

Clara Turner (1917 – 2021)



Guest of Honour, Clara, giving a speech at the Institute of Physics Retired Members (REMS) Christmas Lunch held at Parker's Restaurant, Kingsway, London on 14th December 2016



Clara's Daughter, Elizabeth Warriner, writes:

"Portrait of Clara by Michel de Klerk who was a famous designer and a family friend of my grandfather. When we cleared out her rooms we found an edition of an architectural periodical called wendingen, from 1926, which was a retrospective of de Klerk's work including the designs for the furniture made for my grandfather's wedding, which is now in the Rijksmuseum and the Stedelijk museum in Amsterdam"

On the 10th December 1917 in Amsterdam, a taxi rushed home from the opera, and baby Clara was born. Thus began a lifelong passion for travel, engineering and music, especially opera!

The 2nd of lawyer Joachim Polenaar's 4 daughters, Clara grew up surrounded by artists, designers, scientists, and musicians. This extraordinary background underpinned her own remarkable achievements throughout her life. Her family expected its girls to excel: one aunt wrote a standard Dutch Chemistry textbook, another was a paediatrician with internationally recognised insights into childhood allergies, and 2 others were a dentist and an art teacher. All the family were fluent linguists. With such inspiring figures in her daily life, it is unsurprising that Clara had such a range of interests, dedication to learning, and professional success throughout her life.

In her youth, Clara enjoyed learning, sport and music. Her education at the first Dutch Montessori secondary school shaped her independent way of thinking and a drive to follow her curiosity that equipped her well for her working life in research. The Polenaars were a very active family. Jo, her father, believed in “Mens Sana in Corpore Sano” (Healthy mind in healthy body) and did gymnastic exercises well into his eighties. As a child, Clara was a competitive gymnast and recalls marching in the parade introducing the 1928 Amsterdam Olympics, where a member of her gymnastics club won a gold medal. Clara followed her father’s example throughout her life, playing sports and riding a bike until quite recently - she was very fit even at 103!

From school, she went to Amsterdam University to study Physics, excelling as a student and going on to research X-ray Crystallography for her graduate work. She had a great sense of fun. Her laboratory overlooked the canal, and on quiet winter days she would throw a lump of sodium out of the window and watch astonished passersby as it fizzed along the ice and exploded with a flash.

While at university, she met Albert Emmering, her “lieve Apie” who became her first husband. Her Sister Chel tells how as their relationship developed their mother berated Clara for holding hands in public “People will think you’re engaged!”. Typical of her independence and directness, Clara replied “We are!”. Clara and Albert married in 1940. However as Dutch Jews under Nazi occupation, the family had to go into hiding. Tragically, Albert was arrested and died in Auschwitz. Her parents and sisters survived the war and all 4 sisters eventually left Holland. The experience undoubtedly shaped their determination to live life to the full. 3 emigrated to New Zealand, but Clara decided her best opportunity to develop her scientific work was in Britain where she met and married my father Henry in October 1950. They settled in Hayes, beginning an exceptional partnership in work and play that lasted for 51 years until Henry’s death in 2002.

Clara was always invested in both family and work, perhaps best illustrated when in 1952, heavily pregnant with me, she returned to Amsterdam to sit the final viva of her doctorate before the examiners and an audience of proud friends and relatives. When Dot was born in 1954, we moved to a larger house, 9 Rosebery Gardens in Ealing. My parents worked together at the Electrical Research Association (ERA) in Perivale, but money was tight so both taught evening classes. Tiger, the cat, always walked Clara to the bus stop and met her there when she came home. One evening she got a lift, and the cat was nowhere to be seen. My dad found her still waiting at the bus stop. Even with such busy working lives, my parents performed in choirs and opera groups and Clara played the violin in a local orchestra. They encouraged us to take part too. Both under 10, we appeared on stage in “The Bartered Bride”, and in costume on the Southall Operatic carnival float. We often fell asleep to the sound of singing from downstairs, when friends came round to make music. As a teenager, I enjoyed playing violin duets with Clara, but our outraged cat, Minouche, did not, and would demand to be let out.

Everyone's a critic! Clara's love of music and theatre was instilled in her family, and several of us, notably her grandchildren, Peter and Rachel, have made our careers in the arts.

When the ERA transferred to Leatherhead in 1963, we moved into a new house in Ashted where Clara lived until 2016. There was plenty of room for two teenagers, our English grandmother and the obligatory cat, as well as frequent guests, including Dutch and New Zealand family. My parents were always hospitable. One of my university friends, Gary Mudd, stayed for a year while working locally as part of his sandwich course. During a 1974 work trip to Poland they generously invited a young couple they met to my wedding at their request. On the day, they didn't arrive, but left a parcel and note on the doorstep with fervent thanks for giving them the chance to travel here. It contained a lovely embroidered table runner which I still own.

Both Fellows of the Institute of Physics, my parents travelled widely, to represent Britain at international conferences and committees, and to carry out ERA research, visiting many European countries, the USA, South America and the far east. On one such visit to China, they were in Beijing the day before the Tiananmen Square protests. Together, they contributed to some unusual projects including the channel tunnel, the Maglev train, ejector seats and testifying as expert witnesses in court. Their work won international recognition in Chicago in 1978, as the only married couple to receive the prestigious IEEE Ragnar Holm Scientific Achievement Award for their contributions to electrical contact theory and application. Clara retired officially in 1977, but continued freelance work until Henry retired in 1990.

This opened a new phase of life to pursue her interests. She was an enthusiastic member of the International Club, the Arts Society and 2 U3A branches. A friend relates how, after a full day in Oxford on a U3A trip, she went up to her hotel room for a much-needed nap, but Clara, who was 20 years older and in her 90s, went down to the pool for a swim. Until she was 98, she took the train to London to Institute of Physics Retired members meetings; they celebrated her 100th birthday by taking her out to lunch. When she moved to Rosebery Manor in 2016, she contracted the local taxi firm to take her to bridge, art classes, opera appreciation, science discussions and lectures, as well as hosting French conversation in her comfortable sitting room in the home, where she could provide her guests with delicious cake. Within the home, she was an energetic participant in many activities and trips.

All her life, Clara kept contact with her 3 sisters Dora, Nettie and Chel by letter and latterly by email and Skype. In 1950s Ealing, Christmas began in September when carefully wrapped parcels of toys and gifts were sent, by sea, to New Zealand. My cousin Anja remembers the parcels arriving, and changing the words of a Dutch song from "Dank u Sinter Klaasje" (Thanks, Santa) to "Dank u Tante Claartje" (Thanks Aunt Clara). Meanwhile, in England, large sacks of clothes and toys arrived from New Zealand. Clara visited New Zealand several times - with Henry, alone after his death, and with Dot in 2006. In an apt symmetry her first trip was with her 92-year-old father and, in 2010 when I joined her for her final trip, she herself was 92.

It was wonderful for the four sisters to be together again and Clara relished the chance to meet new members of the family.

She delighted in participating in life events such as graduations, weddings and performances, and family parties, especially celebrations to mark her remarkable birthdays. Her 88th birthday weekend with Dot was particularly memorable. Even Clara, with her poor hearing, woke up the next morning when the Buncesfield explosion 10 miles away shook the house, and a day later her first great grandson Ethan was born. Ethan and his brother Connor particularly enjoyed visiting their great grandmother to “play” her piano, perhaps a sign that the music gene continues into the next generation.

Clara took pride in the achievements of her 4 grandchildren: Matthew, Christopher, Rachel and Peter and her 5 great grandchildren: Ethan (15), Connor (13), Walter (8), Max (2½) and Rosa (1½). Tales of the family cheered her greatly during lockdown and her final hospital stay.

On the last Sunday of June, she had a stroke and was hospitalised for six weeks. It paralysed her left side, but her spirit remained until the last few days of her life. She died peacefully on 22nd August at Rosebery Manor.

Lately, people often told her, to her bemusement, that she was amazing. They were right.

Elizabeth Warringer (Clara's daughter)