

周明镇先生自落基山脉至南雄盆地的 学术马拉松

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摘要: 周明镇先生出生于五四运动前夜,其一生与中国近代史息息相关。先生出身书香门第,家境殷实,自幼聪颖,受新式教育,虽经战乱,学业未辍。他1943年毕业于重庆大学地质系,1947年赴美留学,获硕士和博士学位,其博士论文研究的是瓣鳃类化石。在普林斯顿大学作博士后期间,师从著名古哺乳动物学家杰普森教授,研究古近纪哺乳动物化石,1950年夏季随师在怀俄明州做野外工作。次年返国,任教于山东大学,1952年调入古脊椎动物研究室,遂成为杨钟健先生的得力助手。

周先生在学术上是通识之才,他不仅是中国古近纪哺乳动物系统研究的创始人,而且积极推动了新近纪和第四纪哺乳动物的研究,在其学术生涯的后期,还开拓了中国中生代哺乳动物的研究。周先生是继杨老之后的中国古脊椎动物学的帅才,他高瞻远瞩,爱才、识才、育才、用才,辅助杨老建立了一支精悍的科研队伍。周先生思想敏锐,密切关注国外学术发展趋势,借助其外语上的优势,及时将国外的新理论、新方法引介给国内同行。他在文革后为中国古脊椎动物学重新走向世界起了承前启后的重要作用。周先生毕生关注和推动古生物学的图书和出版工作,并积极推进中国自然博物馆事业以及其他科普工作的发展。周先生在学术上取得的成就以及获得的荣誉,是令人称羡的,但他及其家庭所做出的牺牲也是令人叹息的。

MINCHEN CHOW'S ACADEMIC MARATHON FROM THE BIGHORN BASIN TO THE NANXIONG BASIN

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Russell and Zhai (1987:21) point out that, "Although Eocene and Oligocene localities were known in China south of the Gobi in the 1920's, very little augmentation of the collections occurred until approximately the 1960's, when increased field activity on the part of crews directed by Minchen Chow was responsible for much new material collected and described." Minchen Chow's own report of the late Eocene to early Oligocene mammals from Yunnan and Guangxi provinces began to appear in 1957 (Chow, 1957). In the following three years, Chow published more than half a dozen papers on Paleogene mammals from Yunnan, Henan, Jiangxi, and Xinjiang. These works set the stage for the discoveries mentioned above by Russell and Zhai.

Paradoxically, this sudden surge of interest in Chinese Paleogene mammals was not accidental, given the fact that during the 1950s and early 1960s, the Chinese government promoted

geological investigations and Chinese vertebrate paleontologists seized this opportunity to expand their scope of exploration and research. It is, however, a historical accident that Minchen Chow, the principal organizer and a major player in these increased research activities, learned his trade in the Bighorn Basin, Wyoming from Glenn Jepsen, a vertebrate paleontologist at Princeton University. Chow spent the summer of 1950 with Jepsen's Princeton field crew, where he familiarized himself with North American Paleogene mammalian faunas. Before that, Chow had focused on the Pennsylvanian freshwater bivalves of Pennsylvania, as his PhD dissertation at Lehigh University. Thus, the seeds of passion for mammalian paleontology were sowed in remote Wyoming, and the harvest began only a few years later across the Pacific.

1 “The Return of the Prodigal Son”

Minchen Chow was born in Nanhui County (now a suburb of Shanghai), Jiangsu Province on November 9th, 1918, on the eve of the May Fourth Movement in 1919 that marked the beginning of a turbulent modern Chinese history. Consequently, that history profoundly branded his inner self and shaped the course of his life. Similar to the fateful experiences of many western-trained Chinese intellectuals of his generation, Minchen also lived his life like a grain of pollen floating on the roaring waves, being carried up and down and thrown into the ebbs or washed ashore. In pure Darwinian terms, the survival was a bitter struggle and the success a sheer luck.

Luck was plentiful for Minchen nevertheless. He was born into a well-to-do family as the eldest grandson, and enjoyed a comfortable life as a child, while many unprivileged children in the country were on the verge of starvation. His father was a professor of mathematics at a university in Shanghai, and his mother a well-educated woman. Minchen attended the best western-styled elementary and secondary schools China had to offer at the time. He, however, was too smart to be good in school, and he was especially spoiled by his grandmother. Even with his unusual innate ability and rare opportunities, he goofed off in elementary school and junior high. He became such an “embarrassment” to an honorable family that his father decided to disown him! That was a wake-up call for the young man, and he was determined to redeem himself. He went to Hangzhou, and enrolled himself into the Hangzhou High School, one of the best high schools in China at the time. He excelled at the Hangzhou High School, where he also met, and fell in love with, his sweetheart and future wife, Meichen.

2 Hooked on fossils

During the Japanese invasion of Shanghai and Hangzhou, Minchen fled to Chongqing, the wartime capital. In 1939, he was enrolled in the geology department at Chongqing University, studying paleontology under a distinguished roster of faculty with J. S. Lee and C. C. Young as courtesy professors. Minchen was a brilliant student, and upon his graduation in 1943, he immediately got a job with the Sichuan Geological Survey. He also moonlighted, part-time teaching and translating, to make ends meet.

After the World War II was over, Minchen took a job at the Taiwan Geological Survey in 1946. In 1947, he went to study at Miami University in Oxford, Ohio, and earned an M. A. there the following year. Then he moved onto a PhD program at Department of Geology, Lehigh University, in Pennsylvania in 1948, and finished his degree in 1950. His dissertation, entitled “Pennsylvanian Mill Creek Limestone of Pennsylvania”, dealt with some fossil bivalves. While a student at Lehigh, Minchen took some summer classes at the American Museum of Natural History and had the opportunity to meet the luminous vertebrate paleontologists George Gaylord Simpson, Ned Colbert, and Bob Schaffer. Minchen was immediately hooked on vertebrate fos-

sils and wanted to study vertebrate paleontology. Bob Schaffer sent Minchen to study with Glenn Jepsen at Princeton University. As Minchen recalled years later, that event changed the course of his life! If he had not met those gentlemen at the American Museum of Natural History, he would never have known what he might have missed.

Minchen spent the summer field season in 1950 with Jepsen's Princeton crew in Wyoming's Bighorn and Wasatch basins. In the North American Rockies, he found his first *Hyracotherium*, among many other typical Paleogene mammals. Minchen became familiar with these classical mammal localities and their rich faunas, which would benefit him for the rest of his life. Armed with his field experience in Wyoming and his intimate knowledge of North American Paleogene mammals, he was destined to become the founder of mammalian paleontology in China.

3 Return to the homeland

In 1951, Chow returned to China, and after a brief stint at Shandong University, he joined C. C. Young in Beijing at the newly established Institute of Vertebrate Paleontology and Paleoanthropology (IVPP) of the Chinese Academy of Sciences in 1952. During his early years at the IVPP, Chow toyed with fossils of various vertebrate groups, e. g., dinosaur eggs, turtles, and lizards. He also made substantial contributions to the study of the Chinese fossil proboscideans. In the late 1950s, his attention turned to Paleogene mammals. Among his most important contributions to mammalian paleontology was a systematic study of the Eocene mammals from the Lushi Basin in Henan Province between 1958 and 1973, which produced a dozen publications.

Chow was a co-leader (with the Russian paleontologist A. K. Rozhdestvensky) of the 1959–1960 joint Sino-Soviet paleontological expeditions to Nei Mongol (Inner Mongolia), an ambitious project aborted because of the souring of political relationship between the two countries. He later led or joined expeditions to Yunnan, Ningxia, Gansu, and Qinghai. Within the ten years before the Cultural Revolution, he published nearly 100 papers. More importantly, he managed to gather half a dozen devoted, hardworking, and promising young colleagues around him. He mentored them and together they laid a solid foundation for development of mammalian paleontology in China. Those were the most productive years of Chow's career.

Chow's second period of high productivity began when the Cultural Revolution was barely over. During this period, Chow and his colleagues resumed their research activities in the Nanxiong Basin, South China, which started in 1962 but were interrupted after 1966. They described numerous Paleocene mammals including endemic anagalids, pantodonts, and condylarths in the early 1970s, and this culminated in the publication of a monograph entitled "Mammalian fauna from the Paleocene of Nanxiong Basin, Guangdong" (Zhou et al., 1977) along with about 20 related papers.

Chow served as Director of the IVPP from 1979 to 1984. He was mainly responsible for bringing the IVPP to world prominence by promoting significant research, international exchanges, joint expeditions, and traveling exhibits. He remained engaged in research himself and turned his attention to Mesozoic mammals. He coauthored two papers with Tom Rich on a Jurassic mammal *Shuotherium* from Sichuan and a triconodontan *Klamelia* from the Jurassic of Xinjiang (Chow and Rich, 1982, 1984). The pseudotribosphenic *Shuotherium* documented a distinct branch of early mammals, Yinotheria, and remains puzzlement in early mammalian evolution. Chow's fascination with early mammals and their origin has inspired us to pursue this line of research; he would have been so pleased should he know that many Mesozoic mammals from the Jehol Biota have come to light since his passing. His legacy can never be overestimated.

Chow always had a particular interest in Quaternary studies, which are tied closely with hominid evolution, mammals around the early hominids, and climate changes affecting these or-

ganisms. He also led the long-term efforts in establishing the biostratigraphic framework for the Cenozoic terrestrial deposits in China and their global correlations on the international geological time scale. Minchen was a renaissance paleontologist, and his academic interests were all-encompassing. He was an early supporter of Plate Tectonics theory in China, and helped popularize it in numerous occasions. He always kept abreast on the newest disciplinary development in the West, and his fluent English helped him share it with his Chinese colleagues whose English was not sufficient to grasp theoretical aspects of the literature. Along with Mee-Mann Chang and others, Chow organized the Chinese translation of two anthologies on cladistics and vicariance biogeography in 1980s and 1990s respectively. These two volumes have had a huge impact on the Chinese colleagues beyond the field of paleontology.

4 Beyond Chow's publications

For more than four decades, Chow's influences on Chinese paleontology were far beyond what his publications may have reflected. From the very beginning of his tenure at the IVPP, Minchen was C. C. Young's right-hand man. He assisted Young in stewarding the IVPP through its ups and downs in the following three decades. As a result, Chow became Young's successor as the Director of the IVPP after Young's death.

The first task that showed Chow's vision and capability was to build up a library from scratch. In a couple of years, he managed to buy more than 20 nearly complete sets of back issues of vertebrate-paleontology-related journals, as well as many books, from a book dealer in Holland. He co-founded *Vertebrata Palasiatica* with C. C. Young, along with three other colleagues, and succeeded Young as its Editor-in-Chief from 1980 to 1991. He was also a long-time chief editor of *Palaeontologica Sinica*. Minchen helped establish the journal exchange programs with international peer institutions, which have lasted to this day.

In addition, Chow was also instrumental in drafting numerous national strategic planning documents for paleontology in general and vertebrate paleontology in particular between 1953 and 1990. He played an important role in recruiting some of the best students for the IVPP as well as sending the promising students at the IVPP to study abroad. Minchen also wholeheartedly promoted causes that popularize paleontology through his writings and his support for natural history museums throughout China. He served as the Director of the Beijing Natural History Museum from 1982 to 1996.

Chow's life was a marathon that required strength, endurance, and determination to reach the finish line. He finished it with admirable achievements as well as painful personal sacrifices. He was elected a member of the Chinese Academy of Sciences in 1980, and awarded the Romer-Simpson Medal by Society of Vertebrate Paleontology in 1993. He lived to see Chinese vertebrate paleontology thrive and could have said: "I came, I suffered, I survived and even succeeded."

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