A woman mathematician's journey*

by Mei-Chi Shaw†

Dedicated to the memory of my parents, Chiang Shaw and Lan-Fang Liu

1. The Village of Righteousness

I was born in 1955 in Taipei, Taiwan. My parents were among the two million mainland Chinese who migrated to Taiwan in 1949 after the Nationalist government lost the civil war to communists. My father was in the retreating Nationalist Air Force. At birth, I had three brothers and one sister, and two years later my younger brother was born. They named me after their favorite theater in Shanghai (Mei-Chi Grand Theater still exists) which they frequented. My parents always fondly remembered Shanghai, where they lived with my two eldest brothers from 1945–1947, after the war with Japan. They always said jokingly that, since girls do not count in a Chinese family, they did not give much thought to the naming of girls. My sister's name is Mei-Som—Mei means beautiful and Som means a special kind of jade. Mei-Chi means another kind of beautiful jade. All the boys were named in the family tradition with the word Yu in their name, meaning Universe (Fig. 1).

Taiwan in the 1950's was a very unusual place. The island had been under Japanese rule for fifty years, from 1895–1945, and was only returned to China after the war. Four years later, two million mainlanders from all over China fled with the Nationalist government to Taiwan to join the six million Taiwanese at that time. We grew up on a military housing project near the Air Force headquarters, very much segregated from the outside world. At that time there were many government military housing compounds like this to accommodate the hundreds of thousands of Nationalist military personnel and their families who had retreated from the mainland to Taiwan. The housing compound where we lived was called the "Village of Righteousness." It was called a "village," but it was near the center of Taipei. Other villages had names like the "Village of Loyalty," "Village of Recovering," and "Village of Reconstruction" to reenforce the government doctrines. When I was young, the communist threats were still very real and we were bombarded by government propaganda to be prepared for the communist invasion and to prepare for recovering and reconstructing the mainland next year (always next year).

All the people living in our village were Air Force families. These people came from all over China and spoke various Chinese dialects. Every family had a story to tell about how they came to Taiwan during that fateful year of 1949. My father told of how he arranged to get my mother and my two eldest brothers out of Hunan on the last flight from the Hengyang airport near my mother's hometown Leiyang, when the communists were already nearby. My mother's was how sad and reluctant she was to leave her ancestral home that day, accompanied by my uncles and other relatives (and servants), to meet with my father for the flight to Taiwan. Little did she know that it would be another thirty-eight years before she would see her hometown again.

The houses in our village were barracks built in haste under the very spartan conditions of a military in retreat. With six children, it was very hard for my parents to make ends meet on my father's meager salary. It was also difficult for them to adjust to the new life after moving to Taiwan with all the uncertainties. But, for the children growing up in the military compound, the place was like an endless summer camp. I have some of the fondest memories of my

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Figure 1. 1961 Taipei Botanical Garden with my parents, elder Brothers Der-Yu, Zhen-Yu, Cuen-Yu, younger brother Chang-Yu and elder sister Mei-Som.

childhood of playing, to my heart's content, with my siblings and neighbors' kids. Whenever our parents would leave the six of us at home alone, we turned the place upside down playing hide-and-seek. I never knew what loneliness was then.

One of my fondest memories was flying kites in the autumn with all the village kids in the rice paddies. Even though the village was near the center of Taipei right next to the Air Force headquarters, on the other side there were still rice fields at that time. After the fall harvest, the farmers did not mind people walking on the narrow ridges along the paddies. We would use anything available to us to make our own kites, starting from splitting bamboo for the kite frames, to pasting old newspapers on the frames. There was no money to waste on kites. We would compete to see whose kite was the prettiest and whose kite would fly the farthest. If the line broke and the kite flew away, all the village kids would run after the kite to retrieve the valuable threads. We would get a good scolding if we did not bring the threads back home to our mothers. At that time, material things were so scarce, everything was precious, even a spool of thread.

The other thing I remember was Chinese New Year. The people in the village would celebrate it with great fanfare for the whole 15-day period. After the big New Year's Eve feast, there would be firecrackers all night. We kids would always stay up all night playing poker with the precious money we just received from our parents. On the last day of the New Year celebration (the fifteenth of the first month of the lunar calendar), was the Lantern Festival. All the kids in the village celebrated by making our own lanterns together from scratch. My eldest brother Der-Yu was very handy and always made the most elaborate lanterns by hand. The traditional food for the Lantern Festival was sweet dumplings filled with sesame paste. After a big meal finished with the dumplings, all parents would turn out the lights in each house. We kids would carry our homemade lanterns, lit with candles, to roam the village in complete darkness. There must have been hundreds of kids together. We would form a long line like a dragon with the oldest ones in front and kids as young as two at the tail end. All the kids would chant together, "Here come the lanterns! Here come the lanterns! Dong, Dong, Dong," repeatedly until midnight. We did not want to go home until our parents started calling each kid to come home or face punishment. I always remembered how sad I was when I went back home that day thinking, another 350 days until the next New Year! These memories seem so distant now. Within twenty years, Taiwan would be transformed from an agrarian society into one of the four tigers in Asia, the others being Hong Kong, Sin-

gapore and South Korea. The rice paddies near the village became the choicest real estate in Taipei and our village was also transformed into high rises. Military villages became a thing of the past.

By the time I was five, most other kids of the same age would attend the kindergarten on the compound. But I did not want to go since I would rather be playing outdoors than sitting in a classroom. My parents did not force me to attend, nor did they teach me how to read or write at home before I entered elementary school one year later. Unlike most other parents, they did not believe in early education to make kids get ahead, but believed that kids should play at that age. Though they were quite strict in disciplining children, they let us do things that we liked. One day my mother took me to see a fortune teller at a neighbor's house. The neighbor, who was very much into such things, highly recommended this fortune teller. Seeing a mother with a precocious five-year old daughter, the fortune teller started confidently by saying that my mother has no sons. After the neighbor corrected him, he said that originally my mother was destined to have no sons, it was only because she had done many good deeds in her previous life, that she was blessed with sons in this life. The fortune teller thus successfully rescued himself from a misstep. He continued to compliment my mother: with the good physical features that she had, good fortunes were waiting for her around the corner, even though she had gone through a lot of hardship earlier. Such words could have been applied to and would have been welcomed by almost every parent in our village. At the end, my mother casually asked the fortune teller to also tell the fortune of her daughter. The fortune teller said to my mother, probably from a well-rehearsed line:

> Your daughter will grow up to be smart and strong, better than men.

My mother was elated! She would repeat these words to me (almost) every day until I left home for graduate school. She always said to me how accurate that fortune teller was. I always reminded her the same fortune teller also said that she had no sons.

2. My Education in Taiwan

2.1 Air Force Affiliated Primary School

I attended the elementary school affiliated with the Air Force in Taipei, located right next to the Air Force headquarters. There was an entrance gate directly linked to the headquarters with a plaque that read, "Air Force Children's Primary School." Under it there was a sign which proclaimed, "Founded in Jian-Qiao, Hang-Zhou." The China Air Force was founded in Jian-Qiao, Hang-Zhou before the war. Due to its remote location, a Primary school was established in 1934 for the education of the children of Air Force personnel. Subsequently, it had moved several times, first to Chengdu, Sichuan during the Sino-Japanese war and then to Nanjing before it moved to Taipei in 1949.

Like many things in Taiwan, this Children's Primary School, was a refugee version of the original one in Jian-Qiao, Hang-Zhou, in mainland China, but the principal was the same one. There were about a dozen such primary schools affiliated with the Air Force in Taiwan. All the children of Air Force personnel could attend for free, regardless of their rank. Among my classmates, there were children of generals and children of cooks. It was a co-ed school and with no uniform, since not every student could afford uniforms at that time. All the students, regardless of their provincial ancestry and despite the fact that the official language was Mandarin, conscientiously adopted the Sichuan dialect as the common language among ourselves, even though dialects were banned by the teachers at school. At home, we children also spoke the Sichuan dialect to each other, even though only my eldest brother was born in Chengdu. My parents spoke their heavily accented Mandarin to us. It was quite a phenomenon that students of a primary school in the center of Taipei, born in Taiwan by parents from all over China, would continue to speak Sichuan dialect. In later years, I have had great difficulty explaining to people why the Sichuan dialect was my first language, both to people in Taiwan or from China. The good side of this development is that the diverse and isolated (refugee) students developed a special pride and bond from the strong identity the language, almost a secret code, offered. The downside was that many students did not adjust to the outside world. After I graduated from the elementary school in 1967, the compulsory education in Taiwan was extended from six years to nine years. Taiwan's economy also took off in the 1960s. The Air Force Primary Schools all became public primary schools. Nevertheless, I still frequently encounter people from Taiwan with a Sichuan accent—and, if they are of my age, I can guess very often correctly where they went to primary school.

On the first day of primary school, the teacher asked what my name was and how to write it. I told her that I did not know how to write. Most other kids had attended the kindergarten and knew how to write their names already. My last name Shaw (Xiao) consists of nineteen strokes and is one of the most difficult Chinese characters to write. I remembered hearing my teacher commenting to another teacher: this is the daughter of Chiang Shaw, but she cannot even write her name! My father was the editor-in-chief of

China Air Force, a monthly magazine, and had some reputation in writing. When I went home that day, my father wrote my name on a piece of paper and told me to memorize it. These were the first characters I learned when I was already six years old. I learned several characters in school each day for the next few years. By the fourth grade, I suddenly realized that I could read newspapers and books. My first joy was to find out that I was able to read the Chinese classic novel, *Journey to the West*, a mystic novel about a Tang dynasty monk who journeyed to India to gather the sutra with the help of a monkey king and a pig. This was my favorite story growing up and was my main motivation to study Chinese. I also read other classic epic novels, *The Romance of the Three Kingdoms* and *On the Water's Edge*. Such novels were considered boys' stories. Growing up with four brothers, I had heard the stories many times and was thrilled to read them on my own. I also discovered Tang dynasty poetry, which my father and mother, who studied Chinese literature at Wuhan University in Hubei during the war, recited frequently. My father was especially delighted that I liked Chinese literature and taught me some Chinese classics every weekend. He always hoped that I would become a writer or something. I was not very serious about it. In fact, I was more interested in Sherlock Holmes and Arsene Lupin. My best friend Yu-Tarn in elementary school was also a fan of their adventures. She and I always traded our latest acquisitions in the form of either a novel or a comic book.

In elementary school I was also very good at arithmetic. In the last two years, we used some traditional Chinese arithmetic problems supposed to be useful for real-life applications. One of the problems is called

> *Chickens and Rabbits In the Same Cage: Determine how many chickens and rabbits are in the cage, given the number of heads* (*e.g. eight*) *and feet* (*e.g. twenty-two*) *in the cage.*

I had no difficulty solving such a problem, but had difficulty finding it useful to me in real life. Such problems were very frustrating to kids who were not particularly mathematical, and who might even be punished for having incorrect answers! I always had great sympathy for the students who really struggled in class and were punished physically by the teacher for not being able to solve such problems. Later in junior high, I realized that with good notation in algebra, solving this kind of system of linear equations with two variables could be much easier.

In the last year of primary school, we were all busy preparing for our entrance exam. We were the last group of kids in Taiwan who had to suffer the horror of possibly failing the entrance exam at age twelve, thus ending one's schooling and hope for a future career. Both teachers and parents alike warned us that if we did not pass the exam to get into a public school, we would be sent to "tend buffalo" (figuratively speaking). I did not feel the same pressure in later entrance exams for senior high schools and colleges like I felt for this one.

Happily, I passed the entrance exam to enter the Taipei Municipal Girls Junior High School, my first choice. The following year, in 1968, free education was extended from six years to nine years, eliminating the entrance exam for twelve-year old kids. That year the average height of the twelve-year old in Taiwan shot up by one inch for boys and girls.

2.2 Girls' High School

Following the Japanese tradition of segregating girls and boys in high school, the junior high school was only for girls. But, under the nationalist government, the curriculum and the number of public high schools were exactly the same for boys and girls. It turned out to be a very good system, especially for girls—we were really separate but equal. All students entered the public schools based on that one test, with no exceptions, so the school included kids from elementary schools all over Taipei. This was my first exposure to local Taiwanese kids, those whose parents did not come from the mainland. Their accents were curious to me. But my Sichuan accent was sometimes a source of mockery.

In junior high school, we started to learn English. Though my parents both knew English, they had never taught me the language before. When I first learned this new language, it was such an eye-opening experience for me. I could not believe that one only needed a twenty-six letter alphabet to write every word in the language. It seemed that all our elementary education was spent learning how to write Chinese characters. If one had invented an alphabet for Chinese, I could have read the Chinese classics much earlier than when I was ten years old! I learned English with all the enthusiasm of a new kid learning a new language. I also listened to records entitled "The Linguaphone" that my father bought for us to learn English. This is a language course designed by a group of linguists. There were fifty lessons altogether, and I memorized them all in about a year. Naturally my English was much better than the other students'. I was also very much into Rock and Roll songs, from Elvis to the Beatles to the Kingston Trio. They were all great learning tools for me.

My enthusiasm in English was short-lived. The English classes after the first year were all about English grammar, instead of teaching us to appreciate English literature or more interesting things.

We were drilled everyday about things like the plural forms of "potato" or "bamboo." I also found another course more interesting—history. At that time the history curriculum in junior high school consisted of three years of Chinese history. The history course was taught for three years by the same teacher, Ms. Shi Man-Hua. She was such a gifted teacher that it was like attending a story-telling session rather than a class. I always could not wait for my history classes.

I continued to enjoy and excel at math classes. In junior high school, the math curriculum consists of algebra, which include systems of linear equations and factorization. In the third year, we learned Euclidean Geometry. I liked the simple logic of proof based on a few axioms very much. This was the first time I became fascinated by mathematics.

I got into the Taipei First Girls' High School in 1970 as expected. The school was founded in 1904 during the Japanese colonial period. During that period, the curriculum emphasized the subjects of a traditional women's education like music, arts, cooking, and sewing. It was a famous "brides' school," since the main goal was to prepare women to be brides. After the Nationalist government took over, the new curriculum was updated to be as rigorous as at any boys' high school. During my first two years there, the president of the high school was still the legendary Ms. Jiang Xue-Chu. She dedicated her whole life to the school, which was transformed from a bridal school to one known for its academic excellence.

We were not only taught to excel academically, but also required to do well in cooking, music, arts and athletic activities. The education also emphasized participation in all school activities, at least for the first two years. For the third-year students, there was only one thing on our minds: to pass the entrance exams in order to get into a good university. Later I learned that many girls in the U.S. did not have the experience of playing team sports in high school. This was not the case at all in our high school. Each class had to participate in every sports event, like track and field, volleyball, basketball and choir competition. Even the required daily cleaning of classrooms after classes became a competition. Since we spent so much time together, I made a lot of good friends while in high school.

In my first year, I found biology very interesting, especially when we studied genetics. By the end of the first year, each student had to choose to study science or humanities. I was sure that I wanted to study biology. At the beginning of the second year, our teacher in Chinese asked each student to write an essay on "How I Decided To Study Science." I was so sure of my choice, I wrote the article on how I would like to study biology in the future. Probably because the clarity of the article, the essay was chosen and posted on the bulletin board for everyone to see as a model essay. A year later, another declaration was needed for all the science students—either Biology (including Medicine) or Physical Sciences. I chose Physical Sciences instead of Biology. It was a constant question from other students why I changed my mind since my essay was so convincing. One reason was that, while I liked genetics, I did not like the experience of dissecting frogs or, in fact, any experiment.

In high school math classes, we used textbooks written by some college professors based on the New Math concept. It was very abstract and difficult for most students. I still remember that one semester, the math textbook started with the completeness of real numbers! During the last year in high school, my math teacher was Mr. Yang Kwan-Man. The math we learned that semester was combinatorics and probability. I was really good at it and had many perfect scores in a row. Mr. Yang always praised me in front of the whole class and constantly encouraged me to study mathematics. That was the first time that this notion crystalized in my mind. Thus when it came time for me to declare my preferences for the college entrance exams, I chose the Math department of National Taiwan University as my first choice. At that time, I had not learned any calculus at all.

2.3 National Taiwan University

Like many students in Taiwan, I wanted to take a break from studying to enjoy other aspects of life after entering college. Freshman year was a new social experience for all students since almost all of us attended all-girls' or all-boys' high schools. It was our first time in a coed environment in six years. There were forty five students admitted to the Math Department, and nine of them were women. Most boys had crew cuts since they had just served the required two-month military training before entering college. All the girls had curly hair since it was the first time we were allowed to wear our hair long and to have perms. Since I entered the Mathematics Department at National Taiwan University with the highest entrance exam score, I was made the math class representative in the first semester by default. I took this job very seriously and was busy with things like organizing excursion trips, dancing parties, etc. I had very little time for studying.

National Taiwan University was founded by the Japanese with the name "Taipei Imperial University". The campus has western-styled buildings lined with palm trees. In 1949, when the Nationalists came over to Taiwan, the president was Fu Si-Nian, the former president of Beijing University. He passed away suddenly and was succeeded by Chien Si-Liang, who

greatly expanded the university and transformed it into one of the leading universities in Asia. All the students entered by merit, i.e., passing through the entrance exams, with no exceptions. The education was (almost) free. For many students, including myself, it was a dream come true. We were all so excited about our new-found freedom and status.

The curriculum at the university for each student was very rigid with not much flexibility until the junior year. In the first year, we took Calculus, Linear Algebra and Physics. Our Calculus course was taught by Professor Wu-Hsiung Huang, a former student of Blaine Lawson at U. C. Berkeley.

Linear algebra was taught by a teacher who was trained in the Japanese tradition, and was mostly about computation of matrices. My performance in all three courses was just above average and I almost flunked my freshman physics lab. But I did well in Chinese, English, Thoughts of Dr. Sun Yet-Sen (a political course) and the General History of China even without studying much (we all had to take seven courses each semester in our freshman year plus physical education). Many classmates were always suspicious that my high score in the entrance exam was not due to my math abilities, but because of my English and Chinese. It seemed that now they had confirmed their suspicion that, "You *girls cannot do it*." This was publicly and enthusiastically proclaimed by some of my male classmates after the first semester at the National Taiwan University. Some of my male classmates would say such things to female students with no regard for our feelings. This negative environment was new to me. In girls' high school, our teachers were always encouraging and made us believe that we could do anything! Partly because of the insults and partly because I was bored with partying and goofing-off, I became a more serious student in my sophomore year.

The required math courses for sophomores were Advanced Calculus, Advanced Algebra and Applied Analysis. The textbook we used for Advanced Calculus was *Mathematical Analysis* by T. M. Apostol. The teacher, Professor Lung-Chi Miao, got his Ph.D. from Gottingen and had a German no-nonsense attitude in his teaching. He finished the book in one and a half semesters, covering everything from the first to the last page. Then he used the book *Calculus on Manifolds* by M. Spivak for the remaining second semester. I remember that one day, in the Advanced Calculus course, professor Miao put the Heine-Borel Theorem on the blackboard:

> *Every open cover of a compact set has a finite subcover.*

From this one theorem, I realized that this was what modern mathematics was about. Though it was not what I thought in high school at all, it was not as hard for me as it was for many other classmates. Many students transfered out of the math department after the first or second year.

For the sophomore algebra course, we used Hoffman and Kunze's *Linear Algebra* and I. N. Herstein's *Topics in Algebra*. As for Applied Analysis, the teacher was Professor Wei-Tseh Yang, who got his Ph.D. from Princeton. He did not use any particular book, but I learned several important topics including the Laplace equation, Green's functions and distributions in his course. He flunked almost all students except six. I was one of the six and had the highest score. After the sophomore year, my classmates had much more respect for me—so much so that they elected me to be the president of the Mathematical Society (kind of a glorified math club).

Besides Math courses, all the science students were required to take a second foreign language course for two years. The default language for math majors was German, but one could substitute French or Russian. Our German teacher for the math majors was an elegant professor who had a Ph.D. in comparative literature from Gottingen. He had no interest in teaching a group of unmotivated students. Though I did well in his course, I did not learn much German after one year. I decided in my junior year to move out of the assigned German course and took German from a German priest. He was a popular teacher on campus but was known to be very tough. I learned a lot more German from him but got a much lower grade. I found the grammar in German overwhelming. I never felt the same excitement with German like I did with English.

In my junior year, I took Complex Analysis from Professor Miao using L. Ahlfors's book *Complex Analysis* (second edition). Professor Miao finished the whole book in a little more than one semester and continued to teach Nevanlinna theory from his own lecture notes in the second semester. These real and complex analysis books (pirated copies) remain my prized possessions after all the years, even though they all fell apart. I also took algebra, differential geometry and probability in my junior year. We used the first of the three volumes of *Lectures in Abstract Algebra* by Jacobson in the junior year. Though I always did well in algebra, I liked analysis much better (Fig. 2).

In my senior year, I took three math courses: Real Analysis, Ordinary Differential Equations and Topics in Geometry. I also took economics, but found it very boring. Most male classmates had to serve two years in the military after graduation, so they were busy preparing for the exams for being commissioned officers in the army. I decided to go to the U.S. to get an advanced degree, so I was busy preparing for the GRE

Figure 2. Junior Year at NTU, 1976.

and TOEFL, and sending out applications. I applied to several graduate schools—some to their Math Departments and some to their Statistics Departments. At that time, I was not sure if I could succeed as a mathematician.

The first acceptance letter came from the Princeton math department. I still remember the excitement of that day (January 28, 1977) when I received the letter offering me a full scholarship. Afterwards, I received acceptances from all the schools that I applied to, including the Harvard Statistics department. Students from our Math department had a good reputation abroad at that time. Being admitted to a good school was nothing new, but being admitted to Princeton or Harvard still caused some excitement. Some teachers said that I should go to Princeton, but others advised that it was easier to succeed in Statistics.

I asked my mother. She did not know that I had applied to Statistics Department also and scolded, "If you want to study mathematics, study mathematics, why bother with statistics?"

In her opinion, pure math is the higher form of scholarship, while statistics is for people who buy and sell. She always looked down upon business people. I told her that I worried that I might not succeed in mathematics. My mother said,

> The fortune teller said that you are smart and strong, better than men. You are always strong when the opponents are strong, weak when the opponents are weak.

Sometimes a mother's blind faith is all one needs! My mind was made up. The day I accepted the admission offer from Princeton, I also took out my book "Real Analysis" by H. L. Royden and studied it in earnest. I said to myself, "The game is afoot."

3. Becoming a Mathematician

3.1 Princeton, 1977–1981

I arrived at Princeton in July 1977. After staying for a few days with my sister, who lived nearby, I moved into the Graduate College. The castle-like dormitory for graduate students was more beautiful than in the picture on the cover of the graduate school brochure. It bordered a golf course and had a tall tower, the Cleveland Tower. I enrolled in an English language course for foreigners on campus. The students in that course came from all over the world. My initial culture shock was mollified by the beautiful surroundings among the Gothic buildings and tall ancient trees. Every day I carried the bookbag which my college classmates gave me as a going away present. After two summer months, my spoken English improved.

In September, the semester started. To my surprise, I found that I was the only woman student out of eleven in my class, plus two male visiting students from Germany. Not only that, but there was only one other woman student, who had transfered from Chemistry, in the whole graduate Math program. It seemed that the Math Department had not admitted too many women graduate students before me. There were no women professors on the faculty either, only one woman instructor from Germany. The first year I arrived at Princeton, these were the only women mathematicians at the university, in addition to a few visitors that I met at the Institute for Advanced Study. When I was young, my father always liked to tell me stories about women scientists. One was Madame Chien-Shiung Wu, the famous physicist who became the first female instructor at Princeton and later the first female professor of physics at Columbia. The other was Tsai-Ying Cheng, a graduate of National Taiwan University who became the first woman to receive a degree (Ph.D. in Biology) from Princeton in 1964, five years before the university started admitting undergraduate women students. It was only in my second year at Princeton that the Math Department hired Chuu-Lian Terng as the first woman assistant professor. Chuu-Lian also graduated from National Taiwan University and went to the same high schools as I did, only six years before me. We immediately developed a special camaraderie and became close friends. Three decades later, another National Taiwan University graduate, Sun-Yung Alice Chang became the first woman department chair at the Princeton Math department (Fig. 3).

The Princeton Math Department was unique in that it did not offer any basic graduate courses. The idea was to throw all the graduate students into the most advanced courses right from the beginning, a

1. Mei Chi Shaw
2. Greg W. Anderson
3. Brian C. White
4. Robert F. Coleman
5. Dieter K. Bassendowski
6. Mark I. Heiligman
7. John P. Snively
8. Eric R. Jablow
9. Thomas G. Goodwillie
10. Roderick D. Ball
11. Wolrad B. Vogell
12. Don M. Blasius
13. Allan T. Greenleaf

Department of Mathematics

Entering Graduate Students - Fall 1977

Figure 3. Princeton 1977 Entering Graduate Students.

kind of total immersion from the start. There were no required courses, no grades. The only exam a Ph.D. student needed to pass was the General Exam, within the first two years. It was a three-hour oral exam on two advanced topics chosen by the candidate and three basic courses: real and complex analysis and algebra. I knew that I wanted to study analysis, but I had no idea which subject in analysis. I decided that I would sit in all three analysis courses offered that semester by Professors R. C. Gunning, J. J. Kohn and E. M. Stein. Though I had been forewarned by my teachers at National Taiwan University about the advanced nature of the courses, I did not know how ill-prepared I was for this new system of learning. After only one week, I stopped attending Professor Kohn's course since I was totally clueless. Another two weeks later, my anxiety had reached such a level that I really did not know if I should continue. At that time, the title of Stein's course was "Another Class of Pseudo-Differential Operators". There were more than twenty people in the audience. I knew a little bit of differential equations, mainly the Laplace equation. I had not heard of pseudo-differential operators, let alone "another class" of them. I mustered all my courage to see Professor Stein. I bluntly asked him two questions:

(1) should continue to attend his course, since it was way over my head?
(2) should study mathematics at all?

Professor Stein told me that he did not expect me or any first-year graduate student to understand much in his course.

"Just look at the audience in the class," he said. Half of the attendees were professors, and the others included advanced graduate students. He suggested that I should still sit in the course and hopefully, in a year or two, I would understand more.

As for the second question, he said that since I was already there, I might as well stick around and see what happened. He also suggested that I read his two books, *Introduction to Fourier Analysis on Euclidean Spaces* (joint with Guido L. Weiss) and *Singular Integrals and Differentiability Properties of Functions*. I had brought both books (pirated copies) with me from Taiwan. I studied the two books thoroughly and they somehow calmed me down. I still attended the courses but did not worry about whether or not I understood anything.

I decided to choose Fourier analysis and several complex variables as the two topics for the General Exam. Since I was attending Gunning's course, I was reading the book *Analytic Functions of Several Com-*

plex Variables by R. C. Gunning and H. Rossi to prepare for the exam. At the same time, I was also reviewing the three basic topics. Fortunately, my undergraduate training in analysis and algebra was quite solid. But before taking the General Exam, one has to pass foreign language requirements. Each student had to demonstrate the ability to read math texts in two out of three of German, French and Russian. My two years of German in college came in handy, so I passed the German, examined by Professor Gunning, without much difficulty. However, I really did not have time to learn French. Other graduate students told me that the professor always asked students to translate the same book, *Introduction à L'Étude des Variétés Kählériennes* by André Weil, so I simply memorized the English translation of the first chapter of the book.

When I went to take the exam with Professor Moore, however, he gave me a French calculus book instead and asked me to translate the first few pages. He thought that it would be easier for me. I read the first page, which started with "Nombres," or "Numbers." Though I could roughly guess the meaning, my translation was very halting and probably incorrect. Finally I told him I had studied the book by Andre Weil but not this book. He gave me Weil's book and asked me to translate the first chapter. That is how I passed the French exam. I passed the General Exam in May by the end of the first year. Thus I survived the first year at Princeton after a shaky start.

After the exam, I decided to work with Professor Kohn in several complex variables since I always liked complex analysis. Professor Kohn was the first one to solve the $\overline{\partial}$-Neumann problem on strongly pseudoconvex domains, and his solution is called "Kohn's solution". The Gunning and Rossi book on several complex variables, which I had studied for my exam, uses sheaf theory, a more algebraic approach. It is completely different from Kohn's approach, which uses partial differential equations. The first thing for me to do was to read Folland and Kohn's book, *The Neumann Problem for the Cauchy-Riemann Complex* and to read Kohn's original papers. After about one year, the Folland-Kohn book had fallen apart and I gradually understood the subject. In my second year, I sat in the same courses under the same titles as the first year, but they began to make sense to me now, when in the first year, they had all seemed so intractable. Kohn lectured on his influential paper on sufficient conditions for the $\overline{\partial}$-Neumann problem using the multiplier ideals, a paper he had just completed.

After one semester in the second year, Professor Kohn gave me a warmup problem to do before giving me the real thesis problem. The warm-up problem was to study the $\overline{\partial}$-Neumann problem on piecewise smooth strongly pseudoconvex domains. I remembered distinctly that he told me that he expected me to finish the warm-up problem in three to six months. He also emphasized that it would not be enough to be a thesis problem. The real thesis problem will be on multiplier ideals. At that time, the solution of the Cauchy-Riemann equations on piecewise smooth strongly pseudoconvex domains had already been obtained a few years prior using integral kernels by Range and Siu. Thus he thought it would be a routine exercise to do the $\overline{\partial}$-Neumann problem on such domains. He asked me to do a report on the Range-Siu paper on the solutions for the Cauchy-Riemann equations using kernel method. It was very difficult for me to read the paper without prior knowledge of the kernel method. I muddled through the paper and did a report in Kohn's graduate course, but it was years before I completely understood the kernel method in several complex variables. At the same time, I was also studying Hormander's *An Introduction to Complex Analysis in Several Complex Variables*. Kohn's subelliptic estimates, Hormander's L^2 method, and the kernel approach were the three major attacks on the Cauchy-Riemann equations. Later I realized that perhaps the idea of total immersion might not be too bad. By exposing graduate students early to the forefront of research, they had a broader scope and became very independent (for those who survived). At that time, I felt very inadequate, and I was not alone.

During my third year, there were even more activities in the department and at the Institute for Advanced Study in Princeton. Charles L. Fefferman was giving a course in the department for the first time after many years on leave. I was taking courses from John Erik Fornaess and learned a lot of the counterexamples in several complex variables. I also took courses at the Institute for Advanced Study that year, including lectures by Louis Nirenberg and Shing-Tung Yau on nonlinear partial differential equations. That was a special year in differential geometry at the Institute, organized by Shing-Tung Yau. Every Wednesday morning at 8:00 am, Yau would give a lecture on nonlinear equations and his solution to the Calabi conjecture. The auditorium room was packed with mathematicians from all over the world. I still remember the excitement one felt during those lectures. I also met many mathematicians that year, including Professor Shing-Shen Chern. At Princeton, one was always surrounded by so many brilliant people, not only people in several complex variables, but also in other fields. At times it could be intimidating, but it was most stimulating. One thing I learned early there at Princeton was that one has to work very very hard, and hard work is only the necessary condition. I still do not know what the sufficient conditions are, if there are any.

After working on the warm-up problem for almost one year with not much progress, I was very

frustrated. Everything turned out to be the opposite of what Kohn had expected on non-smooth domains. The boundary value problem on smooth domains cannot be generalized to non-smooth domains except the basic L^2 theory, which had been obtained in Hormander's seminal paper in 1965. Anything beyond that required new techniques, so it was premature to expect to solve the problem at that time. Even the easier Hodge theorem on non-smooth (Lipschitz) domains was not understood at all. I obtained some results on the special case for the Hodge theorem on Lipschitz domains with conical singularities. That turned out to be my thesis. The Hodge theorem on general Lipschitz domains was not solved until three decades later, published in 2001 by Dorina Mitrea, Marius Mitrea and Michael Taylor in a Memoir of AMS (American Mathematical Society). A few years later, Dorina, Marius and myself gave another proof of the theorem. At the time, I felt very bad about not being able to solve even the warm-up problem.

3.2 The Winding Road to Notre Dame

After I finished my Ph.D. at Princeton in the summer of 1981, I took a post-doc position at Purdue University. The head of the Math Department was Salah Baouendi. I had met him the previous year at a conference organized by F. Treves at Rutgers. He was an extremely energetic person and very active in research. There were a lot of activities and people around him at Purdue. When I first arrived at Purdue, I only knew that I did not want to continue my graduate work on domains with corners. I attended the seminars and talked to Baouendi and Baouendi's student, Chin-Huei Chang, often. Chin-Huei Chang was also from Taiwan University and he was working with Baouendi and Treves on the real-analytic hypoellipticity of vector fields. Within a few months, I found a problem related to their question, but in the smooth category. The special case of this question was already known by the Kohn-Rossi theory, so it was related to what I had studied before. Within a few months, I solved the problem.

Right after I finished writing the paper, a former student of Hormander and a visitor at Purdue that year, Anders Melin, told me that the result I got was already known earlier from Egorov-Hormander's theorem, once the problem is micro-localized. I was devastated by this blow. Baouendi told me that I should still submit the paper since my new method itself would justify a paper, but make it clear that the result was known from the microlocal technique. I submitted the paper and it was accepted later that year. He also gave me very practical advice on how to write a paper or a proposal. He asked me to submit a proposal to NSF for my own research, even though the chances of getting funded were small, and he even gave me a copy of his own proposal as an example to follow. He advised me to read the classic papers by Kohn and Hormander and imitate how they write. I remember his sometimes blunt advice clearly: "Every sentence has to have a comma or a period. Do not invent your own English." Later, I often repeated this same practical advice to my own students and postdocs.

At the beginning of the second year, I had to look for another job since my position at Purdue was only for two years. Having only two papers accepted but not yet published (the other one was based on my thesis), I did not hear anything from any department. By the end of March, I was about to be ready to make a "Plan B" when a phone call came from the head of Texas A&M, Dr. E. Lacey, inviting me to interview for a tenure-track position. At that time, Al Boggess was the only person I knew in the department and he was the main advocate for my hiring. I got the job in April and no Plan B was necessary.

That summer, I married my husband, Hsueh-Chia Chang, a fellow graduate student from Princeton. He was born in Taiwan, but left when he was eight and lived in Malaysia and Singapore before coming to the U.S. But he was teaching at UC Santa Barbara at that time. The two-body problem was not easy to solve either.

Texas A&M is in the middle of nowhere, just like Purdue, but everything is bigger in Texas. The school was also unique because of the presence of so many cadets on campus. They always addressed me as "Ma'am". It took me sometime to get used to the Texas drawl. But mathematically, we had very stimulating seminars with many young participants who had similar interests. One year later after I arrived, Harold Boas was also hired.

Al Boggess was a student of John Polking and he was an expert on the kernel approach in complex analysis. In the seminars, he gave a series of lectures on integral kernels and was a great teacher. It was there I learned the kernel approach to the Cauchy-Riemann equations and the tangential Cauchy-Riemann equations. The paper by Range-Siu which I studied by myself with great difficulty as a graduate student now became easy to understand with the new interpretation using the work of Harvey-Polking. Very soon Boggess and I found a problem to work on together and wrote a paper on the local solutions to the tangential Cauchy-Riemann equations. This was the first collaboration I had with another mathematician. I realized the importance of having collaborators. Not only did each of us bring new ideas and different perspectives, but the interchange of ideas was so stimulating that new results could come out that would otherwise be impossible.

I also continued my research on the global L^2 existence and estimates of solutions for the tangential Cauchy-Riemann equations. This work started when I was at Purdue. I continued to expound the problem and wrote two papers on related subjects. But there was one major obstacle to proving the main theorem. One day after teaching a course on finite mathematics (high school Math), a simple idea just came to me: using change of variables in calculus. Once this was thought through, I wrote the paper, L^2 estimates and existence theorems for the tangential Cauchy-Riemann complex. I decided to submit the paper to *Inventiones Math*, one of the best journals. I waited anxiously for five months until a letter arrived from the editor-in-chief informing me that the paper would be accepted upon satisfactory revision. There was still one case missing. I discussed the problem with Boas who was working on the regularity of the Szego projection at that time. We solved the remaining case in a few months and submit the paper to *Math. Annalen*. These papers established the L^2 theory and closed range property for the tangential Cauchy-Riemann equations on pseudoconvex boundaries. I also wrote a paper on non-linear partial differential equations as a result of talking to H. Brezis while he was visiting there.

After two and half years at Texas A&M, I decided to join my husband at the University of Houston, where he took a job as an associate professor. Without people of similar interests in the department, I realized how much I missed the collaboration I had with people at A&M. At Houston, I tried to attend the seminars at Rice University as often as I could, but it was not the same. After the department botched my early promotion to associate professor, I felt underappreciated there. I called Salah Baouendi to tell him about the situation. He told me to calm down since it was only an early promotion. He added that he would see what he could do. A few days later, Nancy Stanton, a math professor at the University of Notre Dame whom I had met at Princeton, called to ask if I might be interested at a position at Notre Dame. I went to Notre Dame for my interview on January 28, 1987 (exactly ten years after the letter of admission from Princeton), one of the coldest days I can remember. After the interview, Pit-Mann Wong invited Wilhelm Stoll and me to his house for dessert. Pit-Mann grew up in Hong Kong, but he attended National Taiwan University and was a classmate of Chuu-Lian Terng. Two weeks later, I received a phone call from the chairman Bill Dwyer offering me a tenured associate professorship at Notre Dame. I had been admitted to a very exclusive club of tenured professors of mathematics at a major research university. The criterion for membership includes proving a few good theorems. One month after I got my job at Notre Dame, my husband also got a full professorship at Notre Dame. The two body problem had now been solved. I was promoted to full professor in 1992.

After tenure, the rules of the game became different. The new struggle now was not to survive, but to become a better mathematician and to help others with similar aspirations. I was always flattered when people considered me to be a role model. I consider it a great privilege to have the opportunity to work with many mathematicians. I also received numerous invitations to give lectures or talks from all over the world, including countries in Asia and Europe, plus Egypt and Morocco. These invitations were great experiences for me. I worked on problems which I considered important and strived to be the best that I could be (Fig. 4).

Though I decided not to continue to work on the problems on domains with corners after Princeton, these problems were always on my mind. Since I came to Notre Dame, tremendous progress was made on the Dirichlet and Neumann problems on Lipschitz domains. Harmonic analysis on Lipschitz domains became a central theme of modern research. This made solving the $\overline{\partial}$-Neumann problem on Lipschitz domains possible. Finally I was able to prove, in a joint work with Joachim Michel, some partial results for the $\overline{\partial}$-Neumann problem on piecewise smooth or Lipschitz strongly pseudoconvex domains. I gave a talk at a workshop in November of 1995 at the Mathematical Sciences Research Institute (MSRI), founded by Chern in Berkeley, California. After my talk, some people in the audience who knew me from Princeton joked, "Finally she was able to do something with her thesis." They did not know that it was only the warm-up problem for my thesis. I also began to branch out into various different areas, including problems in complex geometry, on which I worked with Jianguo Cao for more than ten years until his untimely death.

One of the most rewarding experiences as a mathematician is to teach students, both graduate and undergraduate. I take great pride in seeing young graduate students or postdocs mature into mathematicians. Based on years of teaching experiences to graduate students on several complex variables, I decided to write a book on the subject with So-Chin Chen, another former student of J. J. Kohn. We met in college when he was a major in Electrical Engineering but was taking the complex analysis course in the Math department. We had similar outlooks on the subject and the two of us complemented each other. Our goal with this book was to bring the subject up to date and to write it as clearly as possible. We joked that it must be made so clear that *"we could explain it to someone on the street*." During the next four years, writing the book became so all-consuming that I was always glad

Figure 4. Professor Kohn's 60th birthday conference, Princeton, 1992. (Picture taken by Dan Burns.) Front row (from left to right): John Stalker, Gerald Folland, John D'Angelo, Joseph J. Kohn, Donald Spencer, David Catlin. Second row: So-Chin Chen, Pengfei Guan, Mei-Chi Shaw, Lop-Hing Ho, Ricky Diaz. Third row: Jeff McNeal.

when it was over. The book *Partial Differential Equations in Several Complex Variables* was published in 2001 and well-received. It has been most rewarding to hear from people, from the most prominent researchers to beginning students, who find the book useful.

My proudest moment was when Shing-Shen Chern wrote the preface of an article "On Several Chinese Women Mathematicians" in the Chinese magazine "Zhuan Ji Wen Xue" ("Biographical Literature") in 1995[1]. This is still a popular magazine in Taiwan today. Chern's own autobiography, "Studying Mathematics for Forty Years," appeared in that magazine in 1964. In the preface, Chern called the six women mathematicians from National Taiwan University, Sun-Yung Alice Chang, Wen-Ching Winnie Li, Fan Chung, Jang-Mei Wu, Chuu-Lian Terng and myself, "… a miracle in Chinese history; the glory of the Chinese people." The first four were in the same National Taiwan University class in 1970 and became legendary in Taiwan. I did not bother to tell my family in advance, so when my father read the article, he was beside himself, as if I had just won the Nobel Prize. When I assured him that I was not that famous nor did I deserve such praise, my father said, "If Mr. Shing-Shen Chern said so, then you are to me." (Fig. 5).

[1] For a copy of the article, see http://www3.nd.edu/meichi/miscellaneous.html.

I had met Chern a few more times after I had left Princeton. Over the years, I always reminded myself, "You must not make the great mathematician Chern look like a fool." In 2001, I went to a special conference in honor of his ninetieth birthday in Taipei hoping to thank him in person. Unfortunately he was too weak to make the trip from Tianjin, China. I wrote a letter to thank him again for his extreme generosity in praising Chinese women mathematicians, along with a copy of our book. He graciously acknowledged the receipt of our book (with more praise) and invited me to visit him in Nankai, Tianjin. I wished I had.

Looking back, I have been very lucky to have had jobs at Purdue and Texas A&M, which later became powerhouses in several complex variables. The two places might not have been the most exciting places to live, or the most glamorous. But for me, they were the best places for me at that stage of my career. It was a time for me to slowly mature into a mathematician. Notre Dame is another place in the middle of nowhere, but it suits my disposition well. Along the way, I have been helped mathematically and otherwise by many friends and colleagues. I had also been extremely lucky to have been able to do the things I love for a living. It was sad for me that Wilhelm Stoll, Pit-Mann Wong, Jianguo Cao and Salah Baouendi all passed away within the past three years. I will always remember their warm friendship in my heart (Fig. 6).

Figure 5. Woman Mathematician Forum, National Taiwan University, July, 2009. (http://www.tims.ntu.edu.tw/exlink/ntumath2009/week2-2.html.) Panelists from left to right: Yng-Ing Lee, Wen-Chin Winnie Li, Sun-Yung Alice Chang, Chuu-Lian Terng, Mei-Chi Shaw and Fan Chung Graham.

Figure 6. Giving a talk at Phong's 60th birthday conference, Columbia University, May, 2013 with Louis Nirenberg and Xiaojun Huang in the audience. (Picture taken by Christina Sormani.)

4. Journey to the Village Leiyang, Hunan

In May 2008, I visited the Math Department at Fudan University in Shanghai for one month. Since my first trip to China in 1987, I have visited China often, mostly to give lectures at universities. This time, my younger brother Chang-Yu was also in Shanghai on a business trip. One day I called him to ask if he was interested in visiting Hunan Leiyang, our mother's hometown. He said that he was also thinking about it. Thus the two of us embarked on a root-finding

trip to Leiyang years after both our parents passed away.

We first flew to Changsha, the capital of Hunan, and took a bus to Hengyang, the largest city near Leiyang, where my parents took the last available flight out of Hunan to Taiwan in 1949. After staying at a hotel in Hengyang, we met our cousin, my mother's nephew, the next day before we hired a taxi to the Leiyang village. The four-lane highway became two-lane, then one-lane before it turned into a dirt road across the rice fields. The taxi driver refused to continue for fear that the car might fall into a ditch. He agreed to continue only after we promised to pay him more. After a few turns on the dirt road, suddenly a small village appeared in the distance before us. The village was hugged by small hills at the back. It was such a beautiful sight that it reminded me of those small Italian towns in Tuscany, but surrounded instead by lush green fertile filelds. The taxi driver exclaimed, "This is really good Feng-Shui!" Even he was excited.

After we passed a pond, we first saw a very symmetrical two-story building with a Chinese character "Shou" (meaning longevity) written in the middle of the second story. Our cousin told us that it was the ancestral worship place of the Liu family. The building was built of local blue bricks, famous for their durability. Leiyang is not only rich in agricultural products, but also rich in a special kind of coal. The coal generates an especially high temperature in order to make the blue bricks. The brick is actually white but develops a bluish patina after years of wear, which makes it more beautiful. The building was now empty with nothing left in the interior and all the windows were gone, yet it was still standing with its beautiful exterior.

While I was admiring the beautiful remains of the old building, an old gentleman came and asked whom I was looking for. It was unusual for strangers to come to the remote village. I told him that I was not looking for anybody, but my mother used to live here. He looked surprised and asked who my mother was. I told him that my mother's name was Liu Lan-Fang. He looked more than surprised, almost shocked. Then he told us to wait for a moment. Within a few minutes, the old gentleman came back with another old man, to whom he introduced us. The old man did not say a word, but took us to the front door of my mother's ancestral home. The door was gone but the two large columns which framed the door were still there. My mother used to tell us that her family motto was inscribed on the columns by the door: "Art and Literature enlighten the world. Sincerity and Kindness run in the family." One could still see some characters on the column. There used to be two lions in front of the gate of each house, but now the lions were gone, destroyed during the Cultural Revolution. When we entered the gate, there was a courtyard in front of us with two-story brick buildings on both sides. I could only imagine what a beautiful country home it must have been, but now it was very dilapidated.

The old house had more than thirty rooms and was now occupied by eight families. The old man pointed to a room where my mother used to live, but now the room was locked and we could not enter. We continued across a low gate and came to the kitchen, the wine cellar and the stable. When we were young, we used to laugh at our uncle's stories about horse riding and hunting as jokes. We always thought that our uncle was bragging. Now it turned out to all be true. Further down, after exiting the house, we entered another house similar to the previous one. That house belonged to my mother's uncle. The two brothers lived side by side just like in the classic Chinese novel, *Dreams in the Red Chamber*. My grandfather died when my mother was only eight. Her uncle was like a surrogate father to her.

By the time we finished touring the house, all the villagers had come to see the "two strangers." It was a scene that reminded me of a story my father told us. When he came to my mother's home to meet her family for the first time at the end of the war, the whole village came out to see "Lan-Fang's husband" before he even entered the house. My mother's family was very much against their marriage in the beginning. My parents fell in love and decided to get married in Chengdu, Sichuan during the war, despite opposition from both families. Such a thing was unheard of at that time in the village. Her family had other plans for her marriage, but after a beautiful grandson was born, my mother brought the child back to her family and they finally reconciled. To the great sadness of my parents, the child died of strep throat at age three in Leiyang. When my father visited there, the family welcomed the handsome son-in-law wholeheartedly with a feast that lasted three days.

I suddenly realized why my mother was very often unhappy when we were young. Growing up in Taiwan, there did not seem to be a day that our mother would not miss her home and the people in Leiyang. The sudden change from the richest family in Leiyang to the almost refugee-like existence in Taipei was probably too much for anyone to take. When my mother left home in 1949, she was only thirty. By the time she returned, she was sixty seven. Seeing how the home lay in ruins, she was heart broken. Yet she was an optimist, and did her best to raise six kids under the most trying circumstances.

On our way back to Shanghai, my brother and I sat in total silence. We always knew that our mother was special. Now we knew just how special and why (Fig. 7).

Figure 7. My mother's ancestral home in Leiyang, Hunan.

5. Journey to Sichuan

My mother was not the first woman from her village to attend Wuhan University—she was the second. The first was her cousin, Liu Lang, who was considered a revolutionary in her time. She defied her family's arranged marriage and later married a communist. My mother admired her very much. After attending the elementary school run by her family, she followed the footsteps of Liu Lang to attend high school in Changsha and then Wuhan University in 1938. At that time, the Sino-Japanese war had already been going on for more than a year. The Nationalist government had lost Shanghai, Nanjing (the capitol city), and the eastern half of China, and had reestablished the government at Wuhan. Within a few months, the government decided to move further west to Sichuan, a province with fertile land surrounded by tall mountains. It is a place called "Heaven on Earth" with natural barriers, easy to defend and difficult to invade. The administration at Wuhan University also decided to move the entire faculty and students to Leshang, Sichuan.

The journey from Wuhan to Sichuan was most treacherous. By boat, one has to pass through the Three Gorges, whose famously beautiful scenery has inspired many poets and writers over thousands of years. By road, there was no highway at that time. By train, one could only get to Quiyang, Quizhou, and go from there. But the tickets were difficult to get since all the available resources were used to transport government personnel and military. My mother and her best college girlfriend got on the train from Wuhan to Quiyang. It was on this train that she first met my father. As fate would have it, my mother and her friend boarded the same compartment where my father and his fellow officers were sitting. He was a dashing twenty-six year old Air Force officer dressed in full uniform. My mother was not yet twenty, dressed in her westernized Chinese clothes. Immediately they struck up a conversation and found out not only that they both loved literature, but that they shared similar dialects. Though my father was from Guanxi province, a province adjacent to Hunan, the village he grew up in was very close to Leiyang. There is such a thing as love at first sight.

I always wanted to visit Sichuan to retrace the footsteps of my parents in Chengdu and Leishan. For some reason, I never got to do it until the summer of 2012. The moment I got off the plane in Chengdu, the capital of Sichuan, I thought I was back to the Taipei Air Force Primary School again. The language came back to me, though I had had little chance to use it except when my friend Yu-Tarn came to visit me. Not only the language, but the food and the people seemed all so familiar to me. The Sichuan people have a reputation of being hot-tempered, which many attribute to the hot spicy food. The Sichuan women were noisy and laughed out loud, just like us. I realized I have a lot of Sichuanness in me. I also visited Leishan, where my mother studied for two more years before marrying my father. Leishan is in the foothills of Emeishan, the sacred buddhist mountain. It is also at the confluence of three rivers. There is not much

left in Leishan today except the famous Giant Buddha, still guarding the rivers.

One of my favorite pictures of my parents was taken in 1939 in Chengdu at the tea house in "DuFu Thatched Cottage." DuFu was my mother's most favorite Tang dynasty poet. My father took the picture of the two of them and gave it to my mother. The two of them looked so handsome and so happy together during that period in the middle of the Sino-Japanese war. I have the picture on my desk in my home office in Indiana. Last summer, when I sat at exactly the same place in Chengdu, I realized that perhaps Sichuan was the place that they wanted to remember. This fond memory existed in many people in the Village of Righteousness and survived to the next generation in me and my Sichuanese-speaking classmates. Most parents in that village spent many years in Sichuan fighting the difficult Sino-Japanese war, but it was a war worth fighting. Later, after losing the civil war and the hasty retreat to Taiwan, they tried to cling to the good memories and forget about the painful defeat. They also did their best to cling to the Chinese traditions and teach their children to be proud even under most difficult conditions. Thus every Chinese holiday was celebrated with fanfare and the Chinese culture was proudly preserved on that part of the remote island. Over the years, I always felt that I cannot fail, since my failure would be not just for myself, but for two generations. I carried the torch of their dreams from Sichuan. I can only hope that I have lived up to the premonition of the fortune teller, which my mother so firmly believed (Fig. 8).

Figure 8. My Parents in Chengdu Sichuan 1939.

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