Physics as a Calling, Science for Society

Studies in Honour of A.J. Kox

Edited by

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11 Amsterdam memories

Roger H. Stuewer

Anne Kox invited me to be the third Pieter Zeeman Visiting Professor of the History of Modern Physics at the University of Amsterdam, in succession to Martin J. Klein and Peter M. Harman, for the months of October and November of 1998. I was honoured and delighted to accept Anne's invitation, which I was able to do because I was then in the middle of a five-year phased-retirement arrangement, so I could be away from the University of Minnesota for those two months.

I arrived at Schiphol airport in the early morning of Friday, 2 October, where Anne met me, drove me in his car to the apartment on the Quellijnstraat (close to the Heineken brewery) that he had arranged for me, and helped muscle my two heavy bags (filled mostly with books) three stories up a narrow staircase to the apartment, which left both of us panting for breath. That, however, did not prevent Anne from inviting me for dinner that evening with his wife Henriette Schatz and their daughter Laura at their house on the Valeriusstraat. No one could have experienced a warmer and more gracious introduction to Amsterdam than I did.

I felt immediately at home at the University of Amsterdam, because both Anne and I, as historians of physics, had essentially identical academic appointments, he in Amsterdam's Institute for Theoretical Physics and I in Minnesota's School of Physics and Astronomy. Moreover, it was immediately obvious to me that Sander Bais, Director of the Institute, was providing Anne the same strong professional and intellectual support that Morton Hamermesh, Head of our School of Physics and Astronomy, and his successors were providing me. This extended to Anne's and my other colleagues, and to our secretaries, who joined in creating for us a wonderfully warm and welcoming departmental atmosphere.

I lectured on the history of quantum and nuclear physics prior to the Second World War for two hours each Monday afternoon, for eight weeks from 5 October to 23 November. I usually had around 15-20 auditors, ranging from students in physics to a retired physicist from Apeldoorn, where Wilhelm Conrad Röntgen had lived for a time as a child. Each Monday morning I made multiple copies of a variety of handouts to distribute in class, where I also showed many 35mm slides to illustrate my lectures, including ones I had taken on my travels to cities and sites of significance in the history of physics. It was a most enjoyable and richly rewarding teaching experience.

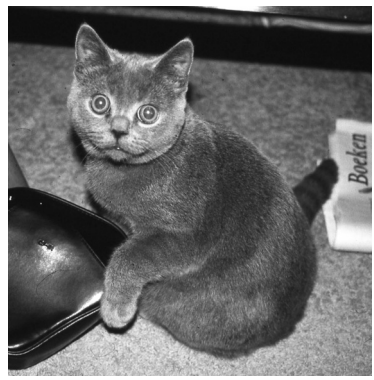

Fig. 1 – The beautiful purebred British Blue cat Dorus

On Saturday, 8 November, my wife Helga joined me in Amsterdam, so on the following Monday evenings both she and I now enjoyed Anne and Henriette's gracious hospitality. They treated us royally: Before dinner, over several rounds of chilled Jenever, we learned of Laura's love of polar bear pictures, and we were nuzzled by their beautiful British Blue cat Dorus (figures 1 and 2). Further enjoyable conversation and warm companionship followed during a splendid dinner and excellent wine. Much later, our hearts melted when Anne told us that Dorus had got into a fierce fight outdoors and had developed an abscess that required lancing and some twenty stitches to repair.

Fig. 2 – Henriette and Laura holding Dorus

It did not take me long to embrace the Dutch, with their long tradition of tolerance, and to love their wonderful city of Amsterdam. I immediately bought (as did Helga after she arrived) a monthly transit pass, and got the lay of the land by hopping on Circle Tram 20 at Central Station, which passed many historic sites to be visited later: the magnificent Royal Palace, the impressive Amsterdam His-

torical Museum, the unforgettable Anne Frank House (figure 3), the fabulous Vincent van Gogh Museum, the moving Jewish Historical Museum, the extraordinary Rijksmuseum, and the beautiful Maritime Museum. Later, we toured the historic seventeenth-century canal houses, including the clandestine Church of Our Lord in the Attic (*Ons' Lieve Heer op Solder*), the Amstelkring Museum, the Rembrandt House where the artist lived and worked from 1639 to 1658, the Willet-Holthuysen House, the Van Loon House, and the Biblical and Theatre Museums. Still later, Anne took me to the Holland Theatre (*Hollandsche Schouwburg*), site of never-to-be-forgotten tragedy: In 1942-1943 Amsterdam's Jews (among them Anne Frank) were assembled there for transportation to Westerbork for further deportation to Auschwitz and other extermination camps. One who survived in hiding in Amsterdam was the future distinguished theoretical physicist Abraham Pais,[1] whom I had come to know well in the 1980s and 1990s.

Fig. 3 – Statue in front of the Anne Frank House at Prinsengracht 263

I made three weekend excursions outside Amsterdam, first to Haarlem where I visited the Teyler's Museum and Hendrik A. Lorentz' and Pieter Zeeman's graves. I next went to Leiden where I visited Museum Boerhaave, and where the prominent theoretical physicist Pierre van Baal (whom I had met when he had visited Minnesota in the mid-1980s) took me to the lecture room where Paul Ehrenfest had taught from 1912 to 1933, and where he had asked his many famous visitors, including his friends Albert Einstein and Niels Bohr, to inscribe their signatures on one of its walls. Then, after Helga joined me, we went to Utrecht and walked around the University and other sites. I also made two foreign trips, first at the

end of October to give a lecture at the University of Göttingen on Klaus Hentschel's invitation, and second with Helga in the third week in November to give a lecture at the Niels Bohr Institute in Copenhagen on Finn Aaserud's invitation.

Helga and I also enjoyed the Amsterdam musical scene. We saw a performance of *The King and I* at the magnificent Royal Theatre Carré. We loved the music and acting, but the Dutch lyrics, regretfully, were beyond our ken. Earlier, on Saturday, 17 October, I went to a concert of the Dutch Philharmonic Orchestra at the Concertgebouw, where I experienced my greatest surprise in Amsterdam. During the intermission, I suddenly heard someone call out, 'Roger!' and turning around I saw David Haviland and his wife Elisabeth. David had audited one of my courses at Minnesota while working on his doctorate in condensed-matter physics under my colleague and friend Allen Goldman. Then, after receiving his PhD degree in 1989 and holding postdoctoral positions at the Chalmers University of Technology in Gothenburg, Sweden, he was appointed Professor of Nanostructure Physics at the Royal Institute of Technology in Stockholm in 1997. He and Elisabeth were now in Amsterdam to celebrate their tenth wedding anniversary. After the concert, over beer and a snack, we enjoyed recalling old times at Minnesota.

That was not my only reminder of Minnesota while in Amsterdam. In November, I was struck once again by the abiding independence of Minnesota voters when Jesse Ventura, a former US Navy SEAL and professional wrestler, was elected Governor of the State. Our son Marcus hit the nail on its head when he sent me an e-mail saying, 'Guess what we've done now, Dad!' It turned out that actually Ventura was not a bad governor – among his accomplishments was securing public funds to construct a light-rail tram line from downtown Minneapolis to the Minneapolis-St. Paul International Airport, which since then has been expanded throughout and beyond the Twin Cities metropolitan area.

The most demanding of my continuing ties to Minnesota, however, was my editorial work for the journal *Physics in Perspective*, which my longtime friend John S. Rigden and I had just founded. Its first issue was scheduled for publication in March 1999, so five months earlier, while I was in Amsterdam, we were assembling its Editorial Board and scrambling for manuscripts. Since I am a computer ignoramus, I was deeply grateful to Anne (figure 4) for setting up a computer and internet connection for me in my office in the Institute for Theoretical Physics, where (when I was not teaching on Mondays) I kept my secretary in Minnesota busy with all sorts of jobs associated with the impending birth of this scholarly baby.

Fig. 4 – Anne standing beside a bust of Pieter Zeeman in the Institute for Theoretical Physics

The most memorable event I experienced in Amsterdam occurred on Wednesday, 11 November , when on Anne's invitation I gave my Inaugural Lecture as Zeeman Visiting Professor of the History of Modern Physics. Such a lecture, of course, was entirely outside of my earlier academic experience. I chose as my title, 'History as Myth and Muse,' prepared my lecture, and delivered it in the Aula of the University at Singel 411 in central Amsterdam. Anne joined me in donning the impressive academic garb (figure 5), and I then walked to the podium (figure 6), where – to my great surprise and delight – I saw in the audience Hendrik B.G. Casimir, then probably the most distinguished living Dutch physicist, and his wife, Josina Jonker.

Helga and I had come to know the Casimirs quite well eighteen years earlier, in 1980, when I had invited Casimir to give a series of six lectures over a two-week period in Minnesota's School of Physics and Astronomy. His marvellous lectures were, in many ways, the highlight of the academic year. One of the endearing stories he told was that after Niels Bohr had invited him to stay on in Copenhagen following the first conference at the Bohr Institute in April 1929, his father, wondering if Bohr really was as famous as his son had claimed him to be, sent him a letter addressed simply to 'H.B.G. Casimir, [c/o] Niels Bohr [Denmark]' – which the Danish Post Office had delivered without delay, just penning on the envelope ϕ for ϕ*sterbro*, the Copenhagen district in which the Bohr Institute is located.

Fig. 5 – Anne and me in academic garb prior to my Inaugural Lecture on 11 November 1998

Fig. 6 – Delivering my Inaugural Lecture on 11 November 1998

I treasure the transparency on which Casimir sketched this envelope and gave to me (figure 7), along with all of the other transparencies he showed in his lectures – lectures that formed the basis of his 1983 autobiography, *Haphazard Reality*. At one point in it Casimir remarked that in his life, 'Things just 'happened to happen',' to which he appended the following footnote:

> *Dr. Suess, The 500 Hats of Bartholomew Cubbins*, final sentence. During a visit to Minneapolis in 1980, thanks to the kind offices of Dr. and Mrs. Stuewer, my wife and I could witness a remarkable performance based on this remarkable book at the Children's Theater.[2]

Following my Inaugural Lecture, Anne organized a splendid dinner for a small group of people in the magnificent Hotel Schiller on Rembrandtplein (figure 8). I sat next to Casimir at the table and took that opportunity to ask him about his impression of Werner Heisenberg on his visit to Holland in October 1943; that is,

Fig. 7 – Transparency of the envelope of the letter that H.B.G. Casimir's father sent to him around April 1929

eight months after the decisive defeat of the German army in the battle of Stalingrad. Casimir replied that Heisenberg was still convinced of an ultimate German victory in the war.

Fig. 8 – Guests at the dinner in the Hotel Schiller following the author's Inaugural Lecture. (left to right:) known person, H.B.G. Casimir, me, Anne, known person, known person, Helga, Mrs. Casimir

Helga and I loved dining in Amsterdam. We were constantly reminded of the enduring legacy of the Dutch East India Company by the large number of Indonesian restaurants that served their delicious *Rijsttafel*. One particularly memorable *Rijsttafel* that we enjoyed with Anne and Henriette was at the *Mamak Den* restaurant on the Olympiaplein. Later, on Friday, 27 November, our stay in Amsterdam was topped off by a grand dinner with Anne and Henriette and a number of Anne's colleagues in the aptly named *Eerste Klas* restaurant in the Central Station. Also present – to our great pleasure – was Sheila Tobias, who earlier that day had given a lecture at the Free University of Amsterdam on the techniques she pioneered to overcome math anxiety in high school and college students in America. I also learned a new facet of Dutch dinner etiquette there: It seemed to me that every-

one's wine glass was being refilled except my own, and when I gave a bewildered shrug to the physicist sitting across from me, he pointed out that I was leaving a small amount of wine in my glass, and that the waiter would not refill it unless it was completely empty. I immediately solved that problem.

Anne's invitation, in sum, opened up a new world to me. In fact, I count the two months I spent in Amsterdam in October and November of 1998 as two of the most intellectually stimulating and personally enjoyable months that I ever spent in my academic career.

And there was a wonderful postscript. One year later, in December 1999, Anne invited me to give a talk at a symposium celebrating the 50th anniversary of the founding of the Institute for Theoretical Physics at the University of Amsterdam, which I eagerly accepted. At the same time, Pierre van Baal somehow got wind of Anne's invitation and also invited me to give an Ehrenfest Colloquium at the University of Leiden. Thus, courtesy of Anne's and Pierre's invitations I was able to add my signature to those already on a second wall that supplemented Ehrenfest's famous original wall of signatures (figure 9).

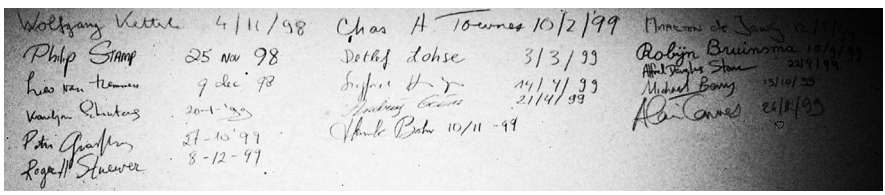

Fig. 9 – Signatures on the second wall that supplemented Ehrenfest's famous original wall of signatures at the University of Leiden

Notes

1. Pais (1997), Chapter 10, pp. 88-125.
2. Casimir (1983), p. 238, footnote.

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