

A Global History of Mathematics: A Research Trip to Germany, January 2020

Tomoko L. Kitagawa

In January 2020, I visited Wuppertal (13th-16th), Hannover (16th-18th), Göttingen (18th-20th), and Berlin (20th-22nd). The main goal of this research trip was to consult with scholars and archivists as I searched for relevant historical sources for my research projects currently in progress. It was a great opportunity for me to gather more sources and ask for feedback from specialists.

Professor Remmert and his research group at Bergische Universität Wuppertal (Drs. Ellinghaus, Link, Scholz, and Professor Scholz) hosted me for four days in Wuppertal, and they spent ample time to discuss the details of my research on global history of mathematics in the 17th century. I had a specific set of questions concerning drawings on scientific instruments and Jesuit science: Professor Remmert gave me a detailed guidance (e.g. the page numbers of references). His research group taught me how to navigate databases in German as I was looking for a newspaper article published in Hamburg. My visit coincided with the public lecture by Professor Schiemann on January 15th and a conference on the history of quantum mechanics on January 16th, so I attended both. (photo: a beautiful sunrise through the window of visitor's office.)



In Hannover, I visited the Gottfried Wilhelm Leibniz Bibliothek to go over some of Leibniz's letters. Leibniz was the court's librarian from 1676 to 1716 and his correspondence is now part of the UNESCO Memory of the World. The department of Manuscripts and Ancient Printing in the Leibniz scientific library has around 50,000 original documents and 20,000 letters from and to Leibniz. The specific letters I was looking for had not been digitised yet: I asked for help at the library to pin down where and how I can get to the letters, and I was also advised to visit the Herzog August Bibliothek in Wolfenbüttel for further research.

Professor Habermann at the University of Göttingen and I have communicated via email to prepare for my visit there, and we met at *kolleghaus*, which is now the university's archive (photo). Professor Habermann had ordered the rare collection of portraits of Göttingen mathematicians for me, and that was astonishing to see; over two hundred mathematicians celebrated Hilbert's birthday by sending in their portraits with handwritten messages and signatures. I ordered scanned copies of some to use in my writing projects in the future.



Our discussion was mostly on female astronomers and computers. Professor Habermann also helped me to locate the dissertation of Sophia Kowalevski, submitted to the University of Göttingen as I am working on a chapter on Kowalevski.

After the meeting, I visited the Mathematical Institute. Professor Mihailescu and his student took me to a local tour, visiting the historical places including the tomb of Carl Friedrich Gauß and statues of Wilhelm Weber and Gauß. It was a very informative trip that will help me to flesh out my work on the history of German mathematics.

My final stop on this trip was Berlin. I visited the Max Planck Institute for the History of Science (MPIWG) and attended a colloquium talk given by Professor Matteo Valleriani. I also made an appointment with Professor Dagmar Schäfer to discuss my global history project. I spent one day at their library, looking at the collection of primary sources as it had a vast collection of books from the 17th century on open shelf.

As I publish my work stemming from this research trip, I will acknowledge the support I have gained from the BSHM. It was an incredible opportunity for me to meet the scholars based in Germany. I am benefited greatly from their help, and I have learned so much just in 10 days.

Thank you very much for funding my research trip.



MPIWG Library



(Left) Leibniz Library, Hannover (Right) The Art Collection at the University of Göttingen