

# A Discussion about Harmony in Chinese Pre-modern Technique

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**Abstract:** On distinguishing technique from technology, this article analyses some characters of Chinese pre-modern technique, then tries to make a presentation and demonstration about harmony in Chinese pre-modern technique. It concentrates on mutual relationship between subject and technique which are subject technicalization and technique subjectivization. Furthermore, the article puts forward two reasons of this phenomenon which are the social status of technique in ancient China and the harmony in the mind of ancient people.

**Keywords:** Sci-tech; Art-tech; Harmony; Subject technicalization; Technique subjectivization

## 1. Introduction

Human's influence to the nature is increasingly stronger with technique as one of the key roles. As usual, technique is always considered as a cause of disharmony between human and nature. However, technique is a historical concept, which has varied characters in different periods. In addition, harmony in Chinese history is one of the universal goals in physical and mental fields, which affects the mind of human, so does technique. This article tries to put forward a possible character in Chinese pre-modern technique----harmony.

## 2. Chinese pre-modern technique -----Compared to the Modern Technology

In order to discuss the harmony in Chinese pre-modern technique, it's necessary to understand its specialties by comparing to technology. There is one thing should be clarified that the concept of technology is used to contrast with the pre-modern technique, which can include latter-day technology and modern technology.

With the development of etymology, technology, which can be considered as the combination of two words: *techne* and *ology*, is rooted in the ancient Greek word "technê". *Ology* represents systematic and scientific, which is from the original word *logos* with the meaning of knowledge, theory and rational. Generally speaking, technology has the same meaning with the Chinese word "knowledge about technique". Hans Lenk indicated that technic (technique) is traditional technology and "technologie" (technology) means modern technology.<sup>[1]</sup> In my opinion, the main point is the suffix "ology", meaning scientific and systematic, which is the reason for modern technology can be represented by technology. As we know, in most periods of

history, technique almost had no relationship with science. Both of them have their own origin and tradition. Science is originated from scholar tradition on exploring unknown episteme, while technique is from artisan tradition on pursuing better practical knowledge.<sup>[2]</sup> After industrial revolution, science began to affect technique, and technology began. In Chinese, the word "Ke ji", *Sci-Tech*, which many scholars are not satisfied with, but best describes the most original nature of the technology in this aspect. Yingshi Yu considers the ambiguous word *Sci-Tech* neither refers to science nor technique, but scientific technique.<sup>[3]</sup> Contrastively, technique development is independent from science and mainly relies on the accumulation of artisans' experiences. So the most apparent character of technique is its separation from science. As well as the *Sci-Tech*, the word *Art-Tech* means artistic technic may precisely depicting the technique which can be guessed as the combination of "techne" and "unique", which can be considered as one character of art. The word *techne* in Greek is *art* in Latin shows there is no distinct borderline between technique and art.

Wang Qian concludes nine characters of Chinese pre-modern technique: Dao goes beyond skill in mode of thought; Comply with nature in view of nature; Embrace things for practice in values; Dao drives technique in ethics; People orient in the relationship between human and machine; Savvy thought in configuration of knowledge; Make utensil by emulating nature in invention of technique; Manage organically in management of technique; incorporate things of difference in spread.<sup>[4]</sup> Obviously, this dissertation adopts the research method of analytical philosophy commonly used in Occident for giving prominence to the characters of technique. Then through a deeper analysis, there is a unified idea in all of these aspects that is harmony. The nine characters exhibit several relationships: the relationship between technique and nature demands technique to adapt to the nature essentiality and invent various tools according to the natural state of raw material so as to stress the Dao overtop the technique. The relationship between technique and human requires technique to reflect the human nature and personal essentiality as an individual in technique. These two relationships put together would express a third one, harmony between human and nature, which is the best state on personal survival and development in ancient time. So it testifies technique creates a friendship between human and nature. Otherwise, most of Chinese pre-modern techniques are practical and applicative, therefore, this practicability

requires the technique consider the problem needed to be resolved in the real life which would avoid some blindness on direction. So this article attempts to ascribe harmony as one speciality of technique.

### 3. Harmony in Chinese Pre-Modern Technique

#### 3.1 Definition of harmony

“Harmony”, means “*he xie*” in Chinese. “Guangya. Shigu” records that “*he, xie ye*” and “Erya. Shigu” said, “*xie, he ye.*” So in ancient china, *he* and *xie* can be explained by each other. In fact, “*he*” and “*xie*”, having the same significance, combined together is following the way of word construction in modern Chinese. Such as “*zhengqi*” which means orderliness, “*zheng*” is “*qi*” and “*qi*” is “*zheng*”. So, in ancient Chinese philosophy, “*he*” can represent the word “harmony”, which can be found in the “Guoyu”(《Guo Yu》), a classical text. One of the earliest expressions of “*he*” was proposed by Shi Bo, a pre-Confucian scholar—minister who elaborates one reason of the corruption of Western Zhou Dynasty said, “.....losing the ‘*he*’ and selecting ‘*the same*’.....”, and he also said “‘*He*’ is indeed productive of things, but ‘*sameness*’ does not advance growth,” which also pointed out the key to success in strength with *State of Zheng*—pursuing ‘*he*’. What’s the meaning of ‘*he*’? He said, “Smoothing one thing with another is called harmony. For this reason things come together and flourish” which means “combining all different things together to keep balance is harmony, which can make development of everything on earth.”<sup>[5]</sup> Basically, harmony is a relational concept and deals with various relational problems. Concretely speaking, harmony is a relational network with human in centre and resolves the problems between human and nature, or between human and society, or in human itself.

#### 3.2 Harmony in technique

It takes for granted that technique originated from human ancestor break a branch or abrade a sharp stone firstly. What is the reason for its origination? Boldly guessing, disharmony between the human and nature causes the technique emerge, because at that time human is helpless in front of nature even a slight alteration would disturb human’s life but technique changed such phenomenon increasingly. So technique is born to create and maintain the possible harmony between human and nature. Take the arrow invention for example. While fighting with animals, human find out sharp stones can be thrown farther and have more execution accidentally, at last, man invent the arrow. The invention of man-made fire is the same as arrow. Such inventions can be called opportunity technique. Though the inventions are incidental, they improve the human’s life factually. So the emergence of technique is for the purpose of harmony between human and nature. Considering technique itself, the fundamental issue of harmony is in the relationship between technique and human. Generally speaking, harmony in technique can be explained by the interpenetration between technique and its subject as if both of them are combined together and neither one can be alone. In modern technical philosophy term, this can be expressed

as technique subjectivization and subject technicalization. Here, the technique subject mainly refers to the artisans though it is a historical concept.

Subject technicalization means subject permeates into technique as an element, which is one difference between technique and technology. There are three concrete aspects about subject technicalization as following: first, the life of subject is reflected by technique. “CHUANG TZU. Heaven and Earth” depicts a dynamic life from “technique—Affair—Rightness—Virtue—Dao—Heaven” which based on the technique. “Affair is governing people best, technique is making a artificial product. Technique contains affair, affair contains rightness, rightness contains virtue, and virtue contains heaven.” Second, technique is the integrated artwork of personal mind and behavior, which has been done by the subjects and embodies their specialties. Finally, subject technicalization represents subject is a part of whole technique and which can’t be used without human. The reason is that the motivation of the technique is from human physical power and agency. Human hands, as an example, interlink the subject and technique object. In some technical process, the effect to either object or human is by human hands. The analogous case is described in “Xunzi. Encouraging Learning”, “Those who make use of boats may not know how to swim, and yet they manage to get across rivers. The gentleman is by birth no different from any other man; it is just that he is good at making use of things.” Boat is human’s tool and move thousands miles only under the control of human. Crossing the river is the technical value of boat. Arrow is also a typical example, whose launch needs the power of human.

Technique subjectivization means through the ingenuity of subject technique then represents as an art excelling the nature. Cook Ting’s knife can be regarded as a perfect technique only when it was used by “Cook Ting”. Factually, subject technicalization and technique subjectization are always combined as a whole. The explanation to the “technique” and “art” in some ancient books can explain this such as “technique is art” in “Shuo wen jie zi” and “art is technique” in Li shan’s explanation on “art” in “Gong ren qiao shi” in the book of “Wenxuan. Changdifu”. Ancient people consider art is the nature of technique. Art interlinks the technique and subject and combines both of them together in the action of technique. In ancient time, a man named Xi Zhong invents the vehicle. The reason of his invention is not he has tools or ability but his wisdom which make the technique to be the unique one with subject’s characters. In this meaning, the two aspects of art in technique are the refinement of technical product and the nature of the subject as an artisan.

Certainly, there are many other details reflecting harmony in technique. For example, Cook Ting’s appearance is harmony in dividing a cow. Also the harmony between technical action and nature, which means technical action have a precondition for following the rule of nature.

### 4. The Reasons for Harmony in Chinese Pre-Modern Technique

Considering some social facts, we will find out that

harmony in Chinese pre-modern technique had some necessary. Fundamentally, social status of Chinese pre-modern technique and heart cultivated idea of harmony are the reasons.

As Joseph Needham had said, “the world view of Chinese has depended on a completely different thinking path from other worlds. The harmonious cooperation happened in all kinds of existence is not because there is an authoritative, powerful command from the upper class but due to the fact that all of them are one small part that constitutes a necessary part in universal model, one that they obeyed as their natural and inner fate.” [6] With such kind of circumstance, the development of technique is hard to avoid the influence from the view of harmony, because harmony is the ultimate goal pursued hardly by the ancient Chinese. Further more, in ancient china, because of the influence from both animism and organism, people believe, nature has an inner mysterious power, and technique is an unnatural action which is adverse to its own nature. Technique brings the convenience and efficiency for production and living condition on one hand, but also creates the scare of mysterious spirit to people on the other hand. So people in ancient time have wariness on technique, and restrict the using of technique in certain limitation. Taking the idea of “Yi Dao Yu Shu” from Zhuangzi for example, which means controlling the technique with the Dao, as well as Mozi, who was calling for the development of technique, but which also was leaded by the “Ten political programs”, such as “Universal Love” and “No attack” etc. Consequently, because of the limitation on technique development from all kinds of thought, people

had two side of view about technique, hoping the development of technique and also controlling its development. And the result of all these points is that harmony of Chinese pre-modern technique happened.

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