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PRIVATE CONTRIBUTION

My time with Rob

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I first met Rob van Glabbeek in March 1988 at the Workshop on Combining Compositionality and Concurrency held at Königswinter. Though only a graduate student at the time, Rob was one of the three organizers of the workshop, the other two being Ulla Goltz and Ernst-Rüdiger Olderog.

There were two highlights of that workshop for me. One was Robin Milner's delightful pronouncement at the start of his talk that, in contrast to those of us professing the need for true concurrency, his own research was on "false concurrency". The other of course was encountering Rob—with whom I found enough common ground to have some very spirited discussions.

I next heard from Rob in December 1989 when he wrote to me to say that he had enjoyed our conversations at Königswinter very much, and moreover that he expected to be graduating in May or June and would be interested in a position at Stanford working with my group. I encouraged him to apply for a faculty position here at Stanford. The department was impressed enough with his letters to have him visit, and he gave a talk here on "Comparative Concurrency Semantics". This resulted in an offer of a 1-year appointment as an acting assistant professor starting in September 1990, with the understanding that if not renewed he would continue here as my postdoc. Rob accepted.

When Rob and his partner Hanna Walinska arrived they rented a house on West Selby St in nearby Redwood City. I fondly recall the many parties hosted there throughout the 1990's.

Rob is a truly prolific researcher: by the middle of his very first year here he had already published some twenty papers. He also turned out to be much appreciated by the students in the first course he taught: he was one of the only two faculty in our department who received student evaluations of 80% or better in the fall quarter of 90/91.

One of the first things we worked on together was improving the notion of higher dimensional automata, HDAs, which I had presented at POPL in January 1991. I had based it on the category-theoretic notion of a globular complex; but Rob suggested that cubical sets would instead be a more natural representation of HDA's. This was so much more natural that I was embarrassed I had gone with the more obscure globular approach—and I quickly switched to Rob's cubical representation.

I had hoped that Rob's temporary faculty appointment would be renewed. Unfortunately the strong interest in Europe in theoretical models of concurrency was not as widely appre-

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ciated in the US, and the department declined the renewal. Rob thereafter remained on, as agreed, initially as a postdoc and subsequently as a research associate.

In May 1992 my research was interrupted by medical issues, and I spent the following year recuperating. And after that, Rob and I pursued largely independent research directions in concurrency theory. (My student Vineet Gupta and I developed an interest in Mike Barr's Chu spaces as a framework for concurrency, and Rob did not participate in that.)

In the summer of 1993 Gordon Plotkin joined my group as a visiting faculty from Edinburgh University. This began a tradition of Gordon's visiting Stanford each summer. Rob and Gordon soon found common interests and took the opportunity to work together whenever Gordon was here.

In 1997 Dominic Hughes, at the time a student of Luke Ong at Oxford, took an interest in the Chu spaces Vineet and I had been studying after hearing me speak on them at a workshop in Santa Margherita. He applied for a postdoc with my group, and began in October 1998.

At that time I had posed the problem of showing that Chu spaces constituted a fully complete model of multiplicative linear logic, MLL. Gordon, Dominic, and a student, Harish Devarajan, worked on this with me for a number of months, solving it just in time to appear in LICS'99 as the paper "Full completeness of the multiplicative linear logic of Chu spaces".

We then turned our attention to extending the result to multiplicative-additive linear logic or MALL. However we encountered an unforeseen problem: whereas there was no question as to what an MLL proof net was, Girad's proposal for its extension to MALL was far from clear.

Dominic then spent some six months on the question of what exactly was an MALL proof net. He then enlisted Rob's help on this problem, and together they worked on this for a long time.

In 2000 I retired emeritus and my group dissolved. Rob spent the next 3 years in various short term positions in Europe before accepting his present position at NICTA, now Data61, starting in June 2004. Dominic remained in the area while Gordon resumed an earlier collaboration with Martin Abadi, first at Microsoft Research in Mountain View and later at Google. Rob and Dominic continued their collaboration on defining the notion of a MALL proof net. Their eventual solution appeared as the lead paper in LICS'2003, "Proof Nets for Unit-Free Multiplicative-Additive Linear Logic", and it has since been widely cited as a major breakthrough in the field of linear logic.

Rob has continued to work from time to time with Gordon and Dominic in order to wrap up papers they began early on, taking the opportunity to meet with Dominic on his occasional visits to Stanford, as well as with Gordon on his visits to the area from Edinburgh. And during the month I spent in Australia in 2011, Rob kindly accommodated me in his house in Waterloo near Sydney University.

I am grateful to Rob for both his scientific contributions and his friendship. And to this day I remain in awe of his mathematical ability.

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