

中國橋魂

——茅以升画传

北京交通大学出版社

内 容 简 介

本书以大量珍贵的历史照片和翔实的史料，展示了中国知识分子的楷模茅以升教授伟大、平凡而传奇的一生。

茅以升教授是我国著名的桥梁专家、教育家和社会活动家。

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人生一征途耳，其
长百年，我已走过十之七
八，回首前尘，历历在目，崎
岖多于平坦，忽深谷，忽
洪涛，幸赖桥梁以渡，桥
何名欤，曰奋斗。

以升



前言

茅以升教授是我国著名的桥梁专家、教育家、社会活动家。自束发就学，便立志发奋图强。早年留学美国，获博士学位，学成后旋即回国，将毕生精力投身祖国建设事业。在20世纪20年代至50年代，先后出任唐山交通大学、东南大学、河海大学、交通大学贵州分校、北洋大学、北方交通大学教授和校长。30年代，主持建造了由中国人自己设计的第一座铁路、公路两用桥——钱塘江大桥，开创了我国现代桥梁的先河。在武汉长江大桥的建设过程中，作为中国专家技术顾问委员会的主任委员，为这座新中国建设的第一座现代化大桥贡献了自己的智慧。在北京人民大会堂建设中，作为结构审查组组长，周恩来总理指定由他审定设计方案并签字，承担人民大会堂结构安全责任。他主持编撰的《中国古桥技术史》，是我国第一部古桥建筑史。他担任铁道科学研究院院长达三十年之久，为我国铁路运输事业提供了大量科研成果，培养了大批科技人才。

茅以升教授是一位与时俱进的爱国主义者和社会活动家。抗战前后他对钱塘江大桥的建桥、炸桥、复桥就是最好的证明。新中国成立后，他先后出访东、西方14个国家，大力宣传新中国的建设成就，同侨居海外的科技人员广泛联系，满腔热忱地提出“报国有门”的主张。他顾大局、识大体，拥护共产党的领导和社会主义制度，最终由一个民主主义者转变成共产主义者。

茅以升教授生前曾任第六届全国政协副主席、九三学社中央名誉主席、中国科协名誉主席、欧美同学会会长、交通大学校友总会名誉会长等职。

我们出版这本画册，旨在追思遗范，轶念勋劳，光大茅以升教授生命不息、奋斗不止的精神，以激励广大知识分子为振兴中华、建设和谐社会而奋斗！

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Foreword

Professor Mao Yi-sheng was a well-known bridge expert, educator and social activist. He cherished great ambition even when he was only a child. In his youth he studied in the USA winning doctor's degree. Immediately after the completion of study he returned to China and since then began his lifelong striving for the development of the motherland. From 1920s to 1950s he was successively the professor and president of Tangshan Jiaotong University, Southeast University, Hehai University, Jiao Tong University-Guizhou Branch, Beiyang University and Northern Jiaotong University. In 1930s he designed and supervised the construction of Qiantang River Bridge, the first highway/railway bridge ever designed and constructed by Chinese. During the construction of Wuhan Yangtze Bridge he served as the chairman of the Chinese Technical Advisory Committee, offering his wisdom to this first modern bridge of the new China. In the project of the Great Hall of the People he was appointed by Premier Zhou to examine the design plan and signed up to be responsible for the structural security. He was the chief editor of **History of China's Ancient Bridge**, which is the first of its kind in China. He held the post of the President of China Academy of Railway Sciences for 30 years, making great contribution to the research and education work in railway industry.

Professor Mao was a patriot and social activist. During the Anti-Japanese war, he blasted Qiantang River Bridge which was constructed under his own supervision to support the fight against Japanese. After the founding of the new China he visited 14 countries in the world to praise the achievements of the motherland and make friends with a great number of overseas Chinese researchers, urging them to seize the great opportunity to serve the motherland. He supported the leadership of the communist party and socialist system. In his later years he turned from a democrat to a communist.

Professor Mao was once Vice Chairman of the 6th National Committee of the Chinese People's Political Consultative Conference, Honorary Chairman of Jiu San Society, Honorary President of China Association for Science and Technology, President of Western Returned Scholars Association and Honorary President of Jiao Tong University Alumni Association.

We compile this album to commemorate Professor Mao's contribution to science and to carry forward his spirit of striving for the motherland's progress. His spirit will inspire Chinese intellectuals in their efforts to revitalize their nation.



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茅以升年谱

1896年1月9日 出生于江苏省丹徒县（今镇江市）五条街巷。父茅乃登，母韩石渠，祖父茅谦。

1916年 唐山工业专门学校（原唐山路矿学堂）毕业，考取清华学堂官费赴美留学。

1917年 获美国康乃尔大学土木工程硕士学位。

1919年 获卡内基—梅隆理工学院工学博士学位和“斐蒂士”金质奖章

1921年 任唐山交通大学（今西南交通大学）副主任。

1922年 任东南大学教授兼工科主任。

1924年 任河海大学校长。

1925年 任唐山交通大学校长。

1930年 任江苏省水利局局长。

1933年 任钱塘江大桥桥工处处长。

1938年 任交通大学贵州分校校长

1943年 任交通部中国桥梁公司经理兼总工程师。

1948年 当选中央研究院院士，任北洋大学（今天津大学）校长。

1949年 出席全国政协第一届大会，参加开国大典，任中国交通大学校长。

1950年 任中国科普协会副主席。

1950年 任北方交通大学校长。

1951年 出席世界科协大会。出访捷克斯洛伐克、苏联，兼任铁道科学研究所所长。

1954年起 当选全国政协第一至第五届委员，全国人民代表大会第一至第五届委员。出访苏联。

1956年 担任国际桥梁和结构工程学会会员，任铁道科学研究所所长。出访法国、葡萄牙、意大利、瑞士。

1957年 担任国际土力学及基础工程学会会员。出访英国。

1958年 当选中国科协副主席。

1959年 当选九三学社中央副主席。

1960年 出访瑞典、苏联。

1973年 出访日本。

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1978年 出席全国科学大会，成为中央电视台向全世界介绍的七位著名科学家之一。

1979年 获卡内基—梅隆理工学院颁发的“卓越校友”奖章。

1981年 他的著作《没有不能造的桥》获新长征优秀科普作品一等奖。

1982年 当选美国国家工程院外籍院士。

1984年 当选全国政协副主席，获加拿大土木工程学会荣誉会员称号。

1986年 主编《中国桥梁技术史》出版，翌年获中国图书奖荣誉奖。

1987年 10月12日 加入中国共产党。

1989年 11月12日 在北京逝世，享年93岁。



Chronology

1896 January 9. Born in Wutiaojie Street, Dantu County (today's Zhenjiang City), Jiangsu Province. His father is Mao Nai-deng, his mother, Han Shi-qu and his grandfather, Mao Qian.

1916 Graduates from Tangshan Special School of Railway Engineering (formerly Tangshan Railway and Mining College) and wins Tsinghua Study Abroad Scholarship.

1917 Receives Master's Degree in Civil Engineering from Cornell University.

1919 Receives Ph. D. of Engineering from Carnegie Institute of Technology (today's Carnegie Mellon University) and wins Fuertes Medal.

1921 Deputy Director of Tangshan Jiaotong University (today's Xinan Jiaotong University).

1922 Professor and Director of Engineering Department of National Southeast University.

1924 President of Hehai University.

1925 President of Tangshan Jiaotong University.

1930 Director of Water Resources Bureau of Jiangsu Province.

1933 Director of Project Office of Qiantang River Bridge.

1938 President of Jiao Tong University-Guizhou Branch.

1943 Manager and Chief Engineer of China Bridge Company, Ministry of Communications.

1948 Elected Academician of the Central Academy. President of Beiyang University (today's Tianjin University).

1949 Attends the 1st Chinese People's Political Consultative Conference and the founding ceremony of the People's Republic of China. President of China Jiaotong University.

1950 Vice Chairman of China Popular Science Society.

1950 President of Northern Jiaotong University.

1951 Attends the conference of the World Federation of Scientific Workers. Visits Czechoslovakia and the Soviet Union. President

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of Railway Research Institute of the Ministry of Railways.

1954 Visits the Soviet Union. Starting this year, the committee member of the 1st-5th Chinese People's Political Consultative Conference and committee member of the 1st-5th National People's Congress.

1956 Visits France, Portugal, Italy and Switzerland. Member of International Association for Bridge and Structural Engineering and President of China Academy of Railway Sciences.

1957 Visits England. Starting this year, Member of International Society for Soil Mechanics and Foundation Engineering.

1958 Vice President of China Association for Science and Technology.

1959 Vice Chairman of Jiusan Society.

1960 Visits Sweden and the Soviet Union.

1973 Visits Japan.

1978 Attends the National Science Conference and is one of the seven scientists introduced to the world by CCTV.

1979 Awarded the Medal of Distinguished Alumnus by Carnegie Mellon University.

1981 **No Bridges That Can Not Be Built** wins the First Class Prize of New Long March Excellent Popular Science Writing Prize.

1982 Elected foreign associate of American National Academy of Engineering.

1984 Elected Vice Chairman of the 6th National Committee of the CPPCC. Elected honorary member of Canadian Society of Civil Engineering.

1986 **History of China's Ancient Bridge** is published and wins Honorary Prize of National Chinese Book Award the following year.

1987 October 12. Joins the CPC.

1989 November 12. Passes away in Beijing at the age of 93.



领导接见

茅以升是我国著名桥梁专家，中国现代桥梁事业的奠基人。1916年留学美国，1919年获得博士学位后，旋即回国，效力国家。1933年至1937年，在极其困难的条件下，埋头苦干，殚精竭虑，攻克无数技术难题，建造了中国第一座铁路、公路两用现代化桥梁——钱塘江大桥，并经历了建桥、炸桥和复桥的过程，集中体现了在灾难深重的旧中国有良知的知识分子高尚的爱国情操和民族气节，彰显了中华民族刚强不屈的民族之魂。解放后，茅以升主持建造了武汉长江大桥，承周恩来总理指命，负责人民大会堂建设的结构安全。他是中国老一代知识分子的杰出代表和楷模，受到毛主席、周总理等党和国家领导人的高度信任和重用。茅以升不但是我国著名的科学家、教育家、社会活动家，也是一位杰出的国家领导人，在对外交往和团结侨居海外的科技工作者为国效力方面，也做出了杰出的贡献。

Interviews by Leaders

Prof. Mao Yi-sheng was a world-renowned expert in bridge engineering and founder of modern bridge engineering in China. He began his study in the USA in 1916 and returned in 1919 after winning both master's and Ph.D. degrees. From 1933 to 1937 he designed and supervised the construction of Qiantang River Bridge—the first modern highway/railway bridge in China. The project was carried out in very tough working conditions. With his strenuous and exhausted efforts, he overcame numerous technological problems. But the bridge had to be blasted after having been first completed because of the war and then rebuilt after the war. His actions showed the patriotic spirit of the Chinese intellectuals at the time and also reflected the unyielding tenacity of Chinese nation. In 1950s he supervised the construction of the Yangtze Bridge at Wuhan. In the project of the Great Hall of the People he was nominated by Premier Zhou Enlai to take charge of the structural security. Being an outstanding representative of intellectuals of his time, he enjoyed great trust and care from the Party and state leaders including Chairman Mao and Premier Zhou, and was given important tasks by them. Apart from being a scientist, an educator and a social activist, he was also an outstanding state leader. He was active in academic exchange with foreign countries and made efforts to encourage overseas Chinese scholars to serve the motherland.

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1956年2月，毛主席在怀仁堂接见出席第二届全国政协会议科学界的代表(图中左二为茅以升)



1963年3月，全国农业科技大会召开。毛主席在接见会议代表时对他说：“你写的《桥话》我都看了，写得很好，你不但是科学家，还是文学家呢。你现在还写吗？”茅以升当即表示：“请主席多指示，今后我还要写。”