

A Study on the Inheritance of Craftsman's Spirit in the Early Chinese American Laborers

Jianqi Li, Ping Yi*

Chengdu University of Traditional Chinese Medicine, Chengdu, Sichuan, 611137, China

*Corresponding author

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Abstract: The craftsman's spirit is now strongly advocated in China and relevant topics greatly publicized, but little attention is paid to how it was promoted in the working experience and laboring practice of the earliest Chinese American immigrants, who, in their endeavor to settle and survive, played an indispensable part in the development of the American West as gold miners, railroad builders or agricultural workers. The essay, in attempts to illustrate the essential inheritance of the Chinese craftsman's spirit with analysis of historical facts, aims to justify the its great influence upon the American during west expansion as well as the Chinese laborers' lives during the second half of the nineteenth century.

1. Introduction

Craftsman spirit, known as *Gongjiang Jingshen* in Chinese, is a sort of professional spirit, which embodies professional ethics, professional ability and professional quality, and is a kind of professional value orientation and behavior of practitioners. The basic connotation of "craftsman's spirit" includes dedication, meticulousness, tenacity, intrepidity, teamwork, innovation and so on.

The spirit of Chinese craftsmen is an important part of Chinese civilization and culture. Zhang Xue, a scholar researching on the craftsman's spirit, believes that from the perspective of competence, the spirit is embodied in "exquisite skills, dedication and perseverance"; from the perspective of occupation, the spirit is embodied in "rigorous dedication and perseverance"; from the perspective of morality, the spirit is embodied as "respecting teachers and respecting education, selfless dedication". As far as the value dimension is concerned, the spirit of craftsmen is embodied in "the integration of skill and workmanship, innovation and exploration"^[1].

Based on the summary above, it is evident that for a long time, the spirit of craftsmen in China takes on different forms, and it is rooted in the cultural accumulation of Chinese civilization in history. Bred in the soil of Chinese culture itself, the spirit of craftsmen in China has strong vitality. It is not only reflected in the laboring practice of the working people in China's long history, but also in the arduous pioneering history of Chinese immigrants who have gone abroad to survive and thrive in the American West.

2. The Historical Survey of the Early Immigrant Chinese Laborers in American West

The second half of the nineteenth century witnessed the pioneering activities of the early Chinese who immigrated to the United States. Their working practice in mining, construction and farming, especially during the development of the West highlighted different aspects of the craftsman's spirit.

The early American Chinese immigrants experienced various difficulties and obstacles. Nevertheless, these Chinese laborers, with the unique traditional excellent qualities, devoted themselves to American social construction for their own survival and development. Some of them participated in the gold rush in the West, some in the construction of the Trans-American Railway, and some in the agricultural exploitation of California. In all the stages, in face of tortuous task and harsh natural challenges, the Chinese laborers had always adhered to their intrinsic craftsman's spirit. Whether working as gold diggers, road builders or agricultural farmers, the Chinese laborers, having inherited the good qualities in their practice, strove in their unique Chinese way: working meticulously in cooperation, proceeding with intrepidity and tenacity, and inheriting traditional skills with innovations on them. Their activities and achievements, to a large extent, embodied the essential spirit of craftsmanship in different aspects.

After nearly half a century of twists and turns, influenced by the great spirit, Chinese Americans have come to secured themselves a deserved place in the modern American society.

3. Different Aspects of Craftsman's Spirit in the Labouring American Chinese

3.1 Craftsman's Spirit in the Chinese gold diggers—Meticulousness and Cooperation

During the "gold rush" of the 1850s, white miners began to use destructive hydro-mining methods to obtain more gold placers, but most left due to the declining production of surface gold. After the Chinese took over, they used new methods to exploit the abandoned mines. The basic hydro-technical skills which Chinese had learned in their hometown, such as ditching, damming and pumping, were applied to gold panning. The process includes separating gold from clay and sand from gravel, so the Chinese's water control skills and experience were very helpful to their gold panning work.

In addition, unlike other white miners, the Chinese miners were well organized. The European-Americans went to the mines in droves, but once they arrived, they dispersed and went their separate ways. The Chinese were working under the leadership of those who could provide them with funds and technology. In their humble life and ordinary practice, it was evident that the great spirit of craftsmen stemmed from the hard working of the miners themselves, who played their role in the social division of labor and completed the assigned tasks. In contrast to other white gold diggers, the Chinese had clearer goals and plans, following strict teamwork discipline, and working together to accomplish the same goal with a serious attitude. The quality of diligence and endurance of Chinese people won praise since they lay in the professional ethics of the superb Chinese tradition, which constituted an indispensable aspect of the craftsman's spirit.

The spirit of craftsmen was not only embodied in the unity, cooperation and division of labor of Chinese gold diggers, but also in the fact Chinese "gold diggers" use the simple machinery such as windlasses typically found in their homeland. Even in the abandoned mines, the quality of the gold they panned out was as superb as that produced by the Americans. The Chinese laborers used the most primitive wheels to send buckets of gold and earth from the ground to the top of the ground, and then poured the gold and earth into their own filter tanks made of wood. In the filter tanks were partitions made of tiled wooden boards. Then a worker kept pouring water into the filter tank. Because of the high specific gravity of gold, the sand and soil were slowly washed away by the

water, leaving gold and some other substances of higher specific gravity under the partition. Finally, the gold soil with large gold content under the partition was poured into a special sand washing tool, and a worker kept shaking in the pool to let the water filter out the substances of small specific gravity. After so many filtering procedures, they could finally get precious gold.

The achievements of Chinese gold diggers demonstrated that they can actively absorb new experience and adapt themselves to new environment, master advanced technological inventions in time, and quickly acquainted themselves with metallurgical and geological conditions. All of the progress requires much meticulousness. Their survival in the gold rush, in addition to hard work, lay in their cooperation and teamwork as well.

3.2 Craftsman's Spirit in the Chinese Railroad Builders—Intrepidity and Perseverance

Unfortunately, the efforts of Chinese gold diggers had aroused the jealousy of gold diggers from other local ethnic groups and the hatred of racists, who consequently plotted to exclude the Chinese from the working sites. Since the 1850s, the implementation of a series of unjust acts has compelled more and more Chinese gold diggers to devote themselves to railway construction while California's gold mines provided the original funds for the development and construction of the West. In 1862, the federal government of the United States implemented the plan of building a continental railway from the central United States to California. Due to the harsh natural conditions, including the steep and mountainous terrain along the route, other workers like the Irish just gave in while the Chinese workers showed their hard-working quality and high efficiency in the railway construction, hence the Central Pacific Company's increased efforts to introduce Chinese laborers. At the peak of the construction of the China Pacific Railway, the Chinese immigrants accounted for 90% of the total labor force of the Pacific Railway Company.

During the construction of the western section of the most difficult American railway, the Central Pacific Company paid the Chinese laborers low wages without providing enough food and accommodation, let alone life insurance. Nevertheless, the Chinese laborers, risking their lives with indomitable will, relied on baskets and ropes to drill holes, blast on steep cliffs, dug roadbeds, built bridges and tunnels with pickaxes in the mountains, and finally completed the construction in due time.

Hardly a mile of the 890 miles of the Central Pacific Railroad was suitable for road construction. The builders had to work through mountains two or three thousand meters above sea level with extreme temperatures all around the year, including severe snowstorms in winter. Worse still, the Chinese laborers were often assigned the most dangerous and tiring work. In 1866, they began to challenge the biggest obstacle in the project, the Sella Ridge Passage. The granite wall known as Cape Horn was the most difficult pass to construct here. Its lower part was on a vertical, smooth, 1000-foot-deep cliff. The sides of the gorge were so steep that there was no place to stand when the granite buttresses and rock embankments were being built. In order to cut a double-track wide roadbed from the straight cliff, the tenacious Chinese laborers used an ancient method, sitting in a basket suspended by a rope, lowering it from the top of the mountain, and then hanging in the air with hammers and crowbars to knock down the rocks bit by bit, opening a narrow passage. It is of decisive significance that the deepening of the passage plays a key role in the laying of the railway sub-grade, which was finished by the Chinese as well. Sometimes a Chinese sitting in basket chiseled the wall in midair, filled it with gunpowder, ignited it, and then pulled it up. The rock there was so hard that the gunpowder often burst out directly from the cannon hole, injuring the Chinese laborers. Countless Chinese died at the bottom of the cliff because of the instability of the gunpowder or the broken rope. The Chinese laborers tied ropes around their waists and hung in the air, forcing out a passage for moving vehicles. According to *The Historical Accounts of Overseas*

Chinese in America, "the death rate of Chinese laborers was as high as 10% during the construction of the 100-mile railway sect in the Sierra Mountains". Despite the extremely dangerous environmental conditions, the Chinese accomplished one of the greatest construction projects in American history, with their intrepid and tenacious spirit of craftsman.

Despite some deliberate obscuring efforts by white racists to exclude the Chinese in the historical fact for long time, Lelan Stanford, one of the four giants of the Central Railway of the United States, praised the Chinese for their unity, friendship, self-restraint and frugality. "They organized to help each other. "Were not the Chinese, it would be impossible to complete the western section of this grand national project within the time stipulated in the Act of Congress."^[2]

3.3 Craftsman Spirit in the Chinese Agricultural Workers—Inheritance and Innovation

The completion of the Trans-American Railway in 1869 rendered thousands of Chinese laborers jobless, but some of them soon found work in the farming regions of California and devoted themselves to the new project of drainage and irrigation. As the new settling agricultural workers, the Chinese opened up wasteland, built dikes and dug ditches in the flooded Sacramento River Basin of California, so that the low-lying land could avoid floods and the highlands could be irrigated, and in total 5 million acres of waterlogged land were practically reclaimed into fertile farmland. With the veteran agricultural experiences from their hometown, the Chinese-style application has created brilliant achievements in distant California. Besides, the earnest Chinese also promoted the Chinese farming technology and helped enrich the agricultural species in the United States.

In the 1870s and 1880s, Chinese agricultural workers in California grew barley, wheat, rice, corn, cotton and sugarcane. They also planted grain and vegetable seeds brought from southern China in field experiments. Growing fruit trees in Californian orchards, the Chinese produced successive harvests of fruit, especially oranges, which not only met the daily needs of Americans at home, but were also exported abroad to Europe. For example, the "Liu Jinnong Orange" sells well all over the world even today. Chinese sharecroppers specialized in labour-intensive crops, such as vegetables and fruit, and sell their crops door-to-door or from railway-side stalls. Others were engaged in packaging and processing in various major agricultural sects.

Inheriting the innovation of traditional culture, the Chinese workers made full use of the techniques acquired in their hometown. Without conscious knowing it, they actually put into practice the dynamic characteristic of the craftsman's spirit; that is, they practically mastered "the focus of carrying forward the spirit of craftsman: to innovate while inheriting the good tradition, and adapt to the requirements of a new era".^[3]

4. Conclusion

Throughout human history, craftsmen are explorers and inventors in all walks of life, tradition inheritor, technology innovators. Whether in ancient China or the modern west world, facts indicate that the spirit of craftsmen is a great driving force for social development. In the late nineteenth century, the spirit was fully embodied in the Chinese immigrant laborers, who indomitable, united and cooperative in the course of the development and construction of the American West. The spirit of craftsmen reflects not only the excellent tradition of Chinese culture including the inheritance of established skills, but also the integral innovation and flexible adaption to local conditions. Just as it ever conduced to the prosperity of the Chinese nation, the craftsman's spirit also played a vital part in the efforts of early Chinese immigrants to survive and thrive the new land. On the whole, the Chinese laborers also objectively contributed to American society while ensuring prosperity of their own ethnic community. Therefore, from a broader perspective, the craftsman's spirit of the

immigrant laborers, which is deep-rooted in the ground of Chinese civilization, has been beneficial to the people's lives in both China and the US. In future, the spirit definitely, together with Chinese wisdom, will contribute to a community of shared destiny for mankind.

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