

Modern Mathematics Bole - Xiong Qinglai

Yazi Wang¹, Yanling Wu¹, Hongjie Li^{1*}

1. Zhoukou Normal University, Zhoukou Henan 466001, China

*Correspondence author

ABSTRACT. *Xiong Qinglai, a famous mathematician and educator in China, has made outstanding contributions in the field of function theory. He is famous for his theory of "Infinite Number of Xiong". He is good at discovering talents and is called Bole in Chinese mathematics.*

KEYWORDS: *Xiong qinglai; Mathematics; Bole*

1. Introduction

Xiong Qinglai (1893-1969.), the word Dizhi, Yunnan Maitreya. Master of modern mathematics in China, he successively founded the Department of Mathematics of Southeast University, the Department of Mathematics of Tsinghua University, and the Journal of Chinese Mathematics. Under his cultivation, Chen Shengshen and Hua Luogeng became world famous mathematicians. In addition, Duan Xuefu, Zhuang Yutai, Yang Le, and Zhang Guanghou are also their disciples, and have made significant contributions to the development of mathematics in China.

2. The Master of Mathematics Road to School

Xiong Qinglai, born on October 20, 1893 (November 11th of the lunar calendar), was born in Xizai Village, Zhuyuanba, Maitre County, Yunnan Province. His father, Xiong Guodong, served as an official in charge of education. In 1906, his parents brought Xiong Qinglai to his place in Zhaozhou. Xiong Qinglai and his father stayed together. The father invited him to two more famous tutors to teach him foreign languages, mathematics and other natural sciences.

In 1907, Xiong Qinglai came to Kunming, admitted to the Yunnan Dialect School, and later admitted to the Yunnan Advanced School Foundation. In 1909, Xiong Qinglai was promoted to the undergraduate. In the same year, he and Jiang Juyuan became married - his success is inseparable from his wife's obscure dedication. Good things are in pairs, Xiong Qinglai studies harder, both professional and foreign languages, the results are very good.

Xiong Qinglai is not only very good at learning, but also very concerned about the fate of the country. At that time, Yunnan was carrying out the recycling of the mineral resources of Yunnan Qifu, and Xiong Qinglai also actively participated in

the campaign. However, under the ignorant and corrupt government of the Qing Dynasty, the young Xiong Qinglai was detained by the school for participating in the patriotic movement.

At the beginning of 1913, Xiong Qinglai was awarded the Belgian public student with the third place. It takes half a year from the hometown of Yunnan to Belgium, and this is not going back for eight years. It is no wonder that the family are worried about Xiong Qing. I even want to persuade him not to go. Xiong Qinglai wrote a poem: "Grandmother loves Sun, loves you, and speaks to Mingda." It is a future for the wind and waves, and the dance is effective for the future." Xiong Qinglai, a group of international students, was sent to Yunnan history. The second outstanding representatives of studying in Europe and America. For this trip, Xiong Qinglai's people are very excited. They think of the cultivation of their hometown and the backward reality of their hometown. They feel that their responsibilities are heavy.

In 1934, Xiong Qinglai's paper "On Infinite Entire Functions and Meromorphic Functions" was published, and he obtained his Ph.D. The "infinite function" defined by him in the paper, internationally known as "Xiong's infinite number", Xiong's infinite level, has exerted considerable influence on the research of later world function theory. Like "Xiong's infinity" The important results of the international name named after the personal names of Chinese scientists were very rare in that era, even in the contemporary era! Xiong Qinglai used his ingenuity and perseverance to let the world know himself!

3. The Master of Mathematics Bole Feelings

One day in 1929, Xiong Qinglai, who was then the head of the Department of Computing at Tsinghua University, in his office, occasionally flipped through a magazine published in Shanghai at the time, Science, and saw an article: "The Fifth Formula of Sujiatun's Algebra The reason why the solution cannot be established." Xiong Qinglai knew that Su Jiaxuan had published an article in the journal Science to discuss the solution of the algebraic fifth-order equation. Now some people have denied his conclusion, and Xiong Qinglai's curiosity has come up. The more Xiong Qinglai read, the more I feel that this article is written well and the deduction is correct. He found the signature under the title of the article - Hua Luogeng. Xiong Qinglai, through many inquiries, finally learned that Hua Luogeng dropped out of school after graduating from junior high school, and later became a teacher at Jintan Middle School. Xiong Qinglai, who is thirsty, immediately managed to transfer Hua Luogeng to Tsinghua University and personally guided his self-study. Hua Luogeng encountered difficult problems in his studies. Xiong Qinglai often lends him several reference books, which allows him to obtain theories from books and improve his ability and thinking through independent thinking and solving problems.

Xiong Qinglai asked Hua Luogeng to organize books, materials, and copy documents and cards. In this way, Hua Luogeng studied mathematics while working, and soon he finally reached the level of knowledge of undergraduates in the Department of Computing. A year later, he was hired as a teaching assistant in the

Department of Computing. A few years later, Hua Luogeng became a great mathematician who was well-known both at home and abroad. Later, there was an anecdote. Xiong Qinglai went to Yunnan University to be the principal. The student actually only knows that there is Hua Luogeng, but he does not know his principal, the mathematician Xiong Qinglai. At the beginning of the founding of New China, Chairman Mao Zedong personally met with Hua Luogeng, and major newspapers and magazines also introduced the life of Mr. Hua Luogeng. Mr. Hua Luogeng did not forget his own teacher. Every time he talked about Xiong Qinglai: "Know me, Mr. Xiong." Hua Luogeng rarely shed tears, but when Xiong Qinglai died, Hua Luogeng's tears could not be suppressed!

In the autumn of 1930, the Department of Mathematics of Tsinghua University enrolled a graduate student, Chen Sheng, a mathematics master who influenced the world in the future, and studied under Xiong Qinglai. Chen Shengshen recalled: "In 1930, when I graduated from Nankai University, I witnessed the tremendous progress of Chinese science. The Tsinghua University in Beiping was in the development center, and it was a thriving scene." The formation of the thriving scene of the Department of Computing at Tsinghua University is closely related to Xiong Qinglai. together. He has nothing to do, and he has all asked. In the early 1930s, the Tsinghua Department of Computing for the purpose of cultivating high-level talents became the cradle for cultivating modern Chinese mathematics talents, because Xiong Qinglai was eager to hire excellent teachers, arrange courses, promote academic research, and vigorously add books.

In the 1960s, Xiong Qinglai focused on the study of meromorphic functions, actively promoted the advancement of mathematics research in China, and devoted himself to cultivating more advanced mathematics talents. The seminar on complex variable function theory in Beijing was established. It was held once every two weeks in the residence of Xiong Qinglai. During this period, two outstanding graduate students, Yang Le and Zhang Guanghou, were trained. Later, as the chairman of the Chinese Mathematical Society, Yang Le recalled, "Mr. Xiong not only guides us in the business direction, but also spares no effort to specifically help us, so that we have laid a good foundation and move toward the function value distribution theory faster. The frontiers in the field of research, no use of him will not have me to achieve these results today!"

Even as early as 1921, when Xiong Qinglai taught at Southeast University, he discovered a talent called Liu Guang. Liu Guang is very serious in studying. When he encounters a problem, he always has to rack his brains to solve it. Xiong Qinglai appreciates this spirit very much. Now he wants to graduate. It is best to let him have the opportunity to continue studying abroad. However, Xiong Qinglai understands Liu Guang's family and the family has no power to go to school. This makes Xiong Qinglai very anxious. On a sunny afternoon, Xiong Qinglai invited several professors to sit at his home. Xiong Qinglai told the professors a small story, saying that there is a famous big mathematician in France, called Poller. During his studies at the Paris Normal School, he had a good Chinese friend called Corning. Corning studied very well, and Poller admired him very much. It is a pity that after returning to China, Corning did not receive the attention it deserved, and was

unfortunately killed by a Belgian. After reading this story, Xiong Qinglai felt with emotion: “Our country is backward, science is making slow progress, and talent is being wasteless. It seems to be a very important reason--” The professors guessed that Xiong Qinglai discovered talents, and they did not agree. The name of Liu Guang came out. Xiong Qinglai said emotionally: “Our Liu Guang is about to graduate. He should go abroad to receive a better education. However, his family conditions are particularly bad. We can’t see him go to Corning again. Overwhelming!” Professors have expressed their willingness to fund Liu Guang’s going abroad.

Once, in order to send Liu Guang a living expense, Xiong Qinglai actually sold his own leather jacket. Liu Guang later often said: “The professor sold me a leather robe for ten years. I heard it ten years later. At that time, I was moved to tears. I am deeply impressed with me, and I can’t forget it forever. How much he cares about our generation, how much enthusiasm and love you have paid!”

This is just a microcosm of Xiong Qinglai’s discovery of talents and the cultivation of talents. His life-long work, almost all his life and energy spent on China’s scientific research and education, has personally created the three major universities in modern China (National Southeast University, National Tsinghua University, National Yunnan University) Cultivate a large number of outstanding talents and improve the influence of Chinese mathematics in the world.

4. The Patriotic Feelings of Mathematics Masters

In 1949, after Xiong Qinglai went to Paris to attend the UNESCO General Conference, he stayed in Paris and continued his scientific dream. But unfortunately, in 1950, he suffered from a cerebral hemorrhage, which led to a paralysis of his right body. Xiong Qinglai struggled with the disease with amazing perseverance. Every day, he insisted on writing with his left hand. After one year, the left handwritten words were as skilled as the right hand. With the help and active treatment of friends, the body gradually improved.

In 1954, Hua Luogeng led a Chinese delegation to Switzerland to attend the World Mathematical Congress. He took a letter from Premier Zhou to Xiong Qinglai: “I am very happy to hear that you decided to return to the motherland. The motherland welcomes you, the people welcome you! Welcome You are coming back to participate in the great cause of socialist construction!” Xiong Qinglai read the letter and was very excited and happy. He wrote back that France is working out a set of mathematics books, in which the task of writing on the functional theory part is gloriously falling on a Chinese. (that is, he himself), after he was drafted, he returned to the motherland.

One afternoon in July 1957, Zhongguancun Institute of Mathematics, Chinese Academy of Sciences. Xiong Qinglai spoke at a conference welcoming his return to China: “Today, I have to join the ranks of science. I have to join the ranks. The victory in science is like the victory in war. The acquisition often requires the power of the majority. I am willing to do my best in the academic construction of the

motherland in the light of socialism!” In the warm applause, Hua Luogeng, the director, held the hands of his own teacher.

In the “Cultural Revolution”, the sick Xiong Qinglai was also attacked and persecuted, but he never complained, always in the interests of the country. Until the day before his death, he also said that he would do his best for the people and die. Before his death, Xiong Qinglai saw his own students become the pillars of the country. He saw his students train the second generation of young mathematicians (such as Hua Luogeng) and physicists in China to see China’s first atomic bomb explosion. All this made him feel relieved of this life.

Mr. Lu Xun once said: “I am like a cow, eating grass, but squeezed out milk and blood.” This sentence is a true portrayal of the dedication of the millions of intellectuals of Chinese clan and also to mathematics. Master Xiong Qinglai’s portrayal of the spirit of “ Do your best, die and then”.

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