From “Telling Knowledge” to “Science” and “Productivity”——Transmutation and Transformation of Modern Chinese Knowledge System

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Abstract. From the “intellectual knowledge” to the “science” and “productivity”, the Chinese knowledge system has undergone a long process of transformation and transformation in modern times. From the narrow-minded style to the dual division of “Gezhi” and “science”, and finally realize the “science” to the replacement of “Gezhi”, thus officially establishing the scientific view of the Chinese people. When we study the historical changes of China's knowledge system, we must combine the historical time nodes and event processes to deeply study the roots of the traditional “Gezhi” and the root cause of the prosperity of Western “science”, thus helping to reveal the formation of scientific views of modern Chinese. And historical drivers of development.

Introduction

The modern transformation of China’s knowledge system has undergone a process of evolution from “Gezhi” to “science”. From the acceptance of language to the change of ideas, the establishment of the scientific view of modern Chinese people has experienced a long and arduous process of evolution. This kind of transformation has experienced a historic turning point in the history of thought, from the old to the new, from the traditional to the modern, from the Stereotyped Writing to the multi-dimensional technology. The root cause of the Chinese nation’s external oppression in modern times lies in the decay and decay of civilization, and the awakening of modern Chinese thought is also derived from the modern transformation of the knowledge system. Therefore, it is necessary for us to trace the source and to understand and study the evolution of modern Chinese knowledge systems and cultural relations by revealing the historical motives of the formation and development of modern Chinese scientific views.

The First Stage (1850-1895): The Narrowly Defined “Gezhi” Period

In the second half of the 19th century, the introduction of Western scientific knowledge into China was the result of the development of world history, because the background of the times had confirmed that the moral order of Confucianism could not adapt to the development and progress of society, and the method of the emphasis of Confucianism the method of extrapolation of common sense can no longer reflect its scientific, practicability and value. Moreover, it is undeniable that the opposite Western technology is more practical. This is the Confucianism represented by Cheng Zhu Neo-Confucianism. Unable to give practical power. Driven by the needs of the world, Western science and technology entered the vision of the scholar-officials. The purpose was to suppress the Taiping Heavenly Kingdom movement, modernize the national defense, and resist the Western powers. However, the scholar-officials who advocated doing Westernization and learning technology at that time regarded the so-called “Gezhi” as the school of manufacturing. They used a narrow-minded “Gezhi” perspective to examine the situation in China at that time. For “Gezhi”, it was limited to pure pursuit of craftsmanship. The purpose is to deal with the crisis of internal and external difficulties. However, this narrowly defined “Gezhi” has two levels of defects. On the one hand, it separates “Gezhi” from “Expo group”, ignoring “Expo group” and “Exhaustion of reason”, that is, neglecting the understanding of Western science and technology theory. On the other hand,
this narrow sense is a narrow definition of the western scientific category, limited to the disciplines of chemistry and physics, but neglects the “geometry” of the humanities and social sciences. Until 20 At the beginning of the century, historical science, humanities, and social sciences were gradually incorporated into Chinese scientific research system.

The narrowly defined “Gezhi” especially flourished during the Westernization Movement, mainly focusing on the development of national industry and military manufacturing to maintain the rule of the Qing Dynasty. However, the differences between Chinese and Western cultures, thoughts, scholarship, and productivity are objective and need to be reflected in the transformation of scholarship. However, scholars urgently need to pursue technological advancement to enhance their national strength, failing to deeply understand the essence of Western learning, and instead turn to I began to envy Japan’s rapid rise and follow Japan’s successful experience, but did not analyze and evaluate China’s actual national conditions scientifically and rationally. In Yan Fu’s view, “science” must take the road of expo group, and the narrowly defined “Gezhi” that the Westernization faction yearns for seems to be to accelerate the development of internal and external difficulties, but it is not the correct way to save the country. Yan Fu’s emphasis on “science” is unity and accuracy, while Japanese “science” presents diversity and ambiguity. It is a product of Japanese Westernization, and it incorporates Japanese local thinking concepts and combines them. After the concept of Western learning, we have not examined the nature of China and the actual national conditions of our country. We have to pick up the wisdom of the “East Learning” and use it to copy it. It will inevitably fall into the barrier of development. Therefore, although the Westernization Group has changed its position in the foreign aggression, it has never resolved the inherent contradiction between the means of improvement and the inherent foundation. The development of things has a universal connection. The contradictory contradictions are directly related to the failure of the Sino-Japanese War of 1894-1895 and the Westernization Movement.

The Second Stage (1895-1915): The Dual Division Period of “Gezhi” and “Science”

In the years after the failure of the Sino-Japanese War, the traditional Chinese “Gezhi” and the advanced “science” of the West were still in a state of independence and dissociation. During this period, “science” did not immediately replace “Gezhi”. Second: First of all, the traditional Chinese “science” and the so-called “science” in the West are very different. The traditional Chinese “science” points to the “cancer of the imperial examination”, so the translation of “science” for the traditional Chinese people And understanding will have linguistic adaptation obstacles; secondly, China’s geography is based on Confucianism and therefore contains the function of moral ideology, while Western science does not contain any ideological color, which is also impossible for Western science. The main reason for replacing traditional Chinese academic status. After the Reform Movement of 1898, the new school gradually became the mainstream, but the essence of “the middle school is the use of Western learning” has not changed. The attitude of the Chinese to science is only a layer of suit for them. The ideology permeates. Still a Confucian ethic. Confucian ethics as a common sense rationality, the formation of moral ethics structure is deeply rooted in the general ideology of society, and scientific knowledge is not generally considered a new common sense. In his book The Complete Works of Drinking Ice Room, Liang Qichao once commented: “I boldly say that if the Chinese attitude toward science is longer, the Chinese will never have the independence of learning in the world.” [1] In Liang Qichao’s view, the Chinese accepting “science” is still only succumbing to the pursuit of scientific research results, while ignoring the value and spirit of science itself, and excessively reflecting the utilitarianism and pragmatism of the Chinese people in science.

Although after the Sino-Japanese War, “Science” did not immediately replace “Gezhi”, it has actually entered a transitional stage of ideological change. In this transitional phase, the frequency of use of the term “science” began to rise. In the book “Research on the History of Ideas”, Jin Guantao counts the trend of “science” replacing “Gezhi” and counts the frequency of use of these two words in the newspapers and periodicals between 1894 and 1915. “Science” replaces “Gezhi”. For the following three stages: “the first stage was from 1894 to 1900, the number of ‘Gezhi’ was
far more than ‘scientific’; the second stage was between 1901 and 1905, both of which were commonly used, which can be called the period of use is the same; the third stage is around 1906, and ‘Science’ completely replaced ‘Gezhi’. ”[2] Further analysis, the word “Gezhi” was replaced by “science” after 1906 and also related to the historical background of the time. From a macro perspective, it is because after 1905, China’s imperial examination system was experienced in 1284. It was officially abolished after the year, which also means that the word “science” in the Chinese tradition has been diluted, and the Western “science” has been widely used unambiguously. From the micro level, the general concept of society and the official ideology have been subjected to overseas revolutions. The influence of elites such as factions, reformists, and gentry members who promoted the New Deal in China has undergone tremendous changes. Western “science” has gradually been accepted by the masses, and “Gezhi” has gradually faded out of the public’s horizons.

It can be seen that in the first 15 years of the early 20th century, before 1915, the status of traditional common sense was not replaced by scientific knowledge during this period, and scientific knowledge failed to become a new common sense recognized by the public. Since ancient times, Chinese people have used experience to understand the essence of things, but they have not raised this experience to knowledge. The argumentation model of using experience as reasoning has not changed. However, the common sense that is widely accepted by modern scholars can no longer be pushed by experience. It is necessary to accept modern common sense explained by science and make science become the common sense rationality of modernization and popularization. Therefore, if scientific knowledge wants to subvert the traditional Confucian ethics as modern common sense, it is necessary to use modern common sense to investigate Confucian ethics, and popularize scientific knowledge widely in China, so that it can replace Confucianism as the basis of moral ethics and build a new moral consciousness.

**The Third Stage (after 1915): The Formation and Development of Modern Science**

After the New Culture Movement, science realized the transformation from language to concept, and completely subverted traditional Confucian ethics as modern common sense. This also marks the formal integration of science into China’s modern knowledge system, so the outbreak of the new culture movement is an important historical node in the transition of modern Chinese academic system and conceptual transformation. However, the outbreak of the new cultural movement and the fact that science has become modern common sense is by no means accidental. This is in line with the logic of historical development. In 1905, the imperial examination system was officially abolished, and the eight-week text of the millennium was officially replaced by new-style education. The ten years of new education has cultivated a group of new generations of intellectuals. The most important point of this new education is that it is popularized and widely spread, even in the relatively backward education level. In the northwestern region, the transformation of new-style education has also received a large degree of positive response. The new type of education is not only the transformation of the education model from the old private school to the new school, but more importantly, the transformation of the educational concept. The new-style education has laid a certain foundation for the development of modern education in China, and at the same time awakened the ideological concepts and democratic consciousness of Chinese intellectuals.

Until 1915, a large number of new intellectuals emerged. They included international students studying abroad and students studying in new schools. They represented the main body of contemporary Chinese culture with advanced democratic ideas, and judged ethics by modern interpretation of scientific common sense. Whether the reasonable ultimate standard completely overturns the ultimate standard status of Confucian ethics. “Science” completely breaks away from traditional classics in terms of conceptual form, which also marks the formal disintegration of the dual moral ideology between China and the West. The Chinese scientific view has risen to a new level as a whole, and the status of science has been rising. Especially during the New Culture Movement in 1915 and the May Fourth Movement in 1919, science has been infinitely crowded, and even the “left” to science has emerged. Pour thoughts. Among them, the new intellectuals
represented by Hu Shi regarded science as a sacred object and raised the status of science extremely. He once said: “In the past 30 years, there has been a noun in China that has almost achieved the status of supreme dignity; People who don’t understand, no matter how old or new, don’t dare to openly despise or ridicule him. The term is ‘scientific’.” [3] After the New Culture Movement, “science” seems to be headed by the Chinese. At the other extreme, traditional morality is completely denied, and the Chinese begin to pursue the construction of a new moral ideology. Since then, Marxism has gradually been favored by intellectuals. The connotation of “science” has developed into a new moral ideology and discourse system based on Marxism-Leninism and social science, and has become the common belief of the knowledge community. “Science” is officially equated with Marxism-Leninism.

After the New Culture Movement, the transformation of China’s ideology has surpassed any previous period. Today, China’s ideology is a socialist ideology based on Marxist ideology. Socialism with Chinese characteristics unswervingly exalts the great banner of Marxism. It has been tested and proved by decades of practice through revolution and construction. China’s Marxism is the guiding ideology that represents the interests of the broad masses. It is not an imaginary socialism, but a scientific socialism. Its scientific knowledge system contains both the common sense and rationality inherent in the great tradition of Chinese culture. The structure also covers the modern knowledge of Western science and technology, and its connotation category goes beyond the meaning of Western science. Advanced science and technology also reflects the advanced culture. The outstanding Chinese traditional culture and the revolutionary culture and socialist advanced culture fostered in the great struggle of the party and the people accumulate the deepest spiritual pursuit of the Chinese nation and represent the unique spirit of the Chinese nation.

References

[1] Qichao Liang, The preface of the Western Learning Bibliography, Z.Book.Comp, Beijing, 1989, pp.123.

[2] Guantao Jin, Qingfeng Liu, Research on the History of Ideas: The Formation of Important Political Terms in Modern China, Law Press, Beijing, 2010, pp. 341-342.

[3] Junli Zhang, Wenjiang Ding, Science and outlook on life, S.P-Publishing Inc., Jinan, 1997, pp. 12.