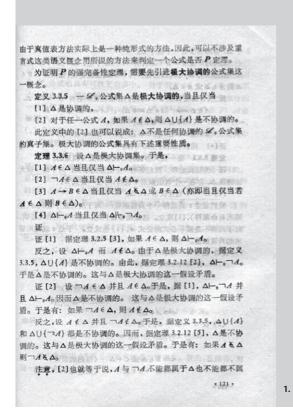
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Chinese logic and Chinese philosophy: reconstruction or integration?

"Logic" derives from the Greek $\lambda \dot{o} \gamma o \varsigma$, meaning word, speech or discourse. Its translation into Chinese is 逻辑, which is merely phonetic. "Philosophy" derives from the Greek $\phi i \lambda o \sigma o \phi i \alpha$, meaning a love of wisdom. Its translation into Chinese is 哲学 (zhixue) "the study of wisdom", which strikes an odd note due to the Confucian sublimation of wisdom to more important virtues such as 仁 (ren) "humanity". These Greek words have played a defining role in Western intellectual history, so much so that it would be difficult to imagine the result of somehow subtracting them to see what remains. By contrast, attempts to find logic and philosophy in Chinese tradition meet with only partial success.

Fenrong Liu and Jeremy Seligman



CERTAINLY, CHINESE PEOPLE SINCE ANCIENT TIMES have thought and written about fundamental questions of human life similar to those studied in the West and recognized as "philosophy." And, if we try hard enough, we can find in ancient Chinese texts an interest in the sort of thing that fascinated Western thinkers under the designation "logic." But is this comparative similarity enough to justify thinking and talking of two traditions of philosophy and logic: one Western and one Chinese? Or is this categorization of subject matter an essentially moribund imposition of Western concepts on a foreign culture? This latter view is resisted even by prominent Chinese thinkers. In his book 《逻辑指要》"Essentials of Logic", 章士钊 Zhang Shizhao said "The name logic was initiated in Europe, but the principles of logic exist everywhere ... the principles of logic existed already in China."

Although these academic questions excite considerable interest today among scholars in West and East, their answers (if any) are in danger of an ironic fate: anachronism. As history marches forward, generations of Chinese students have studied Western philosophy and logic, and increasingly more Western students are exposed to Chinese thought. The intellectual frontiers in China today are drawn by individuals well versed in Western intellectual tradition. And this includes not only those working in mathematics and physics, but also 现代 新儒学 the "new" Confucianism and 国学 "Chinese studies."

This leaves the question of how to approach ancient Chinese texts in philosophy, and especially logic, without a clear direction. In particular, we may wonder how to approach texts that appear to be concerned with issues that Western scholars brand "logical". Is it a matter of reconstructing the text in modern (Western) notation, with the implicit claim that the authors were grasping towards something that was probably much better understood in the West? Or should we be trying to extract an indigenous logic, one that is fundamentally at odds with Western "binary polarities" and which reveals an essentially Chinese way of thinking about the world? We believe that this is a false dichotomy, and that methods developed largely in the West can be used in a culturally neutral way, to reveal the operation of genuinely non-Western modes of thought. But this is getting a little ahead of ourselves. First, let us go back to the first indications of the problem, the first contact between China and the West.





In China, the first sign of any recognition of Western civilization is the word 蒙奇兜勒 (mengqidoule), found in two books: 《后汉纪》 "The Annals of the later Han Dynasty" and 《后汉书》 "The History of the later Han Dynasty (25-220 A.D.)", describing a visit by a foreign envoy in the year 100 A.D. It is thought that these four characters are a phonetic transcription of "Macedonia". In Europe, the Roman historian Florus describes a visit by envoys from the Seres (Chinese) to the Roman Emperor Augustus: "even Scythians and Sarmatians sent envoys to seek the friendship of Rome. Nay, the Seres came likewise, and the Indians who dwelt beneath the vertical sun, bringing presents of precious stones and pearls and elephants." Later commercial contact along the Silk road, both on land and sea, are well-known.

In the 16th and 17th centuries, many Jesuits went to China. Perhaps the most famous was Matteo Ricci, who arrived in China in 1583 and stayed until he died in 1610, introducing the imperial court to science, mathematics and astronomy, as well as Western ideas about the visual arts. With the help of 徐光启 Xu Guangqi, he translated Euclid's Elements, revered in the West as an early exemplar of systemic logical deduction. But the Jesuits were also very active in transmitting Chinese ideas to Europe. Confucius Sinarum Philosophus, "Confucius, the Philosopher of the Chinese," was published in Paris in 1687. By the middle of the 17th century, accounts of the Eight Trigrams and Yin/Yang appeared in Europe, influencing Gottfried Wilhelm Leibniz, the prolific rationalistic philosopher and mathematician, to invent binary notation and to propose his characteristica universalis, "universal language," which would eventually lead to the birth of modern logic.

At the end of the 19th century and beginning of the 20th century, the ruling Chinese dynasty, the Qing, was in decline, and shocked into humbling concessions to foreign powers. Somehow, the West had risen from its barbarous past to become masters of technology. In sharp contrast to China's

- 1: A page from a book on modern logic, written in Chinese. Is there anything similar in China's own tradition? (© Beijing Normal University Press).
- 2: The first group of students sent to America in 1872, aged between 12 and 20. Imagine what an extraordinary world lies ahead of them.
- 3: Pages from Confucius Sinarum Philosophus (China's Philosopher Confucius), 1687.

previous indifference to the West, many students were now sent abroad to study this foreign wisdom. Later, between 1909-1929, about 1300 students were sent overseas through the Boxer Rebellion Indemnity Scholarship Program. Tsinghua College, a preparatory school for that program, was established in 1911 in Beijing. Now, "Tsinghua University" employs one of the authors of this article.

Logic has always been closely allied to science, and science to technology. It is therefore no surprise that the Chinese also have an interest in Western logic. The generation of the 1930s and the 1940s who studied abroad, returned to China and started passing on their new knowledge. Jin Yuelin, for example, initiated the department of philosophy at Tsinghua University, Wang Xianjun taught logic at Peking University, and Mo Shaokui at Nanjing University. Including them, there have now been six generations of logic students in China, with numbers expanding dramatically since the general opening of China in the 1980s. Now, as China claims its place in the world, an appreciation of Western methods is accompanied by a renewed interest and celebration of traditional Chinese culture. This has led, in recent years, both to a questioning of the Western labels "philosophy" and "logic" and to a growing interest in indigenous traditions, especially 名学 (mingxue) "the study of names" and 辩学 (bianxue) "the study of argumentation" as alternatives. These subject titles go back at least 2000 years in the Chinese tradition. The emphasis here is on reconstruction: discovering what from the past is distinctively Chinese.

When looking at ancient Chinese texts of a logical nature one is presented with an enigma. For the most part, these texts had little impact on the progression of Chinese thought in general. The temptation is to think of them as a curious foray into an alien world. One example here will suffice. In the Mohist Canon, an extraordinary book of miscellaneous logical and scientific texts, we see 以言為盡誖, 誖。說在其言。 "To claim that all saying contradicts itself is self-contradictory. Explained by: what he says himself." This is so similar to Eubulides' "What I am saying now is a lie" (4th century BC), that we cannot but assume that these geographically and culturally remote thinkers had something of the same revelation. Yet by examining the text in context, we see that it is likely that the Mohists were more concerned with providing a manual for court rhetoric rather than an inquiry into the nature of truth. Those who seek a distinctively Chinese logic see more than just a difference of emphasis. Hidden in these ancient texts, perhaps, are the secrets of quite a different way of looking at the world.

The search for cultural uniqueness is understandably celebrated everywhere. We all want to know what special contribution we made to the sum of human history. Yet the associated tendency to ignore similarities is commonly an unnecessary and regrettable intellectual myopia. All but the most isolated and authoritarian societies show an abundance of diversity, and even when it isn't revealed, we suspect that it nevertheless exists, hidden and repressed.

In a recent book, George Nisbett claims that "to the Asian, the world is a complex place, composed of continuous substances, understandable in terms of the whole rather than its parts, and subject more to collective than to personal control. To the Westerner, the world is a relatively simple place, composed of discrete objects that can be understood without undue reference to context, and highly subject to personal control." But such gross generalizations, when lifted out of context, are obviously false. Those Chinese students, for example, who study logic and mathematics in Western universities probably do not actually think of themselves as "holistic thinkers".

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Notes

- 1 Yule, Henry. 1915. *Cathay and the way thither*. London: J. Jetley. p.18.
- 2 Parker, John. 1978. *Windows into China: the Jesuits and their books*, *1580-1730*. Boston: Trustees of the Public Library of the City of Boston. p.25.
- 3 Nisbett, R.E. 2003. The Geography of Thought: How Asians and Westerners Think Differently ... and Why. New York: Free Press. p.100.