

Alan Baker: My reminiscences

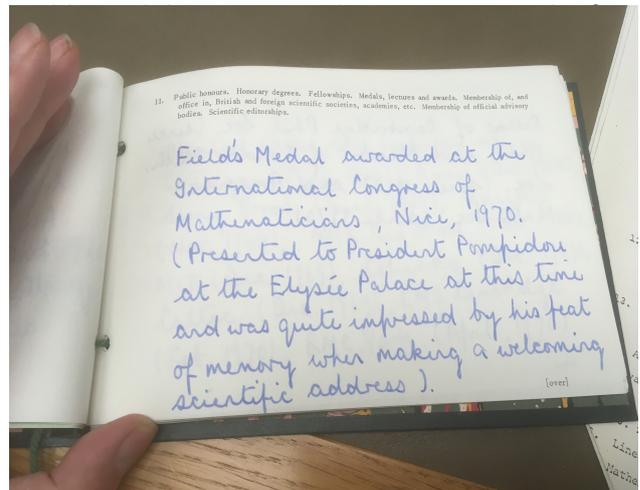
David Masser

My first contact with Alan Baker (apart from attending his lectures, written out rapidly but clearly on the blackboard and even more rapidly erased) was probably during weekly supervisions at Trinity College Cambridge, I think in Algebra, maybe 1968. Generally the exercises would be set by the lecturer, and the student would hand in solutions to the supervisor, who would return them with comments or grades. I remember that once I developed one of the exercises into a theorem with proof; and Alan returned it with something like “A very nice effort - I am not sure if the result has been recorded before in this form”.

Then at some point, probably around 1970, I had to write an essay, and I chose the subject of transcendental numbers; this might have been at Alan’s suggestion but my main source was Serge Lang’s book. That was published in 1966, so contained no references at all to Alan’s fundamental paper of that year. But I did insert a reference to his second paper of 1967, which was fortunate because it must have been Alan who read the essay, although this time I have no recollection of any comments or grades. This cannot have been due to my emphasis on Lang, because any tension between the two came only somewhat later.

Shortly afterwards Alan proposed that I start as his research student. I recall that he was absent during the whole of the first semester, most probably in America (and possibly at I.A.S. Princeton) enjoying one of the earliest of his many visits there. So I filled in time studying Enrico Bombieri’s paper on algebraic values of meromorphic maps.

As soon as he returned, things went very quickly and he moved me in the direction of applications of his method to elliptic functions, a topic he had started already in 1969 and meanwhile given also to John Coates. I think we met every two weeks or so, in his college rooms in Whewell’s Court opposite the Great Gate. Actually these rooms (fitting C.P. Snow’s description “not specially agreeable”) had been occupied previously by Hardy (about which Hilbert indignantly wrote to the Master that Hardy was the best mathematician, not only in Trinity, but in England, and should therefore have the best rooms). One had to ascend a slightly low and narrow spiral staircase, and then knock on the thick wooden door. Often in College *une porte peut en cacher une autre* and I believe he did indeed have a second door immediately behind; at any rate he was sometimes a long time coming and I supposed that he did not hear me through the two doors (also against the heavy traffic then in Trinity Street). On each visit I felt obliged to knock or bang harder and yet harder, sometimes bringing with me a heavy book to protect my hands. But now I wonder if he was not simply far too busy with his own extremely intensive research. Of course he had already obtained the



Fields Medal in 1970; see his comment in the first photograph. And he was by no means resting; for example his famous “Sharpening II” was published in 1973; see the second photograph for a copy of his handwritten version (which indicates that he was not so happy with “Strengthening”).

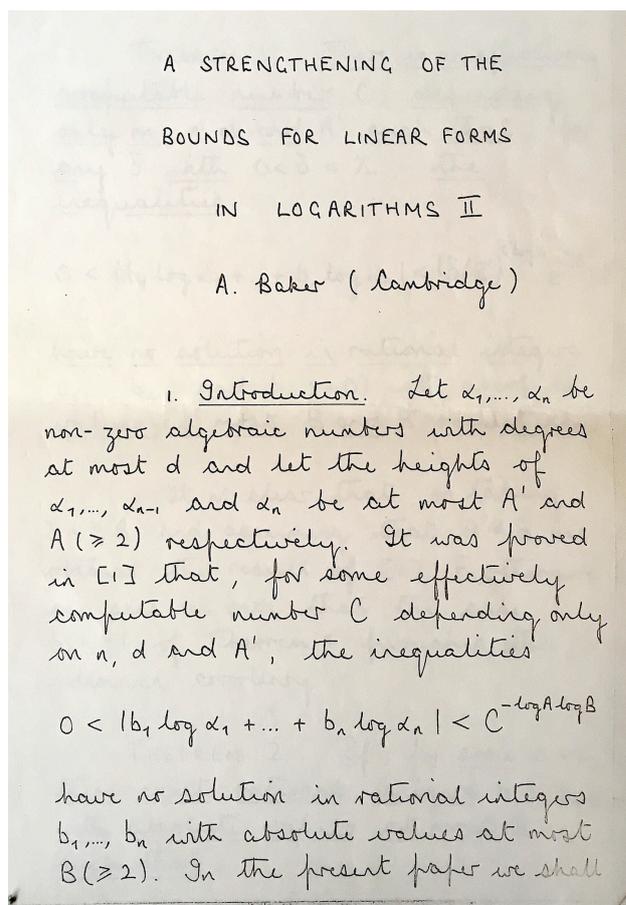
I don’t remember his supervisions at the research level being particularly intensive, but he was very clear and helpful with the sort of advice most useful to research students, such as who to reference in a paper, how to submit it, what conferences to go to, and so on. It was probably in connection with some important aspect of referencing that he once chided me, and with some feeling: he started to walk round and round me, sometimes approaching, sometimes retreating, like a planet elliptically orbiting its sun, obliging me to rotate on my own axis in synchronism, while he repeated his criticism over and over again. Towards the end of the three years we very nearly wrote a paper together, but an unsurmountable gap in the proof put an end to that.

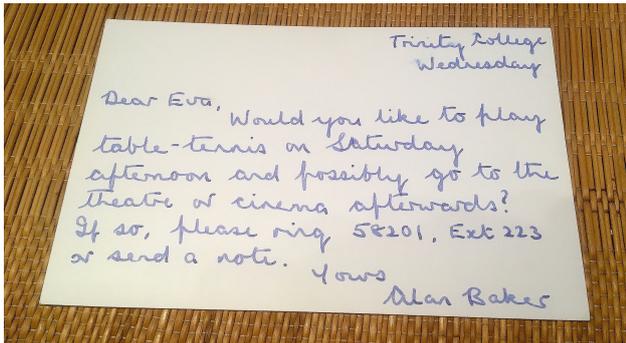
I left Cambridge in 1973 after finishing my doctoral studies, but returned as a Fellow of Trinity for the year 1975/76; however there was no

more attempt at collaboration. I did read the proofs of his marvellous but concise book of 1975. And in 1976 we organized a conference in Cambridge and edited the resulting volume of Proceedings; there were 16 papers and I believe Alan and I refereed practically all of them ourselves.

After that I left Cambridge for good and I met Alan mainly only at conferences; but also whenever I returned to Trinity for Annual Reunions and stepped into Great Court, he would usually be the first person I would see, crossing the Lawns in his usual hasty manner (he had since acquired far better rooms in that Court). I also saw his Rover rusting away in New Court, although I do have nice memories of him once driving a few of us around the countryside. On one occasion he asked me if I would mind him proposing me for the Royal Society; and I was rather happy to be elected in 2005. And he presided in the Combination Room once when I visited with my future second wife round about 2011, and he was most hospitable and attentive. She found him lively and entertaining, as had my first wife, also a keen judge of character; and I have heard others express similar opinions.

The conferences were also memorable. Earlier I met him at Oberwolfach, when he was still relaxed, and then in various places, notably the marvellous Durham Symposium of 1986, which he himself organized with his former doctoral student Richard Mason. But at a 1993 conference at M.S.R.I. Berkeley, which he organized with Wolfgang Schmidt, he was not so relaxed. After that, at his very warm 60th birthday conference organized by Gisbert Wüstholz at E.T.H. Zürich in 1999, he was much more easy-going, and at the conference dinner he gave a speech at which I initially stiffened in horror, fearing he might have enjoyed the excellent wine too much; but which was in fact a carefully prepared and heartfelt account of his life, starting with his memories of wartime London, also mentioning that he was known as the “*brainbox*” of the family, including a rendering of the Lancashire accent of his own doctoral supervisor Harold Davenport; and ending with his regrets about never marrying. Some people already knew that these regrets were not abstract but concerned specific ladies. See the third photograph for one of his earliest notes to Eva Gordon McLean.





After that I met him a couple of times in Pisa and then he was also relaxed and affable, and I appreciated very much his naturalness. But his encroaching deafness occasionally led him to ask questions during lectures in rather too loud a tone, which was sometimes (but not always) intimidating for the younger people. That was also when he did not notice the special anti-mosquito devices in his hotel and was bitten so much that he had to go back home early. I remember him too at a conference at Zürich in 2009 where he started a

lecture by recalling that he once went to the Lord Mayor's Show in London but saw nothing but horse shit, and then charmingly expressed the hope that no-one in the audience would have an analogous experience.

I should also mention a special dinner (with about 40 guests) at Trinity in his memory (October 2018), where two or three people gave rather affectionate speeches, and then someone stood up impromptu, and another, and then another, until about half the table had said their word.

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