

In Memoriam Margarete Zuelzer

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Today (2.9.2012) we want to remember a woman scientist from Berlin who became a victim of the Shoah, one of six million European Jews who were rubbed and killed by the Nazi's and their collaborators in the occupied countries during World War II. We are here to memorialise her with one "Stolperstein"¹ in front of the entry of her former house in Berlin, her last home in this city located at Eichkampstr. 108. From here she fled into exile. We have to thank the "Eichkamp initiative" for this memorial.²

We hope that the "Stolperstein" will memorialise the life and fate of this remarkable woman scientist, sister and aunt - Margarete Zuelzer. She worked as a biologist in Berlin from 1916 to 1933 in the Imperial Health Office (Reichsgesundheitsamt). In 1926 she was the only woman leader among 17 councilors (Regierungsräten).³ In April 1933 she was forced to leave her work place because of the so-called law on reconstruction of civil service ("Gesetz zur Wiederherstellung des Berufsbeamtentums"). This "law" became the juridical non-legal legal basis upon which all political enemies (especially all socialists, communists, socialdemocrats) of the Nazi's and all German-Jewish employees were dismissed from all institutions of civil service, i.e. from schools, Technical Colleges, Universities, and other academic institutions in the "Third Reich", independently whether they were Jewish by Halacha or not, and including all baptised German Jews.

After the beginning of World War II, in October 1939, Margarete Zuelzer emigrated to the Netherlands. She settled in Amsterdam, where she was able to do some scientific work. In November 1941 Nazi officials used the procedure of deprivation of citizenship ("Ausbürgerung") to expatriate her from German citizenship, and on this basis they stole her belongings on her bank account.⁴ In her case it was the Deutsche Bank, its branch at

¹ Stolperstein - cobblestone-sized memorial for an individual victim of Nazism -, an initiative of the artist Gunter Demnig (b. 1947), first implemented in 1995. Since 2000 the Stolpersteine have been installed in many towns throughout Germany and abroad.

² See the homepage of "Eichkamp-Initiative" Berlin: www.siedlung-eichkamp.de/stolpersteine/

³ See: Festschrift. Hrsg. Reichsgesundheitsamt. Berlin: Springer Verlag, 1926, supplement (employees and publications, here were listed 8 publications of M. Zuelzer). On Margarete Zuelzer see: Vogt, Annette. Wissenschaftlerinnen in Kaiser-Wilhelm-Instituten, A-Z. Berlin 2008, pp. 221-222 (Veröffentlichungen aus dem Archiv der MPG, vol. 12 (2. rev. edition); below as Vogt (2008, dictionary)).

⁴ See the lists of all Germans who were excluded from German citizenship, in: Hepp, Michael (ed.). Die Ausbürgerung deutscher Staatsangehöriger 1933-1945 - nach den im "Reichsanzeiger" veröffentlichten Listen. 3 vol.s, München/New York/Paris, London: K. G. Saur, 1985.

Hohenzollerndamm⁵, which carried out the expropriation. From this time onwards, May 1942, Margarete Zuelzer had lost her home in Berlin and her home country, her citizenship and all of her belongings. Her life became harder, she was increasingly persecuted, and she had to contend with very poor living conditions.⁶

As we know today, the city Amsterdam was not safe enough to escape. During one of the crackdowns (Razzia, in Nazi parlance an "Action"), Margarete Zuelzer was arrested in May 1943 and was sent on August 1, 1943, to the transit Concentration Camp Westerbork.⁷ In Westerbork the Nazi's had established a transit Concentration Camp from which they sent the arrested detainees on trains to the death camps, especially Auschwitz. Margarete Zuelzer was 66 years old when she was interned in Westerbork. Three weeks later, - on August 23, 1943 -, she had no more vitality and died of hunger, amid the horror and terrible living conditions around her. Her urn was buried at the Jewish cemetery (the Dutch-Israelite cemetery) in Diemen near Amsterdam. Because she "died" in Westerbork, she has a grave. Other captives of the transit Concentration Camp Westerbork "died" in the trains to the death camps, like the mathematician Robert Remak from Berlin (b. 1888 Berlin - killed November 13, 1942 in the train to Auschwitz)⁸, or they were murdered in the death camps.

The "Stolperstein" at Eichkampstreet No. 108 urges us to remember the life of a woman scientist who is known today only by specialists in the history of science and history of biology. But in the late 1920s, Margarete Zuelzer was a prominent and well-known woman scientist, famous not only in Berlin and in Germany. She belonged to the group of "women pioneers", as they were called because of their successful scientific careers. She was

See Archive: Brandenburgisches Landesarchiv, Unterlagen zur geplanten Versteigerung des Besitzes von Margarete Zuelzer auf Grund der erfolgten Ausbürgerung, Rep. 36 A, II. Thanks to Frau Claudia von der Haar, May 2012, for this information.

⁵ See Brandenburgisches Landesarchiv, Rep. 36 A, II, Bl. 5, document from 21.5.1942.

⁶ See Brandenburgisches Landesarchiv, Rep. 36 A, II, letter written by Margarete Zuelzer to the president of the highest financial office (Präsident der Oberfinanzdirektion), Jan. 1942, where she was asking to get 100 Mark each month from her bank account in Berlin which was banned by the Nazi's (a juridical ruling, "gesperrt"). She enclosed a letter written by the mayor of Amsterdam who underlined her disastrous poor financial situation.

⁷ She was registered at the so-called Dutch "Judenrat" in May 1943 (the local administration of Amsterdam Jews), and was sent to the transit Concentration Westerbork on August 1, 1943. See the letters to Annette Vogt, Herinneringscentrum Kamp Westerbork, letter of 21.8.2001 to AV; and Dutch Red Cross, Den Haag, e-mail 28.4.2005 to AV.

⁸ On Robert Remak see Vogt (2008) and Vogt (2009), p. 56.

Vogt, Annette. Bemühungen um eine mathematische Ökonomie. Ein Brief von Robert Remak an Emil Julius Gumbel. In: Hecht, Hartmut et al (eds.) Kosmos und Zahl. Beiträge zur Mathematik- und Astronomiegeschichte, zu Alexander von Humboldt und Leibniz. Stuttgart: Franz Steiner Verlag, 2008, pp. 411-422. - AV. Berlin. In: Birgit Bergmann, Moritz Epple (eds.) Jüdische Mathematiker in der deutschsprachigen akademischen Kultur. Heidelberg et al, Springer Verlag, 2009, pp. 46-56.

nationally and internationally recognized as one of the few specialists in the field of research on protozoa (Protozoenforschung). She was the director of the laboratory on research on protozoa at the Imperial Health Office (Reichsgesundheitsamt). But by the time she received national and international recognition at age 56, she was displaced from her working place. Her scientific career was broken and abandoned.

Looking back 35 years, in autumn 1898, Margarete Zuelzer belonged to the small group of women guest students at the Berlin University (the Friedrich-Wilhelms-Universität Berlin). Here she studied biology and science, which was unusual at this time. Why did she do so, what were the reasons for her study?

Margarete Zuelzer was born on February 7, 1877 in Haynau (Silesia), the youngest daughter of the textile merchant Julius Zuelzer (1838-1889) and Henriette, b. Friedländer (1852-1931). Like many Jews from Silesia Julius Zuelzer went to Berlin, when the town was growing and expanding. As usual in Jewish families, education played an important role, and it was quite normal, when financially possible, to provide a good higher education for the children, including girls.

The oldest sister of Margarete, Anneliese (Anna Luise) (1872 Haynau - 1948 Berlin), married the politician and journalist, a member of the Social Democratic Party, Albert Südekum (1871-1944).⁹ As the mother of three children and the partner of her "Arian" husband, Anneliese lived in Berlin until his death on February 18, 1944. From then until the liberation by the Allied Forces she was forced to live underground, to live illegal, and thanks to her "Arian" friends she survived the Nazi persecution. Like Margarete herself, elder sister Gertrud (1873-1968) also lived alone. Gertrud studied arts and became a woman painter, who participated in several art exhibitions in Berlin and Munich. She survived the ghetto and concentration camp Theresienstadt where she was deported in November 1942. After the liberation of the camp she came back to Berlin, where she lived until her death.¹⁰

By the time when Margarete wanted to study sciences, in the end of the 19th century, women students were officially not allowed to enter the Prussian universities and Technical Colleges. Only from winter semester 1908/09 onwards women could study regularly. Therefore, she moved to the university in Heidelberg in the summer of 1902, where women students had

⁹ On Albert Südekum see Bloch, Max. *Albert Südekum (1871-1944). Ein deutscher Sozialdemokrat zwischen Kaiserreich und Diktatur. Eine politische Biographie.* Düsseldorf: Droste Verlag, 2009.

¹⁰ Gertrud Hermine Zuelzer (b. 26.11.1873) was sent to the ghetto and concentration camp Theresienstadt with the so-called "Transport I/78" on 19.11.1942 (p. 269). Of the 15.122 Jews sent from Berlin to this camp in all, only 1.924 survived (p. 59); of the 100 Jews transported with Gertrud Zuelzer, only 10 survived (p. 58).

See: *Theresienstädter Gedenkbuch. Die Opfer der Judentransporte aus Deutschland nach Theresienstadt, 1942-1945.* Prag: Institut Theresienstädter Initiative, Academia, 2000, p. 269, p. 59 and p. 58.

been officially allowed since 1900. In Berlin she had begun work on her thesis at the Zoological Institute of the Berlin University under the guidance of Privatdozent Fritz Schaudinn (1871-1906). This dissertation "Contributions to the understanding of *Diffflugia urceolata* Carter" ("Beiträge zur Kenntnis von *Diffflugia urceolata* Carter") was completed in Heidelberg, and she received her doctoral degree in 1904.¹¹ After her study "Fräulein Doktor" Zuelzer came back to Berlin to start her scientific career. At that time women students were still not wellcomed at Prussian universities, and no positions were available for women scientists. She began to work as a collaborator (in German wissenschaftliche Hilfsarbeiterin) in one of the Royal academic institutions dealing with water supply and sewage disposal, the Royal research and examination institute for water supply and sewage disposal (Königliche Versuchs- und Prüfungsanstalt für Wasserversorgung und Abwasserbeseitigung).

In June 1908 she published her first report, concerning biological research on water quality, in the treatises of this Royal institution.¹² She analysed the water quality from a biological perspective, in addition to the different analyses which were made until 1900 mostly with chemical and bacteriological methods. By contrast, M. Zuelzer studied the biological processes of water purification and the living organisms - single-cell (unicellular) organisms, i. e. protozoan. From this time onwards she dedicated more than two decades to the study of these protozoan and investigated their role and influence on the quality of drinking water and waste water.

Her research interests belonged to the scientific field of ecology and bacteriology. In 1924 she published some results of her recent project in the leading journal at that time "Die Naturwissenschaften" on the ecology of some saprobien on the island Helgoland ("Zur Kenntnis der Ökologie einiger Saprobien bei Helgoland").¹³ This topic was quite new and not well investigated. About 1924 the knowledge of the biological process of self-cleaning of streams and lakes was relatively well established. Margarete Zuelzer was interested in the question how this process played out in the sea. This led her to study this process of self-cleaning sea water at the Prussian Biological Station on the Helgoland island. Here again, she was one of the first woman scientists who was working in this academic institution.

During her research Margarete Zuelzer focused on the investigation of special spirochaetes - i.e. unicellular organisms which were corkscrew-shaped, vermiculated and spirally coiled -, a special kind of protozoan. Some of these bacteriological pathogens were (and they still are)

¹¹ Her work (59 pages) was published in 1904 by the publishing house Lippert.

¹² See Dr. Margarete Zuelzer. Zur Kenntnis der biologischen Wasserbeurteilung. Ein Sammelbericht. Kgl. Versuchs- und Prüfungsanstalt für Wasserversorgung und Abwasserbeseitigung, June 1908, pp. 439-446. (Internet, access, 17.8.2012).

¹³ See Zuelzer, Margarete. Zur Kenntnis der Ökologie einiger Saprobien bei Helgoland, in: Die Naturwissenschaften, No. 6 (8.2.1924), pp. 113-116.

very significant, because they were able to cause different illnesses like Weil' disease and syphilis. The investigation of these spirochaetes became the focus of her main research project, and she published three books on this topic, in 1911, 1918 and in 1931. One of her most significant results was the discovery of the disease which was named after the physician Adolf Weil (1848-1916) - linking the Weil' disease to the Weil' spirochaete -, which she published in 1918. Margarete Zuelzer became internationally acknowledged for this discovery in the Netherlands among other places. In recognition of her accomplishment the Dutch government asked her to conduct scientific research between 1926 and 1928 on the islands of Sumatra, Java and Bali.

In the winter months of 1932 and 1933, Margarete Zuelzer was working as a guest scientist at the prominent Kaiser Wilhelm Institute for physical chemistry and electrochemistry under the director Fritz Haber (1868-1934) who was awarded with the Nobel Prize in Chemistry in 1918. Until January 1933 Fritz Haber was one of the leading scientists in Germany and one of the most influential. Less known is the fact that he also supported women scientists, for example, the woman chemist Margarete Wrangell (1876/77-1932). From 1922 to 1923 she was a guest scientist at his Institute, and from 1923 until her death she was the first female full professor for chemistry at the Agricultural College in Hohenheim near Stuttgart, thanks to the references and support of Fritz Haber.¹⁴ We don't know if Margarete Zuelzer also wanted to become a female professor, and if Fritz Haber wanted to help her as he done with Margarete Wrangell. It is also possible that Margarete Zuelzer was working in the Haber Institute because of growing antisemitism in the German society, especially in the academic world beyond a few Kaiser Wilhelm Institutes. She was baptized, but that was ignored by those Germans who became more and more aggressive in their antisemitism. The racist antisemitism of the Nazi's ignored the baptismation, as it was then codified by so-called laws from 1933 onwards.

In spring 1933 the wonderful and successful period as a researcher at one of the Kaiser Wilhelm Institutes, the "Oxford in Dahlem", was ended abruptly for many German-Jewish scientists, including Margarete Zuelzer and Fritz Haber. Fritz Haber emigrated immediately. In Zurich he founded together with the physician Philipp Schwartz (1894-1977) from Frankfurt/M. an organisation to help the emigrées - the Emergency Association of German Scientists in Exile ("Notgemeinschaft Deutscher Wissenschaftler im Exil"). This association had helped many displaced German-Jewish scientists and was partly successful to support

¹⁴ On Margarete Wrangell see Vogt (2008, dictionary), pp. 217-218 and the secondary literature, mentioned there.

their new scientific careers in different countries in exile.¹⁵ Fritz Haber died soon, in 1934, in Switzerland.

We don't know how often Margarete Zuelzer wrote to colleagues abroad to appeal for help, seeking to overcome her difficult situation in Nazi Germany. To escape into exile was not easy, particularly for a middle-aged female scientist. In March 1935 Margarete Zuelzer was in Copenhagen, where she gave a lecture on the biology and epidemiology of the Weil' disease under consideration of the situation in Denmark ("Biologie und Epidemiologie der Weil'schen Krankheit mit besonderer Berücksichtigung von Dänemark", 28.3.1935) which was published in September 1935.¹⁶ Perhaps she was looking for an academic position and wanted to remain in Denmark. Back in Nazi Germany, the situation for German Jews was getting worse. In autumn 1935 the so-called "Nuremberg Laws" were introduced, German Jews became second class citizens, their living conditions were deteriorating more and more, and antisemitism was on the rise. The persecution was intensifying year by year, and in 1938 from month to month. Finally, Margarete Zuelzer emigrated in October 1939 to the Netherlands. At the beginning, her situation in Amsterdam was relatively good, compared with the life and fate of many other emigrées. She met colleagues who helped her, and she was even able to do scientific research in the Tropical Institute in Amsterdam. But when the Nazi occupation began she was persecuted again. Her colleagues tried to save her but they failed. In the transit Concentration Camp Westerbork her life ended on August 23 in 1943, when she was only 66 years old.

In 1928, 15 years before her tragic end, one of her female colleagues in Berlin highly acknowledged her in an autobiographical sketch. Rhoda Erdmann (1870-1935), a female cell researcher and assistant professor (außerordentlicher Professor) at the Berlin University, published her autobiographical text in the book "Leading Women of Europe". Only five years later, in spring 1933, Rhoda Erdmann was displaced from the Berlin University and arrested by the Gestapo. Thanks to the protests of colleagues in the USA she was freed but was forced to go into retirement, although she was an "Arian" by Nazi definition. In her autobiographical sketch in 1928 she mentioned four women scientists who attained high academic career and recognition. Two of them became victims of the NS regime: Maria countess von Linden (1869-1936), who was going into exile to Luxembourg in 1933 because of her opposition to the Nazi regime, and Margarete Zuelzer, who perished in Westerbork.

Rhoda Erdmann emphasised in 1928:

"In biology, in my research field where I am able to judge, the following women scientists have reached an acknowledged position: Kristine Bonnevie as head of the zoological institute

¹⁵ See Schwartz, Philipp. Notgemeinschaft. Zur Emigration deutscher Wissenschaftler nach 1933 in die Türkei. Marburg: Metropolis Verlag, 1995.

¹⁶ See Zuelzer, Margarete. Biologie und Epidemiologie der Weil'schen Krankheit mit besonderer Berücksichtigung von Dänemark. In: Acta Pathologica Microbiologica Scandinavica, 1935, Vol. 12, Issue 4 (Sept. 1935), pp. 511-535.

in Oslo (and the first female member of the Norwegian Academy of Sciences -AV), the female pionier of German zoologists Maria countess von Linden (since 1902 Member of the Academy Leopoldina -AV), Margarete Zuelzer, female researcher and expert on spirochaetes at the Imperial Health Office in Berlin; Adele Hartmann, female anatomist of the Institute in Munich; Paula Hertwig, female researcher on heredity and the daughter of the famous biologist Oskar Hertwig.

... It is remarkable that first in the fields zoology and botany women scientists were able to receive academic positions and became acknowledged."¹⁷

Remembering against forgetting - we hope that the "Stolperstein" at Eichkampstreet No. 108 will always bring to our mind the female scientist and female biologist, the sister and aunt Margarete Zuelzer.

¹⁷ Erdmann, Rhoda (autobiography). In: Kern, Elga (ed.): Führende Frauen Europas. München: Verlag Ernst Reinhardt, 1928, pp. 35-54, here p. 40:
 "In der Biologie, meinem engsten Fachgebiet, das ich allein beurteilen kann, haben sich eine geachtete Stellung erworben: Kristine Bonnevie als Leiterin des Zoologischen Instituts in Oslo (und erstem weiblichen Akademiemitglied - AV), die Pionierin der deutschen Zoologinnen (Maria) Gräfin (von) Linden (seit 1902 Mitglied der Akademie Leopoldina - AV), Margarete Zuelzer, die Spirochaeten-Forscherin des Reichsgesundheitsamtes Berlin; Adele Hartmann, die Anatomin des Münchener Instituts; Paula Hertwig, die Vererbungsforscherin und Tochter des bekannten Biologen Oskar Hertwigs.
 ... Es ist bemerkenswert, daß gerade von der Zoologie und Botanik aus zuerst sich Frauen Stellungen in der Wissenschaft erwarben."