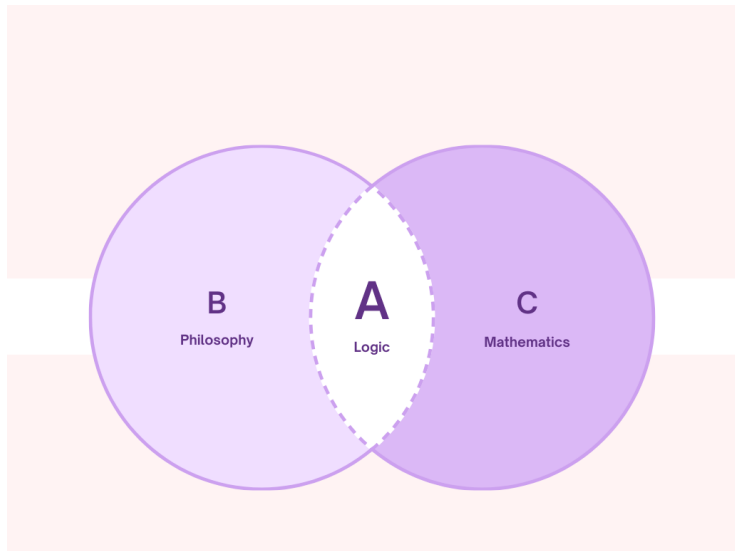


Women and Logic: Where We're At, How We Got Here

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Where are the women logicians?



Two different questions

Instead of asking “Where are the women logicians?” first ask:

Two different questions

Instead of asking “Where are the women logicians?” first ask:

- What is logic?

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- What is logic?
- What is a logician?

What is logic?

- Symbolic/mathematical systems.
- Formal reasoning.
- Dialectic.
- Argumentation and the practice of debate.
- Connected to philosophy of language: signification, meaning.

What is a logician? (1)

- 1 One who was taught logic?
- 2 One who practices or uses logic?
- 3 One who writes treatises on logic?

What makes one a logician? (2)

If (3), then that's why, historically, there have been so few women logicians. Why?

- Strong connection between production of textbooks/theoretical treatises and university activity, restricted access.
- Public vs. private activity.
- Logic as a male pursuit.

Women and Logic in Ancient Greece/India/China/Japan

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- We just don't have the data.

Women and Logic in the Middle Ages

The easy answer:

Proposition

There weren't any.

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Logic was practiced in the universities.

Universities didn't admit women.

Ergo, there were no medieval female logicians. □

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Not so easy ...

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- (and more to the Middle Ages than western Europe)

(Poss. Apocryphal) Women in the Universities

Bologna

- Maria di Novella, by age 25, was professor of mathematics at Bologna in the 13th C.
- Dorotea Bucca (1360–1436) was chair of medicine and philosophy at Bologna from 1390–1430, following the death of her father.

Salamanca

- Beatriz Galindo (c. 1465–?) studied grammar at one of the university's dependent institutions, and then taught philosophy and medicine at Salamanca, as well as tutored Isabel the Catholic in Latin. A commentary on Aristotle, *Notas y comentarios sobre Aristóteles*, is attributed to her. Little on the *Notas* appears to be available in English.

Study outside the universities

- Convent education.
- Correspondence courses.
- Private tutoring.
- Changing attitudes to the education of women.

Convent education

The foundations for philosophical education by women were set by the founders of convents, based on the *trivium* (logic, grammar, rhetoric).

- Radegund: established first Frankish convents in the 6th C.
- Hild (d. 680): abbess of Whitby, taught five English bishops.
- Hrotsvith (d. 927): abbess of Gandersheim, “is said to have written works on logic and rhetoric” [Waithe, *History of Women Philosophers*, vol. 2], or possibly just logic [Wright, p. 48].

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- Anglo-Saxon nuns: “we hear of Anglo-Saxon nuns . . . even becoming accomplished logicians”; in the 7th C, Anglo-Saxon nunneries were a place where “female children of the laity, even of the higher ranks. . . were instructed. . . sometimes in rhetoric and even in logic” [Wright, *Womankind in Western Europe*, pp. 81, 86]

Correspondence courses

- Alcuin of York's letter to a holy nun (8th C): Advances a method of syllogistic reasoning for dealing with heretics, praising the nun's awareness of grammar and rhetoric and implying knowledge of logic as well.

Private tutoring

- Flamenca:
 - ▶ Occitan romance Flamenca, composed around 1287.
 - ▶ Two young women are rewriting some poetry for one to send to her lover.

- Eloise d'Argenteuil (more about her later)

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*Flamenca said to her, "Who has taught you,
Margarida, who has shown you—
by the faith you owe me—such dialectic?" (5441–5443)*

- Eloise d'Argenteuil (more about her later)

Eloise d'Argenteuil

- c. 1090?/1100?–1164.
- Student and lover of Abelard.
- Recognized as an important ethical philosopher in her own right in modern times.
- After Abelard's death, Peter of Cluny complimented her on the fact that she had “left logic for the gospel, Plato for Christ, the Academy for the cloister”.

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- Did she study logic?
- Eloise rejects what Townsend calls the “tradition of dialectical disputation and the social customs of ritualized male aggression”

Christine de Pizan

- Born in Venice, 1364; grew up in the French court of Charles V as her father was the king's astrologer, alchemist, and physician.
- Began writing after being widowed at 25.
- Best known for her French courtly poetry, but also wrote books on practical advice for women.
- *The Book of the City of Ladies*: Dialogue between allegorical women representing Reason, Justice, and Rectitude, written in a highly skilled dialectical style.
- “Je ne suis logicienne”, Christine de Pizan write to Pierre Col.
- But shortly afterward she poses a standard logical puzzle: “Se tu dis oyl, c'est faulx. . . Se tu me dis non, doncques te dis je vraye ma proposicion” (“If you say yes, it's false. . . If you tell me no, then you have proved true my proposition”).

Education of Women in the Renaissance

- Depended on social class/time period.
- Focus on the promotion of virtue.
- Leonard Bruni (1370–1444): girls should study the ancient classical and Christian authors in order to learn grammar, rhetoric, poetry, history, moral philosophy, and how to become virtuous.
- Public oratory and disputation are omitted, because they are “considered unbecoming and impractical for women”.
- Ludovico Dolce (1508–1568): Women should “not teach school or ‘dispute’, that is, participate in academic disputation”.
- “A girl ought not require Latin learning, because she had no public role to play” (Grendler, *Schooling in Renaissance Italy: Literacy and Learning, 1300–1600*, p. 89).

Shifting opinions in the 19th and 20th C

- Christine Ladd-Franklin (1847–1930, first woman to complete the requirements for a PhD at Johns Hopkins).
- Emily Elizabeth Constance Jones (1848–1922, “widely regarded as an authority by her contemporaries”)
- Grace Chisholm Young (1868–1944, set theorist, published under the name of her husband)
- Olga Hahn-Neurath (1882–1937, wrote on boolean algebras)
- Susan Stebbing (1885–1943, first female professor of philosophy in England)
- Hilda Geiringer von Mises (1893–1973, worked on geometrical foundations)
- Sof’ja Aleksandrovna Janovskaja (1896–1966, logician and friend of Wittgenstein)
- Janina Hosiasson-Lindenbaum (1899–1942, translator of Russell into Polish)
- Rose Rand (1903–1980, member of the Vienna Circle)
- Izydora Dambaska (1904–1983, student of Twardowski)
- Lyudmila Keldysh (1904–1976, worked in the research group of Nikolai Luzin and Petr Novikov)
- Maria Kokoszyńska-Lutmanowa (1905–1981, one of the most prominent members of her generation of the Lwów-Warsaw school)
- Roźsa Péter (1905–1977, mother of recursion theory)
- Alice Ambrose Lazerowitz (1906–2001, student of Wittgenstein)
- Wanda Szmielew (1918–1976, proved the decidability of the first-order theory of abelian groups)

What provides context for change?

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- Men that support women

What provides context for change?

- Men that support women
- Women that support women
 - ▶ Women in Logic: twitter, slack, FB, mailing list, website, blog, annual workshop
<https://sites.google.com/view/womeninlogic/home>