From Philosophical Vocabulary to the Bureau of Terminology:

Two Paths of Logical Terminology Standardization in Modern East Asia

Can Hu*

School of Oriental Languages and Philosophy, Zhejiang Gongshang University, Hangzhou, China

*everhucan@qq.com

Abstract. Against the backdrop of the modern eastward transmission of Western learning, how to accurately and uniformly introduce the Western logical system posed a common academic challenge for both China and Japan. In 1880, Japan published the Philosophical Vocabulary, which rapidly achieved the standardization and systematization of logical terminology. China, on the other hand, established the Bureau of Terminology in 1909 and compiled the Comparative Glossary of Logical Terms. Japan proactively advanced terminology standardization through its academic community, achieving efficient unification by instrumentally borrowing from the resources of Chinese classical learning. China, by contrast, only intervened officially after Japanese-translated terms had already come to dominate the market, making it difficult to compete with the well-established Japanese terminology system.This study provides a systematic comparison of the Japanese Philosophical Vocabulary and the Chinese Bureau of Terminology as institutional mechanisms for terminological standardization.

Keywords: Logical terminology, Philosophical Vocabulary, Bureau of Terminology, Jevons.

1 Introduction

In the modern eastward transmission of Western learning, the accurate and uniform translation of Western concepts into Chinese characters was a foundational challenge for both China and Japan. Nowhere was this more acute than in logic—the discipline that undergirded Western science, rationality, and education.

Japan and China responded to this challenge in fundamentally different ways. In 1880, Japanese scholars at Tokyo University, led by Inoue Tetsujirō, published the Philosophical Vocabulary, a systematic glossary that rapidly standardized philosophical and logical terminology across the country[1]. Chinese intellectuals, by contrast, waited until 1909 to establish a state-led Bureau of Terminology, which

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produced the Comparative Glossary of Logical Terms but failed to achieve any lasting unification[2].

This paper compares these two institutional mechanisms for terminological standardization. It focuses on a specific set of materials: the Chinese and Japanese translations of the logic textbooks written by the British logician William Stanley Jevons (1835–1882). Jevons was a leading figure in symbolic logic and a successful popularizer of logical studies through his accessible textbooks, especially Elementary Lessons in Logic (1870) and Science Primers: Logic (1876). These works were widely adopted in Britain and the United States, going through numerous reprints[3].

The Japanese translations appeared in multiple versions between 1879 and 1890. The Chinese translations appeared between 1886 and 1909. This difference in timing and the availability of multiple translations offer a controlled case for examining how each country‘s terminological system shaped actual translation practice.

2 Japan’s Terminological Unification: The Philosophical Vocabulary and Its Impact

In the early Meiji period (late 1860s–1880s), Western learning flooded into Japan at a pace that far outstripped the development of a standardized vocabulary. Translators, often lacking formal philosophical training, invented multiple Chinese-character compounds for the same Western concept. For example, “Logic” was rendered by at least four different Japanese phrases during the 1870s. This chaos severely obstructed academic communication and the systematic teaching of new disciplines.

To resolve this problem, Inoue Tetsujirō (1855–1944), Japan‘s first university professor of philosophy, together with colleagues at Tokyo University, compiled a systematic philosophical dictionary. First published in 1880, the Philosophical Vocabulary provided Japanese equivalents for tens of thousands of English, French, and German philosophical terms. In its preface, Inoue explained that the lack of fixed translations made it urgently necessary to finalize a standard set of Japanese equivalents for European philosophical concepts[4].

A key reason for Japan’s success was the pragmatic way Meiji intellectuals employed Chinese characters. They borrowed character compounds from ancient Chinese texts but deliberately stripped them of their original classical meanings, reassigning them based on Western concepts. For example, the compound for “philosophy” contained a character meaning “wisdom,” yet its meaning was determined solely by the Western discipline, not by any Chinese classic[5]. This pragmatic approach discarded cultural baggage and made knowledge transmission exceptionally efficient.

The Philosophical Vocabulary established a set of logical terms that remain in use today.The impact of the Philosophical Vocabulary is clearly visible in the Japanese translations of Jevons‘ logic textbooks. Soeda Toshiichi’s Ronri Shinpen (1883) and Kuwata Kingo‘s Ronri Setsuyaku (1883) both explicitly stated in their prefaces that “most terms follow the Philosophical Vocabulary,” and Inoue Tetsujirō personally proofread both translations[6]. This uniformity allowed Japanese readers to move

seamlessly from one translation to another, greatly facilitating the spread of logic as a school subject.

The Philosophical Vocabulary was Japan's first systematic attempt to standardize the terminology of Western philosophy across all major disciplines. Its significance lies not only in its immediate impact on translation practice but also in its long-term role as a model for terminological planning in East Asia. Many of its coinages were later borrowed into Chinese and Korean, the Philosophical Vocabulary became a regional standard.

3 China's Fragmented Path: Two Translation Strategies

China's systematic translation of Western logic began later than Japan's. Although Joseph Edkins translated Jevons' Science Primers: Logic as Bianxue Qimeng in 1886, it attracted little attention. Only after China's humiliating defeat in the Sino-Japanese War (1894–1895) did Chinese intellectuals urgently seek Western learning. By that time, Japanese translations had already flooded the Chinese market. When Chinese translators produced their own versions of Jevons around 1908–1909, they had to confront an existing system of Japanese-derived terms.

Two major Chinese translations of Jevons appeared almost simultaneously: Yan Fu's Mingxue Qianshuo (1908) translated from *Science Primers: Logic* (1876), and Wang Guowei's Bianxue (1909) translated from *Elementary Lessons in Logic* (1870). They represented two opposing strategies.

The most influential Chinese translator of the period, Yan Fu (1854–1921), strongly resisted the incoming Japanese terms. He believing that classical Chinese philosophy contained adequate conceptual resources. He coined elegant but archaic equivalents: reviving an ancient term for "Logic," creating neizhou/waizhou for induction/deduction, using a classical literary form for "syllogism," and a single character for "proposition"[7]. In his preface, Yan stated that his sole aim was to make the text understandable, and strict fidelity was secondary. Yan deliberately erased the foreignness of Western logic and rewrote it in the language of classical Chinese philosophy. This approach achieved cultural fusion but created a high entry barrier.

Wang Guowei (1877–1927) and Zhang Junmai (1887–1969), both educated in Japan, embraced the existing Japanese terminology. Their translations adopted the Japanese-derived equivalents for "deduction," "induction," "proposition," and "syllogism". Wang criticized Yan Fu for "often using inappropriate ancient words to express modern concepts"[8].

In 1909, the Qing government established the Bureau of Terminology, appointing Yan Fu as chief editor and Wang Guowei as a member, to standardize scientific terms. The Bureau produced a Comparative Glossary of Logical Terms that heavily favored Yan's translations over Japanese-influenced terms[9]. For example, it kept Yan's term for "Logic" as the recommended equivalent, even though its own note admitted that another term "might be more accurate"[10].

The Bureau of Terminology, established in the last years of the Qing dynasty, was China's first state-sponsored institution dedicated to the unification of scientific terms.

Its very establishment signaled that Chinese intellectuals and officials had come to recognize the urgency of terminological standardization. The Comparative Glossary of Logical Terms it produced was the first official glossary of logic in Chinese history. Moreover, the Bureau brought together the most prominent translators of the era—Yan Fu and Wang Guowei—in a single institution. For these reasons, the Bureau represents an important milestone in China's long and difficult journey toward modern academic infrastructure.

Yet the outcomes of the two institutions could hardly be more different. The Philosophical Vocabulary was widely adopted and its terms have endured for over a century. The Bureau's glossary, by contrast, was largely forgotten after the fall of the Qing.

4 Comparative Analysis

The contrasting outcomes of the Philosophical Vocabulary and the Bureau of Terminology can be explained by examining several key factors highlighted in existing scholarship.

First, timing was crucial. Japan acted during a window of opportunity. When the Philosophical Vocabulary was compiled in 1880, Japanese terminology for Western philosophy and logic was still in a state of flux. As Funayama Shin'ichi documented in his Meiji Ronrigaku-shi Kenkyū, the early Meiji period saw multiple competing translations for the same concepts, and the Philosophical Vocabulary appeared precisely when a unifying standard was most needed. Inoue Tetsujirō himself recalled that as a student he had been frustrated by the lack of fixed Japanese equivalents for European philosophical terms[4]. By the time the Bureau of Terminology was established in China in 1909, the situation was entirely different. Japanese-derived logical terms had already flooded the Chinese market through student translations and popular textbooks. The Bureau thus faced an already entrenched terminology system that it could not displace.

Second, the compiling bodies differed fundamentally in their authority and composition. The Philosophical Vocabulary was compiled by active researchers at Tokyo University—scholars who were themselves engaged in translation and teaching. Its authority was academic, and it spread through voluntary adoption. Evidence of this is found in the prefaces of Soeda Toshiichi's and Kuwata Kingo's Jevons translations, both of which explicitly stated that they followed the Philosophical Vocabulary, and Inoue personally proofread their work. The Bureau of Terminology, by contrast, was a government agency. Its glossary was imposed from above, but it lacked the academic prestige and practical enforcement mechanisms to make its standard stick. The Bureau's work was further undermined by the political turmoil of the late Qing, and after the 1911 revolution, its glossary was largely forgotten[11].

Third, the Japanese approach to Chinese characters was pragmatic and instrumental. Meiji scholars borrowed classical Chinese compounds but emptied them of their original meanings, refilling them with Western concepts. This allowed them to build a modern technical vocabulary quickly, without being weighed down by classical

associations. In China, by contrast, there was deep ambivalence about how to treat the classical language. Yan Fu‘s effort to find equivalents in ancient texts was culturally ambitious but created terms that were too obscure for practical use. The Japanese-derived terms that Wang Guowei and Zhang Junmai adopted were shorter, more transparent, and easier to learn. Over time, the market of readers and teachers chose efficiency over elegance. By the 1920s, Japanese-derived terms had become the standard Chinese logical vocabulary, a position they retain to this day[12].

In sum, Japan succeeded because it acted early, relied on academic rather than official authority, and treated Chinese characters as a neutral tool. China failed to achieve lasting unification because it acted too late, relied on a weak state bureau, and remained divided over whether to preserve classical forms or adopt efficient Japanese-derived terms. The success of the Philosophical Vocabulary and the failure of the Bureau of Terminology reveal two different paths in modern East Asian knowledge transformation.

5 Conclusion

The success of the Philosophical Vocabulary and the failure of the Bureau of Terminology reveal two different paths in modern East Asian knowledge transformation.

Japan, through an academic-led approach, rapidly established a uniform linguistic norm during the window of opportunity. Its pragmatic use of Chinese characters—borrowing classical forms while redefining their meanings—allowed it to build an efficient knowledge infrastructure without cultural baggage.

China, adopting an official-led approach, attempted unification only after Japanese terms had become entrenched and could not change the established market pattern. Yan Fu‘s effort to find equivalents in classical Chinese philosophy, while culturally ambitious, placed a double burden on readers and proved impractical for mass education.

Yan Fu‘s translations, though ultimately superseded, retain their value as an intellectual achievement. They represent a profound effort to integrate Western and Chinese thought. But for the practical purpose of building a modern educational and scientific vocabulary, the Japanese-derived terms proved superior. The market of readers, teachers, and publishers chose efficiency over elegance.

The story of how logical terminology was standardized—or not—in modern East Asia is more than a footnote to intellectual history. It shaped how generations of students learned to think. Japan’s success laid the groundwork for its rapid integration into the global scientific community. China‘s fragmentation delayed the teaching of logic in schools and left the field open to Japanese imports. Understanding this history offers a perspective on the broader challenge of constructing the linguistic infrastructure for modern knowledge in non-Western societies.

Disclosure of Interests

The authors have no competing interests to declare that are relevant to the content of this article.

References

1. Inoue, T. et al.: Tetsugaku Jii [Philosophical Vocabulary]. Tokyo University, Tokyo (1880) https://dl.ndl.go.jp/pid/994560
2. Wang, L.: Xuebu bian ding ming ci guan shi qi de Yan Fu yu Wang Guowei [Yan Fu and Wang Guowei during the Period of the Ministry of Education's Bureau of Terminology]. Chinese Classics & Culture 91(4), 143-149. DOI:10.16093/j.cnki.ccc.2014.04.020.
3. Jevons, W.S.: Elementary Lessons in Logic. Macmillan, London (1870); Jevons, W.S.: Science Primers: Logic. D. Appleton and Company, New York (1879) https://www.loc.gov/item/tmp96026009/
4. Inoue, T.: Meiji Tetsugakukai no Kaiko [Review of the Meiji Philosophical World]. Iwanami Shoten, Tokyo (1932) https://aozorashoin.com/title/47507
5. Chen, L.W.: Dong wang dong lai: Jindai Zhong-Ri zhi jian de yuci gainian [Going East and Coming East: Words and Concepts between Modern China and Japan]. Social Sciences Academic Press, Beijing (2019) http://find.nlc.cn/search/showDocDetails?docId=-8758144673908702673&dataSource=ddts&query=%E4%B8%9C%E5%BE%80%E4%B8%9C%E6%9D%A5
6. Soeda, T. (trans.): Ronri Shinpen [A New Compilation of Logic]. Maruya Zenichi, Tokyo (1883); Kuwata, K. (trans.): Ronri Setsuyaku [A Concise Explanation of Logic] (1883) https://dl.ndl.go.jp/pid/753150
7. Yan, F. (trans.): Mingxue Qianshuo [A Simple Account of Logic]. Commercial Press, Beijing(1981) http://photoapps.yd.chaoxing.com/MobileApp/GDSL/pdf/mgsk/81130014_09.pdf
8. Wang, G.W.: Lun xin xueyu zhi shuru [On the Introduction of New Academic Terms]. Education World 96(1905) https://www.sklib.cn/booklib/imagedetail?ID=8914767&SiteID=122
9. Peng, L.T., Gu, X.Q.: Qingmo bian ding ming ci guan yu jindai luoji xueshu yu de li ding [The Late Qing Bureau of Terminology and the Determination of Modern Logical Terms]. Journal of Zhengzhou University (Philosophy and Social Sciences Edition) 4, 146-151 (2013) https://kns.cnki.net/kcms2/article/abstract?v=lcJiu7QxtGO99xqmeq9JNfLLw06vHKxTGnBxsD00zUlE4hfs9G6RvNvTKqXdk-RzHUo80-Kp0MoXmtMU0VWWCwSUtD4mAgZzWXEBqv5A9TtDChia672Okw3eaX7odNZF5MSgTgM_b0FqchhJqs5AzOnUJomdQFBBiZO5K4C6NurmjUbVL34FBA==&uniplatform=NZKPT&language=CHS
10. Bureau of Terminology (comp.): Bianxue Zhong-Ying Mingci Duizhaobiao [Chinese-English Comparative Glossary of Logical Terms]. Ministry of Education, Beijing (1909) http://find.nlc.cn/search/showDocDetails?docId=9127517373908726863&dataSource=ucs01&query=%E8%BE%A8%E5%AD%A6%E5%90%8D%E8%AF%8D%E5%AF%B9%E7%85%A7%E8%A1%A8%20
11. He, S.Y., Cheng, X.F.: Xinzheng, xinzhi, xin wenhua: Bian ding ming ci guan yu gui zu xue tang [New Policies, New Systems, New Culture: The Bureau of Terminology and the College of Nobles]. Huaxia Publishing House, Beijing (2021) https://www.hxph.com.cn/newBooks/9289.jhtml

12. Long, X.: Luoji shuyu yiming yanbian de zhongguohua tansuo [A Chinese Exploration of the Evolution of Logical Terminology Translations]. Studies in Dialectics of Natur e 34(6), 10-17. DOI:10.19484/j.cnki.1000-8934.2018.06.002.