Centrefold

Gillian Thornley

It is only a journey of a few metres for me to go to the office of my friend and colleague, Gillian Thornley. However it has been a long and demanding academic journey for the young Gillian Brown from her family's Murchison dairy farm, to her current position as Senior Lecturer in mathematics at Massey University. Geographically her journey has taken her to distant places such as Toronto and Trinidad, while her career path has had to negotiate motherhood, various short term and part time jobs in teaching and research.

Gillian won a scholarship and attended Nelson College for Girls for 5 years, before she went on to the University of Canterbury in 1958 to start a Science degree. Like some other girls' schools even today, there was inadequate support for the sciences, with no classes in Physics. Her proposal that some of the senior students wanting to study physics should attend the Boys' College was not accepted! Hence she was at a considerable disadvantage doing first year physics at Canterbury. In her third year she chose mathematics as her major. Among her contemporaries were Beatrice Hill (Tinsley) and Brent Wilson, with Dean Halford and David Alcorn one year ahead. She continued into the MSc programme. At that time the first year graduate programme was fully prescribed, 3 papers in Pure and 3 in Applied Mathematics. In her second year she completed her thesis on Finsler Geometry, under the notional supervision of HoD, Derek Lawden. However as Derek was on leave for a full year, Gillian was essentially without supervision and had to develop her own independent research skills. Her thesis was examined by Henry Forder.

Gillian's plan had been to go Secondary teaching, but on gaining first class honours, she was encouraged to continue her research. She did however spend two terms teaching at Marlborough Girls' College before she took up a Teaching Fellowship at the University of Toronto in 1963. When she arrived she was the only woman postgraduate student in mathematics at U of T. (Subsequently a second woman Betty MacIntosh (Johnston) from New Zealand joined her.) Her supervisor was Ray Vanstone, although she also worked with Hanno Rund, who was there on leave from South Africa. Her thesis topic in Metric Differential Geometry followed on from her masterate.

On her return to New Zealand, she took up a Lectureship at Canterbury University for 2 years. At this time she wrote up results from her thesis for her first two research publications and she renewed her acquaintance with John Thornley, who was to become her husband. John was about to take up a three year appointment with the World Student Christian Federation in Trinidad. Gillian applied for, and received a Lectureship at the Trinidad campus of the University of the West Indies. It was there that they were married. Gillian found that on changing her name, she could either be addressed as "Dr Brown-Thornley", or as "Mrs Thornley", but not "Dr Brown"! Gillian had 2 very colourful, but academically frustrating years at UWI, including a period of Acting HoD. The five other staff of the Division of Mathematics and Statistics were all in applied mathematics or statistics, the teaching loads were high, in excess of ten contact hours

per week, and there were no resources or opportunities to continue research. The campus was a satellite to the main campus in Jamaica, but there was poor communication and little contact with that campus.

At the completion of John's contract, they returned to Nelson for 2 1/2 years, were their two children, Louise and Matthew were born. During this time she did some part time tutoring at Nelson Polytechnic, and also made contact with Professor Jim Campbell, who had moved to Nelson on his retirement from Victoria University.

John then moved to an academic publishing job in Wellington, but there was no opening at Victoria for Gillian. She spent the next 8 years in various jobs in Wellington, all temporary, and mostly part time. These included teaching evening classes at Wellington Polytechnic, a parttime job at the College of Education, one year sharing a temporary lectureship with Sharlene Forbes at Victoria and another year sharing a research position with Mary Fama, working for Ian Dick in the Mines Department. This last position included developing a model of the New Zealand economy (independent of the model developed by the Treasury) in order to predict future trends in the energy sector as a result of the oil price shocks. In this they found some alarming predictions under free market policies, including the large scale unemployment, which has subsequently come to pass.

In 1980 she was successful in obtaining a permanent academic position, being appointed to a Lectureship at Massey University, but at the same step on the scale she left 10 years earlier! This time it was John who had to follow, he has since been employed in various part time and temporary jobs, and learned the requirements of being a "house husband". In 1982 she was promoted to a Senior Lectureship, a level she may well have attained at Canterbury in 1968, had she stayed there.

Gillian had been an active member of our Society, even before she came to Massey. She was a member of the Council from 1978-81 and from 1985-92. On the first term she was Secretary, and in her second term was Publications Convenor, and then from 1989 to 1991, the first, and to date, the only woman who has been elected President of the Society. During this period she represented the Society at the IMU meeting in Kobe, the only woman President among all the societies represented there.

Heavy teaching loads, a disproportionate university committee workload (where gender balances were sought) and the long gap in her research activity all made her return to her research activities more difficult. Nevertheless, she has continued this activity, and has successfully supervised two PhD students, Nicola Jane in Differential Geometry and Mary Day in gender issues in mathematics.

As well as her research interest in Differential Geometry, she has developed a research interest in Mathematics Education, especially in gender issues and participated in the ICMI study on Gender and Mathematics held in Sweden in 1993.

It is obvious that the gender issue has had an impact on her career, it is difficult to imagine a male contemporary having to spend so much time "out in the cold" between the two periods of full time university appointments. Also, being absent for 15 years from a research environment has made her return to active research much more impressive. Gillian has been identified as a diligent teacher, and perhaps this has led to her having a greater than average teaching load. She attended the conference on Undergraduate Teaching held at Queensland University last month. An observation was made that almost half the participants were women, certainly in a far greater proportion than in university departments. Perhaps this is a reflection of a more caring role into teaching, or maybe a more balanced attitude by women academics? Certainly in a male dominated vocation, women like Gillian have a harder path to follow and probably are less likely to achieve their appropriate levels in the promotion rounds with criteria based solely on research output. These are issues which I am not well qualified to judge.

Mike Hendy