philosophy. She wrote texts for mathematical instruction. Typical in the ancient world, hers was a scholarly circle that wasn’t particularly *bookish*. Bookishness was male, but thinking, doing, curing, questioning, debating was something that both women and men could do.

Women thinking was the norm. Women offering expertise was the norm. Women speaking, too. But women writing was another matter entirely. While women discussed all matter of ideas and pushed the fields of mathematics, astronomy, medicine ethics forward, there

⁶¹ Holt Parker, “Galen and the girls,” p. 385.

were probably no scrolls authored by women in the library of Alexandria, not in 300 BCE when it was built, not in 30 CE when Julius Caesar burned its warehouses and Cleopatra snuck onto his ship to strike a bargain with him, and not in 415, when Hypatia was murdered by a political rival.

Zero is not a common number in history. Women have managed to do almost everything and make contributions in almost every field. Women hunted the stags. Women fought the Crusades. They have ruled dynasties and run companies. For an activity to be truly and really exclusively male, it has to be heavily institutionalized. Women's absence was the result of careful and consistent gate-keeping – power used against women – rather than any lack of activity on their part.

Scholarly activity was by no means exclusive to libraries. Libraries were places where works were compiled for posterity and for the instruction of future leaders. These realms, schooling and leading, were coded male. By looking at how the library was put together (and of course, in 600 years, methods came and went) and later preserved and passed down over the years, we can see that from the very conception of the project, maleness was a qualifying factor. For an author's work to be part of the library and, later, to be worth keeping, he had to be a man. To be female was to be disqualified.

How did the library come to be?

Alexander the Great founded the city of Alexandria in 331 BCE on his way to conquer the known world. In a decision lauded for its political savvy, he chose not to attempt to suppress Egyptian culture or supplant Egyptian leaders. Egypt was the cultural powerhouse of the day and its population and military tradition meant that if Egyptians began to find Hellenic occupation tiresome, there would be trouble. So Alexander worshiped at the local shrines, walked in the steps of Ra and Osiris. He kept the local governors in place, demanding only a (relatively) small

tax. He wanted to leave some lasting public symbols of his authority, but didn't want to step on anyone's toes. Perhaps following a dream, perhaps following the well-known currents of the Mediterranean, he chose a small island and port city to name for himself. There, Alexander installed the first of the Ptolemies, Sotor. It was he who founded the library and built the Serapium.

There are two origin stories for the library of Alexandria.⁶² The first is that the founding collection was copied in Rome from the book holdings of Aristotle himself. Strabo reports that Aristotle built up a large library at his Lyceum for the erudition of the boys and young men destined by birth and station for leadership.⁶³ The second is that it was based on a smaller selection of works copied at Mieza in modern-day Macedonia for the education of Alexander himself— it therefore contained more work of poetry, ethics, politics and rhetoric, which were intended specifically for the education of a young man destined for political leadership. These stories, whether true or not, held sway on how works were chosen for the library. Ptolemy Soter followed Aristotle's model, even if he did not draw directly on his exact collection.⁶⁴ It was a place to compile the most important works for the erudition of the most important people, people who would go onto hold public office. Those were, by definition, men.

Scholars at Alexandria did the necessities to establish a standard text and make it available to the small class of the learned public. They compared multiple editions, filled in missing words, corrected spelling and ensured legibility. They either removed or discouraged the circulation of other copies.⁶⁵ This was not always, or even often, the respectable enterprise it seems to be. From Galen we know that this was often a matter of plunder. Ships were searched

⁶² The following explanations are adapted from R.G. Turner "Aristotle's Works: The Possible Origins of the Alexandria Collection" in *The Library of Alexandria: Centre of Learning in the Ancient World* New York, St Martin's Press, 2000

⁶³ Strabo, 13.1.54.

⁶⁴ Diogenes Laerts 4.1, 5.51 quotes in Reynolds, p. 6.

⁶⁵ Reynolds, p. 6.

upon their entrance to the harbor. If any books were found, they were either taken outright or held until copies could be made. Once, Ptolemy III borrowed the scrolls of Aeschylus, Sophocles and Euripides from Athens. Promising to return them, he left 15 young men behind as collateral. He never returned the books and the young men were never heard from again.⁶⁶

Compiling these books was an act of power. These were works of established merit and fame, works necessary for the education of young men of consequence. It was at no point a gender-neutral endeavor. Prestige, merit, fame, all of these were by convention and practice coded male in the ancient world. If there were works by a female author or ascribed to a female author in the first place, it is highly likely that they were either expunged or integrated into works ascribed to notable men.

What did the library look like?

We are not quite sure what the main library of Alexandria looked like in its heyday. In the 1980's, archeologist Adam Rowe found what is believed to be a smaller, secondary library next to the Serapeum.⁶⁷ Ancient texts refer to it as the "daughter library," so we assume that it is similar in appearance to the original one, but smaller in scale.⁶⁸ 19 identical rooms have been excavated, each four by three meters (about 13 by 10 feet). An adult of about five feet, six inches tall, could walk across it in five or six paces. Each room probably held one or two shelves, either on opposite walls or in the center so readers could walk around them. They were arranged by subject, but as far as we know, unlabeled. Enthusiastic scholars had to learn the locations of important scrolls, competing with each other in this trick of memory. Several ancient

⁶⁶ Barnes, p. 68.

⁶⁷ McKenzie et al. This is the most recent and comprehensive description of the various archeological findings of the site. The discussion you see here draws heavily on that article.

⁶⁸ Robert Barnes, "Cloistered Bookworms in the Chicken Coop of the Muses" in Roy MacLeod, editor, *The Library of Alexandria* (London, Taurus: 2000) pp. 61-78.

sources note that Callimachus, a famously prolific ancient poet, was the only person who could find any scroll he wanted.⁶⁹

Scholars developed a certain amount of intimacy with a rack of scrolls, rolled tightly around an umbilicus, a cord of leather, and laid on top of each other in diamond, square, and triangle-shaped openings like so many ears of corn. When you pulled out a scroll for the first time, you wouldn't know what you were opening. You selected a scroll, wondering what mysteries of mathematics or metaphysics would come to you from the distant past. The paper, made of pressed papyrus reeds, was thicker than paper in the 21st century, but still dry and delicate. Scholars felt themselves not just to be discovering new horizons, but to be preserving the precious material of a disintegrating past.⁷⁰ Nowadays, scientists don't have to concern themselves nearly as much with the preservation and transmission of past discoveries. They can hand their students a textbook, a pin drive or even tell them to consult the internet. The pressing need to preserve the past is a concern that the wealth and technology of the 21st century has made disappear from our minds. But without Theon and Hypatia, the work of Euclid would be lost. And without countless scribes and thinkers, named and unnamed, the work of Pythagoras would be lost too. Without the benefit of extensive copying, the works of many women were lost.

The library was not just a storehouse of knowledge, it was a place of teaching and learning. Young men of Alexandria received their education in or near the collections of scrolls. Archeologists have excavated slightly larger recessed rooms with graduated walls for listeners to sit and a small raised square in the middle for the speaker to stand on: more of a stone soapbox than a podium. In a manner of schooling probably modeled on Aristotle's Lyceum, groups of 12 to 14 boys gathered daily to hear their teachers and learn their letters. This small

⁶⁹ Barnes, p. 67.

⁷⁰ Barnes, p. 61.

group of elite boys and men were preparing for a future of public influence and authority. A boy could have in mind that, were he to make an important enough contribution, one day, he could sign his name to his own scroll.

Why didn't the library include any female authors?

When it came to admitting women's work into the library's canon, theory overcame the daily reality of their presence. Even if Aristotle's actual collection was not the source for the Library of Alexandria, his views on what qualified as worthy influenced its curation. Aristotle had a clear theory of not just male superiority, but male *authority* over women. According to Aristotle, men are more expert "by nature" than women at leading. In *The Politics*, he explains that women are to be ruled by men in a "political manner." The female possesses the "deliberative faculty," meaning the capacity to think, but that she "lacks authority."⁷¹ In Aristotle's worldview, a woman can think but she doesn't really *know* what she is thinking.

What does it mean to have rationality without authority? Aristotle uses the Greek term, *akuron*, meaning "without authority." *Akuros* can pertain to persons, denoting that they have no power or authority; or it can apply to laws or sentences, in which case the term means "no longer in force, canceled, annulled, or set aside." It's a fitting way to describe how women's writing has been treated throughout history. For Aristotle, women were like children, they lacked self-control (authority) over their own desires, urges and passions.⁷² The theory is insidiously flexible. Any observation of a woman can justify it. If she says something intelligent, she doesn't really know what she is saying. If she says something foolish, she confirms the inferiority of the female mind.

⁷¹ "Political Rule, Prudence and the 'Woman Question'" in *Aristotle*, p. 564. For a larger discussion, see Smith, Nicholas D. "Plato and Aristotle on the Nature of Women." *Journal of the History of Philosophy*, vol. 21 no. 4, 1983, p. 467-478. Project MUSE, [doi:10.1353/hph.1983.0090](https://doi.org/10.1353/hph.1983.0090).

⁷² *Aristotle*, p. 566.

Male authors occasionally mentioned that they heard ideas from a sister or a female relative. One wonders then, if a man writing down ideas he heard from women felt himself to be taking elements of the landscape for a painting. Monet did not plagiarize the water lilies, he used them as inspiration for his own accomplishments. While a woman might share fascinating ideas, they're not quite hers. It's the way a child might make an observation that is startling in its accuracy and originality. A child sees the world with fresh, untrained eyes. Their naïveté is an asset. In this theoretical model, women do not improve themselves through gaining expertise. They can only stumble across insights. Naïveté, like virginity, is not earned. It is something you're born with and then can only lose.

Galen, the same physician who was happy to collaborate with women physicians, supplied the biological basis for Aristotle's theory of female inferiority. Apparently based on studying baboon bodies, Galen developed and wrote a theory that female fetuses were the result of a lack of heat in their mother's wombs. In this understanding of reproduction, a man provides the seed and the woman acts as a kind of oven. When a fetus gets fully cooked, a boy is born. When the oven isn't hot enough, a girl is born. Certain generalities about men and women's bodies seem to justify this patently false understanding of sexual differentiation. Broadly speaking, women tend to have less muscle, to be a little cooler to the touch than men. Ancient thinkers came to associate an ancient table of opposites, hot and cold, dry and wet, solid and porous, good and bad, with the binary of male and female. We find these associations repeated again and again in ancient sources until they became accepted wisdom.⁷³ Western physicians widely cited Galen on sexual differences into the twentieth century. Galen's ideas fed into a larger notion that women were underdeveloped men.⁷⁴

⁷³ See Aristotle, *Metaphysics* 986 a 21-6 among others. See Parker 2012 pp. 107-110 for a detailed analysis.

⁷⁴ Galen's work on sex differences was a small part of his overall corpus. For an overview see C., T. E. "Galen on Why the Female Is More Imperfect than the Male." *Pediatrics*, vol. 55, no. 4, 1975, pp. 562-562., <https://doi.org/10.1542/peds.55.4.562>.

This was the theory anyway. Probably many men and lots of women thought differently. The sources show us that many men were happy to converse and collaborate with the women of their acquaintance. It was a regular enough practice that no one bothered to say that it was noteworthy or strange that they were bandying about philosophical, mathematical, metaphysical ideas with women.

Aristotle's theory that women had reason but not authority extended into a practice wherein women developed ideas but did not write them down. Women were thinkers, not authors. Writing was something men did for other men. The late 20th century cliché that "women dress for other women" has an ancient corollary: men wrote for other men. Even the poetry of Sappho, the most well-known of ancient female writers and certainly a famed poet, comes to us only through quotation by men. We have no scroll by Sappho or ancient copy of her work alone.

Could there have been more scrolls by women?

Perhaps women authored many scrolls, but these scrolls have been lost to us through the ages of selective copying and compiling. The emergence of one woman's name through twentieth-century scholarly efforts illustrates the difficulties of reconstructing an accurate picture of thinking women in Antiquity. Pandrosian, a woman mathematician, lived one or two generations before Hypatia and was active in mathematical circles around 340 CE. Her name comes to us through a collection of writing by Pappos of Alexandria, her contemporary.⁷⁵

The history of Pappos's manuscripts is important to the story. The collection of Pappos is divided into eight different books, the third of which is addressed to Pandrosian. These works survived in a single manuscript, known as *Vaticanus Graecus* 218, which was found in the

⁷⁵ The following account is adapted from the article by Winifred Frost, "Pappus and the Pandrosian Puzzlement," reprinted in Deakin, *Hypatia of Alexandria*, pp. 128-133. The translations I have included are hers as well.

Vatican Library in the 16th century by Federico Commandino, an Italian Humanist. This manuscript was probably copied in Byzantium in the ninth or tenth century. This was a typical journey for Greek works of mathematics: from Alexandria in Antiquity to Byzantium around 900 and into Vatican libraries over the course of the Renaissance. There, in the fervor for reviving Classical learning, they were transcribed, translated and published in print. The work of Pappos was subject to at least two more transcriptions. At some point in the eighteenth century, it was copied in France and kept in their National Archives under the label *Paris 2440*. In 1875 in Berlin, a German man, Fridericus Hultsch, used this manuscript to publish a dual language edition with Greek on the left and Latin on the right. This was the definitive edition of Pappos's work and used as the basis for French and English editions.

Manuscripts may have been copied many times in between these periods of scribal activity. Each point of transcription was an opportunity for the scribes to edit or change the work. Sometimes they made mistakes, sometimes they made deliberate changes. We have no way of knowing if it was a mistake or a deliberate change when, sometime between the Vatican manuscript and the 1875 Berlin edition, Pandrosian's name was changed into the masculine form "Pandrosio" and the form of address (in the Greek and in the translation) changed from feminine to masculine.

In the 1950's, the error was discovered by a particularly assiduous scholar Athanasius. Treweek painstakingly reconstructed the original Vatican manuscript by deciphering where the ink had marked the opposite page. Over the next thirty years, scholars confirmed and built on his findings. Without his work, we would never know that Pandrosio was really Pandrosian (though perhaps we should have known since "Pandrosian" was the name of a minor Greek goddess and the name itself means "all dewy," hardly a typical masculine nomenclature). We can infer from the text that in the fourth century, Pandrosian proposed a way of calculating arithmetic, geometric and harmonic means through iterative, increasingly accurate

approximations. While not completely developed (that we know of) it is an approach that modern mathematics has shown to be quite effective.

Pappos disagreed with her analysis but refers to her as “an important person, reputed to be a geometer” and that “certain people who claimed to learn mathematics from you set out the enunciation of the problems in what seemed to us an ignorant manner.” So Pandrosian was both a mathematician and a teacher! For Pappos, her gender went by without comment, but for some scribe, maybe Hultsch in the nineteenth century, it seemed more likely or more accurate that she was a man. The gender biases of history worked to obscure this one woman’s work and only painstaking scholarly investigation brought this tiny reference to light. It is safe to assume that many other women’s contributions to scholarly work—and perhaps their own written work—were similarly copied out of history or, as was the case with Hypatia, attributed to a man instead.

The compilation of learning is never politically neutral. These periods of organized scholarly activity, Alexandria under the Ptolemies, Byzantium in the 9th century, Italy in the 15th century, France in the 18th century, Germany in the late 19th century, all align with attempts to centralize and solidify political power by drawing on scholarly prestige. Sappho’s work made it out of Antiquity. We have records that she was widely read in sixth- and seventh- century Byzantium, but no one bothered to copy her work in the ninth century. Thus we are left today with only fragments found in the works of other (male) authors. At these key periods of political consolidation, leaders intertwined scholarship with an illustrious and imperial past. Scribes and professors copied elite works to forge a living connection with their own times.

Later historians compounded these effects by focusing on the noteworthy among the noteworthy. They whittled down the lists of significant thinkers that had already been carefully selected from the contemporary sources. Historians dwell at length on these notable men in philosophy, public virtues, medicine, science, but haven’t spent much ink on ways in which

women were actively excluded from the records. The result is a partial view of the classical antiquity's intellectual scene masquerading as a complete view and a decided lack of critical inquiry into how certain spaces, intellectual and historical, were carefully coded as *male* spaces.

A moment of reckoning

These were the cultural norms that women navigated in late antiquity to participate in the intellectual culture of the day. Hypatia may have been the most successful at navigating them, or perhaps she was merely the last to work with this set of rules. More people know her name than any other woman's name, except for perhaps Sappho. With the rise of the Christian church, the rules of gender and power would change, and for Hypatia, her public position and intellectual authority would not save her. In fact, they became a danger.

Even as women philosophized, computed, composed, cured the ill, and consulted with their male colleagues, the tightening atmosphere of doom loomed over Alexandria. Many women looked at the broken temples and the growing numbers of black-cloaked monks walking the streets and left to establish female communities beyond the city walls.⁷⁶ They saw the rules of public discourse changing from philosophical debate to Christian belief and they shifted their strategies. Hypatia stayed.

Cyril was elected bishop of Alexandria in 412 in a contested and messy election. Though his uncle had the position before him, Cyril commanded little loyalty within the city itself. Many preferred a man named Thomas for the position.⁷⁷ Cyril already had a reputation for militancy and for particular animosity towards Christian sects and thinkers who favored the ideas of Origen, a Christian Alexandrian from the third century. The particulars of the debate— subtle

⁷⁶ There are numerous works about female religious communities in Late Antiquity. Laura Swan's *The Forgotten Mothers* (New York : Paulist Press, 2001) offers a good introduction.

⁷⁷ *The Suda* in Deakin, p. 136.

differences on the nature of Christ's soul—dizzy the modern mind. Was Christ's soul always the *logos* (word) or did it become the *logos* at the moment of resurrection? Theological debate often masked personal vendetta. Cyril's defining quality, one that he shared with his uncle before him, was a militant streak that made debate over big ideas—the posing of questions and insistence on exploring possibilities—intolerable.

This put Cyril at constant odds with the prefect of Alexandria, Orestes. Cyril considered himself the better Christian. But Orestes was the savvier politician. He courted favor with the Jewish community. He connected himself with Hypatia, the leading scholar of the day, so that he could draw on her influence with the intellectual community, pagan and Christian alike. Cyril took a different tack. He wanted to ensure that ecclesiastical power was the only power in Alexandria that mattered. His uncle Theophilus had destroyed the Serapeum but let the teaching and learning continue. Now Cyril would put a stop to that too.

Following his election, Cyril escalated his efforts to stamp out paganism and cement his supremacy over Orestes. He summoned some 500 monks, armed and angry, to descend from their refuges in the mountains of Nitria to attack Orestes in the street. Armed with rocks and shards of whatever they could find, they called him a pagan idolator. Despite his protests that he had been baptized in Constantinople by the bishop there, one monk, named Ammonius, struck the governor in the head with a rock.⁷⁸ A small group of Alexandrians loyal to Orestes seized and tortured the monk to death. Enraged, Cyril sent word to the emperor that a pagan was killing Christians for their faith and that Ammonius must be counted among the saints and martyrs. Cyril's requests were ignored by the emperor's officials, pagan and Christian alike. They sided with Orestes, leaving Cyril angry and thirsty for a fight he could win.

⁷⁸ Socrates Scholasticus, Book VII, Chapter XIII in Deakin, pp. 143-145. Some accounts refer to the monk that attacked Orestes as Hierax.

Several sources tell us that it was around this time, and in this mood, that Cyril was himself held up one day in the street.⁷⁹ But not by an angry mob, instead by an eager crowd of listeners. They were clamoring around the entrance to a private residence, straining to hear the voice of the teacher within. A few were running in and out, shouting summaries and commentaries on what was being said. So unfamiliar was he with the gathering places in his city, that Cyril had to ask one of his attendants whose house it was. For, of course, the teacher was Hypatia and the house was hers. She was captivating her audience with her usual verve and wisdom. It was for her that listeners came from far and wide.⁸⁰ It was these kinds of gatherings that earned her the reputation of a philosopher “who far surpassed all others in her own time.” While we don’t know the particulars of her speech, it’s fair to say that she was both satisfying and stoking her listeners into that philosophic frenzy Synesius loved so much.

Even if she wasn’t a Christian herself (and she probably was not, but we do not know for certain), Hypatia must have seen herself as something of a mentor to the next generation of church leadership – cosmopolitan, learned in the old thinkers, rigorous in debate and stylish in writing and rhetoric. Many of her students went on to become bishops of important cities. Athanasius became a father of the church. Around 411, Synesius, Hypatia’s most admiring student, and the one whose letters give us such rich information about her, her teaching style and her vibrant circles of pupils, was made bishop of Cyrene.⁸¹ None of this influence kept her safe, in reputation or in body, from the accusations of a spiteful rival.

What happened next is known to us in multiple ways. First, through consistent references in Greek texts in the Eastern Empire, references so casual as to imply that it was common knowledge. Sometimes, writers don’t even bother to mention Hypatia’s name.

⁷⁹ I’ve drawn on several primary sources to present as complete and vivid a picture as possible. Mostly Damascius’s *Life of Isidorus*, translated in Deakin, p. 141-2. Socrates Scholasticus p. 147 with some details gleaned from Synesius’s descriptions of the assemblies Hypatia led.

⁸⁰ Socrates Scholasticus, quoted in Deakin, p. 147

⁸¹ Deakin, p. 52.

Everyone knew her. Everyone knew what happened to her. We also have five extant sources: four authors that condemn the violent actions: Hesychius, Damascius, Socrates Scholasticus, and the Suda. And one, John of Nikue, who celebrates it.

Cyril called on his monks again. To embolden them to greater violence, he spread rumors about Hypatia: that she cast devious spells; that she attended and participated in public dances; that she wasn't just manipulating Orestes, she was *sleeping* with him. Orestes had become so deluded by her wiles that he had stopped going to Church!⁸² The list of insults is a familiar one: manipulation, seduction, dancing, magic, music, sex. Over the 7000 years of culture this book covers, the insults stay remarkably consistent. Whispered a few times, they merge together into an accusation of *witchcraft* for any woman of influence.

It was broad daylight when the monks seized the reins of her carriage and pulled Hypatia into the sandy street. They grabbed pottery shards and old roof tiles to stab and beat her. They dragged her north to the Caesarium, a newly minted church right on the water. They may have torn off her clothes. The implication of sexual violence exists. So does the shame of nakedness. One source tells us they used the pottery shards to beat out her eyes, another that they used them to flay and dismember her. They were right on the water, so seashells may have been involved. All agree that they mutilated her body and burned the remaining pieces. Whatever they did, it's not hard for a large group of men to chase down and beat a 60-year old woman to death.

Women, power and writing

Orestes, as far as we know, never stood up to Cyril again. Through his authority as the city's prefect, Orestes saved himself from Cyril's mob. Hypatia could not. But without Hypatia,

⁸² John of Niku, chapter LXXXIV 87-103, as quoted in Deakin, p. 148.

Orestes no longer challenged Cyril's authority. So the fear campaign worked. When Orosius, a student of Augustine of Hippo, visited Alexandria in the year following Hypatia's death, he noted no major library and no significant groups of pagan philosophers. Synesius bade farewell to Hypatia from his own deathbed: "Even though there shall be utter forgetfulness of the dead in Hades 'even there I shall remember thee' my dear Hypatia."⁸³

And thus the story goes, told again and again. The first ones to tell the story were Cyril and his followers. John of Nikku, a chronicler for Cyril, left no one, woman or man, in any doubt as to how to interpret Hypatia's killing. A woman speaking in public was a witch. She was a witch. Cyril was the saint. Cyril would go on to make an important philosophical contribution to Christian doctrine by carving out a clear and defined place for women. In 431, at the Council of Ephesus, where men gathered to lay down church doctrines that held for centuries. Cyril spoke passionately for the role of Mary as the *Theotokos*, meaning "bearer of god." While we cannot know his intentions, he gave women a crystal clear and narrowly defined role in Christian doctrine as the vessel of god. Mary bore Jesus in her body, but was not responsible for him in any way. The Christian doctrine echoes Aristotle's understanding how women could *express* ideas without taking part in creating them.

But this isn't the whole story. Hypatia's enduring reputation has always offered a counter-narrative of scholarly women. Even though she may not be the first woman mathematician, her accomplishments and wisdom shine brightly. Hypatia is hardly an unknown figure. Her reputation and her impact on the lives of so many meant that forever there would be a whisper of dissent from Cyril's version of events. In 12th century Byzantium, plenty of people knew her name. The "Egyptian Lady" became shorthand for a woman brilliant in philosophy and mathematics. As a symbol, Hypatia has enjoyed a long and interesting life as a paradigm of female achievement in otherwise exclusively male halls. Raphael included her in his "School of

⁸³ Synsesius in Deakin, p. 152.

Athens.” Edward Gibbon in his influential *Decline and Fall of the Roman Empire* describes her death with relish as an indictment of the savagery of religious fanaticism. For him, her death marks the end of free-thinking Classical Antiquity.⁸⁴ A nineteenth century English novelist, Charles Kingsley, wrote a popular fictionalized account of Hypatia’s life that casts her as a young, brilliant thinker doing battle with Catholic fanaticism. Queen Victoria loved it.⁸⁵

Through the history of Hypatia’s history and the history of the library where she left a record of her contributions, we see certain characteristics of learned western culture that would endure for a long, long time. Posterity, instruction, leadership were male domains. Official knowledge and official learning—acknowledged and under the direction of celebrated individuals—was, by definition a male affair. If women did it, it wasn’t official. At the root of this is a theoretical understanding of women as fundamentally lacking men’s authority. Biological notions of sexual difference, that female bodies were undeveloped male bodies, interwove with these notions of cultural differences to create a resilient male gender hegemony.

At the same time, we shouldn’t take this “philosophical” stance on women too seriously. For there were plenty of men who were happy to listen and learn from women, provided they demonstrated exceptional ability. Some men may have resented this and turned to their pens to turn vitriol into more theories of gender wherein women are decidedly subservient to men. In general, women did not participate in these written debates about their own nature—just as they did not participate in most written debates full stop. But in the ancient world, wherein speaking was the principle way of transmitting knowledge, we should not underestimate how, through speaking’s more flexible and participative rules, women were able to make themselves heard, develop their ideas, and offer their insights.

⁸⁴ Edward Gibbon, *The History of the Decline and Fall of the Roman Empire*, p. 382

⁸⁵ David Anthony Downes, *The Temper of Victorian Belief: Studies in the Religious Novels of Pater, Kingsley and Newman* (London, 1972) p. 65.

Merely counting the women named in various sources does not reflect what seems to be a rich and complex oral tradition of passing ideas from one person, one generation, to the next. And this passing happened from mother to son, sister to brother, daughter to father. With the ascendancy of the Christian Church as an institution, intergenerational passing of knowledge would happen more often from man to man, woman to woman— what scholars deem a more “homosocial affair.” Within this much more gender-segregated system, individual women wrote much more, for themselves and for their communities. Many of their manuscripts survive. In this book, Hypatia is the last woman whose experiences we have to trace primarily through the words of male writers.

Looking forward

The Western World would have to wait 700 years for another woman to wield such public influence in philosophical circles. Hildegard of Bingen (1098-1179) was as savvy a politician as any of her time, and a more prolific writer than almost anyone. She navigated the paths to power available to women in her time and place with remarkable acumen to become one of the leading public thinkers of the 12th-century. Her tools were rhetoric, the written word and fruitful political relationships with powerful men. Unlike Hypatia, whose political influence made her powerful enemies who found her to be an easy target in a crumbling city, Hildegard wrapped herself in the protection of the Catholic Church and died an old woman in her bed. Power and authority changed forms and women had to change their approaches, but they could still wield power and authority.

Historically, to institutionalize learning was to make sure it was male. Later, in a wave of professionalization brought on by industrialization and commercialization, the same tendency would be at play: to do something professionally was to be a man doing it. If women did it, it was

not professional. This was the case in a range of jobs from teaching to book keeping and compiling scientific data.

A lot has changed and a lot has not. Closing gates of intellectual circles to women, writing histories and making lists of notables that include only men are practices that have endured the years remarkably well. In 1980, there were 17 female professors with tenure at Harvard University— out of 569.⁸⁶ Today, male tenured faculty at Harvard outnumber female faculty three to one.⁸⁷ Most major history textbooks in English mention women on fewer than one in 10 pages— and almost always describe them in their domestic roles.⁸⁸ *Forbes*, a magazine that focuses on expertise in political, financial and technological sectors, regularly publishes lists of the world’s “most powerful or “most innovative” that don’t include any women.⁸⁹ Is it that women aren’t powerful or innovative or that, regardless of their respective accomplishments, being a man qualifies a person for power in ways that being a woman does not?

⁸⁶ “Lock-out: Women Academics: Opinion: The Harvard Crimson.” *Opinion | The Harvard Crimson*, <https://www.thecrimson.com/article/1980/3/6/lock-out-women-academics-pia-man-and/> .

⁸⁷ Harvard Trustees, *Annual Report 2019-20*.

https://faculty.harvard.edu/files/faculty-diversity/files/2019-20_annual_report_brochure.pdf

⁸⁸ Chipond, Annie Chipond, and Johan Wassermann. “Women in History Textbooks - Scielo.” *Women in History Textbooks - What Message Does This Send to the Youth?*, Yesterday & Today, 2011, <http://www.scielo.org.za/pdf/yt/n6/06.pdf>. For a US-specific study of women included in history curricula, see “Where Are the Women?” *Where Are the Women? A Report on the Status of Women in the United States Social Studies Standards*, National Women’s History Museum, 2017, <https://www.womenshistory.org/social-studies-standards> .

⁸⁹ McGregor, Jena. “Analysis | ‘We Blew It’: Forbes Named 99 Men and Only One Woman on Its List of ‘Most Innovative Leaders’.” *The Washington Post*, WP Company, 10 Sept. 2019, <https://www.washingtonpost.com/business/2019/09/10/we-blew-it-forbes-named-men-only-one-woman-its-list-most-innovative-leaders/> .