The first doctorate in medicine for a women in European perspective



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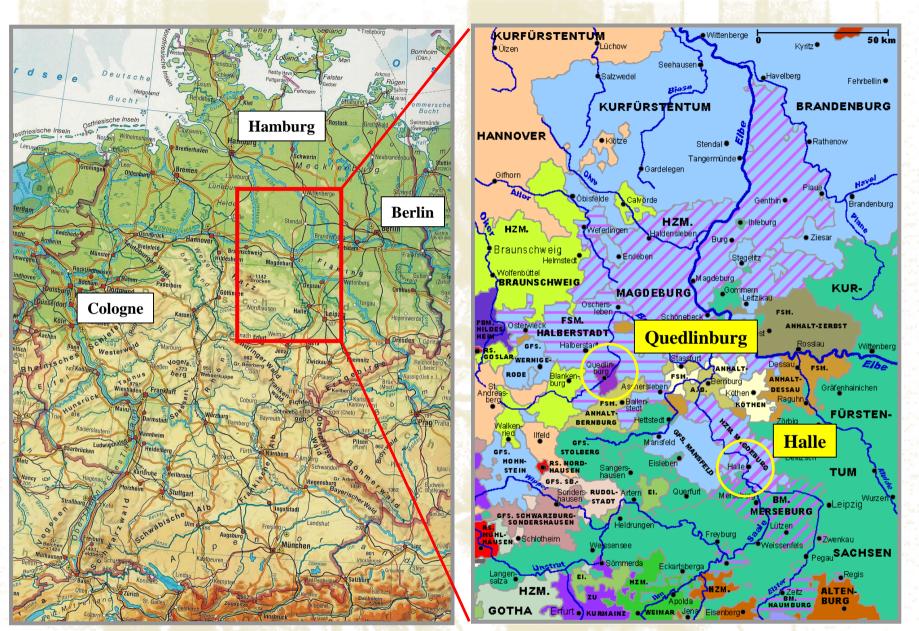
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Anna Maria van Schurman excelled in art, music, languages, and literature



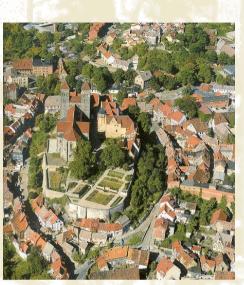
**1607 - 1678** 





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# Quedlinburg – Home of Dorothea



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### Dorothea Christiana Erxleben, b. Leporin



- 1715 Birth at Quedlinburg, Germany
  - Father Christian Polycarp
    Leporin, Physician, Mother
    Anna Sophia Meinecke
- 1741 Permission for exams
- 1752 Complaint because of illegal healing (Quackery)
- 1754 MD University of Halle
- 1762 Death by pulmonary tuberculosis at Quedlinburg







## Thesis



- Against the easy giving in of the patients' wishes
- Every illness needs its characteristic time to be cured
- Putting the emphasis on the self-healing forces of the body



Laura Bassi -Professor of physics in the Istituto delle Scienze, Bologna



1711-1778





Holy Hedwig at Augsburg Hospital 1515 practizing Christian caritas





## Citizen Hospital Frankfurt 1598





Georg Ernst Stahl – famous physician



1659-1734



"Thorough study of the reasons that keep the female sex from studying, the demonstration that these reasons were not valid and that studies were possible, necessary, and useful for the female sex."



- Destroying prejudices by judging with one's own reason (enlightenment)
- Higher education for women is compatible with natural duties
- Reading good books, lessons, own meditation
- Educating the reason and the will – good judgment and good actions will follow

Christian Thomasius – key figure of German Enlightment



1655-1728



"Boys are for study and knowledge, girls for sewing and knickknacks"

"Ex conditione sexus naturaliter subjectae imperio virorum"





#### The first doctorate in medicine for a woman (1754) at the University of Halle (Germany) in European perspective

In early modern Europe learned women were not rare. In the late 17th century we can take Anna Maria van Schurman from the Netherlands as an example, who was known as a "miracle" throughout the European scientific network, the so called "republic of letters". She was praised not only for her stupendous knowledge of languages but also for her modesty. For, keeping modest was important for gifted girls and women who wished to follow their inclination for scientific studies. It was expected at that time that women should not forget being humble and modest because they should not forget accepting the natural hierarchy between men and women. Only men were allowed to study at universities and become officials. Men were seen as the stronger and more gifted sex. Women like Anna Maria van Schurman were seen as exceptions that occurred from time to time.

Another exceptional woman of the 18th century was Dorothea Erxleben, who was born and lived her whole lifetime at Quedlinburg in Prussia. This small town at the edge of the Harz-mountains nowadays takes part in the UNESCO-cultural heritage program, but not only because of its famous physician, Erxleben, who graduated as the first woman in medicine exactly 250 years ago. Quedlinburg features a nearly intact mediaeval old city, whose size and beauty is due to its importance in the Middle Ages for the emperors of the German Reich. It was ruled for 700 years by female abbesses and became part of Prussia only in the late 17th century. Dorothea graduated at the Prussian university of Halle, only 70 kilometers from Quedlinburg. Due to a special permit from the Prussian king Frederick II., the faculty of medicine accepted her thesis and she received the doctorate of medicine in June 1754. Like Anna Maria van Schurman she was praised not only for her excellent skills in theoretical and practical medicine and her perfect Latin but also for her modesty.

At that time she was 39 years old. That means that was not one of those women who, trained by their fathers, achieved premature excellence. But how could Dorothea Erxleben, born Leporin, have acquired her scientific knowledge? Fortunately Dorothea published her own <u>curriculum vitae</u> together with her thesis. This vita is an interesting source because it shows how a young woman struggled with traditional gender roles. First she mentions that she was born in 1715

as a daughter of Christian Polycarp Leporin, a physician who participated in scholarly activities in the republic of letters. Her father was her most important mentor. By 1730 he had published several treatises and books. These ranged from medical treatises to biographies about scientists and included a treatise on how to improve higher education for everybody. Yet, compared to the other physicians of Quedlinburg his position seems to have been rather difficult.

Dorothea discussed her mother Anna Sophia, too. She listed all the titles of her mother's father, who had been a very recognised preacher at Quedlinburg. It is important to note that her grandfather as well as her father were in some way connected with the abbesses of Quedlinburg abbey. Dorothea had one older sister and two younger brothers. As a child she often fell ill. Her father discovered that she bore her illnesses more bravely when she could learn together with her younger brother. So she was educated in foreign languages - especially French and Latin - and the humanities. When her brother went to the Quedlinburg gymnasium, the head of the school Tobias Eckard willingly supported Dorothea's father in his ambition to teach his daughter at home. In an appendix to her thesis, Dorothea added three letters in Latin she got from Eckard. In a letter to the seventeen-year-old girl, written in 1732, he expressed his hope that she might one day follow the example of the learned Laura Bassi. The physicist Laura Bassi was a celebrity not only because of the doctorate she took in 1732 at the university of Bologna, but also because she became professor at Bologna in that same year. This letter indicates as well how quickly news of the republic of letters became known even in Quedlinburg.

Besides her education in the humanities Dorothea studied theoretical and practical medicine. She read the most important medical handbooks of her time and assisted her father, the physician. This way of acquiring knowledge is similar to the way how education took place in the crafts, where household and workshop were not divided so neatly.

Although her father was very much involved in the scientific developments of his time, the economic situation of the family had never been without difficulties. Problems arose in 1740 when her brother got a call-up for the military service. Usually students were protected by law against military service; but her brother, who was student of medicine at the University of Halle, had to obey nevertheless. So, his sister Dorothea took courage and demanded the officials set her

brother free from this duty during a symbolic ceremony for the inauguration of the reign of Frederick II. At the same time she requested the right to be examined at the University of Halle for herself. Indeed, in 1741 she got the permission; and Frederick II, the so-called "Great", signed the document himself. The reasons why he did agree were probably manifold. The document itself states a reason that is quite simple: outstanding examples of learned women were until then rare in the German nation. The young king, formed in his education by the age of Enlightenment, was eager to demonstrate that his country was able to compete in the concert of the European nations also in this regard.

Instead of going ahead and earning the degree at that time, however, Dorothea's life underwent a major change when one of her cousins died. She married the widower of her cousin, who was diakonus at her church, and took care of his five children. In the following years she had four children of her own, one of whom died young. Was it then impossible for her to continue her studies in medicine and her training as assistant to a physician?

In her vita she reported that, already as a learned young woman, she had always felt the duty to help in the household of her mother. She accepted that there were natural duties for women. Her husband seems to have supported her in her studies as she supported him in his duties as a clergyman. After having healed her husband from a severe malady, other patients asked for her expertise. When she was healing the poor for free, she was motivated by Christian <u>caritas</u>. But according to 1725 law that regulated the conditions for healing professionals, semi-professional healers were subject to several restrictions. The administration of pharmaceuticals that affected the body internally was allowed only to academic physicians. Like other regulations in the early modern period, this law was on the book, but nevertheless not strictly obeyed. But physicians did lodge a great number of complaints against non-licensed healers, fearing the loss of patients and income. In 1753 at Quedlinburg Dorothea Erxleben was the object of such a complaint. In several letters she defended herself, but according to the law the physicians were right to accuse her as a non-licensed healer. At that moment she suggested that she might take her exams at the university <u>now</u>, twelve years after she had gotten the permission.

For an appropriate evaluation of that situation it is helpful to understand that Dorothea Erxleben and her family were embedded in a micro-social structure dominated by relationships of patronage. In this short paper it is impossible to discuss these interconnections. Dorothea, after having given birth to her fourth child, wrote her thesis on a pharmacological subject. In it, she criticised those physicians who too often gave in to their patients' wishes for remedies that produced immediate effects. She cited the famous physician Georg Ernst Stahl as she reminded her readers of the self-healing power of the body. Every illness needed its characteristic time to be cured.

Dorothea defended her thesis at the University of Halle in a final exam on May 6, 1754. In order to ensure themselves in this extraordinary case, the members of the medical faculty secured the sanction of the ministry at Berlin. Finally, on June 12, 1754, she received the doctorate of medicine and was henceforth allowed to work as a physician. According to contemporary sources she practiced successfully until her death in 1762 at the age of 47 years. Although she was a celebrity during her later years, her name was forgotten quite soon. In Germany universities remained closed to women until the beginning of the twentieth century.

Dorothea Erxleben showed through her own life what she had called for years earlier, in a treatise printed in 1742. Its title was its programme: "Thorough study of the reasons that keep the female sex from studying, the demonstration that these reasons were not valid and that studies were possible, necessary and useful for the female sex". Acquiring knowledge that is useful was an approach to science and education common to the Enlightenment. Her arguments against old prejudices were inspired by the early Enlightenment too. She insisted that prejudices against the higher education of girls and women had to be overcome. Women's mind should be educated to a good use of reason and to the improvement of the will. In order to reach this aim, reading good books, lessons and one's own meditation, as well as constancy and discipline, were necessary. From such a well-educated reason would result appropriate judgements and morally good actions.

In her treatise she showed a very wide reading. She mentioned a large number of women famous for their scientific education. These examples had been taken out of special dictionaries. She cited several treatises that stood in the tradition

of the old debate of whether women belonged to the rational human species at all, the so-called "querelle des femmes". This querelle had been a pan-European phenomenon. Many treatises were published on this subject in Spain, France and Italy. The controversy came to an end with the beginning of the Enlightenment, a movement dedicated to eliminating scholastic models of science, inappropriate models of learning at the university and false ways of judging and thinking in general. The use of one's own competence to judge required the destruction of unwise and unreflected prejudices. This was the programme of Christian Thomasius, holder of a chair of law at the University of Halle, the first German university that was set up according to a reform model in 1694. Halle was a centre of Pietism, as well, and although Enlightenment and Pietism stood often in opposition, both agreed on the necessity of better education. Dorothea Erxleben cited Christian Thomasius, who was a key figure of the early German Enlightenment, as an authority, since he had addressed one of his early treatises about reason to all people, without any differences regarding sex or position in society. Later, however, Thomasius developed a second theory of natural law in which he emphasized the fundamental role of custom for the maintenance of common decency. This new theory had dramatic consequences for his thinking about women, because as a result of it he stressed the role of the natural duties that custom laid upon women, in other words, their obligations stemming from their roles as wives, mothers, and housewives. Though he still supported the improvement of women's education, the formation of polar gender characteristics, which dominated the debate on gender in the late 18th and the 19th centuries, became visible in his theory.

There are two aspects stressed in all early modern arguments concerning the higher education of women: the natural duties that women had to obey and the fact that they are gifted for higher education and science like every human being who is willing to improve his or her skills. Dorothea Erxleben suggested that both aspects could be combined, if a woman dedicated her days to learning and duties rather than wasting them with activities like sleeping, gossip or unnecessary visits. Nowadays these aspects are discussed in terms of how women can make compatible family and profession.