# JEAN BEE CHAN INTERVIEW August-October 2009

(interviewed by Kenneth A. Ross)

#### When did you get interested in mathematics?

While in elementary school in China, I was quick in arithmetic, and I had won some school competitions.

#### What were the circumstances?

My real interest developed when my high school teacher asked us to do rigorous proofs in solid geometry. My classmate and I were always doing geometry proofs, even during classes on other subjects.

### Did you ever consider fields other than mathematics as a vocation?

Yes, in kindergarten I wanted to become a music teacher. I was enrolled in the most prestigious Teachers Training College in Hong Kong when my parents insisted that our family move to Chicago. I had to quit the music program, and I was really upset at that time.

#### What was the special attraction of mathematics?

After I passed an entrance exam and enrolled in the University of Chicago, I took a calculus course, and I thought that was so much easier than the other courses in English, Humanities, and Social Sciences. I studied in Eckhart Hall, the Mathematics Department building, where I met other friends majoring in mathematics. I had the good fortune of having Professors Irving Kaplansky, Saunders MacLane, S. S. Chern, and A. A. Albert as my instructors. Mathematics became a way of life for me from then on.

### Where did you grow up?

I grew up in China before moving to Chicago. As a small child, I lived in a small village near Taicheng of Guangdong Province in Southern

China for four years. Later our family moved to Nanjing, then the capital of China, before our move to Hong Kong, where I finished junior high and high school. Then we moved to Chicago where I ended up at the University of Chicago.

#### Where do did you go to school?

I went to a one-room school in a Chinese village where my mother was the only teacher. She got paid two bags of rice per student. I attended grade school in three different Chinese villages and in the cities of Taicheng and Nanjing. I attended junior high in three cities, namely, Taicheng, Guangzhou, and Hong Kong. I attended high school in Kowloon and in Hong Kong. Due to our family's multiple moves, I went to 15 schools before finishing high school. After moving to the United States, I earned my B.S. and M.S. in mathematics from the University of Chicago, and the Ph.D. in mathematics from UCLA.

#### What did your parents do?

My mother was an elementary school teacher, and my father was a dean in a high school in China, and he later became an editor for a Chinese Newspaper in Chicago. My father was elected the national president of the powerful Chan Family Association in the United States.

### Did they influence your interest in mathematics? If yes, how?

No, my parents didn't want me to study mathematics. Like many Asian parents, they wanted me to study medicine.

## How about siblings? Did they influence your mathematical development?

No, none of my five sisters likes mathematics. They are baffled that I enjoy mathematics.

## I noticed that you got your Ph.D. at UCLA. What did you work in, and who was you thesis advisor?

My Ph.D. thesis advisor was Professor Frederick Valentine of UCLA. I worked in convex sets and combinatorial convexity. Professor Valentine had a positive influence on my research, and he continued to be interested in my work even after I left UCLA.

### That's interesting. I was also interested in convexity and wanted to work with Victor Klee. Did you know him?

I know of Victor Klee and admired his work. I became very interested in the so-called Art Gallery Problem that Klee proposed to a young mathematician at a mathematics conference at Stanford.

#### How did you get involved in the MAA?

Professor Valentine once mentioned that the MAA is an organization to which I could contribute.

## Did you receive mentoring in the MAA at the early stages of your career? By whom?

Bill Chinn served on several national MAA committees, and he recommended that I be considered to serve on some MAA committees. In spring, 1974, I attended the meeting of the then Northern California Section of the MAA, and I enjoyed the talk given by Professor Don Chakarian of UC Davis. Later, I started our Sonoma State Mathematics Colloquium series, and I invited Professor Chakarian to give a colloquium talk at Sonoma State. From then on, I became active in the MAA Section.

### What accomplishments in the MAA are you especially proud of?

I continue to serve on the Committee on Undergraduate Student Activities and Chapters (CUSAC) of the MAA as a member and as a committee chair. I have coordinated the Diversity Initiative of CUSAC over the years, and helped bring many underrepresented students to the MAA meetings. Also, I edited the Governors' Handbook and placed it on the MAA website while serving as the MAA Second Vice President.

### Are there any efforts of yours in the MAA that you are

#### disappointed with?

I wished I had made more contributions as the Second Vice President of the MAA. Also, I wish I could encourage more Asian American mathematicians and more people from industry to participate in the MAA.

One can always wish one had done more, but I think your accomplishments are praiseworthy. What changes have you seen in the MAA since you first became involved?

The MAA now has more programs for students and the teaching of mathematics.

# You've been very active in your section. What are some highlights or activities you are especially proud of?

I urged our local section to start a student poster session, and the poster session has flourished over the years to benefit our students.

Among your many Sonoma State activities, your Annual Mathematics Festival caught my eye. Tell me about it and any other especially interesting things you were involved in.

When I was department chair, I started the annual Mathematics Festival to celebrate National Mathematics Awareness Month. On the Festival day, we invite administrators and community leaders to honor our students for their success, and our alumni return to have dinner with the current students and faculty members. Also, I started the Math Club, which has won awards for being one of the most active clubs on campus.

### Have you been active in any other mathematics organization?

Yes, I have been somewhat active in the AWM, AMS, and the Canadian Mathematics Society. For example, I often attend AWM events and AMS conferences, and I have published papers in the AMS Proceedings. I also occasionally attend the Canadian Mathematical Society conferences, and I have published in the Canadian Journal of Mathematics.

## What personalities have stood out in the mathematical community, in the MAA and elsewhere?

I admired many MAA personalities and there are too many to mention here. My thesis advisor, Professor Frederick Valentine, was active in the Southern California Section of the MAA, and he was very kind and encouraging. I am immensely grateful to him. Dr. Clarence Stephens of SUNY Potsdam was inspiring to all of us at Sonoma State University. I invited him to visit our campus to talk about teaching on three separate occasions. As a result, our Department went through a sea change and has become a student-centered department. Professor Shiing-shen Chern, while at the University of Chicago, always invited the campus students from China to his home for dinner. In his home, I met some students who became my life long colleagues and friends.

On September 20th, 2004, less than three months before Professor Chern died, my husband and I paid him a gratitude visit and shared lunch with him in his home in China. There was a large Chinese sign. "Home of Geometry," on the wall of his entryway, and we felt honored to have entered his home on the Nan Kai University campus. It was amazing that he remembered both my husband and me and some of our schoolmates. We talked about the good old days at the University of Chicago, his 2004 Shaw prize, and his two children. Then he autographed and gave me a few of his recent books. On the day of our visit, Dr. Phillip Griffiths, former Director of the Institute for Advanced Study, was the invited speaker at Nan Kai University. So we were included in the VIP reception hosted by the Nan Kai University President prior to the lecture. Professor Chern was alert throughout the whole lecture. That afternoon, when he hugged me goodbye, I knew that would be the last time I would see him, but his memory and influence on me will live forever.

That's a wonderful tribute and a fine way to end our interview. Thanks for an enlightening interview.