

**On an esteemed teacher, colleague and friend, Dr. Doris Chen  
(a short presentation at the Doris Chen Memorial Funds Tea  
Gathering on February 24, 2014)**

Dr. Doris Chen took an early retirement in 1985 and subsequently moved to England and stayed in England until her passing in June two years ago. Many colleagues currently in the department may not know her. It is my honour and pleasure to be asked by the department to say a few words about this remarkable lady who had been with the department for thirty-two years.

Doris, as she was fondly called, obtained her B.Sc. Degree in 1949 from the Sun Yat Sen University in Guangzhou, being one of the very few woman graduates in mathematics in China in those days. Later in that year she proceeded to King's College of University of London to pursue further study under the supervision of Professor John Greenlees Semple in algebraic geometry, obtaining her Ph.D. Degree in 1955. In 1953 she was appointed Assistant Lecturer in our department, headed at the time by the late Professor Wong Yung-Chow, who was also Doris' teacher in the Sun Yat Sen University. Doris was promoted to Lectureship in 1960 and served the Department with all her heart until retirement in 1985.

Her book *Elementary Set Theory*, written jointly with colleague Dr. K. T. Leung, was published in 1967 by the Hong Kong University Press. Lucid and carefully written, it was for many years a must on the reading list of all mathematics undergraduates at HKU as well as of numerous pupils in matriculation classes --- Part I of the book --- who aspired to enter the university.

Many generations of undergraduates from the mid-1950s to the mid-1980s learnt algebra from Dr. Doris Chen. To them Doris was emblematic of

elegance and culture, and was also a person full of warmth and kindness. To many female students Doris was held as a role model, being the only woman mathematician on the faculty in those years. Let me read an excerpt from an article I wrote on the occasion of the 70<sup>th</sup> anniversary of the HKU Faculty of Science. This excerpt is about my first meeting with Doris on my first day of class at HKU fifty-one years ago.

"[The] second class of that first day was a lecture on mathematics, [...]. Right on the dot a lady dressed in an elegant Chinese "*cheung-sam*" entered the lecture theatre. She marched down the aisle to the front, flanked by two young teaching assistants. [...] She looked around with a smile and began lecturing and writing on the blackboard. She was Dr. Doris Chen, [...]."

Dr. Doris Chen was a dedicated and caring teacher who always delivered clear and well-prepared lectures, writing beautifully and swiftly on the blackboard but pausing at strategic moments to let the class chew over what was just explained. Many students will remember fondly the characteristic smile she wore on her face whenever these moments came up. Some would recall, half-jokingly years later, that this was a moment of anxiety and apprehension but at the same time admit that it was also a moment they realized they should pay attention to and treasured it even after graduation.

There are quite a number of anecdotes about Doris. Let me conclude by telling one that happened to me. When I was about to graduate I went to seek advice from Doris on further study in mathematics. Naturally I asked her what algebraic geometry was about. She patiently explained to me. At the end she said, with her characteristic smile on the face, "Do you know there is also geometric algebra?" As an ignorant undergraduate I did not know, but in my callow naivety I bemusedly asked myself, "What's the difference --- Algebraic geometry, geometric algebra? Aren't the two terms commutative?" Doris then showed me the 1957 classic *Geometric Algebra* written by Emil Artin. That was my first introduction to the book. I went

home and read it, of course only the beginning part of it. But already I learnt a lot and it served me in good stead in my subsequent study at graduate school and further on in my teaching many years later. I still remember vividly to this date the emphasis Artin paid to Section 4 of Chapter One, which is on the concept of a dual space. He regarded the concept so important that he added a long exercise as Section 6 to work out the analogue in the case of a finite abelian group. I tell this anecdote because I think a good teacher will have influence on students not just in giving good lectures but more importantly in the interaction with students inside or outside the classroom. A good teacher, like Doris, will broaden the knowledge as well as the vista of a student through such interaction. The venerable Columbia scholar Jacques Barzun once said, "Teaching is not a lost art, but the regard for it is a lost tradition." Doris was a good teacher who upheld this tradition. I feel fortunate to have been one of her students.

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