How do "categories" used in the past

to describe women in science

influence our view of nowadays

female mathematicians / scientists?

Isabelle Lémonon – Oberwolfach – January, 8th to 14th 2017

"If one would like to gather everything that would make women who were very grounded in science well-known....one would write a fairly long history which would not be an uninteresting one"

Canon Goujet, 1728 in A. Rebière, *Les femmes dans la science : conférence faite au cercle Saint-Simon*, le 24 février 1894



M.C de Gotha (1751-1827)



J. Lalande (1732-1807)



J. Sniadecki (1756-1830)



CENTRE ALEXANDRE KOYRE

HISTOIRE DES SCIENCES ET DES TECHNIQUES

personae

How do "categories" used in the past

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influence our view of nowadays

female mathematicians / scientists?

Sibum, H. Otto, Lorraine Daston, «Scientific Personae and Their Histories », In *Science in Context*, Cambridge University Press, 2003.

- Persona in Latin = mask in the Greek sense = who models the personality, not who hides it!
- A cultural identity that models both the individual (in body and mind) and creates a collective with a shared and recognizable physiognomy. The bases of the personae are varied: a social role (mother ...) / a profession (a physicist ...) / an anti-profession (flaneur ...) / a vocation (priest ...)
- It is not a presentation of individuals but of species, identifying a class rather than an individual.
- The personae appear and disappear according to a specific context.
 A nascent persona indicates the creation of a new type of individuals whose distinctive traits mark a recognized social species. Being a persona requires some degree of cultural recognition, just like a group physiognomy that can be condensed into a type.

Female scientist personae from Humanism to Enlightenment



Docta Puella XIVth- XVIth



Femme savante XVIIIth- XVIIIth



M.G. Agnesi (1718-1799)



E. Du Châtelet (1706-1749)

Femme savante of 17th - 18th centuries

Vocabulary used in french dictionaries of savants for women (18th century):

La Porte 1769, Delacroix 1769, Briquet 1804

- No noun, except "savante" One exception for Mme Du Châtelet ("savante mathématicienne")
- Usually description of the actions: "she wrote...", "she calculated...", "she observed...", "she studied geometry..." and of the family link to a male savant

Femme savante of 17th - 18th centuries

Vocabulary used by french savants about women (18th century) - correspondences

- Learned calculator / trained calculator / logarithm calculator / The muse that makes these calculations for me
- Women astronomers / schoolgirl in astronomy / learned in astronomy / astronomer / young astronomer / companion of work / helper / counselor / Professor assistant in astronomy / colleague / lecturer
- Collaborator in chemistry
- Academician
- Secretary
- Mistress of business by proxy
- Guide / oracle / prodigy / learned woman





What about 19th

century women?

Which persona?

A. Rebière, *Les femmes dans la science : conférence faite au cercle Saint-Simon*, le 24 février 1894, p. 79-80

- "In order to clarify the more real influence that women are believed to have on the progress of science, it would be necessary, first and foremost, to study
- the professional scientists who devoted most of their lives to scientific studies: philosophers, mathematicians, physicists and naturalists. [...]
- the simple curious, who, devoted to other labors, have nevertheless touched the sciences properly so called. [...]
- the collaborators, who helped the scientists, actively and discreetly. [...]
- the protectors, who founded prizes in academies or spread their benefits in other forms."

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1800

Women scientists of 19th century

Vocabulary used in french dictionaries of savants for women (19th century)

Quérard 1826-1842, Rebière 1894 and 1897

- Quérard : same description than 18th century books, but use "mathematician" for S. Germain
- Rebière for 18th and 19th c women: use the names "mathematician", "philosopher" as "femme savante", with the description of the actions
- Rebière for end of 19th c women: professions as "ingeneer", "astronomer" for women who received a degree

Women scientists of 19th century

Vocabulary used by french savants about women (19th century)

- Mathematician / geometer
- Philosopher
- Enthusiastic amateur of science
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Some Hints....

- *Personae* according to profession fit better the 20th century than the centuries before....but what about the "amateurs"/ "collaborators" during the 20th century: are they included? (ex: V.Fages, 2012)
- *Persona* "Femme savante" covers a huge diversity of realities: what about a classification according to practices?
- Advantage about a study according to practices and not profession / diploma : include "amateurs", include topics which were not included in modern sciences

Discussion

- What was the impact of the access to science universities granted to women at the end of the 19th century on these "categories"/ *personae*? Do these "categories"/ *personae* still apply?
- Do or/and did they foster or hinder our understanding of science's production by women?
- How do these past "categories"/ personae influence our way of describing women's activities in science?
- How does the selection of women made according to these "categories" / personae in dictionaries bias our view about women in science in the past?
- Do these categories have an impact on the *persona* "woman of science" or "female mathematician" we (historians of mathematics or science) regard nowadays, and the public imagine?

THANK YOU!