

Conjecture and Proof: A Case of Shifting Identities in Raphael's *School of Athens*

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Abstract

Perhaps the greatest challenge presented by Raphael's *School of Athens* is its potentially intentional ambiguity. Try as we might to secure identifications for the huddled philosophers massed in its soaring spaces, those identities have a way of shifting with the passage of time. A case in point is a relatively recent argument for Hypatia's inclusion in the painting. Inextricably linked to the complex program of the Stanza della Segnatura (the room in which it is located), and by extension, to the Neoplatonism of Julius II's papal court, Raphael's painting makes an awkward mirror for contemporary notions of mathematical achievement.

By turns inspirational and controversial, Hypatia of Alexandria has captured the attention of historians and mathematicians since her "rediscovery" during the Enlightenment. In recent years, two fine biographies of Hypatia, one by Maria Dzielska (1995) the other by Michael Deakin (2007) have gone to great lengths to separate fact from fiction, and to assess her contributions to the field of mathematics. Alejandro Amenábar's 2010 film, *Agora*, likewise sought to introduce a modern audience to the historical figure of Hypatia. At the same time, an intriguing tradition has persisted, linking Hypatia to a figure at the lower left side of Raphael's painting of *The School of Athens*. The sources of this tradition are murky, indeed, and include an account of an actual, recorded conversation between Raphael and an advisor in the court of Pope Julius II! Spurious or not, such accounts reveal much about how different generations see Raphael's great gathering, and what meaning we continue to read into the selection of figures that he (or others) made. Competing for center stage are an urge to identify the founders of a given discipline (mathematics, for example) as we understand it now, and a responsibility for understanding the painting in the context of the room in which it appears and the patron for whom it was created. Although a criterion for a great work of art is its potential to inspire new ideas in new audiences, the reverence for demonstrable truth so intrinsic to mathematical investigations must be applied here as well.

Within 50 years of its completion, Raphael's *School of Athens* was already the focus of a campaign to identify certain key figures with an eye toward unlocking meaning in the Stanza della Segnatura as a whole. Writing first in 1550, but basing his comments on observations begun in 1531 [1] Giorgio Vasari made the bewildering assertion that the bulky figure seated at the lower left-hand side of the painting is the evangelist, St. Matthew. [2] Even allowing for its placement directly across from a painting known as *The Disputà*, in which Raphael imagines an anachronistic, but powerful debate on the nature of the Eucharist, Vasari's claim is hard to understand. It has also complicated matters considerably for art historians, as Vasari's seminal work, *The Lives of the Most Excellent Sculptors, Painters, and Architects*, published in a second edition in 1568, has served as a key reference ever since. For Vasari, just one artistic generation removed from Raphael and his patrons, the impulse to see *The School of Athens* and *The Disputà* as two parts of a whole must have been strong indeed. Whether (as has been argued) Vasari's confusion lay in the fact that he was working from a later engraving of the painting [3], or whether he was relying on contemporary notions of the way fresco cycles could be "completed" via the



Figure 1: *Raphael, The School of Athens. Vatican Palace, Stanza della Segnatura, ca. 1510-1512 (photo: Scala/Art Resource, NY)*

viewer's movement through and involvement in the space, [1] the biographer was conditioned by the conventions—and predilections—of his day.

By 1695, Giovanni Bellori saw the St. Matthew figure differently, re-identifying him as Pythagoras, a claim that has held—for the most part—ever since.[4] The author interpreted Pythagoras as “writing his philosophy based on the harmonic proportions of music,” and went on to point out the small panel supported by the young boy at Pythagoras’s feet. On this panel Raphael depicted “...the consonances of song, indicated with Greek names and letters: diapason, diapente, diatesseron.... Of these consonances it is thought that Pythagoras himself was the author, and that he drew from them the basis for his philosophy, as Plato after him formed from them the harmonic proportions of the soul.” [4] Bellori solidified the figure of Pythagoras and identified the figure bent over and inscribing with a compass on a slate at the lower right of the painting as Archimedes, a figure whom most contemporary scholars read as Euclid.[4] Vasari had previously pointed out that this figure’s face is modeled on that of Donato Bramante, who was Raphael’s friend and booster as well as Pope Julius II’s close confidante and the original architect for the newly designed basilica of St. Peter. Bellori potentially saw Archimedes as the counterpart to Pythagoras, recognizing him as a greater creative genius than Euclid. Whether it was Euclid or Archimedes, Bellori established the primacy of mathematics in the composition as a whole, stating, “...mathematics must precede philosophy and the sciences, as their principles and elements, passing from the tangible to the intellectual....”[4]

Behind Archimedes, Bellori saw “two sages,” the figures of Zoroaster (with his back to us) and a Chaldean leader. More recently, the figure seen from behind has come to be identified as Ptolemy, and

the figure facing him as Zoroaster. Then, writing in 1998, Christiane Joost-Gaugier raised the question “Why Zoroaster?” Zoroaster was neither an Athenian, nor a Greek, nor a philosopher, and Julius II “had no known interest in Zoroastrianism, [nor any] such works on the subject in his library.”[3] Instead, she argues convincingly that the pair holding globes—one terrestrial, one celestial—are Ptolemy of Alexandria, a mathematician-cosmographer, and Strabo, a well-known Greek geographer. Both students in Alexandria, Strabo and Ptolemy became vital for Renaissance humanists. As exploration of new lands dramatically increased in the late 15th and early 16th centuries, the rediscovery of these classical scholars’ texts impacted the nature of cartography, and by extension, understanding of the known world.

Bellori did not see Hypatia anywhere in *The School of Athens*. For the figure cloaked in white and standing just behind Pythagoras (figure 2), he provided the name Francesco.[4] Francesco Maria della Rovere, the beloved nephew of Pope Julius II. Art historians have generally accepted this identification, while a devoted group of mathematicians continue to lobby for Hypatia.[6] Who else would it be, after all? In a room full of otherwise male philosophers, a beautiful woman glides in from the left, pulling her

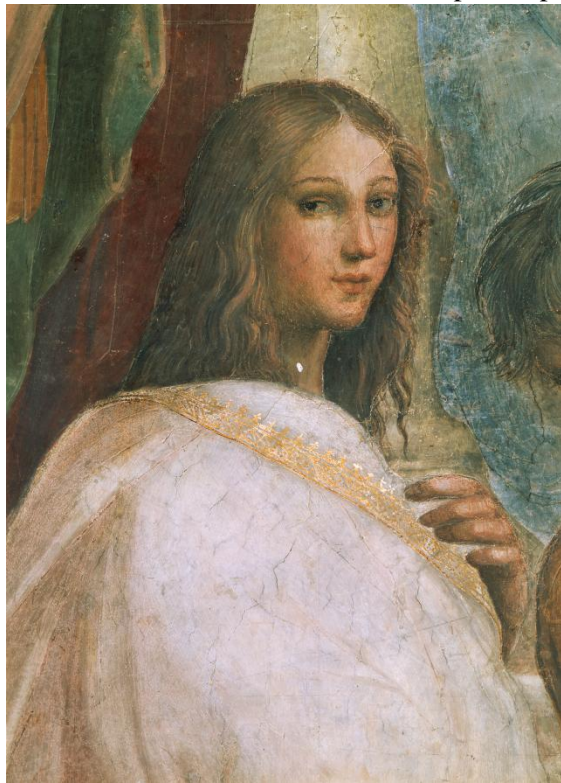


Figure 2: Assumed portrait of Francesco Maria della Rovere, sometimes called Hypatia. Detail from *The School of Athens*. (photo: Scala/Art Resource, N.Y.)

cloak across her shoulders. Given the overall compositional emphasis on mathematics in general, who other than Hypatia could hold her own in this gathering of the greatest of ancient Greek minds? The art historical retort is quite straight-forward: the walls of Julius II’s library were no place for Hypatia. To argue for her in *The School of Athens* is to ignore entirely the cultural context of the time and place in which the fresco was conceived, and to forget the controversial accounts of Hypatia’s death at the hands of an angry, Christian mob. It would have been a delicate maneuver, indeed, for Julius II to advance the achievements of certain ancient Greek philosophers while simultaneously drawing attention to a female mathematician whom many believed perished at the bidding of the church.

Historical objections such as these may have inspired an apocryphal account of a private conversation between Raphael and an advisor to the Pope. According to this legend, the artist was prompted to smuggle Hypatia into the fresco in the guise of the Pope’s nephew. [6] Unfortunately, such stories ascribe to Raphael an autonomy he did not enjoy and a fondness for a female mathematician who was most likely unknown to him. Instead, we have Francesco Maria, who is depicted like many other male youths of his day: hair down, somewhat ephemeral gaze focused out on the viewer, and swathed in a cloak of impressive

proportions.

How could such an impassioned case for Hypatia emerge in the first place? The answer may lie in Alexandria. The Stanza della Segnatura functioned as the private library of Pope Julius II, and naturally echoed in both prestige and character the Biblioteca Apostolica Vaticana, the great Vatican library, founded in the mid-fifteenth century and reorganized in 1475 by Julius II’s uncle, Pope Sixtus IV.[5] But it is possible that *The School of Athens* refers back even farther—to the Museum and the library at Alexandria. While structures such as the Baths of Diocletian in Rome provided Raphael with an

immediate model for the barrel vaulted and sunlit spaces of the *School of Athens*, the great scholarly gathering, and the atmosphere of lively, intellectual dialogue depicted therein appear like an illustration of Alexandria between the 4th centuries B.C. and A.D. No extant documents name the papal scholar who advised Raphael on the program for the Stanza della Segnatura, but there is no doubt that an erudite librarian or humanist was charged with developing the program for this space. Such advising was common in much less visible spaces; it is certain that Julius II would not leave the decision-making to a mere painter. A savvy advisor would have known that to evoke the Museum and library at Alexandria was to further raise Julius II's desired identity as a humanist scholar. It may be that in evoking this connection, and in populating the space with the likes of luminaries such as Ptolemy and Euclid, Raphael and his advisor unintentionally set the stage for later scholars to search for other Alexandrian alumni. With this in mind, we can see how recent scholars may have been prompted to see Hypatia where most have long seen Francesco Maria della Rovere.

It all would have been much simpler, of course, if Raphael had just labeled the figures for us. Even in the preparatory sketches for the painting, however, Raphael did not include inscriptions, distancing the work from such conceptual forbearers as "Uomini Famosi" cycles.[7] In this tradition, artists were asked to render famous figures from history, whether religious, historical, or mythological. Typically, these figures were labeled with inscriptions, leaving the guesswork out of the viewing experience for their privileged patrons. In the Stanza della Segnatura, where the audience was by definition erudite, such inscriptions were dispensed with, leaving us to rely on the odd attribute (a tablet with equilateral triangles, a copy of *The Timaeus*, a cup on the stairs, flowing locks of golden hair) to identify figures today. This has led, in turn, to the painting's rich afterlife, in which each generation brings to the experience of viewing and interpreting a new understanding of how the painting first functioned, as well as specific cultural concerns that shape how the work is now seen. When we are able to disentangle longing and legend from the original circumstances of the work's creation, we come to appreciate the fresco on a deeper level. In the end, *The School of Athens* is both the vault into which Raphael deposited Pope Julius II's scholarly aspirations, and a prism through which we now view the intellectual ideals of subsequent generations.

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