

Perspectives

Professional Troubles

Growing up in the German Youth Movement, one adhered to the ideals of purity and veracity, but living in this world also frequently requires political acumen. I did not possess this courteous flexibility and its lack caused great personal difficulties. Opa Franck saw this clearly. In the early fifties, he once said, "You will soon get the Nobel Prize;" but a few years later: "You will never get it." By speaking my mind, I had made friends but also so many enemies that I was blocked on many occasions.* In frustration I once even wanted to take the whole laboratory out of M.I.T. and one of the strange adventures of my life resulted.

A successful industrialist offered me a directorship in his company and the chance to create a research laboratory in any way I might want. I therefore selected a lovely farm located on a hilly meadow surrounded by woods in Northboro village on the outer circumferential expressway around Boston. Building plans for the Laboratory -- and also a house for us -- were drawn up by an architect. The villagers were enthusiastic about the prospect of having such a prestigious taxpaying enterprise. A town meeting was called to re-zone the farm land "for industrial use" -- but on the afternoon before that meeting, the industrialist's company went bankrupt!

There I was, a "babe in the woods," not knowing what to do next. I therefore went to my friend, Edward Bowles. We got an excellent lawyer, and I was advised to resign immediately from the Board of Directors of the company because the last

* Later, when, after his retirement, he had been elected to the National Academy of Engineering ARvH commented, "My friends have outlived my enemies."

one remaining on the Board would be left "holding the bag." We drew up a statement of resignation, the secretary of the lawyer galloped over to the office of the industrialist -- and I was saved by a hair from financial catastrophe.

To my great chagrin, the architect never got paid. M.I.T. was glad to keep me and the Laboratory. And now only the inhabitants of the village wonder why that land was re-zoned in the fifties "for industrial use."

Driving Through a Hurricane

In September 1959, while we were still in Passaconaway, a hurricane struck New England. The Swift River rose by 21 feet and overflowed the bridge and street. Trees crashed down and waterfalls cascaded down mountain cliffs where no streams had been before. Since I had to lecture at M.I.T. the next morning, and we had two cars, we decided to drive home.

It was a lovely and slightly hair-raising adventure -- especially on the street system of that day. Time and again we found ourselves confronted with streams crossing the road, and when one car became entangled, the other pushed or pulled it out. Near Rochester N.H., the air suddenly became silent and the landscape was bathed in a green, unearthly light. We were in the eye of the storm and used the occasion to have supper at a restaurant. The dining room downstairs was flooded, but the owner agreed to feed us upstairs. While eating, we heard the Governor of New Hampshire on the radio calling out the National Guard and ordering everybody else off the streets.

Driving on, we found ourselves in the avalanching rain on the backside of the hurricane. National Guardsmen tried to push us off the streets, but we refused "as citizens of Massachusetts who want to get home." Angrily swearing, they let us pass -- and we finally reached Weston, tired and elated.

My Friend, M.C. Escher

In 1960 a Dutch colleague sent me a copy of by M.C. Escher's first book, *Graphics and Drawings*.¹ I was thunderstruck by his wonderful mastery and originality, and felt that there was a kinship between his artistic creativity and our struggling at molecular designing. I therefore wrote him a letter inviting him to M.I.T. for a lecture. Since he had just decided to visit a son in Canada, he accepted.

It was a wonderful occasion. The biggest lecture room we could get was packed full with students and Escher was a hero for them thereafter. We stayed friends and he made a woodcut, "The Thinker," for our last book, *The Molecular Designing of Materials and Devices*, showing a man in a fool's cap contemplating a screwy model in puzzled confusion.

I stayed in contact with Mr. Escher until his death and visited him once in Holland at his home. He was an inspired visionary who became famous late in life and wrote in his last letter, "I would like to be able to give my fame for better health." His father and a son, if I remember correctly, were professors of geology and his familiarity with crystal structures is apparent in many of his graphic designs.

Mr. Escher's world anticipates the fantasies of scientists and his draftsmanship rivals that of Dürer. He should not be forgotten.