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East Asian Studies

2023

Well-Ordered Textures: The Book of Odes and the Study of Wu in Mid-Qing China

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Princeton, NJ : Princeton University

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WELL-ORDERED TEXTURES
THE *BOOK OF ODES* AND THE STUDY OF *WU* IN MID-QING CHINA

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A DISSERTATION
PRESENTED TO THE FACULTY
OF PRINCETON UNIVERSITY
IN CANDIDACY FOR THE DEGREE
OF DOCTOR OF PHILOSOPHY
RECOMMENDED FOR ACCEPTANCE BY
THE DEPARTMENT OF EAST ASIAN STUDIES

Adviser: He Bian

January 2023

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Abstract

This dissertation examines the epistemic breakthroughs and complexities in the study of “things” (*wu*) in mid-Qing evidential learning, a prevailing intellectual movement in China circa 1750-1850 which sought for truth from solid facts. By focusing on the multifaceted natural and ritual objects in the *Book of Odes* (*Shi*), this work offers a new understanding of mid-Qing intellectual history from the perspective of historical epistemology. Overall, I argue for a parallel development and contending authority between the textual and material aspects of evidential learning, which, in giving rise to an emerging inwardness of *wu*, collectively shifted the focus of epistemic inquiry from the referential surface of cosmological “coherence” (*li*) to the well-ordered “textures” (*li*) of specific *wu*.

Tracing back to the earlier cosmological tradition, this dissertation first demonstrates how the name and the object, text-derived features and natural traits had already merged into hermeneutical loops in the Song dynasty. These complicated *wu* were then incorporated into broader epistemic networks in the late Ming, creating an extensive referential surface which frequently left competing theses unresolved. I then elaborate how these unresolved problems were overcome through newly developed philological techniques such as ancient phonology, general pattern, and paleography, as well as intensified observations, frontier evidence, and technocratic inclination on the material side. Given the comparability of the newly revealed philological and material textures, the mid-Qing intellectual movement can be better categorized as a collective inquiry for the refined textures of specific *wu*.

Nevertheless, due to varied epistemological takes and methodological preferences, these breakthroughs guaranteed no convergence in knowledge making. This dissertation then examines the fickle and frequently irreconcilable working premises behind bifurcating philological theses, as well as the contending evidential authorities between textual and material aspects of a holistic *wu*. Such complexities suggest both an internal explanation for the trivialization of philological learning and an indigenous propensity for disciplinary division in the nineteenth century. The specified yet holistic inquiry of *wu*, rigorous in the epistemic construction of “facts” while loose in the epistemological attaining of “truth,” displays an important epistemic mode between the fade of Neo-Confucian cosmology and the advent of disciplinary science.

Acknowledgements

The best acknowledgement is the dissertation itself, which would not be imaginable without the collective wisdom and hearty support of so many people from the conception of the topic to its finalization. I feel fortunate to be a student of Professor He Bian, whose broad vision in the history of knowledge, just-right guidance in my study and life, and encouraging accommodation of my wild ideas made me to thrive, well beyond my expectations, in my Princeton years as a student and thinker.

I would also like to thank all the other professors in my dissertation committee. Professor Paize Keulemans has always been a witty supporter on my behalf, who oversaw the development of this project and provided insightful feedback on several early drafts of my dissertation. Professor Willard Peterson offered me a systematic training in Chinese intellectual history, which is a rare and precious experience in the East Asian departments today. His meticulous reading of my dissertation draft also significantly enhanced the quality of the final piece. Professor Cheng-hua Wang has long been the exemplar of erudition in my mind. The training I received from her in Chinese art and visual culture, which appeared to me a formidable expertise just a few years ago, is indispensable for this project. Professor Bruce Rusk kindly read the entire draft and offered extensive feedback, which is tremendously helpful for the conceptualization of my project. He is the best external reader I can ever imagine.

At Princeton, I also greatly benefited from Martin Kern, Anna Shields, Ya-hwei Hsu, Soren Edgren, and Janet Chen, whose seminars on the *Book of Odes*, *leishu* encyclopedias, antiquarianism, book culture, and China's modern transformation, respectively, equipped me with the essential knowledge and tools in carrying out this project. Besides, Susan Naquin, Jennifer Eichman and Trenton Wilson kindly read part of the dissertation draft, whose insightful comments have saved me from many technical and theoretical pitfalls.

Meanwhile, I would also like to thank my master's advisors, Professors Shang Wei and Dorothy Ko from Columbia University. They are the early mentors who marveled me with the great potential of

“things” in their virtuosic analyses of literature and objects. Besides, special thanks also go to Wang Fansen, Ge Zhaoguang, Feng Shengli, Xu Jianwei, Zhang Ke, Kevin Huang, Yuan-ting Hsu, Jean Tsui, Guo Xi'an, Ya Zuo, Nathan Vedal, Ori Sela, Wen Yu, Devin Fitzgerald, Harvey Lederman, Peter Gordon, John Moffett, and Joshua Seufert for their hearty support and encouragement at different stages of my dissertation research.

The writing of this dissertation would be a much less delightful journey without the inspiring conversations and warm companionship of my friends at Princeton, Columbia, Beijing, and Shanghai. I will not list your names here one after another. Our steady friendship is the best testimony. This dissertation—and indeed, my entire student life in this country—would not have been possible without the unwavering support of my family. I also wish to take this opportunity to thank my grandparents and parents, for their love, blessings, and patience.

The majority of this dissertation was finished during Covid-19 in the reference reading room of Shanghai Library, where I saw many fellow readers, like me, coming and leaving every day. They were in the same city, same library, same room, or even sitting at the same table right in front of you. You could see their eyes, but nothing about their face; you knew their appearance, but nothing about their name. All these marvelous creatures, half revealed, half concealed, used their sheer presence to tell a mystery that was destined to be out of reach—like a squeaky cart rolling out of the book storage, like the dawn and dusk of urban charm. This dissertation is dedicated to these familiar strangers, to the city, and to life.

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When things are successfully separated so that the individual strands are not intertwined, they are called “well-ordered textures.”

得其分則有條而不紊，謂之條理。

——Dai Zhen 戴震 (1724-1777)

*An Evidential Commentary on the Meanings of Terms in Mengzi*¹

¹ Dai Zhen 戴震, *Dai Zhen quanshu* 戴震全書 (Hefei: Huangshan shushe, 2010), 6: 149. With minor adaptations, the translation follows Justin Tiwald and Bryan W. Van Norden, eds., *Readings in Later Chinese Philosophy: Han to the 20th Century* (Indianapolis and Cambridge: Hackett Publishing Company, 2014), 320.

Introduction

This is the end of spring in Beijing and—perhaps I am too impatient—already I feel that summer is in the air and have suddenly remembered the slender-waisted wasps of my home. It must have been in midsummer that bluebottles swarmed on the ropes of our awning, and the iron-black wasps flew to and fro among the mulberry trees or by the cobwebs at the corners of the wall, from time to time carrying off a small green caterpillar or a spider. At first the caterpillar or spider would resist, but in the end it was always overcome and borne up into the air, as if by an aeroplane.

The old folk informed me that the slender-waisted wasp was the *guoluo* mentioned in the old classics, who, since all *guoluo* are female, must adopt bollworms to carry on her line. This wasp imprisons the green caterpillar in her nest, while she herself raps and taps outside day and night, praying, “Be like me! Be like me!” Then after a certain number of days—I forget exactly how many, but probably seven times seven—the caterpillar turns into a slender-waisted wasp. This is why the *Book of Odes* says, “the bollworm has young ones, yet the *guoluo* wasp carries them on its back.” This bollworm is the green caterpillar found on mulberry trees. As for the spiders, no mention is made of them.

I remember some evidential scholars propounding alternative theories to the effect that the wasp can lay eggs herself, but she catches caterpillars and puts them in her nest as food for her larvae when they hatch out. None of the old folk I knew would accept this view, however. They maintained that the caterpillar was carried off to be a daughter to the *guoluo*, and if we want to preserve a pretty story from nature, this version really is better. On long, idle summer days when you sit in the shade and watch the two insects, one tugging forward and one holding back, the wasp seems like a kindly mother giving her daughter a lesson for her own good, while the squirming caterpillar looks for all the world like a silly girl who doesn’t know what is best for her.

But these barbarians certainly are a nuisance, the way they keep harping on science. Though science has given us many marvels, it has also spoiled many of our pleasant dreams. The careful observations made by the great French entomologist Fabre have confirmed the view that the caterpillar is food for the wasp’s larvae. And this wasp, it seems, is no ordinary murderer but a peculiarly cold-blooded one, and a most learned and skillful vivisectionist into the bargain. Understanding the structure and function of the caterpillar’s nervous system, she stings its motory nerve with her wonderful poisoned sting, and when it is paralyzed—neither dead nor alive—it cannot move, but being neither alive nor dead, it does not decompose either. Right up to the time when the larvae emerge, this food is as fresh as on the day it was caught.

——Lu Xun, “Idle Thoughts at the End of Spring,” April 1925²

² See, “Chunmo xiantan” 春末閒談, in Zhou Shuren 周樹人, *Lu Xun da quanji* 魯迅大全集 (Wuhan: Changjiang wenyi chubanshe, 2011), 3: 103; with minor adaptations, the translation follows Xianyi Yang and Gladys Yang trans., *Lu Xun: Selected Works* (Beijing: Foreign Languages Press, 2003), 2: 141-42.

Lu Xun 魯迅 (1881-1936), the physician turned writer, was renowned for his lifelong interest in natural history.³ In the above quotation, he offers a vivid account for the slender-waisted *guoluo* 螺贏 wasp (sphex), which takes the bollworm for child raising. Yet the phenomenon is explained twice rather than once. In the first round, Lu Xun retells the “pretty story” from folk knowledge, where the *guoluo* wasp bewitched the bollworm and transforms the latter into its own descendent. The anthropomorphic prayer “be like me,” along with the numerical pattern of seven by seven, bespeaks an old divinatory language of cosmic transformation. But nothing testifies to the long history of this enchanting explanation than the quotation from the *Book of Odes* (*Shi* 詩), the oldest existing collection of Chinese odes dated back to almost three millennia ago.⁴ As one of the five Confucian classics since the Han dynasty, each ode received extensive elaborations in the form of classical commentaries, and the bewitching thesis of the *guoluo* wasp, along with its idiosyncratic prayer, had already appeared in an early commentary from the third century.⁵ Although by Lu Xun’s time this explanation had become so popularized that appearing like a hackneyed folk saying, it in fact derived from a time-honored epistemic tradition for the highest literacy.

Yet be it classical learning or folk saying, this “pretty story” became apparently outmoded by the time of Lu Xun, who also offers the disenchanting explanation from modern science. Quoting Jean-Henri Fabre (1823-1915), the renowned French entomologist, he discloses the authentic situation as a brood parasitism, where both the accurate observation and neologisms like the “motory nerve” indicate a scientific discourse disparate from the traditional interpretation. Moreover, between the two well-

³ See, Tu Xin 涂昕, *Lu Xun yu bowu xue* 魯迅與博物學 (Shanghai: Shanghai wenyi chubanshe, 2019), ch. 1.

⁴ Scholars have elaborated on the generic difference between the Greek “poetry” and the Chinese “*Shi*” The former, coming from the Greek word “*poiēō*” (I make), highlights the artificial nature of the poem as a fictive creation. This is much different from the Chinese *Shi*, which aims at the natural evocation of pre-existing correspondences. To avoid the linguistic implications of the term “poetry,” in this dissertation, I will leave *Shi* untranslated, and refer to the individual pieces as “odes.” For the generic difference, see, Pauline Yu, *The Reading of Imagery in the Chinese Poetic Tradition* (Princeton: Princeton University Press, 1987), ch. 1, esp. p. 36.

⁵ See, Lu Ji 陸機, “Maoshi caomu niaoshou chongyu shu,” 毛詩草木鳥獸蟲魚疏 in *Yingyin Wenyuange siku quanshu*, 70: 18.

established explanations, Lu Xun also mentions a few “evidential scholars propounding alternative theories,” who had already taken the phenomenon as brood parasitism despite the lack of modern etymological knowledge—though they were not well accepted by the “old folks” and only seemed to achieve a limited success.

For Lu Xun himself, this long introduction of the *guoluo* wasp would serve as an apt critique for the paralyzing ruling techniques of the upper class.⁶ That said, the epistemic distance between the folk and scientific explanations is of interest on its own. How did the ancient commentators derive the natural historical knowledge from a classical text? In what ways did the “evidential scholars” establish their alternative explanations closer to the actual situation? Moreover, why did such alternatives only witness a limited success? What were their similarities and differences from the modern scientific view? In this dissertation, I will explore these questions through a comprehensive case study on the myriad “things”—or *wu* 物—mentioned in the *Book of Odes*, with a temporal focus on the mid-Qing era (1750-1850) which was featured as the hightide of evidential learning in Chinese intellectual history. The new analytical techniques developed in this period, I argue, revealed an inner richness of specific *wu* that shifted the focus of scholarly inquiry from a broad correlative surface to well-ordered localized textures. This far-reaching epistemological transformation, explaining both the breakthroughs and complexities of mid-Qing scholarship, captures a crucial yet largely neglected chain between the fading of correlative cosmology and the advent of Western science, which is precisely represented by Lu Xun’s account of the *guoluo* wasp.

The *Book of Odes* and the Encyclopedic Inquiry of *Wu*

The story of the *guoluo* wasp and the bollworm highlights an intimacy between the study of *wu* and the *Book of Odes*. As a rich collection of 305 odes, this is by no means a special case. Instead, thanks

⁶ See, Zhou Shuren, *Lu Xun da quanji*, 104–5.

to the prevalence of natural images and ritual descriptions, the anthology involves hundreds of animals, plants, and artifacts, which were both essential for the reading of the odes and became a field of encyclopedic inquiry on its own. This epistemic significance was well addressed in Kongzi's *Analects* (17.9), where the master explained to his disciples the benefits of *Shi* learning:

Little Ones, why do none of you learn *Shi*? *Shi* can be a source of inspiration and a basis for evaluation; they can help you to come together with others, as well as to properly express complaints. In the home, they teach you about how to serve your father, and in public life they teach you about how to serve your lord. They also broadly acquaint you with the names of various birds, beasts, grasses, and trees.

小子何莫學夫詩？詩可以興，可以觀，可以群，可以怨。邇之事父，遠之事君。多識於鳥獸草木之名。⁷

In this influential claim, Kongzi enumerated a variety of social and ethical benefits in the learning of *Shi*. Yet the final point was different, where the “broad acquaintance” of animal and plant names underlined an additional significance for erudition. For sure, such an erudition was far beyond the rote memorization of vocabulary, but, as well addressed by Kongzi himself, always involved a normative demand for the “rectification of names” (*zhengming* 正名), or the proper match between the name and the referent that was believed to be crucial for a smooth ordering of the world.⁸

For the myriad *wu* mentioned in the *Book of Odes*, this first means a proper match between the textual names and the material objects. In the history of Chinese classical learning, such a matching endeavor became by itself a time-honored subfield for scholarly inquiry, the “study of name-referent” (*mingwu xue* 名物學). In the transmitted texts, the term *mingwu* first appeared in the *Rites of Zhou* (*Zhouli* 周禮), where the cook was recorded to be responsible for the provision of six livestock, six beasts, and six birds, as well as to “distinguish their *mingwu*.” According to the commentary by the Tang scholar Jia Gongyan 賈公彥 (fl. mid-7th c.), this was because each of the animals had its own “name”

⁷ Zhu Xi 朱熹, *Sishu zhangju jizhu* 四書章句集注 (Beijing: Zhonghua shuju, 1983), 179. With minor adaptations, the translation follows Edward Slingerland trans., *Confucius Analects: With Selections from Traditional Commentaries* (Indianapolis and Cambridge: Hackett Publishing Company, 2003), 204.

⁸ Zhu Xi, *Sishu zhangju jizhu*, 143.

(*minghao* 名號) and “traits” (*wuse* 物色).⁹ If *ming* concerns primarily the philological aspect of the name, *wu* refers more to the material traits of the object. In this sense, the very term lays out the basic agenda of this subfield, where the convergence of textual label and the material referent became a lasting pursuit for two-millennia of commentarial history on the Confucian classics, ranging across animals, plants, natural phenomena, ritual paraphernalia, daily utensils, and so on.¹⁰

Thanks to its encyclopedic content, as well as the authoritative guidance from Kongzi, the *Book of Odes* loomed particularly large in this intellectual subfield. The earliest work of *mingwu* studies, Lu Ji’s 陸機 (fl. mid-3rd c.) *Maoshi caomu niaoshou chongyu shu* 毛詩草木鳥獸蟲魚疏 (Exegeses on the grasses, trees, birds, beasts, insects, and fishes in *Maoshi*) was precisely dedicated to the animals and plants in *Maoshi*, the dominant commentarial tradition of *Shi* since the late-2nd century.¹¹ In the current version of this field-establishing work, there are 80 entries for plants and 53 entries for animals altogether, though, as an incomplete work recollected from transmitted texts, this is far from the encyclopedic capacity of the *Maoshi* world. In his far more exhaustive monograph *Shizhuan mingwu jilan* 詩傳名物集覽 (Collected catalog of *mingwu* to the *Shi* commentary), the early-Qing scholar Chen Dazhang 陳大章 (1659-1727) included 338 entries of animals and plants altogether. This is not far from Kou Shuhui’s modern account of 357 entries in her *mingwu* dictionary of *Shi* based on scientific taxonomy.¹² But even this only constitutes a proportion of the complete list, since the anthology also includes a considerable number of ritual objects, daily utensils, costumes and decorations, natural phenomena, as well as a variety

⁹ Jia Gongyan 賈公彥, *Zhouli zhushu* 周禮注疏 (Beijing: Beijing daxue chubanshe, 1999), 1: 86. Also see, Masaru Aoki 青木正児, *Chūka meibutsu kō* 中華名物考 (Tokyo: Heibonsha, 1988), 19–21.

¹⁰ For the fundamental aim of *mingwu* studies as a convergence between *ming* and *wu*, see, Yang Zhishui 楊之水, “Dingming yu xiangzhi,” 定名與相知 *Dushu* 讀書, no. 11 (2004): 38.

¹¹ According to Xu Jianwei, the author of this work should be identified as “陸機” rather than “陸璣” that more commonly appears in modern bibliographies. That said, one should not confuse this 陸機 (*zi* Fuke 符恪) with the more renowned literatus 陸機 (*zi* Shiheng 士衡, 261-303), though they were contemporaneous and might even descend from the same lineage. See, Xu Jianwei 徐建委, “Wenben de yanbian: *Maoshi caomu niaoshou chongyu shu* bianzheng,” 文本的衍變：《毛詩草木鳥獸蟲魚疏》辨證 *Shanghai daxue xuebao* 上海大學學報 35, no. 5 (2018): 74–76.

¹² Kou Shuhui 寇淑慧, “Shijing mingwu,” 詩經名物 in *Shijing xue da cidian*, 1159–1314.

of geographical, institutional, and individual proper names. Feng Fuming's 馮復京 (1573-1622) *Liujia shi mingwu shu* 六家詩名物疏 (*Mingwu commentaries to the six schools of Shi*, henceforth *Mingwu Commentaries*), one of the most encyclopedic *mingwu* monographs in Chinese history, included an interpretation for almost every meaningful noun in the anthology, accumulating to an astonishing total of 1,568 entries.

In fact, compared to other Confucian classics, this statistical result is not particularly impressive. For instance, contemporary scholars have shown an even larger number of *mingwu* items in the *Book of Rites* (*Liji* 禮記, 2473 items in total) and the *Rites of Zhou* (2121 items in total), where the ritual and institutional descriptions apparently involve more technical details of *wu*.¹³ As for the geographical and personal names, the history-oriented *Spring and Autumn Annals* (*Chunqiu* 春秋) will then take the lead. That said, the *Book of Odes* stands out for two reasons. First is its rich involvement of *mingwu* items from both human life and the natural world. Therefore, among the five Confucian classics, only *Shi* can create an encyclopedic impression of *wu* across all kinds of the myriad things. This was particularly important in the earlier history of *mingwu* studies, which tilted significantly to the natural side.

But speaking of this encyclopedic coverage, why do we have to focus on the five Confucian classics? Is it not the early glossary *Erya* 爾雅 an even better candidate? As a collection of lexical notes from early texts—in particular *Shi*—it not only includes the straightforward explanation of a greater number of *mingwu* terms but also arranges them by categories.¹⁴ This brings forward the second and more

¹³ See, Liu Xingjun 劉興均 and Huang Xiaodong 黃曉冬, "Sanli" *mingwu ci yanjiu* "三禮"名物詞研究 (Beijing: Shangwu yinshu guan, 2016), 1: 41.

¹⁴ According to Yin Menglun's statistics, there are 2,091 entries and around 4,300 terms included in *Erya* altogether, about half of which are specific *mingwu* terms. See, Yin Menglun 殷孟倫, "Cong *Erya* kan guhanyu cihui yanjiu: Pipan jicheng zhongguo yuyanxue youliang chuantong de yige shili," 從《爾雅》看古漢語詞彙研究——批判繼承中國語言學優良傳統的一個實例 *Shandong daxue xuebao* 山東大學學報, no. 4 (1963): 69. For the textual intimacy between *Erya* and *Shi*, see, Federico Valenti, "Biological Classification in Early Chinese Dictionaries and Glossaries: From Fish to Invertebrates and Vice Versa" (PhD Dissertation, Università degli Studi di Sassari, 2017), 10–11; Xu Jianwei 徐建委, "Shi de bianci yu Maoshi de xingcheng," 《詩》的編次與《毛詩》的形成 *Fudan xuebao* 復旦學報, no. 2 (2017): 64–66. For the classificatory significance of *Erya*, see, Federico Valenti, "Explicit and Hidden Zoological Categories in Early Chinese Taxonomies," *Asiatische Studien - Études Asiatiques* 74, no. 3 (2020).

important feature of *Shi*—its multifaceted nature in the accounts of *wu*. In the scholarly inquiries of the myriad things, premodern Chinese practitioners accumulated a wide range of approaches, such as cosmological reasoning, natural observation, technical engagement, and medical studies.¹⁵ Yet the classic-oriented *mingwu* studies stood out in their greater emphasis on the *textual* dimension of *wu*. Due to the unique authority of the classical texts, such studies frequently gained an autonomous development within the commentary tradition that did not form into a necessary consistency with the natural world.¹⁶ And the situation was more complicated in *mingwu* studies of *Shi*, since the odes, unlike other Confucian classics, had a *poetic* nature that was particularly rich in linguistic patterns, imagistic associations, and hermeneutic possibilities. In her study on the animal catalogues in early modern China, Martina Siebert identifies multiple facets from a single kind of animal, where the “text-animal” from early records, the “physical animal” observed through direct encounters, and the “allegorical animal” for symbolic purposes may well be incompatible with each other yet coexist side by side.¹⁷ Such a multifaceted split of *wu* was common in the *mingwu* inquiries of *Shi*, whose dual nature as a classical *and* literary work added rich symbolic, poetic, and linguistic layers beyond the material inquiries in a simple natural-historical case.¹⁸

When *mingwu* imagery appeared in *Shi*, did it involve a serious epistemic claim or a mere literary imagination? When a specific trait was suggested from the lines, was it a faithful depiction of the material world or aiming at certain symbolic meanings beyond? The entanglements and plural possibilities created

¹⁵ See, e.g., Barry Allen, *Vanishing into Things: Knowledge in Chinese Tradition* (Cambridge and London: Harvard University Press, 2015); Yung Sik Kim, *The Natural Philosophy of Chu Hsi (1130-1200)* (Philadelphia: American Philosophical Society, 2000); Dagmar Schäfer, *The Crafting of the 10,000 Things: Knowledge and Technology in Seventeenth-Century China* (Chicago: The University of Chicago Press, 2011); He Bian, *Know Your Remedies: Pharmacy and Early Modern Culture in China, 1500-1800* (Princeton: Princeton University Press, 2020).

¹⁶ For a relevant discussion on the autonomous development of the commentary tradition, see, Haun Saussy, *The Problem of a Chinese Aesthetic* (Stanford: Stanford University Press, 1993), ch. 4 and p. 188.

¹⁷ Martina Siebert, “Animals as Text: Producing and Consuming ‘Text-Animals,’” in *Animals through Chinese History: Earliest Times to 1911*, ed. Roel Sterckx, Martina Siebert and Dagmar Schäfer (Cambridge: Cambridge University Press, 2019), 139-140, 152.

¹⁸ For the dual nature and mutual influence between the classical and literary approaches in the hermeneutic tradition of *Shi*, see, Bruce Rusk, *Critics and Commentators: The Book of Poems as Classic and Literature* (Cambridge and London: Harvard University Asia Center, 2012). For the general transition from a classic-oriented reading of *Shi* to a literature-oriented reading in the Ming dynasty, see, Liu Yuqing 劉毓慶, *Cong jingxue dao wenxue: Mingdai Shijing xue shilun* 從經學到文學——明代《詩經》學史論 (Beijing: Shangwu yinshu guan, 2001).

from this multifaceted overflow of information rendered the *mingwu* study of *Shi* a perennial field of scholarly debate, which not only demanded the most rigorous analytical tools, but also offered an arena to display the varied epistemic premises and methodological preferences among the scholars. Due to its encyclopedic coverage and multifaceted nature, the prominence of *Shi* in the history of *mingwu* studies was no accident. And for the same reason, it offered an ideal sample that is sufficiently large and comprehensive for examining the scholarly inquiry of the myriad *wu* in Chinese history—an enormous yet loosely knitted field that was central to the intellectual agenda of the literati scholars, under the umbrella term of the “investigation of things” (*gewu* 格物).

Just as Fabre’s entomological findings brought new light to Lu Xun’s account of the slender-waisted wasp, in the more recent decades, new evidence from modern archaeology and biology greatly propelled the study of *mingwu* and revitalized this subfield. Puzzling designs were clarified by excavated artifacts; uncertain creatures were pinned down to specific species. Many misleading claims from the transmitted works, like the bewitching wasp, were abandoned and rectified.¹⁹ Here, it is worthy noting that my dissertation has no aim at contributing to these cutting-edge discussions. Instead, one may better conceive the relationship between these contemporary *mingwu* studies and my own work as that of up-to-date scientific research and the history of science.²⁰ On the one hand, these cutting-edge *mingwu* discoveries can offer a revealing vantage point for the reexamination and reflection of past works. Yet on

¹⁹ For the study of *Shi*-related artifacts, see, e.g., Yang Zhishui 楊之水, *Shijing mingwu xinzheng* 詩經名物新證 (Tianjin: Tianjin jiaoyu chubanshe, 2007); Chen Wenju 陳溫菊, *Shijing qiwu kaoshi* 詩經器物考釋 (Taipei: Wenjin chubanshe, 2001); Sun Ji 孫機, *Huaxia yiguan: Zhongguo gudai fushi wenhua* 華夏衣冠：中國古代服飾文化 (Shanghai: Shanghai guji chubanshe, 2016), chs. 1, 2, 12; Sun Ji 孫機, *Zai chi zai qu: Zhongguo gudai chema wenhua* 載馳載驅：中國古代車馬文化 (Shanghai: Shanghai guji chubanshe, 2016), chs. 1-3, 5.

For the study of *Shi*-related animals and plants, see, e.g., Sun Zuoyun 孫作雲, *Sun Zuoyun wenji* 孫作雲文集 (Kaifeng: Henan daxue chubanshe, 2003), 2: 1-68; Cheng Qingtai 成慶泰, “*Shijing zhong suo jizai de yulei kaoshi*,” 《詩經》中所記載的魚類考釋 *Bowu* 博物, no. 4 (1981): 4-6; Pan Fu-chun 潘富俊, *Shijing zhiwu tujian* 詩經植物圖鑒 (Taipei: Maotouying chubanshe, 2001); Hu Miao 胡淼, *Shijing de kexue jiedu* 《詩經》的科學解讀 (Shanghai: Shanghai renmin chubanshe, 2007).

²⁰ For the adaptability of history-of-science methods to the historical study of philological expertise, see, Yingtian He, “‘Qingdai xueshu xin shiye’ gongzuofang shuping: Jianlun qingxue yanjiu de xin dongxiang,” “清代學術新視野”工作坊述評——兼論清學研究的新動向 *Sixiang shichang* 思想市場, 2022, https://m.thepaper.cn/newsDetail_forward_17224260.

the other hand, they bear no teleological authority but merely imply one possible way out of the multifaceted pre-modern *mingwu* complexity. It is with this historical hindsight that we delve into the mid-Qing era, the temporal focus of this dissertation.

Epistemic Breakthroughs in the Mid-Qing Era

In the Chinese intellectual history, the mid-Qing era (ca. 1750-1850) is featuring by the rise and dominance of evidential learning (*kaoju xue* 考據學). As a countermovement to Song-Ming Neo-Confucian learning, and in particular the shortcomings in the speculative trends of the Wang Yangming 王陽明 (1472-1529) school, the mid-Qing era witnessed a collective striving for precise learning based on reliable facts.²¹ The study of *mingwu*, as noted by Benjamin Elman, was among the foremost endeavors to “break through the veil of Neo-Confucian interpretation.”²² Speaking of this intellectual movement, a salient feature was the dazzling philological techniques newly developed by evidential scholars. To name a few, ancient phonology identified the original characters from the loan character used in the transmitted text; general pattern revealed textual structures that were not discernable from a single case; paleography dissected a single character into meaningful components. All of these new techniques helped to reveal more refined philological traits behind the immediate textual appearance, thus advancing new hermeneutic possibilities beyond a literary reading on the surface. This is precisely what was going on in *mingwu* studies of the mid-Qing era. As I will elaborate in this dissertation, the newly revealed philological traits not only shed key light on many suspended puzzles that were formerly unresolvable through a surface reading, but also indicated an *inner richness* to the specific *mingwu* terms. For the first time, the textual name became a focus of intensive epistemic inquiry, whose hidden traits, waiting to be

²¹ See, Benjamin A. Elman, *From Philosophy to Philology: Intellectual and Social Aspects of Change in Late Imperial China*, Harvard East Asian monographs 110 (Cambridge, Mass.: Council on East Asian Studies, 1984), ch. 2.

²² Elman, *From Philosophy to Philology*, 45.

identified through analytical tools, endowed it with a similar epistemological position to the unfamiliar material object in front of the beholder.

For the *mingwu* study of *Shi*, such intensive inquiries spanned over a wide range of evidential works and involved almost all the leading philological scholars of the day. New philological observations came from *mingwu* monographs such as Jiao Xun's 焦循 (1763-1820) *Maoshi caomu niaoshou chongyu shi* 毛詩鳥獸草木蟲魚釋 (Exegeses on the birds, beasts, grasses and trees in *Maoshi*), philological collections such as Duan Yucai's 段玉裁 (1735-1815) *Shijing xiaoxue* 詩經小學 (Lesser learning on the classic of *Shi*) and the *Maoshi* section of Wang Yinzhi's 王引之 (1766-1834) *Jingyi shuwen* 經義述聞 (An account of classical meanings heard), as well as comprehensive *Maoshi* commentaries including Hu Chenggong's 胡承珙 (1776-1832) *Maoshi houjian* 毛詩後箋 (Endnotes to *Maoshi*), Chen Huan's 陳奐 (1786-1863) *Shi maoshi zhuan shu* 詩毛氏傳疏 (Exegeses to the Mao commentary to *Shi*), and Ma Ruichen's 馬瑞辰 (1782-1853) *Maoshi zhuanjian tongshi* 毛詩傳箋通釋 (Comprehensive exegeses to the commentaries of *Maoshi*). Moreover, relevant discussions were also widely available from the philological analyses of neighboring fields. Wang Niansun's 王念孫 (1744-1832) *Guangya shuzheng* 廣雅疏證 (Annotated proofs to *Guangya*) and Hao Yixing's 郝懿行 (1757-1825) *Erya yishu* 爾雅義疏 (Commentaries to the meanings of *Erya*), both working on the glossary tradition of *Erya*, were notable examples of the kind. Besides, there were also plenty of philological discussions in the form of individual treatises or scholarly correspondences, widely preserved in the collected works of evidential scholars.

That said, the prevalence of philological breakthroughs by no means indicated a downplay or oblivion on the material side. Although for certain philologists such as the father-and-son Wang Niansun and Wang Yinzhi, one could indeed observe a prevailing prioritization of philological evidence over textual ones, other scholars would choose different stances. For instance, in Jiao Xun's *mingwu* monograph mentioned above, the two sides were rather balanced, where cutting-edge philological reasoning and keen natural observations worked jointly for new interpretations. And for sure, there were

also scholars who placed a general priority on the material side. Among the *mingwu* monographs on *Shi*, *Maoshi duoshi* 毛詩多識 (Extensive Inquiries in *Maoshi*) by the Manchu scholar Doronga 多隆阿 (1794-1853) would be the best representative. It not only reexamined transmitted interpretations through meticulous eyewitnesses, but also offered a detailed account on the geographical difference of the *mingwu* species in his homeland Manchuria. Yet speaking of material inquiries, none of the mid-Qing evidential scholars was comparable to Cheng Yaotian 程瑤田 (1725-1814), whose collected treatises *Shicao xiaoji* 釋草小記 (Minor records on the interpretation of grasses) and *Shichong xiaoji* 釋蟲小記 (Minor records on the interpretation of insects) covered several *mingwu* items in *Shi*. In these natural historical writings, Cheng's active collection of specimens, faithful morphological illustrations, and proto-experimental designs reached a meticulousness that was unprecedented in Chinese history, which won him recognition as the Chinese inventor of an "implicit botany" from George Métaillé—and we can grant a similar title for his zoological discoveries as well.²³ Meanwhile, the revival of antiquarian studies in the mid-Qing era also contributed to the resolution of *mingwu* puzzles related to the early artifacts. In this aspect, Cheng Yaotian's *Kaogong chuanguwu xiaoji* 考工創物小記 (Minor records on the diverse crafts and artifact making) also marked the analytical height among evidential scholars. Finally, the unparalleled mobilizing power and strong intellectual curiosity also rendered the mid-Qing court an unneglectable actor in these material inquiries. For *mingwu* studies of *Shi*, two aspects were particularly relevant: the antiquarian catalogues of the vast imperial collections, and the long-distance geographical surveys. Neither could be easily emulated by a local scholarly community, and thus offered an important supplement to the evidential enterprises of the day.

In sum, thanks to the newly developed techniques such as ancient phenology, general pattern, and paleography on the one hand, as well as the intensified observations, expanded territory, and imperial channels on the other hand, the mid-Qing era featured epistemic breakthroughs on both the philological

²³ See, Georges Métaillé, "The Botany of Cheng Yaotian (1725–1814): Multiple Perspectives on Plants," in Miller; Louis, *Antiquarianism and Intellectual Life in Europe and China, 1500-1800*, 260.

and the material sides—an observation appropriate for both the evidential movement in general and *mingwu* studies of *Shi* in specific. Meanwhile, the diverse priorities taken by the scholars between philological and material evidence also testified to the intellectual significance of both sides, which, as this dissertation will demonstrate in detail, did not necessarily guarantee any epistemic convergence. In this sense, the mid-Qing era spoke precisely to the complexities of a *ming-wu* compound, where the philological “name” and the material “referent” both concurred with each other in the yield of new knowledge, and competed for evidential authority that led them to different directions.

Object-Oriented Epistemology of *Wu*

The philological developments in the mid-Qing era endowed not only a similar epistemological structure but also a comparable epistemic efficacy between the textual name and the material referent. How should we account for this balanced view between *ming* and *wu*, where the conceptual term and the concrete object were as revealing? In this regard, the recent trend of Object-Oriented Ontology (OOO) offers important theoretical insights. To start with, this intellectual trend is featured by its “flat ontology” that treats all objects initially in the same way, be it human or nonhuman, animate or inanimate, physical or conceptual, actual or fictional.²⁴ For instance, Graham Harman, the founding leader of this intellectual trend, defines the object as “anything that cannot be entirely reduced either to the components of which it is made or to the effects that it has to other things,” which is void of any privileged inclination to material substance.²⁵ Secondly, as already implied from this definition, in OOO, the object is featured by its *withdrawal* from one another, a key point inspired by Martin Heidegger’s tool-analysis.²⁶ This means the object denies any direct access to human beings or other objects, and thus is never exhaustible by its

²⁴ See, e.g., Graham Harman, *Object-Oriented Ontology: A New Theory of Everything* (London: Pelican Books, 2018), 54–58; Levi R. Bryant, *Onto-Cartography: An Ontology of Machines and Media* (Edinburgh: Edinburgh University Press, 2014), ch. 1.

²⁵ Harman, *Object-Oriented Ontology*, 43.

²⁶ See, Harman, *Object-Oriented Ontology*, 7, 12; Graham Harman, *Tool-Being: Heidegger and the Metaphysics of Objects* (Chicago and La Salle, Illinois: Open Court, 2002), 16, 21.

effects or manifestations in the world. This insight is nicely put in the following lines by Levi Bryant, another key figure in the OOO movement:

Here the point to be borne in mind is that objects are always in *excess* of any of their local manifestations, harboring hidden volcanic powers irreducible to any of their manifestations in the world.²⁷

Meanwhile, noting that the denied access is for both objects without and within, we can speak of a similar irreducibility to its components. And in this way we arrive at Harman's featured definition of the object, which always has "a surplus beyond its constituent pieces and beneath its sum total of effects."²⁸ In OOO, the object is thus not defined by its physicality but its unfathomable excess, an inner richness that is never possible to be fully grasped.

Here, my elaboration of these theoretical details by no means indicates a similar epistemological take by any of the mid-Qing scholars. Instead, the analogy is drawn for *us*, regarding how *we* may learn from OOO for a better conceptual framework to account for the complexities in the *mingwu* study of *Shi*. The inspiration comes threefold. First, the flat-ontology of OOO, granting an equal initial position to the textual and the material, is particularly apt for the dual nature of the *mingwu* problems. In this dissertation, I will adopt a similar flat-epistemology, which offers a *symmetrical* treatment to the analysis of *ming* and *wu*. Correspondingly, no hierarchy is initially presumed among the varied evidential methods. Be it textual quotation, philological reasoning, material observation, or aesthetic interpretation, their different epistemic authorities are only identified in the actual unfolding and encounter of one another under specific contexts.

Second, the featured definition of the object in OOO, pointing to an inner richness of individual things, also offers a revealing perspective to account for the epistemic breakthroughs in the mid-Qing *mingwu* studies. As I will demonstrate in this dissertation, the late Ming and early Qing witnessed an

²⁷ Levi R. Bryant, *The Democracy of Objects* (Ann Arbor: Open Humanities Press, 2011), 70.

²⁸ Harman, *Object-Oriented Ontology*, 51.

“erudite learning” that drew extensive references on the textual surface. As a contrast, the newly developed philological techniques in the mid Qing were precisely featured by their ability to identify more refined philological traits behind the immediate textual appearance, an epistemic effect comparable to the intensified observations on the material side. In this sense, *ming* became another kind of *wu*—not a plain signifier for something else, but a textual object with its own inner richness. This explains why in the dissertation title, I do not mention *mingwu* but only the “study of *wu*,” where the term takes this broader meaning to involve both aspects.

This symmetrical view is also the basis on which I use the term “texture” to denote the specific, localized traits of the broadly defined *wu*. Two reasons make the word an apt choice. First, in English, the word can be used for not only corporeal objects (e.g., the texture of a stone) but also incorporeal objects (e.g., the texture of a writing piece), thus fitting well with the demand to cover both the textual and the material sides. Second, unlike the visual “pattern” or the logical “structure,” “texture” implies a tangible experience and thereby the irreducible materiality of the object. It thus works well in capturing the inner richness of the broadly defined *wu*. From this vantage point, the mid-Qing epistemic movement can be reconceptualized as a collective inquiry for the refined textures of *wu*. Concrete-based rather than metaphysical, carefully differentiated rather than all embracing, such newly revealed textures also redefined *wu* in a more specified form. This double move toward the refined textures of specific *wu* is essential for understanding the epistemological transition from the late Ming to the mid-Qing.

Yet the most important inspiration comes from somewhere else. Note that the constant withdrawal of the object indicates an insurmountable epistemological limit, namely, “there is no direct knowledge of anything.”²⁹ And here lies the deep message of Harman’s definition of the object, since according to him, the downward reduction to the components and the upward reduction to the effects are the only two kinds of possible knowledge for an object.³⁰ As we can fairly conceive from the word

²⁹ Harman, *Object-Oriented Ontology*, 52.

³⁰ Harman, *Object-Oriented Ontology*, 43; Graham Harman, *Immaterialism: Objects and Social Theory* (Cambridge: Polity Press, 2016), 7–11.

“reduction,” each approach has its intrinsic shortcoming. By “undermining” an object into its smaller constituents, one would not be able to explain *emergence*, the new properties appear when smaller objects are joined together into a new one. By “overmining” an object into its tangible properties or effects, one would not be able to explain *change*, which demands a surplus for potentiality.³¹

Had Harman stopped here, it would have merely been an impotent critique for the inevitable limit of human knowledge, since no philosophical reflection was capable of getting rid of this. However, a deep insight is suggested when he continues to elaborate what will happen when a beholder is determined to seek further knowledge from an object despite its doomed failure. In such instances, the beholder starts from a “sensual object” yet goes beyond its immediate “sensual qualities” to search for the “real qualities.” However, contra Edmund Husserl’s belief in the transcendental power of the intellect, in OOO, such “real qualities” are never directly attainable due to the constant withdrawal of the “real object.”³² As a result, the beholder has to replace these inaccessible “real qualities” by some others on the scene, and the only available choice, surprisingly, is the “real qualities” of the beholder herself.³³

What is meant by a beholder supplying real qualities for a “sensual object”? Here Harman offers the most crucial insight for the dissertation:

Practically speaking, the real qualities of any sensual object we encounter can be found in the *unnoticed background assumptions* that make it visible to us. What is a good name for such an object, built of unknowable real qualities that cannot be stated literally, and which also come from our own side of the fence rather than from the object directly? It seems to me that we can use the term paradigm...³⁴ (Italics added)

The inaccessibility of the “real qualities” or ultimate knowledge shifts the focus to the background assumptions of the beholder. Although this philosophical reflection is not able to transcend the

³¹ Harman, *Immaterialism*, 7–11; Harman, *Object-Oriented Ontology*, 30, 49–50.

³² In OOO, each object comes with a quadruple structure, with its real object, real qualities, sensual object, and sensual qualities carefully distinguished. For further elaborations, see, Graham Harman, *The Quadruple Object* (Winchester and Washington: Zero Books, 2011), chs. 2–3.

³³ Harman, *Object-Oriented Ontology*, 181–85.

³⁴ Harman, *Object-Oriented Ontology*, 189.

epistemological limit, it sheds key light on knowledge making by showing its dependency on tacit paradigms, and correspondingly, its rich potential of plurality out of varied underlying assumptions. This is particularly relevant to *mingwu* studies of *Shi*, which, due to its intrinsic multifacetedness, witnessed a wide array of epistemological priorities and methodological preferences. In the above discussions, we have seen how this is possible between the aesthetic and the epistemic, as well as the philological and the material. And as I will demonstrate in this dissertation, such different underlying assumptions, or “epistemic stances,” could also take place on a variety of more specific levels. As one can fairly conceive, such underlying differences played a key role in the pluralization and lasting debates of the scholarly realm. This was especially the case in the mid-Qing era, when the well-ordered textures, having settled most of the inconsistencies and suspended debates from earlier periods, foregrounded the epistemic stances as a key factor for further divergences and debates. And the lack of a systematic reflection on this epistemological level, I argue, is crucial for understanding the intrinsic limit and trivialization of the evidential movement in the 19th century.

Epistemic Analysis as a Third Approach

On the broader scale, this OOO-inspired focus on the underlying assumptions also proposes a promising approach for the analysis of intellectual history in general. In the field of intellectual history, scholars have developed two major approaches for analyzing past thought. One is to trace the “internal logic” in the unfolding of its key notions, as epitomized in the history of ideas. The other is to “contextualize” it in the broader historical setting, as widely conducted in the more recent trend of cultural-intellectual history.³⁵ Although since the past a few decades, the collected move from the former

³⁵ For a similar division of the two approaches in the European and the Chinese contexts, see, Peter E. Gordon, “What Is Intellectual History: A Frankly Partisan Introduction to a Frequently Misunderstood Field,” 2013, 1–3, <https://ces.fas.harvard.edu/uploads/files/Reports-Articles/What-is-Intellectual-History-Essay-by-Peter-Gordon.pdf>; Yü Ying-shih 余英時, *Lun Dai Zhen yu Zhang Xuecheng: Qingdai zhongqi xueshu sixiang shi yanjiu* 論戴震與章學誠：清代中期學術思想史研究 (Beijing: Sanlian shudian, 2012), “Preface to the Reprinted Edition,” 2–4.

to the latter approach has yielded fruitful results, methodologically speaking, neither is sufficient to offer a full account for the complexities in past thought.³⁶

This intrinsic limit is well elaborated by Peter Gordon in his thoughtful reflection on the excessive tendency of contextualization in the current field of intellectual history. According to him, the modern understanding of history is characterized by a tension between two general ideals—the ideal of “movement” that takes the past as a passage for change, and the ideal of “containment” that treats the past as a foreign realm on its own. In the field of intellectual history, they are precisely epitomized by the two approaches, where one obeys the former ideal when attending to the transformation of an idea through time, and the latter ideal when situating the idea in its own historical context.³⁷ Yet each ideal is confined by its own limits:

If we obey the ideal of movement without restraint we may lose any sense for the conditioning forces that help to explain why an idea is not merely invariant, and we are disabled from accounting for local changes of meaning. If we obey the ideal of containment without restraint, we may end up imagining a context as a self-stabilizing unity inside of which there is no history whatsoever. Both ideals are therefore one-sided: the ideal of movement on its own runs the risk of breaking up all contexts and creates the illusion that ideas, like privileged passengers on a high-speed train, simply travel through history while taking only the most superficial notice of their surroundings. The ideal of containment, when it governs without restraint, will break up the historical continuum into a set of discrete totalities, each of which exists in a state of sublime isolation, such that even the passage from one station to the next thereby becomes inexplicable.³⁸

This double confinement makes more than clear its relevance to the epistemological limits described in OOO. By reducing the thought downwards into its key ideas, one would lose the emerging properties in its situational manifestations. Is it not a typical form of “undermining?” By reducing the thought upwards into its contexts, one would lose the capability to explain historical change. Is it not a typical form of

³⁶ For a brief account on the shifted fashion from the former to the latter approach, see, Anthony Grafton, “The History of Ideas: Precept and Practice, 1950-2000 and Beyond,” *Journal of the History of Ideas* 67, no. 1 (2006): 1–32. For a similar call in China field at the methodological turning point, see, Benjamin A. Elman, “Zhongguo wenhuashi de xin fangxiang: Yixie youdai taolun de yijian,” 中國文化史的新方向：一些有待討論的意見 *Taiwan shehui yanjiu jikan* 台灣社會研究季刊, no. 12 (1992): 9–15.

³⁷ Peter E. Gordon, “Contextualism and Criticism in the History of Ideas,” in *Rethinking Modern European Intellectual History*, ed. Darrin M. McMahon and Samuel Moyn (Oxford: Oxford University Press, 2014), 33–34.

³⁸ Gordon, “Contextualism and Criticism in the History of Ideas,” 35.

“overmining?” The formation of the two historical ideals and analytical approaches is therefore for a good reason. And there is no need to bemoan their intrinsic confinements, for they are rooted in the fundamental epistemological limits of human knowledge.

What OOO teaches us, instead, is that the inaccessibility of an object would bring the underlying assumptions of the beholder onto the fore. And due to the unique feature of intellectual history, whose subject of inquiry—historical thought—by itself had an epistemic nature, the underlying assumptions concern not only the historian in the sense of a historiographical reflection, but also the historical actors themselves—their epistemic stances, methodological preferences, and all the tacit premises that rendered the thought possible. Admittedly, by formulating these underlying assumptions into explicit statements, one will inevitably enter a new round of overmining and undermining. Nevertheless, just as suggested from *mingwu* studies of *Shi*, this shift in the analytical object can offer meaningful supplements to the two traditional approaches by revealing epistemic patterns and dynamics that are normally taken for granted. If a historical thought is too “naked” in its core ideas within, and too “determined” in its contextualized effects without, the wisdom of OOO guides us to circumvent this double inevitability by questioning the very assumption that why the boundary of the thought is demarcated as such.

With all the above elaborations, I am not promoting this reflective approach as a new invention. In the history of science, this has already been fruitfully carried out under the name “historical epistemology,” which probes the underlying assumptions of scientific concepts in a Kantian manner.³⁹ As pinpointed by Lorraine Daston, one of its leading practitioners, the approach is precisely featured by asking the “question about the preconditions that make thinking this or that idea possible.”⁴⁰ The aim of my reasoning, instead, is to suggest its broader applicability to the field of intellectual history as a general

³⁹ In a statement-of-field article, Uljana Feest and Thomas Sturm have listed three usages of the term “historical epistemology” in the history of science. My discussion here is mainly relevant to the first usage epitomized by Lorraine Daston and Ian Hacking. See, Uljana Feest and Thomas Sturm, “What (Good) is Historical Epistemology? Editors’ Introduction,” *Erkenn* 75 (2011): 288–91.

⁴⁰ Lorraine Daston, “Historical Epistemology,” in *Questions of Evidence: Proof, Practice, and Persuasion Across the Disciplines*, ed. James K. Chandler, Arnold I. Davidson and Harry D. Harootunian (Chicago: University of Chicago Press, 1994), 283.

third approach. Apart from major scientific concepts like “objectivity” or “possibility” with a prevailing epistemological significance, the more specific schemes to organize reasoning, priorities given to evidence, tactics to get rid of discrepancies, or weapons to win over a scholarly debate may involve rich information on the development of an idea as well. To incorporate both inquiries on the general *and* the local scales, I will use the term “*epistemic analysis*” to refer to this third approach, which takes past thought as an epistemic process and probes into its underlying assumptions. Just as how contextualization has associated intellectual history with cultural history, this third approach would suggest an epistemic turn that incorporates the field with the history of knowledge in the broader sense of *zhi* 知 (knowing), ranging from rigid reasoning and elaborated demonstrations to tacit skills and the innermost beliefs.

Epistemic Analyses in the China Field

In historical studies of Chinese knowledge and thought, although there has not been any self-conscious genealogy in “epistemic analysis,” we can still identify a small group of precursors who have testified the great potential of this third approach. In the English-speaking world, John B. Henderson was presumably the first scholar who made a systematic inquiry into this underlying epistemological world. His first monograph deals with Chinese “cosmology,” or more specifically, the rise and fall of “correlative thinking” in multiple cultural-intellectual aspects of the long imperial era.⁴¹ Despite his insufficient differentiation among the varied modes of cosmological thought, Henderson succeeded in demonstrating how the decline of correlative thinking in the seventeenth century, as a prevailing shift in the epistemological scheme of literati learning, was explanatory to the Ming-Qing intellectual transition.⁴² This schematic analysis is further refined in his second monograph on the exegeses of Confucian classics,

⁴¹ John Henderson, *The Development and Decline of Chinese Cosmology* (New York: Columbia University Press, 1984).

⁴² Henderson, *The Development and Decline of Chinese Cosmology*, chs. 7, 9. For an extensive critique of the confusion of different modes of correlative thinking in the middle period, see, Willard J. Peterson, ed., *Cambridge History of China: The Ch'ing Dynasty to 1800, Volume 9, Part 2* (Cambridge: Cambridge University Press, 2016), 661–65.

where he identifies more specific epistemic assumptions and reasoning strategies in the genre of commentarial writings.⁴³ And according to him, the disenchantment and historicization of those premises was essential for characterizing mid-Qing literati learning.⁴⁴ The risk of over-generalization notwithstanding, these two works reveal a significant potential in reexamining long-term intellectual transitions from the underlying schemes.

Despite the limited resonance of Henderson's overarching approach, in the past decade a more localized, case-specific style of epistemic analysis has been developed by historians of science and knowledge. In her study on the late-Ming polymath Song Yingxing's 宋應星 (1587-ca.1666), Dagmar Schäfer highlights Song's emphases on sensory experience and bodily engagement through a close analysis of his "rhetoric of knowledge inquiry."⁴⁵ Carla Nappi's study of the *Bencao gangmu* 本草綱目 (Compendium of *Materia medica*) offers a more comprehensive exploration into the "epistemic commitments" of its author Li Shizhen 李時珍 (1518-1593), demonstrating an intricate structure of authentication involving multiple sensory dimensions and textual authorities.⁴⁶ Besides, the edited volume *Thinking with Cases* pays special attention to the epistemic mode of case histories to highlight its featured direction towards local, situated knowledge.⁴⁷ A more recent edited volume, *Powerful Arguments*, centers around the "changing standards of validity" in making powerful arguments from a wide range of knowledge fields in the second millennium of China.⁴⁸ Such secondary works testify to the historical richness and methodological potential in the epistemic analysis of Chinese knowledge.

⁴³ John Henderson, *Scripture, Canon and Commentary: A Comparison of Confucian and Western Exegesis* (Princeton: Princeton University Press, 1991), chs. 4-5.

⁴⁴ Henderson, *Scripture, Canon and Commentary*, ch. 6, esp. p. 214.

⁴⁵ Schäfer, *The Crafting of the 10,000 Things*, ch. 4, esp. p. 130-38.

⁴⁶ Carla Nappi, *The Monkey and the Inkpot: Natural History and Its Transformations in Early Modern China* (Cambridge and London: Harvard University Press, 2009), 7, 37-48.

⁴⁷ Charlotte Furth, Judith T. Zeitlin and Ping-chen Hsiung, eds., *Thinking with Cases: Specialist Knowledge in Chinese Cultural History* (Honolulu: University of Hawai'i Press, 2007), Introduction.

⁴⁸ Martin Hofmann, Kurtz Joachim and Ari Daniel Levine, *Powerful Arguments: Standards of Validity in Late Imperial China* (Leiden and Boston: Brill, 2020), Introduction, esp. p. 2. Besides, on a more localized scale, one may also refer to Martina Siebert's analysis of the "different types of 'text-animals'" in the natural catalogues, as well as Bian He's discussion on the "epistemic strategy" of Fang Yizhi 方以智 (1611-1671). See, Siebert, "Animals as Text," 157; Bian, *Know Your Remedies*, 107-8.

More impressively, in her recent work on the Northern Song polymath Shen Kuo 沈括 (1031-1095), Ya Zuo makes an explicit allegiance to historical epistemology.⁴⁹ Through a successful integration of the overarching and the case-specific methods, she identifies two fundamental “epistemological stances” in the Northern Song period. One is “empiricism,” which deals with the myriad *wu* by “individuating” them into distinctive objects and focusing on their intrinsic qualities through sensory inquiry. The other is “system building,” in which a *wu* is not comprehended by its individual properties but its “order of relation” in a holistic, coherent system.⁵⁰ From this vantage point, Zuo not only offers a detailed comparison between Shen’s empiricist stance and Wang Anshi’s 王安石 (1021-1086) systematic view across the scholarly and statecraft realms, but also broaden the contrast by connecting it to the general epistemological difference between evidential studies and Neo-Confucian learning.⁵¹ Although in Zuo’s own words, her situating of Shen Kuo in Song intellectual history is still mainly taken as a contextualization, the work has set up a new standard for “epistemic analysis,” exemplifying how a systematic inquiry of epistemic premises can shed important light on major intellectual movements.⁵²

In this dissertation, I will bring this methodological insight into the mid-Qing era, and use *mingwu* studies of *Shi* to illustrate the rise and fall, vigor and limit of the most significant intellectual trend of the day—the proliferation of evidential learning. In particular, I will unfold my epistemic analysis from two dimensions, a general diachronic one, and a localized interpersonal one. For the diachronic dimension, I will make a type-based comparison on the epistemic schemes and underlying mechanisms of the newly developed analytical techniques to the earlier ones. This includes the dialectical *ming-wu* entanglements and the encyclopedic compilation of *mingwu* entries from the Song to the early Qing, as well as the multiple intensified philological and material approaches that we have mentioned earlier in the mid-Qing era. If Zuo Ya’s work offers a cartography of *wu* that highlights its dual nature as

⁴⁹ Ya Zuo, *Shen Kuo's Empiricism* (Cambridge and London: Harvard University Asia Center, 2018), 18.

⁵⁰ Zuo, *Shen Kuo's Empiricism*, chs. 4, 7, esp. p. 77, 134.

⁵¹ For the broader epistemological difference, see, Zuo, *Shen Kuo's Empiricism*, ch. 11.

⁵² Zuo, *Shen Kuo's Empiricism*, 18–19.

a placeholder in a system and an individuated object, my dissertation is then an animated view that traces the specification of *wu* from the correlative surface to the emerging inwardness. For the interpersonal dimension, I will scrutinize the scholarly debates and revised statements on specific *mingwu* questions, so as to reveal the different evidential priorities and methodological preferences among the inquirers. Such epistemic analyses not only demonstrate a prevailing diversity of general takes among the philological, material, and literary approaches, but also varied stances on more specific levels. The result was a plurality of incompatible interpretations even out of a shared evidential basis and analytical toolkit. I call such stance-oriented incompatibilities a “*bifurcation*,” where the lasting debates and mutual denial betrayed a deconstructing power that only confirmed the arbitrariness in the epistemic stances. This lack of necessary methodological reflections, I argue, is essential for comprehending the trivializing tendency in the *mingwu* debates of the 19th century.

Evidential Learning Reexamined

The above observations from epistemic analyses shed important light on our understanding of evidential learning and early modern Chinese intellectual history. This can be comprehended from three prevailing “conundrums” in the field. The first conundrum concerns the rise of evidential learning, which is often packaged into the question of a Ming-Qing intellectual transition. Classic works on this issue, though differing in their approach to periodization and dating of the turning point, generally agree that a shifting emphasis from “philosophical reasoning” (*yili* 義理) to “evidential studies” (*kaoju* 考據) took place sometime between the late-Ming and the mid-Qing era.⁵³ This standard view has been complicated by the recent works of Minghui Hu and Ori Sela, whose case studies of leading evidential scholars Hui

⁵³ See, e.g., Yü Ying-shih 余英時, “Some Preliminary Observations on the Rise of Qing Confucian Intellectualism,” in *Chinese History and Culture, Volume 2: Seventeenth Century through Twentieth Century* (New York: Columbia University Press, 2016), ch. 1; Elman, *From Philosophy to Philology*, ch. 1; Kai-wing Chow, *The Rise of Confucian Ritualism in Late Imperial China: Ethics, Classics, and Linage Discourse* (Stanford: Stanford University Press, 1994), ch. 5.

Dong 惠棟 (1697-1758) and Qian Daxin 錢大昕 (1728-1804) highlight the insufficiency of this dichotomy, since such later scholars continued to make “big claims” and connect to the “Grand Way” through their textual-centered, evidential-based learning.⁵⁴ Meanwhile, in a recent development of Lin Ching-chang’s study of the Ming evidential learning, Nathan Vedral also demonstrates the intellectual richness of late-Ming linguistic studies.⁵⁵ On the one hand, this coexistence of “evidential studies” and “philosophical reasoning” in both periods poses serious challenges to the conceptualization of a Ming-Qing intellectual transition. On the other hand, Vedral continues to acknowledge a significant difference between the philological works of late-Ming “cosmological” thinkers and the more “historical” ones such as Chen Di 陳第 (1541-1617) and Gu Yanwu 顧炎武 (1613-1682), who have been regarded as the direct forerunners of mid-Qing evidential research.⁵⁶ It is at this point that the first conundrum emerges: Given the coexistence of *yili* and *kaoju* in both periods, was there a real difference of mid-Qing evidential studies comparing to earlier ones? For Vedral, the key was an elimination of cosmology from phonology, a shift in the basis of validated knowledge from “self-so correlations across fields of learning” to historicized textual evidence.⁵⁷ Recalling John Henderson’s claim about the decline of Chinese cosmology in the 17th century, this is an excellent observation, though Vedral’s actual focus on the Ming dynasty still leaves the latter half of the picture largely to be explored. What was the epistemological significance for being “historicized?” And here brings in my diachronic analysis. The emerging

⁵⁴ Minghui Hu, *China's Transition to Modernity: The New Classical Vision of Dai Zhen* (Seattle and London: University of Washington Press, 2015), ch. 7, esp. p. 179-80; Ori Sela, *China's Philological Turn: Scholars, Textualism, and the Dao in the Eighteenth Century* (New York: Columbia University Press, 2018), chs. 5-6, esp. p. 105-106, 131.

⁵⁵ Lin Ching-chang 林慶彰, *Mingdai kaoju xue yanjiu* 明代考據學研究 (Taipei: Xuesheng shuju, 1983), esp. p. 590; Nathan Vedral, *The Culture of Language in Ming China: Sound, Script, and the Redefinition of Boundaries of Knowledge* (New York: Columbia University Press, 2022), chs. 1-3; Nathan Vedral, “New Scripts for All Sounds: Cosmology and Universal Phonetic Notation Systems in Late Imperial China,” *Harvard Journal of Asiatic Studies* 78, no. 1 (2018): 10–41.

⁵⁶ Vedral, “New Scripts for All Sounds,” 23–24; Vedral, *The Culture of Language in Ming China*, 148–150, 213-215.

⁵⁷ Vedral, *The Culture of Language in Ming China*, 215-16, 220-21. A similar view is also suggested by Peter Bol in his concluding remarks on the history of Neo-Confucianism. See, Peter K. Bol, *Neo-Confucianism in History* (Cambridge, Mass.: Harvard University Asia Center, 2008), 277–78.

inwardness of *wu* and the shifting emphasis towards refined textures confirm this far-reaching intellectual transition despite the thematic similarity in the scholarly inquiries of the two eras.

The second conundrum concerns the high-tide of evidential learning, or the general intellectual environment of the mid-Qing period. On the one hand, thanks to recent studies in the past decade on material culture and history of technology, the mid-Qing is depicted as a “material empire” where the active management of material objects, the rising significance of artisanal knowledge, and the corresponding “technocratic” approach of governance have been regarded as an essential feature of the Manchu empire.⁵⁸ And more specifically, through her emphasis on embodied experience and artisanal epistemology, Dorothy Ko has proposed a material-oriented view of mid-Qing literati learning which greatly enriches our understanding of evidential scholarship.⁵⁹ This insight can be further supported by the active material seeking and bodily engagement in the formation of paleographic, antiquarian and pharmaceutical knowledge of the day.⁶⁰ Yet on the other hand, the voluminous corpus of mid-Qing evidential learning, and in particular the philological or *xiaoxue* 小學 studies that constituted its mainstream, confirms the more standard view that it is primarily a textual enterprise.⁶¹ This brings forth

⁵⁸ See, Dorothy Ko, *The Social Life of Inkstones: Artisans and Scholars in Early Qing China* (Seattle and London: University of Washington Press, 2017), esp. p. 18, 45; Kaijun Chen, “The Rise of Technocratic Culture in High-Qing China: A Case Study of Bondservant (Booi) Tang Ying (1682-1756)” (PhD Dissertation, Columbia University, 2014), esp. p. 5; Yijun Wang, “From Tin to Pewter: Craft and Statecraft in China, 1700-1844” (PhD Dissertation, Columbia University, 2019), ch. 5.

⁵⁹ Kaijun Chen and Yijun Wang have also connected the hands-on knowledge and artisanal epistemology to an alternative mode of literati learning. Yet Ko goes a step further by linking these directly to the rise of high-Qing evidential studies. See, Ko, *The Social Life of Inkstones*, “Epilogue,” esp. p. 200-201; Chen, “The Rise of Technocratic Culture in High-Qing China,” 230–31; Wang, “From Tin to Pewter,” 212–13.

⁶⁰ See, e.g., Ko, *The Social Life of Inkstones*, ch. 3; Qianshen Bai, *Wu Dacheng he tade tagong* 吳大澂和他的拓工 (Beijing: Haitun chubanshe, 2013), ch. 1; Qianshen Bai, *Fu Shan's World: The Transformation of Chinese Calligraphy in the Seventeenth Century* (Cambridge and London: Harvard University Asia Center, 2003), 177–84; Shana J. Brown, *Pastimes: From Art and Antiquarianism to Modern Chinese Historiography* (Honolulu: University of Hawai'i Press, 2011), ch. 1; Benjamin A. Elman, *On Their Own Terms: Science in China, 1550-1900* (Cambridge, Mass., London: Harvard University Press, 2005), 260–61; He Bian, “An Ever-Expanding Pharmacy: Zhao Xuemin and the Conditions for New Knowledge in Eighteenth-Century China,” *Harvard Journal of Asiatic Studies* 77, no. 2 (2017): 315–16.

⁶¹ See, e.g., Willard J. Peterson, “Changing Literati Attitudes toward New Learning in Astronomy and Mathematics in Early Qing,” *Monumenta Serica* 50 (2002): 385–86; Chow, *The Rise of Confucian Ritualism in Late Imperial China*, ch. 2.

the second conundrum: how should we situate the mainly *text*-oriented evidential learning within a general awakening of *material* consciousness in the mid-Qing period? This brings up to my observations on the symmetry between the textual and the material sides, where the seemingly divergent intellectual moves in fact suggest a consistent mechanism that covered both aspects—a collective move towards the refined textures of specific *wu*.

The third conundrum concerns the decline of evidential learning, which is intertwined with our assessment of this intellectual movement from historical hindsight. On the one hand, evidential learning, and in particular its later development, has long been charged for its increasing concern in trivial details and its impoverished interest in practical knowledge. This has been a good explanation of why the intellectual movement fell out of fashion and conceded to new waves, such as statecraft learning and New-Text classicism in the ever-aggravated socio-political context of the 19th century.⁶² For some, evidential learning is even held responsible for China's backwardness in face of Western powers.⁶³ On the other hand, evidential learning is also regarded as one of the most shining intellectual legacies of the Qing dynasty. Early in the Republican era, scholars like Liang Qichao 梁啟超 (1873-1929) and Hu Shih 胡適 (1891-1962) had already advocated for its “scientific spirit” and “scientific methods,” an emphasis that received further elaboration by Feng Shengli in his recent articles.⁶⁴ And here lies the third conundrum: Given its “scientific” nature, why did evidential learning not keep its dynamic as an ever more refined discipline, but instead fell into trivialization and stagnancy? Admittedly, one may attribute its fate to

⁶² See, e.g., Elman, *From Philosophy to Philology*, 233–53; Benjamin A. Elman, *Classicism, Politics, and Kinship: The Ch'ang-chou School of New Text Confucianism in Late Imperial China* (Berkeley: University of California Press, 1990), 181, 250; Wang Fan-sen, *Zhongguo jindai sixiang yu xueshu de xipu* 中國近代思想與學術的系譜 (Shanghai: Shanghai sanlian shudian, 2018), 17–20.

⁶³ For a brief summery of this view, see, Qi Yongxiang 漆永祥, *Qianjia kaoju xue yanjiu* 乾嘉考據學研究 (Beijing: Beijing daxue chubanshe, 2020), 297.

⁶⁴ For the Republican studies, see, e.g., Liang Qichao 梁啟超, *Qingdai xueshu gailun* 清代學術概論 (Shanghai: Shanghai guji chubanshe, 1998), 34–43; “Qingdai xuezhe de zhixue fangfa” 清代學者的治學方法 in Hu Shih 胡適, *Hu Shi quanji* 胡適全集 (Hefei: Anhui jiaoyu chubanshe, 2003), 1: 371-390. For recent elaborations, see, e.g., Feng Shengli 馮勝利, “Lun Qianjia xueshu de kexue tupuo,” 論乾嘉學術的科學突破 *Yuyan jiaoxue yu yanjiu* 語言教學與研究, no. 3 (2019): 1–13.

external factors such as the mass destruction of the Taiping rebellion or the unprecedented challenge from the West. But the waning process had already taken place before these two factors were germane. Regarding this, the deconstructing power of bifurcating interpretations out of different epistemic stances offer an important internal explanation. The holistic nature of *wu*, being specified yet still open to varied epistemic approaches, lacked a necessary methodological confinement that is essential in modern disciplinary divisions. If the evidential movement can be summarized by the motto of “search for the truth in actual facts” (*shishi qiushi* 實事求是), it was a movement rigorous in the epistemic construction of “facts” yet loose in the epistemological attaining of the “truth.”

Finally, on a broader scale, the epistemological journey depicted in this dissertation also enriches the picture of an early modern Chinese intellectual transition which started from Confucian cosmological thinking and ended up with a modern scientific worldview. Scholars have been more familiar with these two end points, where the overarching correlative associations formed a sharp contrast with the atomic view of scientific classification, while the epistemological pattern in the middle is largely understudied.⁶⁵ The well-ordered yet competing textures, pointing to a specific yet holistic *wu*, captures precisely this intermediate stage. In fact, the word “texture” is not a mere analytical concept coined by me, but is the closest translation for *li* 理, the central concept of literati learning after Dai Zhen’s 戴震 (1724-1777) reinterpretation.⁶⁶ From the heavenly “coherence” (*tianli* 天理) in Neo-Confucian learning, to the well-ordered “textures” (*tiaoli* 條理) of in evidential studies, and to the discipline-based “principles” (*gongli* 公理) in modern scientific discourse, our epistemological investigation captures a crucial yet largely understudied chain between the fading of Confucian cosmology and the advent of modern science.

⁶⁵ See, e.g., Cheng Yu-yu 鄭毓瑜, *Yin pi lian lei: Wenxue yanjiu de guanjianci* 引譬連類：文學研究的關鍵詞 (Taipei: Lianjing chuban gongsi, 2012), 262–66; Cheng Yu-yu 鄭毓瑜, *Zi yu yan: Shiguo geming xinlun* 姿與言：詩國革命新論 (Taipei: Maitian chuban, 2017), 64–74; Wang Hui 汪暉, *Xiandai zhongguo sixiang de xingqi* 現代中國思想的興起 (Beijing: Sanlian shudian, 2015), 1: 47-53.

⁶⁶ Dai Zhen 戴震, “Mengzi ziyi shuzheng,” 孟子字義疏證 in *Dai Zhen quanshu*, 6: 149.

Chapter Outline

Due to the multilayered nature of our subject, this six-chapter dissertation has a specially designed structure. On the most general level, the work is arranged in a temporal order, with the first chapter starting from the Song dynasty, the second chapter between the Song and the mid-18th century, and the remaining four chapters on the high tide of evidential learning circa 1750-1850. Chapter One traces back to the Song dynasty and the correlative cosmology of earlier times to offer a necessary epistemic background to the internal complexities of the *mingwu* problems in the commentary tradition of *Shi*. Through three carefully chosen examples on the unjealous cicada, the gender-separated osprey, and the mouth-delivered rabbit, the chapter demonstrates how the philological name and the material referent had already formed into complicated hermeneutical loops in the middle period through correlations across the textual, natural, moral, and political fields. In particular, this correlative entanglement became salient under the “New Learning” of the Wang Anshi 王安石 (1021-1086) school, which offered etymological “proofs” to the text-derived traits by featuring correlative reasonings based on the appearance of characters.

These *ming-wu* compounds were incorporated into broader epistemic networks in the following centuries, which is the focus of Chapter Two. Through a comparison of Feng Fujing’s late-Ming *Mingwu Commentaries* with its predecessors, the chapter demonstrates a significant expansion in the scope and number of references among the late-Ming *mingwu* entries, which frequently involved an encyclopedic overflow of sources and interpretations that lacked a refined judgment. This typical feature is further confirmed by a systematic quantitative analysis on the quotation structure of *mingwu* monographs across time, where I use the PCA (Principal Component Analysis) method to demonstrate a significant clustering of these encyclopedic works of “erudite learning” that were most common in the late Ming and extended into the 18th century in typical works of mid-Qing evidential learning. Finally, the chapter uses a later example of erudite learning, Xu Ding’s 徐鼎 (b. 1739) *Maoshi mingwu tushuo* 毛詩名物圖說 (Illustrated notes on the *mingwu* in *Maoshi*), to showcase how this encyclopedic referential network could even

involve visual sources in a similar fashion. Put together, these encyclopedic entries of erudite learning displayed a referential surface on which *mingwu*-related information interrelated with each other into an extensive network.

The above epistemic background brings forward the main body of the dissertation on the mid-Qing era, which is made up of four chapters in a specially designed 2×2 structure, so as to sustain our symmetrical inquiry on the textual and material aspects. Focusing on the epistemic breakthrough from the textual side, Chapter Three demonstrates how the suspended *mingwu* problems in erudite learning were overcome through newly developed philological techniques. These include the identification of phonetic loans, general patterns, binomic chains, as well as the study of individual characters and paleography, which are elaborated by category in the chapter. For each of these techniques, the dissertation uses concrete examples to reveal its epistemic schemes and underlying mechanisms, and in particular, how it helped to identify more refined philological textures behind the textual appearance. Collectively, such techniques revealed an inner richness in the textual *ming* that rendered them on par with the material *wu* in epistemic inquiries.

In a symmetrical fashion, Chapter Five traces the mid-Qing epistemic breakthroughs on the material side. Again, the chapter is arranged by category, which involves multiple forms of intensified observations through the collection of plant specimens, design of animal experiments, and circulation of antiquarian objects. Meanwhile, the material inquiries also benefited from the expanded territory and technocratic management of the Qing empire, with new evidence brought from the frontier areas and long-distance geographical surveys commanded by the emperor. From surface appearance to the unknown interior, and from immediate experience to evidence across temporal or spatial obstacles, such endeavors also helped to reveal more refined textures on the material side. Joined together, Chapters Three and Five highlight a far-reaching epistemological shift from the referential surface of a correlated world to the refined textures of specific *wu*—a collective move incorporating both the textual and the material aspects that is essential for understanding mid-Qing evidential learning.

Nevertheless, these epistemic breakthroughs guaranteed no convergence in the knowledge-making of *wu*. Bifurcating theses continued to occur even from a shared evidential basis due to varied epistemological takes and methodological preferences. These stance-derived pluralities, as a crucial yet largely neglected “side-B” of mid-Qing evidential learning, becomes the theme for Chapters Four and Six. As a reflective move to Chapter Three, Chapter Four examines the bifurcating philological theses through three cases of lasting debate—a chariot component, fur coat stitches, and locust-fish transformations. Through a close comparison of the contending interpretations from *mingwu* entries, scholarly correspondences, or even revisions of own's own claim, the chapter reveals the fickle and frequently irreconcilable working premises behind these evidential reasonings. With the gradual settlement of transmitted *mingwu* puzzles, such stance-derived bifurcations became increasingly common in the 19th century, and their mutually nullifying effect shed important light on the trivialization of philological learning.

Chapter Six, as a reflective move to both Chapters Three and Five, further explores the contending evidential authorities between the textual and the material aspects. Through three more cases—the bristlegrass, a sacrificial vase, and the myna bird—the chapter displays a variety of epistemic takes on the textual-material spectrum, which confirms both the symmetricity of the two sides and a salient methodological limit of the evidential enterprise. Meanwhile, such intrinsic boundaries also propelled some scholars to reemphasize the literary mediation behind such *mingwu* problems, which was unneglectable for a text with poetic nature. Put together, these bifurcating interpretations of *wu* indicates an indigenous propensity for disciplinary divisions, which explains both China's preparedness and distance on the eve of academic modernization.

And finally, through the changing conceptualizations of *li* and *wu*, the Epilogue reviews the significance of the mid-Qing era in comprehending the epistemological transition between the collapse of Confucian cosmology and the advent of modern science.

Chapter One: Dialectics of *ming* and *wu*

Shi can be used for evocations.

詩可以興。

—— Kongzi, *Analects*

Evocation refers to the drawing of analogies and association of categories.

興，引譬連類。

—— Kong Anguo 孔安國 (ca. 156-74 BCE)

Commentary to the *Analects*⁶⁷

Being affected by *wu*, the poet associates categories endlessly.

詩人感物，聯類不窮。

—— Liu Xie 劉勰 (ca. 465-532)

*The Literary Mind and the Carving of Dragons*⁶⁸

The poetic imagery of *wu* never stood alone. Ever since the age of *Shi*, the lyrical self and the affective object, the natural phenomenon and the cultural event had already been associated under the ideal of *xing* 興, or evocation. In the Western Han, Kong Anguo interpreted the term as not only the “drawing of analogy” but also the “association of *categories*,” thus indicating a broader network of generic mechanism beyond the localized rhetoric. A few centuries later, this category-based interpretation was further taken by the eminent literary theorist Liu Xie as a central feature for not only the *Shi*-odes but also poetic writing in general. Like Kong, the affective encounter between the poet and the *wu* was not understood as confined within this immediate poetic context. Instead, it blended into an endless network of category association with broader significance.

⁶⁷ Xing Bing 邢昺, *Lunyu zhushu* 論語注疏 (Beijing: Beijing daxue chubanshe, 1999), 237.

⁶⁸ Yang Mingzhao 楊明照, *Zengding wenxin diaolong jiaozhu* 增訂文心雕龍校注 (Beijing: Zhonghua shuju, 2012), 563.

In her brilliant studies of early Chinese poetics, Yu-yu Cheng has demonstrated the epistemic richness of these networks. Despite the artfulness and seeming spontaneity of the evocative associations, they did not fully abandon the material attributes of their *wu* categories. Aspen leaves would flourish in the third month, thereby evokes the missing of the proper marriage time in the fall and winter (*MS* #140); the soaking dew could bend the leaves downward, and thereby evokes the tipsy appearance of the banqueting dukes (*MS* #174).⁶⁹ Such phenological features and material traits not only served as a starting point for the evocative expression, but also played an integral role for securing the effective reckoning of poetic images in an associative network.⁷⁰

This epistemic channel could also function in more implicit ways. As a good example, several of the odes in *Shi* share the formulaic expression “in the mountain there is.../ in the marsh there is...” (*shan you* 山有.../ *xi you* 隰有...), where certain tree and grass names are attributed to the landscape to create a flourishing scenery where each plant “finds its proper place” (*ge de qi yi* 各得其宜). As elaborated by Cheng, despite the seeming arbitrariness of the plant images, it is noteworthy that the dry loessland of Northern China made the forest a rare scenery in the time of *Shi*. It was only within this climatological background that the flourishing plants in the mountains and marshes became particularly eye-catching and treasurable, thus effectively evoking the imagery of worthy man in the proper position. Meanwhile, it was also due to the same reason that another formulaic expression “the south has...” (*nan you* 南有), with a reference to the fecund natural products in the moist and warmer climate of the Jiang-Han area, could evoke the political ideal of a nourishing governance.⁷¹ These associated images, ranging across the environment, the natural objects, the people, and the political order, exemplified a correlative network of categories under the idea of “nourishment.” Such correlative associations, named by Cheng as the

⁶⁹ Zheng Xuan 鄭玄, *Maoshi zhuan jian* 毛詩傳箋 (Beijing: Zhonghua shuju, 2018), 176-177, 231.

⁷⁰ Cheng Yu-yu, *Yin pi lian lei*, 204 For Cheng’s analysis of the two examples in *MS* #140 and #174, see, Cheng Yu-yu, *Yin pi lian lei*, 203-4; Cheng Yu-yu 鄭毓瑜, “Quanshi de jieyu: cong ‘Shi daxu’ zaitan ‘shuqing chuantong’ de jiangou,” 詮釋的界域——從〈詩大序〉再探「抒情傳統」的建構 *Zhongguo wenzhe yanjiu jikan* 中國文哲研究集刊 23 (2003): 26-27.

⁷¹ See, Cheng Yu-yu, *Yin pi lian lei*, ch. 3, esp. p. 164-165, 180-182.

“correspondence of categories” (*leiyi* 類應), reached a cosmological scale in the phenological frameworks of early texts such as the twelve “Almanacs” (*ji* 紀) in *Lüshi chunqiu* 呂氏春秋 (Master Lü's spring and autumn annals) and the “Monthly Ordinances” (*yueling* 月令) chapter of *Liji* 禮記 (Book of rites), which aimed at accommodating human affairs according to the calendrical cycle of the natural world. With further systemizations through the *yin-yang* Five-Phase theory and codifications in the *leishu* 類書 encyclopedias, this category-based correlative thinking became the most fundamental epistemic pattern in early to early middle China.⁷²

It is under this epistemic background that we step into the hermeneutic tradition of *wu* in *Shi*, where poetic expression and natural traits were but two sides of the same coin. Correspondingly, the interpretation of the “birds, beasts, grasses, trees, insects, and fishes” in *Shi* also went far beyond a mere “acquaintance” with their names, but gradually unfolded through the correlative association of categories across multiple realms. Let us start with a plain example.

肅肅鵠羽	Flapping are the plumes of the bustards,
集于苞栩	They settle on the bushy oak;
王事靡盬	The service to the king must not be defective,
不能蓺稷黍	I cannot plant my sorghum and glutinous millet,
父母何怙?	What shall father and mother rely on? ⁷³

The voice in the ode was straightforward. Someone who, committed to the “service to the king,” was no longer able to cultivate the grains for his parents. This intra-poetic message was confirmed by the preface to the ode, which took it as a critique to the turbulent times of the Jin 晉 state, when the worthy man,

⁷² See, Cheng Yu-yu 鄭毓瑜, “Lei yu wu: Gudian shiwen de ‘wu’ beijing,” 類與物——古典詩文的「物」背景 *Qinghua xuebao* 41, no. 1 (2011): 9–17; Cheng Yu-yu, *Yin pi lian lei*, 14–17. Also see, Joseph Needham, *Science and Civilisation in China, Vol. 2, History of Scientific Thought* (Cambridge: Cambridge University Press, 1956), 279–91.

⁷³ Zheng Xuan, *Maoshi zhuan jian*, 154–55. With slight adaptations, the translation follows Bernhard Karlgren, *The Book of Odes* (Stockholm: Museum of Far Eastern Antiquities, 1950), 78.

involved in corvee labor, was unable to support his parents.⁷⁴ But how could one associate this uneasy situation to the bustards in the first two lines that gathered on the oak trees? According to the Mao commentary, the key lay on the natural trait of the bustard, which “by nature did not rest on trees” (*xing bu shu zhi* 性不樹止). This evocative link was further elaborated in Zheng Xuan’s commentary, who, with the claim that the worthy man should “settle in a peaceful position,” associated his uneasy involvement in the labor corvee to the bustard’s uneasy rest on the trees.⁷⁵ Stepping into the mid-3rd century, Lu Ji added a further biological note that the bustard had “connected toes” (*lian ti* 連蹄) and thereby “felt troublesome when resting on trees.”⁷⁶ Although it remains unclear what the “connected toes” refer to, as the bustard does not have webbed toes, this is the earliest entry which attempts to explain the natural trait through the bustard’s feet structure. In his commentary to the “Rhapsody on the Imperial Park” (*Shanglin fu* 上林賦) a few decades later, Guo Pu 郭璞 (276-324) made a clearer note on the bustard feet—it had “no hind toes” (*wu hou zhi* 無後趾). The same observation also went into Lu Deming’s 陸德明 (c. 550-630) early-Tang exegesis to *Maoshi*, as an explanation to the bustard’s non-tree-resting habit (*Figure 1*).⁷⁷ Here, the epistemic logic behind the evocative imagery becomes lucid. The bustard, with no hind toes, was unable to hold the branches and hence found it uneasy to rest on the trees. This bitter misposition thus offered a vivid analogy to the misplaced worthy man in the labor corvee, thereby securing the evocative efficacy of the two images. From a direct assertion of the non-tree-resting habit to a biological explanation of its feet structure, the gradual specification of the natural observation went hand-in-hand with a refined understanding of the evocative rhetoric.

⁷⁴ Zheng Xuan, *Maoshi zhuan jian*, 154. 君子下從征役，不得養其父母。

⁷⁵ Zheng Xuan, *Maoshi zhuan jian*, 154–55.

⁷⁶ Lu Ji, “Maoshi caomu niaoshou chongyu shu,” 14–15.

⁷⁷ For Guo Pu’s note, see, Li Shan’s 李善 commentary in Gao Buying 高步瀛, *Wenxuan Li zhu yishu* 文選李注義疏 (Beijing: Zhonghua shuju, 1985), 143.

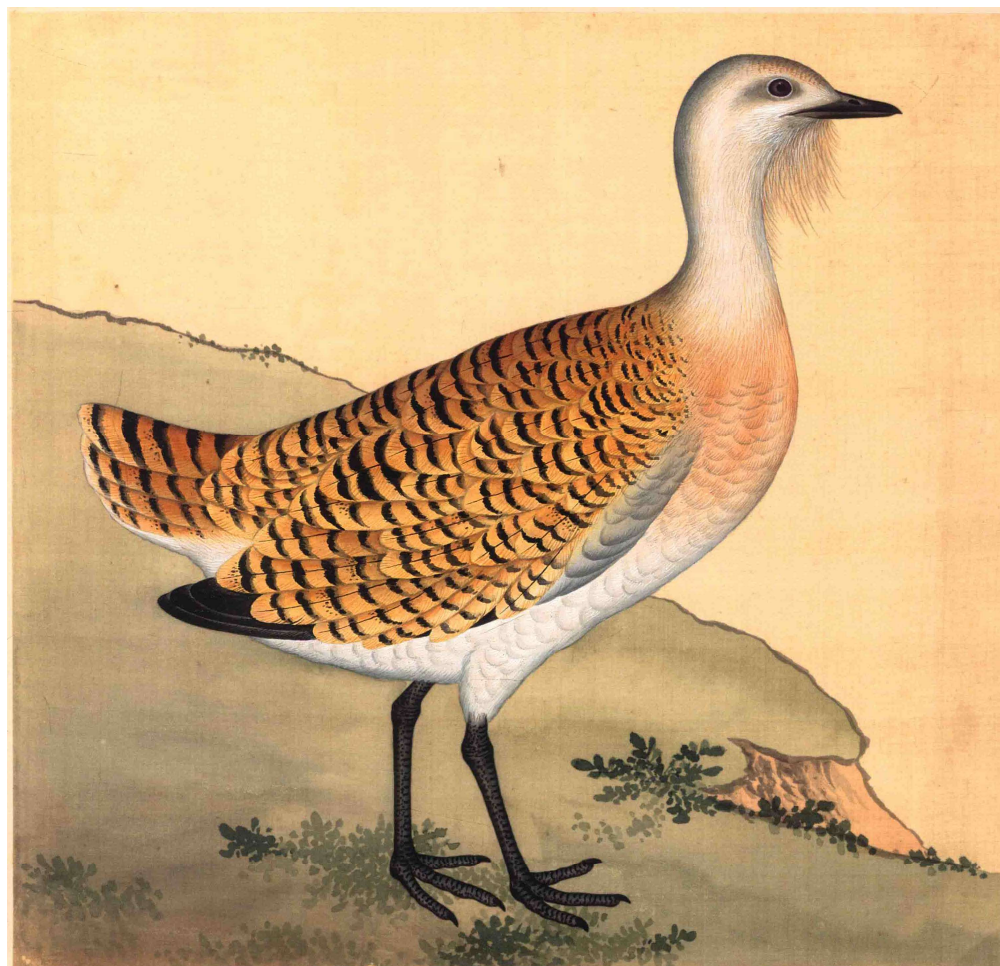


Figure 1: Illustration of the male great bustard (*yangbao* 羊鵝, *Otis tarda*) in Yu Xing 余省 and Zhang Weibang 張為邦, *Niaopu* 鳥譜 (Illustrated Catalogue of Birds), 1761. Volume 9 of 12 albums, ink and color on silk, 41.9×43.9 cm. Palace Museum of Beijing. Note the featured bustard feet in the painting, which have only three front toes but no hind toe.⁷⁸

That said, the smooth accumulation of a natural-poetic message in the above example was merely an ideal situation. In many other cases, the natural observation and poetic message did not witness an hermeneutic convergence, but jointly contributed to the epistemic history of the *mingwu* concept in a much more convoluted way. For instance, in the ode “Katydid” (Zhongsi 螽斯, *MS* #5), the insect was famously eulogized for its fertility:

⁷⁸ Photocopied from Yu Xing 余省 and Zhang Weibang 張為邦, *Qinggong niaopu* 清宮鳥譜 (Beijing: Gugong chubanshe, 2014), 307.

螽斯羽	The wings of the katydids,
詵詵兮	They are multitudinous.
宜爾子孫	It is suitable, that your sons and grandsons
振振兮	should be numerous. ⁷⁹

The basic message within this beginning stanza was easy to grasp, where the proliferation of the katydids was used to evoke the fertility of a human lineage. But the preface added further layers of meaning to the ode, which offered not only a historical context to the ode, as many of the *Maoshi* prefaces do, but also a “biological” explanation for the katydid’s high fertility:

“Katydids” refers to the multitude of the royal consort’s descendants. It suggests that, if one, like the katydid, remains unjealous, one’s descendants would be multitudinous.

螽斯，后妃子孫眾多也。言若螽斯不妬忌，則子孫眾多也。⁸⁰

According to the preface, the evocative efficacy was guaranteed not only by a comparable fertility between the katydids and the royal consort (i.e., Tai Si 大姒, the wife of King Wen of the Zhou Dynasty), but also by a similar mechanism in achieving the result, namely, the virtue of non-jealousy. For a polygamous patriarchal society, it is not hard to understand why the virtue could lead to a high fertility. But how about the katydid? This was further elaborated by Zheng Xuan, who claimed in his commentary that every creature with a gender distinction and sentimental desire was jealous, while the katydid was the only exception. “With each [of its female] accepting the [masculine] *qi* and bearing descendants, this is why the [the katydid] could be multitudinous.”⁸¹ In this sense, the high fertility of the royal family followed precisely the same logic as the katydid insect, thus transforming the latter into an ideal imagery for the evocative association.

⁷⁹ Zheng Xuan, *Maoshi zhuan jian*, 9. The translation follows Karlgren, *The Book of Odes*, 4.

⁸⁰ Zheng Xuan, *Maoshi zhuan jian*, 9.

⁸¹ Zheng Xuan, *Maoshi zhuan jian*, 9. 凡物有陰陽情慾者，無不妬忌，唯蚣蝮不耳，各得受氣而生子，故能詵詵然眾多。

That said, was Zheng Xuan's note credible? Apparently, the featured natural description was not addressed as a mere poetic analysis but also an epistemic claim, just as, in the Tang-Song era, the unjealous nature of the katydid went into both the *leishu* encyclopedias for literary quotations, and the *mingwu* monographs for epistemic reference.⁸² From the hindsight of modern biology, we know the claim of non-jealousy is nothing but a mythical construct. Yet scholars from the Song dynasty had already expressed their own reservations. For instance, Zhu Xi suggested the biological claim as a mere inference from the crowded and harmonized appearance of the katydid swarm, which did not have to really bear an unjealous nature.⁸³ Yet the most revealing reflection came from Ouyang Xiu, the pioneering idiosyncratic scholar of *Shi* in the Northern Song, who attributed the claim of non-jealousy to a reversal of textual order.⁸⁴

The general message of "Katydids" is crystal clear and easily attainable. However, due to a reversal of the preface text, Mao and Zheng follow the [wrong order] in their interpretations and miss the point. The katydid, as a kind of locust, is just a tiny insect. How could the poet know about the non-jealousy in its mind? This is particularly unreasonable. The katydid is a fertile insect. Generally speaking, all the insects are fertile; the poet just randomly picks up one of them for analogy. And what analogized is but the fertility of the [imperial consort] that is similar to the katydids. Based on the preface, it would be proper to say that "without jealousy, [one] will have a multitude of descendants like the katydids." Now that the text has been reversed, Mao and Zheng thereby claim the katydid as bearing a nature of non-jealousy. This has missed the point.

《螽斯》大義甚明而易得，惟其序文顛倒，遂使毛鄭從而解之，失也。螽斯蝗類，微蟲爾。詩人安能知其心不妬忌，此尤不近人情者。螽斯，多子之蟲也，大率蟲子皆多，詩人偶取其一以爲比爾。所比者，但取其多子似螽斯也。據《序》，宜言“不妬忌，則子孫衆多如螽斯也”。今其文倒，故毛、鄭遂謂螽斯有不妬忌之性者，失也。⁸⁵

⁸² See, e.g., Ouyang Xun 歐陽詢, "Yiwen lei ju," 藝文類聚 in *Yingyin Wenyuange siku quanshu*, 887: 396; Bai Juyi 白居易, ed., *Baishi liutie shilei ji* 白氏六帖事類集, photocopy of Song edition, Shanghai Library, no. T03565-76 (Wuxing: Zhangshi jinpu, 1933), 2: 19b; Cai Bian 蔡卞, "Maoshi mingwu jie," 毛詩名物解 in *Yingyin Wenyuange siku quanshu*, 70: 579; Lu Dian 陸佃, "Piya," 埤雅 in *Yingyin Wenyuange siku quanshu*, 222: 141.

⁸³ See, quotation of Zhu Xi in Duan Changwu 段昌武, "Maoshi jijie," 毛詩集解 in *Yingyin Wenyuange siku quanshu*, 74: 464; for a briefer claim of the idea, also see, "Da Pan Gongshu" 答潘恭叔, in Zhu Xi 朱熹, *Zhuzi Quanshu* 朱子全書 (Shanghai: Shanghai guji chubanshe, 2010), 22: 2310.

⁸⁴ For the identification of Ouyang Xiu as a leading iconoclastic scholar on *Shi*, see, Steven Van Zoeren, *Poetry and Personality: Reading, Exegesis, and Hermeneutics in Traditional China* (Stanford: Stanford University Press, 1991), 158-159, 181-184.

⁸⁵ Ouyang Xiu 歐陽修, *Shi benyi* 詩本義, photocopy of Song edition in Sibu congkan (Shanghai: Hanfen lou, 1936), juan 1: 5a-b.

According to Ouyang Xiu, at the very beginning, the evocative connection between the consort and the insect was nothing more than a similarity in fertility. In the original preface, the phrase of non-jealousy was referring to the consort. And it was only due to a reversal of textual order that it became a modifier for the katydid, which misguided Mao and Zheng to attribute the virtue to the insect.⁸⁶ Admittedly, without further evidence, this reconstructed textual history of the preface was at best an unsubstantiated hypothesis. That said, the entry indeed captured an essential dynamic in the preface's "misleading" of Mao and Zheng, namely, the attribution of a text-derived poetic message to the biological trait of the natural *wu* itself. Whether the preface had experienced a textual reversal or not, what really mattered was a parallel *epistemic reversal* that must have taken place: The virtue of non-jealousy, originally speaking about the human world, became associated with the katydid imagery through the textual mechanism of the poetic field. However, once this was established, the *text-derived feature* was taken as a natural trait of the insect *per se* and was reversely used for the analysis of the ode.

This correlative association witnesses a continued expansion if we trace it further. As a good example, in his *Maoshi mingwu jie* 毛詩名物解 (Explanations on the *mingwu* of *Maoshi*), the most important Northern Song *mingwu* monograph dedicated to *Shi* alone, Cai Bian 蔡卞 (1048-1117) mentioned in the "Katydid" entry not only the unjealous nature of the insect, but also a quantitative feature about its fertility—"one mother, a hundred offspring" (*yi mu bai zi* 一母百子). And this was more than a rough number or a mere exaggeration. For in the following lines, Cai immediately associated it with the imperial consort Tai Si and his husband King Wen, who, based on another line in *MS* #240, was reported to have "a hundred sons" (*ze bai si nan* 則百斯男) altogether.⁸⁷ In this sense, the katydids would be a perfect evocative image for the imperial family. Similar to the virtue of non-jealousy, here the hundred-son fertility of the katydid must also be a text-derived feature from the poetic field that was

⁸⁶ I.e., a change of textual order from "言不妬忌，則子孫衆多如 (sic.) 蠡斯也" to "言若蠡斯不妬忌，則子孫衆多也."

⁸⁷ See, Cai Bian, "Maoshi mingwu jie," 579; Zheng Xuan, *Maoshi zhuan jian*, 367.

reversely attributed to the natural trait of the insect itself. Thanks to the evocative correspondence of categories, in both cases, the result was an interconnection between human and nature, the textual and the material. From this vantage point, both Ouyang Xiu's textual reversal or Zhu Xi's natural inference can be regarded as revisionist attempts to disentangle and rationalize this epistemic complexity, which had been gradually accumulated for more than a millennium, from the very beginning of the hermeneutic history to their own era.

If for the katydid, the poetically oriented textual reversal about its unjealous nature was still largely a hypothesis, in the following example, the textual construction became evidentially traceable and influenced the upcoming epistemic inquiries in a significant way. The protagonist is presumably the most renowned piece of *mingwu* imagery of the entire *Shi* tradition—the crying “osprey” (*jujiu* 雉鳩) at the very beginning line of the first ode in *Maoshi*:

關關雉鳩	<i>Guan-guan</i> cries the osprey bird,
在河之洲	on the islet in the river.
窈窕淑女	The beautiful and noble lady,
君子好逑	is a good mate for the worthy man. ⁸⁸

Again, the basic message was straightforward, where the *jujiu* bird was analogized to the good mate as an evocative imagery. The debate, instead, arose around the specific epistemic mechanism of this association. For the identification of *jujiu*, the most commonly accepted thesis was the fish-hunting bird 鵟 or the osprey (*Pandion haliaetus*) suggested by Guo Pu, though other early commentators also proposed alternative readings, such as Xu Shen's hen harrier (*baijue* 白鷲) or Lu Ji's vulture (*jiu* 鷲). Yet all of these early readings shared the commonality to take *jujiu* as a fierce, carnivorous bird.⁸⁹ Needless to

⁸⁸ Zheng Xuan, *Maoshi zhuan jian*, 3. With slight adaptations, the translation follows Karlgren, *The Book of Odes*, 2.

⁸⁹ For a detailed list of these early identifications, see, Table 2 on p. 69. Contemporary scholar Liu Yuqing has enumerated 13 different interpretations of the *jujiu* bird from early China to modern scholars, among which he also endorsed Guo Pu's osprey as the most convincing. See, Liu Yuqing 劉毓慶, *Shisao lungao* 詩騷論稿 (Beijing: Shangwu yinshu guan, 2017), 198–202.

mention, there was a tension between the imagery of such fierce birds and the beautiful lady or fine match in the following lines. Based on cultural-anthropological reasoning and excavated materials with early decorative patterns, modern scholars would suggest the bird's fish hunting as a metaphor for the male's courtship of the female, thus drawing a close analogy between the hunting osprey and the mate-seeking worthy man.⁹⁰ However, this was far from the line of thinking in the traditional commentaries. As a contrast, ever since the famous claim of the Mao commentary, "the imperial consort preserved the virtue of the osprey" (*houfei you guanju zhi de* 后妃有闢雎之德), the bird became bonded with the ideal image of female virtue in the pre-modern hermeneutic history.⁹¹ Correspondingly, the natural trait of the bird was endowed with a moral significance that deserved a closer investigation.

In the Mao commentary, the bird was noted by its alternative name *wangju* 王雎 and briefly characterized as "zhi yet differentiated" (*zhi er youbie* 摯而有別).⁹² The latter feature of differentiation is easy to grasp. As a bird of prey, the osprey indeed behaves alone most of the time.⁹³ In this sense, Liu Xiang's 劉向 (77-6 BCE) influential claim in *Lienü zhuan* 列女傳 (Biography of exemplary women) that one had not seen the "coupled dwelling and behaving" of the *jujiu* bird was not far from the point.⁹⁴ As a contrast, the former feature was open to discussions due to the multivocality of character *zhi* 摯—either as genuine (*zhenzhi* 真摯) or ferocious (*mengzhi* 猛摯). Although the ferocious reading worked well with the natural trait of the bird, Zheng Xuan made a decisive move towards the genuine side through his authoritative commentary:

Zhi refers to the genuineness. It suggests that the female and the male ospreys have deep sentiments yet still differentiate from each other.

⁹⁰ See, "Shijing liange fawei" 詩經戀歌發微 in Sun Zuoyun, *Sun Zuoyun wenji*, 2: 305-306; Zhao Guohua 趙國華, *Shengzhi chongbai wenhua lun* 生殖崇拜文化論 (Beijing: Zhongguo shehui kexue chubanshe, 1990), 259-63; Liu Yuqing, *Shisao lungao*, 204-206, 244-252.

⁹¹ Zheng Xuan, *Maoshi zhuan jian*, 3.

⁹² Zheng Xuan, *Maoshi zhuan jian*, 3.

⁹³ Liu Yuqing, *Shisao lungao*, 204-5.

⁹⁴ Liu Xiang 劉向, "Gu lienü zhuan," 古列女傳 in *Yingyin Wenyuange siku quanshu*, 448: 34. 夫雎鳩之鳥，猶未嘗見乘居而匹處也。

摯之言至也，謂王雎之鳥，雌雄情意至，然而有別。⁹⁵

Faithful yet with a distance, affectionate yet with a difference, this *tensive* imagery of the *jujiu* bird offered an apt evocation to the ideal image of the imperial consort, or the Confucian order of gender difference in general. More impressively, it shed as much new light on the natural interpretation as to the poetic reading.

In the Northern Song, when Lu Dian summarized the natural traits of the osprey in *Piya*, he quoted a common saying that the bird “flies in pairs in mating, while stands individually in separation” (*jiao ze shuang xiang, bie ze li er yichu* 交則雙翔，別則立而異處)—a description that would reach a broader influence through its inclusion in Li Shizhen’s 李時珍 (1518-1593) *Bencao gangmu* 本草綱目 (Compendium of materia medica).⁹⁶ Modern ethology tells us that accompanied flight, as a typical behavior of mate guarding, was uncommon for the birds of prey.⁹⁷ In particular, although the male ospreys have been reported to accompany their mates on flight during an early stage of pair formation, this is a rare phenomenon even for modern observers.⁹⁸ By referring to these, I am not using modern ethology as a benchmark to judge the accuracy of those earlier observations, nor asserting that the “osprey” understood by the premodern scholars is exactly the same as ours. That said, this ethological vantage point suggests a higher likelihood that the affective description of pairing flight was derived from Zheng Xuan’s reading rather than a natural observation. This inference becomes more likely given the *tensive* structure in the description, where the pairing flight and individual standing form a close parallel to the genuineness and differentness of the bird in the Mao-Zheng hermeneutic tradition.

⁹⁵ Zheng Xuan, *Maoshi zhuan jian*, 3.

⁹⁶ See, Lu Dian, “*Piya*,” 116; Li Shizhen 李時珍, *Bencao gangmu* 本草綱目, Shanghai Library, no. 020185 (Taihe tang, 1655), juan 49: 15b.

⁹⁷ In the behavioral biology of birds, mate guarding is defined as the close following of the female partner by the male prior to and during egg-laying. See, T. R. Birkhead, L. Atkin, and A. P. Møller, “Copulation Behaviour of Birds,” *Behaviour* 101, no. 1 (1987): 104, 118, 136.

⁹⁸ See, Alan Poole, “Courtship Feeding and Osprey Reproduction,” *The Auk* 102, no. 3 (1985): 490; T. R. Birkhead and C. M. Lessells, “Copulation Behaviour of the Osprey *Pandion haliaetus*,” *Animal Behaviour* 36, no. 6 (1988): 1681.

This text-derived construction of natural knowledge became more apparent in the following brush note by Wang Zhi 王銍 (d. ca.1144), who recorded a revealing episode of “natural observation” by Lu Dian’s contemporary Li Gongbi 李公弼 (*jinsshi* 1067). When he encountered a flying osprey during a rural inspection, an accompanying clerk told him an idiosyncratic feature of the bird, that its mate slept in the same nest yet in a different chamber. Having the osprey nest fetched for examination, Li noticed that the nest indeed had two chambers (*yi chao er shi* 一巢二室), which indicated a separate dwelling of the two genders. And this, according to the note, made Li to attain a real understanding of osprey’s “harmony in difference.”⁹⁹

Despite its acclaimed cogency as a first-hand observation, the description of a dual-chambered osprey nest is a complete myth. Although modern ornithology indeed records a few birds capable of building multi-chambered nests, this has never been observed for large predators such as the osprey. Moreover, even for those multi-chambered nest builders, the additional chambers are either dwelled in by young descendants from the same family, or other families of a bird community, but are never designed for gender separation.¹⁰⁰ Here, it is hard to know whether the mythical description was caused by an inaccurate observation, the assistants’ manipulation, or a problematic record. Yet just like Li realized by the end of the episode, its connection to the tensive description of the bird in the commentary tradition was apparent. With the single nest indicating genuine affection, and the separate chambers bespeaking gender difference, this architectonic arrangement offered a perfect embodiment to the tensive traits in the line of Zheng Xuan’s reading, with the text-derived features enriched to a new level of specificity.

In Zhu Xi’s *Collected Commentaries*, this text-derived image continued to grow into the paramount criterion for the *jujiu* bird. Under his brush, the bird was described as “frequently wandering in pairs without indulging in each other,” an even more intimate image that could no longer be sustained by

⁹⁹ Wang Zhi 王銍 and Wang Yong 王栎, *Mo ji Yanyi yimou lu* 默記 燕翼詒謀錄 (Beijing: Zhonghua shuju, 1981), 28–29.

¹⁰⁰ Nicholas E. Collias and Elsie C. Collias, *Nest Building and Bird Behavior* (Princeton: Princeton Legacy Library, 1984), 267–72.

the fierce osprey. Correspondingly, he forfeited this time-honored attribution and suggested *jujiu* as a mallard-like water bird (*zhuang lei fuyi* 狀類鳬鷖), an alternative reading presumably inspired by Zheng Qiao 鄭樵 (1104-1162) which had little support from transmitted philological texts.¹⁰¹ That said, it was indeed common for those duck-like birds of the Anatidae subfamily to swim in pairs, thus fitting well into the text-derived intimate image of the *jujiu* bird. Here, Zhu Xi's alternative reading can be best explained as a victory of the commentary tradition, where the tensive determination initiated by Zheng Xuan must have played a central role.¹⁰²

Note that all these text-derived interpretations were based on the single reading of *zhi* 摯 as genuineness. However, as already mentioned above, this did not have to be the case, and Zheng Xuan's interpretation could have already been a text-derived reading evoked by the ideal image of the imperial consort. Similar to the above case of the katydid, it was also our pioneering skeptic Ouyang Xiu who cast the first serious doubt. According to him, given the predatory nature of the bird, the character *zhi* in the original Mao commentary (“*zhi* yet with difference”) should be fairly understood as fierceness (*mengzhi* 猛摯), and it was only under Zheng Xuan's hand that the problematic alternative was derived. All the animal mates, reasoned Ouyang, had intimate sentiments, where the osprey did not appear to have any specialty. But if this was the case, how should one comprehend the awkward association between the fierce bird and the refined lady? For Ouyang, this was a rhetoric of a partial emphasis that solely concerned the bird's differentiation rather than its fierceness, which was not peculiar for a literary piece.¹⁰³

¹⁰¹ See, Zhu Xi 朱熹, *Shi jizhuan* 詩集傳 (Beijing: Zhonghua shuju, 2017), 2; Zheng Qiao 鄭樵, *Tongzhi ershi lue* 通志二十略 (Beijing: Zhonghua shuju, 1995), 559, 597. 偶常並遊而不相狎。

¹⁰² Similar text-derived readings also include the “white buttonquail” (*cangyan* 蒼鵪) thesis in Zhou Chu's 周處 (236-297) *Fengtu ji* 風土記, and the “cuckoo” (*tijue* 鷓鴣) thesis in Qian Wenzhi's 錢文子 (1148-1220) *Shi gu* 詩詁. See, Table 3 on p. 76.

¹⁰³ Ouyang Xiu, *Shi benyi*, juan 1: 1b-2a.

If the above critique of Zheng Xuan's reading was still a subjective inference from natural traits, the Qing philologists would locate more direct evidence from transmitted texts. The key quotations came from two places. The first is Lu Deming's *Jingdian shiwen* 經典釋文 (Exegesis on the classics, henceforth *Exegesis*), whose phonetic notations preserved many early traces of the classic texts. For the current issue, the *Exegesis* offered a revealing note that the character *zhi* 鷙 in the Mao commentary "also appeared as *zhi* 鷙 in the original" (*ben yi zuo zhi* 本亦作鷙).¹⁰⁴ Despite the phonetic interchangeability of these two characters, the latter referred univocally to the fierce bird in its literary meaning, and was seldom used for other contexts. The existence of this various form therefore tilts the early interpretation of the *jujiu* bird towards the "fierce" side.

The likeliness of this alternative reading becomes higher when it is joined with another quote from the *Zuo Commentary*, where Tanzi 邾子 (fl. late-6th C. BCE) famously elaborated how his ancestor used the names of birds for bureaucratic nomenclature. For instance, the Minister of Instruction was named after the partridge (*zhujiu* 祝鳩), the Minister of Crime the hawk (*shuangjiu* 爽鳩), and the Minister of War the osprey (*jujiu* 鵟鳩).¹⁰⁵ The underlying logic, as noted by Roel Sterckx, was to pair "bird behavior with the function of the official," thereby a natural-bureaucratic correlation with epistemic significance.¹⁰⁶ In his third-century authoritative commentary, Du Yu 杜預 (222-285) followed precisely this logic to explain the name attributions, where the *jujiu* 鵟鳩 bird was noted as follow:

Jujiu: the *wangju* bird. It is fierce and differentiated (in gender). Therefore, it is attributed to the Minister of War, which is responsible for the legal system.

鵟鳩，王鵟也。鷙而有別，故為司馬，主法制。¹⁰⁷

¹⁰⁴ Lu Deming 陸德明, *Jingdian shiwen* 經典釋文 (Beijing: Zhonghua shuju, 1983), 53.

¹⁰⁵ Kong Yingda 孔穎達, *Chunqiu zuozhuan zhengyi* 春秋左傳正義 (Beijing: Beijing daxue chubanshe, 1999), 3: 1363.

¹⁰⁶ Roel Sterckx, *The Animal and the Daemon in Early China* (Albany: State University of New York Press, 2002), 51–52.

¹⁰⁷ Kong Yingda, *Chunqiu zuozhuan zhengyi*, 3: 1363.

Here, the orthographic relationship between *ju* 鷗 and *ju* 雥, the same alias *wangju*, as well as the famous description of “*zhi* yet differentiated” undoubtedly connected Du Yu’s reading to the same bird and hermeneutic tradition as the Mao commentary. Yet it is noticeable that the character *zhi* 鷖 here came with a bird component, which not only referred to the fierceness of bird in its character meaning, but also double-confirmed this non-loan usage through its connection to the military and legal affairs that demanded a spirit of fierceness as well. For mid-Qing scholars such as Ma Ruichen, this would be good evidence that the Mao commentary originally went by *zhi* 鷖 and was understood as fierceness. Correspondingly, the character *zhi* 摯 in the later editions were taken as a phonetic loan of this original form, which was then misinterpreted by Zheng Xuan as genuineness.¹⁰⁸

Here, it is noteworthy that in Lu Deming’s *Exegesis* on the *Zuo Commentary*, there is also a note on the character *zhi* 鷖 in the above-quoted line, suggesting that it “originally appeared as *zhi* 摯 as well” (*ben yi zuo zhi* 本亦作摯)—a precise symmetry to his note under the character *zhi* 摯 in the Mao commentary.¹⁰⁹ Considering the interchangeability of the two characters, as well as the high fluidity of the early texts, it was more likely that both of the graphic forms were used in the epistemic tradition of the *jujiu* bird. Instead of searching for an “original” form of these early commentaries—as traditional philologists had always strived for—a more reliable and revealing phenomenon in the above quotes is the hermeneutic divergence of the two classic traditions. Out of the same textual-epistemic foundation, the “*zhi*-ness” of the bird was written primarily as *zhi* 鷖 and taken as fierceness in the official analogy of the *Zuo Commentary*, yet written primarily as *zhi* 摯 and taken by a large cohort as genuineness in the poetic evocation of the refined consort. Taking the osprey’s natural behavior into consideration, the former interpretation indeed made better sense, and might be crowned as the more “original” if one adopts the view of the traditional classicists to equalize “originality” with the untainted truth of a presumed Urtext.

¹⁰⁸ Ma Ruichen 馬瑞辰, *Maoshi zhuanjian tongshi* 毛詩傳箋通釋 (Beijing: Zhonghua shuju, 1989), 30.

¹⁰⁹ Lu Deming, *Jingdian shiwen*, 283.

Nevertheless, as elaborated by Martin Kern, the high fluidity and paralleled transmissions made it insufficient to analyze the early classics through such “textual lineages,” and it is better to consider the variants as individual realizations of a much broader “repertoire” under different contexts.¹¹⁰ Just as the various lines of *Shi* can be better conceptualized as “ever-renewed instantiations” from a larger repertoire of poetic materials, one may also take the various versions of *mingwu* commentaries as parallel realizations from a broader correlative epistemic background.¹¹¹ As we have seen from the case of the *jujiu* bird, the diverging interpretations not only worked well for each of the classic contexts, but also encrypted these contextually sensitive messages into the character variants *per se*. Compared to *zhi* 鷖, the variant *zhi* 摯 was by itself more inclined to an intimate reading, and this was encrypted onto the textual layer of the Mao commentary which was even prior to Zheng Xuan’s explicit note. Does it indicate a germination of the intimate reading already before Zheng’s explication, or a reversed editing of the Mao commentary under the light of Zheng in the later times? Without further evidence, we have to leave the question open. But the following observation is more certain: Ever since the diverging “instantiations” took place, the philological term was no longer innocent from the hermeneutic tradition. And when it came to the Tang-Song scholars, the two aspects were already closely entangled. With contextually encrypted terms to start, and text-derived traits to end up, the *jujiu* case highlighted a hermeneutic loop between the philological term and the natural imagery in the ever-accumulating *mingwu* knowledge across the first millennium.

¹¹⁰ See, Martin Kern, “Methodological Reflections on the Analysis of Textual Variants and the Modes of Manuscript Production in Early China,” *Journal of East Asian Archaeology* 4, 1-4 (2002): 148–50; Martin Kern, “‘Xi shuai’ 蟋蟀 (‘Cricket’) and Its Consequences: Issues in Early Chinese Poetry and Manuscript Studies,” *Early China* 42 (2019): 50–56.

¹¹¹ For the various lines of *Shi* and poetic writings in general, see, Kern, “‘Xi shuai’ 蟋蟀 (‘Cricket’) and Its Consequences,” 55–56; also see, Stephen Owen, *The Making of Early Chinese Classical Poetry* (Cambridge: Harvard University Asia Center, 2006), 73, 130; Stephen Owen, *Just a Song: Chinese Lyrics from the Eleventh and Early Twelfth Centuries* (Cambridge: Harvard University Asia Center, 2019), 30, 59.

In the above case, I have used the osprey to demonstrate a hermeneutic entanglement among the philological text, the poetic message, and the natural trait—though in that case, the reversed mechanism from the text-derived traits to the philological term was channeled through a graphic variation that was largely unconscious. In other occasions, scholars would develop philological reasoning to complete this hermeneutic loop in a more active way. In the Song dynasty, a high tide was reached under the hands of the “New Learning” of Wang Anshi 王安石 (1021-1086). Although due to the far-reaching political failure of Wang’s New Policies, both his new commentaries on the Confucian classics (including one on *Shijing*) and his philological *tour de force*, *Zi shuo* 字說 (Remarks on characters) have long been largely lost, we can still catch a glimpse of his philological techniques and hermeneutic findings from extant works such as *Piya* 埤雅 (Supplements to *Erya*) and *Maoshi mingwu jie* 毛詩名物解 (Explanations on the *mingwu* of *Maoshi*). As representative works of the Wang Anshi school, the former was authored by Lu Dian 陸佃 (1042-1102), presumably the most eminent scholar among Wang’s disciples, and the latter by Cai Bian 蔡卞 (1048-1117), Wang’s son-in-law and brother of the infamous prime minister Cai Jing 蔡京 (1047-1126).

Although new discussions of *mingwu* were widely discernable in the Song from new commentaries of *Shi* and broader studies of the classic texts—as we have seen from Ouyang Xiu and Zheng Qiao—it was Cai Bian’s *Maoshi mingwu jie* which offered the second extant *mingwu* monograph that was devoted exclusively to *Shi*, which is also the only extant work of the kind for the entire Song dynasty.¹¹² Due to Cai’s close affiliation to the New Policies party, *Maoshi mingwu jie* was largely downplayed by later scholars, yet its generic uniqueness still renders the work deserving special

¹¹² Between Lu Ji’s *Exegesis* and Cai Bian’s era, there was also the quotation of a now-lost work *Maoshi caochong jing* 毛詩草蟲經 (Classic on the Grasses and Insects in *Maoshi*) in *Chuxue ji* 初學記 and *Piya*. The work was dated by the Qing bibliographer Ma Guohan 馬國翰 to the Six Dynasties, though contemporary scholars have cast doubt on its authenticity. See, Hu Changqing 胡长青, “*Maoshi caochong jing* wei weishu kao,” 《毛詩草蟲經》為偽書考 *Shijing yanjiu congkan* 詩經研究叢刊 1 (2001): 288–89.

attention.¹¹³ Regarding its philological reasoning for the hermeneutic loop, let us use the following example on the “rabbit” (*tu* 兔) for an illustration. In *Maoshi*, the character *tu* appears 8 times in 4 odes (*MS* #7, 70, 197, 198). Unlike previous examples on the katydid or the osprey, there was little controversy in either the attribution of the rabbit or its evocations in the odes. Instead, what becomes noteworthy is the way Cai Bian developed his entry for the *mingwu* construction of the “rabbit,” a combination of accumulated knowledge with his own philological reasoning. Coming straight to the point, Cai addressed his philological claim at the very beginning of the entry:

The rabbit has a notch in its mouth, and gives birth through vomiting. It is therefore called “rabbit.” “Rabbit” (*tu*) means to “vomit” (*tu*).

兔口有缺，吐而生子，故謂之兔。[兔]，吐也。¹¹⁴

Despite the oddity it may appear to be to a modern reader, the underlying logic is clear. Firstly, Cai described the “vomiting delivery” as a natural trait of the rabbit. Secondly, this peculiar feature was suggested as the nomenclative basis for the name “rabbit.” And thirdly, the philological connection between the “rabbit” (*tu* 兔, OC: *ʃa-s, MC: *thuH*) and “vomit” (*tu* 吐, OC: *tʰaʔ-s, MC: *thuH*) was reemphasized, which must base on their phonetic similarity.¹¹⁵ In short, Cai offered an etymological reasoning for the name “rabbit”—a homophonic confirmation for its natural trait of “vomiting delivery.”

But where did this peculiar description of “vomiting delivery” come from? The remainng lines of this 439-character entry offered some helpful hints. As shown in *Table 1*, the vomiting birth of the rabbit was neither Cai’s own invention nor his natural eyewitness observation, but a time-honored piece of knowledge from transmitted sayings that involved a far broader epistemic realm of correlative associations. Firstly, this peculiar birth was connected to a unique deficiency of the rabbit (Claim 3.1).

¹¹³ Another important reason for the neglected status of the work was its extensive quotation from Lu Dian’s *Piya*, which made its originality questionable and overshadowed by the latter. I will come back to this point.

¹¹⁴ Cai Bian, “Maoshi mingwu jie,” 70: 568. For the addition of the character *tu*, see corresponding entry in Lu Dian, “Piya,” 222: 76.

¹¹⁵ Unless otherwise noted, the phonological reconstructions of Old and Middle Chinese follows William H. Baxter and Laurent Sagart, *Old Chinese: A New Reconstruction* (New York: Oxford University Press, 2014).

With the lack of one “bodily aperture” (i.e., the vagina), it had to give birth through another channel. Meanwhile, as suggested by the “book of Mr. Tao,” the “vomiting delivery” must also bear some relevance with the fertilizing ability of the rabbit mouth. If the female rabbit got pregnant by “licking at the male’s hair,” it would be little strange that it also gave birth through the mouth (Claim 3.2). Judging from the natural relevance of this claim, the “Mr. Tao” was most likely referring to the eminent Six-Dynasty pharmacologist Tao Hongjing 陶弘景 (456-536), though the quote can no longer be found in today’s version of his writings.¹¹⁶ That said, these mouth-related claims indeed had a long history. In his first-century scholarly work *Lunheng* 論衡 (Discourses Weighted in Balance), Wang Chong’s 王充 (27-97) offered presumably the earliest extant record of the kind, indicating the circulation of such knowledge as early as in the Han dynasty:

The rabbit gets pregnant by licking at hair. When it delivers, the baby comes out from the mouth.

兔吮毫而懷子。及其子生，從口而出。¹¹⁷

Table 1: Claims and References in the Entry “Rabbit” in *Maoshi mingwu jie*¹¹⁸

Section No.	Section Concern	Claim No.	Claim Content	Original Text
1	General conclusion	1.1	Etymology of <i>tu</i> 兔	兔口有缺，吐而生子，故謂之兔。吐也。
2	Vision related features	2.1	Pregnancy though moon viewing	〔舊說〕：兔者明月之精，視月而孕。
		2.2	Pregnancy though looking at the Moon Rabbit	故【楚辭】曰：“顧兔在腹。”言顧兔在月之腹，而天下之兔望焉，於是感氣。
		2.3	Excellent eyesight of the rabbit	【禮】云：“兔曰明視”，亦此意也。
3	Mouth related features	3.1	Peculiarity in bodily apertures	蓋咀嚼者九竅而胎生，獨兔雌雄八竅。
		3.2	Mouth-incurred pregnancy and vomiting birth	故【陶氏書】云：兔舐雄毫而孕，五月而吐子。

¹¹⁶ The same line is also quoted in Lu Dian’s *Piya*, yet is not discernable from earlier works.

¹¹⁷ Wang Chong 王充, “Lunheng,” 論衡 in *Yingyin Wenyuange siku quanshu*, 862: 45.

¹¹⁸ Based on Cai Bian, “Maoshi mingwu jie,” 70: 568-569.

4	Correlative associations	4.1	Between the moon's brightness and the rabbit's productivity	而〔里俗〕又謂：視顧兔而感氣，故卜秋月之明暗，以知兔之多寡也。
		4.2	Between the peacock's thunder-incurred pregnancy and the rabbit's moon-incurred pregnancy	今孔雀亦合。蓋〔先儒〕以孔雀聞雷而孕。則兔雖舐毫，而其感孕以月，理或然也。
		4.3	Between the incompleteness of the moon and the rabbit mouth	月，缺也。故其口缺。
5	Poetic messages	5.1	The rabbit-net as an evocation for the love of virtue	【詩】曰：“肅肅兔置，施于中林。”蓋椽木之丁丁，以有所聞；施于中逵，以有所見。施于中林，則無所聞無所見於是焉。肅肅則好德之至也，故詩以此為德。
		5.2	The rabbit-net as an evocation for the spread of moral teachings	【徐幹中論】曰：肅肅兔置，施于中林，處獨之謂。且先王之化，言格於菑蕘，行至於雉兔，然後為博。故是詩正言兔置，而叙者以為莫不好德也。
6	Etymological reasoning	6.1	<i>Kao</i> 尻 and the rabbit ass	【古今注】曰：“兔口有缺，尻有九孔。”今尻於文從九，蓋生於兔也。
		6.2	A relevant note on the fox	【內則】曰：“兔去尻，狐去首。”蓋狐亦正丘首，不忘本也。
		6.3	<i>Mian</i> 免 and mouth-birth of the rabbit	【說文】無兔字，以免為兔。兔生自口而出，宜有留難而後免，故字又通為免。俗作兔，非也。
		6.4	<i>Mian</i> 娩 and the hard birth of the rabbit	今兔身亦謂之分娩。蓋物之產乳莫易於羊，莫難於兔。故羊子曰達，兔子曰嬾。達之為言羊也，嬾之為言兔也。
		6.5	<i>Fu</i> 俛 and the bodily gesture of the rabbit	兔足前卑後倨，其形俛，又從兔也。
		6.6	A further reasoning on the etymology of the official cap <i>mian</i> 冕	冕字從兔。〔古之說冕者〕，以為位彌高而志彌恭，其以此乎？
		6.7	A relevant note on the female virtue of <i>mian</i> 婉	【內則】曰：“姆教婉婉聽從。”蓋婉，妻道；嬾，母道；聽，婦道；從，姑道也。

Notes: 1. The “Original Text” column includes the complete text of this entry.

2. The solid bracket “【】” marks direct references from earlier texts; the hollow bracket “〔〕” marks indirect references from transmitted sources and common knowledge.

Nevertheless, speaking of the pregnancy of the rabbit, the above thesis of “hair licking” was merely minor. Instead, as shown in Section 2 of *Table 1*, the more influential was a vision-incurred pregnancy related to the viewing of the moon. In this section, the three quotes also offer a good example regarding how this text-derived trait, not much different from the non-jealousy of the katydids, gradually unfolded and enriched around the authoritative texts. As demonstrated by modern scholars, the mentioning of “*gutu*” 顧兔 (OC: *[k]^waʔ-s *[l̥]a-s) in the lyric “Heavenly Questions” (Tianwen 天問) of the Chu lyrics (Claim 2.2) had a defining influence for the early association of the rabbit with the moon, where this rhyming binome, though originally referring to the toad (*juzhu* 居諸, OC: *k(r)a *ta), witnessed a prevailing semantic shift in the Western Han into the plain reading of a moon rabbit.¹¹⁹ This text-derived association offered the necessary foundation for conceptualizing the rabbit as “essence of the bright moon” (*mingyue zhi jing* 明月之精), where the dual meanings of the character *jing* 精 as both the “essence” and the “sap” rendered the moon-viewing pregnancy conceivable (Claim 2.1). Moreover, once this mythical correspondence was established, the authoritative texts would also serve as an anchor for its further enrichment. Just as the appearance of *gutu* 顧兔 in the Chu lyrics helped to specify the mechanism of mooning viewing into a “correspondence of *qi*” between the Moon Rabbit and those on the ground (Claim 2.2), the mentioning of the rabbit’s good eyesight in *Liji*—an apt natural observation on its own—also got a new implication for its capability of long-distance moon viewing (Claim 2.3). Besides, this text-derived corresponding network could continue to expand through further inference. As suggested from Claim 4.1, a reasonable deduction from the moon-viewing pregnancy would be the correlation

¹¹⁹ For the original philological demonstration, see, “Tianwen shi tian” 天問釋天 in Wen Yiduo 聞一多, *Wen Yiduo quanji* 聞一多全集 (Wuhan: Hubei renmin chubanshe, 1993), 5: 511-515. For additional evidence from visual materials, also see, Liu Yao 劉瑤, “Lun Zhongguo shenhua zhong yuezhong lingshou xingxiang de chansheng, xingsheng yu liubian,” 論中國神話中月中靈獸形象的產生、興盛與流變 *Henan shehui kexue* 河南社會科學 24, no. 8 (2016): 84-86.

between the moon's brightness and the rabbit's reproductivity. In the same section, Cai Bian also used the correspondence to explain the rabbit's featured mouth: It had a notch, just as the moon had its incompleteness (Claim 4.3).

In this way, both the vision related features and the mouth related ones became associated with the moon, and therefore knitted into the same correlative network. That said, the vision-incurred pregnancy of moon viewing (Claims 2.1 & 2.2) and the mouth-incurred pregnancy of hair licking (Claim 3.2) apparently indicated different fertilizing mechanisms. Yet Cai Bian had little interest here in making a further reconciliation or checking up which was the more tenable. Instead, drawing reference to the thunder-incurred pregnancy of the peacock—a comparable case that in fact came from the Buddhist classic *Nirvana Sutra*—he simply left an ambiguous note that “the rabbit, despite its licking of the [male] hair, was indeed theoretically possible (*li huoran* 理或然) to get pregnant through the moon” (Claim 4.2).¹²⁰ This eclectic feature is also discernable from the general structure of the entry, which not only involves Sections 2-4 that remain rather concentrated in the “natural” traits of the rabbit, but also Section 5 concerning its poetic meaning, and a much diffusive Section 6 that involves the etymological reasoning for several relevant terms across the natural, official, and moral aspects. Ranging from classical texts to common knowledge, philological analysis to natural reasoning, and biological traits to humanly implications, what this entry presents us is an ever-expanding correlative network across disparate evidential bases, analytical methods, and knowledge fields. Thanks to the overarching scheme of “categorical correspondence,” an extensive range of epistemic claims became relevant and associable with each other. Accumulative yet dispersive, heterogeneous yet interconnected, this was typical for the extensive *mingwu* inquiries on a correlative epistemic network.

¹²⁰ For the Buddhist origin of the peacock claim, see, Dharmakṣema 曇无讖, “Dabo niepan jing,” 大般涅槃經 in *Taishō shinshū daizōkyō* 大正新脩大藏經 (Tokyo: Taishō Shinshū Daizōkyō Kankōkai, 1988), 12: 570. 則兔雖舐毫，而其感孕以月，理或然也。

By following this ever-expanding network we come to a better understanding of the knowledge construction of the rabbit's delivery, which, just as the association of the rabbit with the moon, involved multiple rounds of epistemic enrichment between the textual records and natural descriptions. That said, the etymological reasoning in the entry went a step beyond. For they displayed not only a *correlative* network across multiple realms, but also *causative* relationship that implied a temporal sequence. Had the etymology of *tu* 兔 (rabbit), as suggested by Cai, indeed come from the phonetically related character *tu* 吐 (vomit), it would have indicated a historical judgment that the knowledge of "vomiting delivery" was already taken into consideration during the creation of the *tu* 兔 character. However, as suggested above, the "vomiting delivery" of the rabbit only came into the record in the Eastern Han. Although it may need some additional time for such observations to integrate into the knowledge background for Wang Chong's reference, they were apparent late comers comparing to the invention of the *tu* 兔 character, which, as we know today, was already prevalent in oracle-bone inscriptions.¹²¹ Judging from the diachronic order of the sources, the following must be closer to the actual etymological process in history: Due to a phonetic similarity between the characters *tu* 兔 and *tu* 吐, by the Han Dynasty the "rabbit" became inflected by the idea of "vomiting" and resulted in a discourse of "vomiting delivery," a philologically derived trait that was nowhere observable in the natural world. However, in Cai Bian's etymological reasoning, the logic was completely reversed, as if this later derived trait had already been encoded into the name *tu* 兔 from the beginning. In the historical process, it was the name *tu* that induced the idea of vomiting delivery, yet in Cai Bian's reconstruction, the trait became the basis for the determination of the name. This etymological reversal not only added a new epistemic layer to the name *tu*, but also transformed the vomiting delivery from a text-derived trait to one that appeared natural. With textual descriptions naturalized into the features of *wu*, and biological traits philologized into the semantics of *ming*, the name and the referent formed into a *dialectic cycle* of mutual derivation.

¹²¹ For the appearance of *tu* 兔 in the oracle-bone texts, see, Liu Zhao 劉釗, Hong Yang 洪飏 and Zhang Xinjun 張新俊, *Xin jiagu wen bian* 新甲骨文編 (Fuzhou: Fujian renmin chubanshe, 2009), 550.

One can identify a similar etymological reversal from the extended discussions in Section 6 on the cognate series of *mian* 免. According to the entry, the character *mian* 免 (along with 娩 and 嬖) also derived its meaning from the vomiting delivery of the rabbit, which, as the “most difficult” among the mammals, only got “extricated” (*mian* 免) after a hard time in the mouth (Claims 6.3, 6.4). In other words, the graphic connection between *tu* 兔 and *mian* 免, just as a phonetic connection between *tu* 兔 and *tu* 吐, was explained as a derivation from the vomiting delivery. Nevertheless, modern paleographical studies have demonstrated disparate origins for these character series, where the former (免: ) , with long ears and a lifting tail, captures the shape of the rabbit, while the latter (娩: ) , with the outer bracket symbolizing the lower part of the female body, was an ideograph for human parturition.¹²² Since the two character series did not become graphically similar until the late Warring States, it indicates once more an etymological reversal that builds earlier natural interpretations on a later philological coincidence. By revealing the anachronism of such reversals, I am not aiming at judging a 12th-century entry from the hindsight of modern biology and paleography. Yet the entry offered a good illustration of how the dialectic cycle of *ming* and *wu* was actively completed through creative—if not hasty—associations based on immediate resemblance in characters.

This dialectic complication is by no means confined to the single entry of “rabbit.” Instead, such etymological associations are widely discernable in *Maoshi mingwu jie*, which, just as in the rabbit case, witness a particular intimacy with the predicative phrase “therefore it is called X” (*gu weizhi* 故謂之...). In the work, the phrase appears in 23 entries. And a more careful perusal of all the concluding usages of the character *gu* 故 (therefore) in the work would yield a total of 59 counts, or 31% (59/191) of the entire entries that involve etymological reasoning. Although for a minority of these cases, such as the reading of

¹²² See, Yu Xingwu 于省吾, *Jiagu wenzi gulin* 甲骨文字詁林 (Beijing: Zhonghua shuju, 1996), 2: 1646-47; Lü Yahu 呂亞虎, “Guwen 'zi' zi xingyi goujian jixi,” 古文“字”字形義構建解析 *Tōa kangaku kenkyū* 東亞漢學研究 Special Issue (2019): 192.

ji 稊 (broom corn) as the cereal for sacrifice (*ji* 祭), the reasoning seems apt, many others are rather far-fetched.¹²³ To list just a few, *shu* 黍 (glutinous millet) is explained by the homophonic *shu* 暑 (hot weather) due to its harvest in the mid-summer; *chai* 豺 (jackal) is explained by the homophonic *chai* 柴 (bony) due to its slim appearance; *tiao* 蜩 (cicada) is explained by the cognate *tiao* 調 (harmonious) for its concordant sound;¹²⁴ In each of these cases, the reasoning has rightly identified a natural trait on the one hand, and a philological connection on the other. Yet the etymological integration of the two sides remained an arbitrary one that could only make sense under an overarching epistemology of correlated resemblance. In his study on the vernacular medical practices of pre-modern China, Andrew Schonebaum uses the term “literary logic” to characterize such linguistic correlations—“the sense that things in the real world that share names or that are related somehow through language have an actual corresponding relationship.”¹²⁵ Thanks to these “literary logics,” the epistemic boundaries between the textual and the natural, the name and the referent were completely dissolved, interweaving with each other into an ever-expanding correlative network.

As mentioned in the beginning of this section, Cai Bian bore a close connection with the “New Learning” of the Wang Anshi school, and this explained where his featured approach came from. In Lu Dian’s *Piya*, a more influential “twin work” of *Maoshi mingwu jie*, these etymological correlations also loom large.¹²⁶ Despite its self-positioning as a commentary to the character book *Erya*, the intimacy between *Piya* and the study of *Shi* has been widely acknowledged. This was not only due to the intrinsic relevance of *Erya*, which placed a special emphasis on the *Shijing* terms in its exegesis of the classic texts, but also related to the compilation history of *Piya*, which was expanded from an earlier work named

¹²³ For the interpretation of *ji* and *feng*, see, Cai Bian, “Maoshi mingwu jie,” 545.

¹²⁴ Cai Bian, “Maoshi mingwu jie,” 545, 573, 583.

¹²⁵ Andrew Schonebaum, “Demonological Poison (*Gudu* 蠱毒) and Cutting the Flesh [to Make Medicine] (*Gegu* 割股): A History of Two Case Histories,” in *Thinking in Cases: Ancient Greek and Imperial Chinese Case Narratives*, ed. Markus Asper (Berlin and Boston: De Gruyter, 2019), 152.

¹²⁶ For the wide influence of *Piya* in the *Shijing* study of the Song dynasty, see, Yang Chin-lung 楊晉龍, “Lun *Piya* jiqi zai songdai *Shijing* zhuanzhu zhong de chuanbo,” 論《埤雅》及其在宋代《詩經》專著中的傳播 *Zhongguo xueshu niankan* 中國學術年刊 35, no. 1 (2013): 48–55.

Shi wuxing menlei 詩物性門類 (Classifications on the Material Traits of *Shi*).¹²⁷ Although this early edition was not preserved, judging from the title, it must be another *mingwu* monograph dedicated exclusively to *Shi*, which should not be far from the format of *Maoshi mingwu jie*. This intimacy is also discernable from the content of *Piya*, where 213 of its 297 entries demonstrate a relevance to *Shi*.¹²⁸ Yet regarding its specific relevance in *mingwu* studies, nothing is more apparent to the 108 overlapping entries between *Piya* and *Maoshi mingwu jie* that refer to the same natural object, which constitute 36% (108/297) of the former's entries and 57% (108/191) of the latter.¹²⁹ According to Yang Chin-lung's meticulous statistics, at least 44 of these overlapping entries bear a substantial similarity in content, if not a direct quotation between the two. For instance, for the entry of "rabbit," *Piya* offers three more descriptions of its natural traits from earlier texts and common sayings, while it does not have the analyses of relevant cognates (Claims 6.4-6.7) found in *Maoshi mingwu jie*. Yet the rest, or about four fifths of the entry, is almost a character-by-character replication.¹³⁰ Since a close comparison of these overlapping contents reveals traces of later editing in the *Maoshi mingwu jie* version, it is generally believed that Cai Bian had drawn heavily from *Piya*, or at least its earlier draft *Shi wuxing menlei*, in his own compilation.¹³¹

This close relevance of *Piya* renders the etymological reasoning in the work comparable, where a similar perusal for the concluding usage of the character *gu* 故 yields a totality of 98 counts, or 33%

¹²⁷ See, Yang Chin-lung, "Lun *Piya* jiqi zai songdai Shijing zhuanzhu zhong de chuanbo," 31; Yang Chin-lung 楊晉龍, "Lu Dian yu Cai Bian de shijing xue gainian yu xiangguan jieshuo zhi bijiao yanjiu," 陸佃與蔡卞的詩經學概念與相關解說之比較研究 in *Songdai jingxue guoji yantaohui lunwenji* 宋代經學國際研討會論文集, ed. Chiang Chiu-hua, 蔣秋華 and Fung Hsiao-ting, 馮曉庭 (Taipei: Zhongyang yanjiuyuan zhongguo wenzhe yanjiusuo, 2006), 282.

¹²⁸ For a complete statistic list, see, Yang Chin-lung, "Lun *Piya* jiqi zai songdai Shijing zhuanzhu zhong de chuanbo," 31–38.

¹²⁹ Yang Chin-lung, "Lu Dian yu Cai Bian de shijing xue gainian yu xiangguan jieshuo zhi bijiao yanjiu," 296.

¹³⁰ See, Cai Bian, "Maoshi mingwu jie," 568-569; Lu Dian, "Piya," 76.

¹³¹ Due to these extensive overlaps of the two works, traditional scholars critiqued *Maoshi mingwu jie* as a mere "reduplication" of *Piya*. Although recent scholars such as Yang Chin-lung have reconfirmed Cai's own contributions, it is generally agreed that *Piya* offered an intimate prototype for the compilation of *Maoshi mingwu jie*. See, Yang Chin-lung, "Lu Dian yu Cai Bian de shijing xue gainian yu xiangguan jieshuo zhi bijiao yanjiu," 277, 294-302.

(98/297) of all the entries. Close to the 31% percentage (59/191) in *Maoshi mingwu jie*, the ratio indicates a prevalence of this etymological method in both works. Within the 44 similar entries identified by Yang Chin-lung, 20 of them include etymological reasoning shared by both works. Meanwhile, from the rest overlapping entries, we can identify 6 more that include similar reasoning. In other words, besides a totality of 26 entries that shared similar reasoning, there are also 72 entries (73%) from *Piya* and 33 entries (56%) from *Maoshi mingwu jie* which solely appear in the single work. Therefore, despite the apparent indebtedness of *Maoshi mingwu jie* to *Piya*, we can safely conclude that the correlative etymological reasoning was not a ready-made conclusion quoted from earlier works, but a general analytical method well mastered by both Lu and Cai.¹³²

This shared analytical approach offers a necessary background for us to further explore the methodological influence of Wang Anshi, where his *magnus opus* in etymology, *Zishuo*, received a disparate treatment by the two scholars. In *Piya*, *Zishuo* is quoted explicitly 37 times, while it is almost invisible in *Maoshi mingwu jie*. Throughout the entire latter work, the title “*Zishuo*” 字說 only appears once under the entry of “Deer,” yet a further scrutiny of the quoted content suggests that the title is in fact a graphic confusion for *Zitong* 字統 (Compendium of characters), an earlier character book compiled by the Northern Wei scholar Yang Chengqing 楊承慶.¹³³ More revealing is the comparison between *Piya*

¹³² Admittedly, considering the nature of *Maoshi mingwu jie* as a recompiled text that is apparently incomplete in some of the entries, the actual similarity between the two works could be higher. That said, we can still safely conclude from the more-than-half individual entries that Cai Bian mastered the etymological methods well. See, Yang Chin-lung, “Lu Dian yu Cai Bian de shijing xue gainian yu xiangguan jieshuo zhi bijiao yanjiu,” 297–98.

¹³³ In the corresponding entry of *Piya*, the same quote on the vigilant nature of the deer was already marked as coming from *Zitong* 字統. More importantly, in a fragmented Tang rhyme book from the Dunhuang manuscripts (Jx. 1466), a semantically identical quote was also marked as from *Zitong*. Since this manuscript can be dated to the 8th-10th centuries before Wang Anshi’s era, we can exclude the possibility of confusion in this earlier record, and thus confirm the veracity of Lu Dian’s quote. Meanwhile, considering Cai Bian’s intentional concealment of other quotes from *Zishuo* (specified below), it would also be unlikely for him to keep the title here if the quote was included in both *Zitong* and *Zishuo*. Therefore, the most possible explanation is that the title in *Maoshi mingwu jie* was an error caused by the graphic confusion between *shuo* 說 and *tong* 統. See, Lu Dian, “*Piya*,” 77; Zhang Yongquan 張湧泉, ed., *Dunhuang jingbu wenxian heji* 敦煌經部文獻合集 (Beijing: Zhonghua shuju, 2008), 7: 3312. For the dating of the manuscript, see, Xu Chaodong 徐朝東, “Yu Jiang cangben *Tangyun* xiangguan de Dunhuang yunshu canjuan kaoshi,” 與蔣藏本《唐韻》相關的敦煌韻書殘卷考釋 *Dunhuang yanjiu* 敦煌研究, no. 2 (2003): 82.

and *Maoshi mingwu jie* on the entry level. Among the 37 explicit quotes of *Zishuo* in *Piya*, 34 are simply not included in *Maoshi mingwu jie*, including 7 from the overlapping entries that are substantially similar.¹³⁴ As for the remaining three quotes that do appear in *Maoshi mingwu ji*—one on the elm tree (*yu* 榆), one on the *bo* 駝 beast, and one a series of reed-related names (*jianjia* 蒹葭)—although the content is preserved, the origin of these sources is completely unmentioned.¹³⁵ As suggested by Yang Chin-lung, this willful neglect of the *Zishuo* sources might result from the completion of *Maoshi mingwu jie* in the Yuanyou (1086-1094) era, when Wang’s work was under harsh attack by the opponents of the New Policies.¹³⁶ That said, considering the intimacy between *Maoshi mingwu jie* and *Piya*, there is no reason to deny the influence of *Zishuo* to the former despite the complete absence of explicit reference.

Although the majority of *Zishuo* has long been lost, its methodological influence is easily discernable from the extant quotations in *Piya*, where the correlative etymological reasoning precisely plays the central role. Among the 37 explicit quotes, 32 involved such phonetically or graphically based associations. I would not go through the statistical details once more, but simply take a typical example from the *Piya* quotes to illustrate the omnipresent “literary logics” in the work. As the longest preserved entry in the recompiled fragments of *Zishuo* today, the quote deals with a series of *mingwu* components related to the lotus plant:¹³⁷

The lotus rhizome (*ou*) hides below the water. Its self-positioning is so low that it cannot be furthered; what accompanies is dirty yet it is clean and white on its own; it has hollows inside, and only grow in *pairs*. Like this, it would be able to *pair with* others. The lotus stem (*jia*) has no branches. It can neither be tarnished by the mud, nor submerged by the water, but stands uprightly. Like this, it would be able to *add on* others. The lotus seeds (*lian*) are not only white by themselves,¹³⁸ but also join together. Like this, they can *associate* with others. The lotus flower

¹³⁴ In particular, for the entry of “Roe Deer” (*jun* 麋), *Maoshi mingwu jie* is identical with *Piya* in both the beginning and the ending sections, while only the middle part with the *Zishuo* quotation does not appear. See, Cai Bian, “Maoshi mingwu jie,” 572–73; Lu Dian, “Piya,” 80.

¹³⁵ See, Cai Bian, “Maoshi mingwu jie,” 550, 555, 572; Lu Dian, “Piya,” 163, 182, 201.

¹³⁶ Yang Chin-lung, “Lu Dian yu Cai Bian de shijing xue gainian yu xiangguan jieshuo zhi bijiao yanjiu,” 302–3.

¹³⁷ For a modern recompile of the *Zishuo* fragments, see, Wang Anshi 王安石, *Wang Anshi quanji* 王安石全集 (Shanghai: Fudan daxue chubanshe, 2017), 1: 199-240.

¹³⁸ As a pun, *zibai* 自白 (lit. white on its own) also refers to self-confession, thus adding a sense of candidness to the image.

(*handan*) is in fact similar to a *pit*, which opens and closes according to dawn and dusk. The lotus leaf (*xia*) *depends on* the root to stand, yet does not pair with others like the root; it *depends on* the stem to stretch, yet it does not add on others like the stem; it *depends on* the flower to live, yet it does not associate like the seeds or envelop like the flower. Like this, it can be called *xia*... The rhizome tip (*mi*) retreats and hides into uselessness, while the usable and visible are based on it. Like this, it can be called *mi* (secrecy). With all these virtues combined, it then can *carry on*¹³⁹ things, can serve as the laborer (*fu*), as well as the water channel (*qu*). Therefore, it says “the lotus is the *fuqu*.” The “lotus” has “carrying things” as its meaning. It is hence interchangeable to the character *he* in *fuhe*, or “carrying.”

字說曰：藕藏於水，其自處卑，無所加焉；其所與汙，潔白自若；中有空焉，不偶不生。若此可以偶物矣。茄無枝附，泥不能汙，水不能沒，挺出而立，若此可以加物矣。蓮既有以自白，又會而屬焉，若此可以連物矣。菡萏實若白，隨昏昕闔焉。蓮假根以立，而不如藕之有所偶；假莖以出，而不如茄之有所加；假華以生，而不如蓮之有所連、菡萏之有菡也：若此可謂遐矣。……蓂退藏於无用，而可用可見者本焉，若此可謂密矣。合此衆美，則可以何物，可以為夫，可以為渠。故曰：荷，芙蕖也。荷以何物為義，故通於負荷之字。¹⁴⁰

As shown from the bold characters (italics in the corresponding translation) above, in his etymological interpretation of the lotus components, Wang Anshi mapped out an astonishing network of cognates: *Ou* 偶 (pairing) for *ou* 藕 (lotus rhizome), *jia* 加 (add) for *jia* 茄 (lotus stem), *lian* 連 (associate) for *lian* 蓮 (lotus seed), *xian* 陷 (pit) for *dan* 萏 in *handan* 菡萏 (lotus flower), *jia* 假 (depend) for *xia* 蓮 (lotus leaf), *mi* 密 (secret) for *mi* 蓂 (lotus rhizome tip), *he* 何 (carry) for *he* 荷 (lotus), as well as *fu* 夫 (laborer) and *qu* 渠 (water channel) for *fuqu* 芙蕖 (lotus). On the one hand, the meticulous differentiation and description of the lotus components indeed offered valuable information for the natural traits of the plant (Figure 2). On the other hand, the etymological reasoning, concerning not only the philological explanation of these natural features but also an anthropomorphic discussion of their moral implications, was full of imaginative links. If the self-hiding rhizome or the gathering seeds are still conceptually apt for a moral reading, the advantage-taking leaf or the load bearing plant almost appear as a mythology. As long as two characters were phonetically or graphically related, one may argue for an epistemic correlation between them regardless of the distance of their conceptual realms. In this way, the *mingwu*

¹³⁹ Judging from the context, here the character *he* 何 is taken as a phonetic loan for *he* 荷 (load).

¹⁴⁰ Lu Dian, “Piya,” 202.

entry became a nebulous incorporating all the natural, philological, and symbolic aspects around the nexus of etymological reasoning. It is from here that we come to understand the methodological origin of *Piya* and *Maoshi mingwu jie*. With an overarching span of epistemic realms corresponding to the character appearance, *Zishuo* was the correlative association *par excellence*.

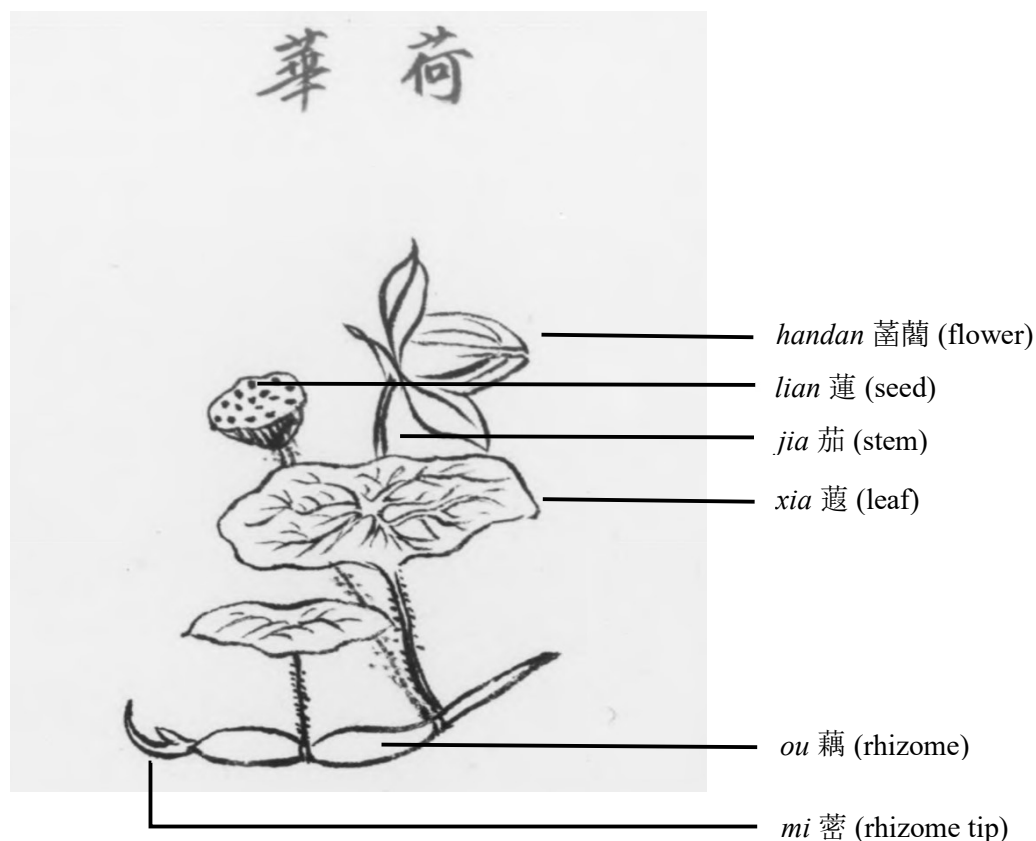


Figure 2: *Mingwu* components for a lotus plant¹⁴¹

Admittedly, this correlative etymological reasoning was by no means Wang Anshi's personal invention. In the abovementioned *Zitong*, the fragmented Northern-Wei character book more than half millennium earlier, there were already similar cases of "character split" where the etymology of a

¹⁴¹ Illustration copied from Xu Ding 徐鼎, *Maoshi mingwu tushuo (draft)* 毛詩名物圖說, Draft Manuscript, National Library of Beijing, no.12047 (before 1771), juan 3: 19b.

character was explained by a correlative combination of its components.¹⁴² As rightly observed by the mid-Qing bibliographer Ma Guohan 馬國翰 (1794-1857), the work offered a prototype for *Zishuo*—though it was only Wang Anshi’s era which witnessed a systemization of such reasoning into a general method.¹⁴³ Just as advocated in Wang’s self-preface to *Zishuo*, no matter for the “rise and fall, open and occlusion, gathering and scattering, in and out” of a character sound, or the “horizontal and vertical, straight and curvy, right and oblique, upper and lower, inner and outer, left and right” of a character graph, each bore a meaning that was naturally originated.¹⁴⁴ This apparent philological overmining, turning *mingwu* analysis into a phenomenology of the character appearance, explained the methodological basis of those daring correlations.

Nevertheless, not everyone was satisfied with such etymological reasoning even during the high tide of Wang’s New Learning.¹⁴⁵ As a revealing critique, Zeng Zao 曾慥 (fl. mid-12th c.) recorded the following playful satire to *Zishuo*, which was attributed to the famous scholar official Su Shi 蘇軾 (1037-1101):

The character *jiu* 鳩 (dove)¹⁴⁶ follows the components of *jiu* 九 (nine) and *niao* 鳥 (bird). There is also evidence for this. The *Shi* says, “The singing-*jiu* bird is in the mulberry tree. Its young ones are seven.” Together with their dad and mom, there would precisely be nine birds.

鳩字從九從鳥，亦有證據。詩曰“鳴鳩在桑，其子七兮”，和爺和娘，恰是九箇。¹⁴⁷

Although the attribution to Su Shi might be a mere fabrication, this playful character-split indeed captured the spirit of correlative association, where the ridiculous joining of a classic text from *MS* #152 and the

¹⁴² As a quick example, the character *bian* 便 (easiness) was split into the components of *ren* 人 (people) and *geng* 更 (change), which was then woven into the following explanation: “When one (*ren*) has fault and then corrects (*geng*) it, one would feel at ease. Therefore [*bian*] follows *geng* and *ren*.” See, Yang Chengqing 楊承慶, “Zitong,” 字統 in *Xuxiu siku quanshu*, 1203: 682. 人有不善，更之則安，故从更从人。

¹⁴³ See, Ma Guohan’s preface to *Zitong* in Yang Chengqing, “Zitong,” 681.

¹⁴⁴ Wang Anshi, *Wang Anshi quanji*, 7: 1481. 其聲之抑揚開賽、合散出入，其形之衡從曲直、邪正上下、內外左右皆有義，皆本於自然。

¹⁴⁵ See, “Zhengli shuoming” 整理說明, in Wang Anshi, *Wang Anshi quanji*, 1: 191-192.

¹⁴⁶ Roughly referring to the dove-shaped birds in today’s Columbidae family.

¹⁴⁷ Zeng Zao 曾慥, “Gaozhai manlu,” 高齋漫錄 in *Quan Song biji (disi bian)* 全宋筆記 (第四編) (Zhengzhou: Daxiang chubanshe, 2008), 5: 104.

colloquial setting of “dad and mom” was as successful in showcasing the hermeneutic efficacy of such etymological reasoning as revealing their ridiculousness.¹⁴⁸

Following the decline of Wang Anshi’s New Learning, this featured etymological reasoning soon went out of fashion in the *mingwu* analysis of *Shi*. That said, as a general philological method, such character-based correlative analyses lasted well into the Ming, as shown from Nathan Vedal’s recent case study of Wei Xiao 魏校 (1483-1543).¹⁴⁹ When the late-Ming scholar Li Ziqian 李資乾 (fl. early 17th c.) picked up the method again in his *Shijing zhuanzhu* 詩經傳註 (Annotated commentary on *Shijing*), its apparent farfetchedness rendered the method closer to the word games common in the late-Ming popular culture. Just take a look at how he interpreted the phrase *yaotiao* 窈窕 in the beginning ode of *Maoshi*, a famous binome modifying the gracefulness of a virtuous lady (*shunü* 淑女) that was typically associated with the classic. According to him, since the ode belonged to the section of “Zhounan” 周南, a region west of the Zhou capital where “the folk custom is to dig *caves* for dwelling,” both characters of *yao* 窈 and *tiao* 窕 followed the *xue* 穴 (cave) component. And the bottom parts, *you* 幼 (infant) and *zhao* 兆 (beginning), captured the budding nature of a young girl.¹⁵⁰ Despite the scholarly language it used, the unexpected association between the classic image of the graceful consort and the folk custom of cave dwelling once again created a hilarious effect, which is more reminiscent of the popular drinking game of “breaking characters into component parts” (*chaibai daozi* 拆白道字) in late-Ming parties than its intended scholarly discourse.¹⁵¹ Noted by Liu Yuqing as the “most ridiculous” *Shi*-related work from the

¹⁴⁸ In the standard version of *Maoshi*, the line goes as *shijiu zai sang* 鵲鳩在桑 rather than *mingjiu zai sang* 鳴鳩在桑. Yet the episode was clearly referring to the same ode. See, Zheng Xuan, *Maoshi zhuan jian*, 188.

¹⁴⁹ Vedal, *The Culture of Language in Ming China*, 75–82.

¹⁵⁰ This revealing work, with the only known copy preserved at the Sonkeikaku bunko at Tokyo, is inaccessible due to Covid-19. Here, the relevant information is quoted from Liu Yuqing, *Shisao lungao*, 401–2. 民俗掘土為室，故窈窕二字皆從穴。

¹⁵¹ For similar wordplay in drinking parties, see, e.g., Lanling xiaoxiao sheng 蘭陵笑笑生, *Jin Ping Mei cihua* 金瓶梅詞話 (Taipei: Liren shuju, 2007), ch. 56: 867-68 For a broader discussion on the prevalence of wordplay in the late-Ming cultural sphere, see, Yuming He, *Home and the World: Editing the "Glorious Ming" in Woodblock-Printed Books of the Sixteenth and Seventeenth Centuries* (Cambridge and London: Harvard University Asia Center, 2013), ch. 1.

Han throughout the Ming, *Shijing zhuanzhu* marks the boundary of correlative etymological reasoning with a fading methodology moving into the realm of entertainment.

In this chapter, I have used three cases—the “unjealous” katydid, the “intimate” osprey, and the “mouth-delivering” rabbit—to demonstrate a progression of three levels for this textual-material complex. In the first case, the derived trait of non-jealousy was suspected as the result of a reversed textual order, yet no one had sufficient evidence to authenticate the claim. In the second case, there is enough evidence to pin down the derived trait of mate intimacy to a graphic variant, yet this was only established by the later scholars rather than the ones who built up the trait. In the final example, the demonstration became a self-conscious endeavor, where scholars naturalized the derived trait of mouth-delivery through active etymological reasoning. In this sense, the character-based correlative associations of the Wang Anshi school represented an advanced level of textual-material entanglement, under which the *ming* and *wu* formed up a dialectic loop.

Despite the relatively short fashion of correlative etymological reasoning, the *mingwu* knowledge it yielded—just like the continuing quotation of *Piya*—would last much longer. In his mid-Qing *mingwu* monograph *Maoshi niaoshou caomu benzhi* 毛詩鳥獸草木本旨 (Original messages on the birds, beasts, grasses, and trees in *Maoshi*), Lu Yicheng 陸以誠 (*bagong* 1777) not only included an extensive quotation from *Piya* in his entry on the rabbit, but also added a piece of marginalia on the upper column regarding the reproductive behavior of the rabbit from first-hand observation (*Figure 3*).¹⁵² Despite the incompleteness of this precious note, we are still able to identify its key points—a response to the text-derived traits in Lu Dian’s description. On the one hand, he confirmed that the copulation of rabbits was not different from other beasts, thus rightly declined the theses of visual-and-mouth-incurred pregnancy

¹⁵² For a fine definition of marginalia in the Chinese context as hand-written supplementary notes, see, Yinzong Wei, *Scholars and Their Marginalia in Late Imperial China* (Leiden and Boston: Brill, 2022), 38–39.

through natural observation (cf. Claims 2.1 and 3.2 in the *Piya* entry).¹⁵³ On the other hand, he also offered an endorsement of its vomiting delivery with considerable details. There were those delivering successfully from the mouth, those dead due to a failed vomiting, as well as those mouthing stalks for preparation. All of these, as he noted affirmatively, came from his personal observation when serving at a local post.

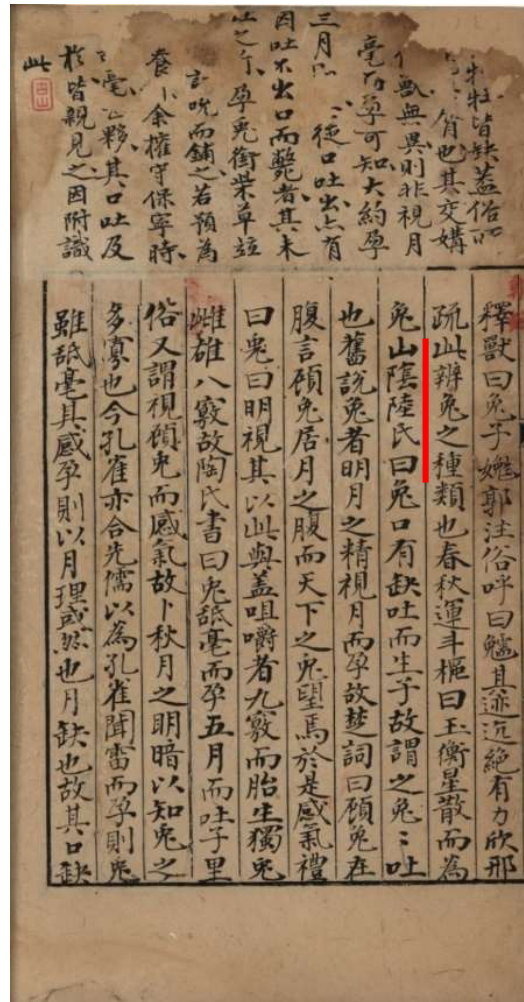


Figure 3: Lu Yicheng's quotation of *Piya* (marked in red) and his marginalia on the mouth delivery of the rabbit¹⁵⁴

¹⁵³ As shown in Figure 3, although the upper part of the column note is broken, we can still infer from context that the incomplete line “其交媾□白獸無異” should be “其交媾與他獸無異,” or “its copulation had no difference from other beasts.”

¹⁵⁴ Lu Yicheng 陸以誠, *Maoshi niaoshou caomu benzhi* 毛詩鳥獸草木本旨, draft manuscript, Nanjing Library, no. KB0244 (prefaced 1776/77), juan 1: 13b

With little motivation to fabricate these claims, how should we, from a hindsight of modern biology, make sense of these live observations that had no counterpart in the natural world? Judging from the rabbit's delivery process, the most likely explanation comes from its placentophagia behavior, in which the mother would ingest the emerging placentas and lick the kittens as they are being born.¹⁵⁵ With birth tissues in a bloody rabbit mouth, this might be mistaken as vomiting delivery by an unobservant observer. That said, placentophagia is a common phenomenon for terrestrial mammals.¹⁵⁶ Why did this confusion only happen for the rabbit? The apparent answer was still the misleading effect of vomiting delivery in the transmitted text, which, though it had long been outmoded as a legitimate method of *mingwu* inquiry, continued its presence as background knowledge. It is in this sense that the dialectics of *ming* and *wu* constituted the epistemic basis for further inquiries in the early modern era. Despite the new sources discovered, and the new methods developed, later scholars had to start their analyses from this accumulated *mingwu* complex, where the name and the referent, the textual and the material, had long been knitted together.

¹⁵⁵ Gabriela González-Maris and Jay S. Rosenblatt, "Maternal Behavior in Rabbits: A Historical and Multidisciplinary Perspective," *Advances in the Study of Behavior* 25 (1996): 337.

¹⁵⁶ Mark B. Kristal, "Enhancement of Opioid-Mediated Analgesia: A Solution to the Enigma of Placentophagia," *Neuroscience & Biobehavioral Reviews* 15 (1991): 425.

Chapter Two: Referential Surface

The interpretation of *Shi* continued to prosper from the 12th century onwards. In terms of the general hermeneutical trends, this was an era for Neo-Confucian interpretations and literary readings. Thanks to the intertextuality between *Shi* and the newly codified “Four Books”—in particular the “Daxue” 大學 (Greater learning) and “Zhongyong” 中庸 (Central and constant) chapters from the *Book of Rites*—scholars actively incorporated Neo-Confucian teachings into their new commentaries from the Southern Song to the Ming.¹⁵⁷ In the meantime, a methodological exchange became increasingly common between the reading of *Shi* and other literary genres. This resulted in what Liu Yuqing named a hermeneutic shift “from classicism to literature” in the Ming dynasty, where *Shi* were analyzed as literary texts under the critical discourse of poetic remarks and fictional commentaries.¹⁵⁸

As for *mingwu* studies of *Shi*, this period witnessed a steady accumulation of relevant textual references, which culminated in a sudden efflorescence of encyclopedic *mingwu* monographs in the late Ming. The previous chapter elaborated the textual-material entanglements at the center of *mingwu* discussions. This chapter will move from this correlative core to the rich references that collectively build up these *mingwu* entries. To be specific, I will develop this chapter in three steps. First, through a comparison of the “*jujiu*” entry between Lu Dian’s *Piya* and Feng Fuming’s *Mingwu Commentaries*, I will suggest how the latter, as a typical work of *mingwu* monographs in the late Ming, covered a significantly wider referential scope than the already rich *Piya* entry. Second, I will conduct a systematic quantitative analysis of the *mingwu* monographs of *Shi* in the Chinese history to demonstrate the typicality of such

¹⁵⁷ For the relevance of these *Liji* chapters to the hermeneutics of *Shi* in the Song dynasty, see, Chen Zhanfeng 陳戰峰, “Songdai *Shijing* xue yu lixue,” 宋代《詩經》學與理學 in *Zhongguo xueshu sixiang yanjiu jikan* 中國學術思想研究輯刊, ed. Lin Ching-chang, 林慶彰, Series 20 (Taipei: Huamulan wenhua chubanshe, 2015), 86-94. For a good summary of the influence of Neo-Confucian thought to the major scholars of *Shi* in the Song dynasty, see, Huang Chung-shen 黃忠慎, *Fu Guang, Yang Jian Shijing xue yanjiu* 輔廣、楊簡《詩經》學研究 (Taipei: Jingxue wenhua, 2017), 364-67. For the influence of the Wang Yangming school to the Ming study of *Shi*, see, Liu Yuqing, “Yangming “xinxue” yu mingdai *Shijing* yanjiu,” 52-57; Rusk, *Critics and Commentators*, 152-58.

¹⁵⁸ See, Rusk, *Critics and Commentators*, ch.4; Liu Yuqing, *Cong jingxue dao wenxue*; Zhang Honghai 張洪海, ed., *Shijing huiping* 詩經彙評 (Nanjing: Fenghuang chubanshe, 2016), 1: 1-41.

encyclopedic references in the late Ming works, which I name “erudite learning.” As an important paradigm of *mingwu* studies lasting into the 18th century, such encyclopedic entries were frequently featured by an overflow of information without fine judgment. Thirdly, I will use Xu Ding’s 徐鼎 (b.1739) *Maoshi mingwu tushuo* 毛詩名物圖說 (Illustrated notes on the *mingwu* in *Maoshi*), a later work of erudite learning and the first illustrated *mingwu* monograph of *Shi* in China, to showcase how this encyclopedic network could even expand to visual sources. By tracing the revision of a plant entry from the initial draft to its final publication, the case highlights the bookish nature of this epistemic process, where the revised illustration did not reflect any study from real life but a mere alternative choice among the intricate visual-textual associations of references. Joined up, these encyclopedic entries depicted an ever-expanding referential surface on which *mingwu*-related information interrelated with each other into a plain network. As will be shown in the following chapters of this dissertation, this referential surface served as an important background for further epistemic breakthroughs by the mid-Qing evidential scholars.

Encyclopedic References

If Chapter One has laid out the epistemic entanglements at the core of a *mingwu* compound, it also highlights how this intrinsic complexity was deeply connected to the varied textual references from earlier works. In the initial stage of *mingwu* knowledge, the number of relevant sources were few, and quotations tended to be rare. Like in the earliest *mingwu* monograph by Lu Ji (fl. mid-3rd c.), most entries were short and direct description of natural traits. However, with the gradual accumulation of relevant sources, textual references became increasingly significant for later *mingwu* studies and an essential component for the organization of *mingwu* entries. In this section, I will trace this rising presence of textual quotations through a brief comparison among Lu Ji’s commentary, Lu Dian’s (1042-1102) *Piya*, and Feng Fijing’s (1573-1622) late-Ming monograph *Mingwu Commentaries*, on the entry of the “*jujiu*” bird that we have already encountered.

In the earliest *mingwu* monograph by Lu Ji, the entry on the *jujiu* bird was a straightforward one with no textual quotations at all:

The osprey: It has a similar size as the *jiu*-bird, with sunken eyes and protruding eye-bones above. People of Youzhou call it *jiu*.

睢鳩，大小如鳩。深目，目上骨露出。幽州人謂之鷲。¹⁵⁹

With a succinct description to the physical appearance and alternative name of the osprey, this is close to what we would see in a dictionary entry today.

Thanks to the accumulation of relevant sources, the *mingwu* entries already appeared much different in the Song. In the first chapter, we have seen how Cai Bian listed as many as nine quotations in his entry on the rabbit (see, *Table 1* on p. 55). This is also the case for the osprey in *Piya*, where seven quotations from early texts, more recent works, and common knowledge make up the bulk of the entry. As shown in *Table 2*, comparing to Lu Ji's simple description, the quotations here introduce many more traits of the *jujiu* bird, which concern not only its fixed mate (no.1), gender separation (no.6), and fierceness (no.7) that are directly related to the ode, but also other information such as its habit of still standing (no.3), and symbolic meaning in the official system (no.4). All of these contribute to a fuller picture of the bird, though, as indicated by the numerical labels above, the sequence of these quotes is rather random. Correspondingly, the entry appears more as an assemblage of relevant sources in a correlative knowledge world than a well-ordered essay.

¹⁵⁹ Lu Ji, "Maoshi caomu niaoshou chongyu shu," 13.

Table 2: Quotation List on the Entry “Jujiu” 雉鳩 in *Piya*¹⁶⁰

No.	Source	Content
1	<i>Yinyang Ziran bianhua lun</i> 陰陽自然變化論	<i>jujiu</i> does not find a second mate
2	<i>Maoshi</i>	Crying <i>jujiu</i> on the river islet
3	Xu Xuan’s <i>Caomu chongyu tu</i> 草木蟲魚圖	<i>Jujiu</i> likes to stand still in pairs
4	Tanzi 鄭子 (the <i>Zuo Commentary</i>)	The use of bird name for official titles, where <i>jujiu</i> refers to the governor of horses
5	[Zhi] Yu’s 摯虞 “Huaifu” 槐賦	<i>Jujiu</i> as the agricultural-guiding bird
6	Folk saying	<i>Jujiu</i> flies in pair yet stands alone when apart
7	The Mao commentary	Fierce birds do not live in pairs

Although the above description of the *jujiu* bird already appears as rather comprehensive, it is still far from the capacity a *mingwu* entry could have. As shown in Table 3, the late-Ming scholar Feng Fujing included as many as 27 quotations in his extensive entry of “Jujiu” in the *Mingwu Commentaries*, which more than doubled the length of the *Piya* entry. Compared to *Piya*, there are not much new information regarding the bird’s traits. Paired living, gender distance, standing still, and official symbolism—all of these are already familiar to us. As a result, many of the additional quotes appear repetitive in content. Meanwhile, despite an apparent editing effort, the sequence of the quotations is still relatively loose. On the one hand, from *Erya* (no.1) to Yan Can (no.17), the beginning 17 quotes are basically arranged in a temporal order.¹⁶¹ On the other hand, the remaining four quotes before the author’s comment move back to earlier works, as if they were added afterwards. The lack of information synthesis and thoroughgoing editing indicate that the compiler was mainly aiming at an encyclopedic *collection* of relevant sources rather than a full picture of the *jujiu* bird itself.

¹⁶⁰ Lu Dian, “*Piya*,” 115–16.

¹⁶¹ The only exceptions come from the quotes of the Han scholars Yang Xiong (no.8) and Xu Shen (no.9), which are earlier than the Three Dynasty scholar Lu Ji (no.7). However, according to the circle labels in front of the quotations (specified below), these three quotes are considered as a single textual block. And if we check the sequence on the level of blocks, they are following a strict temporal order till the Yan Can quote.

Table 3: Quotation List on the Entry “Jujiu” in *Liujia shi mingwu shu*¹⁶²

Circle Label	No.	Textual source	Content	Identification of the bird
	1	<i>Erya</i>	<i>Jujiu</i> refers to <i>wangju</i> 王雉	
	2	Guo Pu's <i>Erya</i> commentary	Identification, alternative name, and diet habit	<i>E</i> 鷂, a kind of eagle (<i>diao</i> 雕)
○	3	<i>Qinjing</i> 禽經	Identification and alternative names	Osprey (<i>yuying</i> 魚鷹)
○	4	<i>Mao Commentary</i>	Faithful yet differentiated	
	5	Zheng Xuan's commentary	Literary exegesis of the <i>Mao Commentary</i>	
○	6	commentary of the Han Poetry	The chaste and secluded <i>jujiu</i> seeking mate via sound	
○	7	Lu Ji's commentary	Physical appearance and alternative name	Similar to the owl (<i>chi</i> 鴟)
	8	Yang Xiong 揚雄	Alternative name and identification	Hen harrier (<i>baijue</i> 白鵞) similar to the hawk
	9	Xu Shen 許慎	Alternative name and identification	Hen harrier (<i>baijue</i> 白鵞) similar to the hawk
○	10	<i>Fengtu ji</i> 風土記	Identifying <i>jujiu</i> as the white buttonquail rather than the sparrow hawk; its solitary habit of living	White buttonquail (<i>cangyan</i> 蒼鷺)
○	11	<i>Caomu chongyu tu</i> 草木蟲魚圖 by Xu Xuan 徐鉉	Living in pairs and standing still on the islet	
○	12	Lu Dian	Habit of standing still	Osprey (<i>e</i> 鷂)
	13*	Folk saying	Flying in pairs and standing alone	
	14*	<i>Mao Commentary</i>	Fierce birds live alone	
○	15	<i>Shi Jizhuan</i> by Zhu Xi	Physical appearance, fixed mate, swimming in pairs	Similar to the wild duck (<i>fuyi</i> 鳬鷖) in shape
	16	<i>Zhuzi yulei</i> 朱子語類	Physical appearance, living in pairs yet always keeping a gender distance	
○	17	<i>Shiji</i> 詩輯 by Yan Can 嚴粲 (<i>jinshi</i> 1223)	The bird-name official titles in the <i>Zuo Commentary</i> , and each is associated to the corresponding lines in <i>Shi</i>	
○	18	Du Yu's 杜預 <i>Zuozhuan</i> commentary	Rationale for <i>jujiu</i> as the Minister of War	

¹⁶² Feng Fuming 馮復京, *Liujia shi mingwu shu* 六家詩名物疏, Princeton University Library (between 1605 and 1620), juan 1: 2b–5a.

○	19	<i>Lienü zhuan</i> 列女傳	Gender distance of the bird and its evocative significance	
○	20	<i>Yinyang ziran bianhua lun</i> 陰陽自然變化論	Fix mate	
○	21	<i>Huainan zi</i> 淮南子	Gender distance for beautification	
Author's Comment				
	22	Ouyang Xiu 歐陽修	incompatibility between the fierce bird and the consort it evokes	
	23	<i>Tongzhi</i> 通志	Endorsing Yang Xiong's claim to align <i>jujiu</i> as <i>baijue</i> 白鵞, yet identify it as a kind of wild duck	<i>Baijue</i> as a kind of wild duck (<i>fu lei</i> 鳬類)
	24	<i>Erya</i>	<i>Yang</i> 鸞 refers to <i>baijue</i> 白鵞	
	25	Feng Shike 馮時可 (<i>jinshi</i> 1571)	<i>Wangju</i> 王雎 as similar to the mandarin duck, while <i>jujiu</i> refers to another species	unspecified
	26	<i>Shigu</i> 詩詁 by Qian Wenzi 錢文子 (1148-1220)	identification	Cuckoo (<i>dujuan</i> 杜鵑)

Note: 1. As shown in *Table 2*, Quotations 13 and 14 are in fact nest quotes within Quotation 12 of *Piya*. Since the purpose of this study is to examine the scope of accumulated knowledge, rather than the actual sources consulted by the author, I count them as three quotes rather than one, and mark the nest quotes with an asterisk.

This observation is consistent with the circle labels “○” in front of the quotations (*Figure 4*), which, as a featured design of *Mingwu Commentaries*, indicate the start of a new quote or a set of immediately related quotes (e.g., the *Mao Commentary* and the Zheng Xuan commentary in no. 4-5). With the variegated quotes—disparate in time, genre, authority, length, and content—marked by the same circle label, the entry is dissected into textual blocks parallel to each other, as if one could move them around. Again, the emphasis is the individuated sources rather than the entry as a complete piece.

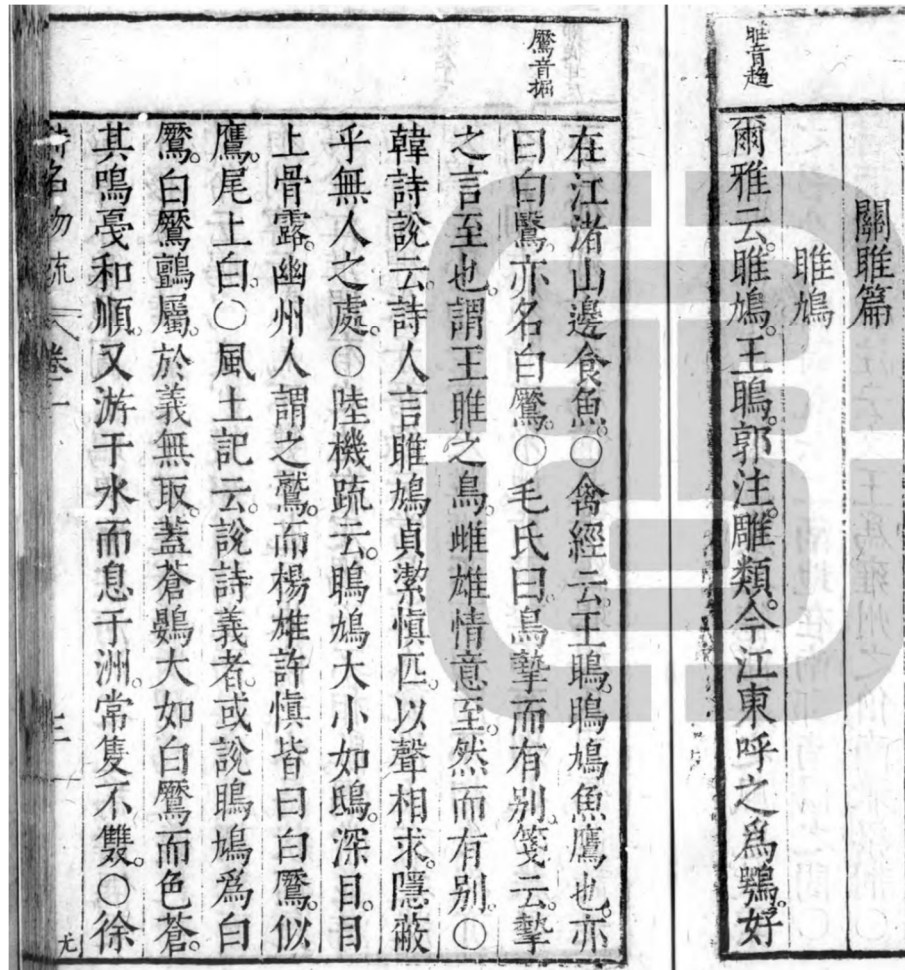


Figure 4: Sample page of the entry “Juiiu” in *Mingwu Commentaries*¹⁶³

Accompanied with this encyclopedic collection is the juxtaposition of multiple interpretations, which is presumably the most salient difference from the *Piya* entry. As shown in the final column of Table 3, among the 26 quotations, there were at least seven different identifications of the *juiiu* bird. This hermeneutic plurality becomes the theme of the author’s comment, which deserves a full quotation:

Among the interpreters of *juiiu*, Guo [Pu] claimed it as “a kind of eagle,” Xu Shen as “similar to the hawk,” and Lu [Ji] as “similar to the owl”—all regarding it as a fierce bird. Fierce birds are not lascivious, and this is sufficient to analogize the virtue of a good lady. It was only Master Zhu [Xi] who interpreted it as similar to the wild duck. Before that, Mr. Ouyang [Xiu] had indeed doubted whether a fierce creature could be compared to the gracefulness of the imperial consort. Zhonghui (Zhu Xi), making the claim after having consulted with the Huai people, was not groundless. Yet I am afraid what the Jianghuai area has was not able to go into the eyes of the poet by the day. Furthermore, according to *Tongzhi*, “*Wangju* is a kind of wild duck, which,

¹⁶³ Feng Fijing, *Liuja shi mingwu shu*, juan 1: 2b–3a

mostly living by the water, has a white spot on the tail. Therefore, Yang Xiong called it the ‘white *jue*.’ Earlier interpretation [identified it] as a kind of eagle. This is wrong.” However, the white *jue* is still similar to the hawk and not a wild duck. According to *Erya*, “*jujiu* refers to *wangju*,” “*yang* refers to the white *jue*.” Each belongs to a different species. *Fengtu ji* suspected [*jujiu*] as the white buttonquail; Feng Yuanmin [Shike] from the recent age says, “*Wangju* is similar to the mandarin duck in shape, yet a different species from *jujiu*.” It is also uncertain whether these were the case. Mr. Qian [Wenzi’s] *Shigu* identified it as the cuckoo. This is particularly unreasonable.

釋雉鳩者，郭云“雕類”，許云“似鷹”，陸云“如鷗”，俱以為鷺鳥。蓋鳥之鷺者不淫，亦足以方淑女之德矣。惟朱子以類鳧鷖者釋之。昔歐陽子固嘗疑猛鷺之物，不可以比后妃之淑善，仲晦詢之淮人而為是說，未為無據。但恐江淮所有，當年未入詩人之目耳。又按《通志》曰：“王鷗，鳧類，多在水邊，尾有一點白，故揚雄云‘白鷗’。舊說雕類，誤矣。”然白鷗復似鷹，而非鳧也。《爾雅》云：“鷗鳩，王鷗”，“鷗，白鷗”，各自一種。《風土記》疑為蒼鷗，近代馮元敏云“王鷗狀似鷺鷥，與鷗鳩二物”，亦未定其然否也。錢氏《詩話》以為杜鵑，尤妄。¹⁶⁴

In this informative comment, Feng Fuming addressed as many as eight different theses from multiple scholars, including Guo Pu’s *e*-as-eagle, Xu Shen’s and Yang Xiong’s *baijue*-as-hawk (see, no. 8-9 for the equivalence), Lu Ji’s owl, Zhu Xi’s wild duck, Zheng Qiao’s *baijue*-as-wild-duck, *Fengtu ji*’s white buttonquail, Qian Wenzi’s cuckoo, and Feng Shike’s distinction of *jujiu* from *wangju*-as-mandarin-duck. With all these contending interpretations listed together, Feng Fuming set off to judge their credibility. For Zheng Qiao’s *baijue*-as-wild duck, he made an apt critique by showing its inconsistency with the claim of *baijue*-as-hawk (by Xu Shen and Yang Xiong, no. 8-9). Meanwhile, he also cast a serious doubt to the *baijue* thesis in its entirety. This was based on the separated entries of *jujiu* and *baijue* in *Erya*, which, as a working hypothesis widely accepted by the early modern scholars, would strongly indicate them as different species. In both cases, the entry shows a good use of textual quotation for critical judgment, another key function that is not seen in the earlier entries by Lu Ji and Lu Dian. Such evidence highlights the efficacy of the encyclopedic references in resolving textual inconsistencies.

However, the epistemic efficacy of such quotations was limited. Apart from Qian Wenzi’s cuckoo thesis, which was unrelated to any sources and one may indeed decline as apparently wrong, all

¹⁶⁴ Feng Fuming, *Liujia shi mingwu shu*, juan 1: 4b–5a.

the other five theses remained notably ambiguous. For Guo Pu's eagle and Lu Ji's owl, Feng solely drew on Ouyang Xiu to express a reservation for using a fierce bird to analogize a graceful lady, while by alluding to the Mao commentary (no. 14), he also admitted the sufficiency of its own logic. Meanwhile, for Zhu Xi's wild duck that works well with Ouyang Xiu, Feng also expressed a geographical reservation by pointing out the distance between where the inquiry was made and the ode was composed. Besides, for the buttonquail thesis in *Fengtu ji* and the distinction of *jujiu* from *wangju* by Feng Yuanmin, Feng Fujing also admitted explicitly that he was unable to judge their validity. That is to say, by the end of the entry, there were at least five theses and four different identifications of *jujiu* left open. Before consulting this informative piece, one may still have a working definition for the bird, which only turned more puzzling afterwards. Instead of reaching a clear conclusion, what we have observed here is a full array of disparate theses, a contention of hermeneutic voices that Feng had neither the technique nor necessarily an intention to resolve.

This encyclopedic yet open-ended collection of textual sources marked a significant difference from the more "abstinent" entry in *Piya*. In the study of the late-Ming encyclopedic culture in *Jin Ping Mei*, Shang Wei has suggested a de-hierarchical effect in the parallel positioning of heterogeneous texts.¹⁶⁵ On a more localized scale, Sophie Volpp also observes a similar equalizing effect from the extensive list of literary objects.¹⁶⁶ We may speak of a similar mechanism from the encyclopedic entries in the *Mingwu Commentaries*, where the egalitarian juxtaposition of individuated sources and contending theses across time and genre jointly created a horizontal plain of referential network. I call this the *referential surface*. To be sure, such a phenomenon was not confined to the single work of *Mingwu Commentaries*. In the following section, I will offer a systematic review of the *mingwu* monographs across Chinese history to demonstrate what had changed since Feng's era.

¹⁶⁵ See, Wei Shang, "The Making of the Everyday World: *Jin Ping Mei cihua* and Encyclopedias for Daily Use," in *Dynastic Crisis and Cultural Innovation: From the Late Ming to the Late Qing and Beyond*, ed. Wei Shang and David D.-w. Wang (Cambridge and London: Harvard University Asia Center, 2005), 68, 73.

¹⁶⁶ Sophie Volpp, *The Substance of Fiction: Literary Objects in China, 1550-1775* (New York: Columbia University Press, 2022), 16.

Erudite Learning

Table 4 offers an account of all the known *mingwu* monographs of *Shi* in pre-modern China, including both the preserved and the lost titles. As shown from the table, although Lu Ji's earliest commentary can be dated back to the 3rd century, the genre did not prosper until the late Ming. Earlier works in this new era, such as Zhang Huang's 章潢 *Xueshi duoshi* 學詩多識 (Extensive inquiries on the learning of *Shi*, 1560) or Hu Wenhuan's 胡文煥 *Shi zhi* 詩識 (Notes on *Shi*, 1593), were still preliminary in format: the former merely collected the *mingwu*-relevant phrases from the *Shi* text without any explanations; the latter indeed included interpretations, yet most of them were extremely terse in just a handful characters. The real defining moment came from the 1600s, when four extensive *mingwu* monographs, each with hundreds of well-elaborated entries, sprang up at almost the same time, and the one by Feng Fujing was precisely in the list. From then onwards, *mingwu* monographs on *Shi* became a prominent subgenre, which, apart from a few decades of suspension after the Ming-Qing transition, lasted well into the late Qing, with more than twenty titles recorded. Besides, stepping into the Qing, there were also a number of works devoted to specific *mingwu* categories. Notable examples including Mao Qiling's (1623-1716) *Xu shizhuan niaoming* 續詩傳鳥名 (Supplementary to bird names in the *Shi* commentary, after 1707) on birds, Jiao Xun's *Maoshi dili shi* 毛詩地里釋 (Explanations on the geography in *Maoshi*, 1803) on geographical and personal names, and Bao Shirong's *Maoshi lizheng* 毛詩禮徵 (Quotations on rites in *Maoshi* 1816) on rites.

*Table 4: Pre-Modern mingwu Monographs on Shi*¹⁶⁷

Dynasty	Author	Title	Dating	# juan
Three Kingdoms	Lu Ji 陸璣 fl. mid-3 rd c.	毛詩草木鳥獸蟲魚疏		2
Song	Cai Bian 蔡卞	毛詩名物解		20

¹⁶⁷ Based on Mou Yuting 牟玉亭, "Zhongguo lidai shijing zhushu cunyi shumu," 中國歷代詩經著述存佚書目 in *Shijing xue da cidian*, 1453–1550.

	1048-1117			
	Yang Taizhi 楊泰之 1169-1230	詩名物編		10
	Wang Yinglin 王應麟 1223-1296	毛詩草木鳥獸蟲魚廣疏		6
Yuan	Xu Qian 許謙 1270-1337	詩集傳名物鈔		8
	Yang Sui 楊璉 fl. early-to-mid 14 th c.	詩傳名物類考		
Ming ¹⁶⁸	Zhang Huang 章潢 1527-1608	學詩多識	1560 ¹⁶⁹	1
	Huang Qiaodong 黃喬棟 1531-1605	詩經名物考		
	Hu Wenhuan 胡文煥	詩識	Prefaced 1593	3
	Feng Fujing 馮復京 Fl. Wanli era	六家詩名物疏	prefaced 1605	55
	Lin Zhaoke 林兆珂 <i>Jinshi</i> 1574	多識編	printed 1606	7
	Wu Yu 吳雨 Fl. Wanli era	毛詩鳥獸草木考	prefaced 1606	20
	Shen Wanke 沈萬鈞 <i>Juren</i> 1597	詩經類考	proofread 1606	30
	Geng Ruyu 耿汝愚 Fl. Wanli era	詩經蟲魚考		
	Qin Yuan 秦沅 Fl. early-17 th c.	詩經多識		
	Zou Zhilin 鄒之麟 <i>Jinshi</i> 1610	詩經物考		1
	Mao Jin 毛晉 1599-1659	毛詩草木鳥獸蟲魚疏廣要	Prefaced 1639	2
	Sheng Yusi 盛于斯 1598-1640	毛詩名物考		30
	Huang Wenhuan 黃文煥 <i>Jinshi</i> 1640	詩經考		18
	Huang Shengnian 黃勝年 Fl. Chongzhen era	詩騷本草通		12
Qing	Yao Bing 姚炳	詩識名解	Prefaced 1707	15
	Chen Dazhang 陳大章 1659-1727	詩傳名物集覽	Prefaced 1713	12
	Gu Donggao 顧棟高 1678-1759	毛詩類釋	Prefaced 1752	24

¹⁶⁸ Besides, in the late Ming, there were also now-lost works such as Zhu Quanzai's 朱荃宰 (fl. early-17th c.) *Maoshi leikao* 毛詩類考 and Jiang Zhilin's 蔣之麟 (1630 *fubang*) *Shijing leishu* 詩經類疏, which, judging from the titles, also had a high possibility to be *mingwu* monographs.

¹⁶⁹ For the completion year of this work, see, Qiu Yuejing 丘曰敬 et al., "Zhang Doujin xiansheng nianpu" 章斗津先生年譜, in Zhang Huang 章潢, *Tushu bian* 圖書編, Harvard-Yenching Library, no. T9299/0438 (prefaced 1613), "Nianpu" 年譜: 4b.

Zhu Huan 朱桓 <i>Jinshi</i> 1733	毛詩名物略	Prefaced 1763	4
Xu Ding 徐鼎 b.1739	毛詩名物圖說	Prefaced 1771	9
Lu Yicheng 陸以成 1777 <i>bagong</i>	毛詩鳥獸草木本旨	Prefaced 1776	13
Dong Guixin 董桂新 Ca.1773-1804	毛詩多識錄	Prefaced 1795	16
Jiao Xun 焦循 1763-1820	毛詩鳥獸草木蟲魚釋	Revised 1802	12
He Zhen 何震	多識考	1810	6
Mou Yingzhen 牟應震 1744-1825	毛詩物名考	Prefaced 1814	16
Bao Shirong 包世榮 1784-1826	學詩識小錄	1822 ¹⁷⁰	6
Fang Huan 方瑛	讀詩釋物	Prefaced 1824	21
Shi Yunyu 石韞玉 1756-1837	多識錄	Prefaced 1828	9
Wang Quanzhi 王泉之 <i>Jinshi</i> 1805	增補鳥獸草木蟲魚疏	1833	2
Huang Chunkui 黃春魁 <i>Juren</i> 1846	詩經鳥獸草木考	Prefaced 1847	4
Doronga 多隆阿 1794-1853	毛詩多識	Prefaced 1851	12
Ding Yan 丁晏 1794-1875	毛詩草木鳥獸蟲魚疏校正	Printed 1857	2
Yin Jimei 尹繼美 <i>Juren</i> 1859	詩名物考略		2
Tao Fuxiang 陶福祥 1834-1896	毛詩草木鳥獸蟲魚疏考證	Printed 1887	1

Notes: 1. The list is arranged in the most likely chronological order.

2. Now-lost works are marked by gray shade.

In order to figure out the scope of textual references, I have counted the number of bibliographical sources and textual quotations in the *mingwu* monographs and compared them diachronically. To limit the statistics to a feasible size, I have chosen to focus exclusively on the birds. With about 40 kinds of birds mentioned in the entire anthology, this *mingwu* subset, frequently appearing

¹⁷⁰ For the completion year of this work, see, Bao Shichen 包世臣, "Maoshi lizheng xu" 毛詩禮徵序, in Bao Shirong 包世榮, *Maoshi lizheng* 毛詩禮徵, Shanghai Library, no. 328122-37 (prefaced 1828), "Preface," 1a.

in the beginning chapters following to Kongzi's famous order of "birds, beasts" and so on, was sufficiently stable for classification and large for comparison. Due to the non-referential format of Zhang Huang and Hu Wenhuan's works, I have excluded these two preliminary pieces out of fairness in comparison. Besides, since Cai Bian's *Maoshi mingwu jie* was also incomplete in some of its entries, I have also counted the *Shi*-related bird entries in its twin work *Piya* for an estimation of the upper limit. As for Xu Qian's *Mingwu chao*, although it came with the disparate format of stanzaic commentary rather than *mingwu* entries, I have manually extracted all the bird-related sections for a statistical reference due to its significance as the only extant work of the kind in the Yuan dynasty. Apart from the works by Zou Zhilin and Lu Yicheng, which are temporarily inaccessible, the rest results are shown as below:¹⁷¹

Table 5: Scope of Textual Reference Regarding Birds in the *mingwu* Monographs of *Shi*

Author	Title	Index Year	Source count	Quote count	Jujiu entry
Lu Ji	毛詩草木鳥獸蟲魚疏	~250	5	5	√
Cai Bian	毛詩名物解	~1000	43	89	√
Lu Dian	埤雅	~1000	92	266	√
Xu Qian	詩集傳名物鈔	~1330	30	82	√
Feng Fujing	六家詩名物疏	1605	157	579	※
Lin Zhaoke	多識編	1606	143	433	※
Wu Yu	毛詩鳥獸草木考	1606	74	138	√
Shen Wanke	詩經類考	1606+	193	644	※
Zou Zhilin	詩經物考	~1630	N.A.	N.A.	
Huang Wenhuan	詩經考	~1644	133	420	※
Yao Bing	詩識名解	1707	178	715	○
Mao Qiling	續詩傳鳥名	1707+	133	396	√
Chen Dazhang	詩傳名物集覽	1713	281	1059	※
Gu Donggao	毛詩類釋	1752	36	197	○
Zhu Huan	毛詩名物略	1763	46	131	※

¹⁷¹ Due to travel restrictions under Covid-19. The only known copy of Zou Zhilin's work was at the Hosa Library in Nagoya, Japan. As for the work by Lu Yicheng, a draft manuscript at the Nanjing Library, I consulted the piece in 2020 and will also cite it in later chapters. However, when the current statistics were conducted in 2022, I did not get a chance to revisit the work.

Xu Ding	毛詩名物圖說	1771	79	288	※
Lu Yicheng	毛詩鳥獸草木本旨	1776	N.A.	N.A.	
Dong Guixin	毛詩多識錄	1795	88	311	※
Jiao Xun	毛詩鳥獸草木蟲魚釋	1802	180	731	√
Mou Yingzhen	毛詩物名考	1814	18	41	√
Shi Yunyu	多識錄	1828	64	196	○
Huang Chunkui	詩經鳥獸草木考	1847	58	208	※
Doronga	毛詩多識 (w/ comm.) ¹⁷²	1851	115 (133)	522 (582)	○

- Notes:** 1. Only explicit references are taken into account. Quotations under general titles (e.g., *jiushuo* 舊說 “the old thesis,” *neidian* 內典 “Buddhist scriptures”) or folk sayings are not considered.
2. Different works under a single author, whenever identifiable, are counted as multiple sources. Short literary works (e.g., poems, essays, rhapsodies) by the same author, or different chapters of a classic text, are counted as single sources.
3. Quotations are not recounted when the same content is referred back or appear twice under a single *mingwu* entry.
4. Since the statistics concern the referential *scope* of accumulated knowledge rather than the books actually used in the composition, I follow *Table 3* to count all the nested quotations as additional sources and quotes.
5. For the final column on the *jujiu* entry in *MS #1*, “√” refers to a unitary identification of the bird, “○” to plural yet coherent identifications, and “※” to the juxtaposition of disparate identifications.

Given the accumulative nature of knowledge, and in particular the availability of new secondary sources as time passed, one may have expected an ever-enlarging size of the source base. However, as shown in *Figure 5*, despite the variations of individual works in the scope and inclination in explicit references,¹⁷³ the high tide of source counts clearly came from the century of late Ming to early Qing (1600s-1710s, henceforth “Period I”) rather than the century of the mid-Qing era (1750s-1850s,

¹⁷² Doronga’s *Maoshi duoshi* includes interlineal commentaries by philologists Wang Yun 王筠 (1784-1854) and Cheng Yulin 程棫林 (b.1861). The larger numbers in the parentheses reflect the additional counts when these commentaries are taken into consideration.

¹⁷³ Good examples came from Wu Yu (74, 138) and Mou Yingzhen (18, 41), whose lower counts partly resulted from their preference in implicit references to explicit quotes.

henceforth “Period II”). The same trend, although in a less significant scale, is also discernable in the quote counts. This is particularly noteworthy given that mid-Qing evidential studies, the apex of textual research where the most comprehensive analyses are supposed to be found, only came about in the latter period. In fact, as I will demonstrate in detail in the following chapters, the *mingwu* monographs by Jiao Xun and Doronga were indeed among the highest-quality evidential works in Period II, whose reasoning and judgments far exceeded their predecessors in Period I. This difference between the referential and the analytical epicenters calls for a closer comparison between the *mingwu* monographs of the two periods.

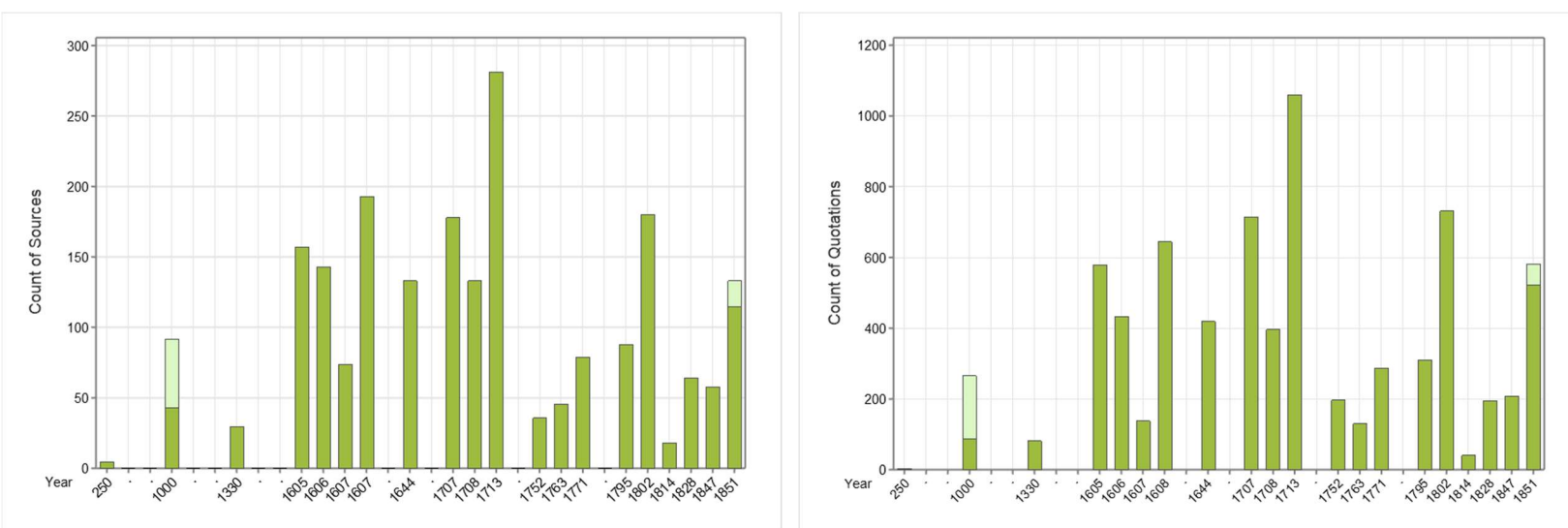


Figure 5: Comparison of source counts (left) and quotations counts (right) among *mingwu* monographs of Shi

In fact, even for the works of Period II with sufficiently large source bases, there were still some notable differences in the referential structure. This can be demonstrated through a Principal Component Analysis (PCA) of the referential data. PCA is a common statistical technique for dimension reduction that projects a multivariate dataset to newly constructed orthogonal dimensions that can best explain the variations of the data. In this way, one can use a fewer number of the most significant orthogonal dimensions, or “principal components,” to cover the majority of variations, and thus reduce the complexity of data analysis without any a priori knowledge of the dataset. In the field of Chinese

humanities, Paul Vierthaler has used the PCA method to analyze the word frequency of late imperial literature across genres, based on which a fine distinction was drawn and visualized among official histories, unofficial histories, historical romances, and other novels.¹⁷⁴

In this dissertation, the PCA analysis is conducted and visualized through Minitab 20, a common statistical software. In specific, I pick up all the *mingwu* monographs of *Shi* in the Ming-Qing era with a quotation count not significantly less than 300, which is 11 works in total. For each of the works, I count the number of quotes under each source title, and the 11 works yield a total of 541 source titles. In this way, I get a 541×11 dataset, where each of the sources is identified by its quotation counts in the 11 works. In order to figure out the intrinsic relation of the 11 works, I conduct a PCA to examine whether the quotation frequency of the sources can be explained by a fewer number of dimensions.¹⁷⁵ The result is significant, with the first principal component (eigenvalue: 8.98) explains 81.6% of the total variations, and the second (eigenvalue: 0.86) an additional 7.8%.¹⁷⁶ As shown in the loadings plot (*Figure 6*), most of the Period-I works appeared in a cluster at the upper right corner, which indicates a high correlation, or similar referential structure of these works. The list is further joined by the works of Xu Ding and Dong Guixin, which witness a high structural similarity to the Period-I works despite their smaller source bases. That said, not every *mingwu* monographs in Period II followed this paradigm. The most significant

¹⁷⁴ To highlight the extensiveness of the high-Qing *mingwu* monographs, I use the greater counts of Doronga's *Maoshi duoshi* with commentaries. However, there is no significant difference in the result when this is replaced by the lesser counts without commentaries.

Besides, due to the special format of their works, Mao Qiling listed the quote of Zhu Xi's *Collected Commentaries* at the beginning of each possible entry, and so did Jiao Xun to Kong Yingda's *Exegesis*, leading to significant outliers in the quotation counts. In order to reduce this format effect, I have excluded these two sources from the dataset, though no significant difference would occur in the PCA result when they are kept.

¹⁷⁵ In Vierthaler's case, the key words are taken as variants to explain different works. Due to a much shorter list of works involved, my PCA analysis is conducted from the opposite direction, where the works are taken as variants to explain the sources. That said, the basic rationale in dimension reduction remains unchanged. See, Paul Vierthaler, "Fiction and History: Polarity and Stylistic Gradience in Late Imperial Chinese Literature," *Cultural Analytics*, May 23, 2016, 18–28, DOI: 10.22148/16.003.

¹⁷⁶ Since I am extracting the principal components to explain the data variations, rather than using them as factors for further statistical analysis, the less-than-one eigenvalue of the second principal component will not be a problem. To a certain extent, the dominance of the first principal component is caused by the high weight of the most-commonly-cited sources. To test the stability of the result, I have conducted another PCA with six most-bibliographically-related sources removed (including *Erya*, Guo Pu's *Erya* commentary, and Lu Ji's commentary for the *mingwu* tradition, as well as the Mao commentary, Zheng Xuan's commentary and Kong Yingda's *Rectified Meanings* for the commentarial tradition of *Shi*). The result, as shown in *Appendix 1*, is essentially the same.

deviation comes from Jiao Xun's work, which appears at the bottom of the loadings plot. The rest three works by Mao Qiling and Yao Bing from Period I, and Doronga from Period II appear in the middle.

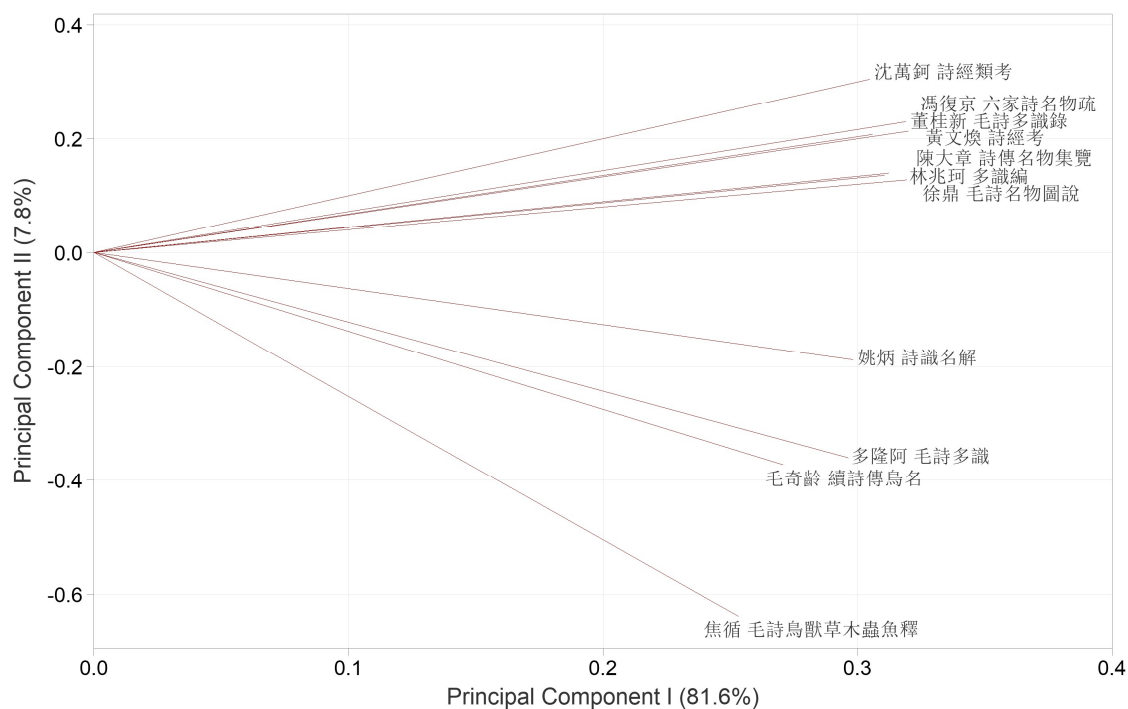


Figure 6: Loadings plot for principal component analysis (all referential sources included)

The result is by no means arbitrary, when we realize that Jiao Xun was the only top-tier evidential scholar involved in this analysis, Doronga's work was famous for its evidential rigor, and Mao Qiling was one of the major precursors of evidential learning in Period I. Moreover, as shown in the final column of Table 5, among the 11 *mingwu* monographs with extensive quotations, these deviated four—including the one by Yao Bing—are precisely the works that offer either a unitary identification or a coherent image of the *jujiu* bird, while all the other ones, like what we have observed in Feng Fujing's *Mingwu Commentaries*, involve a juxtaposition of disparate, unresolved attributions.¹⁷⁷ Such evidence highlights the meaningfulness of the plot. But how should we explain the differentiation? In PCA, the loadings plot

¹⁷⁷ In specific, “coherent image” here refers to a fierce Accipitridae bird despite multiple attributions (eagle, hawk, osprey, etc.).

marks the weight of the original variants to the principal components. On the horizontal axis, the deviated works witness a relatively smaller contribution to the first principal component. On the vertical axis, the difference is more salient, with the clustered works contributing to the second principal component positively, and the deviated ones negatively. In order to further explain the difference, we need to first figure out what the two principal components stand for.

The meaning of the principal components can be inferred from the score (projected value) of varied referential sources on these two dimensions. The pattern for the first principal component is straightforward. As shown in *Table 6*, those with the highest scores on this dimension are precisely the sources that are most commonly cited among the 11 works—the rankings on the score and the total quotation counts almost overlap with each other. That is to say, the first principal component stands for the *general relevance* of the sources to the *mingwu* entries. The higher the score, the more likely the source would be quoted. And correspondingly, the less weight of the deviated works in this dimension indicates a greater difference of their quotation sets from the common distribution of the genre, which is more typically represented by the works in the cluster.

Table 6: Top 15 Sources with the Highest Scores on the First Principal Component

Score Rank	Source	Score	Total Quotes	Quote Rank
1	爾雅	39.20	495	1
2	爾雅 郭璞注	24.76	311	2
3	埤雅	22.49	274	3
4	說文解字	19.10	266	4
5	禽經	18.10	228	5
6	毛傳	15.32	221	6
7	陸璣疏	15.31	195	8
8	禮記	14.70	197	7
9	鄭箋	9.37	138	9
10	毛詩正義	8.80	133	10
11	羅願 爾雅翼	8.65	121	11

12	淮南子	7.27	101	13
13	左傳	7.02	103	12
14	莊子	6.68	98	14
15	嚴粲 詩輯	4.81	75	15

But what are the specific differences in the distribution of quotations? The second principal component sheds important light on this question. As shown in *Table 7*, if we list the sources with the most positive and negative scores on this second dimension, a clear contrast will appear. Apart from the work by He Kai, all sources on the right side are typical ones in mid-Qing textual-philological learning, including the Mao commentary, Zheng Xuan's commentary, and Kong Yingda's *Exegesis* best representing the early hermeneutic tradition of *Shi*, typical philological reference books such as *Shuowen*, *Yupian* 玉篇, and *Guangyun* 廣韻, other Confucian classics including the *Book of Rites*, *Rites of Zhou*, *Book of Documents*, and *Spring and Autumn*, as well as canonized historical and literary writings such as *Shiji*, *Book of Han*, and *Songs of Chu*. From the standpoint of a mid-Qing philologist, these were the sources with the highest textual authority.

Table 7: Top 15 Sources with the Highest and Lowest scores on the Second Principal Component

Rank	Source	Score (highest)	Source	Score (lowest)
1	禽經	8.03	說文解字	-9.58
2	陸佃 埤雅	7.33	毛傳	-9.56
3	郭璞 爾雅注	3.21	毛詩正義	-5.36
4	羅願 爾雅翼	2.56	鄭箋	-4.75
5	張華 禽經注	2.15	禮記	-2.62
6	邢昺 爾雅疏	1.98	漢書	-2.45
7	張華 博物志	1.89	周禮	-1.50
8	酉陽雜俎	1.83	史記	-1.46
9	淮南子	1.72	尚書	-1.39
10	本草經	1.64	玉篇	-1.36
11	山海經	1.28	廣韻	-1.29

12	爾雅	1.14	何楷 詩經世本古義	-1.21
13	崔豹 古今注	1.12	左傳正義	-1.19
14	馮復京 六家詩名物疏	1.08	楚辭	-1.13
15	鄭樵 通志	1.08	春秋	-1.07

If the right side embraces classical and philological works, the left side witnesses a closer relevance to the encyclopedic knowledge of *wu*. One important subset concerns the broadly defined *Erya* tradition, though higher scores are not given to the original text but later commentaries, and notably the Song “expansions” by Lu Dian and Luo Yuan 羅願 (1136-1184) that are closer to encyclopedias in content. The list is further joined by earlier encyclopedias, including Zhang Hua’s 張華 (232-300) *Bowu zhi* 博物志 (Records of diverse matters), Cui Bao’s (fl. late-3rd c.) *Gujin zhu* 古今注 (Notes to Things Old and New), and more “specialized” ones such as the *Bencao* 本草 pharmacopeia and *Qinjing* 禽經. Besides, *Shanhai jing* 山海經, *Huainan zi* 淮南子, and the Tang brush-notes *Youyang zazu* 酉陽雜俎 (Miscellaneous morsels from Youyang) are also renowned for their extensive scope of content. That said, apart from *Erya* and Guo Pu’s commentary, none of the works enjoyed a textual authority comparable to ones on the right side. *Qinjing* and *Bencao* were unclear in textual history; *Shanhai jing* and *Bowu zhi* were full of whimsical episodes; *Piya* and *Erya yi* were typical works of the Song learning. If the classical and philological works on the right side emphasize authoritative sources, the encyclopedic works on the left embrace erudition.

This intuitive observation is well supported by referential data on a more general scale. Regarding the measuring of textual authority, a good touchstone is the diachronic difference in the sources on classical learning, for which a typical mid-Qing philologist would discriminately prefer earlier interpretations than those from the Song-Ming era.¹⁷⁸ Among the sources, I have identified 150 datable

¹⁷⁸ For instance, Chen Yinke once noted “not reading post-Tang books” as an expedient way for the classical scholars to succeed in the hightide of evidential studies, thus indicating a far greater referential emphasis on

titles from the Classics Division (with apocryphal texts excluded), and added a temporal tag to each of them—no later than the Han, after the Han but before the Song, from the Song to the Ming, or in the Qing. The result works closely with our expectations. As shown in *Figure 7*, the Song-Ming era is the only period with a positive average score on Principal Component II, and a t-test shows that it is significantly higher than the collected scores of the rest periods ($t = -2.80$, $p\text{-value} = 0.006$). The result thus further confirms the relevance of the second dimension to textual authority, an emphasis on the *validity* of the referential sources towards the negative direction.

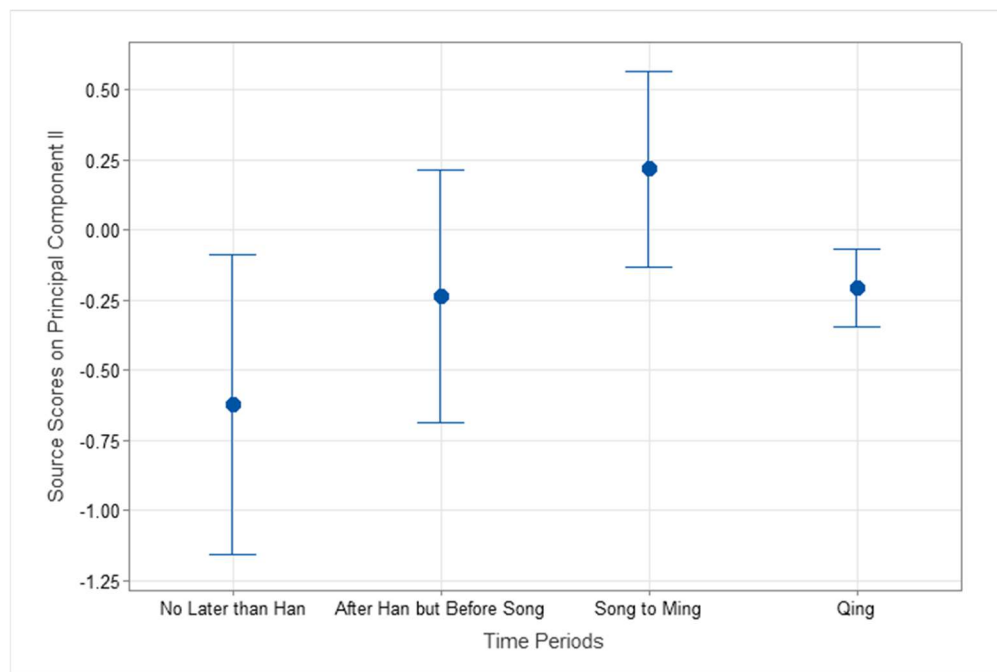


Figure 7: Interval plots for sources from the Classics Division (with apocryphal texts excluded) on Principal Component II. In the plot, the round dots stand for the average score of classical sources on the second dimension at each historical period. The bars indicate the two-sided confidence intervals on the 95% level.

As for the encyclopedic ideal on the positive direction, another good indicator comes from the quotation of lost works (*yishu* 佚書), which were mostly rare sources that bespoke the erudition of the

the earlier periods. See, “Chen Yuan Yuan xiyu ren huahua kao xu” 陳垣元西域人華化考序, in Chen Yinqe 陳寅恪, *Jinming guan congkao erbian* 金明館叢稿二編 (Beijing: Sanlian shudian, 2011), 270.

scholar. Similar to the labeling process above, I have also identified 72 datable lost works from the referential sources with temporal tags attached.¹⁷⁹ As shown in *Figure 8*, although earlier sources still tend to reach a lower score, for these *yishu* sources, each of the three historical eras have a positive average that is significantly above zero (indicated by the one-sided bar), thus confirming the relevance of the positive side to erudition or the *broadness* of reference. Put together, we can conclude that the second principal component captures a spectrum between the ideals of broadness and validity. And correspondingly, the opposite contribution of the *mingwu* monographs on this dimension highlights a meaningful difference in referential structure between the more encyclopedic ones in the cluster, and the more credible ones deviated from.

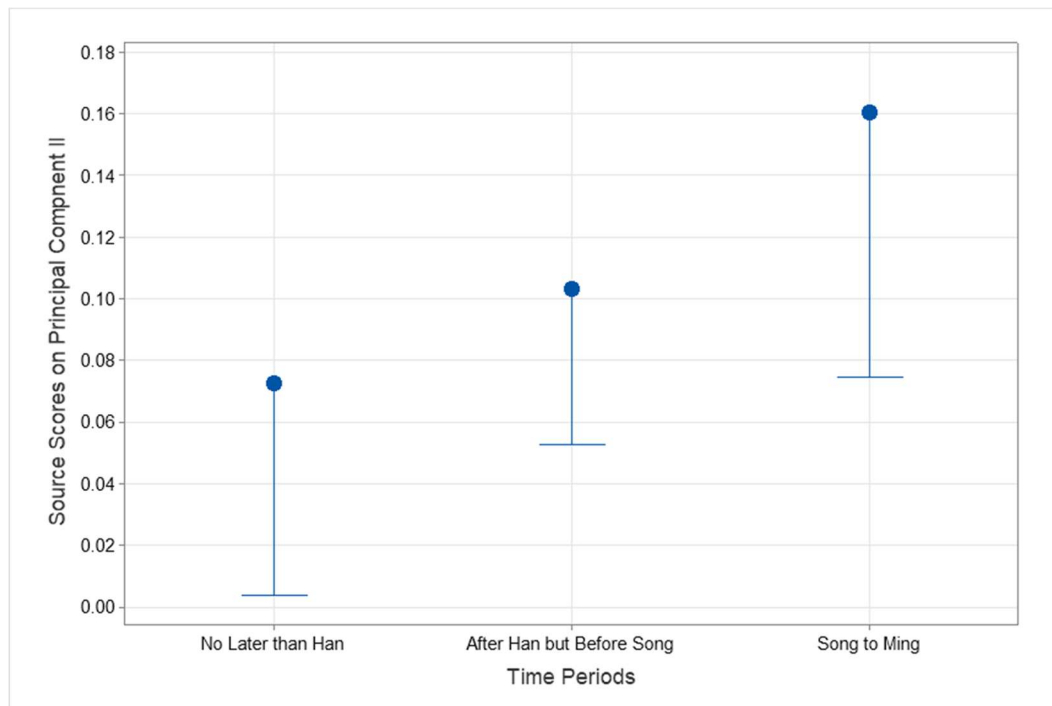


Figure 8: Interval Plots for lost works on Principal Component II. The round dots mark the average score within each historical period; the bars indicate the one-sided confidence intervals on the 95% level.

¹⁷⁹ Here I only take references to *individual lost works* into account. Quotation of early commentaries transmitted in the classical tradition, such as those by Neisheran 內舍人, Zheng Zhong 鄭眾, and most notably Lu Ji 陸璣, are not considered even if the original form of their works had long been lost.

This far-reaching contrast on the second dimension is effective in explaining many contrasts between the typical “encyclopedia” works and Jiao Xun’s “evidential” entries on a more specific level. A good example comes from the entry of “Chicken” (*ji* 雞). Common as it is, no one would have any trouble identifying this livestock, yet it was also due to the same reason that relevant sources were particularly rich. As shown in *Table 8*, the quotation count marks a stark difference between the more encyclopedic works in the cluster and the more evidential ones deviated from. For the *mingwu* monographs in the former category, the “Chicken” entry is among the most extensive, with dozens of quotations ranging from its natural traits, ritual functions, symbolic significance to anecdotes. This forms a sharp contrast with the terser entries in the latter category, and in particular the most “evidential” one by Jiao Xun, who noted the chicken as a “common livestock” (*changchu* 常畜) and did not bother explaining it at all.¹⁸⁰ This stark difference indicates a disparate concern behind the quotations. Although certain evidential works like the one by Jiao Xun could reach a general extensiveness comparable to their encyclopedic predecessors, the quotations were drawn for resolving specific *mingwu* problems; when this was not in need, the entries became much succinct. Judgment from this vantage point, the extensive quotations on the self-evident chicken were no doubt excessive, if not a mere display of erudition. In fact, this was precisely the critique of the *Siku* compilers to Chen Dazhang’s *Shizhuan mingwu jilan* 詩傳名物集覽 (Collected catalogue of *mingwu* in the *Shi* commentary), the most extensive work in our list with the highest count in both sources and quotations. The compilers wrote:

When interpreting “the chicken roosts in the wall-hole” (*MS* #66), be it the “wood chicken” in *Liezi*, the “chicken feet” in *Mr. Lü’s Spring and Autumn*, or the “long-crowing chicken” in *Official Rites of the Han*, none of these is not included in detail. Such cases render it close to the *leishu* encyclopedia in format, which is deeply deviated from the aim of classical exegesis... Nevertheless, given its extensiveness in reference, the work can be valuable for a broad review. Lack in accuracy and refinement yet excessive in comprehensiveness and richness, it may still be an aid to the broad learning of the *Shi* readers.

¹⁸⁰ Jiao Xun 焦循, *Jiao Xun quanji* 焦循全集 (Nanjing: Guangling shushe, 2016), 4: 1603.

釋“雞棲於埘”，則《列子》之木雞，《呂氏春秋》之雞蹠，《漢官儀》之長鳴雞，亦無不備載。皆體近類書，深乖說經之旨。……然其徵引既眾，可資博覽，雖精核不足，而繁富有餘，固未始非讀《詩》者多識之一助也。¹⁸¹

Quoted from the “Bibliographical Annotation” (*tiyao* 提要), the chicken entry was one of the two typical cases raised by the *Siku* compilers to illustrate the deviating extensiveness of the work, and indeed an apt choice. From the earlier case of the *jujiu* bird, we have seen how the juxtaposition of unreconciled theses could serve as a touchstone to differentiate the encyclopedic works from more rigorous evidential reasoning. Here, the extensive inclusion of loosely related quotes also created a similar effect by generating a *de facto* overflow of information that blurred the exegetic purpose of the entry or the clear image of the *mingwu* object. In this sense, the contrasts between “classical exegesis” and “*leishu* encyclopedia,” “accuracy and refinement” and “comprehensiveness and richness” offered an excellent account for the different ideals between Jiao Xun and the works in the cluster, which was now backed up by an authoritative voice that represented the stance of mid-Qing evidential learning on a broader scale.

Table 8: Quotation Counts on the Entry “Chicken” and the Source *Yiwen leiju*

Author	Title	Weight on PC II	Quote Count on “Chicken”	Quote Count of “Yiwen leiju”
Shen Wanke	詩經類考	0.305	51	0
Feng Fujing	六家詩名物疏	0.230	27	0
Huang Wenhuan	詩經考	0.213	17	0
Dong Guixin	毛詩多識錄	0.208	N.A. ¹⁸²	0
Chen Dazhang	詩傳名物集覽	0.140	42	0
Lin Zhaoke	多識編	0.136	23	0
Xu Ding	毛詩名物圖說	0.128	12	0
Yao Bing	詩識名解	-0.188	23	0
Doronga	毛詩多識 (w/ comm.)	-0.360	9	1
Mao Qiling	續詩傳鳥名	-0.372	7	0

¹⁸¹ Chen Dazhang 陳大章, “Shizhuan mingwu jilan,” 詩傳名物集覽 in *Yingyin Wenyuange siku quanshu*, 86: 544.

¹⁸² Due to Covid-19, I haven’t got a chance to recheck this manuscript at the Shanghai Library.

Jiao Xun	毛詩鳥獸草木蟲魚釋	-0.639	0	5
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Another revealing contrast concerns the quotation of lost works, which, although common in both the more encyclopedic and the more evidential *mingwu* monographs, also witnesses notable differences in the way the references are drawn. As shown in the final column of *Table 8*, a good example comes from the Tang literary encyclopedia *Yiwen leiju* 藝文類聚 (Collection of Literature Arranged by Categories), which, apart from five quotations by Jiao Xun, was almost absent from the monographs.¹⁸³ Note that the *yishu* texts did not reappear *ex nihilo*, but were re-collected from transmitted quotations in other works, and *Yiwen leiju*, the earliest extant *leishu* encyclopedia from the early Tang, was precisely one of the richest sourcebook for such collections. Upon a closer look at the five mentions of the title in Jiao Xun's work, we realize that all of them are small-character notes on the origin of the *yishu* quotations, which involve as many as 11 lost works altogether.¹⁸⁴ Although none of these *yishu* quotations was new to the earlier monographs, it was only Jiao Xun who added this bibliographical note and referred to the texts as nested quotations.¹⁸⁵ With the actual origin of each *yishu* quotation clearly marked, these lost works became trailable references open to every scholar, rather than exotic sources on their own.

As a contrast, all the encyclopedic monographs cited them as direct quotations, as if they were nothing different from the extant sources. Such direct references, for sure, would help to create the impression of a broader referential basis. This pursuit of broadness is well captured by Feng Fujing's *Mingwu Commentary*, which included a "Bibliographical List" (Yinyong shumu 引用書目) at the beginning of this work. Although as a front-matter component, this was not particularly new. For

¹⁸³ The only other exception comes from *Maoshi duoshi*, which referred once to the classification system of *Yiwen leiju* and had little to do with the *yishu* references discussed here. See, Dorong 多隆阿, *Maoshi duoshi* (12-juan edition) 毛詩多識, Liaohai congshu series (Shenyang: Liaohai shushe, 1931-1934), juan 3: 11b.

¹⁸⁴ This large number is primarily due to an extensive quotation from *Yiwen leiju* in the "Phoenix" entry, which includes seven quotations from different lost works. See, Jiao Xun, *Jiao Xun quanji*, 4: 1655, 1664, 1790, 1792.

¹⁸⁵ The 7 phoenix-related texts were widely quoted by the encyclopedic monographs in the cluster. The rest four texts were at least quoted by either Chen Dazhang or Yao Bing.

instance, a similar design had already appeared in the early-Ming official textbook *Shizhuan daquan*.¹⁸⁶

Feng's list was featured by its extensive length and self-fashioned statistics. Classified by the Four Divisions into 33 subcategories, the list offered a meticulous account of the source number under each subcategory, which added up to an astonishing total of 587 titles (see *Appendix 2* for details), as marked out at the end of the list by himself.¹⁸⁷

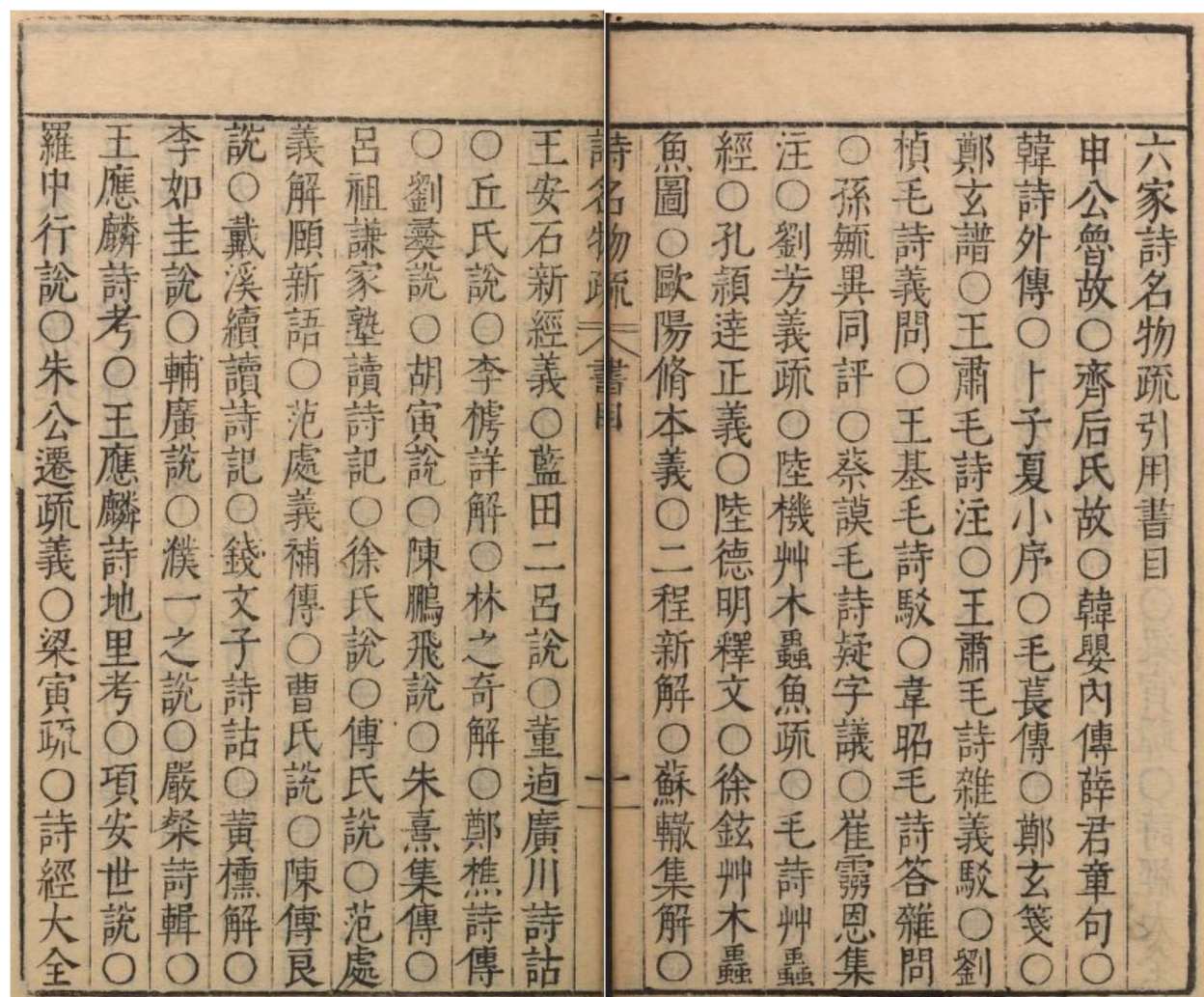


Figure 9: Beginning page of “Bibliographical List” in Feng Fujing’s *Mingwu Commentaries*¹⁸⁸

¹⁸⁶ Though *Shizhuan daquan* only listed the author names but not the work titles.

¹⁸⁷ Note that this is the referential scope for the *complete* monograph, while all the statistical results before are solely based on the bird-related entries.

¹⁸⁸ Feng Fujing, *Liujia shi mingwu shu*, “Shumu” 書目, 1a-b.

The *yishu* titles loom large in this list. Just as shown in *Figure 9*, for the first subcategory of *Shi*-related works, the list does not begin with our familiar Mao-Zheng commentaries, but long-lost Western Han works from the Three Schools—the Lu Poetry, Qi Poetry, and Han Poetry. This is followed by a series of lost *Shi* commentaries in the Six Dynasties, from Wang Su 王肅 (195-256) and Liu Zhen 劉楨 (187-216) all the way to Liu Fang 劉芳 (453-513). This is further joined by the Song lost works of Xu Xuan 徐鉉 (916-991) and Dong You 董道 (fl. early 12th c.), and even more notably, theses by “Mr. Qiu,” “Mr. Xu,” “Mr. Fu,” and “Mr. Cao” without the author specified. Yet each of these is marked by an itemized circle and counted into Feng’s statistics just like the extant works. Under other subcategories, we can find even more eye-catching titles such as the completely unspecified “Mr. X’s Commentary” (*moushi zhu* 某氏注), or the loose titles “*Huang Tingjian ji* 黃庭堅集” and “*Yang Shen ji* 楊慎集” that had never been used to name the collected works of these authors.¹⁸⁹ Such evidence betrays the prevalence of unacknowledged second-hand quotations in *Mingwu Commentaries*, which means there must be a considerable “inflation” in the source counts comparing to the referential works actually consulted by Feng in the compilation process. If this “inflated” account can be best explained as an intentional display of erudition, it is also from the same place that we come to see the significance of Jiao Xun’s small-character notes, which transforms these encyclopedic moments of showing off back into traceable textual evidence. Once more, behind their different treatment of the *yishu* texts lay the contrasting ideals of broadness and validity, the latter of which is well reflected by the negative score of *Yiwen leiju* (-0.67) on the second principal component, ranking 31st from the bottom among all sources.

Apart from these referential features within the entries, another important indicator for broadness, for sure, concerns the scope and total number of the entries in the entire monograph. Note that in the above structural analysis, we have merely focused on the bird-related entries, a review of the monographs on the complete-work level will yield new information that is not covered above. The result is shown in

¹⁸⁹ Feng Fujing, *Liujia shi mingwu shu*, “Shumu” 書目, 4a, 13a.

Table 9, where I count the total number of entries of each *mingwu* monograph to indicate their scopes. Although the result does not overlap with the referential counts precisely, a similar diachronic pattern is indeed discernable. From Lu Ji's commentary onwards, the flora and fauna had long remained as the mainstream for the *mingwu* study of *Shi*—a direct response to Confucius' call on the “broad learning of birds, beasts, grasses, and trees.” For Cai Bian in the Song, although he also included 15 astronomical and miscellaneous entries in his *Mingwu jie*, the majority (184/197, 92.2%) was still about the flora and fauna. However, the ratio witnessed a steep drop in the late Ming, when the monographs began to include all sorts of *mingwu* categories that greatly expanded the total entry count. For instance, in Feng Fujing's *Mingwu Commentaries*, the body entries were arranged according to the *Maoshi* sequence. In his annotation to *MS #1*, Feng not only included entries for the “Osprey” (*jujiu* 鵟) and the “Water Mallow” (*xingcai* 苳菜) that were typical for all *mingwu* monographs, but also the musical instruments of “Small Zither” (*qin* 琴), “Large Zither” (*se* 瑟), “Bell” (*zhong* 鐘), and “Drum” (*gu* 鼓), as well as the more common terms of “River” (*he* 河), “Isle” (*zhou* 洲), and “Female” (*nü* 女).¹⁹⁰ In this way, 7 entries were added solely for the first ode. At the very beginning of this work, we can also find a meticulously drafted “Index” (*tiyao* 提要), where all the 1569 entry titles were classified according to an overarching system in 32 categories, ranging from the astronomical and geographical to the human world and the myriad things. For the above-mentioned entries from *MS #1*, they showed up in the categories of “Explanations on Birds” (*shi niao* 釋鳥), “Explanations on Grasses” (*shi cao* 釋草), “Explanations on Music” (*shi yue* 釋樂), “Explanations on Water” (*shi shui* 釋水), and “Explanations on Relatives” (*shi qinshu* 釋親屬) respectively.¹⁹¹ Here, both the comprehensive scope and the category sequence remind us of the classification style that was typical for a *leishu* encyclopedia.

¹⁹⁰ See, Feng Fujing, *Liujia shi mingwu shu*, juan 3: 5b–13a.

¹⁹¹ Feng Fujing, *Liujia shi mingwu shu*, “Tiyao shang” 提要上: 10a, 15b, “Tiyao zhong” 提要中: 13a, “Tiyao xia” 提要下: 6b, 13b.

Table 9: Scope and Number of Total Entries in the *mingwu* Monographs

Author	Title	Index year	No. of entries	No. of flora and fauna	Flora and fauna %	Arranged by categories	<i>Leishu</i> classification
Lu Ji	毛詩草木鳥獸蟲魚疏	~250	133	133	100%	○	×
Cai Bian	毛詩名物解	~1000	191	177	92.2%	○	×
Lu Dian	埤雅	~1000	297 ¹⁹²	284	95.6%	○	×
Hu Wenhuan	詩識	1593	1728 ¹⁹³	411	23.8%	○	○
Feng Fujing	六家詩名物疏	1605	1568	386	24.6%	○ ¹⁹⁴	○
Lin Zhaoke	多識編	1606	244	244	100%	○	×
Wu Yu	毛詩鳥獸草木考	1606	346	319	92.2%	○	×
Shen Wanke	詩經類考	1606+	949 ¹⁹⁵	292	30.8%	○	○
Huang Wenhuan	詩經考	~1644	1587	356	22.4% ¹⁹⁶	×	×
Yao Bing	詩識名解	1707	275	275	100%	○	×
Chen Dazhang	詩傳名物集覽	1713	338	338	100%	○	×
Gu Donggao	毛詩類釋	1752	606	275	45.4%	○	○
Zhu Huan	毛詩名物略	1763	961	304	31.6%	○	○
Xu Ding	毛詩名物圖說 (draft)	1771-	351	261	74.4%	○	×
Xu Ding	毛詩名物圖說	1771	255	255	100%	○	×
Dong Guixin	毛詩多識錄	1795	1125	338	30.0%	○	○
Jiao Xun	毛詩鳥獸草木蟲魚釋	1802	471 ¹⁹⁷	471	100%	×	×
Mou Yingzhen	毛詩物名考	1814	233	233	100%	○	×
Shi Yunyu	多識錄	1828	376	376	100%	○	×
Huang Chunkui	詩經鳥獸草木考	1847	268	268	100%	○	×
Doronga	毛詩多識	1851	417	417	100%	×	×

¹⁹² Longer essays in the final 5 *juan* of *Piya* are not taken into account.

¹⁹³ Philological and literary entries in the final six categories of this work are not taken into account.

¹⁹⁴ Note that Feng's body entries, unlike most of the others, follow the *Maoshi* sequence. However, thanks to the category-based Index in the front matter, it is still considered "arranged by categories."

¹⁹⁵ Longer essays and philological entries in *juan* 1-3, 9, 18, 20-21, 26-30 are not taken into account.

¹⁹⁶ Since this work is arranged by the *Maoshi* sequence rather than *mingwu* categories, the number of flora-and-fauna related entries is counted by the dissertation author himself, and there can be variations regarding whether a specific entry belongs to this group or not.

¹⁹⁷ This work is also ordered by the *Maoshi* sequence rather than *mingwu* categories. As a result, the same entry title reappears at multiple places, where 89 repetitive entries are left completely empty. I have neglected these void entries in the counting.

Unlike Feng Fujing, most *mingwu* monographs with a similar expanded scope ordered their entries by categories directly (see, Column 6 in *Table 9*). When this category-base order came together with an overarching classification, as was already the case for Hu Wenhuan's pioneering work and became stabilized with Shen Wanke's *Shijing leikao* 詩經類考 (Investigations on the classic of *Shi* by categories), the result became close to *leishu* in format. When Zhu Huan compiled his *Maoshi mingwu lue* 毛詩名物略 (Keynotes on the *mingwu* in *Maoshi*) one and a half centuries later, he already openly claimed to model the work on *leishu*.¹⁹⁸ The result was spectacular: Its 961 entries were first classified into the four "Divisions" (*bu* 部) of Heaven, Earth, Human, and Things, and then to 23 categories (*lei* 類). Moreover, although as a general principle the entries under a single category were ordered by the *Maoshi* sequence, there were also notable exceptions with symbolic meaning. For instance, "Sky" comes first in the category of "Astronomy"; "Mount Tai" appears first in the category of "Mountains"; the phoenix leads the category of birds, and so does the mythical *kilin* for the category of beasts.¹⁹⁹ Both the fourfold division and the symbolic arrangement were typical for *leishu* encyclopedias since the middle period, rendering this work particularly akin to the format.

In this way, we can generally divide the *mingwu* monographs into two groups, a "classical" tradition which followed the format of earlier commentaries and worked on a scope no significantly broader than the flora and fauna, and an "encyclopedic" one which witnessed a closer kinship to *leishu* and worked on a far more extensive scope. As visualized in *Figure 10*, the difference of these two groups in entry counts is apparent. For the encyclopedic monographs, the total counts can easily exceed 1,000, while they are hardly above 400 for a classical one. Based on modern biological taxonomy, Kou Shuhui has identified a total number of 357 plants and animals from the *Shi* anthology.²⁰⁰ If we go so far as Hu Wenhuan to include all kinds of plant-and-animal-related terms as well, such as the *kilin*'s "toe" (*zhi* 趾)

¹⁹⁸ Zhu Huan 朱桓, *Maoshi mingwu lue* 毛詩名物略, Shanghai Library, no. 451926-33 (1763), "Preface": 1a-b.

¹⁹⁹ See, Zhu Huan, *Maoshi mingwu lue*, juan 1: 1a, 55a, juan 4: 1a, 15a.

²⁰⁰ Kou Shuhui, "Shijing mingwu," 1159–1314.

(MS #11), the “downward-bending” (*jiu* 樛) wood (MS #4), or even the “*mian-man*” 綿蠻 singing of the Yellow Bird (MS #231), there would be a total of 411 entries under the categories, which marks the upper limit of the “classical” scope.²⁰¹ As for the works by Jiao Xun and Doronga, which did exceed the limit, it was solely due to their non-category-based ordering in the *Maoshi* sequence, which resulted in a large number of repetitive entries that solely directed the reader back to its first appearance.

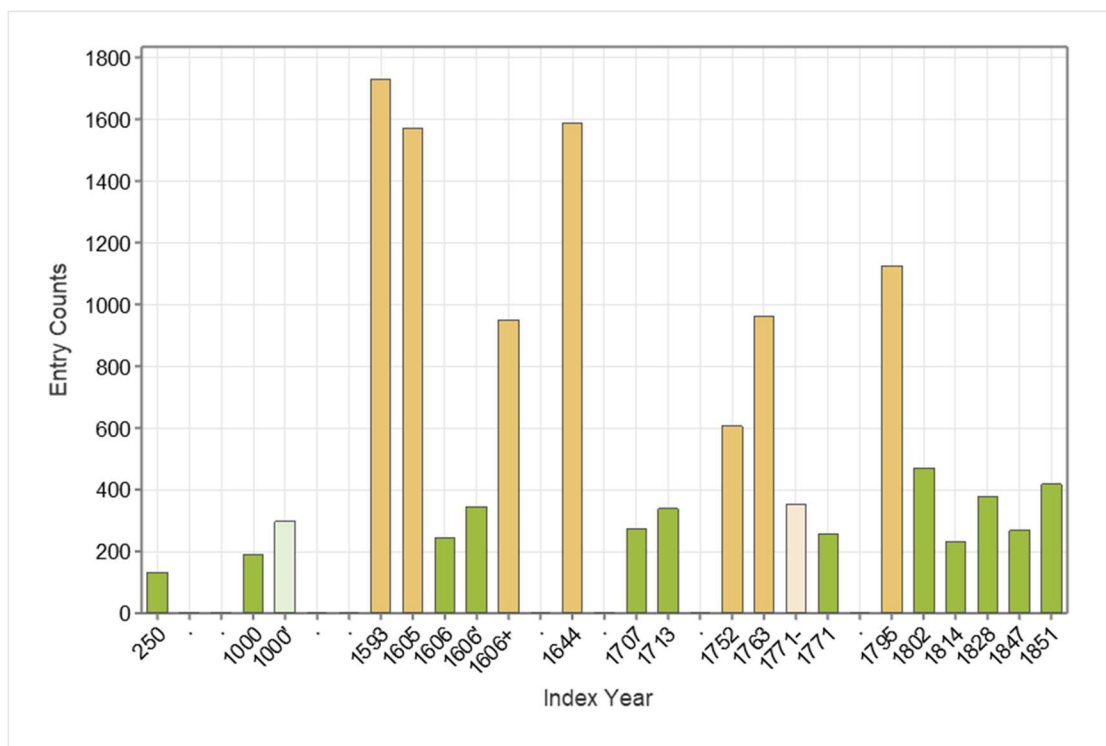


Figure 10: Entry counts of *mingwu* monographs on *Shi*, with the “classical” tradition and the “encyclopedic” tradition differentiated by green and orange colors respectively. Lu Dian’s *Piya* (year 1000) and the draft edition of Xu Ding’s *Maoshi mingwu tushuo* (year 1771-), as two supplementary references, are rendered in lighter shades.

As a contrast, the near-1,600 well elaborated entries by Feng Fujing and Huang Wenhuan made clear that there are still three more times of *mingwu* items in *Shi* beyond the flora and fauna. Table 10 provides a detailed account on the 32 categories in Feng Fujing’s index, which offers a general sense how

²⁰¹ Hu Wenhuan 胡文煥, “Hushi shishi,” 胡氏詩識 in *Siku weishou shu jikan* 四庫未收書輯刊, Series 2 (Beijing: Beijing chubanshe, 1997), 6: 30, 32.

its entries are made up. In fact, this near-1,600 totality should be close to the upper limit of *mingwu* types in the anthology, where you can find not only all kinds of the myriad objects, but also specific activities such as “going in for audience” (*rujin* 入覲, *MS* #261) or “the filial descendant arriving at his position” (*xiaosun cuwei* 孝孫徂位, *MS* #209).²⁰² Such exceptional cases remind us of the early interpretation of *wu* as both “things” and “events,” and raise questions on the proper scope of *mingwu* terms. As for the even higher entry count in Hu Wenhuan’s work, this is mainly due to its inclusion of relevant adjectives and adverbs as well, which are not normally considered as *mingwu* terms. Again, one may attribute this to the primitiveness of Hu’s classification, but it also resulted from the different nature of Hu’s work, whose highly succinct and non-referential entries rendered it closer to a dictionary than an encyclopedia. In fact, my statistics have only counted in the beginning 29 categories normally considered as *wu*. After that, there are still an astonishing 1,947 more entries in 8 categories, ranging from abstract nouns such as sound and quantity to historical facts, literary comparisons, as well as all sorts of philological interpretations. If the totality of concrete nouns is not far from the theoretical boundary of *mingwu* terms, the 3,675 total count of Hu Wenhuan’s entries captures the most extensive attempt in the pre-modern era to divide *Maoshi* into semantic units.²⁰³

²⁰² See, Feng Fujing, *Liujia shi mingwu shu*, “Index” 2: 11b, 12b; Huang Wenhuan 黃文煥, *Shijing kao* 詩經考, National Library of China, no.15314 (1621-1644), “Contents”: 11a, 13b.

²⁰³ A noteworthy exception in Feng Fujing’s *Mingwu Commentaries* comes from the abstract nouns of colors, which also constitute a category in 14 entries. In Hu Wenhuan’s *Shishi*, the color names are grouped together with onomatopoeias into the category of “sounds and colors,” with 67 entries in total. Since the majority of these entries, the onomatopoeias, have never been considered as *mingwu* terms, I have excluded this category from my entry count for *Shishi*.

Table 10: Entry Counts on the 32 Categories in Feng Fujing's *Mingwu Commentaries*

No.	Category	English Translation	Entry Counts
1	天	Heaven	52
2	神	Gods	6
3	時序	Temporal Order	34
4	地	Earth	42
5	國邑	Capitals and Cities	111
6	山	Mountains	52
7	水	Waters	76
8	體	Body	38
9	親屬	Relatives	56
10	姓	Surnames	20
11	爵位	Nobles and Ranks	68
12	飲食	Drink and Food	33
13	服飾	Costumes	72
14	室	Chambers	84
15	器	Utensils	63
16	布帛	Fabrics	13
17	寶玉	Treasures and Jades	21
18	禮	Ritual	92
19	樂	Music	40
20	兵	Military	71
21	舟車	Boats and Carts	61
22	色	Colors	14
23	藝業	Professional Skills	14
24	夷	Barbarians	14
25	獸	Beasts	84
26	鳥	Birds	41
27	鱗介	Scaled and Shelled	23
28	蟲	Insects	31
29	木	Trees	85
30	穀	Cereals	28
31	草	Grasses	94
32	雜物	Miscellaneous Things	35
In Total			1568

Meanwhile, from the plot in *Figure 10* above, we can also identify a clear diachronic feature in the entry counts, which witnesses two heights in the late Ming and the mid-to-late-18th century. The first tide fits well into our expectation. Here, the most eye-catching stars were Feng Fujing, Shen Wanke, and Huang Wenhuan, who, working on *both* extensive quotations and an encyclopedic scope, created the most extensive *mingwu* monographs of *Shi* that became formidable exemplars for the future. These late-Ming models also worked closely with the cultural-intellectual context of the day. As already a well-studied period in Chinese history, this was the time for erudition and showing off in textual learning, a prevalence of *leishu* encyclopedia in print culture, and a prevailing dialogism of heterogeneous elements in the broader cultural sphere.²⁰⁴ All of these could find their traces in the *mingwu* monographs, which were encyclopedic in scope, extensive in reference, and frequently involved an overflow of information without an attempt at reconciliation.

As for the second tide of encyclopedic monographs in the 18th century, it came later than the apex of extensive references in the 1700s-10s, and none of the works included both features of extensive quotation and encyclopedic scope like in the late Ming. If I restrict “erudite” to refer to those *mingwu* monographs with at least one of these two features, it becomes clear that none of the Qing erudite works reached the *overall* broadness of the late-Ming exemplars. In this sense, the tradition of erudite *mingwu* monographs was defined by a *late-Ming paradigm* whose extensive quotations and encyclopedic scope only received partial revivals and developments in the 18th century. This is understandable given the loss of many of the late-Ming cultural context. That said, the 18th century indeed witnessed an embrace of

²⁰⁴ For textual learning, see, Peter K. Bol, “Looking to Wang Shizhen: Hu Yinglin (1551-1602) and Late-Ming Alternatives to Neo-Confucian Learning,” *Ming Studies*, no. 1 (2006): 121–23; Lin Ching-chang, *Mingdai kaoju xue yanjiu*, 32–33.

For *leishu* encyclopedia, see, Benjamin A. Elman, “Collecting and Classifying: Ming Dynasty Compendia and Encyclopedias (*Leishu*),” *Extrême-Orient Extrême-Occident*, 2007, 134–41; Chia Lucille, *Printing for Profit: The Commercial Publishers of Jianyang, Fujian (11th-17th Centuries)* (Cambridge and London: Harvard University Asia Center, 2002), 234–39. In particular, Elman has emphasized Hu Wenhuan’s identity as both the compiler for the *mingwu* monograph and a prolific *leishu* publisher.

For the broader cultural sphere, see, Shang, “The Making of the Everyday World,” 67–79; Shou-Chih Yen, “Xu Wei’s *Zahua*: A Study of Genres” (PhD Dissertation, Yale University, 2004), ch. 1; He, *Home and the World*, ch. 1.

erudite knowledge in one specific intellectual sphere—court learning. In the beginning three decades of the 18th century, the Qing court organized some of the largest official *leishu* projects in the Chinese history. Notable examples included *Yuanjian leihan* 淵鑒類函 (Categorized boxes of the Yuanjian Studio, 1710), *Pianzi leibian* 駢字類編 (Categorized compilation of compounds, 1726), and most notably *Gujin tushu jicheng* 古今圖書集成 (Consummate collection of texts and illustrations from past and present, 1728), which classified its 10,000 *juan* into 6 compilations, 32 treasuries, and an impressive 6,117 items.²⁰⁵ The list can be further expanded by the Manchu language dictionary *Qing wenjian* 清文鑒 (Manchu mirror of literature, 1708) modeled on the *leishu* classification, the horticultural encyclopedia *Guang qunfang pu* 廣群芳譜 (Expanded genealogy of flowers, 1708) specializing in flora, and, more relevant to our discussion, the compilation of *Peiwenzhai yongwu shi xuan* 佩文齋詠物詩選 (Selected poems on things at the Peiwen Studio, 1707).²⁰⁶ Paying an explicit tribute to the *mingwu* tradition of *Shi*, the work was the largest collection of “poetry on things” in the Chinese history, which classified a totality of 14,590 poems by 486 categories in a typical *leishu* order.²⁰⁷ Although it remains to be explored regarding the generic influence of these works beyond the court, one thing was clear: This wave of large-scale encyclopedia making came prior to the fashion of evidential learning in the court. And quite symbolically, although *Qing wenjian* received a substantial expansion in the mid-18th century, its completion (QL 36/12) was precisely before the establishment of the Siku Bureau (QL 37/2), which signified the rise of the “Han learning,” or the narrowly defined evidential studies in the court.²⁰⁸ A compatible timeline can be said for the *mingwu* monographs. First, from the 19th century onwards, there was not a single work in the erudite style. And secondly, for the only two cases with an index year after

²⁰⁵ For the entry counts of *Gujin tushu jicheng*, see, Pei Qin 裴芹, *Gujin tushu jicheng yanjiu* 《古今圖書集成》研究 (Beijing: Beijing tushuguan chubanshe, 2001), 45.

²⁰⁶ For the prosperity of *leishu* compilation and its epistemic significance in the early-18th century court learning, see, He Bian and Mårten Söderblom Saarela, *The Manchu Mirrors and the Language of Natural History in High Qing China* (Cambridge: Harvard University Asia Center, forthcoming), ch. 1-4.

²⁰⁷ See, Zhang Yushu 張玉書, ed., *Peiwenzhai yongwu shi xuan* 佩文齋詠物詩選 (Yangzhou: Yangzhou shiju, 1707), "Imperial Preface": 1a-b, "Presented Memorandum": 3b.

²⁰⁸ For the expansion of *Qing wenjian* in the mid-18th century, see, Bian and Saarela, *The Manchu Mirrors and the Language of Natural History in High Qing China*, ch. 7.

the 1770s—Xu Ding’s draft edition of *Maoshi mingwu tushuo* and Dong Guixin’s *Maoshi duoshi lu*—both were typical works from the PCA cluster that displayed little affinity to the evidential works.²⁰⁹ Moreover, note that Xu Ding was only able to publish the beginning chapters on the flora and fauna but had never completed his remaining categories. The difference between the draft and the final edition also suggests a lateral support to the changing epistemic atmosphere of the day.

Such statistical differences in referential structure and entry scope call for a conceptual distinction between the erudite monographs derived from the late-Ming paradigm and the typical mid-Qing evidential learning. In his case study of Hu Yinglin 胡應麟 (1551-1602), Peter Bol has highlighted a prevailing ideal of erudition (*boxue* 博學) from his works.²¹⁰ To keep track of the meaningful distinction above, I will follow Bol’s insight to label this late-Ming paradigm as “erudite learning.” In the coming chapters, I will demonstrate in detail how the typical form of mid-Qing evidential learning differed significantly from this earlier paradigm, regarding both the analytical techniques and the refinedness of their observations. And this was not confined to the *mingwu* monographs alone, but widely discernible in all kinds of *mingwu* discussions related to *Shi*. But for now, it is sufficient to note the distinctiveness of this earlier paradigm, which, as the most typical form of encyclopedic quotations, marked a unique stage in the *mingwu* study of *Shi*.

Visual Quotations

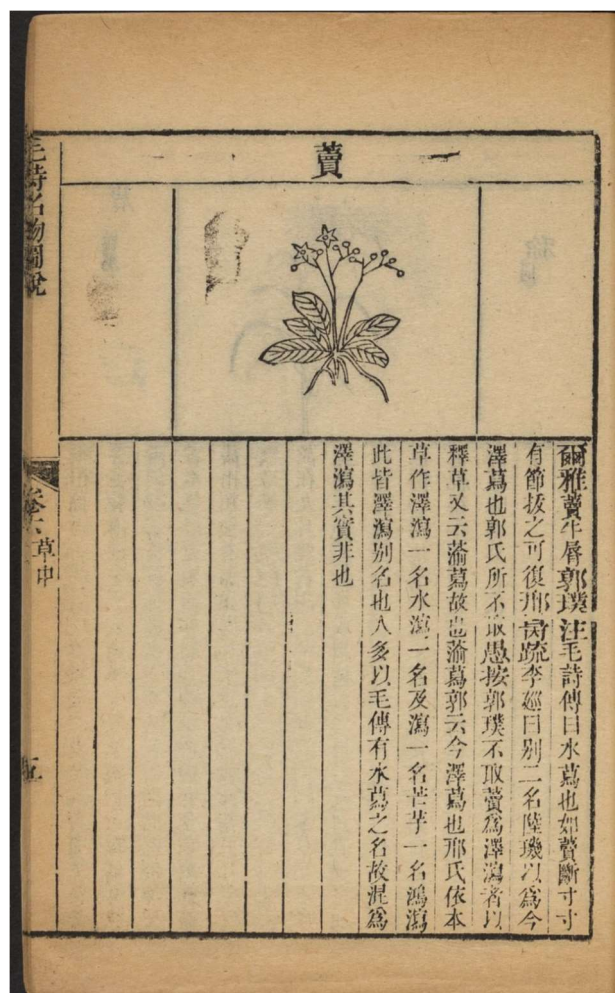
The encyclopedic network of surface references not only concerned textual sources but also incorporated visual materials. For the latter aspect, Xu Ding’s 徐鼎 (b. 1739) *Maoshi mingwu tushuo* 毛詩名物圖說 (Illustrated explanations on the *mingwu* of *Maoshi*, prefaced 1771, henceforth *Illustrated Notes*) offers a revealing case. Identified as a work of erudite learning in the previous section, *Illustrated*

²⁰⁹ For the 1770s as a watershed that marks the prevalence of Mid-Qing evidential learning, see, p. 338.

²¹⁰ Bol, “Looking to Wang Shizhen,” 117-118, 121-122.

Notes is not striking in its scope of textual reference, yet it stands out as the first-ever illustrated work in the Chinese *mingwu* monographs of *Shi*. For its 113 entries of animals and 142 entries of plants, each occupies a half-page with an illustration on the top and a textual description below (*Figure 11*). Another noteworthy feature is the preservation of its draft manuscript, which is in good condition at the National Library of China. With a high quality in both painting and calligraphy, the manuscript is a rich draft that involves extensive revisions in both black and red ink. In particular, many of the entries include more than one round of revision, which can be identified through the extra-textual clues such as ink color, line spacing, calligraphic style, and paragraph format. For instance, in the entry of “Sedge” (*jian* 菅) in *Figure 12*, the first paragraph, with a curvy and well-controlled running script reminding the style of Wen Zhengming 文徵明 (1470-1559), is consistent with the body part of other entries and suggests the original text of the clear draft. The second paragraph, written more tightly in a smaller font and more angular style, must be a later addition, which, judging from its content, might be added together with the thick ink-marks of deletion in the first paragraph. The red-ink addition of the final line must belong to another round of revision, which possibly came together with the red-ink addition in the first paragraph. And this revised version still had substantial difference from the final print.²¹¹ Therefore, from the original clear draft to the black-ink revision, the red-ink revision, and the final print, one can at least reconstruct four versions of the text in a temporal sequence. This densely revised manuscript thus offers rare access to the backstage of knowledge making, shedding important light on how an encyclopedic *mingwu* entry was built up step by step.

²¹¹ Cf., Xu Ding 徐鼎, *Maoshi mingwu tushuo* 毛詩名物圖說, Harvard-Yenching Library (1771), juan 6: 8b.



R2

R1

O

Figure 11 (left): Sample page on the xu 蕒 grass in the printed edition of *Illustrated Notes*²¹²

Figure 12 (right): Sample page on the sedge (jian 菅) in the draft manuscript of *Illustrated Notes*²¹³

(O: original draft; R1: first-round revision; R2: second-round revision)

In the analysis of *Mingwu Commentaries*, I have shown how Feng Fuming presented his references as individuated quotes using the itemized circle mark. In *Illustrated Notes*, this was identified through larger fonts in the printed edition (Figure 11). According to the Guidelines (*fafa* 發凡) at the beginning

²¹² Xu Ding, *Maoshi mingwu tushuo*, juan 6: 5a.

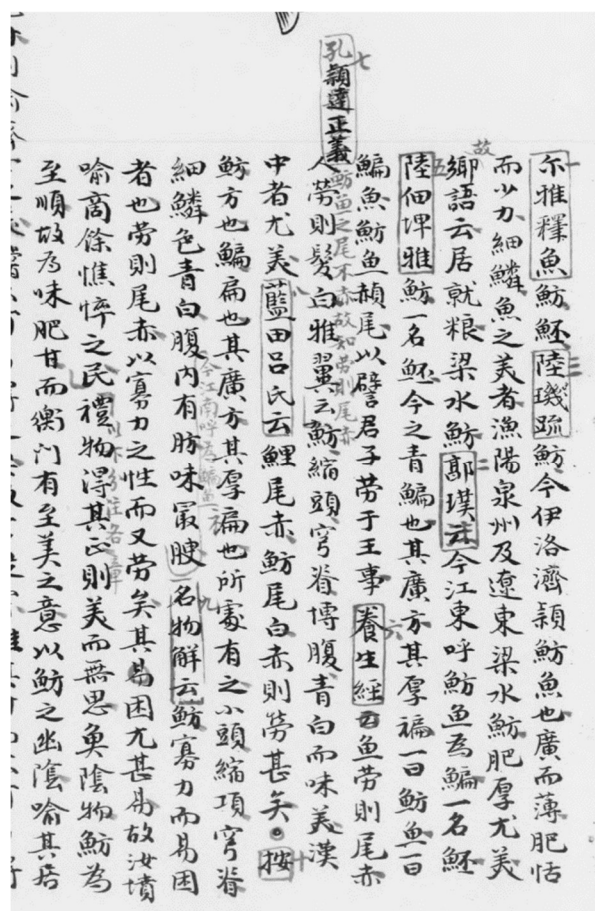
²¹³ Xu Ding, *Maoshi mingwu tushuo (draft)*, juan 3: 27a.

of the work, this was a design for the readers to “know the origins” better.²¹⁴ However, evidence from the manuscript suggests that it also bore a significance for the author’s own source management. As we can identify from *Figure 12*, the original text in the draft had no special marker for the titles. They only began to emerge in the revision, which were mostly bracketed in square boxes.²¹⁵ Naturally, these markers would help to clarify the textual structure of the entry in the revision process. But other entries in the manuscript suggests more.

For instance, in the entry of “Bream” (*fang* 魴), Xu Ding listed eight textual sources along with his author’s note in the original draft. In the red-ink revision, he not only bracketed them in square boxes, but also assigned each of them a number, indicating its supposed position in the revised text (*Figure 13*). As shown from *Table 11*, these numerical labels were essential for the finalization of the entry, since the textual sequence indicated by the labels were precisely the same with the final print. By labeling Lu Ji’s (fl. mid-3rd c.) commentary as the third, and the one by Guo Pu as the second, the markers indicated a switch of position between the two quotes, and the same went for the author’s note and the quotation from Cai Bian’s *Mingwu jie*. Besides, by labeling the quotation of Lu Dian as the fifth, Xu Ding also left an additional space for the fourth position—a quote that might have been written on a now-lost notepaper—which turned out to be a new reference from Luo Yuan 羅願 (1136-1184) in the final print. Such evidence highlights the numerical labels as an effective method for Xu to manage his textual sources and streamline the structural logic.

²¹⁴ Xu Ding, *Maoshi mingwu tushuo*, “Fafan,” 2b.

²¹⁵ Note that in this entry, the title markers do not appear in the beginning lines that are deleted by the ink bracket, but only the remaining text. This is good evidence that the ink markers were added no earlier to the deletion, possibly together in the first round of revision.

Table 11 (right): Revisions Suggested by the Numerical Labels in the Entry “Bream” (*fang* 魴)²¹⁶

Original Draft with Numerical Labels	Suggested Order for the Revision	Printed Edition
<i>Erya</i> 爾雅 (1)	<i>Erya</i> (1)	<i>Erya</i>
Lu Ji 陸璣 (3)	Guo Pu (2)	Guo Pu
Guo Pu 郭璞 (2)	Lu Ji (3)	Lu Ji
Lu Dian 陸佃 (5)		Luo Yuan 羅願
<i>Yangsheng jing</i> 養生經 (6)	Lu Dian (5)	Lu Dian
Kong Yingda 孔穎達 (7)	<i>Yangsheng jing</i> (6)	<i>Yangsheng jing</i>
Mr. Lü 呂氏 (8)	Kong Yingda (7)	Kong Yingda
Author's Note (10)	Mr. Lü (8)	Mr. Lü
<i>Mingwu jie</i> 名物解 (9)	<i>Mingwu jie</i> (9)	<i>Mingwu jie</i>
	Author's Note (10)	Author's Note

Figure 13: (left): Details of the entry “Bream” (*fang* 魴) in *Illustrated Notes*²¹⁷

For a few draft entries that were supplemented or clear-copied in later rounds of revision, the source titles were revised directly in larger fonts as in the final print. In such instances, when Xu Ding used numerical labels to manage the references, he simply marked the numbers beside the enlarged titles (Figure 14). This larger font thus indicates a similar function as the title box, which helps to structuralize the text as a citation index. Such evidence sheds important light on the possible origin of the enlarged

²¹⁶ Xu Ding, *Maoshi mingwu tushuo* (draft), juan 6: 1a; Xu Ding, *Maoshi mingwu tushuo*, juan 4: 1a.

²¹⁷ Xu Ding, *Maoshi mingwu tushuo* (draft), juan 6: 1a.

titles in the final print, which, apart from being a source marker for the readers as explicitly claimed, also captures the trace of source management in the author's own revision process.

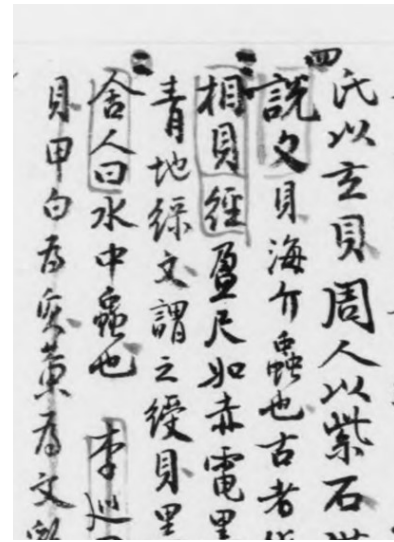
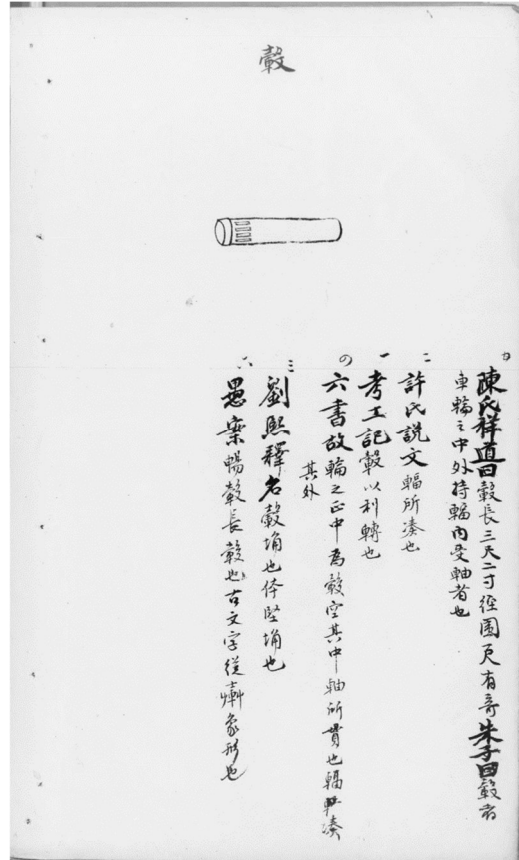


Figure 14 (left): Entry of "Nave" (gu 轂) in the draft manuscript²¹⁸

Figure 15 (right): Details of the entry "Clam" (bei 貝) in the draft manuscript.²¹⁹ (Noted the red-ink traces behind the black-ink numbers. For instance, for the quotation of [Nei] Sheren [內]舍人, which labeled as the second in black ink, was formerly marked as the fourth in red ink.)

Within the 261 draft entries on the plants and animals, only a minority of 29 comes with numerical labels. However, this is largely due to the incomplete status of many entries, while for the most advanced chapter on the fish, as many as 17 (89.5%) of its 19 entries are marked. This high ratio indicates

²¹⁸ Note that the source titles in the first two lines—the original draft—were first written in smaller characters and then revised into bigger ones, possibly during the same round of revision when Xu Ding supplemented the entry with the five new sources. See, Xu Ding, *Maoshi mingwu tushuo (draft)*, juan 10, "Cheqi" 車旂, 2b.

²¹⁹ See, Xu Ding, *Maoshi mingwu tushuo (draft)*, juan 6: 9a.

the number-based reordering as a rather standard operation in the late stage of the revision process. Due to the lack of similar manuscripts, it is impossible to figure out how representative Xu Ding's method was among the works of erudite learning—whether a similar process was also used for the rest *mingwu* monographs with individualized source markers. Nevertheless, the effectiveness of this method in Xu Ding's individual case well reflects the general referential nature of erudite learning identified in the previous sections. Note that the numerical labeling would be less meaningful for a deductive entry, where the ordering of textual evidence is largely determined by the intrinsic logic of reasoning. The prevalent use of this method for structural adjustment thus confirms the relative independence of the quotation blocks, which can be moved around and rearranged in a modular manner. In one extreme case (*Figure 15*), the process even happened twice, each round with a new set of numerical labels assigned to the sources. In this sense, the manuscript page by itself becomes an excellent embodiment for the referential surface, where a multiplicity of sources associates one another rather freely in non-selective manner.

More impressively, the illustration also participated in this referential network in its own way. In his self-preface, Xu Ding addressed his meticulousness in rendering the illustrated entries, that he “always conducted verifications (*shiyān* 試驗) before drawing and writing.”²²⁰ Locally renowned as a capable painter, Xu certainly had enough skills to paint from life, as shown from the vivid rendering of *mingwu* images in the draft manuscript (e.g., *Figure 19*, *Figure 21*).²²¹ However, the inclusion of intaglio designs—a style typical for woodblock illustrations—in not only the final print but also the manuscript (*Figure 16*, *Figure 17*) betrays an alterative reality that some of the image designs must have been borrowed from other prints.²²² In fact, the 3-juan illustrations of *Bencao gangmu* by Lu Zhe 陸詰 (fl. mid-

²²⁰ Xu Ding, *Maoshi mingwu tushuo*, “Preface,” 2a.

²²¹ As suggested by Wuxian zhi 吳縣志, when Cao Xiuxian 曹秀先 (1708-1784) came to examine the students in Kunshan 昆山, Xu Ding ranked first in all the fields of poetry, ancient prose, exam essay, calligraphy, and painting, making him “a prominent name of the time.” See, Cao Yunyuan, 曹允源 1933, juan 75a: 30b. 曹地山尚書校士玉峰，鼎詩古制藝書畫皆列第一，名噪一時。

²²² For the use of intaglio print, or the style of “ink ground, white line” (*mo di bai xian* 墨底白線) in the illustration of *materia medica*, see, Li Ang 李昂 and Chen Yue 陳悅, “Zhongwen guji zhong zhiwu tuxiang biaoda tedian chuyi,” 中文古籍中植物圖像表達特點芻議 *Ziran kexueshi yanjiu* 自然科學史研究 43, no. 2 (2015): 177–78.

17th c.) constitute a predominant visual source for *Illustrated Notes*, and the coverage is far greater than one may first assume.²²³ For instance, among the 50 complete illustrations in the “Trees” chapter of the draft manuscript, 38 (76%) suggest an apparent origin from Lu Zhe’s illustrations; for the “Birds” chapter, the ratio is even higher (93%).²²⁴ Here, it is noteworthy that pictorial reference not only includes the less common pharmaceutical objects, but also the most familiar animals and plants, such as the swine, the goat, the lotus, and so on. As shown in *Figure 16* to *Figure 18*, the faithful imitation of these common creatures makes it clear that Xu had little motivation to paint from life when visual sources were at hand. In particular, for a few vivid illustrations in the manuscript where Xu demonstrated a painting skill that was not easily reproducible in woodblock printing, they were also retouched from *Bencao gangmu* rather than based on a direct observation (*Figure 19* to *Figure 22*). With the source images and Xu Ding’s illustrations placed side by side, what impresses us is not a skill of life painting but an excellence in imitation, which, comparable to the tracing of painting manuals, was a basic training for early modern painters.²²⁵

²²³ Lu Zhe’s illustrations, as a substantial revision of the original images, first appeared in the 1640 edition of *Bencao gangmu*. Due to Covid-19 reasons, I did not get an access to this rare edition, and will use its nearest reprint—the 1655 Taihetang 太和堂 edition for analysis. In the high-Qing era, most of the *Bencao gangmu* reprints were based on these two editions. Correspondingly, Lu Zhe’s illustrations also replaced the original ones and reached a wide circulation. See, Wu Jialin 鄔家林 and Zheng Jinsheng 鄭金生, “*Bencao gangmu* tuban de taolun,” 《本草綱目》圖版的討論 *Zhongyao tongbao* 中藥通報, no. 4 (1981): 9; He Guangyi 何廣益, Zhang Shihan 張詩吟, and Li Liangsong 李良松, “*Bencao gangmu* mingqing banben shuyao,” 《本草綱目》明清版本述要 *Tianjin zhongyiyao* 天津中醫藥 34, no. 7 (2017): 462–63.

²²⁴ The draft chapter on the trees includes 51 illustrations in total. However, one of them is severely damaged and is not sufficient to make the comparison.

²²⁵ See, e.g., J. P. Park, *Art by the Book: Painting Manuals and the Leisure Life in Late Ming China* (Seattle: University of Washington Press, 2012), ch. 1; for plant drawing in specific, also see, Georges Métaillé, *Science and Civilisation in China, Vol. 6, Biology and Biological Technology, Part IV: Traditional Botany: An Ethnobotanical Approach* (Cambridge: Cambridge University Press, 2015), 222–25. For the prevalence of visual reference in technical and pharmaceutical illustrations due to a general decline of the representational ideal in Ming-Qing painting, see, Peter Golas, *Picturing Technology in China: From Earliest Times to the Nineteenth Century* (Hong Kong: Hong Kong University Press, 2015), 87–95; Roel Sterckx 胡司德, “*Chatu de juxian: cong Guo Pu dao Li Shizhen de dongwu chatu*,” 插圖的局限：從郭璞到李時珍的動物插圖 in *Xingxiang zhongyi: Zhongyi lishi tuxiang yanjiu* 形象中醫：中醫歷史圖像研究, ed. Wang Shumin, 王淑民 and Vivienne Lo, 羅維前 (Beijing: Renmin weisheng chubanshe, 2007), 75–77.



Figure 16 (left): Illustration of “Swine” (*shi* 豕) in the final print²²⁶

Figure 17 (middle): Illustration of “Zong ba” 縱肥 (One-Year-Old and Two-Year-Old Swine) in the draft manuscript²²⁷

Figure 18 (right): Illustration of “Swine” in *Bencao gangmu*²²⁸ (Noted the white area on the back of the swine. Possibly caused by an uneven application of ink, the light shade on the Bencao gangmu illustration was faithfully transplanted to Maoshi mingwu tushuo.)



Figure 19 (left): Illustration of “Chun” 鶉 (Quail) in the draft manuscript²²⁹

Figure 20 (right): Illustration of “Chun” in *Bencao gangmu*²³⁰ (Noted Xu Ding’s artful use of dry-ink strokes for rendering the shade at the bird’s neck.)

²²⁶ Xu Ding, *Maoshi mingwu tushuo* (draft), juan 3: 13a.

²²⁷ Xu Ding, *Maoshi mingwu tushuo* (draft), juan 2: 4b.

²²⁸ Li Shizhen, *Bencao gangmu*, illustration section, juan 3: 48a.

²²⁹ Xu Ding, *Maoshi mingwu tushuo* (draft), juan 1: 6a.

²³⁰ Li Shizhen, *Bencao gangmu*, illustration section, juan 3: 42a.



Figure 21 (left): Illustration of “Herbaceous Peony” (*shaoyao* 芍藥) in the draft manuscript²³¹

Figure 22 (right): Illustration of “Herbaceous Peony” (*shaoyao* 芍藥) in *Bencao gangmu*²³² (Noted Xu Ding’s ink wash on the flower petals.)

In some other instances, Xu made minor ad-hoc adjustments to the source images to better serve his own purpose. For example, in *Bencao gangmu*, the illustration of the “Vulture” depicts a scene of preying where the vulture seizes a struggling hare (Figure 23). In the manuscript, Xu deleted both the hare and the background, extracting the sole image of the vulture so as to highlight this *mingwu* object (Figure 24). In another entry of “Xian” 獫, the textual description explains it as the long-snout hunting dog. Noticing the lack of a direct correspondence in *Bencao gangmu*, Xu borrowed the image of “Dog” (*gou* 狗) and manneristically extended its snout to fit his entry (Figure 25, Figure 26). In a similar fashion, for the entry of “Wild Vine” (*lian* 藟), Xu copied the *Bencao ganmu* illustration directly in his manuscript, where the plant grows upward. However, with a consideration that in the line of *Maoshi*, the plant was mentioned as “the wild vine *spreads over* the field” (*lian man yu ye* 藟蔓於野)—a horizontal

²³¹ Xu Ding, *Maoshi mingwu tushuo* (draft), juan 3: 23a.

²³² Li Shizhen, *Bencao gangmu*, illustration section, juan 1: 23b.

growth, Xu added a piece of marginalia on the manuscript to note this problem and rotated the illustration by 90 degree in the final print (*Figure 27 to Figure 29*).²³³ Such adjustments remind us the creative editing of pictorial components in the early modern printed illustrations.²³⁴ Comparable to the quotation of textual evidence into a new context, these ad-hoc adjustments also highlights the referential nature of the illustrations in Xu Ding's work.

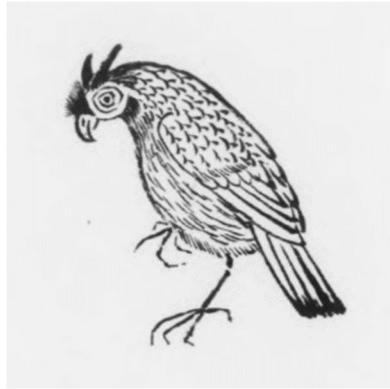


Figure 23 (left): Illustration of “Vulture” (*diao 鵂*) in *Bencao gangmu*²³⁵



Figure 24 (right): Illustration of “Vulture” (*chun 鶻*) in the draft manuscript²³⁶

²³³ Zheng Xuan, *Maoshi zhuan jian*, 157.

²³⁴ See, e.g., Shen Xin 沈歆, “Mingdai jigū huapu de línfāng móshì yǔ fēnbēn gōngnéng: yǐ *Gushi huapu weili*,” 明代集古畫譜的臨仿模式與粉本功能——以《顧氏畫譜》為中心 *Meiyuan 美苑*, no. 3 (2011): 75–79; Lai Yu-chih 賴毓芝, “Qingong dui ouzhou ziran shi tuxiang de zaizhi: yi Qianlong chao *Shoupu weili*,” 清宮對歐洲自然史圖像的再製：以乾隆朝《獸譜》為例 *Zhongyang yanjiuyuan jindaishi yanjiusuo jikan* 中央研究院近代史研究所集刊 80 (2013): 21–38.

²³⁵ Li Shizhen, *Bencao gangmu*, illustration section, juan 3: 46b.

²³⁶ Xu Ding, *Maoshi mingwu tushuo (draft)*, juan 1: 13a.



Figure 25 (left): Illustration of “Long-Snout Dog” (xian 獫狁) in the draft manuscript²³⁷

Figure 26 (right): Illustration of “Dog” (gou 狗) in *Bencao gangmu*²³⁸



Figure 27 (left): Illustration of “Black Wild Vine” (wu lianmu 烏藨母) in *Bencao gangmu*

Figure 28 (middle): Illustration of “Wild Vine” (lian 藨) in the draft manuscript²³⁹ (Noted the marginalia beside the illustration, which goes as, “This illustration should be rendered horizontally, for the vine spreads over the field.”)

Figure 29 (right): Illustration of “Wild Vine” (lian) in the final print of *Maoshi mingwu tushuo*²⁴⁰

²³⁷ Xu Ding, *Maoshi mingwu tushuo (draft)*, juan 2: 9b.

²³⁸ Li Shizhen, *Bencao gangmu*, illustration section, juan 3: 48a.

²³⁹ Xu Ding, *Maoshi mingwu tushuo (draft)*, juan 3: 24b.

²⁴⁰ Xu Ding, *Maoshi mingwu tushuo*, juan 6: 6b.

In the remaining part of this section, I will use a specific case—the entry of the *xu* 蕒 grass (Figure 11, Figure 30) to demonstrate how the intricate textual and the visual associations jointly created a referential surface in Xu Ding’s identification of the plant. This entry is featured by two aspects: First, it involves substantial revisions in both the textual description and the illustration. Second, it also suggests an epistemic change in the author’s identification of the plant. The case thus offers a good example for revealing the backstage negotiations in the referential construction of a *mingwu* entry despite its succinctness.

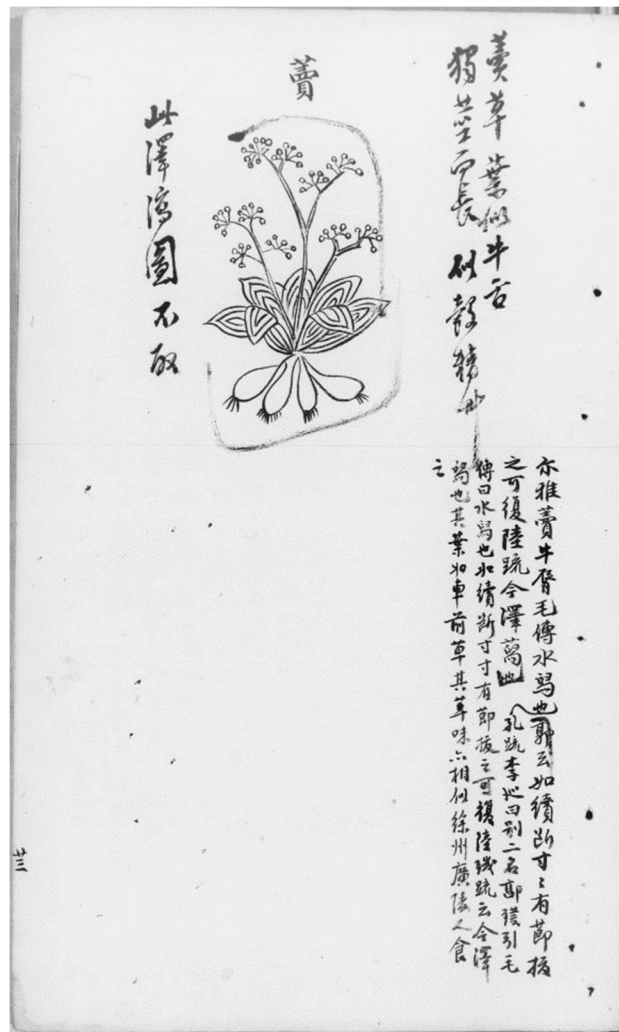


Figure 30: Entry of “Xu” 蕒 in the draft manuscript²⁴¹

²⁴¹ Xu Ding, *Maoshi mingwu tushuo (draft)*, juan 3: 23a.

A close observation of the draft manuscript reveals two sections in the textual description. The beginning one and half lines, with slightly larger font and a better controlled calligraphy, should be the original draft. The smaller and more casually written characters of the other lines, together with the ink marks on the original draft, belong to a later round of revision. This revised text, still bearing substantial difference from the final print, indicates yet a second round of revision. These three textual versions, mapping out a diachronic development of Xu Ding's ideas, lays the basis for our epistemic reconstruction.

The original draft is particularly terse, which is a display of four references from authoritative texts:

尔雅：蕒，牛脣。

Erya: “*Xu*,” the “ox lip.”

毛傳：水鳥也。

The *Mao Commentary*: It is the “water-*xi*.”

郭云：如續斷，寸寸有節，
拔之可復。

Guo [Pu] says: Similar to the “teasel root,” it has joints every inch, which can recover when [a section] is pulled out.

陸疏：今澤瀉也。

Lu [Ji's] commentary: It is today's “marsh-*xi*.”²⁴²

The first reference was not that meaningful, since the term “ox lip” was as puzzling as “*xu*.” The second reference was also a vague one, since “water-*xi*” was not a commonly used name. The third offered a detailed description to one of its biological traits, yet this was still not enough for one to identify the plant. But the final quote was straightforward. The “marsh-*xi*,” more often written as *zexie* 澤瀉, was a widely grown water plant—the alisma. And this is also the position Xu Ding took in the original draft, as he quoted the illustration of “Alisma” (*zexie* 澤瀉) from *Bencao gangmu* (Figure 31).²⁴³ In fact, this was also

²⁴² Xu Ding, *Maoshi mingwu tushuo* (draft), juan 3: 23a.

²⁴³ Unlike many of the newly rendered images, the illustration of the alisma in *Bencao gangmu* was a direct copy from the Song pharmacopoeia *Zhenglei bencao* 證類本草. However, considering the predominance of *Bencao gangmu* as the visual source for *Maoshi mingwu tushuo*, we have sufficient reason to believe that Xu Ding quoted the illustration from *Bencao gangmu* rather than earlier works. See, Tang Shenwei 唐慎微, *Chongxiu Zhenghe jingshi zhenglei beiyong bencao* 重修政和經史證類備用本草, Shanghai Library, no.824305-26 (Ming Dynasty), juan 6: 47a.

the dominant interpretation of the mid-Qing philologists.²⁴⁴ The name “water-*xi*,” being close to the “marsh-*xi*,” was thus implied as an alternative name for the alisma. In this version, the only inconsistency came from Guo Pu’s line. For the alisma did not have inch-by-inch, recoverable joints. However, since the line did not specify what the plant was, one could simply regard it as irrelevant.



Figure 31: Half-page of *Bencao gangmu* illustrations, with “Alisma” (*zexie* 澤瀉) on the top right, and “Oval-Leafed Pondweed” (*hucao* 胡草) on the bottom right²⁴⁵

²⁴⁴ See, e.g., Shao Jinhan 邵晉涵, *Erya zhengyi* 爾雅正義 (Beijing: Zhonghua shuju, 2017), 760–61; Hao Yixing 郝懿行, *Hao Yixing ji* 郝懿行集 (Jinan: Qilu shushe, 2010), 4: 3513–3514; Jiao Xun 焦循, “Maoshi caomu niaoshou chongyu shi,” 毛詩草木鳥獸蟲魚釋 in *Xuxiu siku quanshu*, 66: 735–736.

²⁴⁵ Li Shizhen, *Bencao gangmu*, illustration section, juan 2: 11a.

However, things began to complicate in the revised draft, where Xu offered a more complete quotation of Guo Pu and Lu Ji from Kong Yingda's commentary:

尔雅：蕒，牛脣。

Erya: “*Xu*,” the “ox lip.”

毛傳：水鳥也。

The *Mao Commentary*: It is the “water-*xi*.”

孔疏：

Kong [Yingda's] commentary:

李巡曰：別二名。

Li Xun says: [Ox lip] is an alternative name [for *xu*].

郭璞引毛傳曰：水鳥也。如續斷，寸寸有節，拔之可復。

Quoting the *Mao Commentary*, Guo Pu says: It is the water-*xi*. Similar to the “teasel root,” it has joints inch by inch, which can recover when [a section] is pulled out.

陸疏云：今澤蔦也。其葉如車前草，其草味亦相似。徐州廣陵人食之。

Lu [Ji's] commentary says: It is today's “marsh-*xi*.” Its leaves are similar to the Plantago, and so is the taste. People from Guangling in Xuzhou eat it.²⁴⁶

Although the references of Guo and Lu came from the same lines, these longer quotes delivered quite a different message from the previous version. On the one hand, Lu Ji's more specific description of the biological traits confirmed that his marsh-*xi* was indeed referring to the alisma. On the other hand, with the judgment “*shuixi ye*” 水鳥也 (underlined) added to the beginning of Guo Pu's quote, one came to realize that he was referring to nothing but the water-*xi* mentioned in the Mao commentary, yet the alisma did not fit for his description. Therefore, if Guo was correct, the water-*xi* should be a different plant from the marsh-*xi*. When this was unspecified in the original draft, one may well group the two names together. But now, the incompatible description cast a much stronger doubt to Lu Ji's alisma thesis, where Xu Ding had to take this stance.

Although no judgment was made in the textual entry, the marginalia beside the illustration revealed his choice. On the right side, Xu Ding added a new description of the Xu grass, suggesting that it

²⁴⁶ Xu Ding, *Maoshi mingwu tushuo (draft)*, juan 3: 23a.

should have a “single and long stem” (*du jing er chang* 獨莖而長). Originating from Su Song’s 蘇頌 (1020-1101) *Bencao tujing* 本草圖經 (Illustrated pharmacopoeia), this description marked an apparent dissatisfaction with the current illustration.²⁴⁷ The message was more straightforward on the left side: “This is an illustration of the marsh-*xi*. Not to be adopted.” (*ci zexie tu, buqu* 此澤瀉圖, 不取) The illustration was declined not for its inaccuracy, but for depicting the *wrong object*. Judging from the calligraphy, these two marginalia around the illustration must have been written together. It remains debatable whether they were added during the same round of revision with the textual entry, but for sure not earlier. With the illustration encircled for deletion, such revision notes marked Xu Ding’s abandonment the *alisma* thesis. From the original draft to the revised draft, the diachronic traces of this manuscript page depict an epistemic shift in the identification of the plant.

If the marsh-*xi* interpretation by Lu Ji was to be abandoned, the only way out was to side with Guo Pu and draw an equivalence between the water-*xi* and the Xu plant. This became the new aim for Xu Ding in the final print. Besides the quotations from *Erya* and Guo Pu’s commentary, which I will not reiterate here, Xu came up with new evidence from Xing Bing’s 邢昺 (932-1010) *Erya* commentary and another quote from the *Erya* text:

邢昺疏：李巡曰：“別二名。”陸璣以為今澤蔞也。郭氏所不取。

愚按：郭璞不取蔞為澤瀞者，以《釋草》又云“蔞，蔞”故也。“蔞，蔞”，郭云：“今澤蔞也。”

Xing Bing’s Commentary: Li Xun says: “[Ox lip] is an alternative name [for *xu*].” Lu Ji regarded it as today’s marsh-*xi*, yet this was not agreed by Guo [Pu].

Author’s Note: The reason that Guo Pu did not take “Xu” as the marsh-*xi* is because “Explanations on the Grass” also says, “*Yu* [refers to] *xi*.” [For] “*Yu* [refers to] *xi*,” Guo [Pu] notes, “This is today’s marsh-*xi*.”²⁴⁸

²⁴⁷ Note that in *Bencao tujing*, this was still a description for the Marsh-Xi. The beginning two characters of the note, “*xu cao*” 蔞草 (the Xu grass), were added by Xu Ding himself. See, Su Song 蘇頌, *Bencao tujing* 本草圖經 (Beijing: Xueyuan chubanshe, 2017), 85.

²⁴⁸ Xu Ding, *Maoshi mingwu tushuo*, juan 6: 5a.

The first quotation, confirming the inconsistency between Lu and Guo, offered a good summary for what we have observed in the textual description of the revised draft. From here, Xu Ding took a step further to rationalize Guo Pu's alternative reading. In the author's note, he made a keen observation that in the chapter "Explanations on the Grass" of *Erya*, there was another grass name *yu* 蒲 noted by Guo as the alisma. As we have already encountered in Feng Fujing's analysis of the *jujiu* bird, here Xu was referring to an important feature in the compilation of *Erya*, a book organized by synonyms: If a specific *mingwu* object had multiple names, they were most likely to appear under a single entry (though this was not always the case). Therefore, given that in *Erya*, there was already another entry referring to the marsh-*xi*, the entry of *xu*, interpreted as the water-*xi*, had a high possibility to denote something else.²⁴⁹ This internal evidence from *Erya* enhanced the likeliness of Guo Pu's interpretation, and justified why it may serve as a better reading than the one by Lu Ji. From this vantage point, Xu Ding offers a further explanation regarding how the two plants were mixed up later:

Based on *Bencao*, Xing [Bing] wrote [the "marsh-*xi*"] as "marsh-*xie*." It is also called the "water-*xie*," "*ji-xie*," "throned taro," or "grand-*xie*"—all of these are alternative names for the alisma. Since there is the name "water-*xi*" in the *Mao Commentary*, people frequently confuse [the *xu* plant] with the alisma. In fact, this is wrong.

邢氏依本草作“澤瀉”，一名水瀉，一名及瀉，一名芒芋，一名鴻瀉，此皆澤瀉別名也。人多以毛傳有“水蔞”之名，故混為澤瀉。其實非也。²⁵⁰

According to this smart reasoning, the confusion was caused by a coincidence in the alternative name of the two different plants: water-*xie* 水瀉 for the alisma, and water-*xi* 水蔞 for the *xu*-grass. Till here, Xu Ding had completed the full round of his epistemic shift. In the original draft, he interpreted "*xu*" as the marsh-*xi*, or the alisma, and showed an inclination to take the water-*xi* as the same plant. In the revised draft, he realized a textual inconsistency between the marsh-*xi* and the water-*xi* from Kong Yingda's

²⁴⁹ Xu Ding, *Maoshi mingwu tushuo*, juan 6: 5a. Xu was not the first to make this observation. Both the Song scholar Yan Can 嚴粲 (*jinshi* 1223) and the early-Qing scholar Chen Qiyuan had mentioned the same point. See, Yan Can 嚴粲, *Shi ji* 詩緝 (Beijing: Zhonghua shuju, 2020), 1: 275; Chen Qiyuan 陳啟源, *Maoshi jigu bian* 毛詩稽古編, Zhonghua zaizao shanben series (Beijing: Guojia tushuguan chubanshe, 2009), 95a-b.

²⁵⁰ Xu Ding, *Maoshi mingwu tushuo*, juan 6: 5a

commentary, which led him to give up the alisma interpretation. In the final print, he made a further distinction of these two plant names through new evidence from *Erya*, and formally identified the *xu*-grass as the water-*xi*. As long as one shared a similar faith in the epistemic authority of *Erya* and Guo Pu's commentary, this textual reasoning would remain a powerful one, where the “*xu*-grass”-“ox lip”-“water *xi*” was firmly differentiated from the alisma.²⁵¹

Had *Illustrated Notes* been a purely textual work like the other *mingwu* monographs, this would have been a good ending of the story. Like Feng Fujing's decline of the two *jujiu* theses, this would have been another case on the epistemic efficacy of erudite learning. However, this was not enough for Xu Ding's illustrated work, which still called for a proper image. In order to complete the task, a vague description like “having joints inch by inch” was not enough—he had to pin down the water-*xi* to a specific kind of plant. And it is here that he made the most astonishing move. The new illustration (*Figure 30*), with two peduncles stretching up, fits into neither Guo Pu's inch-by-inch joints nor Su Song's single and long stem. What was this illustration referring to? Given *Bencao gangmu* as the predominant visual source, the first reaction would be a check in the work. The answer appears quickly—it comes from the illustration of “Hucao” 薺草 (oval-leafed pondweed), which follows right after the alisma (*Figure 31*). With three leaves on the left, two on the right, two peduncles stretching up, a few round buds on the right peduncle and star-like flowers on the left one, the origin of the image cannot be mistaken. The neighboring position of the two illustrations also strengthens our confidence.

However, this attribution of the oval-leafed pondweed to the water-*xi* was completely without textual support. None of the previous scholars had made an association like this. Had there been any, Xu

²⁵¹ Admittedly, one does not have to grant Guo Pu the high authority. Another line of reasoning, as shared by the high-Qing philologists, would precisely start from the same alias water-*xi* (*xie*) to argue for an equivalence between the alisma and the *xu* grass. Correspondingly, Guo Pu's inconsistent description was taken as an idiosyncratic account, and, for instance, attributed by Hao Yixing 郝懿行 (1757-1825) to another water plant. That said, Xu Ding made out a good case on its own. See, e.g., Hao Yixing 郝懿行, “*Erya yishu*,” 爾雅義疏 in *Hao Yixing ji*, 4: 3501, 3513-14; Shao Jinhan, *Erya zhengyi*, 2: 760-61; Hu Chenggong 胡承珙, *Maoshi houjian* 毛詩後箋 (Hefei: Huangshan shushe, 1999), 1: 489-90.

would have certainly mentioned it in his textual entry. Devoid of textual evidence, the most possible explanation would be a “lexical affinity”—the neighboring position of the alisma and the pondweed in *Bencao gangmu*. In this *material medica*, both the illustrations and the textual entries are organized according to Li Shizhen’s classification system, where the adjacency of the two plants suggests a taxonomic affinity. This is also corroborated from the succinct textual entry of the pondweed in the work, which is described as “growing by the water, with leaves similar to the alisma but smaller.”²⁵² Did Xu Ding get his inspiration from the keywords “water” (*shui* 水) and “alisma” (*zexie* 澤瀉) here, which seemed to make a good connection with the name “water-*xi*” (*shuixie* 水蔦)? Even if this was true, Xu Ding would never make an explicit claim. For such a word split, reminding us the correlative etymologies in Chapter One, would trivialize the serious textual identification that he took so long to establish. Given the lack of direct evidence, the underlying logic must be not far from this: Considering the nomenclative affinity of the water-*xi* and the marsh-*xi*, Xu sought for a plant that was not the alisma yet close to it. As a result, he checked the neighbors of the “alisma” in *Bencao gangmu*, and found the “oval-leafed pondweed” to be the most relevant.

This is a striking result. Upon realizing the inconsistencies in the transmitted text, Xu Ding had taken great effort to demonstrate that the *xu*-grass was *not* the alisma but had its own features. However, when drawing the visual reference, he started from the alisma again and simply aligned the *xu*-grass with an arbitrary image next to it. The fact that the grass was not identified according to its own features but its affinity to the alisma highlighted a derived nature of the former to the latter. And in this way, the textual plurality repressed by Xu’s meticulous reasoning reappeared in the form of a visual juxtaposition. If the number-ordered sources on the draft page embodied the referential surface for the encyclopedic textual entries, here it was the illustration page of *Bencao gangmu* that fulfilled the role, whose formatting logic overwhelmed any authoritative text. Through the long journey of repeated revisions, Xu Ding made a substantial change in his identification of the *xu*-grass. Yet this entire epistemic move had little to do with

²⁵² Li Shizhen, *Bencao gangmu*, juan 19: 4a. 生水旁，葉似澤瀉而小。

the natural world but merely a source-driven switch from the upper column to the lower column. Confined in an intricate textual-visual network of negotiating pluralities, the editing history of the *xu-grass* was a surface reference *par excellence*.

In this chapter, I have used both individual cases and quantitative analyses to delineate “erudite learning” as an important stage in the *mingwu* study of *Shi*, which was initiated in the late-Ming and lasted into the 18th century. Encyclopedic in the scope of inquiry and extensive in the source of quotation, erudite learning was the most influential paradigm of the field before the high tide of evidential learning in the mid-Qing. Comparing to earlier *mingwu* studies in the middle period, the greatly expanded referential basis not only offered richer description for the *mingwu* compounds, but also added a critical vantage point for textual analysis. That said, the era witnessed a general outpacing in the collection over the analysis of sources, when the encyclopedic entries frequently involved an overflow of inconsistent references that lacked a fine judgment. With a plurality of heterogeneous quotations and contending interpretations juxtaposing to each other, this overflow of sources—both textual and visual—jointly created a plain surface of referential network that defined the basic pattern of erudite learning. It is from this surface that we will set off to explore into the more refined hidden structures discovered by the mid-Qing evidential scholars. Chapters Three and Four will focus on the philological findings closer to the aspect of “*ming*,” while Chapters Five and Six will turn to the material findings of “*wu*.”

Chapter Three: Philological Textures

Scholars arguing for an early origin of evidential studies would be glad to see the broad source coverage and dedicated textual studies in the erudite learning of the previous chapter. In his now-classic study of the Ming evidential learning, Lin Ching-chang investigated eight key figures from Yang Shen 楊慎 (1488-1559) to Fang Yizhi 方以智 (1611-1671) to highlight the evidential achievements of the Ming scholars and their indispensable preparation for Qing learning.²⁵³ For earlier attributions, Qi Yongxiang also emphasizes the significance of Song evidential achievements for Qing learning, which spanned the paleographical, phonological, philological, and bibliographical aspects;²⁵⁴ Sun Qinshan further includes the Han Old-Text school and the Han-Tang commentarial studies into the field of evidential learning, tracing its origin to the pre-Qin the idea of “no evidence, no credence” (*wu zheng bu xin* 無徵不信).²⁵⁵ Indeed, as an umbrella term, the origin of *kaoju* could be traced back to as early as the critical reading of transmitted text.

That said, in the above claims of intellectual continuity, scholars are mainly focusing on the *field* of inquiries. The Song brothers Xu Xuan 徐鉉 (916-991) and Xu Kai 徐鉉 (920-974) were predecessors of paleography thanks to their works on *Shuowen jiezi*; Yang Shen was a forerunner of the Qing phonologists since he also had a series of investigations on ancient sounds. However, just as shown from the quantitative analysis in Chapter Two, even for the same textual topics in the *mingwu* monographs, a significant structural difference is still discernable between late-Ming erudite learning and mid-Qing evidential studies. This is consistent with Nathan Vedal’s recent study on early modern Chinese phonology, which witnesses “a shift in methods of learning and conceptions of disciplinary boundaries” despite the thematic continuity.²⁵⁶ Such evidence highlights a necessity to go beyond the topics of

²⁵³ Lin Ching-chang, *Mingdai kaoju xue yanjiu*, chs. 3–10.

²⁵⁴ Qi Yongxiang, *Qianjia kaoju xue yanjiu*, 10–11.

²⁵⁵ Sun Qinshan 孫欽善, *Qingdai kaoju xue* 清代考據學 (Beijing: Zhonghua shuju, 2018), 14–15.

²⁵⁶ Vedal, *The Culture of Language in Ming China*, 217.

inquiries and explore the varied analytical methods and epistemological patterns behind them. In this chapter, I will focus on the newly developed philological tools for textual analysis, including the study of ancient phonology, general patterns, binomes, paleography, and bronze inscriptions. Thanks to these new analytical techniques, the mid-Qing scholars shifted their focus from the encyclopedic referential surface to well-ordered, localized patterns of the philological inwardness.

“In the Days of the First, Blowing Freeze”

Chapter Two paid a special attention to those monographs dedicated exclusively to *mingwu* entries. This choice is mainly for a comparability in the quantitative analysis. For the study of *Shi*, *mingwu* discussions certainly appeared in a much broader range of scholarly writings, such as classical commentaries, brush-notes, and individual treatises, as well as more specialized philological writings. To start with, I will use two philological entries by Yang Shen (1488-1559) and Ma Ruichen 馬瑞辰 (1782-1853) to offer a snapshot of what had changed in the three centuries from the mid-Ming to the mid Qing. Yang, renowned for his textual erudition, is widely regarded as a leading pioneer of evidential learning. Ma, although not a top-tier evidential scholar, had the advantage of a later comer. His *Maoshi zhuanjian tongshi* 毛詩傳箋通釋 (Comprehensive exegeses on the *Maoshi* commentaries, henceforth *Comprehensive Exegeses*) was one of the best syntheses of mid-Qing philological findings on *Shi*. The philological problem comes from the beginning of the ode “Seventh Month” (Qi Yue 七月, *MS* #154), which depicts the freezing weather of the winter days:

一之日觱發	In the days of the first, freezing blow;
二之日栗烈	In the days of the second, chilling air. ²⁵⁷

²⁵⁷ Zheng Xuan, *Maoshi zhuanjian*, 191.

Here, my translation follows the Mao commentary, which interpreted the term *bifa* 鬲發 as “freezing blow” (*feng han ye* 風寒也). Despite the naturalness of this interpretation in the winter context, it became harder to explain why the term had such a meaning. Neither Kong Yingda’s nor Zhu Xi’s commentary offered any further explanation. This became the background for Yang Shen’s inquiry, who critiqued the more recent scholars as simply reciting the Mao without knowing the reason. For Yang, this was nothing but “a superficial understanding (*pifu zhi jian* 皮膚之見) following the others.”²⁵⁸ Instead, according to Yang, the key to the line lay on the *bi* 鬲 character, a special *mingwu* term that referred to a Tartar pipe:

Bi is a pipe instrument of the Qiang people. It has a gloomy sound. When the freezing wind blows suddenly in the winter, its sound is similar. This is what Zhuangzi called the “piping of the earth,” Song Yu called the “earthy cave,” and Yin Zhongwen wrote as “clear piping startles the crystal tune; lonely ravine taps the void hollow.” Yet nothing is comparable to the folk saying, “Twenty-seven is three nines. Tartar Pipe blows the fence line.” This is precisely suggesting that the wind, blowing over the fence, makes a sound like the Tartar Pipe, which is consistent with the poetic ideal. Today its folk name is the “Head Pipe,” and in *Compendium of Music* it is called the “Wind Pipe.” These offer further evidence to it.

鬲，羌人吹角也，其聲悲慘。冬日寒風驟發，其聲似之。莊子所謂“地籟”，宋玉所謂“土囊”，殷仲文詩“爽籟驚幽律，哀壑叩虛牝”是也。總不若諺云“三九二十七，籬頭吹鬲栗”，正謂風吹籬落，其聲似鬲栗，與詩意合。今俗名頭管，《樂書》名風管，又可證焉。²⁵⁹

The definition of *bi* as the Tartar pipe came from the *Shuowen*.²⁶⁰ However, the book only mentioned the gloomy sound of the instrument, but nothing about its relevance to the wind. It was Yang Shen who made this crucial association—an analogy between the pipe sound and the winter blow. To further support his association, Yang cited three early references as textual evidence: Zhuangzi’s “piping of the earth” in the “Free Wandering” (*Xiaoyao you* 逍遙遊) chapter, and Song Yu’s (ca. 298-222) “earthy cave” in the “Rhapsody of Wind” (*Feng fu* 風賦), both of which referred to the vibrant sound of wind when passing

²⁵⁸ Yang Shen 楊慎, “Danqian zonglu,” 丹鉛總錄 in *Yingyin Wenyuange siku quanshu*, 855: juan 16: 7a.

²⁵⁹ Yang Shen 楊慎, “Sheng'an jingshuo,” 升庵經說 in *Yang Sheng'an congshu* 楊升庵叢書 (Chengdu: Tiandi chubanshe, 2002), 1: 162–63.

²⁶⁰ This textual origin is explicitly mentioned in *Danqian zonglu* 丹鉛總錄, where we can find an earlier and less succinct version of the entry. See the entry “Bifa” 鬲發 in Yang Shen, “Danqian zonglu,” juan 16: 7a-8b.

the ground caves. Together with Yin Zhongwen's (d. 407) Six-Dynasty poem, the three sources indeed created an imagistic network for the melodic effect of the blowing wind, which were consistent with pipe analogy in Yang's interpretation—though strictly speaking, none of these references was talking about the *winter* freeze: the first two had no specification of season, and the third was depicting the chilly wind of the autumn, which is only partially related. But then Yang Shen came up with a “stronger” proof, a folk saying which was duly to the point: “Twenty-seven is three-nine. Tartar Pipe (*bili* 觱篥) blows the fence tine.” Note that the term “three-nine,” or *sanjiu* 三九, was a pun for the coldest period of the winter. The doggerel thus offered a clear description that the winter wind, when blowing over the “fence head” (*li tou* 籬頭), made a sound similar to the Tartar Pipe, which worked in close consistency with Yang Shen's reading of the *Maoshi* line. And finally, for a collateral proof, he also turned to the alternative names of the Tartar pipe, which, with a bookish name “wind pipe” in Chen Yang's 陳暘 (1049-1116) *Yueshu* 樂書 (Compendium of music) and a folk name of “head pipe,” also allured to the imagistic associations in the above references.²⁶¹

Put together, Yang Shen's argument was essentially an analogy between the human breath over the Tartar pipe, and the winter wind over the ground objects—in both cases making a gloomy and sorrowful tone. Following this logic, the term *bifa* 觱發 became the “sudden break” (*fa* 發) of a pipe-sounding wind. As a poetic interpretation, this analogical link indeed worked well, as if we could hear the gloomy sound and feel the fierce blow. To establish this vivid reading, Yang not only cited the *Shuowen* dictionary, pre-Qin literary texts, but also a less-known Six-Dynasty poem, a folk saying, as well as a common name and a bookish name of the pipe. The artful reading and dazzling textual supports testified the intellectual rigor of this entry, which constituted a typical entry for erudite learning.

²⁶¹ In the earlier version of this entry in *Danqian zonglu*, the textual origin of the bookish name “wind pipe” is explicitly mentioned as “Mr. Chen's *Compendium of Music*.” See, Yang Shen, “Danqian zonglu,” juan 16: 8b. For a new study on the life span of Chen Yang, see, Gu Hongyi 顧宏義, “Chen Xiangdao, Chen Yang qi ren qi shu,” 陳祥道、陳暘其人其書 *Lishi wenxian yanjiu* 歷史文獻研究 43, no. 2 (2019): 251–53.

The typicality came from two aspects. First, unsurprisingly, was his broad reference to seven sources from different discursive genres across nearly two millennia. Second, and more importantly, was his plain juxtaposition, or a *lack of evidential priority* among these textual supports. Note that in the entry, the direct connection between the pipe and the wind came from a folk saying and a bookish name in the more recent time, while the literary quotations from the earlier periods offered a mere lateral support. There was neither a *historical dimension* regarding whether the recent sources were proper to serve as evidence for the interpretation of a pre-Qin classic, nor a *textual hierarchy* regarding which kind of sources were more legitimate to support the reading. For Yang Shen, all these relevant sources—regardless of time and genre—were associable into his intricate meshwork of textual evidence. This featured epistemic stance brought forward a plain yet densely associated referential surface, which, as discussed in Chapter Two, was characteristic for erudite learning.

This forms a sharp contrast with Ma Ruichen's philological analysis three centuries later. His entry also started with *Shuowen*, but the line from *Maoshi* came with different characters:

According to *Shuowen*, “*Bi* 凜 means *bifa* 凜发, or the blowing freeze.” The varied editions of *Shuowen* do not have the two characters “*bifa*” 凜发.²⁶² Here, I follow Duan Yucai's edition to add them. The [*Shuowen*] annotation to the *fa* 发 character goes as: “During the days of the first, *bifa* 凜发.” Hence, *bifa* 凜发 were the original characters. In *Maoshi*, they appear as *bifa* 齎發. These were the loan characters. In the [*Maoshi*] ode of the Kuai state, “It is not that the wind is freezing (*fa* 發),” the character *fa* 發 is also a phonetic loan for *fa* 发.

說文：“凜，凜发，風寒也。”各本說文無“凜发”二字，此从段玉裁本增。发字注云：“一之日凜发。”凜发蓋本字，毛詩作齎發，假借字也。檜詩“匪風發兮”，發亦发之假借。²⁶³

In the two citations from *Shuowen*, the character *bi* 凜 was referred to the “blowing freeze,” which was exactly the same as the interpretation of *bifa* 齎發 in the Mao commentary.²⁶⁴ Meanwhile, in the quoted line, the word *bifa* 凜发 also appeared at the same position as *bifa* 齎發 in the *Maoshi* text. Such

²⁶² I.e., for the editions of *Shuowen jiezi* before Duan, the annotation goes as: “*Bi* 凜: the blowing freeze.”

²⁶³ Ma Ruichen, *Maoshi zhuanjian tongshi*, 451.

²⁶⁴ Note that this observation did not rely on Duan's textual rectification.

evidence, indicating a *textual variation* for the odes in *Shi*, was widely discernable in *Shuowen*.²⁶⁵ Based on this observation, Ma argued that the characters *bifa* 𩇛發 in *Maoshi* were merely phonetic loans (*jiajie zi* 假借字), and the ones in *Shuowen*, *bifa* 𩇛𩇛, were the original characters (*benzi* 本字). To support this philological claim, Ma offered two more proofs:

Bi 𩇛 is interchangeable with *bi* 𩇛, just like in the ode “Gathering Beans” (*MS* #222) for the line “*bifei* 𩇛沸 (gushing) the straight-jetting stream,” in *Shuowen* it appears as “*bifei*” 𩇛沸. *Fa* 𩇛 is interchangeable with *fa* 發, just like in the ode “A Splendid Woman” (*MS* #57), for the line “the sturgeons and snouts *fafa* 發發 (leap and lash),” in *Shuowen* it appears as “*baba*” 𩇛𩇛.

𩇛通𩇛，猶采菽詩“𩇛沸濫泉”，說文作“𩇛沸”也。𩇛通作發，猶碩人詩“𩇛𩇛發發”，說文作𩇛𩇛也。²⁶⁶

Despite the prevalence of phonetic loans in early Chinese texts, systematic investigations into this phenomenon only took place in the hands of Jiao Hong 焦竑 (1540-1620), another representative figure of late-Ming broad learning, who listed 108 cases of interchangeable usages in his *Jiaoshi bisheng* 焦氏筆乘 (Collected writings of Mr. Jiao).²⁶⁷ However, Jiao merely noted those cases that were explicitly suggested from textual variants—that is to say, in the sense of *bifei* 𩇛沸 and *bifei* 𩇛沸, whose interchangeable use is directly indicated through *Maoshi* and *Shuowen*. However, Ma did not stop here, but made a further reasoning that, since the characters *bi* 𩇛 and *bi* 𩇛 were interchangeable, *bi* 𩇛 and *bi* 𩇛 should also be interchangeable. Similarly, since *fa* 發 and *ba* 𩇛 were interchangeable according to the transmitted texts, *fa* 發 and *fa* 𩇛 should also be. In both cases, the latter associations were never explicitly recorded. For modern scholars, such an inference for phonographic (*xingsheng* 形聲) characters

²⁶⁵ Based on the index of *Shi* references compiled by Ho Che Wah and Chan Hung Kan, there are as much as 242 records of variant lines in *Shuowen*. (I use a single line as the basic unit for the counting. When the same line is quoted twice in *Shuowen* and each with a textual variation, if the variations are the same, I count the number once; if the variations are different, I count twice.) See, Ho Che Wah 何志華 and Chan Hung Kan 陳雄根, eds., *Xianqin lianghan dianji yin Shijing ziliao huibian* 先秦兩漢典籍引《詩經》資料彙編 (Hong Kong: The Chinese University of Hong Kong, 2004).

²⁶⁶ Ma Ruichen, *Maoshi zhuanjian tongshi*, 451–52.

²⁶⁷ Jiao Hong 焦竑, *Jiao shi bi sheng* 焦氏筆乘 (Beijing: Zhonghua shuju, 2008), 233–40. For the significance of this entry in Ming evidential studies, see, Lin Ching-chang, *Mingdai kaoju xue yanjiu*, 354.

would be intuitive. However, one should not neglect the underlying suppositions that we have long taken for granted: phonetic loans work on the basis of similar rhyme, and, characters with the same phonophoric component belong to the same rhyme group. This latter supposition, or “*tong sheng bi tong bu*” 同聲必同部, was only formally proposed by Duan Yucai in the 1770s.²⁶⁸ Thanks to this new philological principle, a phonophoric component became detachable from the original character to form new connections. This became the foundation of Ma’s reasoning, which was artfully supported by the relevant usages from the *Shi* text.

With this clarification, the only problem left was the meaning of the original characters *bifa* 凜發. Regarding this, Ma turned to the semantic generalization of a binomic series:

The two characters *bi* 凜 and *fa* 發 constitute an alliterative binome. *Shuowen* also says, “*Bifei* 輝沸: the appearance of blazing fire.” The *blazing* fire is called *bifei* 輝沸; the *gushing* stream is called *bifei* 凜沸; the *freezing* cold is called *bifa* 凜發—the idea is the same.

凜發二字疊韻。說文又曰：“輝沸，火盛兒。”火之盛曰輝沸，泉之盛曰凜沸，寒之盛曰凜發，其義一也。²⁶⁹

With the identification of *bifa* 凜發 as an alliterative binome, Ma did not interpret the characters separately, as Yang had done, but connected it to a group of binomes in the *Shi* and *Shuowen* texts with similar pronunciations. (Here, the phonetic link between *fa* 發 and *fei* 沸/沸 was not specified, yet Ma indeed noted in another entry of his work that *fa* 發 and *fu* 弗 “shared a similar sound and the same meaning.”²⁷⁰) A series of binomes could share a similar *core meaning*, which was related to the mere pronunciation of the binomes.²⁷¹ As another new discovery of the mid-Qing philologists, this became the foundation for Ma Ruichen’s next move, a *synthetic generalization* of the core meaning from its patterned

²⁶⁸ See, Duan Yucai 段玉裁, “*Liushu yinyun biao*,” 六書音均表 in, 2: 708–9.

²⁶⁹ Ma Ruichen, *Maoshi zhuanjian tongshi*, 452.

²⁷⁰ Ma Ruichen, *Maoshi zhuanjian tongshi*, 671. 弗與發亦聲近而義同.

²⁷¹ In the high-Qing era, this was best demonstrated by Cheng Yaotian in his systematic study of the *k*-, *l*-rhyming binomes, which I will discuss in the following section of this chapter.

manifestations in different radicals. If, with the fire radicle, the binome referred to an “intense” (*sheng* 盛) fire, and with the water radical, it referred to an “intense” (*sheng*) stream, the core idea of the binome was a state of intensity. Therefore, with the ice radicals, the binome *bifa* 凜冽 must refer to an intense or freezing cold.

In sum, Ma Ruichen delivered his argument in two stages. The first was to establish a phonological connection between the *Maoshi* word *bifa* 齋發 and its variant form *bifa* 凜冽 in the *Shuowen*. And the second was to decipher the latter’s meaning through a generalization of the binomic series it belonged to. Through this philological reasoning, Ma demonstrated that the term had nothing to do with the gloomy “Tartar pipe” (*bi* 齋) or the sudden “breaking” (*fa* 發) of the wind on a literal sense. Instead, the two characters *bifa* 齋發 were merely the loan forms of *bifa* 凜冽, which, again, could not be understood separately but only within a specific binomic chain. In Ma’s analysis, his textual sources were highly focused, which only involved the *Maoshi* text itself and the authoritative character book *Shuowen*. This was far more limited than Yang Shen’s referential network. Nevertheless, no matter how extensive Yang’s references were, it only worked on the surface character of *bi* 齋, or the “Tartar pipe.” Thanks to the mid-Qing philological developments, Ma Ruichen could see through this appearance and reveal the original characters hidden behind. Moreover, to decipher this newly revealed term, one was no longer legitimate to split the characters or draw reference freely but had to further fit it into a carefully delineated chain of alliterative binomes based on which the underlying meaning was generalized. Comparing to Yang’s erudite associations on the referential surface, the newly developed philological techniques revealed an inner richness for the textual units, such that the *mingwu* term, on its own, became an object for epistemic inquiry.

A critical reader may continue to ask: Why do I have to buy Ma’s analysis? Given the phonetic connection between *bi* 齋 and the multiple *bi* 凜/輝/凜 characters, why cannot one, say, make a semantic association between the Tartar pipe and an intense sound—which, materially speaking, could indeed be

true? Succinct as his entry is, Ma had no obligation for a response. Yet we can find a good answer from a relevant entry by Hao Yixing 郝懿行 (1757-1825), a leading philologist one generation prior to Ma. In his influential commentary to the *Erya*, Hao identified another series of homologous binomes from *piliu* 毗劉 (*sparse tree leaves*) to *pili* 仉離 (*people separated*), *pili* 辟歷 (*to split up*), *bili* 箒篳 (*Tartar instrument*), *bili* 必栗 (*Tartar instrument*), and *bielie* 別裂 (*to crack apart*). Noting the denotation of “splitness” in all the other binomes, Hao concluded that the Tartar pipe got the names due to its “strong yet sorrowful” (*jichu* 激楚) tone, as if the sound were “about to *crack*.”²⁷² Here, it is interesting that the philological reasoning indeed suggested a sense of tonal intensity. However, even if this was the case, it was no longer legitimate to draw the semantic link. The reason, as shown in Hao Yixing’s entry, was twofold. First, the name of the instrument, *bili*, was also a binome, and one should thereby not analyze the *bi* character separately; second, the name belonged to *another* binomic series with different pronunciation, phonetic transformation, and core meaning. In other words, the use of the same *bi* 箒 character for both the musical instrument and the weather description was little more than a coincidence of their textual appearance. On this surface level, the poetic analogy by Yang Shen was indeed preferable. However, when one was able to discern the hidden chains of the binomes, she would immediately realize how the two usages were apart from each other, each following its own textual logic. Thanks to these philological developments, the mid-Qing scholars shifted their focus from the broad referential network on the textual surface, to the more refined hidden patterns of specific philological terms. If the former indicates an extensive approach, the latter can be fairly labelled as an intensive one. I call these localized patterns carefully identified in the intensive analysis the *philological textures*.

Here, the epistemic distinction between Yang Shen’s extensive references and Ma Ruichen’s intensive analysis is by no means a mere theoretical construction of my own. The difference was also recognized by the mid-Qing evidential scholars themselves. In his preface to Gui Fu’s 桂馥 (1735-1804)

²⁷² Hao Yixing, “*Erya yishu*,” 2866–67. 蓋必栗猶言別裂，其聲激楚，聽之如欲破裂也。

Wanxue ji 晚學集 (Collection of the Late Learner), the influential scholar-official Ruan Yuan 阮元

(1764-1849) suggested a revealing ladder of scholarly complexity:

I used to say that it is easy to be a talented man (i.e., literary figure), but hard to be a scholar; it is easy to be a scholar of the mind-and-nature (i.e., Neo-Confucian learning), but hard to be a scholar on examining evidence. It is easy to examine evidence that is broad and erudite, but hard to examine evidence that is refined and precise.

嘗謂為才人易，為學人難；為心性之學人易，為考據之學人難；為浩博之考據易，為精覈之考據難。²⁷³

Here, the contrast between *erudition* and *refinedness* captured a precise distinction between the extensive association of textual references and the intensive inquiry of philological texture. Although, compared to the other epistemic forms mentioned here—literary composition and Neo-Confucian theorizing—the extensive and intensive approaches could be classified under the same umbrella term of “evidential studies,” the latter only reached a substantial development in the mid-Qing era. The epistemic tension between these two subcategories provides a revealing entry point for us to reflect on the continuity and discontinuity between late-Ming erudite learning and mid-Qing philological studies.

Intensive analysis was unimaginable without sharpened tools. In the above entries, we have encountered a wide span of *philological techniques* that were either newly developed or gained a new significance in the mid-Qing era. Even with a mere case study, the approach already includes the bibliographical review of textual variants, the phonological identification of original characters, the generalization of patterned text, as well as the association of binomic links. Such philological techniques, as crystals of the mid-Qing evidential enterprise, were not developed in one day. In the Song dynasty, Dong You 董道 (fl. early-12th c.), early pioneer in the study of the Three School versions of *Shi*, had already noticed the textual variation “*bifa* 澤浹” in *Shuowen*.²⁷⁴ In the late Ming, the encyclopedic scholar

²⁷³ Gui Fu 桂馥, *Wan xue ji* 晚學集, manuscript copy, National Library of China, no. 09448 (Pingjiang: Maoshi shangyou zhai, 1847), Preface: 1a.

²⁷⁴ Quoted in Lü Zuqian 呂祖謙, “Lü shi jiashu dushi ji,” 呂氏家塾讀詩記 in *Lü Zuqian quanji* 呂祖謙全集 (Hangzhou: Zhejiang guji chubanshe, 2008), 4: 281. For more information on the Three School versions of *Shi*, see, p. 194.

He Kai took one more step to suspect its interchangeability with the term *bifa* 鬻發 in *Maoshi*. Yet without the necessary knowledge in ancient phonology, he had no way to substantiate the idea, but only left a separate reading of the two characters.²⁷⁵ In the early Qing, the evidential pioneer Chen Qiyuan further noticed the relevant variation in the ode “Gathering Beans” of the *Shuowen* quotation, though he continued interpreting the two characters separately.²⁷⁶

Among the predecessors, Duan Yucai was presumably the first to provide a thoroughgoing phonological analysis on the term and established “*bifa* 澤浹” as the original characters. Based on his own 17-group reconstruction of the ancient rhyme (specified below in this chapter), he reasoned in a featured numerical language that the two characters *bifa* 澤浹 belonged to the 12th and 15th groups respectively, and the same group attributions also fit for *bifei* 燁燁 and *bifei* 澤沸 in the *Shuowen*.²⁷⁷ However, despite his mentioning of these relevant terms and their phonological connections, he did not associate them into any binomic series to explore the core meaning, which, as we have seen, became the further step taken by Ma Ruichen.

In the above-quoted entry, Ma mentioned Duan’s *Shuowen* commentary directly. Meanwhile, both Chen Qiyuan’s *Maoshi jigu bian* and He Kai’s *Ancient Meanings* appeared in his other entries on the same ode “Seventh Month,” and Yang Shen was also cited several times throughout his *Comprehensive Exegeses*.²⁷⁸ Although it was always possible for a later scholar to rediscover the earlier observations on his or her own, the gradual process of complication of and the referential records still highlights a

²⁷⁵ He Kai 何楷, “Shijing shiben guyi,” 詩經世本古義 in *Yingyin Wenyuange siku quanshu*, 81: juan 1: 19b–20a 疑古文音同者，字得通用，故說文鬻發作澤浹。

²⁷⁶ Chen Qiyuan, *Maoshi jigu bian*, 2: 124b.

²⁷⁷ Here, *Shuowen* has suggested the *fu* 沸 character as a graphic variation of the more complex *fu* 燁. See, Duan Yucai 段玉裁, *Shuowen jiezi zhu* 說文解字注 (Nanjing: Fenghuang chubanshe, 2015), 1: 839. For Duan’s entry on *bifa*, see, Duan Yucai 段玉裁, *Shijing xiaoxue* 詩經小學, 30-juan edition (Baojingtang, 1825), juan 15: 1b–2a.

²⁷⁸ For the citation of He Kai and Chen Qiyuan on the same ode, see, Ma Ruichen, *Maoshi zhuanjian tongshi*, 455, 459 respectively. For the citation of Yang Shen, see, e.g., Ma Ruichen, *Maoshi zhuanjian tongshi*, 130, 1140.

cumulative nature for the philological enterprise.²⁷⁹ That said, the mere piling-up of textual references (like the *Shuowen* quotations in the above case) was not sufficient to reveal the hidden secrets. In the following sections of this chapter, I will provide a closer look into the epistemic mechanisms of those newly developed philological techniques, so as to showcase how they made those more refined philological textures discernable.

Phonetic Loans

The systematic study of ancient phonology and the phonological-based reading of classic texts was the most salient phenomenon of mid-Qing evidential learning. As we can still recall from Wang Anshi's component-based reading and Li Ziqian's character game in Chapter One, the graphic form had served as the key semantic carrier in the previous commentary tradition. The shifting emphasis from the *graph* to the *sound*, as aptly put by Qi Yongxiang, was a "revolutionary change" in the philological inquiry of textual meaning.²⁸⁰ In the early Qing, when Gu Yanwu 顧炎武 (1613-1682) marked the starting point of classic reading as "textual analysis" (*kao wen* 考文) and the starting point of textual analysis as "mastering the sound" (*zhi yin* 知音), he already placed phonology as the methodological foundation for evidential studies.²⁸¹ In the mid-Qing era, Dai Zhen was among the first to offer a systematic review on the plurality of sound-meaning relations, or the use of phonetic loans in the classic

²⁷⁹ When referring to the "accumulative" nature of philological studies, I am by no means suggesting a linear development of the entry with Ma as the final completion. For instance, He Kai had aptly noticed the anachronistic problem in Yang Shen's interpretation, for there was no record of the *bili* pipe in the music of high antiquity, but just from the Qiang, Hu, and Qiuci music. The later evidential scholars did not come back to this historical dimension. Meanwhile, both Chen and Duan had noticed an etymological link from 齏 to 齏 to 齏 and to 諄 (15th group, *[b]^hut), which, according to Duan, should rhyme with the second character 凌 (15th group, *p^h[a]t) rather than the first 澤 (12th group, *pi[t]). Although this was not necessarily true according to modern reconstruction, Ma did not delve into this etymological aspect but adopt a more expedient way in his phonological analysis. Therefore, on the current philological problem, Ma was not a final synthesizer. Instead, the previous entries merely offered a referential and methodological preparation for Ma to find his *own way* into the hidden philological texture. See, He Kai, "Shijing shiben guyi," juan 1: 19b; Duan Yucai, *Shijing xiaoxue*, juan 15: 2a.

²⁸⁰ Qi Yongxiang, *Qianjia kaoju xue yanjiu*, 75.

²⁸¹ See, "Da Li Zide shu" 答李子德書, in Gu Yanwu 顧炎武, *Gu Yanwu quanji* 顧炎武全集 (Shanghai: Shanghai guji chubanshe, 2011), 21: 127. 故愚以為讀九經自考文始, 考文自知音始。

texts.²⁸² In a widely quoted methodological claim, he emphasized the importance of sound as an indispensable semantic carrier for the loan characters:

As for the Six Classics, many of the characters are phonetic loans. If the sound is lost, how to acquire the meaning of the loans? Past interpretation and phonetic sound constitute the *surface* and the *interior* respectively.

夫六經字多假借，音聲失，而假借之意何以得？故訓音聲，相為表裏。²⁸³

Here, the new rhetoric of the interiority is particularly noteworthy. It not only resonated to the methodological emphasis of phonology in general, but also, on a more specific scale, suggested a deeper philological layer in the actual interpretation of loan characters. If the “past interpretation” was preserved, the sound would help to explain its logic; if lost, one could infer the meaning from the sound.²⁸⁴ Phonology thus became the technical source for more fundamental textures behind the direct transmission of textual interpretations.

This rhetoric between the surface and the interior of phonetic loans reached its mature form under the hands of Wang Niansun and Wang Yinzhi, for whom the sound had a paramount priority over the graphic form.²⁸⁵ According to Niansun, the problem of previous philologists was precisely an adherence to the textual surface, either to “unwarrantedly construct from the graphic appearance” (*wangwen xuzao* 望文虛造), or to “stubbornly stick to the transmitted gloss” (*moshou chengxun* 墨守成訓). The proper approach, instead, was to seek the meaning from the sound, so as to “extend the reasoning through

²⁸² See, e.g., Dai’s discussions with Jiang Yong and Qin Huitian. Dai Zhen 戴震, “Shengyun kao,” 聲韻考 in *Dai Zhen quanshu*, 3: 334–41.

²⁸³ Dai Zhen, *Dai Zhen quanshu*, 6: 382.

²⁸⁴ For a good summary of this idea from Dai Zhen’s discussion of the loan characters, see, Zhou Binwu 周斌武, “Dai Zhen dui qingdai xunguxue de gongxian,” 戴震對清代訓詁學的貢獻 *Fudan xuebao* 復旦學報, no. 1 (1990): 95–97.

²⁸⁵ In his recent methodological essay on philology, Feng Zheng also attributed the formal invention of “seeking meaning from the sound” to Wang Niansun, Wang Yinzhi and Duan Yucai. See, Feng Zheng 馮蒸, “Lun xin sanfen kuangjia tixi xia de sanshiyi ge xunguxue lilun,” 論新三分框架體系下的三十一個訓詁學理論 *Cishu yanjiu* 辭書研究, no. 3 (2020): 8–9.

analogy without being confined by the graphic form.”²⁸⁶ The graphic appearance is frequently misleading. One has to follow the carefully revealed phonological textures to acquire the proper meaning. As bluntly put by his son Yinzhi, “The key to philology lies in the sound rather than the graph.”²⁸⁷ This methodological realization highlighted a phonological richness behind the immediate textual appearance.

It is under this contrast between the misleading graphic surface and the rich phonetic interior that we come to a better understanding to one of the major evidential efforts from the late-18th century onwards: the identification of the “original characters.” In his preface to Duan Yucai’s *Shuowen* commentary, Wang Niansun underlined the proper distinction between the “loan character” (*jiezi* 借字) and the “original character” (*benzi* 本字) as a major target for philological analysis.²⁸⁸ Yet nothing was more articulate than Wang Yinzhi’s retelling of his father’s method in the self-preface to *Jingyi shuwen* 經義述聞 (An account of classical meanings heard):

My father (i.e., Niansun) said: The key to philological analysis lies in the sound. For characters with the same or a close sound, they are often used as loans in the classic and commentary. If a scholar seeks the meaning from the sound, *breaking the loan character* and reading it as the original character, [the text] would become immediately comprehensible like melting ice. If one sticks to the loan character and seeks for a forced interpretation, it would be convoluted into a problem. (Italics added)

大人曰：詁訓之指，存乎聲音。字之聲同聲近者，經傳往往假借。學者以聲求義、破其假借之字而讀以本字，則渙然冰釋；如其假借之字而強爲之解，則詁籀爲病矣。²⁸⁹

The crux of philological interpretation was a proper identification of the original character from the phonetic loans, and this was only possible through a careful identification of the phonological textures. Regarding the description of this epistemic move, the character *po* 破 is particularly noteworthy.

²⁸⁶ Wang Niansun 王念孫, *Guangya shuzheng* 廣雅疏證 (Shanghai: Shanghai guji chubanshe, 2016), "Self Preface": 1. 引伸觸類，不限形體。

²⁸⁷ Wang Yinzhi 王引之, *Jingyi shuwen* 經義述聞 (Shanghai: Shanghai guji chubanshe, 2018), 1451. 夫訓詁之要在聲音，不在文字。

²⁸⁸ Duan Yucai, *Shuowen jiezi zhu*, "Preface to *Shuowen jiezi zhu*": 1. 不以本字廢借字，不以借字易本字。

²⁸⁹ Wang Yinzhi, *Jingyi shuwen*, "Self-Preface": 1.

Although the verb could also take an abstract object to denote a sense of “deciphering,” the very selection of this character still expressed a material implication, that the loan character was “broken apart” to reveal the original. This was like the deciphering (*po*) of a word riddle, where one had to “break” the “riddle surface” (*mimian* 謎面, the description) to reach the “riddle bottom” (*midì* 謎底, the answer). In a similar fashion, the use of *po* highlighted the break of the loan camouflage for a truly meaningful original character behind it. As well observed by Yu Wanli, this phonological-based identification of the original character was the essential methodological discovery of Wang Niansun. The entire philological enterprise of the Wangs from the 1790s onwards, which was named by Yu as a “textual rectification project for the Zhou-Qin classics” (*Zhou Qin jingdian zheng’e jihua* 周秦經典正譌計劃), could be understood from this vantage point.²⁹⁰

This inward move from the loan character on the surface to the original character behind captured one of the most common philological techniques in mid-Qing evidential studies. In the case study above, we have already seen how Ma Ruichen referred *bifa* 澤浚 as the “original character” (*benzi* 本字) and *bifa* 齏發 as the loan ones (*jiajie zi* 假借字). With the prevalence of phonological analyses from the late-18th century onwards, one could witness a booming discourse on these two kinds of characters in philological writings. A typical claim appeared as “X is Y’s loan” (X 者 Y 之假/假借), “X is the loan character” (X 者借字), or “Y is the original/ formal character” (Y 者本字/正字). In *Table 12*, I have listed the frequency of such phonological expressions among representative works of *Shi* across time. In He Kai’s *Shijing shiben guyi* and Chen Qiyuan’s *Maoshi jigu bian* 毛詩稽古編 (Examinations on Antiquity in *Maoshi*), presumably the most comprehensive studies of *Shi* in the late Ming and the early Qing respectively, these expressions were as rare as in the earlier commentaries. However, such claims

²⁹⁰ Yu Wanli 虞萬里, *Gaoyou erwang zhuzuo yi'an kaoshi* 高郵二王著作疑案考實 (Shanghai: Shanghai jiaoyu chubanshe, 2019), 90–92. For the “textual rectification project,” see, Yu Wanli 虞萬里, “*Jingyi shuwen zhengliren xu*,” 《經義述聞》整理本序 in *Jingyi shuwen* 經義述聞 (Shanghai: Shanghai guji chubanshe, 2018), 1: 80–81.

witnessed an exponential increase from the late-18th century, a general trend indicated from both the most comprehensive works of the day (middle section) and, on a lesser scale, the *mingwu* monographs (lower section). In the philological commentaries by Duan Yucai, Hu Chenggong, Chen Huan, and most impressively, Ma Ruichen, these expressions not only became largely standardized in each of the works, but also further divided into specific categories according to their phonological relations. As shown on the right section of the table, these included loans in the same pronunciation (*tongsheng jiajie* 同聲假借), belonging to the same rhyme group (*tongbu jiajie* 同部假借), and from different rhyme groups (*yibu jiajie* 異部假借). Commonly used in all the four philological commentaries, such terminologies were unimaginable without the new developments in ancient phonology.

Table 12: Discursive Frequencies on Phonetic Loans and Original Characters in Representative Works of *Shi*

Author (Life span)	Work Title	假/借/假借 Phonetic loans	本字/正字 Original characters	同聲假借 Homophonic loans	同部假借 Intra-group loans	異部假借 Trans-group loans
Kong Yingda 孔穎達 (574-648)	毛詩正義	5	2			
Hu Guang 胡廣 (1370-1418)	詩傳大全	1	0			
He Kai 何楷 (1594-1645)	詩經世本 古義	6	2			
Chen Qiyuan 陳啟源 (d.1689)	毛詩稽古編	10	3			
Duan Yucai 段玉裁 (1735-1815)	詩經小學	138	18	1	5	3
Hu Chenggong 胡承珙 (1776-1832)	毛詩後箋	260	56	8	2	0
Chen Huan 陳奐 (1786-1863)	詩毛氏傳疏	367	48	3	0	0
Ma Ruichen 馬瑞辰 (1782-1853)	毛詩傳箋 通釋	1414	144	79	7	1
Feng Fujing 馮復京 (fl. Wanli era)	六家詩 名物疏	1	0			
Chen Dazhang 陳大章 (1659-1727)	詩傳名物 集覽	9	0			
Jiao Xun 焦循 (1763-1820)	毛詩草木 鳥獸蟲魚釋	22	2			
Doronga 多隆阿 (1794-1853)	毛詩多識	46	12	1	0	0

- Notes:** 1. The statistical result here shows not the total word frequencies in the database but only those usages that refer to the phonetic loans or the original characters.
2. To better account for the application of this philological technique, theoretical discussions without identified characters are not taken into statistics.
3. To better differentiate this vertical relation of the loan-original from the horizontal relation of interchangeability (*tong* 通), only those cases with a clear distinction *between* the loan and the original characters are taken into account. In other words, cases such as A and B are “loan character to each other” (*huwei tongjia* 互為通假) are not considered.

Admittedly, this exponential increase did not indicate a complete ignorance of such connections by earlier scholars. Quite to the contrary. In He Kai’s encyclopedic commentary, he mentioned nearly 900 pairs of interchangeable characters, mostly under the formulaic expression “X is interchangeable to Y” (X 通作 Y). However, they were not backed up by ancient phonology but merely established through semantic identity or the sharing of same phonophoric component. And more importantly, what indicated by *interchangeability* was still a horizontal connection, while it was only through the distinction between the loan and the original that the vertical inwardness came into existence. As for the early-Qing work by Chen Qiyuan, it indeed included a summary on the “rectified characters” (*zhengzi* 正字) towards the end, where about 500 pairs of characters were listed under the expressions of “X originally appeared as Y” (X 本作 Y) or “X should appear as Y” (X 當作 Y). However, most of his cases merely concerned the archaic graphic forms and had little to do with phonological-based interpretations. Once more, these earlier accounts testified to a continuous thematic interest in the philological connections yet with nascent methodology and epistemic patterns since the late-18th century onwards.

This newly developed philological technique was, for sure, also applicable for the analysis of the *mingwu* terms. In their theoretical work on Chinese philology, Lu Zongda and Wang Ning have mentioned how the phonological aspect may reveal important clues for the etymology of *mingwu* terms,

thus deepening one's understanding of the concepts.²⁹¹ Before delving into the world of character breaking, let us begin with some simpler cases. As a straightforward example, in the ode “Huang Yi” 皇矣 (How August, *MS* #241), there is a mention of the salt cedar tree (*cheng* 檜), a common shrub in China with pine-like leaves and, most characteristically, slender reddish branches. There had been little confusion about the identification of the plant. However, Wang Yinzhi provided a further etymological interpretation based on the sound:

The salt cedar (*cheng* 檜), its *fanqie* pronunciation is *chi-zhen*. *Cheng* 檜 is to say “*cheng*” 赭. According to the commentary to the ode “Ru fen” (The Bank of Ru, *MS* #10) in the “Zhounan” section, *cheng* 赭 means “red.” The branches of the salt cedar are red. Therefore, it is called *cheng*.

檜，音勅貞反。「檜」之言「赭」也。《周南·汝墳篇》傳云：「赭，赤也。」河柳莖赤，因名為「檜」。²⁹²

This is perhaps the simplest form of a phonological-based interpretation. It even does not involve a phonetic loan, though the phonological connection between *cheng* 檜 and *cheng* 赭 still suggests a carefully delineated philological texture that is not discernable from the graphic surface. The *fanqie* notation of *cheng* 檜 as *chi-zhen* 勅貞 came from *Jingdian shiwen*, according to which the character *cheng* 赭 also shared the same pronunciation.²⁹³ The meaning of redness, as a representative feature for the salt cedar, was indicated from the similar sound of the two characters and had nothing to do with the graphic form. It thus offered a brief yet good example for the Wangs' “seeking of the meaning from the sound” (*yi sheng qiu yi* 以聲求義).²⁹⁴

²⁹¹ Lu Zongda 陸宗達 and Wang Ning 王寧, *Xungu fangfa lun* 訓詁方法論 (Beijing: Zhonghua shuju, 2018), 80-88.

²⁹² Wang Niansun, *Guangya shuzheng*, 4: 1722. Note that this entry, from *juan* 10, was completed by his son Yinzhi.

²⁹³ Lu Deming, *Jingdian shiwen*, 55, 92. That said, the *fanqie* notations in *Jingdian shiwen* only captured the middle Chinese pronunciation. I will come back to this point later in this section.

²⁹⁴ Despite the straightforwardness of this connection, in the past commentaries, only the Song scholar Luo Yuan 羅願 (1136-1184) was close to the discovery, who pointed out both the material feature of red color and the pronunciation of 檜 as 赭. However, from here, he concluded the salt cedar as “the solidification of red” 赤之貞也,

To further illustrate the method, let us move on to a slightly more complex example in Wang Niansun's *Guangya shuzheng* 廣雅疏證 (Annotated Proofs to *Guangya*). One of the entries concerned a grass called *baiji* 白茝 (*Bletilla striata*), which featured white-colored, three-edged roots. According to the main text of *Guangya*, the *baiji* grass had two alternative names *qiu* 仇 and *ci* 蒺. And from here Wang phonologically connected the plant to two *mingwu* terms in *Maoshi*. First, the ode “Small Chariots” (Xiaorong 小戎, *MS* #128) mentioned a certain weapon named *qiumao* 𢇛矛, which, according to the Mao commentary, referred to the “three-edged spear.” According to Wang, this was because the character *qiu* 𢇛 “shared the same sound and meaning with *qiu* 仇.”²⁹⁵ Second, he also suggested that in Guo Pu's *Erya* commentary, the plant *ci* 蒺 (*Tribulus terrestris*) was noted as having “three-edged thorns” in their seeds. Although Wang did not mention *Maoshi* here, this *Erya* entry was already noted by Guo Pu as referring to the *Shi* text, where one could find the plant in the ode “On the Wall There Is Tribulus” (Qiang you ci 牆有茨, *MS* #46).²⁹⁶ In both cases, the phonological link (仇↔𢇛; 蒺↔茨) served as a secret medium for the three-edged meaning and reinforced the interpretation from the material traits of each other. Again, it revealed well-ordered textures that were not discernable from the immediate appearance.

The third example concerns a ritual vessel *xizun* 犧尊 (the *xi*-vase) in the ode “Closed Temple” (Bi gong 閼宮, *MS* #300). In Chapter Six, we will come back to this artifact with further material evidence. For the time being, I will just briefly demonstrate how the phonological analysis by Ma Ruichen contributed to his reasoning of the vase's design. On noticing the Mao commentary, “The *xi* 犧 vessel has *suo* 沙 decorations,” Ma first linked the two characters together with the background knowledge that “*xi* and *suo* belonged to the same rhyme group in ancient phonology” (*guyin tongbu* 古音

thus going back to a surface split of the graph. See, Luo Yuan 羅願, *Erya yi* 爾雅翼 (Hefei: Huangshan shushe, 2013), 113.

²⁹⁵ Wang Niansun, *Guangya shuzheng*, 1700. 聲義正與仇同.

²⁹⁶ Wang Niansun, *Guangya shuzheng*, 4: 1700; Hao Yixing, “*Erya yishu*,” 3498; Zheng Xuan, *Maoshi zhuan jian*, 66.

同部). Second, based on the fact that *sha* and the character *shu* 疏 shared the same “*shen mu*” 審母 initial (i.e., the *sr-* initial according to modern reconstruction of Middle Chinese), with further support from Zheng Zhong 鄭眾 (d. 83) and Du Zichun’s 杜子春 (c. 30 BCE-58 CE) readings of *shu* 疏 as *suo* 沙 in the Han dynasty, Ma also marked these two characters as interchangeable. Given the phonological link of *xi-suo-shu*, and the meaning of *shu* as “carving,” Ma concluded the *xi*-vessel as a “carved vessel” (*shu lou zhi zun* 疏鑊之尊), which corresponded precisely to Gao You’s interpretation of the term in the *Huainanzi* commentary.²⁹⁷ Although scholars remained in debate regarding the specific design of such carvings, this general feature was effectively revealed or reconfirmed through the phonological link. In all the above three cases, the material traits of the *mingwu* objects were deciphered from the philological texture of their names. Such phenomena not only demonstrated the entanglement of name and knowledge in the etymology of *mingwu* terms, but also, due to this very feature, testified to the epistemic significance of phonological analysis. The *mingwu* term, with its own inner richness on par with the material traits, became by itself a meaningful epistemic object for evidential inquiry.

Despite the straightforwardness of these examples, the most crucial step calls for further scrutiny. How could one legitimately claim such phonological connections? Thanks to the development of ancient phonology in the previous two centuries, by the turn of the 18th century, the phonetic difference between Old and Middle Chinese was already a consensus for the leading philologists.²⁹⁸ Yet in the first example, the *fanqie* characters provided by Wang Yinzhi came from *Jingdian shiwen*, which could only explain their pronunciations in the Middle Chinese. Therefore, it was at best an expedient proof, whose tenability still waited for the endorsement of ancient phonology. In the second case, the connection was easy to understand based on the principle of “same phonophoric component, same rhyme group” (i.e., a shared

²⁹⁷ Ma Ruichen, *Maoshi zhuanjian tongshi*, 1146.

²⁹⁸ For representative discussions on phonetic change through history, see, e.g., Jiang Yong 江永, *Guyun biao* 古韻標準, Shanghai Library, no. T286472-77 (1795), juan 1: 2a-b; Duan Yucai, “Liushu yinyun biao,” 2: 708. For a good review on the development of phonological studies in the Qing dynasty, see, Wang Li 王力, *Qingdai guyin xue* 清代古音學 (Beijing: Zhonghua shuju, 2013).

component of *jiu* 九 in the first case, and *ci* 次 in the second). Yet as a commonly accepted principle (or more precisely, working hypothesis), this was not a motto taken for granted, but only gained its cogency through the generalization of massive rhyming cases in Old Chinese. The third example explained the phonological mechanism in greater detail. Compared to the ancient rhymes, the systematic study of Old Chinese initials (*shengniu* 聲紐) was relatively slower. Apart from Qian Daxin's renowned generalization on the absence of the labiodentals (*qingchun yin* 輕唇音) and retroflex stop initials (*sheshang yin* 舌上音) in the Old Chinese, most of the succeeding discoveries in the nineteenth century only received limited attention, until reaching a further systemization under the hands of Zhang Taiyan 章太炎 (1868-1936) and Huang Kan 黃侃 (1886-1935).²⁹⁹ In Ma Ruichen's example, the alliterative connection between *sha* 沙 (MC: *srae*, OC: *s^hraj) and *shu* 疏 (MC: *srjo*, OC: *sra) was also based on the sharing of the “*sr-*”initial in *Middle Chinese*. However, given the interchangeable reading of the two characters in the Han texts, this localized proof was still able to support the link.

As a contrast, for the phonological link between *xi* 犧 and *sha* 沙, Ma simply left a succinct note that they belonged to the same rhyming group in Old Chinese. How could he ascertain this claim? And why, without the need for any further elaborations, could it be widely acceptable by fellow readers? It is from here that we step into the core technique of mid-Qing phonological analysis, namely, the systematic reconstruction of ancient rhyme groups. From Gu Yanwu's (1613-1682) 10-group division to Jiang Yougao's 江有誥 (1773-1851) 21-group division, the system witnessed an ever-going refinement across the two centuries.³⁰⁰ In particular, with the publication of phonological monographs such as Duan Yucai's *Liushu yinyun biao* 六書音均表 (Phonological tables to the six character types, 1776) and Kong Guangsen's 孔廣森 (1752-1786) *Shi shenglei* 詩聲類 (Phonological categories of *Shi*, 1792), as well as Duan's *Shuowen* commentary (1815) which included his phonological attribution of the characters,

²⁹⁹ See, Li Baojia 李葆嘉, *Qingdai gu shengniu xue* 清代古聲紐學 (Shanghai: Shanghai guji chubanshe, 2012), p. 3-7, chs. 10-12.

³⁰⁰ See, Wang Li, *Qingdai guyin xue*, chs. 2-5, 7-9.

scholars in the late-18th and early-19th centuries had plenty of sources for this expertise. In Ma Ruichen's *Comprehensive Exegeses*, we can find explicit citation of Kong's *Shi shenglei*, and his references to the *Shuowen* commentary were prevalent.³⁰¹ As for the Wangs, they were themselves leading phonologists. Although during their lifetime the Wangs had never published more than a synopsis of their own system, it was already well-developed in Wang Niansun's middle age and was among the most refined phonological systems of the day.³⁰² With these taken into consideration, the loose demonstration for the rhyming connections in the above cases became noteworthy. Compared to the demonstration of the alliterative link, the informality and succinctness of the rhyming connections was therefore not due to a lack of evidence, but, on the contrary, to the acceptance of ancient rhyme divisions as a common knowledge background. In other words, it was due to their familiarity rather than unfamiliarity that the rhyming connections were presented in those brief manners. Among the leading mid-Qing philologists, Duan Yucai was presumably the most meticulous one regarding the demonstration. He had a rather persistent habit of specifying the group name (for him, the numeric group division) of the characters. For most of the other scholars, the connection could be established through a simple claim like "X and Y belonged to the same group," or "X and Y were phonetically interchangeable in ancient times." For one could easily verify the claim in the phonological works, and, for those who were familiar with the ancient rhymes, the connection would simply appear apparent. That said, we should not neglect the deeper mechanism that rendered such claims possible.

Let us move back to the above link between *xi* 犧 and *sha* 沙 as an example. In order to associate them in the same rhyme group, one had to step back to the raw data of Old Chinese phonology, namely, the rhyming characters in *Shi* (and other early rhyming texts). As shown in *Figure 32* and *Figure 33*, the

³⁰¹ For Ma's explicit quotation of *Shi shenglei*, see, Ma Ruichen, *Maoshi zhuanjian tongshi*, 1037; for his reference to Kong's phonological system, also see, e.g., Ma Ruichen, *Maoshi zhuanjian tongshi*, 418-419, 1119.

³⁰² For the published synopsis, see, "Guyun nianyi bu" 古韵廿一部 in Wang Yinzhi, *Jingyi shuwen*, 4: 1900-1909. also see, Wang Li, *Qingdai guyin xue*, 194, 207; for a complete rhyme catalogue in 21 divisions, which is dated by contemporary scholars to 1767-69, see, Wang Niansun 王念孫 and Wang Yinzhi 王引之, *Gaoyou erwang heji* 高郵二王合集 (Shanghai: Shanghai guji chubanshe, 2019), 1: 418-505.

collection and association of such raw data, normally preserved in the form of “rhyme tables” (*yunpu* 韻譜), was the first step every phonologist had to take to come up with their own system. The possible rhyming characters, selected from a specific stanza or section of a ode in the form of a short chain, became the basic data for the grouping of ancient rhymes. Specifically, the case for *xi* 犧 and *sha* 沙 was a fortunate one, as both characters appear in the rhyming position of *Shi*. As marked in *Figure 32*, in the ode “Wild Duck” (Fuyi 鳬鷖, *MS* #248), we can find a rhyming chain of *sha* 沙, *yi* 宜, *duo* 多, and *jia* 嘉. Meanwhile, in the ode “Closed Temple” (*MS* #300), where the term “*xi*-vase” appears, we find another rhyming chain of *xi* 犧, *yi* 宜, and *duo* 多. Note the shared characters of *yi* 宜 and *duo* 多 in the two chains. The rhyming relationship between *sha* 沙 and *xi* 犧 can be thereby established by joining the two chains into a longer one: *jia* 嘉—*sha* 沙—*yi* 宜—*duo* 多—*xi* 犧. As for the working hypothesis of “same phonophoric component, same rhyming group,” we can also get a hint of the idea from the current set of raw phonological materials. As marked in blue in *Figure 32*, in the text of *Shi*, the character pair *yi* 儀 and *jia* 嘉 appear repeatedly in the same rhyming chain (*MS* #156, 220, 247, 256). As a result, one can also add the character *yi* 儀 to the above chain: *yi* 儀—*jia* 嘉—*sha* 沙—*yi* 宜—*duo* 多—*xi* 犧. And therefore, the characters *yi* 儀 and *xi* 犧, sharing the same phonophoric component 義, should rhyme with each other and belong to the same group. The generic hypothesis of “same phonophoric component, same rhyming group” was then an induction from numerous rhyming cases like this.

字入支韵益入矣虫賦涉江合韵如字

第十七部 陸韻平聲歌戈麻上聲

皮純蛇召南羔 沱過過歌江有汜 爲何爲何爲

何都北門一 離施新臺 河儀他廊柏舟 珈佗

河空何老一 皮儀儀爲相鼠 猗磴磨衛淇奥

古音七 表四 吳

阿邁歌過二章 左璿離竹竿 離靡王黍離

同 羅爲罹叱免爰 麻墜墜施丘中有一章 宐爲鄭

衣一 加宐女曰雞 吹和二章 何何齊南山三

左我唐有扶之 何多何多何多秦晨風一 塗

原麻娑陳東門之 池麻歌東門之 陂荷何爲沱

澤陂一 繹儀嘉何幽東山 銚叱嘉破斧 何何柯

一 煞多小雅魚 多嘉四 榆離儀湛露 莪阿

儀菁菁者 駕猗馳破車攻 何罷蛇斯干 絜蛇

七 地揚瓦儀議罹九 阿池訛無羊 猗何瘞多

嘉墜前南山 河他小旻 罹何何一 猗地佗

章六 禍我可何人斯 議爲北山 左宐我裳者

羅宐鴛鴦 何嘉他頌弁 俄僂賓之初 嘉儀上

阿難何閼桑 阿何縣蠻 波沱他石漸漸之 莪

大雅核 阿池皇矣 賀左下武 何嘉儀既醉

揆二章 沙宐多嘉爲鬼舅 阿歌卷阿 多馳多歌十

儀嘉磨爲抑五 嘉儀八 寇可晉歌桑柔十 皮

麗韓奕 儀宐多齊頌閭 河宐何元易 ○以上平

聲

Figure 32: Duan Yucai’s collection of rhyming chains from *Shi* for the “Seventeenth Rhyme Group” of *Liushu yinyun biao*, with the rhyming connection between *xi* 犧 and *suo* 沙 marked in red, and *jia* 嘉 and *yi* 儀 in blue.³⁰³

³⁰³ Duan Yucai, “Liushu yinyun biao,” 2: 748.

難那 桑冠三章 羅宜 鴛鴦一章 何嘉他 類升一章 俄佬 實之初四章 嘉儀 同上		阿難何 陽桑一章 阿何 縣鐘一章 波沱他 漸漸之三章 峨宜 概梗三章 阿池 皇矣六章		賀佐 下武六章 何嘉儀 既靜四章 沙宜多嘉爲 曉監二章 阿歌 卷阿一章 多馳多		歌 十章 儀嘉磨爲 抑五章 嘉儀 章八 寇可詈歌 桑柔十章 何何何		韓奕 三章 皮罷 六章 犧宜多 閼宮三章 猗那 那 祁河宜何 元		多何 巧言六章 禍我可 何人斯二章 哆侈 巷伯二章 議爲 北山六章 左左宜 裳裳者華四章		何槎多嘉嗟 御南山二章 河他 小晏六章 罹何何 小弁一章 掎地佗 章七 何		何罷蛇 斯干六章 罷蛇 章七 地錫瓦儀議罹 章九 阿池訛 無羊二章 猗		魚麗 一章 多嘉 章四 椅離儀 淇露四章 莪阿儀 菁菁者莪一章 駕猗馳破 車攻六章		嘉何 東山四章 錡吡嘉 破斧二章 何何 伐柯一章 柯柯 章二 何何 采芣四章 蓂多		東門之 粉二章 池麻歌 東門之一章 陂荷何爲沱 澤陂一章 陂爲 二章三章同 縹儀		章一 宜爲 緇衣一章 加宜 女曰雞鳴二章 吹和 蓼兮一章 何何 南山三章同 左我 有杜		章一 何何多何何多何何多 晨風一三三章 我嗟 權輿一章 差原麻娑		左嗟儺 竹竿三章 離靡我我 黍離一章三章同 羅爲罹吡 兔爰一章 麻嗟嗟施 巨中		爲何爲何 北門一三三章 離施 新臺三章 河儀它 柏舟一章 珈委佗河宜何 君子偕老		章一 嗟嗟 三章 皮儀儀爲 相鼠一章 猗磔磨 淇奥一章 阿邁歌過 考槃章		(詩經) 皮紕蛇蛇 羔羊一章 蛇蛇 二章三章同 沱過過歌 江有汜三章 爲何		音譜	
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Figure 33: Wang Niansun's collection of rhyming chains from *Shi* for the “Ge 歌 Rhyme Group,” printed by Luo Zhenyu in 1925 from unpublished manuscripts.³⁰⁴

Just as suggested by Jiang Yong, the study of ancient phonology was a systematic enterprise, to the extent that “a fault at one point would cause a trouble in the whole.”³⁰⁵ In this dissertation, I have no intention of further elaboration of these technical details, which is the duty of modern phonologists. The purpose of this methodological review, instead, was to underline the supporting mechanism that remained

³⁰⁴ Wang Niansun 王念孫, “Guyun pu,” 古韻譜 in *Gaoyou Wang shi yishu* 高郵王氏遺書, ed. Luo Zhenyu, 羅振玉 (Shangyu Luo shi, 1925), juan 1: 16b–17a.

³⁰⁵ Jiang Yong, *Guyun biao zhun*, juan 1: 2b. 以此知音學須覽其全。一處有闕，則全體有病。

largely tacit in the shortcut application of phonological analysis. Even for a simple case, like the connection between *sha* 沙 and *xi* 犧, one still had to trace back to the rhyme chains in *Shi* for an epistemic foundation, behind which loomed an entire system of phonological reconstruction. As one can see from the *Liushu yinyun biao*, a full-scale phonological reconstruction would include: 1) an exhaustive collection of the rhyming chains from *Shi* and other early texts; 2) a summary of characters within each rhyme group, as well as characters used for joint rhyme from other groups; 3) an abstraction of the phonophoric components within each rhyme group; 4) an attribution of Middle-Chinese rhyme divisions to each groups; 5) the rhyme groups themselves; and 6) higher categories across groups (if any). And for a meticulous philologist like Wang Niansun, the first step alone would take up as many as 25 volumes in manuscript, which, still preserved in the Peking University Library today, ranged over a wide span of early texts from *Shi* and the *Chu Lyrics* all the way to *Shiji* and *Hanshu*.³⁰⁶

Such a well-ordered, comprehensive system was the real supporting body behind a specific rhyme-based phonological claim. Comparing to these specific reasonings, generic criteria such as “identical group” (*tongbu* 同部) or “interchange across groups” (*duizhuan* 對轉) were more ready-to-use, yet that means they came from higher syntheses and therefore reflected even more subtle textures. It was the tacit support of this immense body of philological materials that empowered mid-Qing phonological analyses an efficacy that was unimaginable in the previous era. That said, one should not confuse this immense corpus of supporting materials with the encyclopedic references in erudite learning. This is because in the former case, the supporting materials are both selected from a highly limited array of early texts and demarcated in a rigorous manner, such that each specific texture, despite its relevance to the entire phonological system, can be strictly pinned down to a locality of source base. Therefore, the comprehensive demarcation of ancient rhyme groups does not suggest an alternative form of

³⁰⁶ Zhao Xiaoqing 趙曉慶, “Beida cang Wang Niansun shougao liuchuan kaoshu,” 北大藏《王念孫手稿》流傳考述 *Wen shi zhe* 文史哲, no. 3 (2017): 142.a

encyclopedic reference, but testified, as the most refined example, to the profound inwardness of the classic text.

From the case of the *xi*-vase above, we have already observed the considerable philological power one could release from a proper identification of the original character. That said, for the reading of *xi* 犧 as *shu* 疏, the latter character was already implied from the *Huainan zi* commentary, and the phonological techniques functioned more as a verification for the link. In many other instances, such a referential support reference would not be available, and the phonological connection itself would be the key clue for the search of the original character. As summarized by Wang Yinzhi,

For cases like these, one should base upon the ancient pronunciation of the loan character to search for the homophonic original character. With the consistency to the classic text as the only criterion, I venture not to stick to the transmitted interpretations.

若是者，由借字之古音以考同音之本字，惟求合於經文，不敢株守舊說。³⁰⁷

To raise one more example, in the ode “The Born of Our People” (Shengmin 生民, *MS* #245), there is a description Jiang Yuan’s easy birth of Houji, the predecessor of the Zhou tribe: “She fulfilled her months, and the first-born came like a baby sheep (*xian sheng ru da* 先生如達); there was no bursting, no rending, no injury, no harm.”³⁰⁸ Here, the reading of *da* 達 as “baby sheep” or “*da*” 牽 follows Zheng Xuan, whose reference to the easy birth of sheep became the standard interpretation of the line.³⁰⁹ In fact, this animalistic connection was so influential that it even went into the medical discourse of easy childbirth in the early modern era.³¹⁰ Meanwhile, scholars also began to add sheep-related features to the line’s interpretation, such as to argue for a 7-month premature birth like the gestation period of a

³⁰⁷ Wang Yinzhi, *Jingyi shuwen*, 4: 1921.

³⁰⁸ Zheng Xuan, *Maoshi zhuan jian*, 382. With adaptation, the translation follows Karlgren, *The Book of Odes*, 200.

³⁰⁹ See, e.g., Kong Yingda 孔穎達, *Maoshi zhengyi* 毛詩正義 (Beijing: Beijing daxue chubanshe, 1999), 1062; Zhu Xi, *Shi jizhuan*, 292.

³¹⁰ Yi-Li Wu, *Reproducing Women: Medicine, Metaphor, and Childbirth in Late Imperial China* (Berkeley, London: University of California Press, 2010), 152–53.

sheep.³¹¹ However, on considering the ode as a homage to the first male ancestor of the Zhou lineage, Duan Yucai found the use of the *da* 牽 character or the analogy of the miracle birth to the baby sheep to be “too indecent” (*tai xie yi* 太媿矣).³¹² Instead, noting the interchangeable use between *da* 達 and *ta* 沓 (repeated) in the ancient time, Duan suggested an alternative reading that the first-born came as easy as a *repeated* delivery.³¹³ In a less fanciful tone, this *da*-as-repeated formed a good contrast with the *xian* 先-as-first, and also worked smoothly with the description of harmlessness in the following two lines. This interpretation, also adopted by Hu Chenggong, was at least as possible as the traditional reading.³¹⁴

Here, it is noteworthy that Zheng Xuan’s canonized reading of *da* 達 as *da* 牽 also worked in the same logic as a phonetic “break” of the loan character. The only difference was that the Eastern Han scholar did not need a systematic phonological reconstruction to reach the claim. Therefore, when the secrets of ancient sounds emerged again in the mid Qing, the difference between Zheng and Duan were not much about a textual reference versus a phonological link, but essentially a competition between two possible identifications of the original character. Thanks to the phonological reconstruction, the character *da* 牽 no longer kept a monopolistic position as in the commentary tradition, but became merely one possible reading among many. For speaking of the pronunciation, there could be a long list of candidates for the original character, and Duan’s *ta* 沓 was just another one that fitted particularly well for the line. The streamlined correspondence between the loan and the original characters, as ubiquitous in the philological works of the mid-Qing scholars, was merely a retrospection from the best outcome. The more immediate effect of these phonological techniques, instead, was the emergence of a span of potential choices, thus rendering this hidden philological layer to be one with full uncertainties and new

³¹¹ See, Zang Lin 臧琳, *Jingyi zaji* 經義雜記, annotated copy by Mao Guangsheng 冒廣生, Shanghai Library, no. 555950-53 (1799), juan 27: 11b–12a.

³¹² Duan Yucai, *Shijing xiaoxue*, juan 24: 11a. Also see, Duan Yucai, *Shuowen jiezi zhu*, 1: 259.

³¹³ Duan Yucai, *Shijing xiaoxue*, juan 24: 11a; also see, Duan Yucai 段玉裁, *Shijing xiaoxue* 詩經小學, commented edition by Jiao Xun, Nanjing Library, no. KB0235 (Baijing tang, 1797), juan 3: 7a. According to Duan’s *Shuowen* commentary, both characters were attributed to his 15th rhyme group. See, Duan Yucai, *Shuowen jiezi zhu*, 1: 130, 360.

³¹⁴ See, Hu Chenggong, *Maoshi houjian*, 1318–19.

possibilities. This epistemic feature endowed the *mingwu* terms a *philological excess* in textual analysis, comparable to the inner richness in the investigation of natural objects.

General Patterns

In the previous section, we have seen how mid-Qing scholars reached a new stage of philological analysis through the “seek of meaning from sound” method. This was not possible without the technical support of phonological reconstruction, whose key lay on the multilayered generalization of phonological textures. Speaking of large-scale generalizations, another comparable technique that witnessed a significant development in the same period was the summary of “general patterns” (*tongli* 通例), which was particularly powerful in the collation and rectification of classic texts. A renowned example was Dai Zhen’s collation of *Shuijing zhu* 水經注 (Commentary to the classic of water), which, through the identification of three descriptive patterns that were systematically different between the classic text and the commentaries, he not only made a clear distinction between these two components from a mingled assemblage, but also rectified thousands of textual errors.³¹⁵ In the mid-Qing era, the most comprehensive discussion of general patterns would be Wang Niansun and Wang Yinzhi’s summary on the causes of error in transmitted texts. Based on the 900-odd entries of rectified readings in the *Huainan zi* 淮南子 section of *Dushu zazhi* 讀書雜誌, Wang Niansun offered a meticulous identification of 62 patterns of error, which became the founding work for the subgenre of “general collation patterns” (*jiaokan tongli* 校勘通例) in the field of textual criticism.³¹⁶ The method was then extended by his son Yinzhi to the entire

³¹⁵ For a good summary of the three general patterns, see, Duan Yucai 段玉裁, *Jing yun lou ji* 經韻樓集 (Shanghai: Shanghai guji chubanshe, 2009), 172; for the efficacy of this method, see, Qi Yongxiang, *Qianjia kaoju xue yanjiu*, 77–78.

³¹⁶ Since the textual basis was limited to *Huainan zi*, many of the patterns were only supported by one or two specific cases. However, as pinpointed by Yu Wanli, although the cases raised were limited to *Huainan zi*, the same patterns were discernable from a much larger scope of texts both inside and outside *Dushu zazhi*. In other words, this section was closer to an *exemplification* (rather than generalization) of the erroneous patterns through the *Huainan zi* text. In Niansun’s own words, this was called “to show the pattern through a brief elaboration” 略舉其端以見例, where the emphasis was the identified pattern rather than the supporting cases. See, Wang Niansun 王念

corpus of *Jingyi shuwen*, where he made a further generalization of 12 error categories from nearly 2,000 entries of textual rectification by the very end of the work.³¹⁷ Working on a larger textual basis, each of the categories was supported by a considerable number of cases. For instance, one could find 254 cases of mistaking a phonetic loan for an original character, and 164 cases of erroneous readings caused by graphic error.³¹⁸ Such extensive lists offered an impressive display for the epistemic significance of general patterns.

The repetitive stanzaic format and the prevalent use of “formulaic phrases” rendered the odes particularly apt for the analysis of general syntactic pattern.³¹⁹ In the mid-Qing era, an influential example came from Ruan Yuan’s 阮元 (1764-1849) analysis of the ode “Softness of Mulberry” (Sang rou 桑柔, *MS* #257), where we find the following lines in the ninth stanza:

朋友已譖，	The comrades slander each other,
不胥以穀。	And are not good to each other.
人亦有言，	Just like people have a saying,
進退維谷。	“To go forward or backward is alike impracticable.” ³²⁰

The focus was the final character *gu* 谷, which, according to the Mao commentary, was interpreted as *qiong* 窮 (exhausted, unviable). This was the basis for the above translation, which became the standard reading of the line for later eras. However, as keenly observed by Ruan, the word “*gu*” did not have a

孫, *Dushu zazhi* 讀書雜誌 (Shanghai: Shanghai guji chubanshe, 2014), 2468–97. Yu Wanli 虞萬里, “*Dushu zazhi zhengli ben xu*,” 《讀書雜誌》整理本序 in *Dushu zazhi* 讀書雜誌 (Shanghai: Shanghai guji chubanshe, 2014), 1: 14–15.

³¹⁷ Wang Yinzhi, *Jingyi shuwen*, 4: 1910-1980.

³¹⁸ Wang Yinzhi, *Jingyi shuwen*, 1910–80; For the statistics of supporting cases, see, Wu Genyou 吳根友, “Shilun Wang Yinzhi yuyan xue yanjiu yu gudian renwen zhishi de zengzhang,” 試論王引之語言學研究與古典人文知識的增長 *Wuhan daxue xuebao* 武漢大學學報 65, no. 2 (2012): 50-52, 56-58.

³¹⁹ For the stanzaic repetitions in *Shi*, see, Chu Meng-ting 朱孟庭, *Shijing chongzhang yishu* 詩經重章藝術 (Taipei: Xiuwei zixun, 2007), chs. 2-4; for the use of “formulaic phrases,” see, C. H. Wang, *The Bell and the Drum: Shih Ching as Formulaic Poetry in an Oral Tradition* (Berkeley: University of California Press, 1974), chs. 2-3.

³²⁰ Zheng Xuan, *Maoshi zhuan jian*, 421. The translation follows Karlgren, *The Book of Odes*, 222; Bernhard Karlgren, *Glosses on the book of odes* (Stockholm: Museum of Far Eastern Antiquities, 1964), 113.

meaning of *qiong*. And more importantly, when the line was quoted in *Yanzi chunqiu* 晏子春秋 and *Hanshi waizhuan* 韓詩外傳, the context was always a positive one. In the former case, to go forward to keep one's loyalty, and backward to keep one's behavior; in the second, to go forward to save one's parents, and backward to die for the ruler. In both instances, the line referred to "a satisfactory result to both sides in a situation of dilemma." Therefore, it should be a praise rather than a sigh for hopelessness, and from here, Ruan proposed that *gu* 谷 was a phonetic loan of *gu* 穀, or goodness.³²¹ In this way, the final two lines formed a contrast with the previous two, and could be understood as: "Yet the people have a saying, 'to go forward or backward, alike be good!'"

Had the entry stopped here, it would have been a good example for the "break" of a phonetic loan. However, Ruan moved a step further by asking, why didn't the poet use the *gu* 穀 character directly? The reason, according to Ruan, was the occurrence of the same character two lines above (i.e., 不胥以穀). In order to avoid a repeated use of the rhyming character consecutively, the poet changed the second occurrence into a phonetic loan. This was named by Ruan as the "general pattern of 'same meaning, altered characters'" (*yi tong zi bian zhi li* 義同字變之例), which, according to him, was "prevalent" (*wangwang youzhi* 往往有之) in the three hundred odes in *Shi*—though he only raised one more case from the ode "First Month" (Zhengyue 正月, *MS* #192), where a *mie* 滅 character was altered into the homophoric *mie* 威.³²²

Despite the limited textual support Ruan offered, his claim for the "prevalence" of the pattern was indeed true, and this received a thorough examination by Ma Ruichen in his *Comprehensive Exegesis*. In his essay "The Poets' Pattern of 'Same Meaning, Altered Characters'" (*shiren yitong zibian li* 詩人義同字變例), Ma made a further distinction of the pattern into those with the original character coming first

³²¹ Ruan Yuan 阮元, *Yan jing shi ji* 羣經室集 (Beijing: Zhonghua shuju, 1993), 104–5. 皆謂處兩難善全之事，而處之皆善也。

³²² Ruan Yuan, *Yan jing shi ji*, 104.

(as in the *gu* case), and those with the loan character coming first, for which he identified 11 cases altogether (*Table 13*). This longer list of supporting cases disclosed the real basis for the generalization of this refined pattern. As the proponent of the pattern, Ruan Yuan, was free to exemplify his finding through a mere one or two instances, yet his very confidence in labeling them as a general pattern still came from his awareness that the cases were “prevalent” in the *Maoshi* text—the hidden part of the iceberg that was only explicitly demonstrated by Ma Ruichen.

*Table 13: Cases for the General Pattern of “Same Meaning, Varied Characters”*³²³

Category	Poem Number	Poem Title	Varied Characters (original meaning specified in parathesis)
Original Character First	66	君子于役	𪛗 (arrive)—括
	70	兔爰	羅 (net)—罹
	192	正月	滅 (wipe out)—威
	241	皇矣	度 (scheme for)—宅
	257	桑柔	穀 (good)—谷
	35	谷風	讎 (sell)—售 ³²⁴
Loan Character First	14	草蟲	蟲—螽 (locust)
	202	蓼莪	鞠—育 (raise)
	210	信南山	甸—田 (cultivate)
	246	行葦	鈞—均 (uniformed)
	256	抑	訓—順 (follow)

³²³ Ma Ruichen, *Maoshi zhuanjian tongshi*, 19–20.

³²⁴ In Ma’s essay, this single case was classified into a third sub-category: to use the original character when appearing once, and to change into the “vulgar character” when appearing twice” 又有一字則用其本字，兩字並用則改用俗字。For the former situation, Ma was referring to the single occurrence of the *chou* 讎 character in the ode “Yi” 抑 (*MS* #256), but this had nothing to do with the pattern. As for the latter situation in the ode “Gufeng” 谷風, the change of *chou* into *shou* 售 in the second occurrence was the same as the cases of “original character first.” Therefore, I combine it to the first category in the table. See, Ma Ruichen, *Maoshi zhuanjian tongshi*, 20.

Among these 11 supporting cases, a noteworthy one with *mingwu* significance comes from *MS* #14, which begins with:

嚶嚶草蟲	<i>Iog-iog</i> the “grass insects,”
趯趯阜蟲	Jumping are the grasshoppers. ³²⁵

Here, the “grass insect” is a literal translation for “*caochong*” 草蟲, which, according to Dai Zhen, was a generic name for “small insects living in the grass.” However, on noticing the insect name “*caozhong*” 草蟲 (bush cricket) in *Erya*, as well as the interchangeability for the characters *chong* 蟲 and *zhong* 蟲 in the rhyming position, Ma Ruichen realized that the lines fit well into the pattern of “Same Meaning, Altered Characters.” From this vantage point, he concluded that the term *caochong* 草蟲 in the ode was a phonetic loan for *caozhong* 草蟲, or the bush cricket, which only used the current form to avoid repetition.³²⁶ Without the backup of the general pattern, this phonological connection would appear rather farfetched, if not arbitrary. Yet with ten more similar usages endorsing the pattern, it would be sufficient to legitimize the move and guarantee its cogency. Rendering Dai Zhen’s interpretation a surface reading, this case highlights the efficacy of general pattern for *mingwu* analysis.

If this example still demands considerable insight to identify the general pattern from the two lines, in many other cases the attribution is more straightforward. In such instances, the normative structure of the general pattern may offer important clue for the philological reading of the individual case, indicating a predictive power that was comparable to the phonological-based search for the original character. In the following part, I will use Wang Niansun’s analysis of the ode “Zhongnan” 終南 (*MS* #130) to elaborate the point. In this ode, both stanzas begin with an evocative image of the Zhongnan hill:

終南何有？	What is there on the Zhongnan hill?
有條有梅。	There are Aronia berries, there are plum trees.

³²⁵ Zheng Xuan, *Maoshi zhuan jian*, 18. The translation adapts from Karlgren, *The Book of Odes*, 9.

³²⁶ Ma Ruichen, *Maoshi zhuanjian tongshi*, 1: 77.

.....

終南何有？ What is there on the Zhongnan hill?
有紀有堂。 There are the “*ji*,” there are the “*tang*.”³²⁷

The second stanza mentioned two *mingwu* terms—*ji* 紀 and *tang* 堂—related to the Zhongnan mountain, which, according to the Mao commentary, referred to the “mountain base” and the “hall-like road” respectively.³²⁸ Later scholars proposed other mountain-relevant readings. For instance, Zhu Xi interpreted *ji* as the “hill corners,” and *tang* as the “broad and level grounds.”³²⁹ The leading evidential scholar Jiao Xun, by reading *ji* 紀 as a phonetic loan of *qi* 屹, interpreted the term as “bare hill” instead.³³⁰ In fact, during the mid-Qing era, the specific meaning of this *qi* 屹 character, which appeared directly in another ode (*MS* #110), was also a question in heated debate: Duan Yucai and Zang Yong 臧庸 (1767-1811) took it as a tree-clad hill, while Dai Zhen and Jiao Xun, to the direct opposite, advocated for a bare one.³³¹ That said, all these diverging theses interpreted the terms as descriptions of shapes for the mountain.

However, through a careful review of the “general patterns in the entire *Shi*” (*quanshi zhi li* 全詩之例), Wang Yinzhi witnessed two significant problems in the above line of readings. First, according to Wang, whenever *Maoshi* mentioned “the mountain has something,” it always referred to the *plants* in the mountain, rather than any certain component of the mountain itself. To support this general observation on the syntactic level, he raised 8 cases with similar pattern, which indeed all take plant name as the

³²⁷ Zheng Xuan, *Maoshi zhuan jian*, 165; the translation adapts from Karlgren, *The Book of Odes*, 165.

³²⁸ Zheng Xuan, *Maoshi zhuan jian*, 165.

³²⁹ Zhu Xi, *Shi jizhuan*, 118.

³³⁰ Jiao Xun 焦循, “Maoshi dili shi,” 毛詩地理釋 in *Shanghai tushuguan weikan guji gaoben*, 8: 69–70.

³³¹ The debate originated from the opposing interpretation of the *qi* 屹 character between *Erya* and the Mao commentary. See, Duan Yucai, *Shijing xiaoxue*, juan 1: 23b-24a; Zang Yong 臧庸, *Baijing riji* 拜經日記, manuscript copy, National Library of China, no. A03228 (Qing Dynasty), juan 13: 9b-11a; Dai Zhen 戴震, *Mao Zheng shi kaozheng* 毛鄭詩考正, manuscript copy, National Library of China, no. 11267 (Qing Dynasty), juan 1: 11b; Jiao Xun, “Maoshi dili shi,” 62, 69-70.

subject (*Table 14*).³³² Second, whenever the first stanza mentioned the existence of certain plants (i.e., in the pattern of “you 有 + plant name”), from the second stanza onwards, the same pattern would also refer to the existence of plants. To support this general pattern on the stanzaic level, Wang came up with 8 more supporting cases (*Table 15*).

*Table 14: Supporting Cases for the General Pattern “The Mountain Has...”*³³³

Case Number	Poem Number	Patterned Line	Mingwu Term(s)
1	38	山有榛	Hazel
2	84	山有扶蘇	Rose mallow
3	115	山有樞	Thorn elm
4	132	山有芭棣	Serviceberry
5	204	山有嘉卉，侯栗侯梅	Fine plant, chestnut tree, plum tree
6		山有蕨薇	Royal fern, turtle’s-foot fern
7	172	南山有臺	Sedge
8		北山有菜	Goosefoot

*Table 15: Supporting Cases for the General Pattern of Stanzaic Consistency*³³⁴

Case Number	Poem Number	Stanza Number	Pattern Line	Mingwu term(s)
1	74	1	丘中有麻	Hemp
		2	丘中有麥	Wheat
		3	丘中有李	Plum tree

³³² In fact, this is still below a full quotation of the supporting cases. As one can see from Case 8 of *Table 15*, besides the lines “南山有臺” and “北山有菜,” there are 8 more qualified lines in the same textual pattern. With these counted, the total number of supporting cases will be 16.

³³³ Based on Wang Yinzhì, *Jingyi shuwen*, 320. The English translations in this table and the next refer to Karlgren, *The Book of Odes*; Geoffrey Sampson, *Voices from Early China: The Odes Demystified* (Newcastle upon Tyne: Cambridge Scholars Publishing, 2020); Hu Miao, *Shijing de kexue jiedu*.

³³⁴ Based on Wang Yinzhì, *Jingyi shuwen*, 320.

2	84	1	山有扶蘇，隰有荷華	Rose mallow, lotus
		2	山有喬松，隰有游龍	Pine tree, prince's feather
3	109	1	園有桃	Peach tree
		2	園有棘	Jujube tree
4	115	1	山有樞，隰有榆	Thorn elm, white elm
		2	山有栲，隰有杻	Cork oak, bird cherry
		3	山有漆，隰有栗	Lacquer tree, chestnut tree
5	126	2	阪有漆，隰有栗	Lacquer tree, chestnut tree
		3	阪有桑，隰有楊	Mulberry tree, poplar
6	132	2	山有芭櫟，隰有六駁	Oak, yellow catalpas
		3	山有芭棣，隰有樹檟	Serviceberry, birchleaf pear
7	141	1	墓門有棘	Jujube tree
		2	墓門有梅	Plum tree
8	172	1	南山有臺，北山有萊	Sedge, goosefoot
		2	南山有桑，北山有楊	Mulberry tree, poplar
		3	南山有杞，北山有李	Willow, plum tree
		4	南山有栲，北山有杻	Cork oak, bird cherry
		5	南山有枸，北山有檉	Raisin tree, catalpas

Such generalizations, marked by Wang Yinzhi as “immutable patterns” (*buyi zhi li* 不易之例), highlighted the unlikeliness of the shape readings for the “Zhongnan” ode. Note that the first stanza of the ode—mentioning that the hill had *Aronia berries* and the *plum trees*—fitted well into both patterns, this would strongly imply the *ji* 紀 and *tang* 堂 in the second stanza also as plant names.³³⁵ Just as remarked by Wang, the shape reading was “not only inconsistent with the pattern of the first stanza, but also

³³⁵ Admittedly, in the “Zhongnan” ode, the first stanza only begins with “What is there on Zhongnan” 終南何有 and does not mention the “*mountain*” explicitly. However, given the univocal meaning of “Zhongnan” as a mountain name, one could still attribute the stanza to the first general pattern.

incompatible with the general patterns of *Shi*.”³³⁶ It was from this vantage point that the textual variants of the ode in the Tang encyclopedia *Baishi liutie* 白氏六帖 became particularly suggestive. Identified by Wang as from the *Hanshi* 韓詩 tradition, the variant line went as “there are *willows*, there are *pear trees*” (*you qi you tang* 有杞有棠), which referred precisely to two kinds of plants.³³⁷ With a confirmation on the interchangeability of the characters, Wang concluded that *ji* 紀 and *tang* 堂 in the *Maoshi* text were the phonetic loans of *qi* 杞 (willow) and *tang* 棠 (pear tree) respectively. In this way, all the *mingwu* terms related to the Zhongnan hill became plant names, which worked perfectly with the general patterns above.³³⁸

This example offered a good demonstration for the mechanism of general pattern in philological analysis. The listing of comparable cases (e.g., *Table 14*, *Table 15*) initiated a generalization from the individual expressions to a shared pattern—a refined philological texture that only became discernable through the accumulation of cases (e.g., “mountain + *you* 有 + plant name”; if “*you* 有 + plant name” for the first stanza, then “*you* 有 + plant name” for all the remaining stanzas). But the generalization was more than a mere summary of these listed cases. Instead, it also involved an inductive leap by taking this sampled pattern as a *general* one that could work for *every* similar instance. This crucial leap endowed the pattern a predictive power for the interpretation of new cases, which became particularly revealing when the transmitted readings fell outside the prediction. In such instances, the general pattern would imply a *normative reading* behind the textual surface.³³⁹ Just as we have seen from the above example, although

³³⁶ Wang Yinzhi, *Jingyi shuwen*, 320. 既與首章之例不合，又與全詩之例不符矣。

³³⁷ Bai Juyi, *Baishi liutie shilei ji*, juan 2: 31b; Karlgren, *Glosses on the book of odes*, 215.

³³⁸ Wang Yinzhi, *Jingyi shuwen*, 321.

³³⁹ In his series studies on the rationalist tradition in mid-Qing philological learning (which named by him as “*libi zhi xue*” 理必之學, or the learning of “logical certainty”), Feng Shengli has offered an insightful distinction between the analytical approaches of induction and deduction. According to him, only the deductive approach could speak of certainty with a predictive power, and this was considered as a major methodological contribution of the Wan school (Dai Zhen, Duan Yucai, and Wang Niansun). Here, my emphasis of the inductive leap does not form a contradiction with Feng’s claim. For the induction only helped to generate the pattern, while the predictive use of the pattern for new cases was still a deductive reasoning. See, Feng Shengli 馮勝利, “Cong Renben dao luoji de xueshu zhuanxing: Zhongguo xueshu cong chuantong zouxiang xiandai de jueze,” 從人本到邏輯的學術轉型——

the phonological connection between *ji* 紀 and *qi* 杞, *tang* 堂 and *tang* 棠 were easy to establish, that would only render the plant reading one possibility among the many—and to be precise, a minor reading of the *Hanshi* tradition that did not conform to the Mao commentary.³⁴⁰ It was the normative power of the general patterns that granted Wang Yinzhi a legitimacy to go beyond this most authoritative commentary and tilted the balance to the other side.

Similar to the mechanism of phonological-based analysis, the massive textual support guarantees the philological cogency of these finely generalized textures. Again, one should not confuse this supporting basis with the encyclopedic network of erudite learning, for in the mid-Qing cases, the references were strictly picked up according to a working hypothesis. In his recent study on Wang Niansun's deductive reasoning, Feng Shengli demonstrates how the logic of “generative analogy” guided Wang in the identification of cognate series, and how the generalization of analytical patterns directed his son Yinzhi in the gathering of function word usages.³⁴¹ Despite the considerable expanse of these projects, the philological materials were collected under a strict guiding principle that defined the “target, direction, clue, and procedure.” As pinpointed by Feng, this theory-derived nature marked a significant difference from the overarching accumulation of primary sources, or the immoderate collection of rare sources for showing off one's erudition.³⁴²

This insightful claim fits well for the epistemic feature of the general pattern. In the actual process of research, the philologist did not have to wait for an exhaustive accumulation of supporting cases before coming up with the generalized form. As shown from Ruan Yuan's example, just one or two explicit cases—and possibly some more from memory—would be sufficient for one to conceptualize the

中國學術叢傳統走向現代的抉擇 *Shehui kexue luntan* 社會科學論壇, no. 1 (2003): 21, 24; Feng Shengli, “Lun Qianjia xueshu de kexue tupuo,” 4–7.

³⁴⁰ For Wang Yinzhi's attribution of the plant reading to the Han school, see, Wang Yinzhi, *Jingyi shuwen*, 321.

³⁴¹ Feng Shengli 馮勝利, “Wang Niansun 'shengcheng leibi luoji' zhong de biran shuxing ji dangdai yiyi,” 王念孫“生成類比邏輯”中的必然屬性及其當代意義 *Liyun yuyan xuekan* 勵耘語言學刊, no. 1 (2018): 15–19.

³⁴² Feng Shengli, “Wang Niansun 'shengcheng leibi luoji' zhong de biran shuxing ji dangdai yiyi,” 16, 19.

pattern of “same meaning, altered characters.” And as long as this was conceived, it could serve as the working hypothesis for the further identification of supporting cases, as completed by Ma Ruichen. And within this process, each newly identified case would add to the likelihood of the pattern being verified. This theoretical-driven nature was even more apparent in the reconstruction of ancient rhyme groups. Both working on a massive supporting basis, the inductive generalization of layered phonological textures suggested a similar epistemic move as the identification of general pattern. This is why I place general pattern in the second position, coming right after the most refined technique of rhyme-based phonological analysis. In his comprehensive study of mid-Qing evidential learning, Qi Yongxiang has marked general pattern as the second most important method, which was only outweighed by phonological analysis.³⁴³ The above epistemic reasoning helps to explain why it was these two analytical techniques that could reach the most impressive analytical efficacy.

In other instances, the identified pattern covers a much more confined scope. A typical case is the analysis of syntactic pattern within a single ode, which could still be revealing when the piece has a highly repetitive structure. In the above example, when Wang Yinzhi argued for a plant reading of the line, a careful reader may have already noticed that his reason was twofold—“not only inconsistent with the pattern of the first stanza (*shouzhang zhi li* 首章之例), but also incompatible with the general patterns of *Shi*.” The first half of the claim suggested that, due to the repetitive structure of the ode, the first stanza could by itself serve as a model. I call such intra-poetic consistencies the *syntactic pattern*.

Despite its limited textual basis, the syntactic pattern could still exert considerable power when working coordinately with other philological techniques. Here, I will use one more example from the ode “Wild Ducks” (Fuyi 鳧鷖, *MS* #248) to illustrate the point. In this ode, each of the five stanzas begins with an evocative image of the wild ducks:

鳧鷖在涇……

The wild ducks are on the Jing River...

³⁴³ Qi Yongxiang, *Qianjia kaoju xue yanjiu*, 83.

鳧驚在沙……	The wild ducks are on the water side...
鳧驚在渚……	The wild ducks are on the islet...
鳧驚在澌……	The wild ducks are on the river junction ...
鳧驚在壺……	The wild ducks are in the gorge... ³⁴⁴

In the above quotation, each of the lines ends with a *mingwu* term related to the river. The current translation followed the Mao-Zheng commentary tradition, where the term in the first stanza, *jing* 涇, was taken as a proper name of the Jing River, and the term in the final stanza, *men* 壺, was read as *men* 門 and interpreted as a gate-like gorge across the river.³⁴⁵ This became the standard reading until Duan Yucai, who, based on the syntactic consistency of the stanzas, argued that the five terms should “follow a single pattern” (*yili* 一例), and therefore “*jing* should not be a river name on its own.”³⁴⁶ Instead, drawing evidence from *Erya*, *Shiming* 釋名 (Explanation of Names), and *Zhuangzi*, Duan reinterpreted the character as “straight wave,” thus making it more consistent with the remaining four terms as a water-related location.³⁴⁷ As for the term in the final stanza, the interpretation of gate-like gorge remained unchallenged until Ma Ruichen, who not only accepted Duan’s new reading of *jing*, but also took the character *men* 壺 as a phonetic loan of *mei* 湄, or the water side.³⁴⁸ Previous scholars such as Fang Yizhi and Qian Daxin had already noticed the interchangeable use of *men* 壺 and *mei* 湄 in bronze inscriptions.³⁴⁹ However, it was only Ma Ruichen who moved on from this connection to a new interpretation of the line. The basis was still syntactic consistency. According to Ma, since *mei* 湄 meant the water side, this new reading could achieve a better consistency with the terms in the previous three

³⁴⁴ Zheng Xuan, *Maoshi zhuan jian*, 390–92.

³⁴⁵ Zheng Xuan, *Maoshi zhuan jian*, 392.

³⁴⁶ Duan Yucai, *Shijing xiaoxue*, juan 24: 7a.

³⁴⁷ Duan Yucai, *Shijing xiaoxue*, juan 24: 7a-b.

³⁴⁸ Ma Ruichen, *Maoshi zhuanjian tongshi*, 900.

³⁴⁹ Fang Yizhi 方以智, “Tong ya,” 通雅 in *Fang Yizhi quanshu* 方以智全書 (Hefei: Huangshan shushe, 2019), 4: 149; Qian Daxin 錢大昕, *Jiading Qian Daxin quanji* 嘉定錢大昕全集 (Nanjing: Fenghuang chubanshe, 2016), 8: 182.

stanzas—*sha* 沙 as the water side, *zhu* 渚 as the river islet, and *zhong* 澤 as the river junction—which all referred to “the ground by water” (*shuipang zhi di* 水旁之地).³⁵⁰

The repetitive structure of the odes endowed the pieces an intrinsic cohesiveness. In this typical case, the method of syntactic pattern was used twice for a more consistent reading of the *mingwu* terms in both the first and the fifth stanzas. Admittedly, such a local generalization—or trans-stanzaic analogy—was not the invention of mid-Qing scholars. However, together with the general patterns on a broader analytical scale, as well as other emerging subfields of relevant inquiry such as Wu Yi’s 武億 (1745-1799) study on the punctuation of classic texts and Wang Yinzhi’s grammatical analysis of function words, one message was crystal clear—the rising significance of “syntax,” or the textual structure on the sentence and sub-sentence levels, as a new focus of philological inquiry.³⁵¹ It added a middle level between the individual words and the boarder stanzaic and poetic contexts, a structuralized basis for the embedding—and deciphering—of *mingwu* terms. Just as the identification of phonetic loans reveals philological textures on the character level, the analyses of general and local patterns are effective in making such identifications on the syntactic level.

Binomic Chains

The identification of syntactic pattern bespoke a more limited scale of generalization. Among the newly developed philological techniques, another important method that shared a similar epistemic mechanism was the study of binomic chains. In the “Tartar pipe” example at the beginning of this chapter, we have seen how Hao Yixing dug out the original meaning of *bili* 鬻篋 through the identification of a six-binome chain (p. 136). This generative link of homologous binomes indicated a

³⁵⁰ Ma Ruichen, *Maoshi zhuanjian tongshi*, 900.

³⁵¹ For the studies by Wu Yi and Wang Yinzhi, see, Wu Yi 武億, *Jingdu kaoyi* 經讀攷異, Shoutang yishu edition, Shanghai Library, no. 327642-53 (Jiaqing era); Wang Yinzhi 王引之, *Jingzhuan shici* 經傳釋詞 (Shanghai: Shanghai guji chubanshe, 2016).

different mechanism from the phonological identification of loan characters and thus is worth a separate discussion.³⁵²

In the Ming, there were already works dedicated to the collection of binomes, such as Yang Shen's *Guyin pianzi* 古音駢字 (Bi-syllabic words in ancient sounds) and Zhu Mouhan's 朱謀埠 (1564-1624) *Pianya* 駢雅 (Direction on the bi-syllables). However, in Yang's work, most of the binomes were listed separately, and for the associated ones, they were mainly grouped by graphic connections.³⁵³ As for Zhu's work, the binomes were clustered according to the meaning, with little concern for the pronunciations.³⁵⁴ It was not until the dynastic transition that Fang Yizhi provided the first systematic analysis of binomes from the phonological perspective. In *Tongya* 通雅, he listed 355 sets of phonologically connected binomes under the name “combined sayings” (*lianyu* 連語), which, according to his own definition, were “alliteratively (or rhymingly) joined in sound and combined in words.”³⁵⁵ Although Fang Yizhi, like Jiao Hong, only had a localized understanding of ancient sounds (cf. p. 133), the study was successful in associating the binomes into phonetic chains. And this was coupled by Fang's methodological insight—“to acquire the meaning from the sound, and to get the sound from the meaning.”³⁵⁶

³⁵² As suggested by Shen Huaixing, in the pre-modern era, the idea of binome (under the name of 駢字, 連語, or 連語) could refer to both bi-syllabic simple and compound words. In this dissertation, I adopt this wider definition to avoid anachronistic problem. The binomes have a single, complete meaning, many with alliterative or rhyming sounds, and are particularly susceptible to phonetic variation. But this does not mean that the two characters are inseparable for further morphemic analysis. See, Shen Huaixing 沈懷興, “Lianmian zi' yu yuwenxue shi shang de xiangguan mingci,” “連綿字”與語文學史上的相關名詞 *Gu hanyu yanjiu* 古漢語研究, no. 3 (2007): 54.

³⁵³ Yang Shen 楊慎, “Guyin pianzi,” 古音駢字 in *Yingyin Wenyuange siku quanshu*, 228: 399–431.

³⁵⁴ See, Zhu Mouhan 朱謀埠, “Pian ya,” 駢雅 in *Yingyin Wenyuange siku quanshu*, 222: 515–48.

³⁵⁵ 雙聲相轉而語連護也。Here, one may take a broader meaning of the word *shuangsheng* 雙聲 to include both the alliterative and rhyming connections. See, Fang Yizhi 方以智, *Fang Yizhi quanshu* 方以智全書 (Hefei: Huangshan shushe, 2019), 4: 273; Li Yunfu 李運富, “Wang Niansun fuzi de 'lianyu' guan jiqi xunjie shijian (shang),” 王念孫父子的“連語”觀及其訓解實踐 (上) *Gu hanyu yanjiu* 古漢語研究, no. 4 (1990): 35. For the statistics, see, Shen Huaixing, “Lianmian zi' yu yuwenxue shi shang de xiangguan mingci,” 52.

³⁵⁶ Fang Yizhi, *Fang Yizhi quanshu*, 4: 273. 因聲知義, 知義而得聲。

In the mid-Qing era, Wang Niansun made the most significant development to this pioneering approach. His comprehensive study of *Guangya* included the analysis of more than 1,200 binome cases.³⁵⁷ The guiding principle was consistent with Wang's general philological take, namely, the priority of sound over graph: "In general, the meaning of alliterative and rhyming binomes lies on the sound. It is accessible when seeking from the sound, but confusing when seeking from the graph."³⁵⁸ Although the idea was already implied in *Tongya*, one could observe three major developments in Wang's analysis compared to Fang Yizhi's. First was a finer inquiry into the "semantic structure" of the binomes.³⁵⁹ This was best suggested through Wang's study of an essential sub-category of binomes—the "joint sayings" (*lianyu* 連語), or binomes with two characters in the same meaning. In *Dushu zazhi*, he proposed the following renowned principle on the undifferentiability of the characters in a "joint saying":

For any "joint saying," the former and the latter characters have the same meaning and cannot be interpreted in separation. When the commentators take the word literally, it is frequent for them to be far-fetched and miss the original meaning.

凡連語之字，皆上下同義，不可分訓。說者望文生義，往往穿鑿而失其本旨。³⁶⁰

To support the claim, Wang raised as much as 23 problematic cases from the *Hanshu* 漢書 commentaries to elaborate how a surface and differentiated interpretation of the characters would lead to over-reaching readings.³⁶¹ It thus added a new weight to the critique of graphic-based surface reading. In the previous section, this pertained to the phonological link of loan characters, while here, it was due to a semantic structure of the binome itself.

³⁵⁷ For the statistics, see, Zhang Zhang 張章, "Guangya shuzheng lianmian ci yanjiu" 《廣雅疏證》聯綿詞研究 (MA Thesis, Fudan University, 2008), 44, 105-124.

³⁵⁸ Wang Niansun, *Guangya shuzheng*, 1020 大抵雙聲疊韻之字，其義即存乎聲。求諸其聲則得，求諸其文則惑矣。

³⁵⁹ This is taken by Li Yunfu as a major contribution of Wang Yinchi's binome studies. See, Li Yunfu 李運富, "Wang Niansun fuzi de 'lianyu guan' jiqi xunjie shijian (xia)," 王念孫父子的"連語觀"及其訓解實踐 (下) *Gu hanyu yanjiu* 古漢語研究, no. 2 (1991): 68-69.

³⁶⁰ Wang Niansun, *Dushu zazhi*, 1026.

³⁶¹ Wang Niansun, *Dushu zazhi*, 1026-35.

Similar to the identification of original characters, this non-separated interpretation could serve as a powerful antidote to the surface readings in the commentary tradition. In *Jingyi shuwen*, Wang Yinzhi applied the technique to the entire classic corpus, identifying 11 cases of separated interpretation in the *Maoshi* commentary.³⁶² For instance, the first case dealt with the alliterative binome *xuanhuang* 玄黃, which, appearing in the ode “Grasswort” (Juan’er 卷耳, *MS* #3), was used to as a description for a horse—“My horse became *xuanhuang*.” The Mao commentary, as a good example of surface differentiated reading, interpreted the binome as “when a black (*xuan* 玄) horse gets sick, it turns yellow (*huang* 黃).”³⁶³ The line thus became a physiological claim about the animal, “My black horse became (sickly) yellow.” However, by pointing out the alliterative nature of this binome and its explanation as “illness” in *Erya*, Wang Yinzhi concluded the binome as a general description for “sick appearance.” According to him, both the *xuan* and *huang* characters suggested the same idea of sickness. And this could be further corroborated from the ode “What Grass Is Not Withered” (He cao bu huang 何草不黃, *MS* #234), where the *huang* and *xuan* characters were used in parallel, both referring to the withering of grass.³⁶⁴ As another example, in the ode “Ephemera” (Fuyou 蜉蝣, *MS* #150), one finds a line “The ephemera *jueyue* 掘閱.” This puzzling binome was interpreted by Zheng Xuan as “digging into the earth for emergence” (*juedi jieyue* 掘地解閱), another typical case of differentiated reading. As a contrast, on noticing a various form of the line in *Shuowen*, where the term appeared as *kuyue* 堀閱, Duan Yucai suggested *jue* 掘 as a graphic error of *ku* 堀. And this rectified term *kuyue*, as a “double word” (*shuangzi* 雙字), could be a phonetic variation for the “overlapping word” (*chongdie zi* 重疊字) of *kongxue* 孔穴, or cave. In this way, the line became a plain description that “the ephemera comes out from the cave.”³⁶⁵

³⁶² This was summarized as the general pattern of “Same Meaning for the Upper and Lower Characters in the Parallel Bi-Syllables of the Classic and Commentary” 經傳平列二字上下同義. See, Wang Yinzhi, *Jingyi shuwen*, 1943–45.

³⁶³ Zheng Xuan, *Maoshi zhuan jian*, 8.

³⁶⁴ Wang Yinzhi, *Jingyi shuwen*, 273–74.

³⁶⁵ Duan Yucai, *Shijing xiaoxue*, juan 14: 1b–2a.

Despite a lack of fixed terminologies, this example indicated a similar rectification of surface differentiated reading through the binomic feature.

One may also extend the reasoning to the reduplicative binomes, where the bi-syllabic words were confused with the meaning of single characters. As a typical example, in the ode “In the South There Are Fine Fishes” (Nan you jiayu 南有嘉魚, *MS* #172), one could find the following two descriptions of the fish: “in great numbers *zhaozhao* 罩罩,” and “in great numbers *shanshan* 汕汕.” According to the Mao commentary, *zhaozhao* referred to the “fishing basket,” and *shanshan* the “wicker trap.”³⁶⁶ This *mingwu*-oriented reading was based on *Erya*, where the single character *zhao* was noted as “fishing basket,” and *shan* the “wicker trap.” Dai Zhen had already noticed the unlikelihood of this reading, remarking that *zhaozhao* and *shanshan*, as “reduplicated adjectives,” should not refer to fishing tools. Instead, with a reference to the explanation of “*shan*” in *Shuowen*—“the appearance of fish swimming in the water”—he attributed this meaning to both of the binomes.³⁶⁷ However, such an interpretation risked falling again into the pit of single-character-based reading, and this was only fixed by his disciple Wang Niansun. On noticing the interpretation of *naonao* 淖淖 and *chanchan* 漣漣 as “multitudinous” in *Guangya*, Wang established the phonological connections between *naonao* 淖淖 and *zhaozhao* 罩罩, *chanchan* 漣漣 and *shanshan* 汕汕. In this way, all the four binomes were taken as the “crowding appearance of swimming fish,” revealing a hidden message in the binomic sound that worked well with the phrase “in great numbers” in the same lines.³⁶⁸ The binomic structure, indicating a semantic unit on its own, was a powerful technique for the rectification of surface readings.

Compared to Fang Yizhi’s study of binomes, the second development of the mid-Qing philologists was a more active inquiry into the sound-meaning connection. In *Tongya*, the binomes were associated into phonetic series. Within a series, one could indeed identify semantic connections among

³⁶⁶ Zheng Xuan, *Maoshi zhuan jian*, 227.

³⁶⁷ Dai Zhen, *Mao Zheng shi kaozheng*, juan 2: 4b.

³⁶⁸ Wang Niansun, *Guangya shuzheng*, 966, 968.

the binomes, but this was simply presented as a fact. In other words, for Fang, the determination of sound for meaning was merely shown in a *descriptive* way. In contrast, the mid-Qing scholars began to apply this principle in a *normative* manner. If the sound was the determining factor, for the binomes that were phonetically connected in the same series, they *should* also share a similar aspect in their meaning. This became the theoretical basis for the generalization of core meaning for a binomic series, which was essential for a deeper understanding of its etymology. Meanwhile, it also lay the foundation for one to extend this core meaning to the interpretation of new binomes in the same series, thereby endowing a “predictive power” to the series. As one may recall from the examples in beginning of this section, this was how Ma Ruichen generalized the meaning of “intensity” from the binomic series of *bifa* and deciphered *bifa* 凜冽 as the intensity of cold; it was also how Hao Yixing generalized the meaning of “splitness” from the binomic series of *bielie* and concluded that *bili* 篳篥 was referring to a splitting sound. Again, the determinacy of sound to meaning indicated a more refined philological texture that was not discernable from the graphic surface of individual binomes.

In the *Maoshi* text, one binomic series that loomed particularly large was “*guoluo*,” which appeared twice in the odes “The East Hill” (Dongshan 東山, *MS* #156) and “Diminutive” (Xiaowan 小宛, *MS* #196) respectively. In the former case, the binome appeared as a fruit-*guoluo* 果臝 and was taken as the Chinese snake gourd; in the latter case, it appeared as an insect-*guoluo* 蜎蝓 and was taken as the slim-waist wasp.³⁶⁹ These interpretations from the commentary tradition remained astonishingly stable, and received little challenge even in the mid-Qing era. That said, it was not until the turn of the 18th century that scholars became able to offer an etymological analysis of the binomes and explained why these two disparate *mingwu* terms could share the same sound. In his *Maoshi caomu niaoshou chongyu shi* 毛詩草木鳥獸蟲魚釋 (Explanations to the Grasses, Trees, Birds, Beasts, Insects, and Fishes in *Maoshi*, henceforth *Explanations*), one of the protagonists in our analysis on the *mingwu* monographs in

³⁶⁹ Kong Yingda, *Maoshi zhengyi*, 523, 744.

Chapter Two, Jiao Xun offered the first systematic inquiry into this binomic series. As a finely argued *mingwu* monograph on *Maoshi*, the compilation of this work lasted for nearly two decades (1781-1799).³⁷⁰ Although the work was never published before the modern era, it is fortunate that four manuscript copies of the work are preserved to today, from which one may reconstruct the process of epistemic reasoning.³⁷¹ In the earlier 20-*juan* copy (completed 1793) and the body text of the 30-*juan* copy (compiled between 1793-98), the binome *guoluo* 果羸 was simply explained as *gualou* 桔樓, or the Chinese snake gourd according to the Mao commentary and a few other classic texts.³⁷²

However, in the 30-*juan* copy, there was also a separate notepaper on the term, where Jiao offered his first generalization to the binomic series. As a new observation, the note must have been inserted into the draft during a later stage of the compiling process, and was then transcribed into a clear entry in the 12-*juan* edition (1799). In *Lüshi chunqiu*, the binome *guoluo* 果羸 was used to describe the “pearl-clustering” millet ears. By associating this appearance to the fruit-bearing branches of a snake gourd (*guoluo* 果羸/ *gualou* 桔樓), Jiao suggested that “all the uneven objects” (*fan buping zhe* 凡不平者) could take this binomic sound. To further support this claim, he also raised two more binomes, *kulei* 窟礪 (cave) and *kunlei* 錕鐻 (uneven) that were phonetically related.³⁷³ That said, how could one connect this shaped-based interpretation to the slim-waist wasp which shared the same sound? According to Jiao, this was due to a similar “conspicuity” (*biaoyi* 標異) between the “standing-out of an uneven shape,” and

³⁷⁰ Lin Po-Ch'eng 林柏丞, “Jiao Xun yanjiu *Maoshi* xueji: yi *Maoshi wuming shi* wei kaocha duixiang” 焦循研究《毛詩》學記——以《毛詩物名釋》為考察對象 (MA Thesis, National Taiwan Normal University, 2016), 39–47.

³⁷¹ Among the four draft manuscripts, two of them are earlier incomplete copies under the title 毛詩物名釋. One 20-*juan* version (1793) now preserved in Academia Sinica, and another 1-*juan* version (between 1793-98) from the Shanghai Library. The other two are more mature copies under the current title, a 30-*juan* version (1798) and a 11-*juan* version (1799), both preserved in the Shanghai Library. For the dating of these manuscript copies, see, Huang Rui 黃睿, “Jiao Xun *Maoshi caomu niaoshou chongyu shi* yanjiu” 焦循《毛詩草木鳥獸蟲魚釋》研究 (MA Thesis, Ludong University, 2020), 31.

³⁷² See, Lin Po-Ch'eng, “Jiao Xun yanjiu *Maoshi* xueji,” 287; Jiao Xun 焦循, *Maoshi caomu niaoshou chongyu shi* (30 *juan*) 毛詩草木鳥獸蟲魚釋, draft manuscript, Shanghai Library, no. 802252-54 (1798), *juan* 15: 21a.

³⁷³ Jiao Xun, “*Maoshi caomu niaoshou chongyu shi*,” 88.

the “hybrid born across species.”³⁷⁴ And following this logic, the binomic series could also denote objects which were “abnormal in reproduction.” As you may still recall from the long quote of Lu Xun at the very beginning of this dissertation, here Jiao was referring to an influential text-derived feature of the *guoluo* wasp. Based on the lines in *MS* #196—“the mulberry insect has young ones, the *guoluo* wasp carries them on its back,” it was widely believed that a *guoluo* wasp, being purely male, could only reproduce by taking a bollworm as its own descendent.³⁷⁵ This sound-meaning connection was also discernable from the binome *pulu* 蒲盧, the name of a specific kind of clam that was believed to be transformed from a black pheasant. Moreover, the logic also worked for single characters. According to Jiao, this was why the mule, hybrid of horse and donkey, was called *luo* 贏 (abnormal reproduction), why the snails, with a standout shell, got the name *luo* 贏/螺 (unevenness), and why the term *xueluo* 蟹螺 could denote a “standout ground.”³⁷⁶ For the first time, the binomic series of *guoluo* was interpreted according to a hidden message in its sound. That said, there are still a few imperfections in this early attempt. First, although the generalized ideas of a standout shape and an abnormal reproduction are revealing within each of the sub-groups, the association of these two aspects under the single idea of “conspicuity” appears far-fetched. Second, the inclusion of both binomic and single-character names implies a methodological confusion between two types of phonological reasoning. Third, in the entry, Jiao also included a few more binomes such as *guoluo* 過贏 and “*fulei* 服_[sic.]累 without further explanation, which also indicates an immature nature of the entry. Although Jiao himself had never offered an explicit reflection like this, these imperfections were notably fixed in the final version of the entry.

³⁷⁴ Jiao Xun, “Maoshi caomu niaoshou chongyu shi,” 88. 蓋形不平而高出，與種不類而雜出，其標異有相似者。

³⁷⁵ Zheng Xuan, *Maoshi zhuan jian*, 279. Translation adapted from Karlgren, *The Book of Odes*, 144–45. For the reproducing trait of the *guoluo* wasp, see, e.g., Zheng Xuan and Lu Ji’s descriptions in Kong Yingda, *Maoshi zhengyi*, 744–45; also see Xu Shen’s characterization in Xu Shen 許慎, *Shuowen jiezi* 說文解字 (Shanghai: Shanghai shudian chubanshe, 2016), 350.

³⁷⁶ Jiao Xun, “Maoshi caomu niaoshou chongyu shi,” 88–89.

果蠃是也蓋禾之秀為穗穗別為梨實為栗栗在梨
 粟累如珠璣謂之穠此果蠃所以名也括樓今謂之
 瓜蔓兩兩偶生于莖葉之間亦果蠃然故亦以是稱
 蠃說文作旅通諸凡草木之實而或又分在木在地
 者則後人別之也于是凡不平者皆取諸是聲厓礪
 鋸錫皆果蠃之轉音也果蠃及通作螺蠃蓋形不
 西高出與種不類而雜出其標異有相似者故凡
 類中有與育之異者而得以呼之螟蛉之為蠅蟪
 之為蠃也又曰九月雄及中雌也杜牧之為雕後果蠃
 屬其較高出類于果
 蘇地之高者說苑稱
 為雙螺亦猶是也

Figure 34: Revision of the *guoluo* Entry in the 12-juan Edition³⁷⁷

As shown in Figure 34, the entry underwent a major revision in the 12-juan edition. As a clear draft, such an extensive revision was quite rare, which indicated Jiao's continuing exploration into the binomic problem towards the finalization of the work. In this revised entry, Jiao took away the entire section about abnormal reproduction. Instead, this time the *guoluo* was also interpreted according to its shape: "This is because the thing has a slim waist, and the part behind the waist looks similar to the ear

³⁷⁷ Jiao Xun, "Maoshi caomu niaoshou chongyu shi," 88.

of millet.”³⁷⁸ Similarly, the binome *pulu* 蒲盧, or clam, was reinterpreted based on its standout, fruit-like shell. Meanwhile, he also deleted the discussion of single-character terms, reinterpreting the snail according to its binomic names that were phonetically related—*pulei* 僕累 and *woluo* 蝸贏. As for the unspecified terms *guoluo* 過贏 and *fulei* 復累, Jiao clarified that the former, an alias of the wren, was derived from its “round and nimble appearance,” while the latter, a specific kind of big clam, also got its name from the standout shell. Comparing to the previous edition, this new synthesis was more thorough. For the first time, a series of 14 binomes across the flora, fauna, and topography were associated under the single idea of unevenness (*Table 16*).

*Table 16: Binomic Series in the Finalized Version of Jiao Xun’s guoluo Entry*³⁷⁹

Case	Sound	Binome	Meaning	Etymological Basis
1	<i>Guoluo</i>	果贏	Chinese snake gourd	Shape of the clustered fruits/ millet ear
2	<i>Gualou</i>	枯樓	Fruit of the <i>guoluo</i> gourd	Shape of the clustered fruits
3	<i>Gualou</i>	瓜萋	Fruit of the <i>guoluo</i> gourd	Same as 枯樓
4	<i>Guoluo</i>	果蓏	Chinese snake gourd	Same as 果贏
5	<i>Kulei</i>	窟礪	cave	Uneven shape
6	<i>Kunlei</i>	錕鐻	Uneven	Uneven shape
7	<i>Guoluo</i>	螺贏	Slim-waist wasp	Shape of the part behind the waist
8	<i>Guoluo</i>	蝟贏	Slim-waist wasp	Same as 螺贏
9	<i>Guoluo</i>	過贏	Wren bird	Round and nimble shape
10	<i>Pulu</i>	蒲盧	Clam	Standout shape of the shell

³⁷⁸ Jiao Xun, “Maoshi caomu niaoshou chongyu shi,” 88. 蓋其物細要，要後有如禾穗者。

³⁷⁹ Summarized from Jiao Xun, “Maoshi caomu niaoshou chongyu shi,” 87–88.

11	<i>Pulei</i>	僕累	Snail	Standout shape of the shell
12	<i>Fulei</i>	復累	Big clam	Standout shape of the shell
13	<i>Woluo</i>	蝸贏	Snail	Standout shape of the shell
14	<i>Xieluo</i>	蟹螺	High ground	standout shape

As one may have realized from the two editions, this is a philological game with scale effect. The more one came up with supporting cases, the more convincing the shared message would appear. This was particularly the case when the binomic series—unlike the *bifa* one in Ma Ruichen’s example—covered a variety of meanings across different fields. In such instances, the generalization of a common trait from the looming similarities would by itself become an artful moment for the emergence of hidden philological texture. In the above example, Jiao did a successful job in connecting the biological terms, though the revision process also betrayed a residue of arbitrariness both regarding the scope of phonetic connection and the determination of generalized idea. For instance, in both versions, Jiao included *xieluo* 蟹螺 as a supporting case. Based on modern reconstruction of Old Chinese initials, one may indeed connect the word (OC: *m-kʰreʔ, *k.rʰoj) alliteratively to the *guoluo* group. However, this required the knowledge of double initials that was completely unknown to mid-Qing scholars. Meanwhile, the fricative initial of *xie* 蟹 (MC: *heaX*) in Middle Chinese—the major basis for the mid-Qing phonological analysis of the binomic initials—also had a distance from the plosive *k*- sound of the *guoluo* group (and the *b*- sound of the *pulu* 蒲盧 subgroup). As I have noted above, in the earlier version of the entry, the word *xieluo* 蟹螺 must have been understood from its connection to the single character *luo* 螺, which was analyzed together with the binomes. However, after the deletion of the single-character terms in the revised entry, Jiao still kept *xieluo* as a supporting case, leaving a looser phonetic connection. The efficacy, together with the imperfections, testified to the great potential of this new philological technique in an experimental stage.

The extensive association across multiple semantic fields, as shown from Jiao Xun's entry, captured a third development in the mid-Qing binomic analysis. In Fang Yizhi's *Tongya*, although it was not impossible for the binomes to form into longer phonetic chains (e.g., 15 binomes for the series of *changyang* 徜徉; 13 binomes for the series of *yini* 旖旎), the cases were normally graphic variations or binomes that were semantically proximate to each other.³⁸⁰ As a contrast, it was much more likely for the mid-Qing philologists to make binomic association across semantic fields (Jiao Xun's case) or word classes (Hao Yixing's case). This was a natural result of the more thorough understanding of the fundamentality of sound. This guiding premise propelled a bolder association of the phonetically related binomes across categories, and the generalization on a broader supporting basis also added a further credibility to the premise in reverse. The result was an accumulating effort of binomic association, which, for the mid-Qing period, culminated in Cheng Yaotian's 程瑤田 (1725-1814) revolutionary work *Guoluo zhuanyu ji* 果羸轉語記 (Notes on the phonetic derivations of *guoluo*).

In this exhaustive study, Cheng knitted together an astonishing 332 binomes through the “phonetic derivations” of *guoluo*, which far exceeded the scope of Jiao Xun's entry.³⁸¹ The phonetic links were unfolded in a gradual and accumulative manner, from a slight shift of sound to the more distant pronunciations. This extensive chain spanned a variety of commonly-used binomes, which one may not associate with *guoluo* at first glance: *goulou* 病僂 (stoop), *fuyao* 扶搖 (swirl wind), *zhuru* 侏儒 (dwarf), *puosuo* 婆娑 (dancing), *qionglu* 穹廬 (thatched hut), *pufu* 匍匐 (creeping), *gudong* 古董 (assorted things), *guduo* 骨朵 (bud), *gulu* 轂轆 (wheel), and so on.³⁸² Although Cheng did not make any semantic generalization on the overall scale, one could easily observe the clustering of meaning from this extensive list, which, as suggested by the modern scholar Yin Menglun 殷孟倫, could be classified into five

³⁸⁰ Fang Yizhi, “Tong ya,” 277, 280.

³⁸¹ For a detailed statistic of these binomes, see, Wang Yin 王寅, *Guoluo zhuanyu ji xiandai hanyu yiben jiqi xueshu jiazhi de dangdai jiedu* 《果羸轉語記》現代漢語譯本及其學術價值的當代解讀 (Changchun: Jilin daxue chubanshe, 2019), 93–112.

³⁸² Cheng Yaotian 程瑤田, *Cheng Yaotian quanji* 程瑤田全集 (Hefei: Huangshan shushe, 2008), 3: 491–503.

interconnected groups: 1) a round shape; 2) a bent shape; 3) a circumferential spreading; 4) a form of rotation; and 5) a rolling extension.³⁸³ Put together, these sound-meaning nexuses offered a good elaboration of Cheng's general claim on the binomes:

The sound was designated according to the form, and the characters established by the sound. The things change from time to time, yet the name does not alter; the characters vary from time to time, yet they never deviate from the sound.

聲隨形命，字依聲立。屢變其物而不易其名，屢易其文而弗離其聲。³⁸⁴

Praised by Wang Niansun as an “unprecedented” yet “indispensable” work, this 300-odd item list of the *guohuo* series displayed the most daring exploration on the philological texture of binomes in the mid-Qing era.³⁸⁵

Individual Characters

In the quantitative analysis in Chapter Two, I have shown the significance of *Shuowen jiezi* 說文解字 (Explaining Graphs and Analyzing Characters) as the highest-scored source on the dimension of credibility. This is consistent with our traditional view of the work as the most authoritative reference book in ancient philology for mid-Qing evidential learning. In his recent work on Qian Daxin, Ori Sela maps out a rapid proliferation of *Shuowen* studies from the 1770s onwards, which is taken by him as a defining indicator for the “quantum leap” of textual-philological studies in the late-18th century.³⁸⁶ Among the 55 datable works in this subfield between 1735 and 1823, only 4 were completed before 1770, while the other 51 were all post-1770 works.³⁸⁷ For Sela, this proliferation was mainly explained as a collective

³⁸³ Yin Menglun 殷孟倫, *Ziyun xiangren leigao* 子雲鄉人類稿 (Jinan: Qilu shushe, 1985), 265–66.

³⁸⁴ Cheng Yaotian, *Cheng Yaotian quanji*, 3: 491.

³⁸⁵ Cheng Yaotian, *Cheng Yaotian quanji*, 3: 505.

³⁸⁶ Sela, *China's Philological Turn*, 85–88.

³⁸⁷ Based on the bibliographical list by Sela, *China's Philological Turn*, 199–204.

pursuit for the textually embedded *Ru* identity.³⁸⁸ However, in the same section, his quotation of the following claim by Cheng Yaotian also implies a parallel methodological reason:

As for the difficulty in reading books, [this] difficulty rests in understanding the characters; if one does not know the characters one cannot comprehend their meaning.

夫讀書之難，難在識字，弗知其字，弗通其義也。³⁸⁹

Coming from the preface to Cheng Jisheng's 程繼盛 (*jinshi* 1780) *Shuowen jiezi yinjing kao* 說文解字引經考 (Investigations on the quotation of classics in *Shuowen jiezi*), here the emphasis of *shizi* 識字, or the comprehension of individual characters, was particularly noteworthy. It recalls the famous critique by Dai Zhen of his contemporaries, recorded by Zhang Xuecheng in 1766 shortly after their initial meeting—"As for scholars today, let alone their learning and literary talents, first of all they commit the crime of 'Not Comprehending the Characters' (*xian zuo bu ceng shizi* 先坐不曾識字)."³⁹⁰

For Dai, the proper comprehension of individual characters was the very foundation for the entire philological enterprise, which Dai had already treated as a guiding principle from his early years. In his 1754 letter to Shi Jing 是鏡 (1693-1769), Dai offered a precious record of the context of this methodological realization, which deserves an extensive quotation:

I came from a deprived family in my childhood, and hence no chance to learn from a teacher. Hearing that there had been a sage named Kongzi, who had compiled the six classics for the following generations, I managed to acquire one of them. Perusing that book, I was confused and could not make sense of it. Thinking it over for a long time, I pondered in my mind,

"The classics aim at the Way, what manifests the Way are the words in the classics, and what makes up the words are the characters. From the characters to reach the words, and from the words to reach the Way—it has to be a gradual course."

³⁸⁸ Sela, *China's Philological Turn*, 90. For the limit of this identity-oriented explanation, see, Yingtian He, "Book Review: Ori Sela, *China's Philological Turn: Scholars, Textualism, and the Dao in the Eighteenth Century*," *East Asian Science, Technology, and Medicine* 53, 1-2 (2021): 118.

³⁸⁹ Cheng Yaotian, *Cheng Yaotian quanji*, 2: 522. The translation follows Sela, *China's Philological Turn*, 89.

³⁹⁰ See, "Yu zusun Runan lunxue shu" 與族孫汝南論學書, in Zhang Xuecheng 章學誠, *Zhang Xuecheng yishu* 章學誠遺書 (Beijing: Wenwu chubanshe, 1985), 224. For the context of this record, see, Yü Ying-shih, *Lun Dai Zhen yu Zhang Xuecheng*, 7-9, 13.

In order to study the characters, I investigated seal script, and got Mr. Xu's (Xu Shen) *Shuowen jiezi*. Spending three years to know its outline, I came to see how the ancient sages invented [the characters] in their origins.

僕自少時家貧，不獲親師。聞聖人之中有孔子者，定六經示後之人。求其一經，啓而讀之，茫茫然無覺。尋思之久，計於心曰：經之至者道也，所以明道者其詞也，所以成詞者字也。由字以通其詞，由詞以通其道，必有漸。求所謂字，考諸篆書，得許氏說文解字，三年知其節目，漸觀古聖人制作本始。³⁹¹

The indented section, mapping out a philological ladder from the individual characters (*zi*) to the words (*ci*) and to the Way (*dao*), was one of the most famous methodological claims in the history of mid-Qing evidential studies—or presumably, one of the two most famous. The other was a twin claim also by Dai, which suggested a similar ladder from the “primary and derived characters” (*wenzi* 文字) to the “language” (*yuyan* 語言) and to the “mind and will of the ancient sages and worthies,” a necessary sequence that one should not “skip over.”³⁹² The special significance of both claims was that they mapped out a *constructive* approach in the study of classic texts. Starting from the smallest textual unit—the individual character, one could build up the entire philological mansion brick by brick, layer by layer, as if the textually rooted Way was a direct aggregation of these individual characters.³⁹³ For sure, Dai was not the first philologist who envisioned a bottom-up methodological scheme. Gu Yanwu had famously claimed that “the reading of the Nine Classics starts from the investigation of text,” and in the nearer past, one found Hui Dong’s emphasis that the meaning of the classics lay on the “comprehension of characters

³⁹¹ Dai Zhen, *Dai Zhen quanshu*, 6: 368. With adaptations, the translation follows Wu Genyou and Huang Deyuan, “A Preliminary Discussion of Dai Zhen's Philosophy of Language,” *Frontiers of Philosophy in China* 5, no. 4 (2010): 538.

³⁹² See, Dai Zhen’s preface to *Gu Jingjie gouchen* 古經解鉤沉. Dai Zhen, *Dai Zhen quanshu*, 6: 376. The translation follows Elman, *From Philosophy to Philology*, 29.

³⁹³ The actual situation, for sure, was more complex. As suggested by Michael Polanyi, the reason is that “the operations of a higher level cannot be accounted for by the laws governing its particulars forming the lower level.” For instance, one cannot “derive a vocabulary from phonetics,” or to “derive the grammar of a language from its vocabulary.” A crucial gap thus remained between the localized study of classical texts and the comprehending of the Way on a “higher level.” In his late years, Dai Zhen made a substantial change of his mind by placing “meaning and principle” (*yili*) as the foundation “evidential studies” (*kaohé*), thus forming a complete hermeneutic cycle by adding a “top-down” aspect into his methodological scheme. However, this methodological refinement, unlike the bottom-up half, did not receive a positive response by his contemporaries. See, Michael Polanyi, *The Tacit Dimension* (Chicago and London: The University of Chicago Press, 2009), 36; Yingtian He, “Acquiring Principle from the Concreteness: Materiality in Dai Zhen’s Plane Trigonometry,” in *The Materiality of Knowledge in Chinese Thought, Past and Present*, ed. Dirk Meyer and Stefano Gandolfo (De Gruyter, Forthcoming), ‘Epilogue.’”

and analysis of sounds.”³⁹⁴ From this perspective, Dai Zhen’s realization captured an emerging consensus in the century-long development of textual evidential analysis. That said, by referring to textual units on different scales (i.e., “character” versus “word,” “primary and secondary characters” versus “language”), Dai suggested a keener awareness to the constructive nature of the philological enterprise, such that one had to start from the *basic unit* of the classic text.

The autobiographical record above offered a revealing account for the connection between this constructivist approach and *Shuowen* studies. The methodological realization led to an enthusiasm in the investigation of characters, which in turn brought them to the study of the *Shuowen* itself. The process received a more detailed record in Dai’s brief biography (*xingzhuang* 行狀) by Hong Bang 洪榜 (1745-1780), according to which Dai already formed a reading habit to “inquire the meaning of each individual character” (*mei yizi bi qiu qiyi* 每一字必求其義) in his early teenage years (ca. 13-14 *sui*). Unable to satisfy him with the interpretations in the standard commentary, and being annoyed by his incessant inquiries, the teacher gave the *Shuowen* to Dai, which became the start of his three-year intensive study.³⁹⁵ In both records, a single-character based, constructive view of the classic text served as the defining impetus for Dai’s study of the *Shuowen*. The logic is easy to understand: If one continued to follow the top-down approach of Neo-Confucian learning, in which embodied justifications and intellectual intuitions played a more fundamental role, a character-by-character reading could well miss the point, and *Shuowen* would at best serve as a supplementary dictionary.³⁹⁶ It was only under this bottom-up constructive scheme that the “comprehension of characters” became a foremost concern. *Shuowen*, as the

³⁹⁴ See, Gu Yanwu, *Gu Yanwu quanji*, 21: 124; Hui Dong 惠棟, *Jiujing guyi* 九經古義 (Qianlong era), “Jiujing guyi shushou” 九經古義述首: 1a.

³⁹⁵ Hong Bang 洪榜, “Dai xiansheng xingzhuang” 戴先生行狀, in Dai Zhen, *Dai Zhen quanshu*, 7: 6.

³⁹⁶ For the methodological feature of Neo-Confucian learning in general, see, Mou Zongsan 牟宗三, *Xinti yu xingti* 心體與性體 (Shanghai: Shanghai guji chubanshe, 1999), 1: 145-147; Mou Zongsan 牟宗三, “Cong Lu Xiangshan dao Liu Jishan,” 從陸象山到劉戴山 in *Mou Zongsan xiansheng quanji* 牟宗三先生全集 (Taipei: Lianjing chuban gongsi, 2003), 8: 188-190, 199-201.

most authoritative reference to the study of individual characters, inevitably gained a paramount significance.

This bottom-up constructive scheme, soon growing into a consensus among the mid-Qing philologists, provided an important methodological foundation for the prevalence of *Shuowen* studies and other character-based philological writings. Its significance to *mingwu* studies was straightforward. By this time, it was no longer legitimate to dissect a character and draw creative associations like Wang Anshi had done (cf. Chapter One). Instead, one had to follow authoritative sources such as *Shuowen*, *Erya*, classic texts and early commentaries, as well as other paleographic evidence such as bronze and stone inscriptions for a credible analysis. For Dai Zhen himself, a good example was his fine distinction of four chariot components—*fan* 軌 (rail front), *gui* 軌 (wheel trace), *zhi* 軛 (side rail), and *ji* 軛 (nave end)—for the analysis of “The Gourd Has Its Bitter Leaves” (*pao you kuye* 匏有苦葉, MS #34),” which I will analyze in detail in the next chapter (p. 220). Here, I will just raise two more examples to illustrate how the intensive analysis of individual characters could deepen one’s understanding of *mingwu*-related texts.

To start with a succinct case, one finds “Minute are those little stars” (*hui bi xiaoxing* 嘒彼小星) in the beginning line of the ode “Little Stars” (Xiaoxing 小星, MS #21). According to the Mao commentary, *hui* 嘒 was interpreted as an “appearance of smallness,” yet there was no specification about why the character could have such a meaning.³⁹⁷ However, as observed by Wang Niansun, “a small voice is called *hui* 嘒, a small caldron is called *wei* 𪔐, a small coffin is called *hui* 𪔐, a small star is called *hui* 嘒, a fine cloth from Shu is called *sui* 緄, the tips of a bird’s wings are called *hui* 𪔐, and the two ends of the chariot axle are called *wei* 𪔐—their meanings are the same.”³⁹⁸ The logic was apparent—a localized

³⁹⁷ Zheng Xuan, *Maoshi zhuan jian*, 27 The translation follows Karlgren, *The Book of Odes*, 12.

³⁹⁸ Wang Niansun, *Guangya shuzheng*, 3: 1230. 小聲謂之「嘒」，小鼎謂之「𪔐」，小棺謂之「𪔐」，小星貌謂之「嘒」，蜀細布謂之「緄」，鳥翮末謂之「𪔐」，車軸兩端謂之「𪔐」，義竝同也。

generalization, whose epistemic mechanism we have already examined. That said, here the unit of generalization was not a syntactic chunk or a binome, but individual characters. And the generalized idea, which must be an equivalence between the “*hui* 彗” component and the meaning of smallness, worked even on a sub-character level. Under the bottom-up methodological scheme, the individual character per se became an epistemic object, with its own intrinsic structure. Moreover, although Wang did not specify the origin of these interpretations, three of them in fact came from *Shuowen* (*sui* 緹, *wei* 𨾏, and *hui* 嘒 as small voice), along with two from Gao You’s 高誘 (fl. early-3rd c.) *Huainan zi* commentary (*wei* 𨾏 and *hui* 𨾏), one from Ying Shao’s 應劭 (ca. 153-196) *Hanshu* commentary (*hui* 𨾏), and one based on *Maoshi* (*hui* 嘒 as small star).³⁹⁹ Joining these scattered interpretations together, Wang’s generalization of this philological texture on the sub-character level offered a good example regarding how the intensive study of *Shuowen* and early commentaries could contribute to a more refined “comprehension of characters.”

For a more complex example, in the ode “Shedding Is the Plum Tree” (*Biao you mei* 標有梅, *MS* #20), where the first line is the same as the title, the character *biao* 標 was interpreted as *luo* 落 or “shedding” in the Mao commentary.⁴⁰⁰ However, this was an uncommon reading in the early texts, and only appeared in this specific ode. As already noticed by Yan Can in the Southern Song, the original meaning of *biao* 標 was in fact to “strike” (*ji* 擊). On noticing this inconsistency, he attempted a forced reconciliation, claiming that in the ode, the idea was to “strike to fell it” (*ji er luo zhi* 擊而落之).⁴⁰¹ In the early Qing, Chen Qiyuan was the first who made a serious inquiry into this inconsistency. In *Maoshi jigu bian*, he suggested that *biao* was a textual variation of *pao* 拋, or “abandon.” The evidence came from

³⁹⁹ See, Xu Shen, *Shuowen jiezi*, 31, 346, 377; Liu An 劉安 and Liu Wendian 劉文典, *Huainan honglie jijie* 淮南鴻烈集解 (Beijing: Zhonghua shuju, 2013), 558, 615; Ban Gu 班固 and Yan Shigu 顏師古, *Hanshu* 漢書 (Beijing: Zhonghua shuju, 1962), 65; Zheng Xuan, *Maoshi zhuan jian*, 27. Also see, Wang Niansun, *Guangya shuzheng*, 3: 1278.

⁴⁰⁰ Zheng Xuan, *Maoshi zhuan jian*, 26. The translation follows Karlgren, *The Book of Odes*, 12.

⁴⁰¹ Yan Can, *Shi ji*, 1: 57.

Shuowen, which, under the entry of “*pao*,” mentioned that in the *Shi*, for the line “shedding is the plum tree,” the interpretation of *biao* as “to fall” “also had the same meaning” (*yi yi tong* 義亦同).⁴⁰² The *Shuowen* quotation, indicating a semantic intimacy of the two characters, thus helped to transform the uncommon interpretation into a more ordinary one.

As a pioneering work on the textual evidential study of *Shi*, *Maoshi jigu bian* witnessed a particular emphasis of *Shuowen*, where one could find as many as 661 mentions of the title in total. However, in this work, most of the *Shuowen* citations were taken at *face value*—a direct reference for the original meaning of the characters. Yet the situation could be much more complex. For the current case, one could find more than one quote of “shedding is the plum tree” in the work, which appeared not only under the “*pao*” entry, but also the entry of “*biao*” 受:

Biao: an object turning up-and-down when falling off. It follows the components of *zhao* (claw) and *you* (hand)...It is read as “shedding is the plum tree” in *Shi*.

受，物落，上下相付也。从爪从又。...讀若《詩》“標有梅”。⁴⁰³

Duan Yucai, the authority of *Shuowen* studies in the mid-Qing era, was the first who noticed the importance of this entry. This was not only because the term “read as” (*duruo* 讀若) was a general marker for phonetic loan, but more importantly, one could find a series of *biao* 受-related variants of the character in other early quotations of the line: In Zhao Qi’s *Mengzi* commentary and Ding Gongzhu’s 丁公著 (762-846) reference to the Han Poetry (Hanshi 韓詩), the character appeared as *piao* 苐—as in the word “*epiao*” 餓苐 (people starving to death); in *Hanshu* 漢書, “*epiao*” was written alternatively as 餓苐, and this *piao* 苐 character was noted in the *Hanshu* commentary as being homophonic to yet another variant “*biao* 菓” in the ode. Based on these interconnected variants between the “菓”-series and the

⁴⁰² Chen Qiyuan, *Maoshi jigu bian*, 6: 165a-b. In fact, under the same entry, *Shuowen* also suggests that in the *Zuo Commentary*, the two characters *pao* and *biao* are used interchangeably. Although Chen did not mention this in his entry, the evidence must have added to Chen’s confidence in his own reasoning. See, Xu Shen, *Shuowen jiezi*, 322.

⁴⁰³ Xu Shen, *Shuowen jiezi*, 99.

“受”-series, Duan concluded that *biao* 𠂔 should be the formal character (*zhengzi* 正字) of the poetic line, with *biao* 標 and *biao* 葉 as the loan characters (*jiezi* 借字), *piao* 𦵏 as a vulgar character (*suzi* 俗字) of *biao* 𠂔, and *piao* 𦵏 as a graphic error (*ziwu* 字誤) of *piao* 𦵏.⁴⁰⁴ Depicting the up-and-down turnings of the falling plums, this vivid reading not only added a poetic flavor to the *mingwu* imagery, but also established a better connection with the loan character comparing to Chen Qiyuan’s reading.

The above identification among the formal character, loan character, vulgar character, and erroneous character captured another important aspect in the study of individual characters, which, reminding us of Chen Qiyuan’s preliminary list of graphic variations, by itself became an important subfield of philological inquiry in the late 18th century. One could find systematic accounts of such variations in works like Bi Yuan’s 畢沅 (1730-1797) *Jingdian wenzi bianzheng shu* 經典文字辨證書 (Handbook on the rectification of characters in the classic texts, *Figure 35*) and Qian Daxin’s *Jingdian wenzi kaoyi* 經典文字考異 (Investigation on the character variations in the classic texts). The prevalence of variant characters highlighted the fluidity of early texts and the indispensability of philological analysis on the single-character level. This included not only the dominant form of phonetic loan but also variants and errors that tilted more to the graphic aspect, as we have seen from the cases of *pao* 拋 and *piao* 𦵏. In a methodological article two decades ago, Martin Kern classified the textual variants into nine categories based on the early Chinese texts in general, which offer a good coverage for the cases relevant to *Shi*: a) graphic variations of the same word; b) variants in the same phonophoric series; c) phonetically related cognates; d) semantically unrelated phonetic loans; e) particles sharing similar functions; f) graphic confusions; g) phonetically unrelated cognates; h) unexplainable variations; and i) transposed characters.⁴⁰⁵ Among the eight categories with known mechanisms, e) and i) have less to do with the analysis of individual characters, due to their relevance to the grammar and context on a broader scale.

⁴⁰⁴ Duan Yucai, *Shuowen jiezi zhu*, 1: 285. For a prototype of this entry in the 1770s, see, Duan Yucai, *Shijing xiaoxue*, juan 6: 2a. For discussions on the dating of *Shijing xiaoxue*, see, Footnote 491.

⁴⁰⁵ Martin Kern, “Methodological Reflections on the Analysis of Textual Variants and the Modes of Manuscript Production in Early China,” *Journal of East Asian Archaeology* 4, 1-4 (2002): 155–56.

Yet all the rest six were essential for the “comprehension of characters,” which spanned across the phonetic, graphic, and semantic aspects. This multiplicity of variation types testified to a richness of philological texture on the level of individual characters and below.

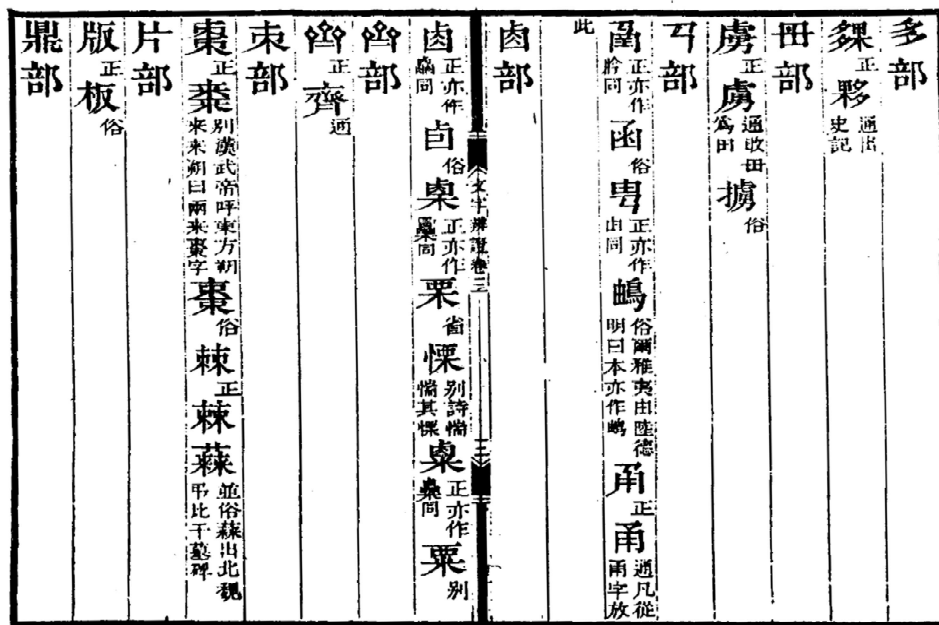


Figure 35: Sample page in Bi Yuan's *Handbook on the Rectification of Characters in the Classic Texts*. Noted the smaller character at the bottom right corner for each graph, which identifies the graph as a “formal character” (zheng 正), “loan character” (tong 通), “vulgar character” (su 俗), “abbreviated character” (sheng 省), or “wrong character” (bie 別).⁴⁰⁶

As we have seen, the analysis of individual characters could also go further into the sub-character level. This not only included the phonophoric generalization, but also the paleographic study of character components. For the composition of the *biao* 𦰩 character, Duan Yucai simply followed *Shuowen* and suggested that it was made up by the components of *zhao* 爪 and *you* 又. However, Cheng Yaotian was not satisfied with this dissection. According to his paleographic analysis of the *sui* 采 (millet flower in the lemmas) character, the upper part of the character was not the *zhao*-claw as commonly believed, but “𦰩,” a pictograph symbolizing the flower (the vertical stroke in the middle) hiding in the millet lemmas

⁴⁰⁶ Bi Yuan 畢沅, “Jingdian wenzi bianzheng shu,” 經典文字辨證書 in *Xuxiu siku quanshu*, 239: 492.

(Figure 36).⁴⁰⁷ Based on this observation, Cheng suggested that the *biao* 𦉰 (𦉰) character should be understood as two “𦉰” succeeding one another, in which the lower one, being upside-down, symbolized the overturning of a falling flower. In this way, the *biao* character became an ideograph which worked perfectly with Xu Shen’s semantic interpretation—“an object turning up-and-down (*shang xia xiang fu* 上下相付) when falling off.”⁴⁰⁸

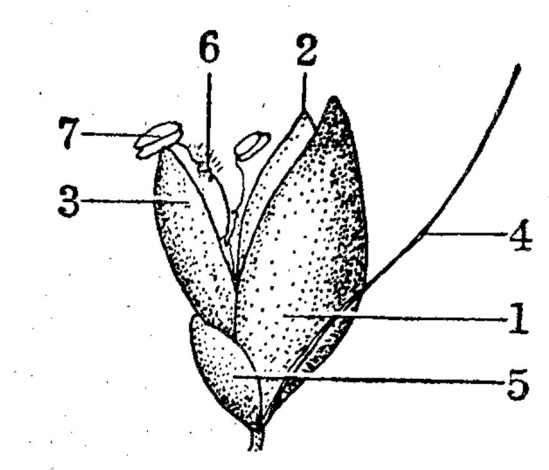


Figure 36: Illustration of a millet flower⁴⁰⁹
(2 and 3 as the outer and inner lemmas respectively)

From Yan Can to Cheng Yaotian, we have seen a growing process in the comprehension of the *piao* character, as well as how this more refined understanding contributed to a better consistency with the Mao commentary and a more poetic description of the *mingwu* imagery. Paying little attention to the possibility of character variation, Yan Can simply drew a forced reconciliation on the textual surface. Chen Qiyuan, noticing a reference of the line in *Shuowen*, made a semantic connection of the character to *pao* 抛. Duan Yucai, with further evidence from textual variants, proposed a more convincing connection

⁴⁰⁷ Cheng Yaotian, *Cheng Yaotian quanji*, 2: 526.

⁴⁰⁸ Cheng Yaotian, *Cheng Yaotian quanji*, 2: 527.

⁴⁰⁹ Li Yanghan 李揚漢, *Heben ke zuowu de xingtai yu jiepou* 禾本科作物的形態與解剖 (Shanghai: Shanghai kexue jishu chubanshe, 1979), 394.

of the character to *biao* 𠄎. And Cheng Yaotian took a step further in this direction, suggesting a new paleographic analysis of the character *biao* based on its seal script version. Put together, this case study offers a good example of the development of analytical techniques in the mid-Qing study of individual characters, and how such a development, in an accumulative manner, contributed to the gradual unfolding of refined philological textures on the character and sub-character levels.

Specialized References

In the above sections, we have gone through a wide range of newly developed philological techniques, from the phonological divisions and general patterns that spanned an entire classic, to the minute analyses of paleography and punctuation that focused within or between single characters. Be it general or specific, complex or straightforward, a commonality among these varied techniques was their capability to reveal more refined philological textures behind the immediate surface, which, as suggested above, marked its difference from the late-Ming paradigm of erudite learning. Yet the divergence from superficial cross-reference was by no means an abandoning of direct reference. For none of these new techniques would be applicable without evidential preparation from direct reference. Admittedly, speaking of the referential scope, most of the mid-Qing evidential works would pale in front of late-Ming erudite learning. That said, the mid Qing still witnessed a significant development in certain types of direct reference, where the sources were strictly limited to a specialized field. Regarding the study of *Shi*, three of such fields deserve special mentioning: the critical collation of different *Maoshi* editions, the collection of the lost Three-School texts, and the study of bronze-and-stone inscriptions.

From a retrospective vantage point, the late-Qing scholar Pi Xirui 皮錫瑞 (1850-1908) listed three major achievements for the Qing classicist studies: the compilation of lost books (*ji yishu* 輯佚書), the refinement of textual collation (*jing jiaokan* 精校勘), and the mastery of philological studies (*tong*

xiaoxue 通小學).⁴¹⁰ If the sharpened philological tools discussed in the above sections belonged to the third category, the collection of the Three School texts and the collation of versions of *Maoshi* would be typical examples of the former two aspects. Although the practice of textual collation could be dated back to the pre-Qin era, it did not become a specialized field of study until the mid-Qing era, when well-collated texts were regarded as the very basis of evidential studies and attracted the serious effort of many top-tier scholars.⁴¹¹ In particular, leading figures such as Lu Wenchao 盧文弨 (1717-1796) and Gu Guangqi 顧廣圻 (1766-1835) devoted most of their scholarly career to this specialized field; each collated an astonishing two hundred titles.⁴¹² For the collation of the classic texts, the most influential would be the Thirteen Classics Project led by Ruan Yuan in the first decade of the 19th century, which was based precisely upon Lu Wenchao's blueprint.⁴¹³ Although in the early Qing, pioneering scholars such as Chen Qiyuan had already made systematic collections of the character variants of *Maoshi* in *Erya* and *Exegesis*, it was not until the mid-Qing era that such variations were comprehensively reexamined to determine the best version of the original text.⁴¹⁴ As a collective enterprise contributed to most by Gu Guangqi and Duan Yucai, the collation of *Maoshi* was among the best quality works in the Thirteen Classics Project, which involved as many as nine editions of *Maoshi* for comparison.⁴¹⁵ Unlike a review of textual criticism, here my purpose is not to evaluate the quality of the Qing collations. Instead, I would merely demonstrate how the meticulous comparison across multiple textual editions opened a new space

⁴¹⁰ Pi Xirui 皮錫瑞, *Jingxue lishi* 經學歷史 (Beijing: Zhonghua shuju, 2011), 241–42.

⁴¹¹ See, Ni Qixin 倪其心, *Jiaokan xue dagang* 校勘學大綱 (Beijing: Beijing daxue chubanshe, 2004), 6-9, 47-49; Sun Qinshan, *Qingdai kaoju xue*, 239–40.

⁴¹² Ye Shusheng 葉樹聲 and Xu Youcai 許有才, *Qingdai wenxian xue jianlun* 清代文獻學簡論 (Hefei: Anhui daxue chubanshe, 2004), 20.

⁴¹³ For the connection between the Thirteen Classics Project and Lu's earlier collations, see, Fan Ning 樊寧, "Ruan Yuan *Zhouyi zhushu jiaokan ji* xiuzuan kaoshu: Yi yu Lu Wenchao *Zhouyi zhushu* jiaoben duikan wei zhongxin," 阮元《周易注疏校勘記》修纂考述——以與盧文弨《周易注疏》校本對勘為中心 *Wenxian* 文獻, no. 3 (2021): 57-58, 70-71.

⁴¹⁴ See, Chen Qiyuan, *Maoshi jigou bian*, juan 26.

⁴¹⁵ See, Yuan Yuan 袁媛, "Zhengli shuoming," 整理說明 in *Shisan jing zhushu jiaokan ji* 十三經注疏校勘記, ed. Liu Yucai, 劉玉才 (Beijing: Beijing daxue chubanshe, 2015), 2: 573-574, 577-578, 582.

for the negotiation of philological textures that were not discernable from a single version of the authoritative text.

A single example is sufficient to illustrate the point. In “The Gourd Has Its Bitter Leaves” (*pao you kuye* 匏有苦葉, *MS* #34), ode mentioned a special *mingwu* component on a chariot:

濟盈不濡軌

Though the ford is full, it does not wet the *gui* of a chariot.⁴¹⁶

In Chapter Four, we will offer a comprehensive review on the philological debates entangled around this *gui*-component of a chariot. For the time being, the only aim is to demonstrate the fickleness of this character across multiple *Maoshi* editions. As shown in Chart 1, among the seven editions used for collation in the Thirteen Classics Project, the same character appeared in three different forms: In four editions, it appeared as *gui* 軌, which, according to *Shuowen*, referred to the wheel trace of the chariot. However, in the earliest available edition for Qing scholars, the Tang Stone Classics of the 9th century, the character appeared as *fan* 𨋖, which referred to a different place in front of the “front rail” (*shi* 軾) of a chariot. And more interestingly, in the other two editions, the character was printed in an intermediate form of 𨋖, which was apparently a graphic combination of *gui* 軌 and *fan* 𨋖. Bibliographically speaking, which character represented the original form? Despite the graphic similarity, *gui* 軌 (MC: *kwijX*) and *fan* 𨋖 (MC: *bjomX*) were distant in both meaning and sound, and this became the basis for further judgment. As pinpointed by the collator, despite the confusions in the printed form of the character, judging from the textual content of Lu Deming’s *Exegesis* (which noted its pronunciation as *gui-mei fan* 龜美反) and Kong Yingda’s *Rectified Meanings* (which noted its meaning as the wheel trace), both early-Tang works indicated *gui* 軌 as the original character. Based on this keen observation, the collator concluded that the character *fan* 𨋖 was not an early form but only appeared from the Tang

⁴¹⁶ Zheng Xuan, *Maoshi zhuan jian*, 48. With slight adaptations, the translation follows Karlgren, *The Book of Odes*, 21.

Stone Classics onwards, and correspondingly, the intermediate graph 軌 should also be taken as a vulgar character for *gui* rather than *fan*.⁴¹⁷

軌 ⇔ 軌 ⇔ 軌

Qing reprint of the Yuan Xiangtai Ed.

“Song” Ten-Column Ed.

Tang Stone Classics

Ming Fujian Ed.

Song Small-Character Ed.

Ming Academy Ed.

Ming Maojin Ed.

*Chart 1: Character variants in the ode “The Gourd Has Its Bitter Leaves”*⁴¹⁸

For the specific epistemic value of this identification, I will leave it for the next chapter.

However, this brief review is already sufficient to explain how textual collation could effectively reveal historical and orthographical dynamics with philological significance. Through a comprehensive layout of the variants and invariants, the technique restored the standardized term back to its incipience of flowing possibilities, transforming the position into a space of textual negotiation. It was within this space that the multiple editions knitted into meaningful philological textures that were not easily discernable from a single piece. In this sense, the comprehensive collations in the mid-Qing textual criticism created a specialized platform to better identify the subtle messages behind the various forms.

Compared to specialized textual collation, the study of *jiyi* 輯佚, or the re-compilation of lost texts from relevant sources, witnessed a longer history. Although one also needed to wait until the mid-Qing era for the high tide of this enterprise—as scholars from the *Siku* Bureau alone would re-compile

⁴¹⁷ Liu Yucai 劉玉才, ed., *Shisan jing zhushu jiaokan ji* 十三經注疏校勘記 (Beijing: Beijing daxue chubanshe, 2015), 2: 640.

⁴¹⁸ Based on Liu Yucai, *Shisan jing zhushu jiaokan ji*, 2: 640.

516 works from materials in the imperial collection—the systematic practice and theorization of *jiyi* had already taken place in the Song dynasty.⁴¹⁹ For the study of *Shijing*, the most important works for re-compilation were no doubt the texts of the “Three Schools”—the Lu 魯, Qi 齊, and Han 韓 versions of *Shi*. Although they used to overshadow *Maoshi* as the officially-sanctioned teachings in the Western Han, these alternative hermeneutic traditions went into extinction since the Tang dynasty. In this specific field, Wang Yinglin’s 王應麟 (1223-1296) *Shi kao* 詩考 (Investigations on the *Shi* Lyrics) was the first systematic attempt to retrieve the Three School texts from earlier references, though, without an established view on the “exclusive transmission” (*jiafa* 家法) of the three schools, he failed to attribute many of the variant texts and interpretations to one or another specific school.⁴²⁰ Following the general tide of *jiyi* activities, the compilation and study of Three-School poetry also grew into a salient subfield in the mid-Qing era. As shown in *Table 17*, within the 92 works on Three-School Poetry in the Qing dynasty, a predominant number, 54, were composed between the late-18th century and the mid-19th, which witnessed a boom compared to the earlier century.

*Table 17: Work Count on the Study of Three-School Poetry the Qing Dynasty*⁴²¹

Time Span	1644-1765	1766-1850	1851-1911
Total Count of Works	10	54	28
Work Per Year	0.08	0.64	0.47

Within this high-tide of interest in Three-School poetry, what deserves a special mention is the contribution of Chen Shouqi 陳壽祺 (1771-1834) and Chen Qiaozong 陳喬樞 (1809-1869), father and

⁴¹⁹ See, Zhang Shunwei 張舜微, *Zhongguo wenxian xue* 中國文獻學 (Zhengzhou: Zhongzhou shuhua she, 1982), 192–96; Ye Shusheng and Xu Youcai, *Qingdai wenxian xue jianlun*, 70.

⁴²⁰ Fang Ruili 房瑞麗, *Qingdai sanjia Shi wenxian yanjiu* 清代三家《詩》文獻研究 (Beijing: Zhongguo shehui kexue chubanshe, 2018), 33–34.

⁴²¹ Based on the statistics of Fang Ruili, *Qingdai sanjia Shi wenxian yanjiu*, 66–68.

son from Fuzhou 福州. Under a strict hypothesis about the “exclusive transmission” (*jiafa*) of each school in the Han-Wei era, the Chens made a significant refinement in the attribution of the variant texts of the three schools. Apart from scholars who could be univocally attributed to a specific school based on explicit records, now one could also *infer* the affiliation of the other ones from their family lineage, mentoring relationship, or native place, for the teachings were believed to pass down rather exclusively through these channels.⁴²² For the major scholars on the Three School versions of *Shi* in the early-to-mid-nineteenth century such as Ruan Yuan, Zhu Shiduan 朱士端 (b. 1786), Feng Dengfu 馮登府 (1783-1841) and the Chens, only the syncretic text *Shuowen* and the great scholar Zheng Xuan were associated with multiple schools, while all the rest were pinned down to a specific school of affiliation.⁴²³

In the above sections, we have already observed the philological efficacy of the various texts from the Han poetry, where the flora-related variants *you qi you tang* 有杞有棠 in MS #130 offered a powerful support for Wang Yinzhì’s synthesis of general pattern. In the nineteenth century, scholars became increasingly aware of the philological significance of these Three-School variants due to the simpler characters used in these New Text classics. As suggested by Ma Ruichen, this textual feature was elevated to a methodological height, which greatly increased the philological appeal of the Three-School text:

The Mao poetry belonged to the Old Text, which frequently used loan characters in the body text... The interpreter of [*Mao*]/*shi* had to grasp the loan characters first, only after which would the classic message become clear. As for the Qi, Lu, and Han Schools, they adopted the New Text and used the formal characters for most of their body texts... One could thereby examine the loan characters of *Maoshi* with the help of these [formal characters].

⁴²² For a good elaboration on the criteria of inference, see, “*Lushi yishuo kao zixu*” 《魯詩遺說攷》自序, in Chen Shouqi 陳壽祺 and Chen Qiaozong 陳喬樞, “Sanjia shi yishuo kao,” 三家詩遺說考 in *Xuxiu siku quanshu*, 76: 42–43. For a summary of these inferring techniques, also see, Fang Ruili, *Qingdai sanjia Shi wenxian yanjiu*, 202–4.

⁴²³ See, Fang Ruili, *Qingdai sanjia Shi wenxian yanjiu*, 199.

毛詩為古文，其經字類多假借。...說詩者必先通其假借，而經義始明。齊、魯、韓用今文，其經文多用正字。...正可藉以考證毛詩之假借。⁴²⁴

This methodological claim was also consistent with his philological practice. In his *Comprehensive Exegeses*, there were 18 instances when Ma explicitly identified a Three-School variant as the “original character” and used it to interpret the loan character in *Maoshi*. In this section, there is no need to repeat the philological efficacy of such recorded variants. Instead, I will solely use one example to illustrate how the principle of “exclusive transmission” contributed to a more refined philological texture by clarifying the mutual dynamics among the multiple hermeneutic schools.

We may simply carry on our discussion on the graphic variants in “Shedding Is the Plum Tree.” Recall that the character *biao* 標 (shedding) in *Maoshi* appeared as *piao* 苽 (which was identified as a graphic error for *piao* 芰 by mid-Qing scholars) in a quotation in Zhao Qi’s (d. 201) *Mengzi zhangju*. And in the Tang scholar Ding Gongzhu’s 丁公著 (762-826) phonetic annotation to Zhao’s work, this variant was noted explicitly as from the Han Poetry. Without the inferential technique empowered by “exclusive transmission,” this would be the end of the analysis: *biao* 標 in *Maoshi* was the loan character, and *piao* 苽 (i.e., *piao* 芰) in the Han Poetry was the original. However, the inferential technique would help to reveal a further dynamic among the hermeneutic schools. As pointed out by Chen Qiaozong, in Ding Gongzhu’s time, the Han Poetry was the only preserved one among the Three School texts that he could consult for the variants. As a result, although Ding’s note confirmed the use of the variant in the Han Poetry, it did not necessarily indicate that Zhao Qi’s original quote also came from the same school. Instead, at an earlier place of his work, Chen made clear that Zhao Qi’s reading of *MS* #197 was consistent with Wang Chong 王充 (27-ca.97); his interpretation of *MS* #235 also accorded with Liu

⁴²⁴ See, “Maoshi guwen duo jiajie kao” 毛詩古文多假借考, in Ma Ruichen, *Maoshi zhuanjian tongshi*, 1: 23. For a similar methodological claim by Zhu Shirui, see, Zhu Shiduan 朱士端, *Qi Lu Han sanjia shi shi* 齊魯韓三家詩釋, blue-column manuscript edition, National Library of China, no. 15625 (Jijin yaoshi shanfang), juan 1: 10b. 三家中訓詁聲音，有足與毛相發明者。三家今文多正字，毛詩古文多假借。無三家則假借不通。

Xiang 劉向 (77-6 BCE) and *Baihu tong* 白虎通 (Comprehensive discussions in the White Tiger Hall).

However, all of these corresponding scholars and works were identified as following the tradition of the Lu Poetry.⁴²⁵ Based on the view of “exclusive transmission,” Zhao Qi was therefore firmly placed within the Lu school.⁴²⁶ And correspondingly, the variant character quoted by Zhao was not a mere reflection of the Han Poetry as noted by Ding Gongzhu, but good evidence that “both the Lu and the Han used *piao* 芑 for this ode”—a meaningful dynamic that further strengthened the likelihood of this variant as the original character.⁴²⁷

In this way, the strict view of “exclusive transmission” helped to establish inferred attributions and reveal meaningful dynamics among the multiple hermeneutic schools of *Shi*. Under this more systematic call, the scattered records of character variants and alternative readings became honored representatives for the varied schools, which jointly created a negotiating space for more refined philological textures. Although present-day scholars have largely abandoned the mechanical premise of “exclusive transmission” for a more fluid and syncretic view among the hermeneutic traditions, this mid-Qing development in the study of Three-School poetry still deserves a special mention for the unique philological dimension it touches upon.⁴²⁸

Comparing to the previous two specialized fields, the antiquarian study of *jinshi* 金石, or the ancient bronzes and stones had a longer-celebrated history. With the compilation of comprehensive catalogues from both the scholars and the imperial sides, the study of *jinshi* had already reached a high

⁴²⁵ For the attribution of Wang Chong, Liu Xiang, and *Baihu tong* to the Lu poetry, see, Chen Shouqi and Chen Qiaozong, “Sanjia shi yishuo kao,” 43, 59, 62.

⁴²⁶ Chen Shouqi and Chen Qiaozong, “Sanjia shi yishuo kao,” 64–65.

⁴²⁷ Chen Shouqi and Chen Qiaozong, “Sanjia shi yishuo kao,” 73. 蓋此詩魯韓同作芑。

⁴²⁸ For recent methodological reflections on the premise of “exclusive transmission” in the study of Three-School poetry, see, e.g., Yu Wanli 虞萬里, “*Shijing* yiwen yu jingshi xungu wenben tanze,” 《詩經》異文與經師訓詁文本探賾 *Wenshi* 文史, no. 1 (2014): 160-161, 182-184; Yixin Gu, “Speaking with the Learning of Odes: Cao Zhi's Representation of the *Shijing* and Its Hermeneutic Traditions in the Contexts of Han-Wei China,” *Journal of the American Oriental Society* 141, no. 2 (2021): 321, 324-328.

tide in the Northern Song.⁴²⁹ For the ancient bronzes, the starring objects of this intellectual movement, the scholarly efforts in that era mainly targeted the artifacts themselves, such as recording and analysis of inscriptions, or dating and antiquarian appreciation of the objects.⁴³⁰ Yet there was also an emerging trend in using *jinshi* materials for the authentication or rectification of transmitted texts. This was most salient in the study of stele inscriptions, with Ouyang Xiu's 歐陽修 (1007-1071) *Jigu lu* 集古錄 (Records of collected antiquity) and Zhao Mingcheng's 趙明誠 (1081-1129) *Jinshi lu* 金石錄 (Catalogue of bronzes and stones) as notable examples.⁴³¹ However, due to the devastating loss of primary sources in the Jurchen invasion, as well as the aestheticization and symbolization of *jinshi* objects in the Southern-Song literati culture, this evidential interest of *jinshi* sources waned significantly in the following centuries, and did not attain a full-scale revival until Gu Yanwu's generation.⁴³²

In the mid-Qing era, the study of *jinshi* witnessed a steady development, surpassing its previous climax in both extensity and intensity. For the accumulation of *jinshi* materials, the mid-Qing scholars not

⁴²⁹ For the prevalence of *jinshi* studies in the Northern Song, see, e.g., Yunchiahn C. Sena, *Bronze and Stone: The Cult of Antiquity in Song Dynasty China* (Seattle: University of Washington Press, 2019), ch. 2; Chen Fang-mei 陳芳妹, "Song gu qi wu de xingqi yu Song fanggu tongqi," 宋古器物學的興起與宋仿古銅器 *Guoli Taiwan daxue meishushi yanjiu jikan* 國立台灣大學美術史研究集刊 10 (2001): 44-55, 82-86. For the scholar-officials' engagement with the ancient bronzes in the Tang Dynasty as a precursor for Song antiquarianism, see, François Louis, "Cauldrons and Mirrors of Yore: Tang Perceptions of Archaic Bronzes," *Zurich Studies in the History of Art*, 13/14 (2006/07): 206-232, esp. p. 232.

⁴³⁰ This is well discernable from representative works such as Lü Dalin's 呂大臨 (1042-1090) *Kaogu tu* 考古圖 (Illustrated Investigations of the Antiquity), and the imperial sanctioned *Xuanhe bogu tu* 宣和博古圖 (Illustrated Catalogue for the Erudite Antiquity of the Xuanhe Era). In her analysis of *Kaogu tu*, Yunchiahn Sena has raised an entry of jade ornaments where the objects "became associated with ancient classics" through the quotation of two lines from *Shi*. However, such quotations, as in several other entries of the works, were used as *evidence* for the identification or contextualization of the *jinshi* objects. This was different from using the *jinshi* materials as sources for the study of classic texts, which was the other way around. See, Sena, *Bronze and Stone*, 86-87.

⁴³¹ In both works, the use of post-Qin stele inscriptions as supplement for history is prevalent, yet for the entries on the Three-Dynasty bronzes (see, *juan* 1 for *Jigu lu*; *juan* 11-12 for *Jinshi lu*), the focus is still the contextualization and philological discussions of the inscribed texts. Such evidence indicates a more preliminary stage in the study of bronze inscriptions comparing to the stele ones in the Northern Song.

⁴³² In the Ming Dynasty, although one could still find high-quality works in the *Jinshi lu* format such as Du Mu's 都穆 (1458-1525) *Jin xie linlang* 金薤琳琅 and Zhao Han's 趙涵 (1564-1618) *Shi mo juan hua* 石墨鐫華, the number was quite rare, and did not reckon a wide scholarly interest. For the changing literati culture in the Southern Song, see, Ya-hwei Hsu 許雅惠, "Nansong jinshi shoucang yu zhongxing qingjie," 南宋金石收藏與中興情結 *Meishushi yanjiu jikan* 美術史研究集刊 31 (2011): 3-8, 18-23, 34-36; Chen Fang-mei 陳芳妹, "Zhui sandai yu dingyi zhijian: Songdai cong 'kaogu' dao 'wangu' de zhuanbian," 追三代於鼎彝之間——宋代從「考古」到「玩古」的轉變 *Gugong xueshu jikan* 故宮學術季刊 23, no. 1 (2005): 297-300. For the decline of *jinshi* studies in the Yuan-Ming period and its revival in the early Qing, see, Brown, *Pastimes*, 21-27; Bai, *Fu Shan's World*, 177-83.

only expanded their collections through long-distant travels and empire-wide exchange networks, but also took advantage of their official posts to organize mass cataloguing projects in specific areas.⁴³³

Representative works included Bi Yuan's *Guanzhong jinshi ji* 關中金石記 (Records of bronze and stone in Shanxi, 1781), Ruan Yuan and Bi Yuan's *Shanzuo jinshi zhi* 山左金石志 (Records of bronze and stone in Shandong, 1796), as well as Ruan Yuan's *Liangzhe jinshi zhi* 兩浙金石志 (Records of bronze and stone in Zhejiang, 1824), which included 805, 1359, and 658 examples of inscriptions respectively.⁴³⁴ Such exhaustive hunting brought about a rapid accumulation of *jinshi* materials. In his early-18th century catalogue *Huanyu fangbei lu* 寰宇訪碑錄 (Records of stele hunting around the world), Sun Xingyan 孫星衍 (1753-1818) included a dazzling 7849 titles of stone inscriptions, far surpassing the scope of any similar works in previous dynasties.⁴³⁵

Thanks to the new developments in paleography and phonology, mid-Qing scholars also greatly enhanced their capabilities in deciphering bronze inscriptions. Meanwhile, under a strong methodological awareness that the study of *jinshi* and the study of classics and history were “mutually dependent,” scholars such as Qian Daxin also elevated the evidential use of *jinshi* sources to a new level. Backed up by a comprehensive array of philological and bibliographical techniques, the stone inscriptions became an integral component in Qian's study of history.⁴³⁶ In his preface to *Qianyan tang jinshi wen bawei* 潛研堂

⁴³³ For the long-distant travels and exchange networks, see, e.g., Xue Longchun 薛龍春, *Guhuan: Huang Yi yu Qianjia jinshi shishang* 古歡：黃易與乾嘉金石時尚 (Beijing: Sanlian shudian, 2019), ch. 3; Wang Yifeng 王屹峰, *Guzhuan huagong: Liuzhou yu 19 shiji de xueshu he yishu* 古磚花供：六舟與 19 世紀的學術和藝術 (Hangzhou: Zhejiang meishu chubanshe, 2017), ch. 4.

⁴³⁴ For the entry counts of *Guanzhong jinshi ji* and *Liangzhe jinshi zhi*, see, Zhao Chengjie 趙成傑, *Jinshi cuibian yu qingdai jinshi xue* 《金石萃編》與清代金石學 (Beijing: Zhongguo shehui kexue chubanshe, 2019), 30-31, 260.

⁴³⁵ Zhao Mingcheng's *Jinshi lu*, the most comprehensive catalogue of the kind in the Song, only included 2000 titles of bronze and stone pieces altogether. For the statistics, see, Zhao Zhiqian's 趙之謙 self-preface to *Bu Huanyu fangbei lu* 補寰宇訪碑錄, in Sun Xingyan 孫星衍, *Huanyu fangbei lu (wai bazhong)* 寰宇訪碑錄 (外八種) (Shanghai: Shanghai guji chubanshe, 2020), 338.

⁴³⁶ See, Qian Daixin's preface to Bi Yuan's *Guanzhong jinshi ji* 關中金石記, in Qian Daxin, *Jiading Qian Daxin quanji*, 9: 383. For the significance of *jinshi* sources for Qian's history research, see, Liu Xinming 劉心明, “Qian Daxin yu qingdai jinshi kaoju xue,” 錢大昕與清代金石考據學 *Shandong daxue xuebao* 山東大學學報, no. 4 (2011): 138-39. 金石之學，與經史相表裏。

金石文跋尾 (Postscripts to the bronze and stone inscriptions of Qianyan Hall), the representative *jinshi* work of Qian, Wang Mingsheng listed seven names of eminent *jinshi* scholars from Ouyang Xiu to Zhu Yizun 朱彝尊 (1629-1709), and identified Qian as surpassing all of them due to his intensive historical inquiry.⁴³⁷

As noted by Weng Fanggang, although the use of *jinshi* sources for the verification of history was prevalent, those that could be used for the classics were “merely one out of twenty.”⁴³⁸ That said, we can still identify a few classic-related cases from mid-Qing works. Regarding the *mingwu* study of *Shi*, a vivid example came from Duan Yucai’s *Shijing xiaoxue*, where he not only incorporated *jinshi* materials for philological analysis, but also left us a precious record regarding how the evidence was acquired. In the ode “Great the Han” (Han yi 韓奕, *MS* #261), there is a depiction of ceremonial audience, when the Zhou king bestowed the Duke of Han a long list of emblematic gifts—a textual pattern that is frequently seen in Western Zhou bronze inscriptions:

王錫韓侯:	The king gave the Duke of Han:
...	...
鉤膺鏤錫,	breast-plates with hooks, engraved frontlets,
鞞鞞淺幘,	leathern front-rail casing, a short-haired covering fell,
絳革金厄。	<i>tiaoge</i> , and metal yoke-bows. ⁴³⁹

The general message was clear—all the gifts in these three lines were for chariot use. However, the specific meaning for the *mingwu* term “*tiaoge*” 絳革 demanded a further clarification. The term appeared four times in the entire *Shi*. The *Mao Commentary* did not specify its meaning in this ode, while in the ode “Tall

⁴³⁷ Wang Mingsheng 王鳴盛, *Jiading Wang Mingsheng quanji* 嘉定王鳴盛全集 (Beijing: Zhonghua shuju, 2010), 11: 439.

⁴³⁸ See, “Hong Yunxuan dubei ji xu” 洪筠軒讀碑記序, in Weng Fanggang 翁方綱, “Fuchu zhai wenji,” 復出齋文集 in *Xuxiu siku quanshu*, 1455: 369. 其實證經者，二十之一耳。

⁴³⁹ Zheng Xuan, *Maoshi zhuan jian*, 434–35; with minor adaptations, the translation follows Karlgren, *The Book of Odes*, 230–31.

Southernwood” (Liaoxiao 蓼蕭, *MS* #173), the term was interpreted as a “rein” (*pei*). Yet the problem was complicated by Zheng Xuan, who offered three interpretations of this single term at different places: in the current ode, it was noted as a “rein” (*pei*)—the same as in Mao; in the ode “So They Appear” (Zai jian 載見, *MS* #283), the interpretation was “bridle” (*peishou* 轡首); in the ode “Gathering the Sow Thistle” (Cai qi 采芑, *MS* #178), it then became “pendulating [decorations] of the bridle” (*peishou chui* 轡首垂).⁴⁴⁰ The main purpose of Duan Yucai’s entry was to determine the authentic meaning of this term out of these diverging interpretations.

Noticing that the character *tiao* 條 did not appear in *Shuowen*, Duan started from the character *tiao* 鑒 which shared the same phonophoric component. According to *Shuowen*, the character had two meanings, “iron” and “the bronze of the bridle” (*peishou tong* 轡首銅). The first meaning was irrelevant, while the second, resonating with Mao and Zheng’s interpretations, suggested a close connection between the two characters. From here, Duan Yucai came up with a series of textual evidence from the *jinshi* inscriptions:

In the Stone-Drum poem, below the line “the four chariots are steady,” there are the characters *tiaole* 鑒勒. The Zhou tripod at the Jiao Hill also has the characters *tiaole* 鑒勒. (I haven’t seen a facsimile of this tripod inscription, and it is uncertain whether the text appears as *youge* 攸革 or *tiaole* 鑒勒. I shall go into the hills to identify it some other day.) In *Bogu tu*, all the three *dui*-vessels of the Zhou administrator Pifu have the characters *youge* 攸革 in their inscriptions. In Xue Shangong’s *Zhongding kuanzhi*, the tripod of the Zhou earl Ji has the characters *youle* 攸勒, and the *gui*-vessel of Yin has the characters *tiaole* 鑒勒.

石鼓詩“四車既安”⁴⁴¹之下，有“鑒勒”字；焦山周鼎有“鑒勒”字。此鼎文未見摹本，其作“攸革”、“鑒勒”未詳，他日往山中辨之。《博古圖》周宰辟父敦銘三皆有“攸革”字⁴⁴²。薛尚功《鐘鼎款識》周伯姬鼎有“攸勒”字，寅簋有“鑒勒”字。⁴⁴³

⁴⁴⁰ Duan Yucai, *Shijing xiaoxue*, juan 25: 14b, 15b.

⁴⁴¹ The first character is normally identified as *tian* 田 rather than the graphically similar *si* 四. When Wang Xianqian quoted this entry in his work, the line was rectified as “田車既安” (the hunting chariots are steady). See, Wang Xianqian 王先謙, *Shi sanjia yi jishu* 詩三家義集疏 (Beijing: Zhonghua shuju, 1987), 599.

⁴⁴² According to *Bogu tu*, the three vessels were “identical in both shape and inscriptions.” 形制款識悉同. See, Wang Fu 王黼, *Chongxiu xuanhe bogu tu* 重修宣和博古圖 (Yangzhou: Guangling shushe, 2010), 340–42.

⁴⁴³ Duan Yucai, *Shijing xiaoxue*, juan 25: 14b.

In the above cases, the connections between *you* 攸 and *tiao* 鑿, *ge* 革 and *le* 勒 as graphic abbreviations were apparent. Based on this frequent occurrence of “*tiaole*” 鑿勒 or its abbreviated forms in the ancient *jinshi* materials, Duan concluded that the term *tiaoge* 倬革 in *Maoshi* was in fact a graphic error for *tiaole* 鑿勒, which referred to the metal-decorated bridle (*jinle* 金勒). According to his reasoning, despite the abbreviation of *you* 攸 (i.e., 攸) for *tiao* 鑿 in the ancient bronzes, this was unknown to later scholars. Instead, they fabricated the character *tiao* 倬 with a *ge* 革 component, which became the cause of the error.⁴⁴⁴ Although it remains debatable whether the character *tiao* 倬 in *Maoshi* was an “error” or “variation”—most likely a “graphic assimilation” (*leihua* 類化) due to the following *ge* 革 character—the philological connection from *tiaoge* 倬革 to *tiaole* 鑿勒 is rigorous.⁴⁴⁵ From this new vantage point, *ge* 革 would refer to the bridle and *tiao* 倬 its metal (or bronze) decorations.

This revealing observation, indicating an inaccuracy in all the three interpretations of Mao and Zheng, would be impossible without the graphic variations from the *jinshi* materials. Those interconnected cases were essential for mapping out the paleographic fluidity of the ancient graphs, a hidden philological texture in the “study of individual characters” which had largely been stabilized in the transmitted texts of the later era. It was also due to the same reason that the reference of *jinshi* inscriptions demanded a greater faithfulness to the original graphic form comparing to the printed text. This is already suggested from Duan Yucai’s quoted inscription of the Pifu *dui*-vessels from *Xuanhe bogutu*. In the catalogue, both a facsimile of the ink-rubbing and a textual transcription were provided (Figure 37). Based on the original graphs reflected by the rubbing (bracketed in red), the first character should be taken as *you* 攸, yet in the transcription below, it was written in the standardized form as *tiao* 鑿, though the lower component *jin* 金 never showed up in any of the three *dui* inscriptions. The fact that Duan

⁴⁴⁴ Duan Yucai, *Shijing xiaoxue*, juan 25: 14b.

⁴⁴⁵ For a general analysis of this phenomenon in Chinese etymology, see, “Hanzi de xingtí jīqī yīndu de leihua fa” 漢字的形體及其音讀的類化法, in Wang Li 王力, *Longchong bingdiao zhai wenji* 龍蟲並雕齋文集 (Beijing: Zhonghua shuju, 2013), 385–89.

Yucan quoted the inscription as “youge” 攸革 rather than “tiaoge” 鑒革 testified that he was reading from the ink rubbing directly. Without paying due attention to this original form, one would miss an important proof for the graphic abbreviation.

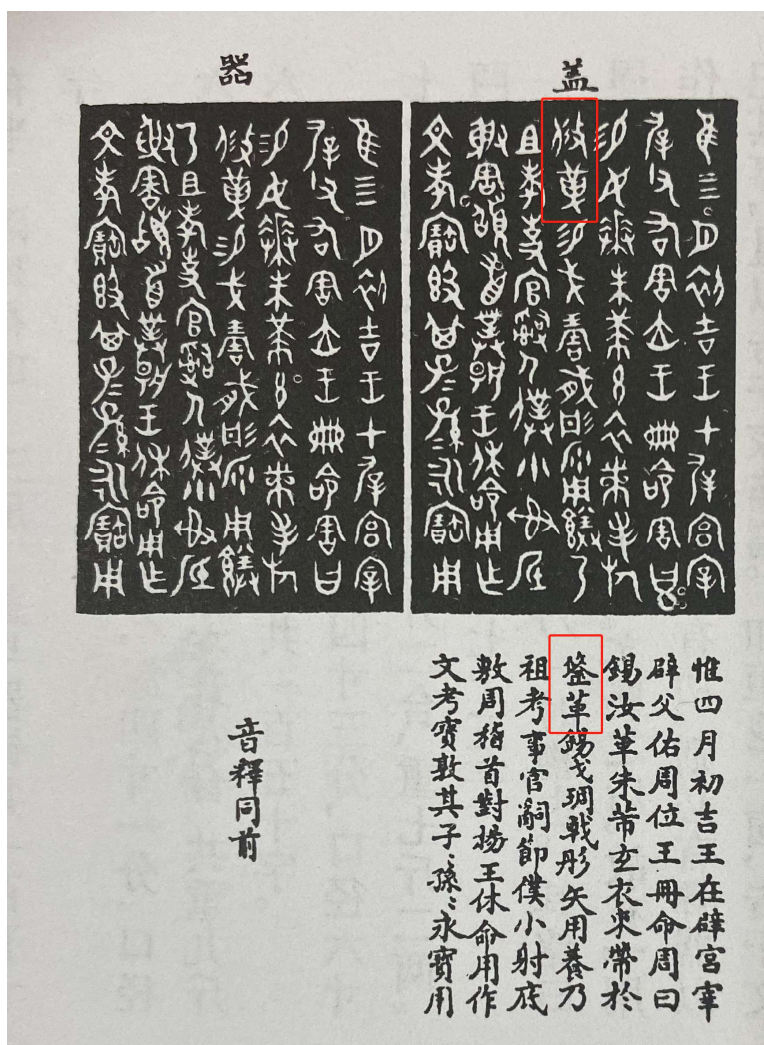


Figure 37: Ink rubbing and textual transcription for the second Pifu *dui*-vessel (“Zhou zai Pifu dui er” 周宰辟父敦二) in *Xuanhe bogu tu* (with the term *tiaoge* marked in red bracket)⁴⁴⁶

Speaking of this emphasis on the original, nothing was more salient than Duan’s reference to the Jiaoshan Tripod, for which he was merely certain about the inclusion of the word “tiaole” {鑒勒} in the inscription, yet had no idea of its graphic form. For the other bronze inscriptions quoted from *Bogu tu* and

⁴⁴⁶ Wang Fu, *Chongxiu xuanhe bogu tu*, 341.

Zhongding kuanzhi, the catalogues would include either an illustration of an ink rubbing or a hand-traced facsimile, which was sufficient for Duan to judge the original form. In contrast, the inscription of the Jiaoshan tripod, unmentioned in these catalogues, must be quoted from a sole record of the transcribed text. Feeling unassured with this mediated source and securing no access to a facsimile copy, he decided to “go into the hill” to identify the original graphs on the actual bronze.

With a long inscription of 93 characters on what was believed to be a Western Zhou artifact, the Jiaoshan tripod (more frequently named as the Wuzhuan 無衷 tripod in the modern era) was among the most prestigious Three Dynasty bronzeware known in the mid-Qing era. Stored with semi-public access in the Jiaoshan Temple of Zhenjiang 鎮江, it gained its initial fame through the poems of the brothers Wang Shilu 王世祿 (1626-1673) and Wang Shizhen 王士禛 (1634-1711), and became a recurrent theme for poetic writing, inscription analysis, and ink rubbing until being destroyed in the Sino-Japanese War (Figure 38).⁴⁴⁷ In the eighteenth century, these works were collected and published in Zhang Chao’s 張潮 (1650-c.1709) *Jiaoshan guding kao* 焦山古鼎考 (Investigations of the ancient tripod of the Jiao Hill, 1700),⁴⁴⁸ and Weng Fanggang’s *Jiaoshan dingming kao* 焦山鼎銘考 (Investigations of the inscriptions of the Jiaoshan tripod, 1773). A native of the Jintan 金壇 county in Zhenjiang 鎮江 prefecture, Duan’s home was merely about 40 miles from the temple. Judging from the easy tone in Duan’s note (“I shall go into the hill to identify it some other day”), the entry should be composed when Duan was at his hometown or nearby in the Jiangnan area.

⁴⁴⁷ For its initial fame, see, Weng Fanggang 翁方綱, *Jiaoshan dingming kao* 焦山鼎銘考, National Library of China, no. A02598 (Qianlong Era), 4a.

⁴⁴⁸ The work was first published in the second series of Zhang Chao’s *Zhaodai congshu* 昭代叢書 (1700). As suggested by the annotated catalogue to *Siku quanshu*, although the work was attributed to Wang Shilu on the title page, it was in fact compiled by Zhang Chao himself. See, Ji Yun 紀昀, “Qinding siku quanshu zongmu,” 欽定四庫全書總目 in *Yingyin Wenyuange siku quanshu*, 3: 519.

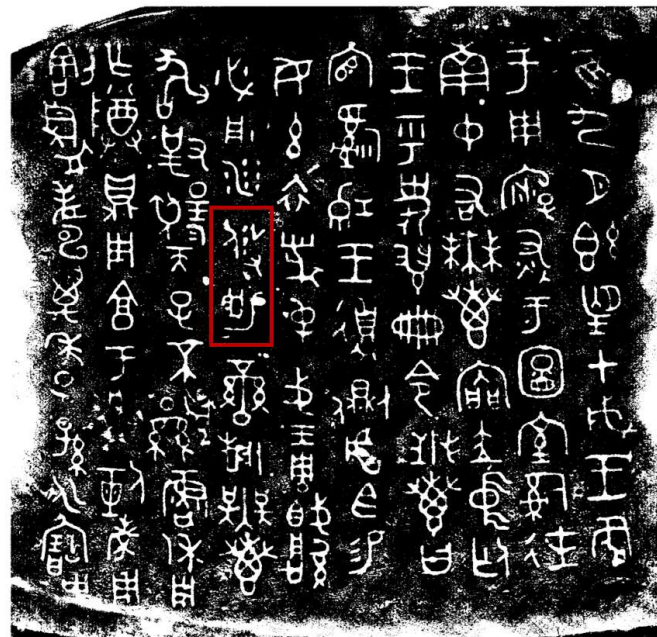


Figure 38 (Left): Composite rubbing of the Jiaoshan tripod by Monk Liuzhou 六舟, 1834, with Ruan Yuan's colophon at the bottom right. Duoyun xuan auction, 1997.⁴⁴⁹

Figure 39 (Right): Details in the rubbing inscriptions of the Jiaoshan tripod, with the characters “youle” 攸勒 marked in red. National Library of China, no. biao Zhou 裱軸 715.⁴⁵⁰

Nevertheless, the trip did not seem to be carried out as Duan planned. Since his leaving for the 1769 civil exam at the capital, and his nomination as a magistrate in the southwest the next spring, he had

⁴⁴⁹ Illustration from Wang Yifeng, *Guzhuan huagong*, 255.

⁴⁵⁰ Illustration from Guojia tushuguan 國家圖書館, ed., *Guojia tushuguan cang qingtongqi quanxingta jicheng* 國家圖書館藏青銅器全形拓集成 (Shanghai: Shanghai shuhua chubanshe, 2019), 1: 208.

been traveling far away from home between Guizhou, Beijing, and Sichuan throughout the 1770s.⁴⁵¹ When he completed the first draft of *Shijing xiaoxue* in 1776, the question was still left open.⁴⁵² Yet the story did not end here. At the very end of the entry, Duan included an additional note in 1778 at his new official post in Wushan 巫山 county:

In the leap sixth month of the Wuxu year in the Qianlong era (1778), the monk Danning from Jiaoshan sent me a facsimile of the Zhou tripod. The word “*tiao*” {鑿} appears as *you* 攸. The word “*le*” {勒} is eroded, yet the left stroke on the right side is apparent. I identify it as *le* 勒.

乾隆戊戌閏六月，焦山僧澹寧寄予周鼎摹本。“鑿”字作“攸”，“勒”字殘蝕，而右旁一“丿”分明，定其作勒。⁴⁵³

Thanks to this long-distance mail from Jiangsu to Sichuan, the question was finally settled. As shown in *Figure 39*, the two characters “*youle*” 攸勒 in the extant rubbings accord with Duan’s description precisely. Different from his earlier expectation as either “*tiaole*” 鑿勒 or “*youge*” 攸革, the result indicated a relative independence in the abbreviation of the two characters, which further proved the indispensability of the original graph. Striving for a higher refinedness, this referential move from the transcription of plain text to the facsimile of original graphs took nearly a thousand miles and at least a decade to complete. Such spatial and temporal gaps, like the immense supporting materials and layered generalizations, also highlighted the considerable effort in revealing such hidden textures. When Zang Yong reedited the work for publication in 1797, the new evidence from the Jiaoshan tripod was finally incorporated into the body entry, becoming one of the five references that testified to the inner richness of the term “*tiaole*” through well-ordered *jinshi* materials.⁴⁵⁴

Impressively, when Weng Fanggang presented Qian Daxin his work on the Jiaoshan tripod in 1773 and asked for a colophon before its publication, Qian also elaborated on the connection between

⁴⁵¹ Liu Pansui 劉盼遂, “Duan Yucai xiansheng nianpu,” 段玉裁先生年譜 *Qinghua xuebao* 清華學報, no. 2 (1932): 7–12.

⁴⁵² For the dating of *Shijing xiaoxue*, see, Footnote 491.

⁴⁵³ Duan Yucai, *Shijing xiaoxue*, juan 25: 15b.

⁴⁵⁴ Duan Yucai 段玉裁, “*Shijing xuexue*,” 詩經小學 (4 juan edition) in *Duan Yucai quanshu*, 1: 645.

“*tiaoge*” 條革 and “*tiaole*” 鑒勒 to showcase how the tripod inscription could “bolster the glossing of classics” (*yuyi jingxun* 羽翼經訓). More interestingly, in his demonstration, the five supporting references from *jinshi* materials were precisely the same as in Duan’s entry—with a mere difference in sequence.⁴⁵⁵ It remained unknown whether the two had exchanged their ideas about the case in the capital before.⁴⁵⁶ Yet judging from the time of their writings, at least the two *entries* should be composed independently. This coincidence highlighted a commonality in both the methodology of *jinshi*-based philological reasoning, and the source pool backed up by printed catalogues, circulated facsimiles, and information networks. As an excellent example for the “one-out-of-twenty” *jinshi* references that could “verify the classics,” this case study demonstrates how the direct reference of *jinshi* materials could prepare unique evidence for intensive philological analyses.

In this chapter, I have elaborated a variety of philological techniques that were either newly developed or reached a new level of intensity during the mid-Qing era. Strictly speaking, for each of the techniques, one can always identify certain prototypes or methodological origins from the earlier periods, some of which I have already mentioned. Yet the point is not to argue for a continuity or discontinuity within each of these specific methods. Instead, a more significant and meaningful difference would emerge when all these philological dynamics are joined together. Speaking of the general evidential approach, it was a transition from the extensive erudition to the intensive refinedness. Regarding the analytical focus, it was a move from the referential surface to the hidden textures. Concerning the underlying epistemology, it was an emerging inwardness for the transmitted texts. Under strict working hypotheses and carefully limited sources, such refined textures also redefined the philological term by its local specificity, whose inner richness rendered it on par with material object in evidential analyses. For

⁴⁵⁵ Weng Fanggang, *Jiaoshan dingming kao*, 28b-29b.

⁴⁵⁶ For instance, when Duan Yucai finished his *Shijing yunpu* 詩經均譜 in the spring of 1770 at Beijing, he invited Qian Daxin to write the preface, and there would be opportunities for them to discuss *Shijing*-related topics. See, Liu Pansui, “Duan Yucai xiansheng nianpu,” 7–8.

the first time in Chinese history, *ming* became another form of *wu*—a philological *wu* that went side by side with its material counterpart. If “materiality” is the common term to account for the intrinsic richness of a physical object, we may speak of a similar feature for the philological terms. In this sense, the emergence of philological inwardness was a central phenomenon for the mid-Qing epistemic world. Greatly enriching the hermeneutic possibilities, it marked an essential leap from the evidential studies of the earlier times.

Chapter Four: Philological Bifurcations

The previous chapter elaborated how the newly developed philological techniques contributed to the revealing of refined philological textures and the settlement of evidential incoherence. Misleading appearances were seen through; superficial readings were abandoned. However, the establishment of a univocal interpretation once and for all was merely an ideal situation. Just as suggested from philological excess in the identification of original characters, in many instances, the polysemy, ambiguity, and internal inconsistencies in the transmitted text insinuated a plurality of possible readings, which, despite the sharpened philological tools, were still unable to reach a hermeneutical consensus. I use the term “*bifurcation*” to account for the development of competing readings that are equally convincing and self-justifiable. As I will demonstrate in this chapter, thanks to the settlement of textual incoherence through the new techniques, the bifurcation of philological readings became a salient phenomenon in the mid-Qing era. Since each of the competing readings had fully utilized the new techniques and boasted a similar evidential cogency, the proposing and endorsing of a bifurcated alternative was primarily due to a divergence in epistemic stance, such as one’s initial premise, methodological preference, evidential priority, or demonstrative emphasis. The philological bifurcations thus created a unique space for the display and negotiation of these underlying differences. In this chapter, I will use three cases from the *mingwu* discussion of the *Shi* to demonstrate the epistemic complexity of philological bifurcation. Starting from a contradictory, an ambiguous, and a clear interpretation in the Mao commentary respectively, the three cases will cover a wide range of diverging types, both among the theses of different scholars and between the varied editions of a single scholar’s claim.

“When a Chariot Passes over the Ford”

In the second stanza of “The Gourd Has Its Bitter Leaves” (*pao you kuye* 匏有苦葉, MS #34), one encounters a lyrical image where a chariot is passing through the water:

有瀾濟盈

From the rich water-flow the ford is full,

有鷺雉鳴	resoundingly sings the female pheasant;
濟盈不濡軌 ⁴⁵⁷	though the ford is full, it does not wet the <i>gui</i> of a chariot,
雉鳴求其牡	the female pheasant sings and seeks her male. ⁴⁵⁸

According to the Mao and Zheng commentaries, the ode is a critique to the lascivious life of the duke and consort of Wei 衛. In particular, the passing of deep water invokes the violation of ritual norms. Despite this, the passenger still insists that the *gui* of the chariot will not be soaked—thus highlighting an ignorance of the violation of ritual (*fanli er bu zizhi* 犯禮而不自知).⁴⁵⁹

Despite the clarity of this poetic message, the untranslated character in the third line, *gui* 軌, is one of the most puzzling *mingwu* terms in the commentary tradition of *Shi*. Among the early authoritative texts outside *Shi*, the term was normally interpreted in two ways. The first, which we still use today, referred to the trace of the wheels. This was best suggested by *Shuowen*, which explained the character as “wheel traces” directly (*cheche* 車徹). Meanwhile, in his commentary to the “Carpenter” (Jiangren 匠人) chapter of *Zhouli*, Zheng Xuan also noted a relevant meaning of *gui* as the “width of wheel traces” (*zheguang* 轍廣).⁴⁶⁰ The other interpretation came from Zheng’s commentary to the chapter “Smaller Etiquettes” (Shaoyi 少儀) of *Liji*, where the characters and *zhi* 軹 were taken as synonyms, both referring to “*weitou*” 轡頭, or the ends of the chariot axle.⁴⁶¹ Which meaning should one take for the character in the ode? The situation became much perplexing under the most authoritative reference, the Mao commentary:

⁴⁵⁷ As presented in Chapter Three, the character *gui* 軌 witnessed considerable variations across different *Maoshi* editions. Since the high-Qing scholars have concluded 軌 as the original form, I will begin with this clean text and introduce the other various forms with the unfolding of my discussion.

⁴⁵⁸ Zheng Xuan, *Maoshi zhuan jian*, 48 With slight adaptation, the translation follows Karlgren, *The Book of Odes*, 20–21.

⁴⁵⁹ Zheng Xuan, *Maoshi zhuan jian*, 48.

⁴⁶⁰ Duan Yucai, *Shuowen jiezi zhu*, 1262; Jia Gongyan, *Zhouli zhushu*, 1149.

⁴⁶¹ Kong Yingda 孔穎達, *Liji zhengyi* 禮記正義 (Beijing: Beijing daxue chubanshe, 1999), 1041–42. 軌與軹同謂轡頭也。

由輶以上為軌

Above the draught pole is called *gui*.⁴⁶²

The meaning of *zhou* 輶 was univocal—the long, bent “draught pole” beneath the chariot box (*yu* 輿) and above the axle (*zhou* 軸). However, neither the wheel trace nor the axle end was possible to locate above it (*Figure 40*). In the early Tang, Lu Deming already noted this inconsistency in his *Exegesis*. According to him, although the character was “previously read as *gui-mei fan* 龜美反 (MC: *kwijX*, the same as *gui* 軌) and taken as the axle ends (*weitou* 轆頭), based on the [Mao] commentary, its pronunciation should be *fan* 犯 (MC: *bjomX*)”⁴⁶³ With a further reference from *Shuowen* that *gui* 軌 was pronounced as *gui-mei fan* and meant the wheel trace, while *fan* 軌 was pronounced as *fan* 犯 and meant “the front of the leaning rail” (*cheshe qian* 車軾前), Lu made crystal clear that he took the character as *fan* rather than the “previous” Six-Dynasty reading as *gui*.⁴⁶⁴ Despite their distance in pronunciation, the graphic similarity of the two characters made their confusing use possible. Although the specific location of *fan* also underwent significant debates throughout history—either the loose description of the “front of the leaning rail,”⁴⁶⁵ Zheng Xuan’s bottom frames of the chariot box,⁴⁶⁶ Dai Zhen’s front cover board of the box (*Figure 41*), or Ruan Yuan’s small wooden support right beneath the box (*Figure 42*)—one thing remained unchanged: It always located *above* the draught pole. And this would be sufficient for scholars to follow Lu Deming’s track to reconcile the contradiction.

⁴⁶² Zheng Xuan, *Maoshi zhuan jian*, 48.

⁴⁶³ Lu Deming, *Jingdian shiwen*, 58. 軌，舊龜美反，謂車轆頭也。依傳意，宜音犯。

⁴⁶⁴ Lu Deming, *Jingdian shiwen*, 58.

⁴⁶⁵ Most Han commentators, including Du Zichun, Zheng Zhong, and Xu Shen, adopted this loose definition in their commentaries. See, Kong Yingda, *Maoshi zhengyi*, 141; Jia Gongyan, *Zhouli zhushu*, 854, 1088. Dai Zhen specified *fan* as a front board covering the chariot box (*yan yu ban* 揜輿版).

⁴⁶⁶ In specific, the term was interpreted as the “front and side bottom frames of a chariot box” (*yuxia sanmian cai* 輿下三面材), though it did not receive much resonance by later scholars. See, Jia Gongyan, *Zhouli zhushu*, 1088.

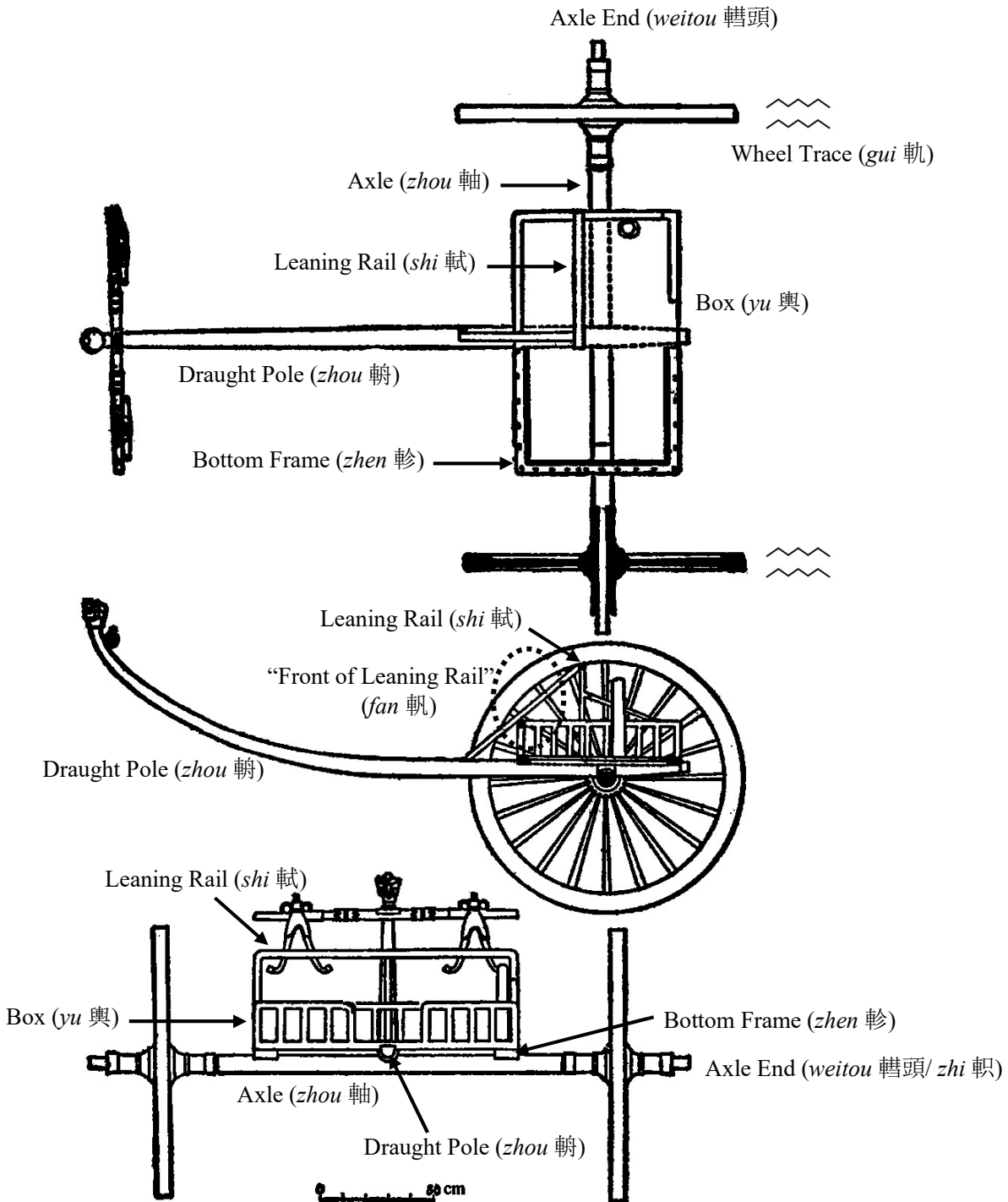


Figure 40: Three-view illustration of a Western Zhou chariot⁴⁶⁷

⁴⁶⁷ The illustrations, as well as the translation of component names, are adapted from Hsiao-yun Wu, *Chariots in Early China: Origins, Cultural Interaction, and Identity* (Oxford: Archaeo Press, 2013), 2. The archetype is an excavated chariot from Baoji, Shaanxi province, dated to 10th century BCE.

hermeneutic discretion. Free from the burden of an explicit contradiction, he switched back to the earlier reading of the character as *gui*—for him in the sense of the wheel trace. Yet this was more than a simple archaistic move, for it also implied a rhyming concern. As pinpointed by Zhang Xuelong 張學龍 (fl. late-13th c.), according to *Shuowen*, the *gui* 軌 character followed the sound of *jiu* 九 (MC: *kyuwX*), while the *fan* 𨋖 character pronounced as *fan* 犯 (MC: *bjomX*). Since the rhyming character in the next line was *mu* 牡 (MC: *muwX*), only the *gui* 軌 character would be compatible in sound—and this, according to Zhang, explained Zhu Xi’s idiosyncratic choice for the alternative interpretation.⁴⁷²

This new concern on the rhyme thus highlighted an intrinsic contradiction in the line’s interpretation. If one read the character as *gui*, it would contradict to the Mao commentary; if one read it as *fan*, it would then violate the rhyme. From now on, any serious commentator who followed Mao had to make a trade-off between the textual authority and the rhyming pattern. This point of divergence was well paralleled by the various graphic forms of the character. As we have already discussion in Chapter Three (p. 193), among the seven editions of *Maoshi* Ruan Yuan used for collation in his Thirteen-Classic Project, four use the *gui* 軌 character, one uses *fan* 𨋖, and two use 𨋖, an apparent intermediate between *gui* and *fan* which doubled the hermeneutic ambivalence of the character.

If the trade-off between *fan* and *gui* constituted the first point of divergence, the specific meaning of *gui* opened the second. At the beginning of this section, we have mentioned two basic meanings of *gui* in the authoritative texts, the “wheel trace” and the “axle end.” However, this was more than an “either-or” choice, for this plurality of meaning also brought about a deeper question regarding whether the term, strictly speaking, should only refer to one chariot component, or could be a synonym for different places. For Lu Deming, the character *gui* only had a single meaning as the wheel trace, while the other

⁴⁷² According to the *Guangyun* system, both *jiu* 九 (You 尤 Division) and *mu* 牡 (Hou 侯 Division) belong to the “Liu Gathering” 流攝, while *fan* 犯 (Fan 凡 Division) belongs to the “Xian Gathering” 咸攝. See, Hu Guang 胡廣, ed., *Shizhuan daquan* 詩傳大全 (Beijing: Inner Court, 1415), juan 3: 18a. 然集傳獨從軌，蓋以九、牡聲之叶也，軌聲則難叶矣。

interpretation was caused by a confusion with the *zhi* 軹 character, which referred to the “axle end.”⁴⁷³ This line of reasoning was further developed by Kong Yingda in his *Maoshi zhengyi*, who pinned down the graphic confusion to a key quotation from *Liji*, “to sacrifice the left, right 軌, and the front rail” (*ji zuoyou gui fan* 祭左右軌范), the very line where Zheng Xuan established the equivalence between the character and *zhi* 軹 in his commentary and interpreted them as the axle end. Yet based on a similar quote from *Zhouli* on the same event, “to sacrifice the two *zhi*, and the front rail” (*ji liang zhi, ji fan* 祭兩軹, 祭軌), Kong identified the “軌” character in the former quote as a graphic error of *zhi* 軹, thus rendering Zheng’s alternative interpretation trivial.⁴⁷⁴ Considering the graphic similarity of the two characters, such a confusion was indeed likely to occur. Nevertheless, it was only one way of interpretation, which did not preclude the possibility that *gui* could *also* refer to the “axle end” by itself—not to mention that it was still endorsed by Zheng Xuan’s authoritative commentary. Strictly speaking, what drove Lu and Kong to their conclusion was not etymological evidence (e.g., a diachronic analysis of how the character *gui* became mixed up into the use of *zhi*), but an epistemic stance that each *mingwu* term should only refer to one specific component of the chariot—a preconceived one-to-one correspondence which can be called a “text-derived classification.”

However, this did not have to be case. What would happen if one accepted plural meanings of *gui*? In the Southern Song, Luo Bi 羅泌 (1131-1189), a contemporary of Zhu Xi, took a notable step on this direction:

Based on the commentary to the “Draught Pole Maker” chapter of *Zhouli*, the width of the wheel trace is called *gui*; the end of the wheel nave is also called *gui*. According to *Yunhui*, the axle is called *weitou*.⁴⁷⁵ Therefore, *wei* is just the axle end that passes through the nave. Both the distance and height of the wheels are determined by *gui*. If the *gui* [of two chariots] are the same, their wheel traces will also be the same. Therefore, later people also call the wheel trace “*gui*.” In the “Quli” chapter, “the dust did not flow over *gui*”—this is talking about the height; In the “Zhongyong” chapter, “the chariots had the same *gui*”—this is talking about the width. The

⁴⁷³ Zheng Xuan, *Maoshi zhuan jian*, 49.

⁴⁷⁴ Kong Yingda, *Maoshi zhengyi*, 142-43.

⁴⁷⁵ Sic. Judging from the content, the line was more likely to be “車軸耑謂轆頭也。” Cf. Duan Yucai, *Shuowen jiezi zhu*, 2: 1259.

height of a wheel is 6 *chi* and 6 *cun*, and the *gui* locates in its center. If it is soaked, the water depth will be 3 *chi* and 3 *cun*.

周禮輶人疏：轍廣謂之軌，轂末亦為軌。韻會曰：車軸謂轆頭也，轆即車軸之端貫轂者。車輪廣狹高下皆定於軌，軌同則轍迹亦同，後人因謂車轍亦曰軌。曲禮“塵不出軌”以高下言，中庸“車同軌”以廣狹言。蓋車輪崇六尺六寸，軌居輪中，若濡軌則水涉三尺三寸。⁴⁷⁶

Two things are noteworthy in this entry. First, here the alternative meaning of *gui* was not marked as the “axle end” but the “nave end” (*gumo* 轂末). In fact, this was also a fine observation by Kong Yingda in his *Maoshi zhengyi*. Quoting *Shuowen*, Kong suggested that only *wei* 轆 referred to the axle end; the *zhi* 軹 character, instead, referred to the smaller end (*xiaochuan* 小穿, i.e., the outer end) of the nave (*Figure 43*). However, noting Zheng Zhong’s undifferentiated interpretation of the two characters in the *Kaogong ji* commentary, Kong refused to make further distinctions, but simply concluded that, since “the nave end and the axle end locate together, they got the two names of *wei* and *zhi*.”⁴⁷⁷ A similar logic was also adopted in Luo’s entry. Although *gui* was explicitly defined as the “nave end,” by referring back to the “axle end” in the following quotation of *Yunhui*, he did not make further distinctions between the two places—I will come back to this point later. Second and more importantly, this was the first time in the *Shi* hermeneutics when *both* the height and the width were considered for a pluralistic meaning of *gui*—though the height alone was already enough for the interpretation of the line. Due to the inclusion of this thesis into Hu Guang’s 胡廣 (1370-1419) *Wujing daquan* 五經大全 (Encyclopedic compendium to the five classics), the officially sanctioned reference for the Ming civil exams, this thesis must have reached a wide circulation. It marked a second diverging point for the reading of the line, namely, whether one should adopt a *singular* interpretation of *gui* as corresponding to merely one place on the chariot, or a *pluralistic* interpretation that linked the term to multiple referents.

⁴⁷⁶ Hu Guang, *Shizhuan daquan*, juan 3: 18a.

⁴⁷⁷ Kong Yingda, *Maoshi zhengyi*, 142.

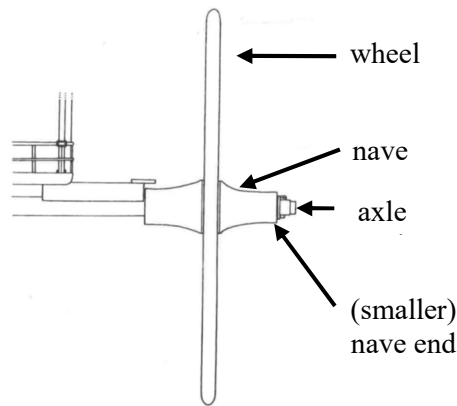


Figure 43: Distinctions between the “nave end” and the “axle end”⁴⁷⁸

These two diverging points, along with the three possible meanings of the “rail front,” “wheel trace,” and the “axle/ nave end,” defined the basic picture for the *mingwu* analysis of the line in the early modern era. As always, the late-Ming and early-Qing erudite scholars were well aware of all these various theses and the inconsistencies between them, yet made little substantial breakthrough in their own analysis of the line. In this comprehensive entry of “Gui 軌” in the *Mingwu Commentaries*, Feng Fujing raised as many as seven quotations from *Liji* and *Zhouli* to determine the meanings for *fan* and *gui*, along with a careful comparison of the three prevailing theses on the rail front, wheel trace, and nave end. Yet the conclusion was a double endorsement for Mao and Luo Bi. On the one hand, the Mao commentary was correct, since *fan* was indeed above the draught pole; on the other hand, “if the ode worked in harmonious rhyme,” Luo’s thesis was better.⁴⁷⁹ Instead of making a real progression on the first divergent point, Feng Fujing simply circumvented the contradiction by addressing the possibility of both sides. This ambivalent stance was even more apparent in Chen Qiyuan’s *Maoshi jigu bian*. After reviewing the three theses, he concluded the rail-front one as “better in meaning but distant in rhyme,” the wheel-trace one as “concordant in rhyme but problematic in meaning,” and the nave-end one, though “working well in both meaning and rhyme,” was discounted in reliability due to Kong Yingda’s critique of the reading as a

⁴⁷⁸ Illustration adapted from Sun Ji, *Zai chi zai qu: Zhongguo gudai chema wenhua*, 49.

⁴⁷⁹ Feng Fujing, *Liujia shi mingwu shu*, juan 10: 15a-17a. 若詩取叶韻，當從羅氏為長。

graphic error.⁴⁸⁰ Each thesis had its own insufficiency; none was able to integrate the commentarial, philological, and phonetic aspects at once. In both cases, what we have observed is the typical feature of erudite learning, which is excess in information but lack of final judgment. The parallel treatment of competing theses highlighted the epistemic limit before the advent of more advanced philological techniques.

It was under this knowledge background that we stepped into the mid-Qing era—though more of a background for us than for the mid-Qing evidential scholars themselves. This is because many of them, with a fervid classicist inclination, paid little attention to the evidential writings of the nearer past.⁴⁸¹ For our case, a notable example is the complete neglect of Luo Bi's thesis by the leading evidential scholars of the day. Instead, the dual meanings of *gui* was “rediscovered” by Li Dun 李惇 (1734-1784), who, after connecting the term to both the wheel trace and the axle end, also preferred the latter for its better sense in both rhyme and meaning.⁴⁸² Praised by Wang Niansun as one of Li's most important evidential discoveries, this entry, rather than the more “original” one by Luo Bi, became the zero point for the pluralistic interpretation of *gui* in the mid-Qing era.⁴⁸³

If Li offered a benchmark for the pluralistic interpretation, his contemporary Dai Zhen must have set the standard for the singular interpretation of the term. In his treatise “On Distinguishing the Four

⁴⁸⁰ In the end, he chose to side with the rail-front thesis, simply because it was endorsed by the most authoritative text—the Mao commentary, and thus “not comparable to those succeeding conversions.” As a mere expedient choice, it still left the entire question unsettled. See, Chen Qiyuan, *Maoshi jigu bian*, 1: 46-47.

⁴⁸¹ For instance, Jiang Fan 江藩 once commented on Dai Zhen as “not reading post-Han books”; Chen Yinque also regarded “not reading post-Tang books” as an expedient way for the evidential scholars to succeed. See, Jiang Fan 江藩, *Guochao hanxue shicheng ji* 國朝漢學師承記 (Beijing: Zhonghua shuju, 1983), 50; Chen Yinque, *Jinming guan congkao erbian*, 270.

⁴⁸² Also noted the slight difference between Luo Bi's “nave end” and Li's “axle end.” See, Li Dun 李惇, “Qunjing shixiao,” 群經識小 in *Yingyin Wenyuange siku quanshu*, 173: 62–63.

⁴⁸³ In Wang Niansun's preface to *Qunjing shixiao*, Li Dun's anthology in evidential studies, this was one of the two entries that received a special praise as “unshakably correct and unparalleled in history.” See, Wang Niansun and Wang Yinzhi, *Gaoyou erwang heji*, 1: 99. 至當不易之論，可謂獨有千古矣。

As for Luo's entry, it was not rediscovered until the early 19th century, when Hu Chenggong, after consulting Feng Fuming's Six-School Poetry, noted in his *Maoshi houjian* that “both theses of Luo and Feng were the same with Li Chengyu [Dun].” 是羅、馮之說皆與李成裕同。This belated acknowledgement highlighted the rupture and parallelism in the transmission of *mingwu* knowledge. See, Hu Chenggong, *Maoshi houjian*, 177.

Characters *fan*, *gui*, *zhi*, and *ji* in the Commentaries to *Shi* and *Li*” (辨詩禮注軌軌軹軹四字 *bian shi li zhu fan gui zhi ji sizi*), Dai Zhen pursued Lu Deming and Kong Yingda’s track for a finer distinction of the *mingwu* characters. The treatise also began with a critique to the inconsistency of the Mao commentary, as if “its sound follows *gui* 軌 but its meaning follows *fan* 軌.” For him, this suggested that during the Han time, the two characters had already been mixed up.⁴⁸⁴ However, instead of leaving this incoherence open, as had the scholars of erudite learning, Dai continued his reasoning based on the following key reference:

Chapter “Grand Rider” in *Zhouli*: “The right [officiate] sacrifices to the two *zhi* and the *fan*”...According to Zheng Xuan’s commentary, “*Zhi* was previously written as *ji* 軹.”...Du Zichun noted: “the *ji* character should just be *zhi*, which means the two axle ends.”

周禮大馭：右祭兩軹、祭軌。……鄭注曰：故書軹爲軹。……杜子春云：軹當爲軹，軹謂兩轡也。⁴⁸⁵

Although the commentaries by Zheng Xuan and Du Zichun here were already included in Kong Yingda’s *Maoshi Zhengyi* and must have been widely noticed by previous scholars, it was Dai who excavated their deeper significance. The two quotations marked a diverging view between the “previous writing” and Du, in which the former suggested the character to be *ji* 軹, while the latter to be *zhi* 軹. Note that Zheng Xuan cited Du’s words in his own commentary, Kong concluded that the two shared the same opinion and thus paid no further attention to the “previous writing.” However, Dai Zhen keenly observed that on a chariot, the “side rail” was also named *zhi* 軹 (see *Figure 41*). If one followed Du’s interpretation, “the two names (i.e., *zhi* as the “axle end” and *zhi* as the “side rail”) will be mixed up, which is incorrect.”⁴⁸⁶ After citing a series of other classical texts, Dai proposed the finest distinction of

⁴⁸⁴ According to Dai, the intermediate character 軹 was a mere vulgar writing, which “did not form a real character.” See Dai Zhen, *Dai Zhen quanshu*, 6: 277.

⁴⁸⁵ Dai Zhen, *Dai Zhen quanshu*, 6: 277.

⁴⁸⁶ Dai Zhen, *Dai Zhen quanshu*, 6: 278. 二名溷淆，非也。

the characters up to the time: *fan* 輓 as the rail front; *gui* 軌 as the wheel trace; *zhi* 軹 as the side rail *ji* 輶, as the nave end; and *wei* 輹 as the axle end.⁴⁸⁷

Based on this list of correspondences, Dai inferred in a twin entry in his *Mao Zheng shi kaozheng* 毛鄭詩考正 (Evidential Rectifications on the Mao and Zheng version of *Shi*) that the attribution of “axle end” to the *gui* character was the result of a three-step confusion (Chart 2): First, during the Han, the two characters *ji* 輶 and *zhi* 軹 had already been mixed up—this could be inferred from Du Zichun’s note and Zheng Xuan’s tacit agreement. The *ji* character was then dropped from the dictionary, while *zhi* began to refer to both the “side rail” and the “nave end.” Second, the names for the “axle end” and the “nave end”—two neighboring components —were mixed up. And third, the characters *gui* 軌 and *zhi* 軹 were also mixed up.⁴⁸⁸

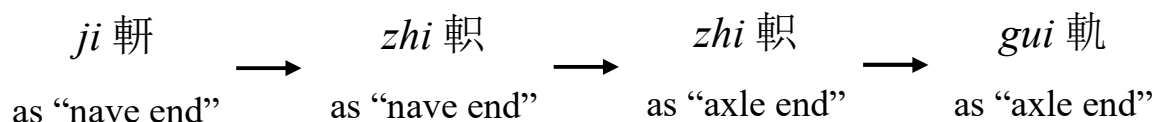


Chart 2: Dai Zhen’s Conception of the Philological Confusion

Compared to the preceding entries by Lu Deming, Kong Yingda and Luo Bi, Dai’s analysis outperformed in both refinement and thoroughness. As mentioned above, although Kong and Luo had already noted the philological difference between the “nave end” and the “axle end,” they simply wrapped up the two components together without a further distinction. As for the differentiation of *ji* 輶 from *zhi* 軹, it showed an even greater originality. In fact, this entry was regarded as a representative case of Dai’s myriad philological contributions. When Qian Daxin composed Dai’s posthumous biography, he included nine examples from multiple fields to demonstrate Dai’s evidential achievements. The distinction of the

⁴⁸⁷ Dai Zhen, *Dai Zhen quanshu*, 278.

⁴⁸⁸ Dai Zhen 戴震, *Mao Zheng shi kaozheng* 毛鄭詩考正 (Manuscript Copy, National Library of China, no. 11267, Qing Dynasty), 1: 5b-6a.

four characters was selected as one of them.⁴⁸⁹ In the mid-Qing era, the entry was widely quoted and became the benchmark for the singular distinction of those *mingwu* characters.⁴⁹⁰

Nevertheless, it is worth mentioning that the evidential basis for the most original point of this entry, the differentiation between *ji* 軛 and *zhi* 軛, was strikingly straightforward: It simply came from the association of two textual sources, one (*zhi/ji* as the axle end) already discussed in Kong Yingda's official textbook, the other (*zhi* as the side rail) even more salient from Zheng Xuan's *Kaogong ji* commentary. These were common sources that a serious scholar on the question would hardly miss.⁴⁹¹ What guided Dai to surpass his predecessors and make the discovery, instead, was a stronger faith in the one-to-one correspondence of *mingwu* terms, such that the confusion of two significations (*er ming hunxiao* 二名混淆) would by itself be adequate to indicate a contradiction. This was how he declined Kong Yingda's discussion, and how he reached a stricter distinction between the "axle end" and the "nave end." This epistemic premise, as discussed above, was already applied by the time of Lu Deming and Kong Yingda, but Dai followed it in a more thorough and systematic way. This classificatory premise, though hard to validate in many situations, was sufficiently powerful to transform textual aggregations into meaningful textures.

The overview above is but a prelude for the real protagonists of this section—Duan Yucai and the father and son pair, Wang Niansun and Wang Yinzhi, whose academic exchanges across years propelled the two to continuously adjust their interpretations of *gui* in multiple editions. However, the shared information and heated debates did not bring a hermeneutic consensus, but a bifurcation of multiple

⁴⁸⁹ See, "Dai Xiansheng Zhen Zhuan" 戴先生震傳, in Qian Daxin, *Jiading Qian Daxin quanji*, 10: 631-634.

⁴⁹⁰ For the wide citation of this entry, see, e.g., Duan Yucai, *Shuowen jiezi zhu*, 2: 1253; Gui Fu 桂馥, "Shuowen jiezi yizheng," 說文解字義證 in *Xuxiu siku quanshu*, 210: 630; Wang Wufeng 汪梧鳳, *Shixue ruwei* 詩學女為 (Shanghai Library, no. T01161-68, Qianlong era), 3: 12b; Hao Yixing 郝懿行 and Wang Zhaoyuan 王照圓, "Shi wen," 詩問 in *Hao Yixing ji*, 1: 1: 573; also, see Ruan Yuan's collation note in Kong Yingda, *Liji zhengyi*, 1041.

⁴⁹¹ For the second source, see, Jia Gongyan, *Zhouli zhushu*, 1084.

readings of the term with equal tenability. As a quick overview, recall that the fatal hermeneutic problem came from the Mao commentary, “from the draught pole above is called *gui*” (*you zhou yishang yue gui* 由輶以上曰軌), for *gui* was not a component that could be defined above the pole. In the final stage of their theses, Duan altered the commentary into “from the draught pole *below* is called *gui*” (*you zhou yixia yue gui* 由輶以下曰軌), and proposed a new *singular* interpretation of *gui* as the “rectangular space below the chariot box”; the Wangs, as a contrast, continued to follow a *pluralistic* interpretation of the character as the “nave end,” but altered the commentary into “from the draught above is call *soaking* the *gui*” (*you zhou yishang yue rugui* 由輶以上曰濡軌). Both theses, despite their apparent incompatibilities, could settle the textual contradiction, and both considered its own interpretation to be better than the other. However, neither had envisaged the key argument of their final theses from the very beginning. Before delving into epistemic complexities of the mature claims, let us first step back to the primordial stage.

It is fortunate that both Duan and the Wangs have left multiple versions of their interpretations in different works across decades. For Duan, the earliest entry on the line came from the 30-*juan* edition of *Shijing xiaoxue*, a middle-age work that could be dated back to the 1770s.⁴⁹² In the entry dealing with the

⁴⁹² According to Yu Wanli and Ma Shushan’s 馬樹杉 studies, the body part of the work was already finished in 1776 when he served as a magistrate at the Fushun 富順 county, though the entire compilation lasted much longer, for he repeatedly came back to the work and added new evidence inside in the form of “additional notes.” Some of the notes started with the two characters “*you’an* 又按” (another note), others with the new evidence presented directly. Some of the notes were dated, with 1778 as the earliest year and 1792 the latest.

These additional notes, as keenly observed by Yu, were attached separately to original entries, which left one space of character in between. Had Duan got a chance to systematically revised the work, he could have easily merged such additional evidence into the original entry to form a more fluent reasoning. (This was precisely what happened when Zang Yong helped him to edit the 30-*juan* work into a more succinct 4-*juan* version in the 1790s. In Chapter Three, Duan’s paleographical analysis of the phrase *tiaoge* 條革 has offered an apt example.) The fact that this did not happen in the 30-*juan* version indicated a high possibility that Duan, despite his continuous addition of new evidence to the end of the entries, did not make any major revision to the entries’ original text since 1778. Therefore, despite the continued refinement of the work after 1776, one may still identify the earlier textual layers from its special format.

As for the entry related to our discussion, only the final sentence, a short piece of evidence from the Tang Stone Classics, fits the format of additional notes, which supported his argument in the body entry. Based on this observation, I will date the core argument of the entry to the 1770s, which represents Duan’s interpretation of the line in his middle age. See, Yu Wanli 虞萬里, “Duan Yucai *Shijing xiaoxue* yanjiu (shang),” 段玉裁《詩經小學》

poetic line, Duan followed his teacher Dai Zhen for a clear philological distinction between *fan* 輓 as the front board covering the chariot box (see *Figure 41*), and *gui* 軌 as the wheel trace. Noting that it made little sense to talk about the “soaking” of the wheel trace, and the place above the draught pole also had nothing to do with *gui*, Duan sided with the Mao interpretation and took the character as *fan*.⁴⁹³ All of these arguments—as you must already be familiar with—were little more than cliché. Yet from here, he proposed a new rationalization for the rhyming of the *fan* character. Recalled that the problem of the rail-front thesis was largely due to its unharmonious sound with the character *mu* 牡 in the following line. This, according to Duan, motivated the alternative reading of the character as *gui*, yet the change was simply “due to an ignorance to the ancient pattern of ‘joint rhyme’” (*you buzhi gu heyun zhi li* 由不知古合韻之例).⁴⁹⁴

What kind of “rhyming pattern” was Duan referring to? Although it was not specified in the entry, Duan left the answer in his phonological study *Liushu yinyun biao*, another early work completed in the 1770s, which also mentioned the same critique for the changed reading.⁴⁹⁵ In this work, Duan divided Old Chinese into 6 rhyme categories (*lei* 類) and 17 rhyme groups (*bu* 部), in which *fan* 輓 belonged to the 7th group (*qin bu* 侵部, *-im/ *-im/ *-um) in the third category, and *mu* 牡 the 3rd group (*you bu* 幽部, *-iw/ *-u) in the second category.⁴⁹⁶ Strictly speaking, the two characters did not fit the common patterns Duan had generalized for “joint rhyming.” Their rhyme groups were not consecutive,

研究(上) *Cishu yanjiu* 辭書研究, no. 5 (1985): 44-45; Ma Shushan 馬樹杉, “*Shijing xiaoxue xulu*,” 《詩經小學》敘錄 in *Duan Yucai quanshu*, 1: 445-47.

⁴⁹³ Duan Yucai, *Shijing xiaoxue*, juan 3: 6b-7a.

⁴⁹⁴ Duan Yucai, *Shijing xiaoxue*, juan 3: 6b.

⁴⁹⁵ The work was completed in 1775 and printed at Fushun in 1776, thus during the same period with his completion of the body part of *Shijing xiaoxue*. See, Lu Guoyao 魯國堯, “*Liushu yinyun biao xulu*,” 《六書音均表》敘錄 in *Duan Yucai quanshu*, 2: 687-88. For the critique of character change from *fan* to *gui*, see, Duan Yucai, “*Liushu yinyun biao*,” 2: 722, 730.

⁴⁹⁶ Duan Yucai, “*Liushu yinyun biao*,” 2: 721, 730, 732. For the phonological reconstruction of the two rhyme groups, see, William H. Baxter, *A Handbook of Old Chinese Phonology* (Berlin, New York: Mouton de Gruyter, 1992), 563-64.

nor did they belong to the same rhyme category, or share the same *rusheng* 入聲 (entering tone) group.⁴⁹⁷ That said, in Table Four of *Lishu yinyun biao*, he indeed raised two more examples from the *Shi* poetry and the Chu lyrics where a Group-3 character rhymed with a Group-7 one.⁴⁹⁸ Thus, it was still fair for him to claim for a “pattern of joint rhyme”—though a minor and unspecified one. Without a systematic explanation on the phonological link, he simply noted that in the ode, the *fan* character should be read as *fu* 阜 (which belonged to the 3rd group) in order to achieve a joint rhyme with *mu*—a temporary phonetic change which was not far from the “harmonizing rhyme” (*xieyun* 叶韻) of the Song scholars.⁴⁹⁹ In 1791, when Zang Yong helped to reedit *Shijing xiaou* into 4 *juan*, a succinct edition praised by Duan as “having included all the key points,”⁵⁰⁰ this entry was not included, indicating that Duan was not satisfied enough with the interpretation.

Before moving onto the next stage of Duan’s interpretation, let us first shift to Wang Niansun and Wang Yinzhi. As mentioned in Chapter Three, thanks to the preservation of multiple editions of *Jingyi shuwen* across three decades, the Wangs left us a rich corpus for the reconstruction of their intellectual traces. The earliest entry on the poetic line came from the first printed edition of the work in 1797, which included a lengthy record of Wang Niansun’s interpretation. The first half of the entry was a long quotation of Li Dun’s thesis, which, as discussed above, adopted a plural interpretation of *gui* and read it

⁴⁹⁷ For Duan’s generalization of these three patterns, see, Duan Yucai, “*Liushu yinyun biao*,” 2: 722.

⁴⁹⁸ Duan Yucai, “*Liushu yinyun biao*,” 2: 735. For some later scholars such as Yan Kejun and Zhang Binglin, the connection of the two groups would be theoretically explained as *yin-yang duizhuan* 陰陽對轉, an interchange between the nasal (*yang*) and vocalic (*yin*) codas. But this was unknown to Duan in the 1770s. See, Yan Kejun, Yan Kejun 嚴可均, *Shuowen shenglei* 說文聲類, Silutang leiji edition, Shanghai Library, no. 255862 (1804), *juan* 1: 23b; also see, Shi Xiangdong 施向東, “Shilun shanggu yin you xiao liangbu yu qin ji tan he sibu de tongzhuang,” 試論上古音幽宵兩部與侵緝談盍四部的通轉 *Tianjin daxue xuebao* 天津大學學報 1, no. 1 (1999): 20-21, 25.

⁴⁹⁹ Duan Yucai, “*Liushu yinyun biao*,” 2: 735. The only difference is that for Duan, the phonetic change was not random, but had to work within his 17-group system. For the connection between Duan’s “joint rhyme” and *xieyun*, see, Chen Hongru 陳鴻儒, “Tantan Duan Yucai de xieyin shuo,” 談談段玉裁的叶音說 *Hanzi wenhua* 漢字文化, no. 6 (2015): 22.

⁵⁰⁰ Zang Yong 臧庸, *Baijingtang wengao* 拜經堂文稿, manuscript copy, National Library of China, no. A03228 (Qing Dynasty), *juan* 4: 33b.

as the “axle ends” for the ode. With almost a full quotation, Wang Niansun endorsed the thesis without reservation.⁵⁰¹

However, one problem remained for followers of Li Dun—the Mao commentary. If *gui* was indeed the axle end, why did the Mao refer to a place “above the draught pole”? This opened the creative second half of Wang’s entry. On the one hand, the character could not be *fan*, as Wang found it unreasonable for a Western Han scholar to be unfamiliar with the ancient rhyme (In fact, he was also aware of the possibility for a “joint rhyme.” However, as he mentioned elsewhere, the pronunciations of *fan* and *mu* were “too far” compared to the dense rhyming in the other lines of the ode);⁵⁰² on the other hand, *gui* was indeed below the draught pole. Instead of regarding it as a hermeneutic error of the Mao commentary, Wang took it as a textual one:

This is because the original text of the commentary was “from the draught pole *below* is called *gui*.”...The characters for “above” and “below” are graphically close; moreover, the commentary to the previous stanza also has “from the knee *above* is called wading,” and “from the belt *above* is called trudging.” Due to these reasons, [the commentary here] wrongly became “above.”

蓋傳文本作“由輶以下爲軌”。...上、下字形相近，又因上章傳有“由膝以上爲涉”、“由帶以上爲厲”之文，遂誤作上耳。⁵⁰³

A character change, not from the “axle end” to the “rail front,” but from “above” to “below”! And more importantly, the error occurred with a reason. It was because, when Mao interpreted the *she* 涉 and *li* 厲 characters for the first stanza of the ode—“the ford has a deep wading” (*ji you shen she* 濟有深涉) and “where it is deep, they trudge with dress wet” (*shen ze li* 深則厲)—he had already used the syntactic pattern “from...above is called” twice. In other words, it was due to a *syntactic assimilation* of

⁵⁰¹ Wang Yinzhi 王引之, *Jingyi shuwen (first print)* 經義述聞, National Library of China, no. 02437 (1797), vol. 3: 11a-12a.

⁵⁰² 若改「軌」爲「軌」爲合韻，則求聲太遠矣。This was recorded by Ruan Yuan in his early work *Kaogong ji chezhi tujie* 考工記車制圖解 (1788). In a later edition of the work, he marked the subject of the claim as Wang Niansun. See, Ruan Yuan 阮元, “Kaogong ji chezhi tujie,” 考工記車制圖解 in *Xuxiu siku quanshu*, Classic 85: 418; Ruan Yuan, *Yan jing shi ji*, 159.

⁵⁰³ Wang Yinzhi, *Jingyi shuwen (first print)*, vol. 3: 12a-b.

graphically similar characters.⁵⁰⁴ Recall a contrast in Lu Deming's exegesis: Despite his own preference to follow the "Mao commentary" and read the character as *fan*, he also noted that the character was *previously* read as *gui* and interpreted as the axle end. For Wang Niansun, this was a good indication that the Mao commentary still went as "from the draught pole below" in the Wei-Jin era (thus Lu got the old reading from his references), but became erroneous by the time of Lu. To further support his "rectified" version of the commentary text, Wang also offered some extra notes. For example, he explained that the reason why Mao did not follow the syntactic pattern in the first stanza was because "there was no more component below the axle end for reference."⁵⁰⁵ As for why Mao did not choose another referential component—for instance, the bottom frame of the chariot box (*zhen* 軫)—but only the draught pole, it was because the axle was precisely below the pole, thus making the description more accurate (*Figure 44*). Such evidence, when pieced together from different directions, rendered Wang's thesis a powerful competitor for the line's interpretation.

⁵⁰⁴ Here, one has to notice that for the two references in Wang's entry, "from the knee above is called wading," and "from the belt above is called trudging," only the first one is a direct quotation of the Mao commentary. As for the second, the text in fact goes as: "To trudge with dress wet is called *li*. This refers to [the situation when the water is] from the belt above" 以衣涉水為厲，謂由帶以上也， which had no variation among the early editions. The line "from the belt above is called *li* (trudging)," instead, came from an explanation of the character *li* 厲 in *Erya*. It was only Duan Yucai, in his collation of the Mao commentary, suggested that the original text should be a juxtaposition of two direct quotations from *Erya*, namely, "'to trudge with dress wet is called *li*,' 'from the belt above is called *li*'" 以衣涉水為厲，由帶以上為厲. This idea was included in the collation notes to the Thirteen Classics, and was directly applied to the commentary text in Duan's own *Maoshi guxun zhuan dingben* 毛詩詁訓傳定本小箋 (*Philological Commentaries to the Mao Poetry*, Collated Edition with Notes). It seems that the Wangs and Duan had agreed upon this point. Despite the lack of bibliographical support, they used the rectified text directly in their arguments.

Duan's rectification, although not explicitly mentioned, must also base upon the syntactic consistency with "from the knee above is called..." and "from the draught pole above/below is called..." Therefore, if one uses Duan's rectified text to re-prove the syntactic assimilation, one should be cautious of the tautological reasoning inside. Instead, if the textual controversy is taken into consideration, one can only talk about the syntactic pattern "from...above" (*you...yishang* 由...以上), rather than "from...above is called" (*you...yishang wei* 由...以上為). In either case, the cogency of the argument would be undermined. See, Kong Yingda, *Maoshi zhengyi*, 138; Duan Yucai 段玉裁, "Maoshi guxun zhuan dingben xiaojian," 毛詩詁訓傳定本小箋 in *Duan Yucai quanshu*, 1: 345-46; Hao Yixing, "Erya yishu," 3436.

⁵⁰⁵ Wang Yinzhi, *Jingyi shuwen* (first print), vol. 3: 12a. 此不言由某物以上為軌者，軌之下更無物以明之也。

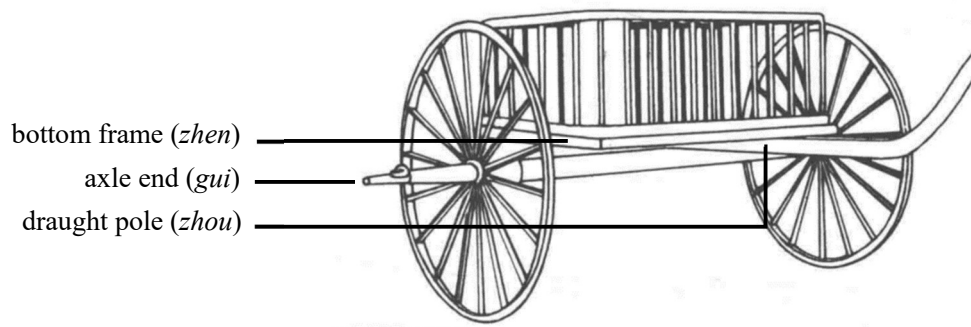


Figure 44: Spatial relationship between *gui*, *zhou* and *zhen*⁵⁰⁶

As for the methodological divergence between the singular and pluralistic interpretation of *gui*, Wang also claimed for an open allegiance to the latter. According to him, “it was natural for different parts of the chariot to share the same name.”⁵⁰⁷ For example, the side rail, nave end, and axle end all had the name *zhi* 軹. Therefore, it was nothing strange for the axle end and the wheel trace to share the name *gui* 軌. This was just another case of “different parts with the same name” (*yishi er tongming* 異事而同名).⁵⁰⁸ Despite its philological appearance, a comparison with Dai Zhen’s distinction above would soon reveal its nature as a claim for epistemic priority. What Dai had meticulously marked out as a graphic confusion of four different characters became here the immediate support of “different parts in the same name.” Was Dai’s analysis working on a more refined philological texture? Yes. He had identified some graphic associations and diachronic potentials that were indiscernible from Wang’s immediate summary of “different parts in the same name.” These marked a higher intrinsic value that I have no intention to deny. However, was Dai’s conclusion more correct than Wang’s? Not necessarily. Recall that Dai’s differentiation of *ji* 軛 (side rail) from *zhi* 軹 (nave end) was solely based on an unsubstantiated premise that the *mingwu* terms of the chariot worked on a one-to-one correspondence. If this was not true, which

⁵⁰⁶ Adapted from Sun Ji, *Zai chi zai qu: Zhongguo gudai chema wenhua*, 77. Illustration based on an excavated chariot from the Jun country 浚縣, Henan.

⁵⁰⁷ Wang Yinzhì, *Jingyi shuwen (first print)*, vol. 3: 12b. 車中之物固有異事而同名者。

⁵⁰⁸ Wang Yinzhì, *Jingyi shuwen (first print)*, vol. 3: 13a.

was completely possible, both the side rail and the nave end would share the same name of *zhi*, and this would precisely support Wang's claim of "different parts in the same name." This is a good example for showcasing the diverging power of epistemic premise. A singular premise would lead to a singular interpretation; a plural premise would lead to a plural interpretation. The starting point had already implied the result, a result that had no guarantee for convergence, nor solely determined by one's philological technique.

Despite these competing approaches regarding the second diverging point, Wang made a real breakthrough on the first diverging point. If Duan's phonological analysis still appeared as more or less a forced reconciliation, Wang's textual rectification opened a new direction to dispose of the problem once and for all. The core idea must have come to Wang's mind far earlier than the publication of *Jingyi shuwen* (1797), for his textual rectification of "up" for "down" was already mentioned in Ruan Yuan's early work *Kaogong ji chezhi tujie* 考工記車制圖解 (Illustrated notes on the chariot design in *Kaogong ji*, 1788).⁵⁰⁹ Other scholars, such as Hu Chenggong and Xia Xin 夏忻 (1789-1871), also quoted the entry with endorsement.⁵¹⁰ However, speaking of its influence, nothing was comparable to the inspiration it offered to Duan Yucai. This can be proved not only from Duan's acceptance of the textual rectification in all the upcoming versions of his interpretation, but also from Wang's own record, that upon hearing this character change, "Duan Ruoying (Yucai) agreed with it."⁵¹¹ This became the start of a three-decade long debate and mutual inspiration on the term between the two sides. Nevertheless, this intimate and fruitful exchange did not bring about a consensus of interpretation, but a philological bifurcation that was irreconcilable yet equally convincing. In his recent monograph on the father-son dynamics in the Wangs' philological writings, Yu Wanli has already offered a brief account of this interaction from the Wangs'

⁵⁰⁹ For the claim of textual rectification, see, Ruan Yuan, "Kaogong ji chezhi tujie," 418; for the attribution of the claim to Wang Niansun, see, Ruan Yuan, *Yan jing shi ji*, 159.

⁵¹⁰ Hu Chenggong, *Maoshi houjian*, 174-77; Xia Xin 夏忻, "Du shi zhaji," 讀詩劄記 in *Xuxiu siku quanshu*, 70: 645.

⁵¹¹ Wang Yinzhi, *Jingyi shuwen*, 290. 曾謂'由軌以上'之'上'當為'下', 段氏若膺聞而韙之。

angle to highlight the twists in the compilation of *Jingyi shuwen*.⁵¹² In this section, I will revisit the process from an epistemic perspective, so as to demonstrate the underlying dynamics that the bifurcation lived on.

Due to the character change from “above” to “below,” followers of the rectification had to redirect the attribution of *gui* to a lower position. This inspired Duan to come up with a nascent interpretation of the character. The most succinct form of this new thesis came from his collation note to *Liji* in the Thirteen Classics Project, which was presumably composed between 1801 and 1806.⁵¹³ It deserves a full quotation:

Gui refers to the place beneath the chariot box and inside the wheels. According to Gao You’s commentary to *Lüshi chunqiu*, “between the two wheels is called *gui*.” According to Mao’s commentary to *Shi*, “from the draught pole below is called *gui*.” Having these two quotations joined, one gets to know the location of *gui*: the top next to the chariot box, the bottom next to the ground, and the two sides next to the wheels—this is called *gui*. As for what Gao You called “between the two wheels,” if one talks about it with the wheels excluded, it would be the empty space; if with the wheels included, it would be what *Liji* calls the “left and right *gui*.”

軌者，與下輪內之僞。高誘注呂氏春秋曰：兩輪之間曰軌。毛公詩傳曰：由輶以下為軌。合此二語，知軌之所在矣。上距輿，下距地，兩旁距輪，此之謂軌。高誘云“兩輪之間”，去輪言之，則空處也；連輪言之，則禮記之“左右軌”也。⁵¹⁴

For the first time in the hermeneutic history, *gui* became a two-dimensional, rectangular space. Among the previous interpretations, the closest would be the one by Luo Bi, which also pointed to both the vertical and horizontal aspects of *gui*—though Duan did not seem to know about Luo’s thesis when composing this entry. And more importantly, there was a key difference between the two interpretations. For Luo, the reason why *gui* could refer to the width and the height at once was because it meant *both* the nave end and the wheel distance. In other words, he did not integrate the two dimensions, but left them

⁵¹² See, Yu Wanli, *Gaoyou erwang zhuzuo yi'an kaoshi*, 135-37.

⁵¹³ For the starting and completion year of the collation notes, see, Liu Yucai 劉玉才, “Ruan Yuan *Shisanjing zhushu jiaokan ji chengshu lishi*,” 阮元《十三經注疏校勘記》成書蠡測 *Guoxue yanjiu* 國學研究 35, no. 1 (2015): 5-6; Dong Hongli 董洪利 and Wang Naigang 王耐剛, “Cong Mengzi zhushu jiaokan ji kan Duan Yucai yu Shisanjing zhushu jiaokan ji xiuzuan zhi guanxi,” 從《孟子注疏校勘記》看段玉裁與《十三經注疏校勘記》修纂之關係 *Guoxue xuekan* 國學學刊, no. 3 (2013): 80.

⁵¹⁴ Kong Yingda, *Liji zhengyi*, 1041.

open as a *pluralistic* interpretation. As a contrast, for Duan, *gui* merely had *one* definition, which was the rectangular space below the chariot. In other words, he was adopting a *singular* interpretation; although one may still refer to more than one place by stressing different aspects of this rectangle, the original definition remained clear and unchanged.

This idea was elaborated in far greater detail in Duan's 1808 essay, "From the *zhou* Below Is Called *gui*."⁵¹⁵ In this essay, the discussion of *gui* was elevated to a methodological height: "Each character has its basic meaning (*benyi* 本義), as well as its additional meanings (*yuyi* 餘義) through derivations and character loans." One should neither forget the basic meaning, nor neglect the additional ones. According to Duan, the "flat rectangular" (*bian fangxing* 扁方形) space beneath the chariot box and between the two wheels was exactly the "basic meaning."⁵¹⁶ In this longer essay, Duan not only listed more quotations regarding the horizontal and vertical aspects of *gui*, but also raised two usages which, according to him, spoke to both dimensions at once. One was "the dust in the *gui* of a chariot" (*che gui chen* 車軌塵) from the *Guliang Commentary*, and "the riding dust does not rise out of *gui*" (*qu chen bu chu gui* 驅塵不出軌) from *Liji*.⁵¹⁷ As we can see from Luo Bi's entry (p. 216), the traditional interpretation was to read *gui* as mere height, namely, the dust did not rise above the axle/ nave end. However, we have to concede it as a strange reading for the *chu* 出 character. While for Duan, the line referred to the confinement of dust within the rectangular space—no dust getting *outside*, a much smoother reading for *chu*.⁵¹⁸ The other was the famous line from *Zhongyong*, "the *gui* of chariots was

⁵¹⁵ The complete title of the essay is "When Passing the Ford, One Should Not Wet *gui*, the Commentary Says: From the *zhou* Below Is Called *gui*" (Jiying bu rugui zhuan yue you zhou yixia yue gui 濟盈不濡軌傳曰由軌以下曰軌).

⁵¹⁶ Duan Yucai, *Jing yun lou ji*, 10. 凡字有本義焉，有引申假借之餘義焉。

⁵¹⁷ Duan Yucai, *Jing yun lou ji*, 10.

⁵¹⁸ In Ruan Yuan's *Kaogong ji chezhi tujie* discussed above, after mentioning of Wang's rectification thesis, Ruan also added the quotation "the dust does not rise above *gui*" (*chen buchui gui* 塵不出軌) as supporting evidence. Since it made little sense to take *gui* here as the wheel trace, he followed Luo Bi's logic and considered the line as a corroboration for Wang's axle-end reading. However, despite the prevalence of this classic quotation in both pre-Qing and contemporary entries, it never occurred in any version of the Wangs' theses. It seems that the Wangs were also aware of the hermeneutic difficulty of this line under their interpretation. See, Ruan Yuan, *Yan jing shi ji*, 159.

standardized” (*che tong gui* 車同軌). Traditional interpretation would read *gui* as mere width between the wheels, while for Duan, the line suggested a standardization in both height and width, which could be corroborated from the regulations in *Kaogong ji*.⁵¹⁹ With a reference to both dimensions of *gui*, Duan’s interpretation added a new layer of meaning to the quotations, which indeed made good, if not better sense. Such “two-dimensional” cases highlighted the hermeneutic cogency of Duan’s new interpretation.

That said, the two-dimensional reading had to settle other usages when *gui* was clearly referring to a specific object, and it was here that Duan brought forward his distinction between the basic and additional meanings. For him, the nave/ axle end and the wheel trace were mere derived names, in which the former was to “use the name inside the wheel to call the outside,” and the latter to use the name to call the trace it produced. Indeed, one may speak of *gui* from either the inside (*li* 裏) or the surface (*biao* 表), the chariot or the trace, but should never confuse the basic meaning from the additional ones derived from it (*Figure 45*).⁵²⁰

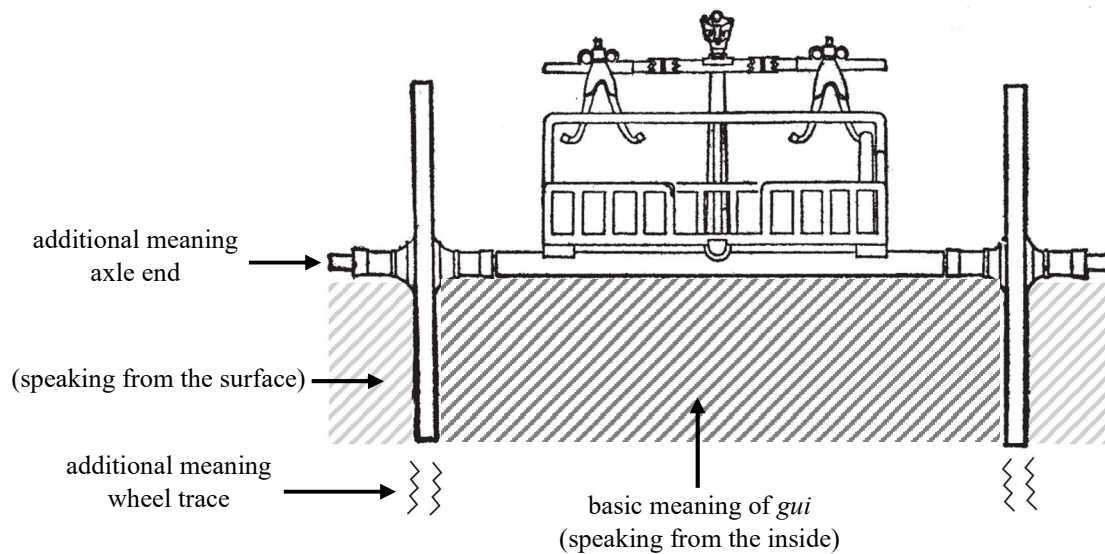


Figure 45: Duan Yucai’s conceptual synthesis of *gui*

⁵¹⁹ Duan Yucai, *Jing yun lou ji*, 10.

⁵²⁰ Duan Yucai, *Jing yun lou ji*, 10-11.

When going over this thoughtfully crafted treatise, one keeps wondering: Why did Duan bother this much about coming up with a new definition of *gui* that had no explicit support from the entire commentary tradition? Duan mentioned a direct cause at the beginning of this treatise. Before proposing his own definition, Duan first offered a brief review to the proceeding interpretations. As for the “front rail” thesis, now he declined it simply and straightforwardly for being “not harmonic in sound,” abandoning all his efforts concerning the “joint rhyme” as if they had never happened. As for the wheel-trace thesis—to pass through the ford does not soak the ground trace—he declined it a “trivial claim” (*yu shen wuwei* 語甚無謂) of inferior meaning. For him, the only interpretation close to the point was the “axle end” one by Li Dun and Wang Niansun. This was where Duan got his inspiration. Yet a problem remained in Wang’s entry: As we have seen, the basis of the Wangs’ textual rectification was a syntactic analogy with the commentaries to the first stanza. However, as Duan keenly observed, when Mao mentioned “from the knee above,” or “from the belt above,” it was always referring to a *straight vertical move* (*zheng zhi yan zhi* 正直言之). However, when Wang marked *gui* as the axle ends below the draught pole, it became an “oblique move” (*xie xing* 斜行) which did not fit the pattern of description.⁵²¹ Succinct as Mao, if he had indeed been referring to the axle end, his commentary would have been more straightforward, such as, “the ends of the axle are call the left and right *gui*.”⁵²² The fact that this did not happen propelled Duan to search for *gui* from the right beneath, and this became the direct impetus for his new interpretation.

Comparing to Wang Niansun’s analogical reading of the commentary lines above, Duan’s analysis here offered a good example regarding how the same textual materials and philological techniques could create a diverging dynamic due to a switch of focus. Apparently satisfied with the discovery, he concluded the treatise in a celebrating tone: “Having discussed the origin and branches,

⁵²¹ Duan Yucai, *Jing yun lou ji*, 10.

⁵²² As a minor point, Duan also argued in his treatise that the axle/ nave ends could only be called the “left and right *gui*,” but not *gui* directly. See, Duan Yucai, *Jing yun lou ji*, 11.

with associations drawn from the varied classics, I bestow this treatise to later scholars, such that they would comprehend the *li* of philology.”⁵²³

How confident! One could indeed call this a “final conclusion in a late year.” However, if this was the sole reason for his new interpretation, a mere integration of the two dimensions would be adequate. Why did he spend so much effort in discussing the “origin and branches”? Why bother; establishing the rectangular space as the *basic* meaning, and differentiating it from all the derived ones? The most likely reason, I suggest, was again his strong faith in the singular interpretation of *gui*. Originally, the character should just refer to one thing, and only later derived into more meanings. Therefore, the stricter his differentiation between the basic and additional meanings, the closer he was to the singular ideal. Yet in order to establish a basic meaning that could speak to the whole series of derived usages, one had to synthesize the multiple aspects into one definition, and this became the deeper theoretical impulse for Duan’s integration. In the history of mid-Qing evidential studies, Duan was frequently critiqued by his contemporaries for his strong inclination toward conceptual synthesis. In the field of ancient phonology, Jiao Xun once objected Duan’s ahistorical attribution of newly-constructed rhyme groups to the ancient pronunciations.⁵²⁴ Qian Daxin also expressed his reservation about the excessive associations Duan had drawn in his “joint rhyme” system.⁵²⁵ In the field of textual criticism, Duan received more challenges due to his daring use of “reason-based collation” (*li jiao fa* 理校法), according to which method transmitted texts could be legitimately rectified based on a proper reasoning of its meaning despite the lack of textual support.⁵²⁶ The best example was his heated debate with the more prudent bibliographer Gu Guangqi 顧廣圻 (1766-1835) in the late 1800s regarding the change of

⁵²³ Duan Yucai, *Jing yun lou ji*, 11. 說其源流，旁通諸經，以爲後學持贈，俾明訓詁之理。

⁵²⁴ When Duan suggested in *Shijing xiaoxue* that “the sound of *hun* 昏 was in the 13th group, and the sound of *min* 民 the 12th group,” Jiao Xun wrote down the following critique in the side commentary: “In the ancient time, there was only the sound but no rhyme [group]. It was indeed improper for Duan to imitate other’s claim and curtly attached the rhyme groups below the characters.” 古有音而無韻。段氏最不合學人之言，即妄繫某部於各文之下。See, Duan Yucai, *Shijing xiaoxue*, juan 2: 20a

⁵²⁵ Qian Daxin, *Jiading Qian Daxin quanji*, 9: 538.

⁵²⁶ Qi Yongxiang 漆永祥, “Duan Yucai jiaokan xue shulun,” 段玉裁校勘學述論 *Guji zhengli yanjiu xuekan* 古籍整理研究學刊, no. 6 (1993): 31.

characters in the collation of *Liji*. As scholars have observed, their antithesis was primarily due to a different epistemic stance on the “judgment of truth and criterion for affirmation,” in which Duan was more concerned with the reconstruction of ritual design than a faithful recovery of the text itself.⁵²⁷ In all these cases, what we see is a prioritization of conceptual reasoning over textual evidence. This is not hard to understand, considering his following to his teacher Dai Zhen, who claimed an epistemic priority of “theoretical reasoning” (*yili* 義理) over “evidential studies” (*kaohe* 考核).⁵²⁸ Such an epistemic stance is crucial for us to comprehend Duan’s daring move and self-confidence in his conceptual synthesis of *gui*.

Despite Duan’s celebratory tone, the challenges it would face in the mid-Qing context was imaginable. Before noticing the more elaborated essay, Duan’s short entry in the collation notes to *Liji* was already targeted by Wang Yinzhi, presumably before the formal printing of the Thirteen Classics in 1808.⁵²⁹ The compilation of Wang’s *Jingyi shuwen* was a long process across three decades. Apart from the three printed editions (1797, 1817, 1827) with ever-enlarging size, Yu Wanli has identified a manuscript expanded copy of the first print (*chuke shougao heding ben* 初刻手稿合訂本) at the National Library of China. This special copy used a 378-entry first print as its basis, yet also included 152 additional entries in the manuscript form—though the total number, 530, was still below the 614 entries of the second printing. It thus captured an intermediate stage between the first (1797) and the second (1817) editions, which was possibly the clear copy of an aborted “1.5” edition.⁵³⁰ By the end of its third volume, we find a draft manuscript on two unbound pages, which includes some revealing notes by Wang Yinzhi exactly on the line of passing through the ford. Since the beginning few lines of the draft is a

⁵²⁷ Ni Qixin, *Jiaokan xue dagang*, 312–13; Hua Zhe 華喆, “Duan Yucai, Gu Qianli ‘Xijiao’ ‘Sijiao’ zhizheng zai yanjiu,” 段玉裁、顧千里“西郊”、“四郊”之爭再研究 *Wenshi* 文史, no. 4 (2018): 226, 230.

⁵²⁸ Duan Yucai, “Zhushu jiyao” 著述輯要, in Dai Zhen, *Dai Zhen quanshu*, 7: 182.

⁵²⁹ As we can see from *Figure 46*, on the attached marginalia, the origin of Duan’s short entry was noted as “Ruoying’s [Yucai] collated copy of *Liji* (*liji jiaoben* 禮記校本).” This name should refer to a privately circulated copy used by Duan himself for compiling the collective collation notes in the Thirteen Classics Project, thus with a high possibility before the latter’s formal print in 1808.

⁵³⁰ Yu Wanli, *Gaoyou erwang zhuzuo yi'an kaoshi*, 110–112, 246–247.

repetition of the final part of Wang Niansun's entry in the first print, we can confirm these pages were additional notes that were supposed to be attached to the end of Wang Niansun's entry.

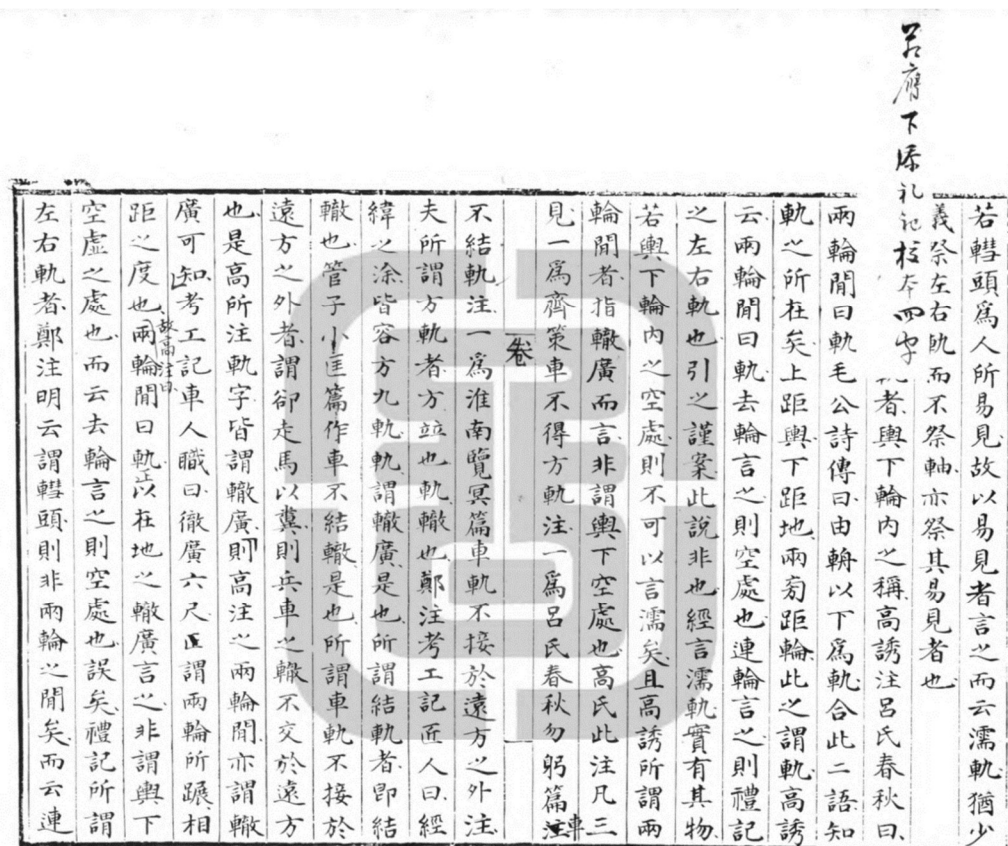


Figure 46: Wang Yinzhi's additional notes in the manuscript expanded edition of *Jingyi shuwen* (the second page)⁵³¹

The second half of the additional notes was a direct critique of Duan's short entry. After a full quotation, Yinzhi first argued that the verb *ru* 濡, or soaking, should refer to a *concrete object*, rather than a void space. He then went back to Gao You's commentary, "between the two wheels is called *gui*," one of the key references in Duan's two-dimensional thesis. According to Yinzhi, the line occurred three times in total in Gao's commentarial works, and in all these cases—one regarding the juxtaposition (*fang*

⁵³¹ Wang Yinzhi 王引之, *Jingyi shuwen (manuscript expanded)* 經義述聞, first printed edition with manuscript expansion, Library of China, no. 02406 (Jiaqing era), Vol. 3: separate page 2a-b.

gui 方軌), one the twisting (*jie gui* 結軌), and another the junction of *gui* (*gui bujie* 軌不接), the character should be understood as the “width of wheel trace” (*zhe guang* 轍廣), rather than the void space beneath the chariot box. Therefore, what Duan put as “with the wheels excluded, it would be the empty space” was unconvincing. Meanwhile, as for the “left and right *gui*” in *Liji*, Zheng Xuan had made clear that they referred to the axle ends. Therefore, what Duan put as “with the wheels included, it would be *Liji*’s ‘left and right *gui*’” was also unconvincing.⁵³²

Strictly speaking, this was not a counterargument to Duan’s thesis, but a mere restatement of the Wangs’ own pluralistic stance through the sources Duan had used. Had Wang seen the distinction between basic and additional meanings in Duan’s longer essay, he would have not used the “left and right *gui*” as a counter argument. As for the three occurrences of *gui* in Gao You’s commentary, one may indeed interpret them as the “distance of the wheel trace,” but they could make similar good sense if one adopted Duan’s definitions. This was precisely what Duan did in his postscript to the 1808 essay. As we can see from *Figure 47*, by the end of the essay, there is an additional note with a one-character indent. Comparing to other essays in the same *juan*, this is the format for postscripts that were added after the completion of the body essay. In this postscript, Duan reinterpreted the twisting (*jie gui* 結軌) and juxtaposition of *gui* (*fang gui* 方軌) through his own definition, which referred to the shunting of chariot and the capacity of road, respectively. Therefore, they did not have to be the wheel trace at all.⁵³³ Considering the demonstrative completeness of Duan’s original essay, the posterior timing of this supplement, the direct correspondence of its content to Wang’s refutation, as well as the intimate academic exchange between the scholars across time, it was highly possible for the postscript to have been a response to Wang Yinzhi’s critique—and apparently an unmoved one. Since Duan had integrated

⁵³² Wang Yinzhi, *Jingyi shuwen* (manuscript expanded), 3: separate page 2a-b. The final sentence by the end of the second page is unfinished (*Figure 46*). However, since the draft has been incorporated into the second print of *Jingyi shuwen*, we can complete the final part based on this printed text. See, Wang Yinzhi 王引之, *Jingyi shuwen* (second print) 經義述聞, Shanghai Library, no. T253829-34 (1817), *juan* 3: 15a-16a.

⁵³³ Duan Yucai 段玉裁, *Jingyun lou ji* 經韻樓集, 12-juan edition (1814), *juan* 1: 18b-19a.

all the varied aspects of the Wangs' pluralistic reading into his own definition, it was unsurprising that he could always come up with a justified explanation corresponding to the Wangs' challenge.

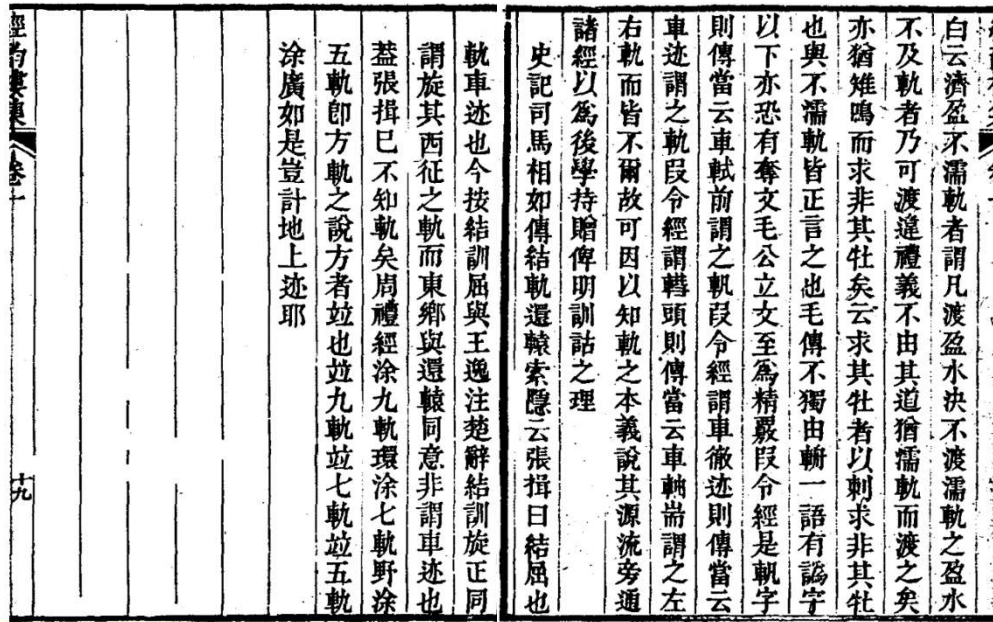


Figure 47: Postscript to Duan Yucai's 1808 essay⁵³⁴

That said, there was still another way for Wang Yinshi to make a real difference. This is where the entire debate started: the textual rectification of the Mao commentary. In the first half of his note, Wang Yinshi made a step further in this direction. The starting point was still the syntactic pattern of the commentary lines, though with yet another focus this time. According to him, no matter for the commentaries to the first stanza, “from the knee above is called wading,” “from the belt above is called trudging,” or another relevant line in *Erya*, “from the knees below is called [wading with] dress lifted” (*you xi yixia wei jie* 由膝以下為揭), the pattern was always referring to the *water level* when crossing the ford. For the second stanza, if one simply put the commentary “from the draught pole below is called *gui*” (as his father and Duan had done in their previous entries), it would refer to the chariot design rather than the water level. This sudden turn of mind led Yinshi to a new rectification of the commentary: “There should be a *ru* 濡 (soaking) character before *gui*.” Correspondingly, the text became, “from the draught

⁵³⁴ Duan Yucai, *Jingyun lou ji*, juan 1: 18b–19a.

pole below is called soaking the axle end” (*you zhou yixia wei rugui* 由輈以下為濡軌).⁵³⁵ Only in this way could one achieve a syntactic consistency.

The pandora’s box had been opened. It was the hardest to legitimize the first move of textual rectification. Once this was done, the change of more characters would soon follow. Having made this key argument clear, Yinzhi continued to reason: If the commentary line was indeed about the water level, when the water was right below the draught pole, it would soak the entire axle. Why didn’t Mao refer to the “soaking of the axle” (*ruzhou* 濡輈) but only the axle end (*gui*)? Regarding this, Yinzhi offered a smart answer: this was because the main part of the axle was below the chariot box, and thus not as easy to see as the axle ends.⁵³⁶ The same interpretation of *gui*, the same track of syntactic consistency, one more rectified character, one more textual support—indeed a meaningful supplement to the original entry. Attached to the end of the entry in its entirety in the second print of *Jingyi shuwen*, this additional note offered a good example for the intellectual continuity and mutual inspiration between the son and the father.⁵³⁷

As mentioned above, there was a high possibility for Duan to have noticed Wang Yinzhi’s new interpretation and left his response. This should also include the first half of Yinzhi’s notes, though Duan remained tacit on this part. That said, it is imaginable that Duan would remain unmoved, for the new rectification still failed to respond to Duan’s critique of Wang in the beginning part of his essay, namely, the problem of “oblique move.” Be it the “axle end” or the “soaking of axle end,” its relation to the draught pole was always diagonal, which did not fit into the pattern of “upright move” for the syntax of “from X above/ below” (now with one more case from *Erya*). Note that despite the early dating of Duan’s essay in 1808, his anthology *Jingyun lou ji* 經韻樓集 (Collection of the Hall of Classics and Rhyme) was not published until posthumously in 1821. When Wang Yinzhi drafted his additional note and included it

⁵³⁵ Wang Yinzhi, *Jingyi shuwen* (manuscript expanded), Vol. 3: separate page 1a-b.

⁵³⁶ I will come back to this discussion of “soaking of the axle” as evidence for Wang Yinzhi’s influence to his father. Wang Yinzhi, *Jingyi shuwen* (manuscript expanded), Vol. 3: separate page 1b–2a.

⁵³⁷ Wang Yinzhi, *Jingyi shuwen* (second print), juan 3: 12a-16a.

in the second printing of *Jingyi shuwen*, it seemed that the critique was still unknown to him. However, the Wangs did read the elaborated essay before its third printing (1827), based on which they prepared yet another version of textual rectification, along with a more extensive critique to Duan's two-dimensional thesis.

In this final edition, Wang Yinzhi's new ideas on the *ru* 濡 character were integrated into his father's body entry. But this was far from the end of the story. Surprisingly, Wang Niansun also turned his own rectification in the previous prints upside-down:

The Mao commentary says, “from the draught pole above is called *gui*.” The “draught pole” (*zhōu*) should originally be the “axle” (*zhóu*). In the past, *zhōu* and *zhóu* had the same pronunciation...and thus the former was mistaken for the latter. There should also be a *ru* (soaking) character before *gui*, which was dropped by the scribe.

《毛傳》曰：“由輶以上爲軌。”輶本作軸，古輶、軸同聲...故軸誤爲輶。“軌”上當有“濡”字，寫者脫去耳。⁵³⁸

In this new print, Wang Niansun abandoned his previous rectification of “above” (*shang* 上) for “below” (*xia* 下)—the ingenious point that inspired Duan Yucai and initiated this entire academic exchange. The character was now left unchanged as it appeared in the commentary. Instead, the focus was shifted to the *zhōu* 輶 (draught pole) character, a *mingwu* term that had been taken for granted throughout the hermeneutic history of this line. According to Wang, the character was in fact a phonetic loan for *zhóu* 軸 (axle) due to their identical pronunciation.⁵³⁹ Put together, the commentary text was now rectified as “from the axle above is called ‘soaking the axle end’” (*you zhóu yishang wei rugui* 由軸以上為濡軌).

The recovery of the text from “below” to “above” was a further development of Wang Yinzhi's discussion on the syntactic pattern of water level. According to Niansun, if one accepted that both “from

⁵³⁸ Wang Yinzhi, *Jingyi shuwen*, 288-89.

⁵³⁹ According to Baxter and Sagart's phonological reconstruction, *zhōu* 輶 (舟, *tu) and *zhóu* 軸 (*lruk) in fact had different initials, though they were homorganic and thus close enough for being phonetic loans.

the knees above” and “from the belt above” were referring to the water level,⁵⁴⁰ since “the soaking of water is always from the below to the above,” the character “above” (*shang* 上) in the original text should not be wrong.⁵⁴¹ Again, the reasoning was based on a syntactic consistency of the same group of texts, with yet another finely tuned focus: Instead of a static description of the water level, now they were taken as a dynamic process.

Comparing to this syntactic analysis, the rectification of the “draught pole” for the “axle” appeared to be a bolder move. With no textual support but only a phonetic link, why did Niansun take the risk for this character change? According to his own words, the gain was a greater accuracy, for the draught pole, in a curved shape, had varied heights at different positions (see *Figure 40*), while the axle could be a precise measure of water level for denoting the soaking of *gui*, or its two ends.⁵⁴² Considering the self-height of the axle, there was indeed a slight difference between the soaking of the axle and the soaking of the lower end of the draught pole, where one may speak of a gain of accuracy. But this was not what Niansun referred to. Instead, had it been the curved shape that rendered the draught pole improper for denoting the water level, the Wangs should have abandoned the *fan* character much earlier in the previous editions. The self-claim here was more rhetoric than a serious *mingwu* discussion.

That said, the new rectification indeed had an upper hand on one thing—the unsettled critique of “oblique move” by Duan Yucai. No matter whether observed “from above” or “from below,” the spatial relationship between the draught pole and the axle ends was always diagonal. But this was no longer a problem after the rectification. Since the axle ends were just part of the axle, the rising water level “from *zhóu* above” would indicate a vertical move of the eyesight that involved the two ends. Despite the

⁵⁴⁰ In this new entry, it is noteworthy that Wang Yinzhi’s quotation of the Mao commentary to the first stanza was changed from “from the belt above is called *li*” to “*li* refers to ‘from the belt above’” (*li wei you dai yishang* 厲謂由帶以上). As I have discussed above, only the latter was a direct quotation of the Mao commentary supported by early editions, while the former came from a meaning-based collation by Duan Yucai. The changed quotation indicated Wang’s alteration to the transmitted text. As a result, he could only speak of the shorter pattern “from X above” now.

⁵⁴¹ Wang Yinzhi, *Jingyi shuwen*, 289-90. 水之濡物皆由下而上，則“上”非誤字。

⁵⁴² Wang Yinzhi, *Jingyi shuwen*, 289.

retorical nature of the Wangs' own words, this new interpretation offered a good response to Duan's critique. This, I argue, was the deeper motivation behind the Wangs' new rectification. By the end of the entry, Wang recalled the former time when his rectification of "above" into "below" received Duan's endorsement. Now, he had come up with a new interpretation, yet "Duan has sadly passed away, thus I am no longer able to hear his opinion."⁵⁴³ And this time, Niansun was also in his seventies. These cherishing words testified to their long-lasting friendship despite the intensive debates. Meanwhile, the mentioning of Duan in the final remark also revealed the intended audience of this entry—it was a response to Duan's longer essay.

It is also worth mentioning that in the previous commentaries on this poetic line, the character *zhóu* 軸, or the axle, was only mentioned in reference to its ends. The "soaking of the axle" (*ru zhóu* 濡軸)—as an indicator of the water level—had not become a topic of attention until Wang Yinzhi's additional note in the expanded manuscript edition (see, p. 238). It was highly possible that Yinzhi's discussion on the relationship between the axle and its ends had inspired his father for the hermeneutic potential of the *zhóu* character, a new direction that was further propelled by Duan Yucai's critique. This final rectification thus suggested an intellectual influence of Duan and Yinzhi back to Niansun.

Note that the earlier rectified version of the Mao commentary, "from the draught pole below is called *gui*," was crucial for Duan's two-dimensional synthesis, as it helped to define the upper side of his rectangular space. If, as the Wangs newly proposed, the commentary was still referring to somewhere above, the two-dimensional thesis would lose a major textual support. This, despite Duan's death, offered the vantage point for a new round of critique. After the cherishing remarks by his father, Wang Yinzhi attached a long note of response, where he first offered a substantial quotation from Duan's essay, and wrote down his own critique sentence by sentence in the form of interlinear commentary (*Figure 48*). A new and apt point of the critique was the fuzziness in Duan's definition of *gui*, such as the subtle

⁵⁴³ Wang Yinzhi, *Jingyi shuwen*, 290. 惜若膺已没，不及就正也。

difference between his “from the chariot box (*yu* 輿) below” and Mao’s “from the draught pole below” in delineating the upper side of the rectangle.⁵⁴⁴ The format of the critique was as impressive as the content, which, reminding us not of classic exegeses but of fictional commentaries, created a strong sense of dialogism through the intensive juxtaposition of antithetic views. Switching between a critique of Duan’s incoherence and an affirmation of his own stance, the format created a discursive affect as if every sentence of Duan’s essay had been problematic. The note then summarized three of Duan’s major problems: 1) his failure to discover the syntactic pattern of “from X above” as denoting the water level; 2) his unwarranted word change from “above” to “below” and conceptualization of *gui*; 3) the impropriety of using *ru* 濡 (soak) to modify an empty space.⁵⁴⁵ After referring back to Gao You’s three usages of *gui* as in the manuscript expanded edition, Yinzhi also concluded in a firm tone, “This is Mr. Duan’s single mistake in a thousand reflections. Scholars should not agree with it curtly.”⁵⁴⁶

⁵⁴⁴ Wang Yinzhi, *Jingyi shuwen*, 291. The textual difference between Duan and Mao *per se* could be explained by the fuzziness of the Chinese expression, since the phrase 由 X 以下 may either include or exclude X in its denotation. That said, the critique was indeed to the right place. On the one hand, Duan had clearly defined *gui* as from the chariot box (*yu* 輿) below. As a result, the draught pole and the wheel axle should be within the rectangular space of *gui*. This was further supported by his succinct yet comprehensive entry of *gui* in *Shuowen jiezi zhu* 說文解字注, where Duan claimed explicitly that “the draught pole below the chariot box is *gui*; the axle below the draught pole is also *gui*” 輿下之輅，軌也；輅下之軸，軌也。On the other hand, in explaining the etymology of *gui*-as-axle-ends, Duan regarded it as “using the name inside the wheel to call the outside,” and the reason for this association to occur was because “the height inside and outside was precisely the same” (以其高下之度外內正等). Following this line, the height of *gui* should be the same as the height of the axle, and this could be testified by a claim that followed, “the names of the left and right *gui* originated from the empty square space between the wheels and below the axle” (左右軌之名起於輪間軸下空方之處). In short, in his primary definition, the height of *gui* was measured by the bottom of the chariot box (i.e., the upper side of the draught pole), while in his etymological analysis, it was measured by the axle (i.e., the lower side of the draught pole). There was indeed a slight difference between these two heights (i.e., the height of the draught pole’s cross section), which Duan seemed to have neglected in his reasoning. However, noted that the latter height only showed up in Duan’s discussion of the additional meanings, and a slight difference like this was normally negligible in the *derivative use* of words. Therefore, the critique would not undermine the key points of Duan’s etymological analysis, though we should be aware of its imperfectness. See, Duan Yucai, *Jing yun lou ji*, 10-11; Duan Yucai, *Shuowen jiezi zhu*, 2: 1263.

⁵⁴⁵ Wang Yinzhi, *Jingyi shuwen*, 291-92.

⁵⁴⁶ Wang Yinzhi, *Jingyi shuwen*, 293. 此段氏千慮之一失，學者勿為苟同可也。

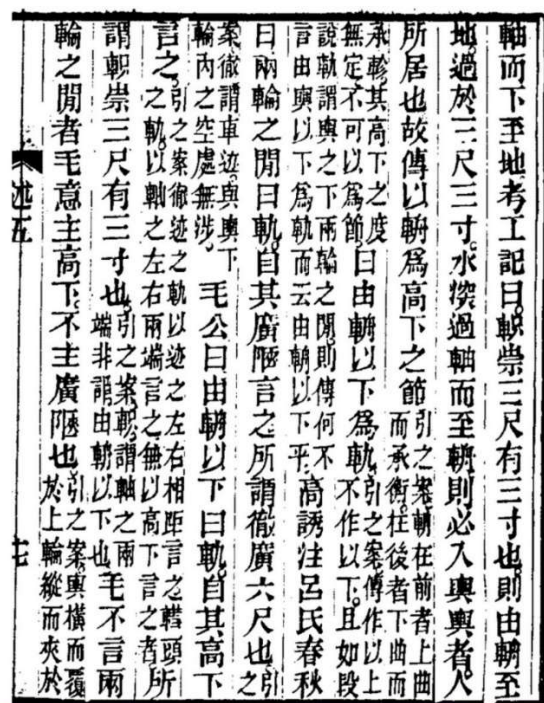


Figure 48: Wang Yinzhi's interlinear critique to Duan Yucai in *Jingyi shuwen*.⁵⁴⁷ Larger characters are direct quotations from Duan's essay, and the smaller ones Wang's own critique.

Had Duan had a chance to see the critique, would he have made further adjustments? Maybe some refinement regarding the upper side of his rectangle, such as to lower it down from the height of the chariot box to the that of the axle. Would he have been persuaded and abandoned his two-dimensional definition? Very unlikely. If we move back to Wang Yinzhi's three critiques, the third one was relatively trivial, while the first two were both more of a claim in epistemic stance than a real refutation of Duan's thesis. For the second critique, it is a little surprising to see the charge of Duan for changing the character from "above" to "below," for this was first proposed by the Wangs three decades earlier. Speaking of textual rectification, the number of changes in the Wangs' and Duan's final theses was 2: 1. But if we count the total moves in the entire claim series, the ratio would be as much as 4: 1. In either sense, the Wangs demonstrated a much stronger inclination for character change. In his now-classic work on mid-Qing evidential studies, Qi Yongxiang has noted the contemporaneous reservations about the Wangs'

⁵⁴⁷ Wang Yinzhi 王引之, *Jingyi shuwen* (third print) 經義述聞 (Beijing: Shouteng shuwu, 1828), juan 5: 17a.

excessive rectifications.⁵⁴⁸ For the current case, the change from “above” to “below” was based on a graphic assimilation; the addition of the *ru* 濡 (soaking) character was based on a consistency of meaning; the final change from the “draught pole” to the “axle” was based on a phonetic link. All these rectifications were *inferred constructions* based on philological reasoning; none had direct textual evidence. When Yinzhi charged Duan’s conceptual synthesis as unsupported by transmitted texts, was his own constructed rectification a better grounded one? Here, one has to consider the high cost of an additional character change. For if we do not, then each character could be philologically connected to several others, and the process of textual interpretation would be close to arbitrary. In any sense, what was highlighted by the second critique was not the Wangs’ higher congruency, but their methodological proclivity of character change to conceptual synthesis—one approach of epistemic construction over another.

As for the first critique, the claim for syntactic pattern was based on a presumed consistency between the commentaries to the first and the second stanzas. However, this did not have to be the case, and in particular after we consider that in *Erya* the three verbs relevant to water level in the first stanza—*jie* 揭, *she* 涉 and *li* 厲—were interpreted together, “from the knees below is called *jie*; from the knees above is called *she*; from the belt above is called *li*,” while the soaking of *gui* was not mentioned there.⁵⁴⁹ Moreover, semantic consistency was not pre-given, but a constructed one which only became possible through the addition of the *ru* 濡 character. One should certainly be open to other interpretations which were more faithful to the transmitted text.

Yet nothing is comparable to the arbitrariness of syntactic reasoning revealed from the Wangs’ diachronic development of their interpretations. Recall that in the first print, when Wang Niansun targeted for a rectification of the text from “above” to “below,” the two commentaries from the first stanza, “from the knees above” and “from the belt above” were quoted as evidence for a textual *assimilation*: Due to the

⁵⁴⁸ Qi Yongxiang, *Qianjia kaoju xue yanjiu*, 288-90.

⁵⁴⁹ Hao Yixing, “*Erya yishu*,” 3436. 繇膝以下爲揭，繇膝以上爲涉，繇帶以上爲厲。

two occurrences of “from...above” in the first stanza, the commentary to the second stanza was affected and wrongly changed from “from...below” to “from...above.” As a contrast, when he rehabilitated the character in the third print, the two commentaries were quoted as evidence for a textual *consistency*. Just as for the two quotations of “from...above” in the first stanza, here “from the axle above” denoted a similar meaning. With a slight switch in the demonstrative strategy, the same quotations could lead to two claims that were directly opposite to each other. A similar backstage operation is also discernable from a comparison between Yinzhi’s manuscript additional note and Niansun’s entry in the third print. When Yinzhi aimed at establishing both “from...above” and “from...below” as patterned claims for the water level, he not only raised the two cases of “from...above” in the first stanza, but also the quotation “from the knees *below*” in *Erya*. This additional quotation offered a greater sense of syntactic consistency for his rectification, “from the draught pole *below* is called soaking the axle ends.” As a contrast, when his father rehabilitated the “above” character and argued that “the soaking of water is always from below to above”—thus only “from...above” would work as the patterned claim, he simply kept the two quotations from the first stanza and left the *Erya* one unmentioned. Paired with the artistically tuned emphases, these demonstrative tactics led the same group of references into disparate conclusions. Such observations across time displayed a philological bifurcation that is comparable to those between different scholars. I call this phenomenon a *self-bifurcation*.

A self-bifurcation is different from the development or strengthening of a specific claim (e.g., Duan Yucai’s enlargement of his short entry into the longer essay), for in the former case, the new claim was not necessarily more convincing than the previous ones. Instead, there is more often a deconstructing power behind the claim series, due to the display of equally convincing thesis as incompatible alternatives. For the Wangs’ three versions of syntactic analysis, each appears to be cogent and well-supported on its own. However, a comparison of the three together will soon reveal the arbitrariness in reference and the fluidity of argument. The result of the comparison is not that one is better than the other,

but a discounting of credibility for all three arguments—a revelation of the methodological limit for syntactic-based character change.

To sum up, Yinzhi's summary was less a solid critique of the internal fallacies of Duan's thesis than a statement of his own methodological preference. Duan was more prone to conceptual synthesis, while the Wangs had a greater inclination to textual rectification and syntactic analogy. Note that it was only a preference, a difference choice. For both Duan and the Wangs were well familiar with these philological techniques, and the process of reasoning was also shared by both through the written entries. Accompanying this methodological preference was their epistemic takes on the second diverging point, for which Duan strived for a singular interpretation of *gui*, while the Wangs were open to a pluralistic reading. Such underlying epistemic differences, together with the shifting emphases triggered by their interactions, explained the bifurcating dynamics behind this intellectual debate. Despite the intimate exchanges and mutual inspirations at multiple stages of their knowledge construction, the result of this two-decade fruitful journey was not a concordance but a bifurcation into two (I, II)—if not four (Ia, Ib, Ic, II)—incompatible theses that were equally justifiable (*Figure 49*).

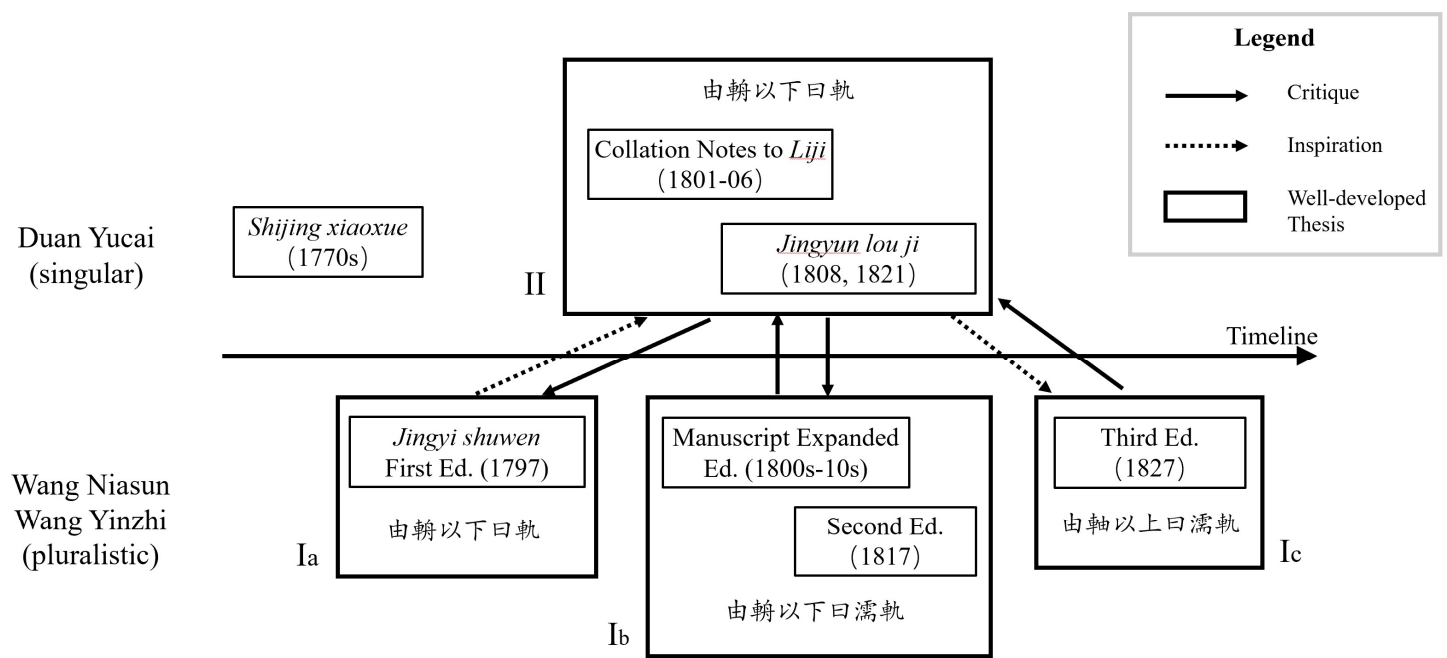


Figure 49: Schematic summary on the philological bifurcation of *gui*

The Wangs' entry witnessed a greater success than Duan's in their afterlives, presumably due to their chance for having the final words. The only identifiable preference of Duan's two-dimensional thesis over the Wangs', as far as I know, was Liu Baonan's 劉寶楠 (1791-1855) unfinished draft manuscript *Maoshi xue* 毛詩學 (Studies on *Maoshi*).⁵⁵⁰ As a contrast, the *Jingyi shuwen* entry received wide quotation and was adopted by leading scholars such as Chen Huan 陳奂 (1786-1863) and Wang Xianqian in their own works.⁵⁵¹ That said, the scope of circulation was not sufficient to evaluate the cogency of these competing theses. We may turn to another criterion, the "completeness" of an evidential claim in dealing with relevant sources in the commentary tradition. In this regard, *both* Duan and the Wangs were unparalleled among the mid-Qing scholars, for they were the only two who could settle all the major evidential problems and textual incoherence accumulated in the commentary tradition. Through their efforts, the focus of debate witnessed a temporal shift from the inconsistencies in transmitted texts to hermeneutic differences of their own contemporaries.

After this thirty-page long journey of *gui* across two millennia from the Han to the Qing, it is high time for us to reexamine the key points within this divergent process of knowledge construction. Upon realizing the difficulty in the Mao commentary, the earliest attempts by Lu Deming and Kong Yingda focused on the orthographies and proposed a singular "front rail" thesis. In the Song, Zhu Xi pointed to the rhyming problem and suggested a "wheel trace" thesis; Luo Bi addressed the dual meaning of *gui* and advocated a pluralistic "axle/nave end" thesis. For late-Ming and early-Qing scholars of erudite learning, these constituted the world of possibilities for the interpretation of *gui*. Each thesis could only

⁵⁵⁰ Liu Baonan 劉寶楠, *Maoshi xue* 毛詩學, draft manuscript, Shanghai Library, no. 802604-07 (early-to-mid 19th c.), Accessed from the Rarebook Database of Shanghai Library, photo page 52-53/397. We know that Liu Baonan was also familiar with the Wangs' alternative interpretation, since he had copied the entire *Jingyi shuwen* entry into his *Maoshi zhushu changbian* 毛詩注疏長編, a manuscript collection of referential materials for his compilation of the *Maoshi* commentary. See, Liu Baonan 劉寶楠, "Maoshi zhushu changbian," 毛詩注疏長編 in *Shanghai tushuguan weikan guji gaoben*, 4-7: 5: 365-72.

⁵⁵¹ Chen Huan 陳奂, *Shi maoshi zhuan shu* 詩毛詩傳疏 (Nanjing: Fenghuang chubanshe, 2018), 1: 109-110; Wang Xianqian, *Shi sanjia yi jishu*, 165.

speak to a limited number of references in the commentary tradition—an insufficient completeness. Scholar had to either adopt one from them and accept the existence of continuing incoherence, or to juxtapose them together and leave the final judgment open. The situation only witnessed a significant change in the mid-Qing era, when Dai Zhen first pushed the limit to a new extreme, followed by the highly complete interpretations by Duan Yucai and the Wangs. These breakthrough constructions, supported by the refined graphic, phonetic, and syntactic analyses, testified to the mid-Qing development of philological studies that I elaborated in the previous chapter. For the first time, a full-scale settlement of textual incoherence became possible.

Nevertheless, the breakthrough offered no guarantee for a philological convergence. Instead, different choices in epistemic stance resulted in a variety of hermeneutical possibilities which were equally complete and coherent. In the early hermeneutic history of *gui*, we have identified two “diverging points,” one regarding an evidential contradiction between the Mao commentary and the poetic rhyme, and the other a difference in epistemic stance between the singular and pluralistic readings. The newly developed philological techniques only contributed to resolving the first issue, but not the second. In fact, the more one had settled the evidential problem on the fore, the larger the epistemic stance would loom in the back. In particular, when a group of “highly-complete” interpretations came onto stage, each with all the apparent evidential incoherence justified, the differences in epistemic stance—initial premises, methodological preferences, source priorities, argumentative emphases—would become the sole ground for further polemics, though in most instances, scholars would still package them as specific evidential problems. The three-round interaction between Duan Yucai and the Wangs has offered a good case for the concealed polemics of epistemic stance, which can be easily missed without a careful epistemic analysis. In his entry on the ode in *Maoshi houjian*, Hu Chenggong quoted both Duan’s two-dimensional thesis and the Wangs’ entry in the first print, without writing a word on the apparent differences in their

definitions of *gui*.⁵⁵² If for the late-Ming and early-Qing scholars of erudite learning, the simple juxtaposition of incompatible theses was primarily the result of *competing evidence*, the case in Hu's entry became one of *competing stances*. This waxing and waning between evidential incoherence and epistemic stance explained why philological bifurcation became a salient phenomenon after the technical breakthroughs in the mid-Qing era.

“On the Lamb Furs”

The waxing and waning between evidential incoherence and epistemic stance is essential for our understanding of the philological bifurcations in the mid-Qing era. The above case of *gui* is a complex one due to an apparent contradiction in the Mao commentary. However, this situation was relatively rare. The more common situation, instead, was unclarity or ambiguity in a key text, such that it could not be adequately explained under the current interpretation. This indicated a weaker type of textual incoherence: an unsolved problem, rather than a contradiction; a text that evaded the current thesis, rather than being incompatible with it. One can imagine that in such instances, scholars could reach an easier justification to the textual problems through the newly developed philological techniques, thus leaving the epistemic issue an even larger space. This applies to the second case of this chapter, a group of clothing-related *mingwu* terms in the ode “Lamb” (Gaoyang 羔羊, MS #18):

On the lamb furs, five many-thread tresses of white silk...

羔羊之皮，素絲五紵.....

On the lamb skins, five twenty-thread tresses of white silk...

羔羊之革，素絲五緘.....

On the lamb-skin seams, five eighty-thread tresses of white silk...

羔羊之縫，素絲五總.....⁵⁵³

⁵⁵² Hu's quotation of the two-dimensional thesis was based on a refined version of the entry in Duan's *Shuowen* commentary. See, Hu Chenggong, *Maoshi houjian*, 175–78; Duan Yucai, *Shuowen jiezi zhu*, 2: 1263.

⁵⁵³ Zheng Xuan, *Maoshi zhuan jian*, 28. The translation follows Karlgren, *The Book of Odes*, 10-11.

In the beginning lines of this three-stanza ode, we find a set of *mingwu* terms denoting the needlework of the fur coat, *tuo* 紵, *yu* 紕, and *zong* 總, which Mao only left an excessively terse interpretation in his commentary: “*tuo* means the quantity” (*tuo shu ye* 紵數也), “*yu* means the seams” (*yu feng ye* 紕縫也), and, “*zong* means the quantity” (*zong shu ye* 總數也).⁵⁵⁴ Apparently, these are modifications for the thread tresses on the fur, but what are the specific counts of the threads if they have something to do with quantity?

In *Piya*, Lu Dian quoted a crucial line from the Eastern Jin compilation *Xijing zaji* 西京雜記 (Miscellaneous Records on the Western Capital):

Five threads is called *she*; doubled *she* is called *sheng*; doubled *sheng* is called *yu*; doubled *yu* is called *ji*; doubled *ji* is called *zōng*; doubled *zōng* is called *sui*.

五絲為緝，倍緝為升，倍升為緕，倍緕為紀，倍紀為緩，倍緩為緦。⁵⁵⁵

Following this numerical sequence, it is easy to calculate the number of *yu* as 20 threads, and the number of *zōng* 緩 as 80 threads—which was implicitly taken as a variant of the *zōng* 總 character. However, Lu conceded that the quantity for *tuo* 紵 in the ode was “without evidence” (*wu suo kaoju* 無所考據), except for a stanzaic inference that since *zōng* was 80, and *yu* 20, *tuo* should refer to a quantity that was even smaller.⁵⁵⁶ This marks the epistemic limit of the quantitative interpretation before the mid-Qing era. Feng Fujing conceded the same limit in his *Mingwu Commentary*—and, as we can see from the translation above, this was precisely the incomplete interpretation that Karlgren worked with.⁵⁵⁷

Again, it was not until the Wangs that the problem had a substantial breakthrough. In Wang Niansun’s *Guangya shuzheng*, he included an entry on *tuo* 紵 by his son Yinzhi. In the entry, Yinzhi not

⁵⁵⁴ Zheng Xuan, *Maoshi zhuan jian*, 28.

⁵⁵⁵ Lu Dian, “*Piya*,” 96.

⁵⁵⁶ Lu Dian, “*Piya*,” 96.

⁵⁵⁷ Feng Fujing, *Liujia shi mingwu shu*, juan 6: 20a.

only quoted the same line from *Xijing zaji*, but also the commentary to another ode MS #159, where Lu Deming established a clear equivalence between *zōng* 纒 and *zǒng* 總. Besides, he also raised three more quotations from the *Hanshu* commentary, the *Shiji* commentary, and *Shuowen* to further support the reading of *zōng/zǒng* as 80 threads.⁵⁵⁸ But the most important claim was the one followed:

The quantity for *tuo* has lost its transmission. Note: *Shuowen* says, “*Tuo* 紵, the character was also written as *tuo* 佗.” In the Spring and Autumn period, the duke prince Chen Tuo 佗 had Wufu (“Brother Five”) as his courtesy name. We thus come to know that *tuo* refers to five threads. This is what called “*she*” in *Xijing zaji*.

紵之數，今失其傳。案：《釋文》云：「紵，本又作佗。」春秋時，陳公子佗字五父，則知五絲爲紵，即《西京雜記》之「緝」矣。⁵⁵⁹

From 5 to 20 to 80, what a numerical logic! This geometrical sequence of the three characters, though unmentioned, also added a further conviction to the interpretation. Given the completion of *Guangya shuzheng* by 1796, this entry had to be a discovery of Yinzhi in his early years.⁵⁶⁰ Note that between 1790 and 1796, Wang Niansun had not only assigned his son part of the *Guangya* commentary, but also before that, another project *Zhou Qin mingzi jiegu* 周秦名字解詁 (Philological explanation to the names of the Zhou and Qin eras), which offered a systematic study on the names and courtesy names of pre-Qin figures.⁵⁶¹ As shown in *Appendix 3*, this was also a minor technique newly developed in the mid-Qing era, which, though witnessed in a few scattered analyses by earlier scholars, grew into a booming field of systematic inquiry in Wang Yinzhi’s generation. Since names and courtesy names were normally associated in meaning, they could preserve important philological textures that were lost in the transmitted texts of later times. In the first print of *Zhouqin mingzi jiegu*, one can already find an entry on Chen Tuo, in which the connection with the *tuo* 紵 character and the poetic line was mentioned at the

⁵⁵⁸ Wang Niansun, *Guangya shuzheng*, 601.

⁵⁵⁹ Wang Niansun, *Guangya shuzheng*, 603.

⁵⁶⁰ For the completion year of *Guangya shuzheng*, see, Yu Wanli 虞萬里, “*Guangya shuzheng zhengli ben xu*,” 《廣雅疏證》整理本序 in *Guangya shuzheng* 廣雅疏證 (Shanghai: Shanghai guji chubanshe, 2016), 1: 15.

⁵⁶¹ For the dating of the *Zhouqin mingzi jiegu* project, see, Yu Wanli, “*Guangya shuzheng zhengli ben xu*,” 26. Although Wang had substantially expanded the work when it was later included in the third print of *Jingyi shuwen* in 1827.

very beginning. The epistemic breakthrough between *zǒng* and “five” must have benefited from Yinzhi’s earlier experience in this name project.⁵⁶² To sum up, the entry offered a good example for how Yinzhi had surpassed his pre-Qing predecessors to propose a “highly complete” interpretation: more textual supports, a stricter character link, and most importantly, the final deciphering of the *tuo* character through the specialized technique of “name studies.” In the third print of *Jingyi shuwen* (1827) where both entries on the ode line and the figure Chen Tuo were included, the interpretation remained essentially the same.⁵⁶³

Despite the philological connection between “five” and *tuo* 紵, one possibility remained: Considering that the already-circulated status of *Shi* in the Spring and Autumn period, what if the courtesy name of Chen Tuo (754-706 BCE), “Brother Five,” was just inspired by the line “five *tuo* of white silk,” rather than serving as a philological interpretation of the *tuo* character? This alternative possibility was picked up by Ma Ruichen, who, after mentioning the interpretation in *Guangya shuzheng*, wrote down the following critique: “[Chen] Tuo had the courtesy name ‘Brother Five,’ this was referring to the line ‘five *tuo*’ in *Shi* for its meaning. Yet *tuo* [itself] did not have to mean five in quantity.”⁵⁶⁴ Instead, according to Ma, *tuo* 紵 was equivalent to *tuo* 佗, and this latter *tuo* was the ancient form of the *ta* 他 character. *Ta* is the name for “the other.” “From the one to the other, the quantity is thus two.”⁵⁶⁵ He

⁵⁶² For *Zhouqin mingzi jiegu*, we can find two original editions: a two-juan separate print with manuscript revisions from the National Library of China, and the final version included in the third print of *Jingyi shuwen* (1827). It is noteworthy that in the separate print, although both the *tuo* 紵 character and the line from “Lamb” were mentioned at the beginning, Yinzhi did not specify the exact quantity of *tuo*. Instead, he noted that “when the ancients raised the quantity, they frequently used the numbers of three and five,” and the “five *tuo*” here just referred to an approximative quantity. 案：古人舉數之辭，多稱三五。“三英粲兮”、“素絲五紵”，皆約言之耳。 Comparing to the mature thesis, this claim captured an earlier form of Yinzhi’s thought. Considering that in both *Guangya shuzheng* (completed 1796) and the first print of *Jingyi shuwen* (1797), the mature thesis was already included, the separate print should be an early edition (an “exposure draft” in Yu Wanli’s words) completed between 1790 and 1796. This is consistent with Yu Wanli’s estimation that the work was compiled between 1790 and 1795. From this early claim, we can clearly observe how the name study on Chen Tuo had guided Yinzhi’s attention to the quantity problem in the ode “Lamb.” See, Wang Yinzhi 王引之, *Zhou Qin mingzi jiegu* 周秦名字解詁, 2-juan separate print with manuscript revisions, National Library of China, no.07303 (1790s), juan 2: 6a. Wang Niansun, *Guangya shuzheng*, 602-603; Wang Yinzhi, *Jingyi shuwen* (first print), 3: 8a.

⁵⁶³ Wang Yinzhi, *Jingyi shuwen*, 280-81, 1400.

⁵⁶⁴ Ma Ruichen, *Maoshi zhuanjian tongshi*, 86. 佗字五父，蓋取詩五紵為義，非必紵即五數也。

⁵⁶⁵ Ma Ruichen, *Maoshi zhuanjian tongshi*, 86. 由此及彼，則其數為二。

then raised three quotations from *Guanzi* and the *Shi* to further support his claim. As a result, the three *mingwu* terms became 2, 20, and 80 respectively. Although the numbers were not as well-ordered, they still followed the general sequence from the fewer (coarse stitches) to the more (refined needlework); meanwhile, the philological reasoning was also as tenable, if not better supported—an even match between Ma and Wang.

This was far from the end of the story, for it merely demonstrated the philological bifurcation when the *mingwu* terms were read as quantities. Yet there was still another possibility. Meticulous readers may have noticed the textual variation in the Mao's terse commentary to the three terms: *tuo* 紕 and *zong* 總 were interpreted as “quantity” (*shu* 數), yet the term from the second stanza, *yu* 絨, was interpreted as “seam” (*feng* 縫). In their entries, both Wang Yinzhi and Ma Ruichen had responded to this variation. Wang explained it away, again, through syntactic consistency. According to him, the reading of *zong* as “seam” was based on *Erya*, yet considering the similar pattern of the stanzas, all the three terms should refer to quantity.⁵⁶⁶ In a less assertive tone, Ma explained the variation as an intertextual interpretation (*huwen yi jianyi* 互文以見義), namely, all the three terms were referring to quantity, and, at the same time, were relevant to the seaming of the fur coat.⁵⁶⁷ That said, the necessity of self-justification betrayed that this was not the only way of interpretation. In fact, in his exegesis, Kong Yingda had already proposed a non-quantitative reading. According to him, when the Mao mentioned “*tuo shu*” 紕數 and “*zong shu*” 總數, “he was saying that the *amount* of *tuo* and *zong* were five, not that *tuo* and *zong* themselves referred to quantities.”⁵⁶⁸ And then he switched his focus to the Mao's interpretation of *yu* 絨. According to Kong—also based on the intertextuality of the commentary—all three terms should refer to seams.⁵⁶⁹ Nevertheless, one has to note that the original text of the Mao commentary was not “*tuo shu*” 紕

⁵⁶⁶ Wang Niansun, *Guangya shuzheng*, 602.

⁵⁶⁷ Ma Ruichen, *Maoshi zhuanjian tongshi*, 86.

⁵⁶⁸ Kong Yingda, *Maoshi zhengyi*, 84. 此言“紕數”，下言“總數”，謂紕、總之數有五，非訓紕、總爲數也。

⁵⁶⁹ Kong Yingda, *Maoshi zhengyi*, 85.

數 but “*tuo shu ye*” 紵數也 (the same with *zong*), and this came right after a univocal interpretation of the *su* 素 character in the same line, “*Su* means white” (*su bai ye* 素白也). Therefore, it was very unlikely to read the text, like Kong had, as “the amount of *tuo*,” rather than a definitional sentence in the same syntax (i.e., *tuo* means *shu*).

Despite the incomplete nature of this interpretation, it opened up a new hermeneutic perspective for coming scholars. And again, it was Duan Yucai who made a breakthrough in this non-quantitative interpretation. If one wants to establish a connection between the three terms and “seam,” one has to provide a good explanation for why they were also interpreted as *shu* 數 in the Mao commentary. This is where Duan surpassed his predecessors. First, in the Mao commentary to the ode “Illustrious Ancestors” (Liezu 烈祖), the character *zong* 總 (an apparent graphic variant of *zong* 總) was suggested as equivalent to *zōng* 駟. Second, this *zōng* 駟, based on the Mao commentary to “The Elms of the Eastern Gate” (Dongmen zhi fen 東門之枌), was also interpreted as “數.” And third, notice that in the Mao commentary to “Fine-Meshed Net” (Jiu yu 九罟), the word *zong gu* 纒罟 was interpreted as “net for small fish.” Considering the interchangeability between 駟 and 纒, as well as the word “*cugu*” 數罟 (fine-woven net) which denoted the same meaning, Duan reached a smart conclusion that the character “數” in the Mao commentary should pronounce as *cu* 促 rather than *shu*, and thus denoting the fineness of the silk in the seams:

As for “five *zong*,” this is saying that for the elaborate decorations of white silk, they are finely woven in the amount of five.

五總，謂素絲英飾，數數(*cucu*)然其數(*shu*)有五也。⁵⁷⁰

With a different reading of 數 as *cu*, Duan successfully avoided the numerical implication and linked the character to the decorated seams. Correspondingly, since according to the Mao commentary to “Wings

⁵⁷⁰ Duan Yucai, *Shijing xiaoxue*, juan 1: 7a.

Flapping” (Xiao bian 小弁, *MS* #197), *tuo* 紵 has the meaning of *jia* 加 (impose), *wu ta* 五紵 also referred to the overlapping of five silk decorations (thus finely knitted) on the seam.⁵⁷¹ In both cases, the interpretation became consistent with the reading of *yu* 紵 as seaming in the second stanza.

In Duan’s alternative reading, the three terms had been freed from number-related meanings, yet the modifier *wu* 五, was still taken as a numerical marker, “five.” Possibly inspired by Duan, his disciple Chen Huan, the leading 19th-century scholar of *Maoshi*, proposed an even less-quantitative reading. In his *opus magnum*, *Shi maoshi zhuan shu* 詩毛氏傳疏 (Exegesis to the Mao commentary of *Shi*), Chen adopted a similar reading for the character “數” as “*cucu* 簇簇” (densely gathered), which, similar to *yu* 紵, denoted the fineness of seaming (*mi feng* 密縫). But Chen did not stop here. Drawing evidence from a graphic variation between *wu* 五 and *wu* 午 in *Zhouli*, he took a further step on the path of non-numeric reading:

The ancient graph of *wu* 五 was 乂. It should be read like *wu* 午 (cross) as in the word *jiaowu* 交午 (crisscross)...According to the commentary to “Flapping Wings,” *tuo* means *jia* 加 (impose, lap)...Thus “*wu-tuo*” is just like saying “*jiao-jia*” (crossed lap).

五，古文作乂，當讀爲交午之午。……小弁傳：佗，加也。……五佗，猶交加。⁵⁷²

Following this interpretation, the word *wutuo* became the cross-seamed fur pieces, which had nothing to do with the quantity at all. The other two terms, *wuyu* and *wuzong*, could be understood in the same way.

Having his own thesis elaborated, Chen also noted that in the transmitted commentary of the Han Poetry 韓詩, *tuo* 紵 was univocally interpreted as “the name for quantity” (*shu ming* 數名), which, with “the name” (*ming*) added, was different from the Mao reading of the character as “densely gathered” (數 as *cu* 簇). From this vantage point, Chen quoted the key arguments in *Jingyi shuwen* and explained his

⁵⁷¹ In Duan’s entry, he did not specify the origin of this *tuo* interpretation. See, Duan Yucai, *Shijing xiaoxue*, juan 1: 7a.

⁵⁷² Chen Huan, *Shi maoshi zhuan shu*, 1: 60-61.

divergence with Wang Yinzhi as a difference between the Mao and the Han poetry.⁵⁷³ That said, by the mid-19th century, the Mao commentary no longer had a privilege over the commentaries of the Three Schools. Moreover, even in Chen's critique to Wang, he could not point out any philological defects, but only that, to use the numerical sequence of 25, 100, and 400 threads as a ritual norm for the fur coat was "circuitous and not straightforward" (*yuhui nantong* 迂迴難通), and thus not as good as the Mao in "attaining the meaning of the classic"—more of an aesthetic judgment than an evidential claim.⁵⁷⁴ Meanwhile, for other scholars such as Wang Xianqian who endorsed the numerical interpretation, "the name for quantity" in the Han commentary would reversely suggest that the Han and the Mao were accordant on this point, and the interpretation of *tuo* 紃 as quantity in *Guangya*—a work that was normally attributed by scholars of the Three-School poetry to the *Lushi* tradition—also indicated an accordance with the Lu poetry.⁵⁷⁵ For Wang, the consistency of all these three traditions became the basis for his siding with the numerical interpretation and his critique to Chen Huan. However, as we have seen from Chen's reasoning above, this was in fact a pseudo-critique, for the result was already inscribed at the very beginning. In other words, the school-based distinction was also subject to the reading of the "數" character, and was therefore insufficient to explain the hermeneutic divergence.

The insufficiencies in the mutual critique between the numeric and the non-numeric sides highlighted the bifurcating nature of these two hermeneutic directions. The 數 character, with two pronunciations and two respective meanings, was by nature open to different interpretations. One may speak of a refinement from Lu Dian's numerical agnosticism to Wang Yinzhi and Ma Ruichen's textual association, or from Kong Yingda's unnatural reading to Duan Yucai and Chen Huan's phonological bridging. As effective clarification for the ambiguities, they testified again the power of the newly

⁵⁷³ Chen Huan, *Shi maoshi zhuan shu*, 1: 62.

⁵⁷⁴ Chen Huan, *Shi maoshi zhuan shu*, 1: 62. 首章止用二十五絲，二三章又多至一百絲、四百絲。以用絲之多寡，為羔裘之制度，其說迂迴難通，總不如爾雅毛傳之得經旨也。

⁵⁷⁵ Wang Xianqian, *Shi sanjia yi jishu*, 95. Although in *Guangya*, the *tuo* character was also interpreted as *shu* 數. However, since it came together with a group of synonyms which also had a numerical implication, one can safely conclude the *shu* character here as referring to the quantity. See, Wang Niansun, *Guangya shuzheng*, 602-603.

developed philological techniques. However, the new methods lost their effectiveness in front of the polemics between the numeric and non-numeric. For there was nothing ambiguous, nothing unknown, but a juxtaposition of two assertive readings of 數 which were both self-justifiable and crystal clear. And the choice between the two interpretations was little more than an aesthetic choice between a stanzaic progression (the numeric reading) and a stanzaic repetition (the non-numeric reading). Again, the reestablishment of evidential coherence did not lead to a convergence in interpretation, but a philological bifurcation between which one could only choose on the basis of ultra-evidential epistemic preference. The same observation also fits for the minor bifurcations within the numeric and non-numeric readings. Compared to Wang Yinzhi, Ma Ruichen's reading was supported by a greater number of quotations, yet it had to work with one more round of graphic link (i.e., from *tuo* 佗 to *ta* 他), and bear a less-ordered numerical sequence. Similarly, comparing to Duan Yucai, Chen Huan's "cross" seams had a clearer sense than Duan's "five" seams, but it had to go through one more round of phonological connection (i.e., from *wu* 五 to *wu* 午). Just like what we have seen from the textual rectifications in the previous case, there had to be an "economy of cogency" between the cost of a longer philological chain and the gain of a better interpretation. Without a common standard, an explicit criterion, it was more than natural for scholars to have a different "cost-revenue curve" on this hermeneutic field. The *intrinsic polysemy* of the text—such as the bivalent meaning of the 數 character, or the graphic-phonological links between the surface character and the "original" one—only provided an evidential basis for the multiplicity of self-justified readings. It was the plurality of epistemic stances which served as the deeper impetus behind such contentions. The newly developed philological techniques could only settle the evidential problems but not the *ultra-evidential* ones, nor did the mid-Qing scholars make any significant effort to establishing a normality or consensus on epistemic preferences. The advance of textual analysis and insufficiency of epistemic reflections jointly made philological bifurcation a salient phenomenon in mid-Qing evidential studies.

The Fish and the Flags

The case of the wading chariot depicts the diachronic reconciliation of a textual incompatibility; the case of the fur coat seams presents the synchronic clarification of a textual ambiguity—both from multiple epistemic takes. In this section, I will analyze another example with yet lesser evidential incoherence. In this case, there was no puzzle, no ambiguity in the transmitted reading. However, due to the intrinsic multivocality of the poetic line, Qing philologists believed themselves to have better interpretations. Such ready-made texts, as one can imagine, transformed the philological polemics into a pure display of epistemic stances.

The poetic line comes from the final stanza of “No Sheep” (Wu yang 無羊, *MS* #190), which depicts an auspicious dream of a herdsman:

牧人乃夢	And the herdsman dreams:
眾維魚矣	There are the crowd catching fish;
旒維旗矣	There are tortoise-and-snake banners, there are falcon banners.
大人占之	The Great Man divines it:
眾維魚矣	There are the crowd catching fish
實維豐年	—that is rich years.
旒維旗矣	There are tortoise-and-snake banners, there are falcon banners
室家濙濙	—your house will be multitudinous. ⁵⁷⁶

Two images arose in the dream. The first, related to fish, signaled a harvest year; the second, related to flags or banners, indicated a fecund family—thus, a dream of affluence. This was compatible with the Mao commentary, suggesting that “the harmony of *yin* and *yang* would bring about a plenty of fish,” and the two kinds of flags were used to “summon people.”⁵⁷⁷

⁵⁷⁶ Zheng Xuan, *Maoshi zhuan jian*, 258. With adaptations, the translation follows Karlgren, *The Book of Odes*, 131-32.

⁵⁷⁷ Zheng Xuan, *Maoshi zhuan jian*, 258.

In the remaining section, I will focus on the eight-character description of the dream. Unlike the contradictory *gui* 軌 or the ambiguous *shu* 數, this time the classic interpretation was sufficiently clear. Neither Zheng Xuan nor Kong Yingda paid much attention to these plain lines. They simply offered the straightforward reading in the translation, “there are the crowd catching fish; there are tortoise-and-snake banners and falcon banners.”⁵⁷⁸ The first hermeneutic deviation came from Ouyang Xiu. On noticing the mention of “plenty of fish” (*yu zhongduo* 魚眾多) in the Mao commentary, he preferred another direct reading of the first line—“there are a plenty of fish,” where the character *zhong* 眾 was taken as an adjective rather than a noun. For Ouyang, this alternative reading made a good sense, for “the fish is the most prolific among [living] beings,” and thus could serve as an auspicious sign.⁵⁷⁹ Again, we find a bifurcation which was caused by the intrinsic polysemy of the *zhong* character. That said, the reading still remained a straightforward one. Although it needed an additional note for the link between fish and harvest, the reading worked better with the Mao commentary.

The interpretation, however, became complicated under the hands of Zhang Zai and Zhu Xi. According to Zhang, the “falcon banner” governed more people than the “turtle-and-snake banner.” Hence it was an auspicious sign for fecundity when a place, now erected with a “turtle-and-snake banner,” was dreamed of having a “falcon banner.”⁵⁸⁰ *Zhouli* 周禮 (Rites of Zhou) was the classic basis for this population claim. As specified by Zhu Xi, this was because the “turtle-and-snake banner” was erected in suburbs and wilds (*jiaoye* 郊野), while the “falcon banner” was used in cities and towns (*zhou li* 州里).⁵⁸¹ The importance of this claim was that it first pointed to the possibility of a *transformative* reading, between the actual and the dream, the present and the ideal. In his *Collected Commentaries*, Zhu Xi pushed it one step further: To dream of the “turtle-and-snake banner” as the “falcon banner” was the

⁵⁷⁸ Kong Yingda, *Maoshi zhengyi*, 694-95.

⁵⁷⁹ Ouyang Xiu, *Shi benyi*, juan 7: 4a-b. 魚之為物，生子最多。

⁵⁸⁰ The claim is best preserved in Lü Zuqian’s *Reading Notes*. See, Lü Zuqian, “Lü shi jiashu dushi ji,” 409. For the attribution of the claim to Zhang Zai, see, Hu Chenggong, *Maoshi houjian*, 932.

⁵⁸¹ Zhu Xi, *Shi jizhuan*, 198.

sign for fecundity. Similarly, to “dream the people as fish,” this was the sign for harvest.⁵⁸² Following this reading, the *wei* 維 character in both lines marked a transformation in the dream. Not only from the *zhao* 旖 banner to the *yu* 旗 banner, but also from the crowd (*zhong* 眾) to the fish (*yu* 魚)! Indeed, what could not happen in a dream? However, without any contextual implications, this human-fish transformation was apparently more fantastic than the flag one as an interpretation. In order to meet the poetic message of harvest, both straightforward readings of the “fishing crowd” and the “plenty fish” already worked well. The only problem that they were not good enough, given the transformative reading of the second line, was the lack of consistency between the two lines—two lines with the same syntactic appearance. This concern of syntactic consistency, though not explicitly mentioned, must have played a significant role in Zhu Xi’s “double-transformative” reading. As we will observe in the following cases, this search for a perfect parallel of the two lines had served as a key impetus for many of the Qing scholars.

Stepping into the mid-Qing era, the “crowd catching fish,” “plenty of fish,” and the “crowd transforming into fish” constituted the three basic interpretations of the first line. Due to its officially sanctioned status, Zhu Xi’s reading reached a wide circulation. However, scholars tended to have some reservation to the human-fish transformation. For instance, Shen Qingya 沈青崖 (*juren* 1723) suggested that, despite the fancifulness of dream beyond logic, the human-fish transformation was still not comparable to Zheng Xuan’s “fishing crowd” as a sign for harvest.⁵⁸³ Similarly, Lu Wenchao also critiqued the human-fish transformation as “excessively bizarre” (*tai guai shen yi* 太怪甚矣), which was not as easy to grasp as the transformation between the two flags.⁵⁸⁴ That said, the smooth reading of the second line and the syntactic parallel propelled the mid-Qing scholars to search for new transformative

⁵⁸² Zhu Xi, *Shi jizhuan*, 198. 故夢人乃是魚，則爲豐年。旖乃是旗，則爲人衆。

⁵⁸³ Shen Qingya 沈青崖, *Maoshi mingbian lu* 毛詩明辨錄, Shanghai Library, no. T443235-38 (1749), juan 7: 8a.

⁵⁸⁴ Lu Wenchao 盧文弨, “Zhongshan zhaji,” 鐘山札記 in *Lu Wenchao quanji* 盧文弨全集 (Hangzhou: Zhejiang daxue chubanshe, 2017), 7: 262.

connections in the first line. Ding Zhuan 丁傳 (1721-1799), bibliographic scholar of the Qianlong era, made a breakthrough on this point.⁵⁸⁵

According to Ding, the *zhong* 眾 character in the first line was a phonetic abbreviation for *zhong* 螽, or the locust. But how could the locust be connected to the fish? This came from a time-honored folk knowledge that the fish roe, during drought years, could transform into locusts. The mechanism was explained by Ding as follow, which deserves a full quotation:

No matter in the pool, lake, pond, or mud, the fish always lay their roe in the shallow water near the shore. During the draught years, the water cannot return to the original level. When the sun and wind dry up the [band] sand, the roe will wriggle out and transform into locusts to harm the crops. This is known to all the folks north of the Yellow River.

凡池湖陂澤中，魚嘯子皆近岸傍淺水處。若遇歲旱，水不能復其故處，土爲風日所燥，魚子蠕蠕而出，即變爲蝗蟲以害苗，自大河以北土人皆知之。⁵⁸⁶

If the water reached the original level, the roe would become fish; if not, then the roe transformed into locusts. By referring to the folk, it appeared that Ding got the idea from life experience. However, one should also notice that the transforming mechanism already appeared in Lu Dian's Northern Song work *Piya*. And more importantly, Lu had also linked it to the Mao commentary, that "the harmony of *yin* and *yang* would bring a plenty of fish" (as there would be adequate precipitation).⁵⁸⁷ Yet even if Ding had secretly consulted the *Piya* entry, there was still an essential difference between the two, for it was only Ding who identified the phonological link between the characters *zhong* 眾 and *zhong* 螽 (locust).

Although the earlier entries had used the same mechanism to explain the auspicious sign of fish, without the phonological link, they could only adopt an adjective reading of *zhong* and comprehend the line as "a

⁵⁸⁵ For the born year of Ding, see, Chen Hung-sen 陳鴻森, "Qingdai renwu shengzu nianbiao dingbu (shang)," 《清代人物生卒年表》訂補（上） *Zhongguo dianji yu wenhua* 中國典籍與文化, no. 4 (2019): 129.

⁵⁸⁶ Quoted from Lu Wenchao, "Zhongshan zhaji," 7: 261.

⁵⁸⁷ See, Lu Dian, "Piya," 151. 俗云春魚遺子如粟，埋於泥中，明年水及故岸，則皆化而爲魚。如遇旱乾，水不及故岸，則其子爲日暴，乃生飛蝗。故《詩》曰：眾維魚矣，實維豐年。說者以爲陰陽和則魚多矣。Hu Chenggong was among the earliest who noticed the intimacy of Ding and Lu's theses. See, Hu Chenggong, *Maoshi houjian*, 2: 933-934.

plenty of fish.” In other words, they were still following Ouyang Xiu’s direct reading, but only changed the *justification* from the prolificity of fish to the transformative capacity of fish. Ding’s interpretation, instead, involved an actual transformation. Working with both common knowledge and the textual tradition, this new interpretation appeared much more natural than the exotic human-fish transformation. From the *zhong*-locust to the fish, it also worked well in parallel with the transformation of the two flags in the following line. Quoted extensively in Lu Wenchao’s *Zhongshan zhaji* 鐘山札記 (Notes from the Zhong Mountain), this interpretation reached wide circulation and was praised by him as “being able to solve the perennial puzzle.”⁵⁸⁸ Stepping into the 19th century, this thesis was also adopted or separately discovered by other leading scholars of the day, such as Hao Yixing, Zhuang Shuzu, and Ma Ruichen.⁵⁸⁹

Nevertheless, the transformation reading also received further critiques from Qing evidential scholars. The breaking point was not the first line, but the Zhang-Zhu theory of flag transformation in the second line. The problem was already realized by Chen Qiyuan. Recall that in Zhu Xi’s *Collected Commentary*, the comparison of population was based on the following evidence from *Zhouli*: the “falcon banner” was used in cities and villages (*zhou li* 州里); the “turtle-and-snake banner” was used in suburbs and wilds (*jiaoye zai zhao* 郊野). However, as Chen acutely noticed, the two citations in fact came from different parts of *Zhouli* and referred to different events. In the chapter “Si Chang” 司常 (Commander of Flags), one has:

In the city and village, one erects the “falcon banner”; in the county and town, one erects the “snake-and-turtle banner.”

州里建旗，縣鄙建旐。⁵⁹⁰

⁵⁸⁸ Lu Wenchao, “Zhongshan zhaji,” 262. 信可以釋千古之疑矣。

⁵⁸⁹ Hao Yixing claimed that he heard the interpretation from his townsman scholar Mou Tingxiang 牟廷相; Ma Ruichen, according to his own words, had reached the interpretation separately before noticing Ding Xizeng’s argument. See, Hao Yixing, “Erya yishu,” 3626; Zhuang Shuzu 莊述祖, “Maoshi kaozheng,” 毛詩攷證 in *Huangqing jingjie xubian* 皇清經解續編, ed. Wang Xianqian, 王先謙, Shanghai Library, no. 298280-599 (1888), 50: juan 2: 5b; Ma Ruichen, *Maoshi zhuanjian tongshi*, 588-89.

⁵⁹⁰ Jia Gongyan, *Zhouli zhushu*, 733.

In the chapter “Da Sima” 大司馬 (Grand Commander of Calvary), one has:

[The local officials] of the suburb and wild carry the “snake-and-turtle banner”; the central officials carry the “falcon banner.”

郊野載旐，百官載旗。⁵⁹¹

As one can see from the underlined phrases, Zhu Xi’s reading was a crafting of these two quotations. However, as noted by Chen, the first referred to the norm of the Grand Parade in the winter, while the second the military rites in the Autumn. They were thus unconnected events and it made little sense for one to join them together. What’s more, in either quotation, both kinds of banners were mentioned, yet neither could indicate that greater population was connected with the “falcon banner.”⁵⁹² This population issue received a more detailed analysis in Wang Yinzhi’s *Jingyi shuwen*, where he calculated that, according to *Zhouli*, both the *zhou*-city and the *xian*-county in the first quotation should refer to 2,500 households. As for the second quotation, it was even less likely for the local districts to have fewer people than the central bureaus.⁵⁹³ Therefore, the transformative reading for the second line was a mere illusion due to Zhang Shi’s unwarranted association of two unrelated sources.

The collapse of Zhang Shi’s flag interpretation would be a fatal problem for the transformative reading of the first line, since for both Zhu Xi’s human-fish thesis or Ding Zhuan’s locust-fish thesis, the hermeneutic parallel of the two lines had served as a crucial support. As Wang Yinzhi put it, “if the transformation from the ‘snake-and-turtle banner’ to the ‘falcon banner’ was unconvincing from the beginning, how could there be another transformation from *zhong* to the fish?”⁵⁹⁴ Meanwhile, according to Wang, the locust-fish reading also had its own philological problem. Strictly speaking, it was not *zhong*, the already-grown locust, but only the larvae, that were capable of transforming into fish during the good years. Ding Zhuan’s reading was thus “a confusion of the *zhong*-locust for the roe.”⁵⁹⁵

⁵⁹¹ Jia Gongyan, *Zhouli zhushu*, 772.

⁵⁹² Chen Qiyuan, *Maoshi jigu bian*, juan 12: 17a–18a.

⁵⁹³ Wang Yinzhi, *Jingyi shuwen*, 341–42.

⁵⁹⁴ Wang Yinzhi, *Jingyi shuwen*, 342. 然則旐化為旗之說本不可通，又安得有衆化為魚之說乎？

⁵⁹⁵ Wang Yinzhi, *Jingyi shuwen*, 341. 是以螻為魚子也。

According to Wang, one should still go back to the Mao commentary for a direct reading—“there are the plenty of fish; there are the ‘snake-and-turtle’ banner and the ‘falcon banner’” (i.e., the same reading as Ouyang Xiu). In the first line, the character *wei* 維 suggested the *modification* of one thing, while in the second, it indicated the *juxtaposition* of two things. For Wang, this was why the Mao commentary mentioned the “plenty of fish” (*yu zhongduo* 魚眾多) for the first line, but “the ‘snake-and-turtle’ banner and the ‘falcon banner’” (*zhao yu yu* 旄與旗) for the second line.⁵⁹⁶ Here, it was quite surprising that Wang Yinzhi, a master of syntactic analysis, would adopt an unparallel reading for the two lines. But it indeed worked as the closest to the Mao commentary. In this case, Wang chose to prioritize the authoritative text over syntactic consistency.

In the early Qing, the sole critique of the flag transformation also brought Chen Qiyuan to the same reading. Working close to the Mao commentary, the syntactic inconsistency appeared a minor problem—“with different meanings but the same syntax, the ancients may have this as well.”⁵⁹⁷ Hu Chenggong, adopting the critique of both Chen and Wang, reached a similar reading from this epistemic stance. As he claimed, “Why is it necessary for the upper and lower lines to have a parallel anthesis to fit each other?”⁵⁹⁸ Yet he strived for a further legitimization of the claim by pointing to another example from the ode “Divine Tower” (Lingtai 靈臺, *MS* #242):

There were vertical posts (*ju*) and horizontal boards (*ye*) with the existence of dented ornaments (*zong*). There were big drums (*bengu*) and big bells (*yong*).

虞業維樅，賁鼓維鏞。⁵⁹⁹

According to Hu, the syntax of these two lines worked precisely the same as the ones in “No Sheep,” in which the first *wei* 維 meant *you* 有 (exist), and the second *yu* 與 (and). Correspondingly, the lines in “No

⁵⁹⁶ Wang Yinzhi, *Jingyi shuwen*, 342.

⁵⁹⁷ Chen Qiyuan, *Maoshi jigu bian*, 3: 16b–17a. 語意異而句法同，古人不妨有此。

⁵⁹⁸ Hu Chenggong, *Maoshi houjian*, 2: 933. 豈必其上下句排比對偶之相配乎？

⁵⁹⁹ Zheng Xuan, *Maoshi zhuan jian*, 374. With minor adaptations, the translation follows Karlgren, *The Book of Odes*, 197.

Sheep” were read as “there is the plenty existence of fish” (*zhong you yu* 眾有魚), and, “there are the ‘snake-and-turtle banner’ and the ‘falcon banner’” (*zhao yu yu* 旄與旗).⁶⁰⁰ That said, the legitimization was not established for free. Despite the lesser semantic change, it is noteworthy that Hu’s reading of the first *wei* as “exist” was not the most natural reading of the character for the “plenty fish” thesis, namely, a pure function word for modification.⁶⁰¹ But that would be inconsistent with the usage in “Divine Tower.” A cross-ode syntactic consistency was drawn on to legitimize an intra-ode syntactic inconsistency, and a less natural character reading was adopted to establish the cross-ode consistency—a gain on the one end, and a cost on the other. These tiny strategies and epistemic trade-off are invisible without a careful comparison of the claims side by side.

Nevertheless, not everyone was satisfied with the unparallel reading. The defensive claims and legitimizing attempts above also indicated its imperfectness. Even after noticing Wang Yinzhi’s critique, Ma Ruichen still preferred the locust-fish double-transformative reading. The reason was precisely the different interpretation of the two *wei* 維 characters. According to him, for the poetic lines which “share a similar syntax, in most cases the meaning would also be identical, and it seems improper to suggest different readings for the two *wei* characters.”⁶⁰² That said, he was unable to make a sufficient defense of Wang’s critique. For the “falcon banner” (*yu* 旗), Ma indeed mentioned that in *Shuowen*, the banner was related to the “advent of gentlemen and the crowd” (*jin shizhong* 進士眾), and the reduplicative binome *yuyu* 旗旗 was also interpreted as “multitudinous” (*zhong ye* 眾也).⁶⁰³ There still seemed a hope for the double-transformative reading, though he did not have a good response for the first line.

⁶⁰⁰ Hu Chenggong, *Maoshi houjian*, 2: 933.

⁶⁰¹ In Wang Yinzhi’s own words, this is called “*wei* read as *nai* 乃”; in Chen Huan’s similar “plenty fish” reading, this is called “*wei* read as *qi* 其.” Both suggest the use of *wei* as a function word for modification. See, Wang Yinzhi, *Jingyi shuwen*, 342; Chen Huan, *Shi maoshi zhuan shu*, 2: 597.

⁶⁰² Ma Ruichen, *Maoshi zhuanjian tongshi*, 589. 然詩人句法相類者大半同義，似不得謂二維字當異訓也。

⁶⁰³ Ma Ruichen, *Maoshi zhuanjian tongshi*, 589. 說文：“旗，錯革鳥於上，所以進士眾。旗旗，眾也。”

In the late Qing, Guan Ligeng 管禮耕 (1848-1887) completed the second step in this direction. In his eyes, both of Wang Yinshi's critiques made a good sense, but the parallel syntax still suggested that, "given the juxtaposition of two things in the second line, the first line should not only raise one thing."⁶⁰⁴ As a result, he continued to search for a possible transformative reading for the first line, where he got a crucial textual support from *Dongguan hanji* 東觀漢記:

When Ma Leng served as the prefect of Guangling, there used to be locusts eating grain at the prefectural border. He submitted to throne to dismiss the salt officials, relieve the poor and weak, and reduce the tax levy. The locusts, entering into the rivers and sea, transformed into fish and shrimps.

馬棱爲廣陵太守，郡界嘗有蝗蟲食穀，奏罷鹽官、賑貧羸、薄賦稅，蝗蟲入江海化爲魚蝦。⁶⁰⁵

Different from the mechanism described by Ding Zhuan, this was a direct, explicit transformation from the adult locust to the fish. Pointing to the natural correspondence to a favorable government policy, the record also made a good connection to a harvest year. As for the population comparison associated with the two flags, Guan conceded the institutional records from *Zhouli* were dead-end. However, with a similar consultation of the "original meaning" (*benyi* 本義) of the two characters in *Shuowen*, he also noticed the emphasis of "crowd reckoning" (*juzhong* 聚眾) for *yu* 旗 (falcon banner), while this was completely unmentioned under the *zhao* 旄 (snake-and-turtle banner) character. Therefore, speaking of the original meaning, one could still justify a connection between the "falcon banner" and a greater crowd.⁶⁰⁶

Having reestablished the transformative link in both lines, Guan did not hasten to his conclusion. Since in this new interpretation, the textual basis for the banner transformation was relatively weaker, Guan proposed two possible solutions. First, one could adopt a transformative reading solely for the first

⁶⁰⁴ Guan Ligeng 管禮耕, "Caoyang zhai yishu," 操敦齋遺書 in *Congshu jicheng xubian* 叢書集成續編 (Shanghai: Shanghai shudian chubanshe, 1994), 141: 129. 下句既並舉二物，上句不宜單舉一物。

⁶⁰⁵ Guan Ligeng, "Caoyang zhai yishu," 129.

⁶⁰⁶ Guan Ligeng, "Caoyang zhai yishu," 129.

line, and continue a juxtaposing reading for the second. Admittedly, this would again lead to a divergent interpretation for the two *wei* 維. However, as suggested by Guan himself, if for Wang Yinzhi, the two characters could be read differently, why not for him? At least, his reading wouldn't be worse than his opponent's. And second, for sure, one could take in the weaker evidence for the second line and adopt a double-transformative reading.⁶⁰⁷ In both cases, the gain would be a greater consistency—the mentioning of *two things* in both lines.

Comparing to Wang Yinzhi's reading, were the ones by Guan better? Not necessarily. For the “plenty of fish” reading was still the one which worked closest with the Mao commentary. However, Guan had achieved his own goal—to reconcile the two lines in the number of things mentioned. This weaker form of syntactic consistency, for him, must be more important than the Mao commentary. The defense, despite its evidential appearance, was a typical polemic in epistemic priority. Moreover, the proposing of two readings, along with his syntactic analogy to Wang, also indicated a strong self-consciousness of the epistemic stance in Guan's reasoning. One was free to choose between a more complete syntactic consistency and a more prudent evidential basis. However, in order to arrive at this stage, one had to first accept Guan's prioritization of numeric consistency.

Towards the end of Qing, scholars continued the search for new readings with syntactic consistency. Endorsing the “plenty fish” thesis but unsatisfied with Wang Yinzhi's unparalleled interpretation of *wei*, Yu Yue argued for a change in the character sequence of reading. According to him, the functional use of *wei* at the very beginning of a sentence was common in the odes of *Shi* and other early texts. Due to its positional flexibility, the original first line, *zhong wei yu yi* 眾維魚矣 (plenty-*wei*-fish) was similar to saying “*wei zhong yu yi*” 維眾魚矣 (*wei*-plenty-fish), and this worked in concert with the second line, which could be comprehended as “*wei zhao yu yi*” 維旄旗矣 (*wei*-“turtle-and-snake banner”-“falcon banner”). In this way, he got a parallel reading through the positional adjustment of

⁶⁰⁷ Guan Ligeng, “Caoyang zhai yishu,” 129–30.

function word—though only a grammatical parallel, but not a numeric one. From the other end, Yu Chang 于鬯 (1862-1919) kept the locust-fish reading but abandoned the transformative implication. Noting the high fertility of the locust, Yu suggested that the imagery of the *zhong*-locust, just as the fish, was pointing directly to the plentitude of things. This is just like, in the ode “Valley-Stream” (Si gan 斯千, *MS* #189), the mention of snakes, as an auspicious sign for the bearing of daughter, was not due to its virulence but its hibernating nature. Here, the use of locust as an auspicious sign for harvest was also not due to its harm to the crops but its fertility.⁶⁰⁸ Thus—the locusts and the fish; the snake-and-turtle banner and the falcon banner. In this way, a strict parallel was drawn between the two sentences. For the first time, it became a juxtaposing relation for both lines.

Due to the intrinsic polysemy of the characters, one is able to observe a pluralization of philological readings even though the line was already clearly defined in authoritative texts. If we don't set a limit to the time period, the list could continue to extend. For instance, Yu Xingwu 于省吾 (1896-1984) once suggested a reading of the *zhao* 旄 character (“snake-and-turtle banner”) in the second line as a phonetic loan for *zhao* 兆 (multitudinous)—together with the traditional “plenty-fish” reading of the first line. In this way, another strict parallel was drawn between the “plenty” (*zhong* 眾) of fish and the “multitude” (*zhao* 兆) of “falcon banners.” Indeed, if the *zhong* character in the first line could be read as a phonetic loan for the locust, why not another loan character at its counter-position which was similarly meaningful? No doubt, the newly developed philological techniques made it possible to identify hidden textual associations to settle previous problems (e.g., critique of the Zhang-Zhu reading of the banner transformation). However, as the list became longer and longer, we realize that they also created new conditions for the justification of alternative readings (e.g., the phonetic loans for *zhong* 眾 and *zhao* 旄). And this was particularly the case for poetic lines, which were more open to creative interpretations—just

⁶⁰⁸ Yu Chang 于鬯, *Xiangcao jiaoshu* 香草校書 (Beijing: Zhonghua shuju, 1984), 284. 蓋不取其害苗, 而但取其衆多爲義耳。

considering how the poetic depiction of a dreamscape had contributed to the likelihood of a transformative reading.

As suggested from the previous two cases of this chapter, the divergence in epistemic stance and the bifurcation of philological reading were two sides of the same coin. This is particularly salient for the current case, where the clarity of transmitted text made the efflorescence of alternative readings a feast of epistemic choices. Between a modification and a juxtaposition, a static description and a transformative link, a faithfulness to the authoritative commentary and a better syntactic parallel, a mere numerical/grammatical consistency and a complete consistency—the various interpretations displayed a full series of epistemic stances. An alteration in each of the above priorities would imply a different interpretation. The newly developed philological techniques, making the discovery and justification of these readings possible, was in capable of judging among them. And in this extreme case, the new techniques brought about more hermeneutic discrepancies than the evidential incoherence it solved. The meaning of the two lines, which used to be fairly clear, had turned more and more puzzling. Each single, mature entry—like the ones by Wang Yinzhi or Guan Ligeng—appears sufficiently convincing on its own. However, when juxtaposed one after another, along with their dazzling epistemic choices, they leave the reader soon at a loss. In the first case of the wading chariot, we have discussed the deconstructing power of self-bifurcation. The effect is precisely the same here. After all, how should one understand “*zhong wei yu yi*” 眾維魚矣? Plenty of fish? The locusts becoming the fish? The locusts and the fish? Are these endless debates making the reading of the line more meaningful or more trivial? For a modern reader who takes it as a literary piece open to plural interpretations, these may not be the correct questions. However, one should not neglect that the above-mentioned evidential scholars were still taking it as a classic text and searching for the most accurate, if not the single original meaning. Under this target, the competing of multiple “well-completed” theses only highlighted the arbitrariness of the underlying epistemic stances, a philological quagmire which undermines the cogency for *each* of the juxtaposed readings.

In this chapter, I have used three *mingwu* cases to illustrate the dynamics and processes of philological bifurcation. The three cases worked on different levels of initial evidential incoherence, from a textual contradiction to a textual ambiguity to a ready-made text. In each case, I have demonstrated the efficacy of newly developed techniques to go beyond the referential surface for more refined philological textures. But the more thought-provoking part is how these breakthroughs, the settlement of textual incoherence, brought about new polemics on epistemic stances. Through the three cases, I have demonstrated the waxing and waning of the two aspects from both the diachronic exploration of a specific *mingwu* problem (Case 1), and the varied levels of initial incoherence among different *mingwu* problems (Cases 1-3). From this negative correlation between the textual incoherence and the epistemic stance, two extrapolations are noteworthy.

First, it explained why philological bifurcation—similar to the extensive references in the late Ming—became a salient phenomenon for the mid-Qing era. The successful settlement of accumulated textual incoherence tilted the balance towards the side of epistemic stance. Meanwhile, it also explained why epistemic analysis is particularly apt for the study of mid-Qing evidential research, an era of prevailing epistemic breakthroughs.

Second, it sheds important light on a gradual stagnation, if not decline of evidential studies in the 19th century. Regarding this issue, scholars have already offered several well-established explanations from both the internal logic and the external context. This includes the neglect of *yili* concerns in the piecemeal knowledge, the impoverishment of practical value in the bookish studies, the new challenges and needs in statecraft, as well as the mass destruction of the Taiping Rebellion.⁶⁰⁹ The deconstructing effect of philological bifurcation, indicating neither an internal nor an external but a *meta*-problem in the epistemic premises, was by itself a key reason for the trivialization of advanced evidential claims. Without a guiding epistemology, without adequate methodological reflections, the critique of Duan

⁶⁰⁹ See, e.g., Elman, *From Philosophy to Philology*, 233–53; Elman, *Classicism, Politics, and Kinship*, 181, 250; Wang Fan-sen, *Zhongguo jindai sixiang yu xueshu de xipu*, 17–20.

Yucai's unsubstantiated theoretical synthesis or Wang Niansun's excessive character rectification was not an individual problem, but an epistemic quagmire faced by all the leading philologists in their endless debates. Just as critiqued by Fang Dongshu 方東樹 (1772-1851), the famous critic of Han Learning, for the design of the ancient chariot, Jiang Yong, Dai Zhen, Ruan Yuan, Jin Bang 金榜 (1735-1801), Cheng Yaotian, and Qian Dian 錢坫 (1744-1806) had all left their evidential works. However, "with writings contemporary to each other yet claims differed one another, who on earth would have the last word?"⁶¹⁰ Similarly, in other specialized fields such as the design of ancient palace and costume, scholars also "refuted each other" (*huxiang bochi* 互相駁斥) with no way to judge who had caught the final answer.⁶¹¹ In his retrospective assessment of mid-Qing evidential learning nearly a century later, Liang Qichao 梁啟超 (1873-1929) offered an insightful comment on this epistemic quagmire and took it as a key cause for the "fragmentation" (*fenlie* 分裂) of Qing learning from the mid-19th century onwards:

As for the subfield of *mingwu* studies, such as investigations on the "Hall of Brightness," the living palace, the capped costume, or the chariot design, since the original object had not been preserved, there was no way for a final judgment on the collected debates. For the subfield of institutional studies, such as claims on mourning rites, Imperial ancestral sacrifice, system of enfeoffment, or the well-field system, they originally had adjustments and transitions across ancient times, and there was also no way for an eclectic synthesis. For the replacement of Ming learning by Qing learning as a new generation of scholarship, was it not because the voidness of the former and the solidness of the latter? Now that the scholars muddled at the *mingwu* and institutional problems that were not thoroughly decipherable. It then became void [again]. How much difference was it from those talking about the mind-heart and the human nature?... In short, Qing learning prospered for its advocacy of "solidness," and declined for its failure to carry the "solidness" out. Reaping the fruit of its own actions, this was indeed the deserved result.

其名物一科，考明堂，考燕寢，考弁服，考車制，原物今既不存，聚訟終末由決。典章制度一科，言喪服，言禘祫，言封建，言井田，在古代本世有損益變遷，即群書亦末由折衷通會。夫清學所以能奪明學之席而與之代興者，毋亦曰彼空而我實也？今紛紜於不可究詰之名物制度，則其為空也，與言心言性者相去幾何？……要之清學以提倡一「實」字而盛，以不能貫徹一「實」字而衰。自業自得，固其所矣。⁶¹²

⁶¹⁰ Fang Dongshu 方東樹, *Hanxue shangdui* 漢學商兌 (Nanjing: Fenghuang chubanshe, 2016), 213. 同時著述，言人人殊，迄不知誰為定論？

⁶¹¹ Fang Dongshu, *Hanxue shangdui*, 213.

⁶¹² Liang Qichao, *Qingdai xueshu gailun*, 70.

Although Liang did not delve into the epistemic stances behind these competing theses, his observation about the incessant debates and a “void” turn of Qing learning still captured the deconstructing effect of the philological bifurcations in an incisive way.

As one can observe from Shen Langkun's 沈闓崐 (fl. mid-19th century) *Tianjian shixue buzhu* 田間詩學補注 (Supplementary notes to *Tianjian shixue*, 1868), in the late Qing scholars began to move again back to the erudite juxtaposition of competing theses (*Figure 50*). Comparing to the predecessors of erudite learning, the only difference was that these quotations were the advanced ones baptized by the recent philological techniques. In his preface to the work, Yu Yue attributed this hermeneutic polyphony to an inclusive nature of the *Shi* teachings, which, “different from other classics, one does not have to stick to the thesis of a single master.”⁶¹³ That said, the interconnected nature of the *mingwu* references across multiple classics in all the above cases still testified to the phenomenon on a broader scale. This reemerging of unsettled plurality offered a revealing vantage point for us to better comprehend the intellectual dynamics in the 19th century.

⁶¹³ Shen Langkun 沈闓崐, *Tianjian shixue buzhu* 田間詩學補注, draft manuscript on a woodblock printed copy of *Tianjian shixue*, Shanghai Library, no. 796182-89 (Prefaced 1874), "Yu Yue's Preface," 2a. 然詩教至廣, 學者各得其所, 與他經不同, 實有不拘守一先生之說者。

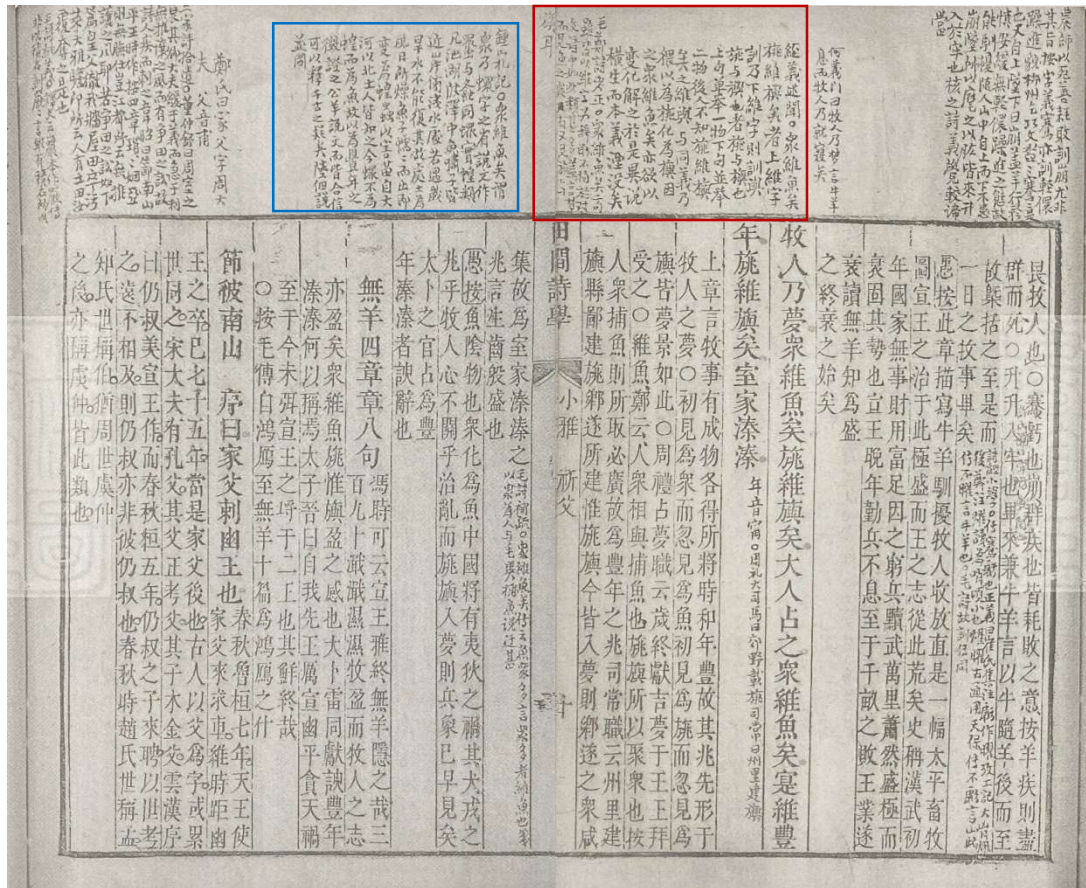


Figure 50: Sample page of Shen Langkun's *Supplementary Notes*, on the two lines of fish and banner in the ode "No Sheep."⁶¹⁴ As marked by the colored boxes, the competing readings of both the "plenty-fish" thesis (red) and the "locust-fish" thesis (blue) were quoted in the marginalia, without any attempt for reconciliation. Also see Footnote 971 on p. 412 for a more typical example.

Last but not least, by referring to the "settlement" of textual incoherence and the proposing of "more complete" or advanced readings, I am not depicting a teleological process in the evidential studies of *Shi*. Instead, the observations only made sense from a *retrospective* vantage point, namely, by standing in the 19th century and looking back into the accumulated corpus of commentarial texts. The mid Qing was without doubt an era of philological breakthrough, yet a breakthrough was far from a completion. Just as how the mid-Qing philological techniques had turned against the surface and immature readings of the late Ming, the new sources and approaches of the modern era could do the same to the mid-Qing

⁶¹⁴ Shen Langkun, *Tianjian shixue buzhu*, "Xiaoya Qifu": 10a-b.

evidential results. As a quick example, recalled the bifurcated readings of the fur-coat stitches in the second case. In the 19th century, both the progressive numeric readings (i.e., Wang Yinzhi's 5-20-80, and Ma Ruichen's 2-20-80) and the repetitive non-numeric reading (i.e., Duan Yucai's "five seams" and Chen Huan's "crossing seams") of the three *mingwu* terms appeared to be similarly possible and convincing. However, in the newly excavated Anda manuscript of the *Shi*-odes, the position of the second and third stanzas were reversed.⁶¹⁵ When taking this fluidity of stanzaic sequence into consideration—a phenomenon that is frequently observed in the Anda manuscript—the numeric reading of a progressive sequence losses much of its rigor. Thanks to the newly discovered materials, the suspended bifurcation from nearly two centuries ago now begins to tilt towards the non-numerical side.

In other words, what I have managed to demonstrate is a dynamic rather than a linear process. Today's coherence could become tomorrow's incoherence, and propel a new round of evidential research. That said, compared to the second half of the 18th century, the 19th century indeed witnessed a relative stagnancy in the development of new philological *techniques*. As shown from the philological writings of Wang Niansun and Wang Yinzhi, although the method of phonological-based textual rectification was already established in the late 18th century, the prolific yield of evidential discoveries extended into the 1830s.⁶¹⁶ Such a background made the first half of the 19th century a particular time for the foregrounding of philological bifurcation and epistemic stance.

⁶¹⁵ Huang Dekuan 黃德寬 and Xu Zaiguo 徐在國, *Anhui daxue cang zhanguo zhujian (yi)* 安徽大學藏戰國竹簡 (一) (Shanghai: Zhongxi shuju, 2019), 89.

⁶¹⁶ For a distinction between Wang Niansun's invention right of the method and both Niansun and Yinzhi's "copyright" on the philological writings, see Yu Wanli, *Gaoyou erwang zhuzuo yi'an kaoshi*, 104–7.

Chapter Five: Material Textures

The *ming-wu* compounds in *Shi*, as already demonstrated in Chapter One, were neither a mere textual enterprise nor a simple referent to the natural world. The dialectics of *ming* and *wu* indicated two fundamental points of departure in the epistemic inquiry, a textual-philological one, and a natural-material one. In the previous three chapters, we have taken a long journey from the referential surface to the hidden richness of *wu*. Yet the discussions merely cover half of the picture—the philological texture rather than the material. This conceptual demarcation is deliberate. Although a major aim of this dissertation is precisely to complicate this taken-for-granted dichotomy between *ming* and *wu*, their isomorphism and interconnections could only be best comprehended after a careful examination from each side.

Comparing to the philological techniques, the development in the analytical methods of the material side was more gradual than revolutionary. Nevertheless, the mid-Qing era still witnessed significant breakthroughs in the material inquiry of *wu*. In this chapter, I will elaborate these newly revealed material textures from three major perspectives: First, the intensive material observations from on-site, first-hand experience. Second, distant evidence collected from frontier regions and Manchu living experience. And third, large-scale investigations backed up by the imperial networks and technocratic ideals of the Qing bureaucracy. In the chapter, special attention will be paid to those cases that placed an epistemic priority on material evidence over textual aspects. As for contending and more complicated relationships of the two sides, I will leave them for Chapter Six.

Intensive Observations

The successful breakthroughs in philological reasoning did not overshadow the fruitfulness of the material approach. By the end of Chapter Three we have already seen a good example from Duan Yucai where an actual ancient bronze, the Jiaoshan tripod, offered a crucial piece of evidence for his refined philological analysis. Nevertheless, in that case, what mattered was the inscription, which, though

involving a sense of materiality in its worn traces, was still dominated by the textual information. In this section, I will switch my focus to the direct inquiry of material traits, such as plant specimens, animal experiments, and physical analyses of antiquarian objects. Working within the more typical scope of *wu*, these material inquiries also witnessed an intensification the mid-Qing era, yielding refined material textures that benefited the *mingwu* study of *Shi* in significant ways.

Plant Specimens

Recall Yu-yu Cheng's keen observation on the epistemic basis of natural imagery (Chapter One). In the *Shi*, the natural imagery of plants and animals frequently come up with an artful yet precise capturing of their natural traits. Among the 150 odd plants mentioned in *Shi*, one of the most typical was the imagery of *wanlan* 芄蘭, a widespread kind of vine bean identified today as the *Metaplexis*. In the ode "Metaplexis" (Wanlan, *MS* #60), we find the following evocative images at the beginning of its two stanzas:

芄蘭之支	Oh, the branches of the Metaplexis!
童子佩觿	The youth carries a knot-horn at his girdle;
雖則佩觿	But though he carries a knot-horn at his girdle,
能不我知	His talent is not comparable to my knowledge.
.....	...
芄蘭之葉	Oh, the leaves of the Metaplexis!
童子佩鞶	The youth carries an archer's thimble at his girdle;
雖則佩鞶	But though he carries an archer's thimble at his girdle,
能不我甲	His talent is not comparable to my practice. ⁶¹⁷

⁶¹⁷ Zheng Xuan, *Maoshi zhuan jian*, 89–90; with adaptations, the translation follows Karlgren, *The Book of Odes*, 42.

Despite the minor differences in the interpretation of the fourth line for each stanza, the basic message for this ode was beyond dispute, which, according to the Mao commentary, referred to the child ruler Duke Hui 惠 of Wei 衛, who was arrogant to his subjects despite his immaturity.⁶¹⁸ This tension between the immature age and the ruling position was further confirmed through the *mingwu* images in the middle two lines. The horn for knot-untying (*xi* 觶) was an adult accessory; the archer's thimble (*xie* 鞬) was for those capable of archery—neither seemed to be suitable wear for a child. The evocative image of the wanlan plant thus opened to a richer interpretation: What was the relationship between this vine bean and the child ruler? According to the Mao commentary, the plant stands for the ideal image as a contrast—a capable ruler who was “soft, smooth, gentle, and kind”; for Zheng Xuan, the plant worked as an allegory to the child ruler himself: just as the soft vine spreading on the ground could only grow upwards with a support, the child ruler had to rely on his subjects to achieve governance.⁶¹⁹ These became the standard interpretations in the early commentaries. No matter whether the plant imagery was taken as a contrast or an analogy to the young duke, at stake was the natural trait of softness. Following this line, Wang Anshi added a further progression between the “branches” in the first stanza and the “leaves” of the second, suggesting that the latter, farther from the root, was “even weaker for supporting itself.”⁶²⁰ Yet for all these interpretations, the evocative association was only drawn between the plant and the ruler, which was independent from the accessories in the following lines.

⁶¹⁸ The current translation follows the classic interpretation of Mao and Zheng, which referred *zhi* 知 and *xia* 甲 (loan character for *xia* 狎) to the knowledge and skill. Song scholars, such as Zhu Xi and Lü Zuqian, associated them with personal relations instead, namely, *wozhi* 我知 as “knowing me,” and *wojia/woxia* 我甲/我狎 as “leading me” or “being intimate with me.” A third different reading, proposed by Wang Yinzhi, was to take *neng* 能 as a function word, which denoted a transitional meaning like *er* 而. That said, all these different readings suggested a failed match between the “youth” and the “I,” thus highlighting the young ruler’s arrogance to his subjects. See, Zheng Xuan, *Maoshi zhuan jian*, 89–90; Zhu Xi, *Shi jizhuan*, 60; Lü Zuqian, “Lü shi jiashu dushi ji,” 134; Wang Yinzhi, *Jingyi shuwen*, 300–301.

⁶¹⁹ Zheng Xuan, *Maoshi zhuan jian*, 89.

⁶²⁰ The interpretation was quoted and endorsed by the Southern Song scholar Li Chu 李樗 (fl. mid-12th c.). See, Li Chu 李樗 and Huang Chun 黃樞, “Maoshi jijie,” 毛詩集解 in *Yingyin Wenyuange siku quanshu*, 71: 174. 離本遠則尤柔不能自立。

As a vine, the softness of the *wanlan* branches was apparent—a common trait that demanded little material justification. However, the reading received an impressive complication under the hand of Shen Kuo 沈括 (1031-1095), the northern Song scholar-official who has been particularly celebrated as a natural polymath.⁶²¹ According to Shen, the plant imagery also had much to do with the material feature of the two accessories:

The “knot-horn” is an awl for untying knots. The *wanlan* plant has pods stretching out from the leaves, which droop down precisely like knot-untying awls. As for the “carrying of an archer’s thimble,” I suspect that the ancient design of the thimble should also be similar to the leaves of *wanlan*, though this is no longer discernable today.

觸，解結錐也。芄蘭生莢，支出於葉間，垂之正如解結錐。所謂佩鞬者，疑古人爲鞬之制，亦當與芄蘭之葉相似，但今不復見耳。⁶²²

For the first time, the *wanlan* vine became associated with not only the young ruler but also his accessories. The analogy between the bean pod and the “knot-horn” demanded a close observation, which Shen might have acquired from life experience. He also seemed to have a word on the shape of the leaves, though this was suspended due to his insufficient knowledge in the design of ancient thimbles. This greater interest in the nature-based observation than the largely philological inquiry of ancient design testified to his inclination as a natural polymath.

Despite its incompleteness, this innovative reading highlighted the potency of intimate natural observations for *mingwu* studies of *Shi*. For a plant like the *wanlan* vine, this would point to the intersection of pharmaceutical studies (*bencao* 本草) and classic hermeneutics. Among the early natural studies of the plant, Guo Pu and Lu Ji emphasized the edibility of its leaves, the white latex in its branches, as well as its long, gourd-like seeds; the Six-Dynasties pharmacologist Tao Hongjing 陶弘景 (456-536) further suggested its nourishing effect; the Tang pharmacologists Su Jing 蘇敬 (599-674) and

⁶²¹ See, Nathan Sivin, “Shen Kua: A Preliminary Assessment of His Scientific Thought and Achievements,” *Sung Studies Newsletter* 13 (1977): 31–32; Zuo, *Shen Gua's Empiricism*, 4–5.

⁶²² Shen Kuo 沈括, *Mengxi bitan* 夢溪筆談 (Beijing: Zhonghua shuju, 2015), 22.

Chen Cangqi 陳藏器 (ca. 687-757) distinguished the plant from the similar-looking stinkvine (*nüqing* 女青), and also mentioned its manner of seed-spreading like the willow catkins. These gradually accumulated observations, together with the varied interpretations of the poetic line, all became textualized for immediate reference in the late-Ming and early-Qing works of erudite learning. As an impressive example, Chen Dazhang included as many as 14 references in his entry from the Mao commentary to Shen Kuo, and from Lu Ji's description to Su Jing. Yet these textual references were simply piled up to form an "all-round" image for the plant, without any further verification or synthesis from material evidence. On a lesser scale, this textual piling-up was also observable in the entries by Feng Fujing and Mao Jin 毛晉 (1599-1659). And more interestingly, in the quotation of Shen Kuo in all these three entries, the speculative tone on the *wanlan* leaves was altered into an affirmative one—"its leaves are similar to the shape of an archer's thimble."⁶²³ Although the specific origin of this semantic shift was unclear, it must result from the indirect summaries in the referential network. Without further verifications, the erudite scholars transformed the natural observations into textualized records, subordinating them again to the logic of textual transmission and surface network of reference.

Yet there was one notable exception within this erudite world of textual overflow—the renowned pharmacopoeia *Bencao gangmu*. After reviewing the collected observations in the middle era, Li Shizhen offered a meticulous account of its material details:

Its siblings emerge in the third month. Spreading over fences, it is easy to reproduce. Its roots are white and soft; its leaves are long, wide at the bottom and fine on the front. The root, stem, and leaves all have whit latex when broken, which is similar to the latex of the paper mulberry. During the sixth and seventh months, it blossoms with small yet long flowers. They are like bells in shape and purple-white in color. The fruits are 2-3 inches long in the size of birthwort, with find end on one side. Its shell is green and soft, which has white fluffs and fluid inside. When the shell becomes dried up and cracked after frost, the seeds fly away. The seeds are light and thin, which is also similar to the birthwort seeds. Merchants take the fluffs to replace of cotton to make sitting cushions, which is said to be particularly light and warm.

⁶²³ Chen Dazhang, "Shizhuan mingwu jilan," 713–14; Feng Fujing, *Liujia shi mingwu shu*, juan 17: 14a; Mao Jin 毛晉, "Lushi shishu guangyao," 陸氏詩疏廣要 in *Yingyin Wenyuange siku quanshu*, 70: 40. 其葉如佩韞之狀。

三月生苗，蔓延籬垣，極易繁衍。其根白軟，其葉長而後大前尖，根與莖葉斷之，皆有白乳，如構汁。六七月開小長花，如鈴狀，紫白色。結實長二三寸，大如馬兜鈴，一頭尖。其殼青軟，中有白絨及漿，霜后枯裂則子飛。其子輕薄，亦如兜鈴子。商人取其絨作坐褥代綿，云甚輕暖。⁶²⁴

Comparing to the previous entries, Li Shizhen elevated the specificity of the description to a new level. This was particularly obvious for the latter half on the flower, fruit, and seed, which included not only internal traits that could only be discernable through a direct engagement, but also diachronic features that demanded the accumulation of multiple observations. Based on this rich set of material evidence, Li made a further connection of the plant to the accessories in *Maoshi*: the *wanlan* fruits, “with the fine end drooping down across the branches,” were similar to the knot-horn, and the *wanlan* leaves, “bent backward,” were also similar to the archer’s thimble.⁶²⁵ After five centuries, Shen Kuo’s suspended argument received the first material-based confirmation. Connecting to both the horn and the thimble, Li’s interpretation suggested a double-layered evocation for the *mingwu* images. With the soft branches symbolizing the young ruler, the drooping fruits resembling the horn, and the back-bent leaves resembling the thimble, the *wanlan* plant became a genius choice that propped up the entire ode. Although such formal resemblances were dismissed by certain scholars like Chen Qiyuan due to its “excessive delicacy” (*xianqiao shenyi* 纖巧甚矣), they had greatly enriched the hermeneutic potentials of the ode, testifying to the epistemic efficacy of intensive natural observations.⁶²⁶

In the mid-Qing era, the *mingwu* study of *wanlan* witnessed further refinement in both the material traits and the descriptions. The most typical work came from Cheng Yaotian, a name that we will encounter many times in this chapter. As presumably the most material-prone figure among the leading evidential scholars of the day, his meticulous inquiries on the plants made him the Chinese inventor of an

⁶²⁴ Li Shizhen, *Bencao gangmu*, juan 18: 58b–59a.

⁶²⁵ Li Shizhen, *Bencao gangmu*, juan 18: 59a. 觸音哇，解結角錐也。此物實尖垂于支間似之。鞞音涉，張弓指彊也。此葉后彎似之。

⁶²⁶ Chen Qiyuan, *Maoshi jigu bian*, 1: 63b–64a.

“implicit botany” according to Georges Métailié.⁶²⁷ In a treatise named “Commentaries on the Metaplexis” (Wanlan shuzheng 芑蘭疏證), Cheng Yaotian offered a detailed account of his research process on this plant. The treatise started in a textual-referential manner, where Cheng distinguished the *wanlan* vine from the homonymic *wan* 莞-sedge (*Schoenoplectus tabernaemontani*) and the morphologically similar stink vine (*nüqing* 女青) based on the accumulated sources from *Shuowen* to Li Shizhen.⁶²⁸ Yet such textual reasoning was followed by an idiosyncratic account of the *wanlan* pods from a first-person perspective:

Two days before the solar term of “Heavy Snow” in the year guichou year (1793), I collected several vine pods from the laurel trees on Ling Hill. They are 7-8 cun in length, largely similar to the okra pods that one eats in the summer. The pod has straight grains throughout its body, with no joints and red-black in color. Within the pod, there are about 30 seeds tightly arrayed. The seeds are 6-7 fen in length, whose shape and color are largely similar to the pod husk. They are very solid and cannot be peeled to split. Cutting them open, the coat is highly thick, inside which one finds a tiny nutlet that is plain, thin and green color. There is white down attaching to the end of the seeds, which are tidy and bright. The down is slightly longer than the seeds, with a length of 7-8 fen.

瑤田於癸丑大雪前二日，在靈山採得施於桂樹上之藤莢數條，長七八寸，略如夏日所食之羊角莢，通體直紋而無節，赤黑色。莢中參差密排子約三十。子長六七分，形色並與莢皮略同，甚堅實，剥之不能開。割開，皮肉甚厚，中有扁薄小仁，綠色。子末戴白茶，齊整光潔。茶稍長於子，約長七八分。⁶²⁹

Comparing to the already-detailed description of the *wanlan* plant in *Bencao gangmu*, further refinements of material specificity are easy to observe. One is the greater attention to the quantitative details. In *Bencao gangmu*, the shape of the *wanlan* seeds was suggested through a comparison to the birthwort, yet Cheng provided the number and measurement of the seeds directly. Another is a higher sensitivity to the minute traits. Instead of referring to the economic use of the plant, Cheng switched his attention to the more “trivial” attributes such as the straight veins on the fruit husk, and the tidy array of the seed down.

⁶²⁷ Métailié, “The Botany of Cheng Yaotian (1725–1814),” 260; Métailié, *Science and Civilisation in China, Vol. 6, Biology and Biological Technology, Part IV: Traditional Botany: An Ethnobotanical Approach*, 235–36.

⁶²⁸ Cheng Yaotian 程瑤田, *Cheng Yaotian quanji* 程瑤田全集 (Hefei: Huangshan shushe, 2008), 3: 148–149.

⁶²⁹ Cheng Yaotian, *Cheng Yaotian quanji*, 3: 149.

For both differences, the relational description was replaced by a direct portrait, thus underlying the material details of the plant *per se*.⁶³⁰ Yet speaking of this increased specificity, nothing is more apparent than Cheng's dissection of the *wanlan* seeds. Regarding this tiny item, Li was satisfied with a formal description of its appearance, while Cheng further split it to reveal the nutlet inside, for which his vivid account of the seedcoat's resistance almost became an embodiment for the epistemic obstacles in reaching this material inwardness. From Shen Kuo's general observation of the fruit shape to Li Shizhen's investigation into its inner structure, and to Cheng Yaotian's further dissection of the seeds inside, what we have seen is a gradually refined understanding of the plant's material features from the surface to the interior, and from the general to the specific—a process that could only be fulfilled through rigorous observation and active engagement due to the rich yet resisting materiality of the object. Similar to the philological textures—or to put it more precisely, as the conceptual prototype for the philological textures—I call these “localized material traits” carefully identified from the intensive observations the *material textures*. In a similar fashion, Cheng Yaotian also described the *wanlan* leaves as solitarily grown by an interval of 1-2 *cun*, which were glossy green in color, thick and uneven, round at the bottom, narrow and drooping towards the end, and with an additional tip (i.e., a stipule) attaching to the branch.⁶³¹ Comparing to *Bencao gangmu*, such an emphasis in quantity and sensitivity to details also captured more refined material textures.

Here, it is noticeable that according to Cheng's own claim, he had no idea about what the plant was when collecting the vine pods. It was thus a pure account from natural observation, free from much of the dialectical entanglements from the “name” side. This is also supported by the dating of the treatise. The pod collection, along with the original record, took place in the winter of 1793, while Cheng did not complete his treatise of identification until the seventh month of 1797, after connecting his observations

⁶³⁰ As noted by Georges Métailié, more traditional treatises on the plants tended to emphasize their economic or medical values, and this was distinct from the autonomous study of the plants themselves that newly developed in the 17th-18th centuries Europe. See, Métailié, *Science and Civilisation in China, Vol. 6, Biology and Biological Technology, Part IV: Traditional Botany: An Ethnobotanical Approach*, 108, 116-117.

⁶³¹ Cheng Yaotian, *Cheng Yaotian quanji*, 3: 149.

to the transmitted texts. In this matching process between *ming* and *wu*, Shen Kuo's entry was quoted in its entirety, where the *Maoshi*-based analogy between the *wanlan* pods and the knot-horn served as an essential proof.⁶³²

Yet Cheng did not end up his treatise here. After establishing the *ming-wu* correspondence, he dispatched the local people once more to “collect [specimens] for a verification” (*xun yanzhi* 尋驗之). Receiving a new branch in the late summer, he noted its variations from his previous observation carefully, such as a shorter (2 *cun* 3-4 *fen*) and softer pod which was green rather than red-black in color, as well as a slightly different leaf shape which was “bigger in the middle while fine on the two ends.” According to Cheng, the former was due to a seasonal difference, while the latter might result from the fact that the previous branch was “closer to the root.”⁶³³ The seasonal difference was well supported by yet another specimen that he observed (*you jian yiben* 又見一本) in mid-autumn, whose vine pods now grew to 6 *cun* in length, with the sun-exposed surface turning red—a precise intermediate stage between his previous two observations. As a further supplement to his meticulous textual descriptions, he also added hand-traced illustrations to these two specimens (*Figure 51*), which, despite their sketchy manner, were adequately informative to reflect the differences in pod sizes, flexibility of branches, and the layout of leaves. In particular, for the second illustration, Cheng noted explicitly that he “picked off a branch to make the illustration” (*zhequ yi gan tu zhi* 折取一幹圖之), confirming the drawings as close representations to the specimens from real life.⁶³⁴

⁶³² Cheng Yaotian, *Cheng Yaotian quanji*, 3: 149-150.

⁶³³ Cheng Yaotian, *Cheng Yaotian quanji*, 3: 150.

⁶³⁴ Cheng Yaotian, *Cheng Yaotian quanji*, 3: 150.



Figure 51 (right): Illustration on the summer branches of *wanlan*
 (left): Illustration on the mid-autumn branches of *wanlan*⁶³⁵

Illustrations loomed large in Cheng Yaotian's evidential research. In his self-edited anthology *Tongyi lu* 通藝錄 (Records of comprehensive skills), there were more than two hundred illustrations altogether, in which about four-tenths were carefully traced from individual objects.⁶³⁶ Apart from this considerable quantity, this visual inclination was also discernable from their page layout in the printed

⁶³⁵ Cheng Yaotian 程瑤田, *Tong yi lu* 通藝錄, Capital Library of China, no. A5(37) (1803), "Shicao xiaoji" 釋草小記, "Wanlan" 芄蘭, 3a-b.

⁶³⁶ If we take both visual representations and geographical diagrams into account, and count the set images under one title as a single illustration, the result will be 266 illustrations altogether, in which at least 106 (39.8%) were traced from individual objects, either through drawing by hand or ink rubbing.

copies, where the illustrations—particularly the complex ones—frequently occupied an entire open page, rather than the more common half-page prints in scholarly works. With a higher cost to join two half-blocks together, this special arrangement bespoke an intention to render the objects and their material details as clearly as possible (*Figure 52*).

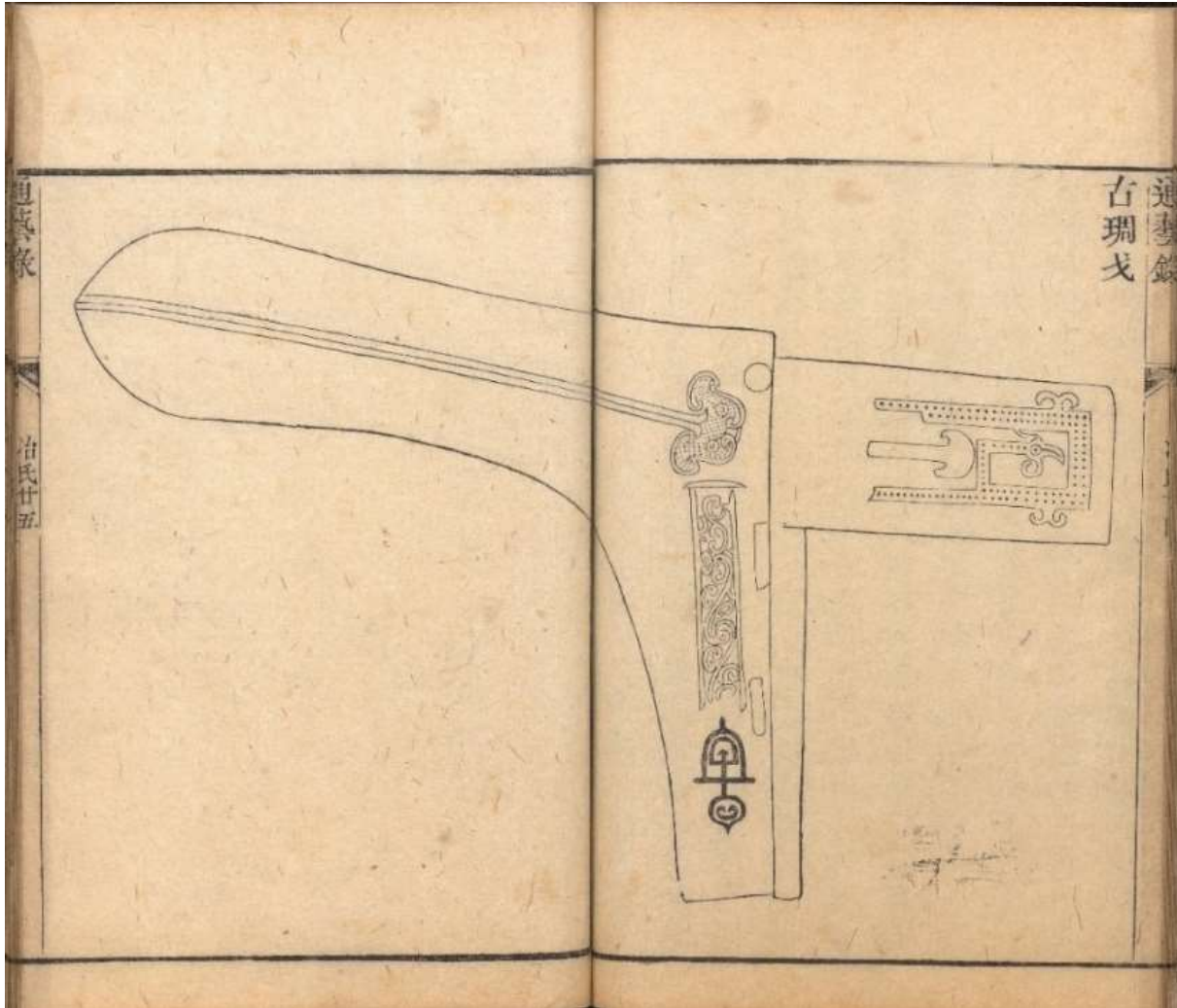


*Figure 52: Illustration of an ancient dagger axe in Tongyi lu on a complete open page*⁶³⁷

⁶³⁷ Cheng Yaotian, *Tong yi lu*, "Yeshi," 24b-25a.

Moreover, Cheng was also among the few leading evidential scholars who were capable of fine painting. As already suggested from his notes on the autumn vine above, the frequent first-person voice on the making of the illustrations strongly implied that they were drawn by Cheng himself. Sometimes these were indirect notes that aligned the material inquiry and the image making to the same person—“[I] took it to make the illustration” (*qu er tu zhi* 取而圖之), “[I] picked it up for observation and made the illustration as follows” (*cai er guan zhi, bing tu yu hou* 採而觀之, 並圖於後),⁶³⁸ sometimes they were more straightforward self-claims for the subject of drawing—“I made the illustration” (*yu tu zhi* 余圖之), “after Yaotian completed the evidential investigation and the illustration” (*Yaotian ji kaozheng er tu zhi* 瑤田既考證而圖之).⁶³⁹ This skill and enthusiasm in painting from real objects can be well corroborated from his *Taro Flowers* (*Yuhua tu* 芋華圖), a life painting of the rarely-seen taro blossoms which bespeaks Cheng’s skill from both the well-controlled brushwork and subtle tonality of color (*Figure 53*). Around the painting are colophons by several leading scholars of the day, including Weng Fanggang (1786), Ji Yun (1787), Qian Daxin (1791), Jin Bang (1798), and Ruan Yuan (undated), all connecting the painting to Cheng’s botanical and evidential studies in one way or another.⁶⁴⁰ Accurate life drawing, as a further aid to intensive observations, also demonstrated a close relationship to the natural inquiry of *wu*.

⁶³⁸ Cheng Yaotian, *Cheng Yaotian quanji*, 2: 318, 3: 88.

⁶³⁹ Cheng Yaotian, *Cheng Yaotian quanji*, 2: 168, 2: 183.

⁶⁴⁰ A puzzling point is that according to Cheng’s own colophon, the painting was originally inscribed with a poem (*sui tu zhi er ti yi shi* 遂圖之而題以詩), while this is not observable on the piece. That said, the work was formerly collected by Wu Hufan 吳湖帆 (1894-1968) and selected into Zhang Heng’s 張珩 (1915-1963) connoisseurship notes, indicating an endorsement of its authenticity by these authoritative connoisseurs. At least, Cheng’s skill in plant painting is beyond doubt. The *Taro Flowers*, together with one more life painting on the *Arisaema* flowers, were also mentioned by Cheng in another poem. Besides, the late-Qing scholar Li Ciming 李慈銘 (1830-1894) also recorded a painting of ink orchid by Cheng. For a complete transcription of the colophons and the connoisseurship notes, see, Zhang Heng 張珩, *Muyanzhai shuhua jianshang biji* 木雁齋書畫鑒賞筆記 (Shanghai shuhua chubanshe, 2015), 4: 3091-3092; for the additional records on Cheng’s plant paintings, see, Cheng Yaotian, *Cheng Yaotian quanji*, 3: 447, 4: 232.



Figure 53: Cheng Yaotian, *Yuhua tu* 芋華圖, size and collector unknown, dated 1782. Photocopy from *Zhonghe yuekan*.⁶⁴¹

⁶⁴¹ "Cheng Yichou yuhua tu," 程易疇芋華圖 *Zhonghe yuekan* 中和月刊 3, no. 6 (1942): Plate 1.

Let us return to the discussion of the *wanlan* plant. Despite the detailedness of Cheng's textual and visual accounts, this was still not the end of his evidential inquiry. Noticing that Li Shizhen marked the vine as blossoming in the sixth to the seventh months, while local people mentioned the time as in the third to the fourth months, he decided to "make another detailed investigation" (*zai xiangkao zhi* 再詳考之) during the blossoming season next year.⁶⁴² This happened on the 21st day of the third month in 1798, when the already 74-*sui* Cheng Yaotian took a personal trip into the hills and confirmed the claim of the local people. After a vivid description on the dichotomous layout of the branches and inflorescence, he zeroed in on the structural details of the flower. Five petals "slantingly encircled" (*pianrao* 偏繞) one another to form an empty hole in the middle, beneath which one could find five hidden stamens by splitting (*bokai* 剝開) the bottom part.⁶⁴³ In the example of the Jiaoshan tripod by the end of Chapter Three, I have suggested how the temporal and spatial obstacles in evidential search also contribute to the hiddenness of philological textures. In a similar fashion, the necessary wait for the right season and the geographical distance here also supplement to the concealed nature of the material textures, highlighting an inner richness of the plant in addition to all the material resistance unfolded in the meticulous observations and hands-on engagements.

In *Tongyi lu*, the refined observation of the *wanlan* flower was further strengthened by a pair of idiosyncratic illustrations, where Cheng rendered the flower from *both* an upper and a front view (*Figure 54*). As an excellent supplement to the textual descriptions, these illustrations specified the spatial layout of the corolla in an exactitude that the text alone would never achieve, and a comprehensiveness that a single image would never be sufficient to capture. Reminding us of the "three-view illustrations" in modern engineering, this multi-perspective drawing was frequently applied in the *Tongyi lu* sections on ancient artifacts. As shown in *Figure 55*, the front, side, and top views of the ancient axe were rendered separately, though there would have been no difficult had Cheng preferred a single illustration of the

⁶⁴² Cheng Yaotian, *Cheng Yaotian quanji*, 3: 150.

⁶⁴³ Cheng Yaotian, *Cheng Yaotian quanji*, 3: 153.

three-dimensional form. In his study on the rise of composite rubbing, a newly-developed technique of precise visual representation, Qianshen Bai emphasizes accurate line drawings and precise evidential research in the 18th century as an important cultural-intellectual context.⁶⁴⁴ Yet the earliest extant composite rubbing, unlike the later mature ones, did not synthesize the multiple surfaces and perspectives into a single three-dimensional image (cf. *Figure 38* on p. 205). Instead, this primordial rubbing of the Han bronze basin adopted precisely the separated form for both a front and a top view (*Figure 56*).⁶⁴⁵ Dated in 1798, the same year as Cheng's rendering of the *wanlan* flower, this thought-provoking coincidence highlighted the efficacy of multi-view illustration for the precise rendering of *wu*.

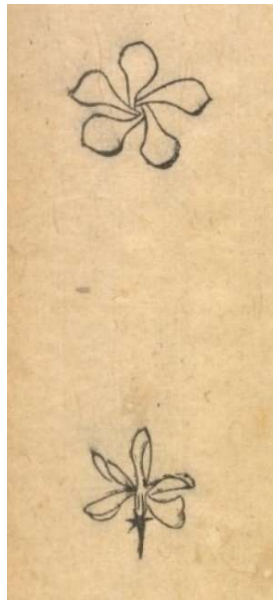


*Figure 54: Illustrations of the wanlan flower by Cheng Yaotian*⁶⁴⁶

⁶⁴⁴ Qianshen Bai, "Composite Rubbings in Nineteenth-Century China: The Case of Wu Dacheng (1835-1902) and His Friends," in Wu, *Reinventing the Past*, 299-301.

⁶⁴⁵ For the identification of the piece as the earliest extant composite rubbing of a Chinese bronze vessel, see, Thomas Lawton, "Rubbings of Chinese Bronzes," *Bulletin of the Museum of Far Eastern Antiquities*, no. 67 (1995): 10.

⁶⁴⁶ Cheng Yaotian, *Tong yi lu*, "Wanlan" 芄蘭, 4b.

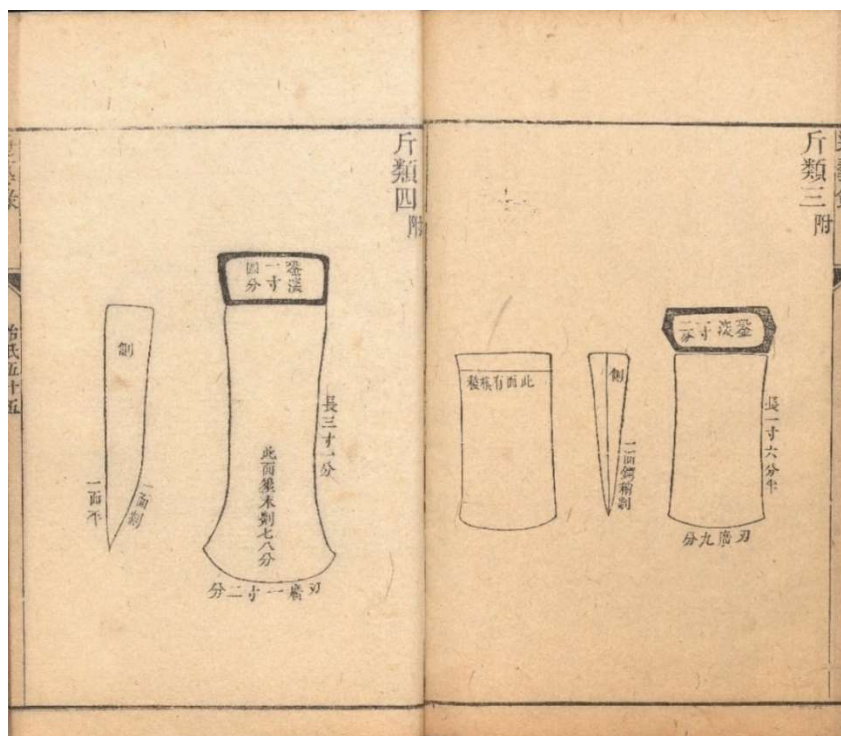


Figure 55: Multi-view illustrations on the ancient axes by Cheng Yaotian. The image on the left shows the top, front, and side views; the image on the right shows the top, front, side, and back views.⁶⁴⁷

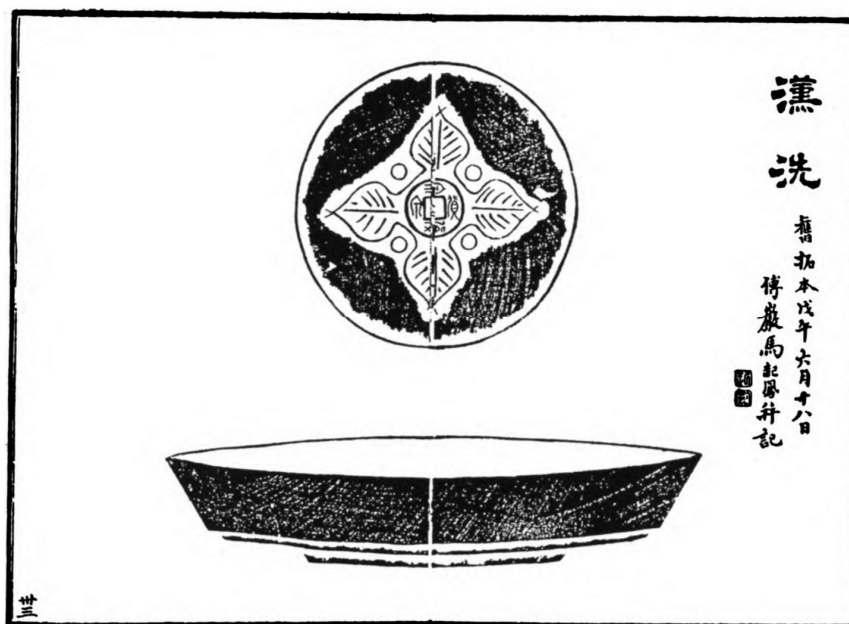


Figure 56: Composite rubbing of a Han dynasty bronze basin by Ma Qifeng, 1798.⁶⁴⁸

⁶⁴⁷ Cheng Yaotian, *Tong yi lu*, "Yeshi" 冶氏, 54b-55a.

⁶⁴⁸ Illustration cited from Lawton, "Rubbings of Chinese Bronzes," 27.

If the multi-view illustration, by means of its pictorial separation, reflected the shift of visual perspectives in an intimate observation, other set illustrations in the botanical section of *Tongyi lu* indicated the process of hands-on engagement or observations across time. The separated rendering of the flower, husk, and seed of the alfalfa (*muxu* 苜蓿) branch captured a dissection of the plant from the surface to the interior (Figure 57); the separated portrait of the orange jessamine (*yun* 芸) in both the mid-winter and the early spring suggested a diachronic observation of its growth (Figure 58). Although these latter cases were more ordinary in European natural historical drawings, all the three kinds of illustrations shared one commonality with epistemological significance: Be it trans-temporal or trans-spatial, the multi-perspective images capture a *material excess* that is not accountable within a single, immediate observation. Compatible with the hidden material textures identified in the actual inquiries, these featured visual techniques also highlight an inner richness of the material objects.

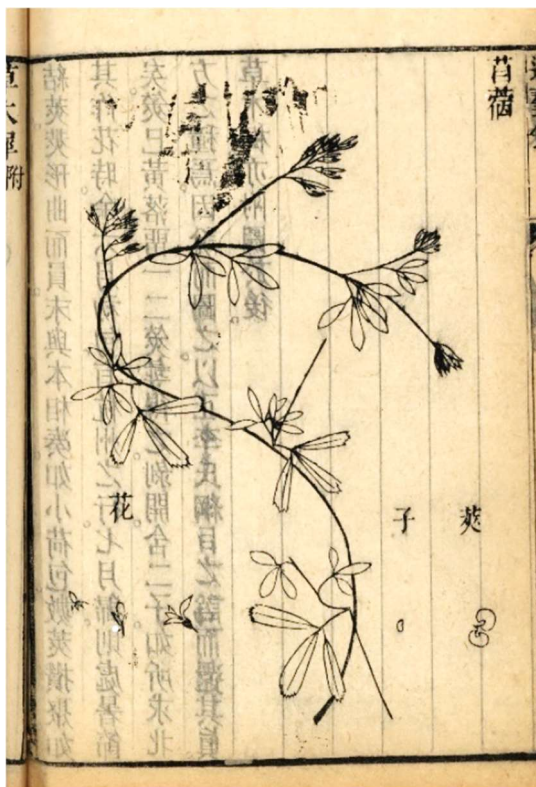


Figure 57 (Left): Illustration of the alfalfa branch, flower, husk, and seed by Cheng Yaotian.⁶⁴⁹

Figure 58 (Right): Illustrations on the orange jessamine (*yun* 芸) by Cheng Yaotian, with the image on the right side representing the newly born plant in the mid-winter, and the two images on the left representing the blossoming plant in the second month.⁶⁵⁰

Although Cheng made his most detailed investigations on the *wanlan* vine, he was by no means the only scholar who paid careful attention to this *mingwu* problem in the mid-Qing era. When Jiao Xun looked into the plant, he first pointed to the binomic nature of its name. Drawing references from early literary texts, Jiao came up with a binomic series from *wanlan* 芄蘭 to *huanlan* 萑蘭, *wanlan* 汎瀾, and *wanlan* 丸蘭. In the typical style of binomic analysis as shown in Chapter Three, Jiao generalized the term as a description for “crisscrossing appearance” (*zongheng sichu zhi tai* 從橫四出之態), which fitted into the spreading branches of the *wanlan* vine. Meanwhile, Jiao also “sought in the fields” for material evidence, where he identified the plant by its fine-tined oval leaves, white latex in the broken branches, ladyfinger-shaped fruits, and white fluff inside the dried husk.⁶⁵¹ Although these fine observations did not exceed the scope of Li Shizhen and Cheng Yaotian, they still highlighted Jiao’s material interests due to a necessary involvement in diachronic observation and hands-on engagement. Followed by this natural description was a double-confirmation from the secular name of his specimen, “Sparrow-Coffin” (*maque guan* 麻雀棺), where Jiao linked the “sparrow” to “Sparrow-Ladle” (*quepiao* 雀瓢), an alias of *wanlan*, and “coffin” (*guan* 棺) to “*guan*” 莞, another alias of the plant, due to their identical pronunciation.⁶⁵² Succinct as it was, this parallel move in natural observation and philological reasoning indicated a dual epistemic emphases on the material and textual sides. As will see in many other contemporaneous

⁶⁴⁹ Cheng Yaotian, *Tong yi lu*, “Muxu” 苜蓿, 4b. For a brief discussion of this entry, also see, Métaillé, “The Botany of Cheng Yaotian (1725–1814),” 256–58.

⁶⁵⁰ Cheng Yaotian, *Tong yi lu*, “Shi yun” 釋芸, 6b.

⁶⁵¹ Jiao Xun, *Jiao Xun quanji*, 3: 1431. The binomic use of *wanlan* for crisscrossing was already observed by Fang Yizhi, though he made no connection between this literary term and the plant name. See, Fang Yizhi, “Tong ya,” 4: 296.

⁶⁵² Jiao Xun, *Jiao Xun quanji*, 3: 1431.

evidential cases, the thoughtful revelation of the material and philological textures went hand in hand and reinforced each other, both pointing to an inner richness of the *wanlan* plant.

Included in *Maoshi bushu* 毛詩補疏 (Supplementary commentary to *Maoshi*), a late piece compiled in 1814 and revised in 1817, the above entry reflected Jiao Xun's mature stance on the plant. The identification by no means had been as clear from the beginning.⁶⁵³ In 1802, Jiao recorded being puzzled in an interesting poem, in which he mentioned a *wanlan* illustration that he received from Cheng Yaotian in the previous winter:

去冬程先生	In the past winter, Mr. Cheng [Yaotian]
貽我芄蘭圖	bestowed me his <i>wanlan</i> illustration.
爾雅幾回讀	Going through <i>Erya</i> for several times,
細驗囊中茶	I scrutinized the downy-seed ⁶⁵⁴ in my pocket.
吾村多此物	In my village, this plant is common.
柔蔓綠牆隅	With soft vines, it greens up the wall corner.
晨起度枝葉	Rising up early, I compare the branches and leaves.
頗與圖中殊	They are quite different from the illustration.
化機任天地	The secrets of transformation are charged by heaven and earth,
形跡真難拘	It is indeed hard to stick to appearance! ⁶⁵⁵

Although it remained unclear whether the illustration received by Jiao was a hand-traced copy or a printed one as in *Tongyi lu*, the message from Cheng would be certain, since this was already after Cheng's completion of his *wanlan* essays in 1798. This timing made the discrepancies particularly eye-catching,

⁶⁵³ In his early work *Maoshi caomu niaoshou chongyu shi*, where the section on the “Air of Wei 衛” was first drafted in 1790 and underwent two rounds of revisions in 1793 and 1802, the entry on the *wanlan* plant merely included the textual discussions on the binomic term and the secular name, with no mention of the material evidence from natural observation. See, Jiao Xun, *Jiao Xun quanji*, 4: 1596–1597, 1599.

⁶⁵⁴ As pointed out by Métailié through his analysis of Cheng Yaotian's relevant treatise, the character *tu* 荼 did not refer to a specific species but various plants with “downy seed-heads,” a material feature shared by the *wanlan* vine. See, Métailié, “The Botany of Cheng Yaotian (1725–1814),” 254–55.

⁶⁵⁵ Jiao Xun, *Jiao Xun quanji*, 12: 5656–5657.

where Jiao noted a puzzling difference between the “branches and leaves” in the illustration and those that were common in his hometown. This precious record testified to the efficacy of life-drawing for the negotiation of material knowledge between natural observers—though in the current case, Jiao was unable to make a final judgment but left the question open as an incredible “secret of transformation.”

Despite the succinctness of the poem, we can indeed discern some hints of the discrepancy from their textual descriptions. Note that in Jiao’s *Maoshi bushu* entry, the *wanlan* leaves are described as “oval with a fine end” (*tuoyuan shang rui* 橢圓上銳).⁶⁵⁶ This is consistent with Li Shizhen’s “big at the bottom yet fine towards the end” (*hou da qian jian* 後大前尖), as well as the material shape of the archer’s thimble, which has generally an oval contour that is finer on one end (*Figure 59, Figure 60*). However, none of these appear similar to the *wanlan* leaves in Cheng’s *Tongyi lu* illustrations, which are fine on both ends (*Figure 54*). More interestingly, Cheng himself was also aware of this inconsistency. Careful readers would have noticed that in Cheng’s first record of the 1793 trip, the *wanlan* leaves were also described as “round at the bottom and narrow on the top” (*ben tuan mo xia* 本團末狹), which had nothing incompatible. However, when he made the second account in 1797, the description instead became “wide in the middle and fine on both ends” (*zhong da er benmo jie jian* 中大而本末皆尖), where Cheng marked out explicitly that there was a “slight difference” between the two specimens of leaves. However, he did not make further inquiry into this problem, but, as mentioned above, simply explained the discrepancy by attributing them to different parts of the branch.⁶⁵⁷

⁶⁵⁶ Jiao Xun, *Jiao Xun quanji*, 4: 1597.

⁶⁵⁷ Cheng Yaotian, *Cheng Yaotian quanji*, 3: 148, 150.

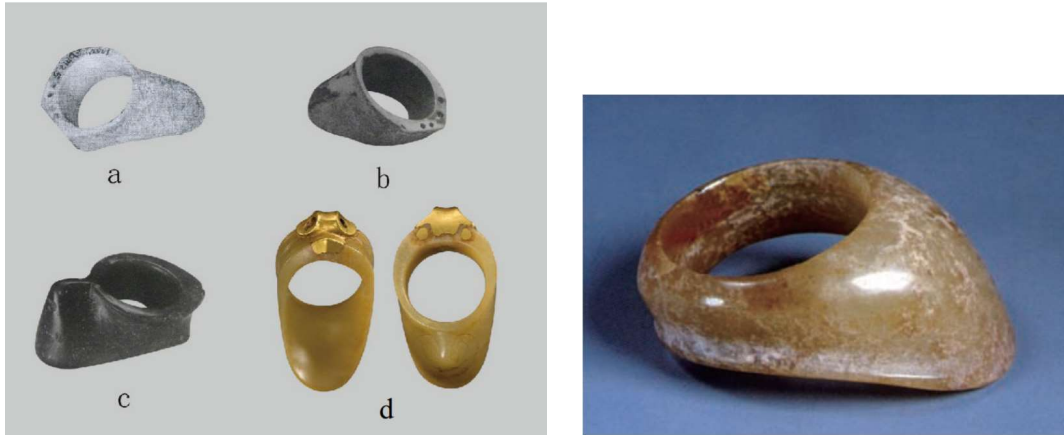


Figure 59 (Left): Archer's thimbles from the Western Zhou period⁶⁵⁸

Figure 60 (Right): Jade archer's thimble, Ming dynasty. Excavated from the Tomb of Mu Rui (1627), Nanjing.⁶⁵⁹ Xu Xiaodong suggests the existence of a large collection of such later jade thimbles in the Imperial Household of the Qianlong era. Although the authentic design of the Western Zhou *she* might be unclear to the early modern scholars, they would not be far away from the point if taking these later designs for the thimble-leaf analogy.⁶⁶⁰

Nevertheless, Jiao Xun's serious doubt reminds us not to take the difference lightly—not to mention the even greater discrepancy between Li and Cheng regarding the blossoming season of the plant, which Li noted as in the summer, while Cheng, acknowledging the difference in his own entry, recorded the blossoming in the spring. Such variations, if substantiated, might even indicate alternative species! Although neither Cheng nor Jiao made further comments on the problems, this loose end became an entry point for the renowned 19th-century official-botanist Wu Qixun 吴其濬 (1789-1847), who, after a full quotation of Cheng's entry on the *wanlan* flower, suggested that he had confused two different plants, the *wanlan* vine (Figure 61) and the “white-flower vine” (*baihua teng* 白花藤, Ceylon leadwort) (Figure 62). According to Wu, the former, as an herbaceous vine (*wancao* 蔓草), blossomed in the summer-autumn and split its husks during the frost; the latter, as a woody vine (*tengben* 藤本), blossomed in the

⁶⁵⁸ Illustration quoted from Xu Rucong 徐汝聰, “Chu she,” 楚鞮 *Jiangnan kaogu* 江漢考古, no. 5 (2014): 47.

⁶⁵⁹ Illustration quoted from Xu Xiaodong 許曉東, “She, she shi pei yu banzhi,” 鞮、鞮式佩与扳指 *Gugong bowuyuan yuankan* 故宮博物院院刊, no. 1 (2012): 58.

⁶⁶⁰ Xu Xiaodong, “She, she shi pei yu banzhi,” 60–62.

spring and produced its husks in the summer. From this vantage point, Wu concluded that only the first plant Cheng observed in the winter of 1793 was the *wanlan* vine; all the other ones, on which his illustrations of the branches and flower were based, were in fact the “white-flower vine.”⁶⁶¹



Figure 61 (Left): Illustration of “luomo” 蘿摩, or the *wanlan* vine by Wu Qixun⁶⁶²

Figure 62 (Right): Illustration of “baihua teng” 白花藤, or the Ceylon leadwort by Wu Qixun.⁶⁶³ Note the differences in the leaf shape, flower shape, and the softness of the branch between the two plants.

If Cheng Yaotian’s meticulous observation revealed detailed material textures that were unnoticed before, Wu made a further refinement by differentiating the accumulated information into two subcategories. These morphological differences were well captured in Wu’s illustrations. The “white-flower vine,” with petals “slantly encircled” and leaves “fine on both ends,” closely resembled Cheng’s

⁶⁶¹ Wu Qixun 吴其濬, *Zhiwu mingshi tukao* 植物名實圖考, Photocopy by Peking University Library, CADAL (1848), accessed May 7, 2021, juan 21: 34b-35a.

⁶⁶² Wu Qixun, *Zhiwu mingshi tukao*, juan 22: 69a.

⁶⁶³ Wu Qixun, *Zhiwu mingshi tukao*, juan 21: 33a.

illustrations and later descriptions, confirming the epistemic reliability of these life drawing; the *wanlan* vine, with seed downs stretching out from the split husk, and heart-shaped leaves that were wide and round at the bottom and fine towards the end, then accorded to Li Shizhen's, Jiao Xun's, and Cheng's earlier descriptions. Yet despite a rough resemblance between the rectified *wanlan* leaves and the archer's thimble, Wu had apparently little interest in making the connection.⁶⁶⁴ For him, the evocation of natural images was spontaneous, where one should not search for a “forced arrangement” (*qiang wei zuzhi* 強為組織) through philological learning. Instead, Shen Kuo's analogy was criticized as an “aftermath” of Wang Anshi's learning, which, as we have already seen from Chapter One, was infamous for its far-fetched associations.⁶⁶⁵ Unlike Cheng Yaotian and Jiao Xun, for whom the philological and material textures went hand-in-hand to reinforce each other, Wu was more prone to a separation between the two, where it was the latter that offered the main authority for his botanic inquiry. In *Zhiwu mingshi tukao*, this greater priority of the material side was most apparent in Wu's innovative inclusion of twelve *unnamed* plants in the work, whose categorization was purely based upon material features.⁶⁶⁶ That said, both the balanced approach and the inclined one were efficacious for identifying refined material textures.

Another notable difference comes from the style of their illustrations. If for Cheng Yaotian, the varied visual perspectives and life stages of a plant were represented through a thoughtful array of multiple images, Wu Qixun chose to synthesize them into a single illustration. Although one could already identify an inclination to capture as many plant components as possible—from the root at the bottom all the way to the flowers and fruits on the top—in earlier *materia medica* illustrations such as *Zhenglei bencao* and *Bencao gangmu*, it was *Zhiwu mingshi tukao* which pushed this idea to the

⁶⁶⁴ According to Wu, although one may speak of a resemblance between the *wanlan* husk and the knot-horn, “how could the leaves, like the snake-gourd and the morning glory, had the shape of an archer's thimble [pendant]!” 其葉如王瓜牽牛等，安得有佩鞬狀。It remained uncertain whether the negation was mainly due to a stricter criterion for formal resemblance, or a different understanding on the shape of *she* (e.g., *she* was also used as an alternative name for the cylindrical-shaped finger ring (*banzhi* 扳指) in the Qianlong era). See, Wu Qixun, *Zhiwu mingshi tukao*, juan 22: 69b; Xu Xiaodong, “She, she shi pei yu banzhi,” 59–63.

⁶⁶⁵ Wu Qixun, *Zhiwu mingshi tukao*, juan 22: 69b–70b.

⁶⁶⁶ Georges Métailié, “Plantes et noms, plantes sans nom dans le ‘Zhiwu Mingshi Tukao’,” *Extrême-Orient Extrême-Occident*, no. 15 (1993): 142.

extreme.⁶⁶⁷ As shown in *Figure 61*, the illustration of the *wanlan* vine includes both the mature leaves and the tender shoots, both the inflorescence and the fruit bearings, both the tender pods and the dried ones with cracked, downy husk. No single *wanlan* vine in nature was able to deliver so much information at once. In order to portray this rich illustration which condensed the material features of almost a year cycle, Wu or his assistants had to make a multiplicity of observations no less than had Cheng. Yet Wu did not present them as separate records, but synthesized the discrete information into an artful collage of truth-to-nature.⁶⁶⁸ If Cheng's set illustration reminds us of the multi-view images of early composite rubbings, Wu's synthetic illustration can be connected to the creative condensation of multiple visual perspectives and material surfaces in the mature form of composite rubbing—a visual play that was already discernable in the Yongzheng catalogue *Guwan tu* 古玩圖 (Scroll of antiquities) (*Figure 63*).⁶⁶⁹ Despite the varied themes and media of representation, such new techniques in the rendering of accurate images share an important commonality, namely, the synthesis of a visual-epistemic verisimilitude that “the eye alone cannot see.”⁶⁷⁰ It is more typical than the material specimen, more specific than direct observation, yet never be fully approachable at a single instance in real life. In this sense, Wu Qixun's synthetic image and Cheng Yaotian's set image pointed to the same thing—a material excess that bespoke the inner richness of *wu*.

⁶⁶⁷ For the earlier illustrations, see, e.g., Métaillé, *Science and Civilisation in China, Vol. 6, Biology and Biological Technology, Part IV: Traditional Botany: An Ethnobotanical Approach*, 184–85.

⁶⁶⁸ For the importance of the truth-to-nature approach in Western natural history, see, Lorraine Daston and Peter Galison, *Objectivity* (New York: Zone Books, 2007), ch. 2.

⁶⁶⁹ For the synthesis of multiple perspectives and surfaces in composite rubbings, see, Bai, “Composite Rubbings in Nineteenth-Century China,” 293, 296; Tao Wang, “Rivals and Friends: Scholar-Collectors and Their Circles,” in *Mirroring China's Past: Emperors, Scholars, and Their Bronzes*, ed. Tao Wang (New Haven: Yale University Press, 2018), 195. For the combination of multiple visual perspectives in the portrayal of a single object in *Guwan tu*, see, Shane McCausland, “The Emperor's Old Toys: Rethinking the Yongzheng (1723–35) Scroll of Antiquities in the Percival David Foundation,” *Transaction of the Oriental Ceramic Society* 66 (2001–2002): 71.

⁶⁷⁰ Wang, “Rivals and Friends,” 195.



Figure 63: Ming Xuande blue and white jar with Laṅkā script. Scroll of Antiquities, no. 6, dated 1728. Percival David Foundation of Chinese Art. Note the perspectival inconsistency of the six protruding “ears” around the bottle neck. As suggested by Shane McCausland, the jar is “seen from the front and both sides at once.”⁶⁷¹

In this section, we have used a millennium-long journey to trace the gradually revealed material textures of the *wanlan* vine. Inspired by a possible imagistic association in *Maoshi*, scholars paid enormous efforts in observing, describing, illustrating, and differentiating the material features of the plant. From Shen Kuo in the Northern Song to Li Shizhen in the late Ming to Cheng Yaotian and Wu Qixun in the mid-Qing era, there was a constant refinement in the understanding the plant. This would not be possible without the increasing meticulous on-site observations, which witnessed its first boom in Li Shizhen’s entry and continued to be developed under the hands of Cheng Yaotian, as well as the sharpened techniques of visual representation, which only achieved a breakthrough in the mid-Qing works. Accompanied these intensified inquiries is a move from the bookish entry to the natural site, from an umbrella term to individual specimens, from the immediate appearance to the interior components, and

⁶⁷¹ McCausland, “The Emperor’s Old Toys,” 71.

from a single snapshot to a multiplicity of observations—all pointing to the inner richness of localized, specific objects. The search for material textures is therefore a constant negotiation with the rich materiality of objects, whose excessive information was precisely reflected in the ever-refined descriptions and hyper-real representations.

Animal Experiments

For the inquiry of material textures, close observation and hands-on engagement were supplementary to each other. Although the above example of the *wanlan* vine places a greater emphasis on close observation, the dissection of the pod and seed also indicates a necessary involvement of hands-on engagement—though in that case, the operation was largely subordinated to the morphological observation. In this section, we will switch to an animal case where hands-on engagement loomed larger and reached the extent of a proto-experiment in its mature form.

The protagonist of this section is our old friend *guoluo* 螺贏, the slender-waist wasp that we have briefly encountered in both Lu Xun's essay at the beginning of this dissertation and Jiao Xun's binomic analysis in Chapter Three. The imagery of the insect came from the ode "Diminutive" (Xiaowan 小宛, *MS* #196) in *Maoshi*, where the third stanza goes:

中原有菽	In the middle of the plain there is pulse,
庶民采之	The common people gather it.
螟蛉有子	The bollworm has a young one,
螺贏負之	The <i>guoluo</i> wasp carries it on its back.
教誨爾子	Teach and instruct your sons,
式穀似之	Then in goodness they will be like (you). ⁶⁷²

⁶⁷² Zheng Xuan, *Maoshi zhuan jian*, 279; with slight adaptations, the translation follows Karlgren, *The Book of Odes*, 144–45.

The general idea of the middle lines is not hard to grasp, that the wasp's carrying of the young worm is analogized to the instruction of one's descendants—or, according to Zheng Xuan's political reading, the ruler's instruction of the people. But *guoluo* (sphex) and *mingling* (bollworm) referred to different species.⁶⁷³ How could the larva of another kind of insect be comparable to one's own son? And it is here that Lu Xun's story cut in, where he mentioned the folklore that the *guoluo* wasp, through a forty-nine-day prayer, was able to transform the bollworm into its own descendent. In the commentary tradition, this was a time-honored view that could be dated back to Zheng Xuan, who already mentioned the magical ability of the wasp to make the worm “into its own descendant” (*yi cheng qizi* 以成其子).⁶⁷⁴ This trans-species adoption was then elaborated by Lu Ji into its classic form, one that Lu Xun borrowed for his essay: With the worm imprisoned in a small space, the wasp would pray “Be like me! Be like me!” for seven days to transform it into its own descendent.⁶⁷⁵ This bewitching thesis, as the standard interpretation in the commentary tradition, was then ridiculed by Lu Xun from the vantage point of modern entomology and reinterpreted as a neurotoxin-based parasitism. Nevertheless, apart from this apparent contrast between the modern and the traditional, he also mentioned in the essay that there were indeed some evidential scholars “propounding a different theory,” suggesting that the wasp could lay eggs herself, and the caterpillars were caught as food for the larva wasp—though, in his featured ironic tone, Lu Xun refused to further elaborate on the point, since it was not as “pretty” a story as the bewitching thesis.⁶⁷⁶ In this section, I will revisit this lost chain from an epistemic perspective, so as to demonstrate how the naturalist scholars dispelled the “pretty story” and came up with a material-based alternative through intensive engagement and keen reasoning.

⁶⁷³ According to Guo Fu, *guoluo* is a general name for the wasps in the *Eumenidae*, *Sphecidae*, and *Trypoxylidae* families, and *mingling* a general name for the larvae of the *Lepidoptera* order. See, Guo Fu 郭郛 and Joseph Needham, *Zhongguo gudai dongwuxue shi* 中國古代動物學史 (Beijing: Kexue chubanshe, 1999), 301–2.

⁶⁷⁴ Zheng Xuan, *Maoshi zhuan jian*, 279.

⁶⁷⁵ Lu Ji, “Maoshi caomu niaoshou chongyu shu,” 70: 18.

⁶⁷⁶ Cf. p. 8.

Doronga (1794-1853, Ch. 多隆阿), a Manchu scholar and native of Liaoning whom we will encounter several times in this chapter, offered a good summary to the history of this alternative view before the Qing dynasty. In his *opus magnus* *Maoshi duoshi* 毛詩多識 (Extensive Acquaintance of *Maoshi*), a *mingwu* study on the flora and fauna of *Maoshi* renowned for its acute natural observations, Doronga listed five scholars in total on this issue. The progenitor of the parasite thesis was the celebrated *bencao* scholar Tao Hongjing, who described how the wasp would leave a millet-sized egg in the nest and catch a dozen or so “green spiders” to close it up. With the nest plugged, the spiders would become the food of the larva when it grew up. The observation was then corroborated by several post-Tang scholars. The late-Shu *bencao* scholar Han Baosheng 韓保昇 (fl. mid-10th c.) noted that “nowadays people wait for the wasp to plug the nest, and then *break it* to look inside (*huai er kan zhi* 壞而看之). They see a millet-like egg on the dead bug, which is indeed like Tao’s claim.” This was further confirmed by the Northern Song *bencao* scholar Kou Zongshi 寇宗奭 (fl. early-12th c.), who reported on having “*destroyed the nest* and make the observation” (*che ke shizhi* 坼窠視之) in person. What he saw, again, was a millet-sized egg in white color with a slight tint of yellow. Below it were some “green larvae” caught by the wasp, which were detached from the egg.⁶⁷⁷

Similar to the case of the *wanlan* vine, one could also observe a gradual specification in the material description, paralleled by a rising presence of the investigating subject. Yet for the current case, the nature of the textual entry was no longer a morphological description but a record of biological behavior, where the breaking of the nest and the revealing of its interior situation became the essential step. If for Tao Hongjing the process was only implied, both Han and Kou mentioned it explicitly, from a “hearsay” (*wen yu ren* 聞於人) for the former to a more convincing “eye-witness” (*mudu* 目覩) for the latter.⁶⁷⁸ That said, these natural observations gained no upper hand vis-à-vis the textual authority of the

⁶⁷⁷ Doronga, *Maoshi duoshi* (12-juan edition), juan 9: 10b–11a.

⁶⁷⁸ Doronga, *Maoshi duoshi* (12-juan edition), juan 9: 11a.

early commentaries, and based on the latter one could make a simple refutation from a mystic stance. “The transformation across material categories could hardly be inferred,” argued Su Song, which was not only possible from the bollworm to the wasp, but also from the dung beetle to the grasshopper, from the melon seed to the silverfish—as recorded by other textual sources.⁶⁷⁹ Another influential critique that was unmentioned by Doronga came from Zheng Qiao 鄭樵 (1104-1162), who doubted that the *guoluo* egg, without a fixed form, was able to consume the worms as food.⁶⁸⁰ In order to defend against such challenges, the parasite thesis had to offer a clearer account of what was going on within the nest, which became the motive for the following inquiries.

The Southern Song scholar Fan Chuyi 范處義 (1132-1203) was the first to describe the paralytic status of the bollworm, which was “neither dead nor alive, but dazedly remaining in the nest.” Meanwhile, he also pointed to a gradual change in the nest, that “the bollworm gradually withers up, while the egg becomes bigger and bigger”—until growing into a wasp and breaking the nest.⁶⁸¹ If this was still a rough description of the hatching process, the following one by Li Shizhen, as the last of the five parasite theses mentioned by Doronga, he further specified it into different stages:

Recently I *broke nests repeatedly*, noticing that the egg lived together with other insects. It was either that the larva had gone away, or that the insects became a pupa while the larva was still small. The insect is therefore undecayed all the time, and only when it becomes a pupa would the larva eat it and get out.

今屢破其房，見子與他蟲同處，或子已去而蟲存空殼，或蟲成蛹而子尚小，蓋蟲終不壞，至成蛹，子乃食之而出。⁶⁸²

Compared to Han Baosheng’s “hearsay” and Kou Zongshi’s “eye-witness,” here the inquiring subject loomed even larger. In her monograph on *Bencao gangmu*, Carla Nappi has used this example to illustrate

⁶⁷⁹ Doronga, *Maoshi duoshi* (12-juan edition), juan 9: 11a

⁶⁸⁰ Zheng Qiao, *Tongzhi ershi lue*, 2: 2033-34.

⁶⁸¹ As quoted by Yan Can in *Shiji*. See, Doronga, *Maoshi duoshi* (12-juan edition), juan 9: 11b; Yan Can, *Shi ji*, 2: 591.

⁶⁸² Doronga, *Maoshi duoshi* (12-juan edition), juan 9: 11a.

Li Shizhen's emphasis of observation for the gathering and testing of natural knowledge.⁶⁸³ This methodological appeal was certainly shared by Doronga, who proposed a "ladder of substantiation" in his self-preface to *Maoshi duoshi*: "Hearsay is not comparable to personal witness; seeing image is not comparable to observing form."⁶⁸⁴ With *repeated* material interventions and examinations, Li Shizhen's entry was marked by Doronga as a "personal experience" (*qinzi liyan* 親自歷驗) that reached a higher epistemic conviction.⁶⁸⁵ Specifically, the entry is noteworthy in two respects. First, with a *repeated* breaking of the nests, Li offered multiple snapshots of the interior situation, rather than a single, general description like his predecessors. Second, his final claim on the feeding condition of the insect, being difficult for direct verification, was instead *inferred* from the discrete observations. Although we will soon realize that Li's description was not particularly accurate, these two newly stressed approaches—repeated material interventions and observation-based inferences—became the basic directions for further studies.⁶⁸⁶

It was under this epistemic background of intensifying interventions and increasing refinedness that we step into the mid-Qing era, when Doronga carried out his own observations. Having "broken [the

⁶⁸³ Nappi, *The Monkey and the Inkpot*, 100.

⁶⁸⁴ Doronga, *Maoshi duoshi* (12-juan edition), "Self-Preface," 1b. 傳聞不如親見，視影不如察形。

⁶⁸⁵ Doronga, *Maoshi duoshi* (12-juan edition), juan 9: 11b.

⁶⁸⁶ Besides, another unmentioned early account of the parasite thesis came from Peng Cheng 彭乘 (985-1049), who reported to have "repeatedly verified the case during childhood." As a detailed observation that was not covered by other early entries, he noted that the *guoluo* wasp would "sting to kill" the insects and took off their legs. See, Zhao Lingshi 趙令時 and Peng Cheng 彭乘, *Hou qing lu, Moke hui xi, Xu moke hui xi* 侯鯖錄 墨客揮犀 續墨客揮犀 (Beijing: Zhonghua shuju, 2002), 330.

In Doronga's entry, it is noteworthy that the late-Ming quotation of Li Shizhen comes prior to the Southern Song one by Yan Can. What's more, Yan's thesis is critiqued as "plagiarizing Mr. Li completely in its meaning" 其義則全襲李氏, which apparently takes Yan as a latecomer of Li. This might result from Yan Can's quotation of Fan Chuyi, where he only mentioned the title of the work *Jiyi xinyu* 解頤新語 but not its author's name. Since the late-Ming literatus Huangfu Fang 皇甫汭 (1497-1582) also had a homonymic work, Doronga might have confused the two authors and thus identified Yan as no earlier than a late-Ming scholar. That said, the confusion is still quite surprising for a high-quality *mingwu* monograph like *Maoshi duoshi*. In his study of Doronga's social network, Lin Wenlong has mentioned the lack of referential books in the Liaoning area. This anachronistic claim on Yan Can and Li Shizhen offered a good support to the observation. See, Lin Wenlong 蘭文龍, "Duolong'a shengping jiaoyou yu *Maoshi duoshi* chengshu zhi guanxi kao," 多隆阿生平交游與《毛詩多識》成書之關係考 *Shijiazhuang xueyuan xuebao* 石家莊學院學報 16, no. 2 (2014): 56-58.

nests] and verified repeatedly” (*lǚ pò ér yán zhī* 屢破而驗之), he offered a detailed account with more snapshots:

I notice that newly born larva of the wasp, as a parasite on other insects, has a grain-shaped body which is yellow-white in color, and long rather than round. Slightly grown up, it gets the shape of a giant maggot; then it has head and legs; then with wings grown it is about to get out. When the wasp is far from maturity, the worms and spiders are full of the nest; when it is about to mature, the worms and spiders are nibbled away by the wasp larva; when the wasp flies away, the nest already becomes empty, with mere sloughs of worms and spiders.

見蜂始生之子，寄於他蟲，身者形如米粒，黃白色，長而不圓。少大者形如巨蛆，再大者有頭足，再大則生翼欲出矣。其未成者，蟲蛛盈窠；將成者，蟲蛛為蜂子蝕殘；蜂已飛去，則此穴已空，惟餘蟲蛛蛻皮也。⁶⁸⁷

With the careful depiction of four stages for the growth of the wasp and three stages for the depletion of the insects, Doronga mapped out a clearer inverse relation between the two processes. If one may still interpret Li Shizhen’s account of the insect pupa from both ways, here the more detailed records on the *intermediate stages* regarding the gradual maturation of the wasp and the nibbled status of the insects indicates a much higher likelihood that the final disappearance of the insects is due to the wasp’s consumption rather than any outer mechanism. This direct account of observation was further strengthened by a converse reasoning of the bewitching thesis: Had the millet-like egg resulted from bewitching, how could only one of the dozen or so insects in the nest grow into a wasp? Would it be the case that witchcraft was merely effective to one of them? Although a hard-core supporter of the classic reading may still answer yes, the unlikelihood of this material-based reasoning added a further credibility to the parasite thesis. From this vantage point, Doronga moved back to the textual level of the ode, suggesting the stanza as a progression from nature to the human world: Despite their different species, the wasp could still carry the worm for breeding; how could a father, bearing the same nature, fail to educate his son! The point of evocative analogy was thus not the father-son relationship as claimed by the bewitching thesis, but a shared sense of support between “carrying” and “education.” As a final move, Doronga further buttressed this argument with the philological technique of syntactic consistency. Note

⁶⁸⁷ Doronga, *Maoshi duoshi* (12-juan edition), juan 9: 12a.

that before the *guoluo* imagery, the stanza also mentioned the picking of pulse in the field (see, p. 300), which was not possible for a transformative reading. The supportive sense of “carrying” and “educating” thus formed a better consistency with the “picking” here, collectively pointing to a higher cogency of the parasite thesis.⁶⁸⁸

During the mid-Qing era, Doronga was far from the only scholar who reached this advanced level of observation, though due to his limited access to the cutting-edge scholarly developments of his day, Li Shizhen was the latest supporter of the parasite thesis that he mentioned. As a Liaoning native who spent most of his life outside the pass, his unfamiliarity with the Jiangnan intellectual circles was apparent. In *Maoshi duoshi*, Shao Jinhan’s *Erya* commentary and Duan Yucai’s *Shuowen* commentary were the only two works of top-tier mid-Qing evidential scholars that were frequently quoted by Doronga, while others, particularly Cheng Yaotian and Jiao Xun, who were famed for their natural observations in *Shijing* studies, were not even mentioned once. This unfamiliarity let Doronga miss the one of most detailed observations on the phenomenon in his age, correspondence between Sun Sui 孫綏 (*juren* 1770) and Pan Yinchun 潘應椿 (*juren* 1759, d. 1797 or 1798).⁶⁸⁹ Although the two letters from Pan to Sun are missing, Sun’s reply was recorded in detail in Cheng Yaotian’s *Tongyi lu*.⁶⁹⁰ Having made an initial observation to confirm that *guoluo* egg and the bollworm stack were “facing to each other yet detached,” Sun offered a set of meticulous snapshots that attained a greater concreteness:

From that time on, whenever I saw a wasp nest, I would immediately break it and make observations. What I saw before was the newly born egg. I also saw the egg turning slightly yellow with wrinkled surface. I also saw the egg turning into a muckworm-like larva, whose rear did not detach from the [nest] wall, yet was able to stretch out and draw back. There was a mouth on the black head, which could reach the insects with a simple stretch. As for the insects, some of them were already withered. I also saw that the insects were completely withered, and the larva

⁶⁸⁸ Doronga, *Maoshi duoshi* (12-juan edition), juan 9: 12a.

⁶⁸⁹ For a brief biography of Sun, see, Zhang Xinzeng 張新曾, *Xuxiu Boshan xian zhi* 續修博山縣志 (1937), juan 12: 8b. For a brief biography of Pan, see, Shi Guozhu 石國柱, *Shexian zhi* 歙縣志 (Shanghai: Lühu tongxianghui, 1937), juan 6: 69a-b. The biography mentioned that Pan died in his official position in the Guangzong county. It is recorded that Pan still served as its magistrate in Jiaqing 2 (1797), while a new magistrate was appointed in the next year, from which we can infer his death year. See, Niu Yunchang 牛韞瑞, *Guangzong xian zhi* 廣宗縣志 (Guangzong: Guangzong wenxian weiyuanhui, 1933), juan 7: 15b; juan 12: 8b.

⁶⁹⁰ For the mention of this exchange, see, Cheng Yaotian, *Cheng Yaotian quanji*, 3: 287.

also became stiff above, not being able to stretch out or draw back. I also saw the disappearance of the larva and the presence of a wasp, whose back got detached from the wall. In a color of tender white, it could only wriggle but not fly. And there was also the fully-grown *guoluo*. When [the nest was] broken, it got outside and was able to fly.

自是每遇土蜂房，輒剖視之。前所見者，其子之始生也；又見子色稍黃而膚皺者；又見子化為蟲如糞蛆者，尾不脫壁而能伸縮，黑首有口，稍伸即與蟲相著，蟲有槁死者矣；又見蟲盡槁而蛆亦僵於上，不能伸縮者；又有蛆不見而蜂在者，尾脫於壁而色煥白，僅蠕動不能飛走；又有宛然螺贏，剖之則出而能飛矣。⁶⁹¹

Comparing to Doronga's four-step snapshots, here Sun Sui's account reached an even greater detailedness of six, where the stretching scales of the larva and its stiffening stage were fine observations that never appeared in previous accounts. Yet more impressive was the following material-based reasoning, where Sun mapped out a general mechanism of *guoluo* parasitism by joining these discrete observations together:

In summary, we can know that as soon as [the wasp] completes the nest, it will lay an egg, which sticks on the [nest] wall. Then it fetches the insects as food storage and leaves with the entry enclosed—this is the end of the [mature] *guoluo*'s task. After this, the egg becomes yellow, wrinkled, and transforms into a larva worm, which still sticks to the wall yet can stretch out and draw back. It has a mouth and can eat. Since the insects are directly below, the larva can take and bite them, sucking the blood essence but leaving the skin. Therefore, the withered insects are still there. When it is fully fed and about to transform, it will become stiff like a mature silkworm, which must transform from a cocoon into moth. After turning into a cocoon, it gives up both food and breath. And when it reaches the time of sloughing, it will have both wings and legs, exactly like a *guoluo* wasp. From tenderness to maturity, it thus breaks the wall and leaves.

綜而論之，可知其成房即生卵，粘著壁上，乃取蟲以儲其糧而封戶以去，螺贏之事畢矣。自後卵自黃皺而化為蛆蟲，仍粘壁上而體能伸縮，有口能食，蟲值其下，遂取而齧之，吮其膏血，而棄其皮膚，故槁蟲猶在也。食既足而將化，則僵如蠶老，必由蛹而化蛾。當其為蛹，食息俱廢也。及期而蛻，則翅足畢具，而宛然螺贏。於是由軟而老，破壁以去。⁶⁹²

For the first time, the discrete observations of natural traits were synthesized into a general explanation through inference, where Sun, with his full insights, formulated a mechanism for feeding from the flexibility of the *guoluo* larva and the position of the bollworms, as well as a mechanism of emergence from the stiff body and its analogy to the silkworm. This idiosyncratic way of feeding, along with the

⁶⁹¹ Cheng Yaotian, *Cheng Yaotian quanji*, 3: 286.

⁶⁹² Quoted from Cheng Yaotian, *Cheng Yaotian quanji*, 3: 286.

organogenesis of the mouth, offered a good explanation for the time lapse between the growth of the larva and the consumption of the worm stack, which, though accounted by both Li Shizhen and Doronga, was unclear about the mechanism. Meanwhile, the inference of the emergence process also helped to clarify the mistakes in these accounts caused by insufficient “data points.” With the “blood essence” of the bollworms sucked, the cocoons observed by Li Shizhen must belong to the *guoluo* larva rather than the stack worms. Similarly, the skin remnants accounted by Doronga must not be “sloughs” of the stack insects, but the leftovers of the larva’s feast. Such explanatory and rectifying power testified to the cogency of the parasite thesis, in front of which any systematic defense on the classic reading would pale. As the climax of *guoluo* observation in both the density of stages and the extent of reasoning, this entry by Sun Sui offered a good example of how intensive observation and mechanism reasoning of biological behavior could lead to the revealing of more refined material textures.

Finally, if Doronga and Sun Sui represented the intensive intervention through their repeated breaking of the nests at different stages, Cheng Yaotian took a different approach of close observation that did not disturb the hatching process. Due to this reason, he failed to identify the feeding mechanism but speculated that the insect stack maintained a “warm *qi*” for hatching, which he conceded to be inferior to Sun Sui’s meticulous account.⁶⁹³ That said, Cheng’s record was more successful in the observations from the outside. First was his detailed account of the sound of the wasp in its nest construction. As he noted, for a wasp that built a round protruding nest on a wall or window column, within the half-day of construction, the wasp only made a sound when flying; it remained silent during its construction and when flying with worm in its mouth. Such fine observations were sufficient for Cheng to conclude that the bewitching chant “Be like me!” in the ode was a mere wishful construction that was groundless in the natural world.⁶⁹⁴

⁶⁹³ Cheng Yaotian, *Cheng Yaotian quanji*, 3: 282, 287.

⁶⁹⁴ Cheng Yaotian, *Cheng Yaotian quanji*, 3: 282-283.

More interesting was Cheng's observation on the mature wasp's breaking of its nest. In this meticulous account, Cheng's counting of the breaking days, material intervention, and contrast of different observing groups offered the impression of a proto experiment. The Northern Song scholar Peng Cheng 彭乘 (985-1049) once made a distinction between different types of slender-waisted wasps. According to Peng, those nesting in the wall were *guoluo*, while those nesting in brush tubes were called *pulu* 蒲盧.⁶⁹⁵ However, recall from Chapter Three that Cheng was one of the leading scholars in the study of binomes. His path breaking *Guoluo zhuanyu ji* 果贏轉語記 focused precisely on the binomic series of *guoluo*. Although the work would only come out three decades later, when looking into the wasps in 1782, Cheng had already underlined the binomic relationship between *guoluo* and *pulu*, which were “rough description of the appearance that did not have a fixed reference.”⁶⁹⁶ Due to this, he included multiple kinds of slender-waisted wasps into his eyewitness accounts, where two cases were noted in particular detail. As shown in *Table 18*, the two sets of observations were made in the 5th and 6th months of the year respectively. If in his morphological description, an important sign of concreteness was his rich inclusion of numerical measurements, here the sense of accuracy was delivered through meticulous day counts for biological behaviors. Although in Cheng's original entry, the records were piled up in prose, for a better presentation, we can easily map out the stages of observation according to the day sequence.

Despite a similar meticulousness on the process of building the nests, his record on their natural breaking was particularly noteworthy, for both observations included a thoughtful “twist” inside. For Observation One, when a hole was made in “less than ten days,” Cheng did not make a hasty dissection of the nest as his predecessors had, but, out of a consideration that the hole might be opened by others, he fixed it again and waited for another ten odd days before splitting it. This diachronic intervention helped to confirm that the former break was indeed caused by some internal mechanism. Similarly, for

⁶⁹⁵ Zhao Lingshi and Peng Cheng, *Hou qing lu, Moke hui xi, Xu moke hui xi*, 330.

⁶⁹⁶ Cheng Yaotian, *Cheng Yaotian quanji*, 3: 281. 擬諸形容，大率無專物。

Observation Two, he did not terminate the observation when noticing the hole in the nest (Nest A), but compared it to another nest (Nest B) which remained intact even after twenty odd days. On discovering a dead wasp inside, this synchronic contrast confirmed the necessity of a normal-functioning wasp breaking nest.

Table 18: Cheng Yaotian's Observations on the Building and Breaking of the Wasp Nest⁶⁹⁷

Observation	I		II		
Type of Wasp	Slender-Waisted wasps which build nests in brush caps		Slender-Waisted wasps which build nests on wall and window columns		
Starting Time	After the summer solstice, 5 th month, 1782		16 th day, 6 th month, 1782		
	Day Count	Observation	Day Count	Observation (Nest A)	Observation (Nest B)
Nest Building	~4 days	Completion of a double-layered nest, with several spiders stored on each layer.	<0.5 day	Completion of a round nest, with one big bollworm and two small ones stored inside.	
Nest Breaking	<10 days	A hole was made at the end. [“On suspecting that the hole was drilled by the children, I smeared the hole with earth again.”]	7-8 days	A hole was made on the side of the nest. The nest was not split for internal check.	
	> 20 days	Nest intact. [nest split] One slough on the bottom layer; two on the upper layer.	>20 days		Nest intact. [nest split] A mature wasp died in the nest.

⁶⁹⁷ Based on Cheng's essay in Cheng Yaotian, *Cheng Yaotian quanji*, 3: 282-283.

- Notes: 1. Following Cheng's own account, the hatching days are counted separately from the nest building days.
2. Cheng's material interventions on the nest are marked in brackets.

Although Cheng did not make an explicit conclusion, the message of the two observations were more than clear when put together: the nest hole was broken by the wasp after its maturity. Like his predecessors, Cheng did not observe the very moment for the wasp's breaking out, yet he was the only one who backed up his reasoning by a set of carefully arranged material interventions. Unlike Doronga and Sun Sui, whose splitting of the nest was subordinated to their purpose of direct observation, Cheng's waiting, fixing, and comparing indicated a design of operations which by itself framed the direction of reasoning. It was in this sense that the material interventions gained the nature of a proto experiment. Admittedly, for Cheng, the designs may have not been conceived from the very beginning, but only arose in his mind in the middle as *ad hoc* operations. Moreover, the logic behind the operations also had some room for further clarification. For instance, a modern natural historian may carry out a stricter control experiment by using the same kind of slender-waisted wasp for the two observations, or splitting "Nest A" for an internal check after the 20-odd days as well. That said, Cheng's account already indicated a self-conscious use of proto-experimental method for the inquiry of animal behavior. If his morphological study of the plants, as noted by Métaillé above, indicated the emergence of an "implicit botany," here the meticulous account of animal behavior must also reach the standard of an "implicit zoology," where the observations and interventions were further backed up by an experimental mind.⁶⁹⁸

As good demonstrations of the epistemic development in mid-Qing material inquiries, the above examples on the *wanlan* vine and the *guoluo* wasp represent the level of refinedness a Chinese scholar

⁶⁹⁸ Métaillé, *Science and Civilisation in China, Vol. 6, Biology and Biological Technology, Part IV: Traditional Botany: An Ethnobotanical Approach*, 236-36.

may achieve before the advent of Western “sinologist-naturalists” in the mid-nineteenth century.⁶⁹⁹

Nevertheless, although the complexity and intensity of these cases were rather outstanding, the methods were applied as a general approach to a much wider scope of natural *mingwu* objects. For Cheng Yaotian, the two essays on the *wanlan* vine came from his *Shicao xiaoji* 釋草小記 (Minor records on the interpretation of grasses), a separate book in *Tongyi lu* that collected 18 essays in a similar format on multiple kinds of plants. His proto experiment on the wasp, excerpted from his longer essay on the various significations of *guoluo* and *mingling*, came from another book, *Shi chong xiaoji* 釋蟲小記 (Minor records on the interpretation of insects), which also included 6 essays on animals.⁷⁰⁰ Comparable to the lengthy philological analysis in *Jingyi shuwen* (Cf. Chapters Three and Four), such essays reminded us of the format of scholarly treatises, which, unlike the more traditional forms of classic commentaries, *bencao* entries, or brush-note styled short entries, by itself symbolized a more developed stage of evidential analysis. Yet for Cheng, none of his natural writings were as influential as his *Jiu gu kao* 九穀考 (On the Nine Grains), a collection of essays targeting on *ming-wu* correspondences of common grains. Apart from intensive philological analyses, the emphasis of on-site material evidence was apparent. In order to establish the correspondence between *ji* 稷 and sorghum, presumably the most influential finding in the work, Cheng claimed to have traveled “five rounds” between the north and the south for “eye witness observation” and discussed with local peasants repeatedly over a decade.⁷⁰¹ According to a recent article, *Jiu gu kao* mentioned as many as ten different places for on-site observation, and 12 occasions of interviews of local peasants.⁷⁰² Although some of Cheng’s findings were dismissed by later scholars such

⁶⁹⁹ For how these Western scholars took a step further from the indigenous natural historical studies, see, Fa-ti Fan, *British Naturalists in Qing China: Science, Empire, and Cultural Encounter* (Cambridge and London: Harvard University Press, 2004), ch. 4, esp. p. 115-118.

⁷⁰⁰ Here, the character “*chong*” 蟲 took a broader meaning, for the book also includes two essays on the sheep and horse, respectively.

⁷⁰¹ Cheng Yaotian, *Cheng Yaotian quanji*, 3: 87. For a long list of endorsement on this claim in the 19th century, see, Qi Sihe 齊思和, “Maoshi guming kao,” 毛詩穀名考 *Nongye kaogu* 農業考古, no. 1 (2001): 207.

⁷⁰² Liu Shuang 劉爽, “Cheng Yaotian *Jiu gu kao* lunxi,” 程瑤田《九穀考》論析 *Shandong nongye daxue xuebao* 山東農業大學學報 20, no. 3 (2018): 24.

as Qi Sihe from modern archaeological and botanical evidence, the work was field-defining in the 19th century, which was widely accepted by the leading evidential scholars of the day.⁷⁰³

Among the leading evidential scholars, Hao Yixing was another one with an apparent interest in natural inquiries. Besides the numerous philological and commentarial writings, his collected works also included three titles on natural observations: *Haicuo* 海錯 (Marine creatures), which included 48 entries on different marine animals and plants in his native Shandong area; *Fengya xiaoji* 蜂衙小記 (Minor records on the bee hive), a small collection of 15 entries on the social behavior of bees and apiculture; as well as *Yanzi chunqiu* 燕子春秋 (Spring and autumn of swallows), which marked out the phenology of swallow behavior according to monthly changes⁷⁰⁴—though, out of an aesthetic of conciseness, his fine observations were rendered in the more traditional form of brush-note styled short entries.⁷⁰⁵ Such accounts of natural observations were further enriched by Hao's 8-juan agricultural work *Baoxun* 寶訓 (Treasured admonitions). Although the body of the work was an extensive compilation of agricultural texts according to farm work types, his own commentaries in smaller characters—in particular the two chapters on vegetable and fruit cultivation—included plenty of hands-on knowledge that must have come from either his personal experience or a close consultation with local practitioners.⁷⁰⁶

Such collected writings were by no means the sole medium for natural inquiry. For Hao Yixing, another main stage would be his renowned *Erya* commentary. The final seven chapters of this 19-chapter

⁷⁰³ For the prevailing endorsement of Cheng's identifications, Qi Sihe had raised Duan Yucai, Wang Niansun, Hao Yixing, Zhu Junsheng 朱駿聲, Liu Baonan, and Sun Yiran 孫詒讓 as notable examples. An important modern critique of Cheng's sorghum interpretation comes from the possible foreign origin of the plant, whose introduction into China might be much later than the prevalent use of the term *ji*—though this is still in debate in agricultural archaeology. See, Qi Sihe, "Maoshi guming kao," 208-210, 220; Zhao Lijie 趙利傑, "Xianqin lianghan gaoliang guming kao," 先秦兩漢高粱古名考 *Nongye kaogu* 農業考古, no. 1 (2019): 37-39.

⁷⁰⁴ Hao Yixing, *Hao Yixing ji*, 5: 4471-4505, 4513-4526, 4535-4542.

⁷⁰⁵ For instance, in *Fengya xiaoji*, Hao noted that "the bees gathering from the flowers do not produce honey; those in charge of honey-making is another kind of bee, which is slight plumper and black comparing to the normal bees," a fine observation that is confirmed by modern entomology. 蜂之采花者不釀蜜，釀蜜者別一蜂，視常蜂差大而黑。However, unlike Cheng Yaotian who would offer a full account of the observation context, Hao simply left the description a terse one like this. See, Hao Yixing, *Hao Yixing ji*, 5: 4537. For Hao's aesthetic preference of conciseness (*xing xi jianlüe* 性喜簡略), see, Hao Yixing, *Hao Yixing ji*, 7: 5228.

⁷⁰⁶ See, Hao Yixing, *Hao Yixing ji*, 5: 4386-4413.

dictionary were all about flora and fauna, which, according to Hao, could only be annotated after “ear and eye experiences” (*erwen muyan* 耳聞目驗). In fact, this was the major place where Hao considered his own commentary to be superior to earlier ones—not only the Song “supplements” such as Lu Dian’s *Piya* and Luo Yuan’s *Erya yi*, but also its most immediate predecessor, Shao Jinhan’s 邵晉涵 (1743-1796) *Erya Zhengyi* 爾雅正義 (Authentic meanings of *Erya*). As claimed by Hao, whenever there was a different interpretation on the plants and animals in his commentary, “it has all gone through eye-witness,” and this, according to him, was “how his work differs from Shao’s.”⁷⁰⁷ A similar calling was also discernable in the commentary to *Guangya*, a 10-juan expansion of *Erya* with the final *juan* devoted exclusively to flora and fauna. As we will see in the next chapter, Wang Niansun and Wang Yinzhi had a general tendency to prioritize philological reasoning over material evidence. However, during their compilation of the *Guangya* commentary, it was still reported that they purchased and arrayed various kinds of plants and animals at their house to “observe their initial stage and growth so as to collate the formal descriptions by previous people.”⁷⁰⁸ Compiled mainly by the young Yinzhi in his late twenties, although most of the entries in this final section were the rather “old-fashioned” erudite accumulation of textual references, one could indeed find a few places with Yinzhi’s own notes where the morphological and behavioral descriptions were particularly detailed. Most started with the character “*jin*” 今 (nowadays)—a comparison between textual sources and current evidence—these accounts corroborated the likelihood of their being “household observations.”⁷⁰⁹

⁷⁰⁷ See, Hao Yixing, “Yu Sun Yuanru guancha shu” 與孫淵如觀察書 in Hao Yixing, *Hao Yixing ji*, 7: 5227-28; Hu Peihui 胡培暉, “Hao Langao xiansheng mubiao” 郝蘭皋先生墓表 in Hao Yixing, *Hao Yixing ji*, 7: 6092.

⁷⁰⁸ This was recorded by the late-Qing philologist Liu Yueyun 劉嶽雲 (1849-1917), a follower of the *Guangya* scholarship. See, Liu Yueyun 劉嶽雲, *Shi jiude zhai zazhu* 食舊惠齋稌箸 (Chengdu: Zunjing shuyuan, 1882), juan 1: 35a. For Yu Wanli’s endorsement of the record based on intellectual familiarity, see, Yu Wanli, “Guangya shuzheng zhengli ben xu,” 25. 花草竹木鳥獸蟲魚皆購列於所居，視其初生與其長大，以校對昔人所言形狀。

⁷⁰⁹ For notable examples, see, e.g., Wang Niansun, *Guangya shuzheng*, 4: 1540, 1655, 1673, 1678-79, 1757, 1818-19.

It was from this perspective that the prevalence of material inquiry in the evidential study of *Shi* became easier to understand, where the natural imagery concerned not only textual names, but also—as shown from the two examples above—artful evocations of natural traits for the delivery of deeper poetic messages. As for the mid-Qing *mingwu* monographs devoted to plants and animals in *Shi*, Jiao Xun's *Maoshi caomu niaoshou chongyu shi* 毛詩草木鳥獸蟲魚釋 (Elaborations on grasses, trees, birds, and beasts in *Maoshi*, henceforth *Elaborations*) and Doronga's *Maoshi duoshi*, were among the most typical in material-based analysis, which we will come back to several times in the current and the following chapter. But relevant discussions of material evidence were also abundant from other genres, such as classic commentaries, vocabulary books, and *bencao* writings. For some quick examples, in his *Jiu gu kao* Cheng Yaotian noted from his on-site observation that the planting of sorghum was prior to glutinous millet, while its blossoming was later. Through his alignment of sorghum with the name *ji* 稷, this temporal sequence added an apt footnote to the beginning lines of *MS* #65, “That glutinous millet (has ears that are) hanging down; oh, the sprouts of that sorghum!”⁷¹⁰ In Hao Yixing's *Erya* commentary, he noted from a local observation at his hometown that the “spring cicada” (*Terpmosia vacua*), or *qin* 蜩, had a “square head and wide forehead.”⁷¹¹ Confirming the Mao commentary, this observation helped to elucidate the line in *MS* #57, which used “*qin*-like head and silkworm-like eyebrows” to describe a beautiful lady.⁷¹² In a supplementary note to *Guangya shuzheng*, the Wangs noticed from direct observation that when the turnip, or *manjing* 蔓菁, produced its seeds, its root would naturally become “withered, decayed, and inedible.” This provided an excellent explanation to the lines in *MS* #35, “One

⁷¹⁰ Cheng Yaotian, *Cheng Yaotian quanji*, 3: 88; Zheng Xuan, *Maoshi zhuan jian*, 95; with adaptation, the translation follows Karlgren, *The Book of Odes*, 45. 彼黍離離，彼稷之苗。

⁷¹¹ For the modern taxonomy of this cicada, see, Guo Fu and Needham, *Zhongguo gudai dongwuxue shi*, 112.

⁷¹² Hao Yixing, “*Erya yishu*,” 4: 3615; Zheng Xuan, *Maoshi zhuan jian*, 82. 蜩首蛾眉。

gathers the turnip, one gathers the radish, without regard to their lower part,” suggesting that one should not abandon the upper part due to the unfavorable lower.⁷¹³

Covering a wide range of textual genres, the meticulous accounts of natural objects witnessed a development in not only the detailedness of observation, but also its intimacy with classic scholarship. This was particularly salient for scholars such as Cheng Yaotian, Jiao Xun, and Hao Yixing, whose mastery in *both* the philological and material approaches highlighted a parallel emphasis on the two sides for an all-round epistemic construction of the natural “*wu*.” Admittedly, compared to the prevailing breakthroughs in philological techniques and their systematic transmission along intellectual lineages, the cultivation of “natural interests” appeared to be more individualized among the evidential scholars, where we do not see the emergence of a collective group of natural historians on the crossing of scholars and physicians, like in Tokugawa Japan.⁷¹⁴ Nevertheless, the cogency of such material evidence was widely accepted. Within merely one or two moves on the referential network, these first-hand accounts moved into the source base of more text-oriented scholars and reached a wider significance. The prevailing endorsement of Cheng Yaotian’s *Jiu gu kao*, as we have mentioned above, captured precisely this diffusing mechanism. Despite the lack of a natural historical community in the social sense, there was certainly one in the bookish sense—both a fruitful discussion among the natural masters, and a meaningful dialogue with the philological side.

Antiquarian Objects

Besides flora and fauna in the natural world, another major aspect of material inquiry was manual-made artifacts. In her monograph on the social life of inkstones, Dorothy Ko maps out a revealing continuum between the professions of scholar and artisan in the early-to-mid-Qing period, where the skill

⁷¹³ Wang Niansun, *Guangya shuzheng*, 4: 1673. 至結子時，根即枯朽而不可食。Zheng Xuan, *Maoshi zhuan jian*, 50; with adaptations, the translation follows Karlgren, *The Book of Odes*, 22. 采葑采菲，無以下體。

⁷¹⁴ See, Federico Marcon, *The Knowledge of Nature and the Nature of Knowledge in Early Modern Japan* (Chicago and London: University of Chicago Press, 2015), Part 2.

of stone carving and the knowledge of archaic scripts closely intertwined.⁷¹⁵ Drawing inspiration from Pamela Smith's "artisanal epistemology," in the epilogue, Ko generalized her observations into a "craft of *wen* (word, culture)" commonly shared by scholars and artisans in early modern China, which "construes classical scholarship and textual production as material and embodied practices."⁷¹⁶ Meanwhile, Kaijun Chen's and Yijun Wang's studies on technocratic engagement with porcelain and tinware making also connected hands-on knowledge and artisanal epistemology with an alternative mode of literati learning.⁷¹⁷ Regarding this prioritization of the material aspect, recent scholars have emphasized the ethnic significance of their bannerman and bondservant identities, whose different education background, in particular their training experience in the Imperial Household Workshop, "brought subtle but perceptible shifts to Han literati culture."⁷¹⁸

Although it remained debatable regarding to what extent this ethnic factor shaped or facilitated material inquiries in the intellectual sphere—an important topic worthy of a monographic study of its own—by the time of the mid-Qing era, material enthusiasm for artifacts had been prevalent among the hard-core evidential scholars in the capital and the Jiangnan area. In her disciplinary review of mid-Qing evidential learning, So-an Chang mentioned Ruan Yuan's special emphasis on astronomical devices in his compilation of *Chouren zhuan* 疇人傳 (Biographies of Astronomers), and noted a general approach from the "investigation of artifacts" to the acquisition of "artifactual knowledge" (*qi zhishi* 器知識) as an integral aspect of Qing learning.⁷¹⁹ A similar material inclination was also observable in Dai Zhen's

⁷¹⁵ Ko, *The Social Life of Inkstones*, 104, 106, 191.

⁷¹⁶ Ko, *The Social Life of Inkstones*, 190. For "artisanal epistemology" and its contribution to the making of natural knowledge, see, Pamela Smith, *The Body of the Artisan: Art and Experience in the Scientific Revolution* (Chicago: University of Chicago Press, 2004), 8, 238-239.

⁷¹⁷ Chen, "The Rise of Technocratic Culture in High-Qing China," 230-31; Wang, "From Tin to Pewter," 212-13.

⁷¹⁸ See, Ko, *The Social Life of Inkstones*, 15-20 (quotation from p. 20); also see, Chen, "The Rise of Technocratic Culture in High-Qing China," ch. 1; Elisabetta Corsi 伊麗, "Nian Xiyao de shengping jiqi dui yishu he kexue de gongxian," 年希堯的生平及其對藝術和科學的貢獻 *Zhongguo shi yanjiu* 中國史研究, no. 3 (2000): 158, 162, 165.

⁷¹⁹ Chang So-an 張壽安, "Qingru de "zhishi fenhua" yu "zhuanmen zhi xue" mengya: Cong jichang lunbian tanqi," 清儒的"知識分化"與"專門之學"萌芽: 從幾場論辯談起 *Lingnan xuebao* 嶺南學報 3 (2015): 92-93.

research, who not only developed a device-based system of plain trigonometry from the quadrant square, but also was reported to have been involved in more direct material engagements, such as the design of mechanical carts according to Western methods, as well as the remaking of a “Dipper Machine” (*xuanji* 璇璣) to replicate celestial movements.⁷²⁰ Cheng Yaotian was reported to have supervised casting a bronze bell in 1780 based on Dai Zhen’s reconstruction of its ancient design, and two bigger ones in 1802 for Ruan Yuan with arithmetical support from Li Rui 李銳 (1769-1817), one of the top mathematicians of the day.⁷²¹ Besides, *Tongyi lu* also included the illustrated record for some of Cheng’s minor material works, such as his remaking of a wooden handle for an ancient dagger-axe in his collection (*Figure 64*).⁷²² These active engagements in design and reconstruction indicated a material interest comparable to the bondservants and banneremen.

⁷²⁰ For Dai Zhen’s development of the device-based plain trigonometry, see, He, “Acquiring Principle from the Concreteness”. For the more direct engagements, see, Dai Zhen, *Dai Zhen quanshu*, 7: 95, 97, 183.

⁷²¹ See, Cheng Yaotian, *Cheng Yaotian quanji*, 2: 251-52, 265-68. For the first cast, also see, Benjamin A. Elman, “The Story of a Chapter: Changing Views of the “Artificer’s Record” (“Kaogong ji” 考工記) and the Zhouli,” in *Statecraft and Classical Learning: The Rituals of Zhou in East Asian History*, ed. Benjamin A. Elman and Martin Kern (Leiden and Boston: Brill, 2010), 353–54; Kondō Mitsuo 近藤光男, *Shinchō kōshōgaku no kenkyū* 清朝考證學の研究 (Tokyo: Kenpun shuppan, 1987), 293-296.

⁷²² Cheng Yaotian, *Cheng Yaotian quanji*, 2: 132.

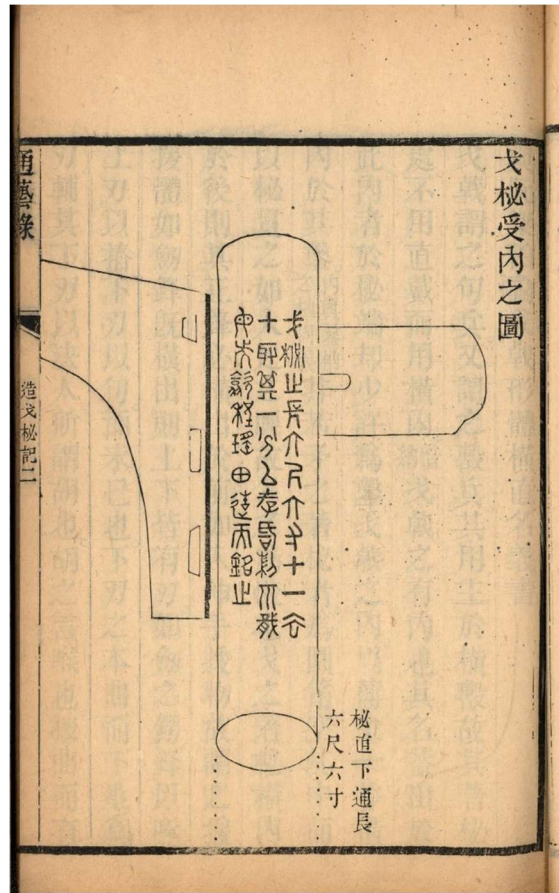


Figure 64: Illustration of Cheng Yaotian's remade dagger-axe handle, with inscriptions carved in seal script. The inscription goes as: "The length of the dagger-axe handle should be six *chi* six *cun*. With ten elevenths [of its length] omitted, I use the [remaining] one eleventh to preserve its design, and divinely store it for my [deceased] mother and father. Made and inscribed by Cheng Yaotian of She."⁷²³ The seal script, along with the archaic textual style, recalled the sacrificial inscriptions on the ancient bronzes, thus connecting the ancient rites to a family tradition in a thoughtfully designed antiquarian manner.

That said, for these mid-Qing scholars, the evidential study of ancient artifacts loomed much larger than the reenactment of new ones. In Chapter Three, I discussed the revival of bronze-and-stone studies in the mid-Qing era, though in that section, the focus was exclusively on textual inscriptions. Although academic interest in three-dimensional objects—facilitated by composite rubbings and the rise of the "Study of Artifacts" (*qiwu xue* 器物學)—only became prominent in the late Qing under the generations of Wu Dacheng and Luo Zhenyu, their predecessors had already emerged in the mid-Qing

⁷²³ Cheng Yaotian, *Tong yi lu*, "Zao gebi ji": 2a. 戈秘之長六尺六寸。十一去十，取其一分，以存𠄎(厥)制，示戡母考。歎程瑤田造而銘之。

period.⁷²⁴ Regarding this, Cheng Yaotian was undoubtedly the most prominent figure. In his natural studies, it was frequent for Cheng to win out in his style of description and representation rather than the accuracy of his conclusion—form overshadowed content. Yet the evidential study of ancient artifact was Cheng’s *métier* that won him a lasting fame. In the early republican era, when Luo Zhenyu traced back the lineage of antiquarian study in his preface to Wang Guowei’s *Guantang jilin* 觀堂集林 (Collected anthology of Guantang), he mentioned Cheng Yaotian and Wu Dacheng as the two major predecessors. According to Luo, although Wu covered a broader scope in his antiquarian studies thanks to newly excavated materials, he was still not on par with Cheng with regard to the “refinedness and erudition” (*jingbo* 精博).⁷²⁵ Similar to his natural observations, most of Cheng’s antiquarian studies were written in the form of topic-specific essays and collected as *Kaogong chuanguwu xiaoji* 考工創物小記 (Minor Records on the investigation of artifacts and creation of objects) in *Tongyi lu*.

As one of the major discoveries in this section, the fine distinction that Cheng made between the dagger-axe (*ge* 戈) and the halberd (*ji* 戟) was the result of a close investigation of more than 20 ancient pieces or ink-rubbings across more than ten years.⁷²⁶ According to Cheng, the key difference between the two categories was the design of the haft (*na* 內): the halberd had blades (*Figure 65*) while the dagger-axe did not (see *Figure 52* on p. 285).⁷²⁷ Here, a mental shift by Cheng is particularly noteworthy. At first, he worked closely with Zheng Xuan’s commentary and proposed a different conception of the halberd design (*Figure 66*), based on which all the ancient pieces that he had handled were classified as dagger-axe. However, out of the plain insight that one should not encounter more than 20 dagger-axes but no halberds at all, he reexamined the pieces and came up with a material-derived morphological distinction

⁷²⁴ For the significance of Wu and Luo in antiquarian studies, see, Brown, *Pastimes*, ch. 4; Cheng-hua Wang, “Luo Zhenyu and the Formation of *Qiwu* and *Qiwuxue* in the First Decade of the Republican Era,” in *Lost Generation: Luo Zhenyu, Qing Loyalists and the Formation of Modern Chinese Culture*, ed. Chia-ling Yang and Roderick Whitfield (London: Saffron Books, 2013), 32–49.

⁷²⁵ See, Luo Zhenyu’s preface to *Guantang jilin* 觀堂集林 in Wang Guowei 王國維, *Wang Guowei quanji* 王國維全集 (Hangzhou: Zhejiang jiaoyu chubanshe, 2010), 8: 3.

⁷²⁶ Cheng Yaotian, *Cheng Yaotian quanji*, 2: 66.

⁷²⁷ Cheng Yaotian, *Cheng Yaotian quanji*, 2: 100–101.

instead, which was more successful in differentiating his own recorded pieces than fitting with the transmitted text.⁷²⁸ In particular, among these recorded pieces, there were three on which Cheng identified a possible *ji* 戟 character inscribed. One of the inscriptions was univocally clear. However, when he adopted the earlier conception of *ji*, even this piece was also classified as a dagger-axe despite its inscribed name.⁷²⁹ The inscriptions on the other two records were more debatable orthographs, if not far-fetched readings. For these two cases, the paleographic identification as *ji* only became reasonable after being morphologically corroborated under the new criterion.⁷³⁰ In all these cases, it was the morphological feature rather than the inscribed name that determined the direction of reasoning.

In the history of Chinese antiquarian studies, “self-naming method” (*ziming fa* 自名法) had long been paradigmatic in the categorization of bronzewares, which granted the inscribed name with the highest authority. In his study of Northern Song antiquarianism, Jeffery Moser has identified Lü Dalin 呂大臨 (1042-1090) as a notable deviation from his contemporaries for his greater material inclination. In particular, he mentions a similar case where Lü classified an antique vessel as a *dui* 敦 despite its self-inscription as *dingyi* 鼎彝, which, according to Moser, indicated the overcoming of “visual rhetoric” to the “nomenclative authority of the inscription.”⁷³¹ Yet strictly speaking, even this is not comparable to

⁷²⁸ Cheng Yaotian, *Cheng Yaotian quanji*, 2: 65-66. For instance, the new definition failed to provide a good explanation regarding why the halberd had the alternative names of “three-blade halberd” (*sanfeng ji* 三鋒戟) in Zheng Xuan’s commentary or “three-blade branch-weapon” (*sanren zhi* 三刃枝) in *Fangyan* 方言. Meanwhile, his identification of the bladed haft as the *ci* 刺 (stab) section also failed to work well with the *Kaogong ji* text, which suggested that “the halberd...weighs three *lue* together with the stab” 戟...與刺重三鈔. Although Cheng’s new thesis became the standard definition of *ji* in the 19th century, such inconsistencies offered an entry point for modern archaeologists to revisit the issue, and Guo Moruo made the next breakthrough by switching back to Cheng’s former conceptualization. According to Guo, an ancient halberd was made up of two bronze sections, a dagger-axe shaped “branch,” and a spear shaped “stab,” which were bound onto the same shaft. As for the blade on the haft, it is now considered as a sign for a *later periodization* for both the dagger-axe and the halberd, rather than a differentiation of the two. That said, Cheng had indeed identified a meaningful material feature with art historical significance. See, “Shuo ji” 說戟, in Guo Moruo 郭沫若, *Yin Zhou qingtongqi mingwen yanjiu* 殷周青銅器銘文研究 (Beijing: Renmin chubanshe, 1954), 172–86; Wang Shaohua 汪少華, *Kao gong ji mingwu huizheng* 《考工記》名物匯證 (Shanghai: Shanghai jiaoyu chubanshe, 2019), 314–18.

⁷²⁹ Cheng Yaotian, *Cheng Yaotian quanji*, 2: 66, 72.

⁷³⁰ Cheng Yaotian, *Cheng Yaotian quanji*, 2: 80, 135.

⁷³¹ Jeffery Moser, “Why Cauldrons Come First: Taxonomic Transparency in the Earliest Chinese Antiquarian Catalogues,” *Journal of Art Historiography*, no. 11 (2014): 20–21.

Cheng's material emphasis. This is because “*dingyi*” (literarily, tripods and vessels) is a general name for bronze vessels, which does not form a competing relationship with the more specific *dui* vessel as in the case between the dagger-axe and the halberd. Cheng's morphological-based reasoning, deviating further from the epistemic priorities in the self-naming method, mapped out an alternative typological approach which drove closely from the material aspect.

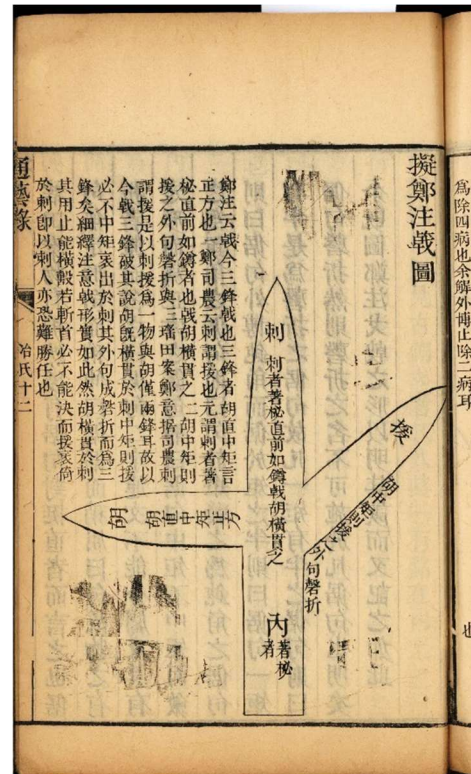
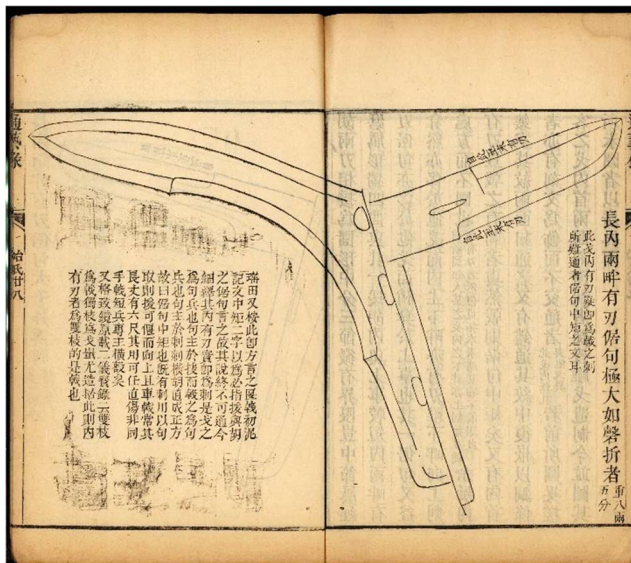


Figure 65 (left): Illustration of the ancient halberd in *Tongyi lu*⁷³²

Figure 66 (right): Former conceptual illustration of the ancient halberd in *Tongyi lu*⁷³³

Although this lengthy distinction of the two weapons derived from the *Record of Artifacts* and was primarily an antiquarian study on its own, it still contributed to the understanding of a specific line in MS #189—“*ru shi si ji*” 如矢斯棘. As an analogy for the crisscrossing building frames, the line was

⁷³² Cheng Yaotian, *Tong yi lu*, “Yeshi”: 27b–28a.

⁷³³ Cheng Yaotian, *Tong yi lu*, “Yeshi”: 12a.

interpreted by Zheng Xuan as “like a bow-and-arrow holder who twisted his elbows like a halberd (*ji qi zhou* 戟其肘),” where the final character *ji* 棘 was taken as a phonetic loan for *ji* 戟.⁷³⁴ But why was the halberd a proper analogy for this gesture? According to Cheng, this was because when holding the bow and the arrow in both hands, one would naturally twist the arms akimbo, and it was in this way that the gesture became comparable to the halberd, which had “both the ridge (*yuan* 援) and the stab (*ci* 刺, i.e., the bladed haft), two sharp ends, stretching outward.”⁷³⁵ Apparently, Cheng’s material-derived definition of the halberd was the key to this analogy.

If this halberd example explains the antiquarian studies could benefit the understanding of *mingwu* images in *Shi*, the following one demonstrates the opposite mechanism, namely, how *mingwu* terms in *Shi* facilitated Cheng’s antiquarian studies. In the ode “Gongliu” 公劉 (*MS* #250), one finds an array of weapons for Gongliu’s troops:

弓矢斯張	He brought out bows and arrows,
干戈戚揚	shields, and dagger-axes, axes and bigger axes. ⁷³⁶

According to Mao, *qi* 戚 was interpreted as *fu* 斧, the normal name for axe, and *yang* 揚 as *yue* 鉞—both belonged to the axe family. But the commentary tradition was less clear regarding the difference between these two sub-categories. *Guangya* suggested *qi* and *yue* as alternative names for the more common *fu*; Kong Yingda made a further differentiation of the two subcategories according to size, noting *yue* as the bigger axe and *fu* the smaller one.⁷³⁷

⁷³⁴ Zheng Xuan, *Maoshi zhuan jian*, 255.

⁷³⁵ Cheng Yaotian, *Cheng Yaotian quanji*, 2: 104. 必曲其兩肘作以手叉腰狀，如戟之有援有刺，兩鋒支出向外。

⁷³⁶ Zheng Xuan, *Maoshi zhuan jian*, 394. With slight adaptations, the translation follows Karlgren, *The Book of Odes*, 207.

⁷³⁷ Kong Yingda, *Maoshi zhengyi*, 1113.

In the artifact section of *Tongyi lu*, Cheng recorded four axes altogether.⁷³⁸ The first two, one collected by Cheng himself (*Figure 67*) and another by Hong Yangquan 洪養全 (*Figure 68*), had nothing particularly special in their forms. At this time, Cheng also followed the transmitted texts, taking *yue* as the bigger *fu*, with *qi* and *yang* as their alternative names. However, his idea began to change when his son brought back a new piece from Beijing, which, as shown in *Figure 69*, had a rectangular blade which was significantly different in shape from the previous two cases. Here, the alternative names of *qi* and *yang* in *Maoshi* inspired Cheng for a more refined typology:

I suppose this should be the *qi*-axe as in the term “*qi-yang*.” *Qi* 戚 is to speak of *cu* 蹙, or being constrained. Its blade is constrained and narrow. This forms a contrast with the axe that names *yang*, which means to spread and fly upwards. Therefore, its blade is widely stretched.

余疑爲戚、揚之戚也。戚之言蹙也，其刃蹙狹。對鉞名揚者言之，彼爲發越飛揚，故其刃侈張。⁷³⁹

Similar to his differentiation between the dagger-axe and the halberd, here Cheng passed over the classic definitions in the transmitted commentary once more for a brand-new morphological distinction, based on the antiquarian pieces that he had engaged with in person. That said, the significance of the alternative names *qi* and *yang* from the ode was apparent. For it was only from these less-used names that Cheng discovered the philological traces that could account for the formal difference at hand, thus transforming his local antiquarian distinction into a general typology for the axe.

⁷³⁸ Here, I only count the normal *fu*-axes that were directly related to our discussion, for which the blade goes perpendicular to the handle. Besides, Cheng also included five *jin* 斤-axes in his work, for which the blade extends out from the top of the handle. See, Cheng Yaotian, *Cheng Yaotian quanji*, 2: 116–123, 237.

⁷³⁹ Cheng Yaotian, *Cheng Yaotian quanji*, 2: 121.

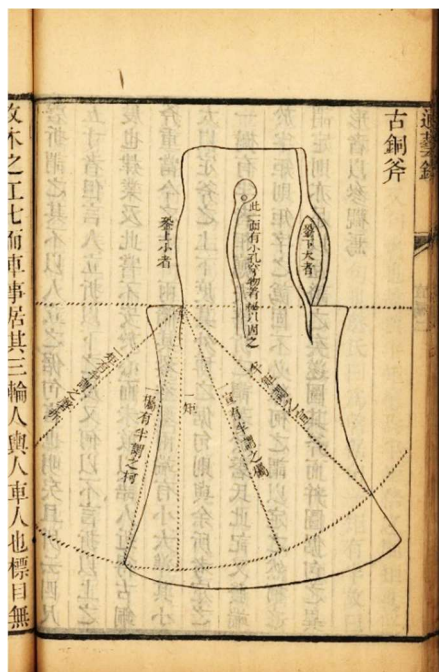


Figure 67 (Left): Bronze fu-axe in *Tongyi lu*⁷⁴⁰

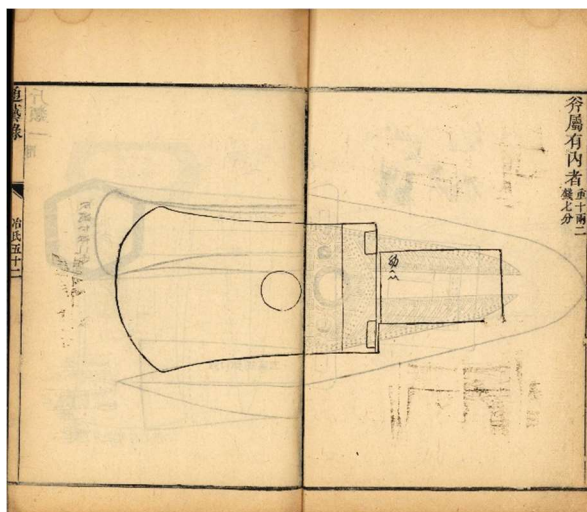
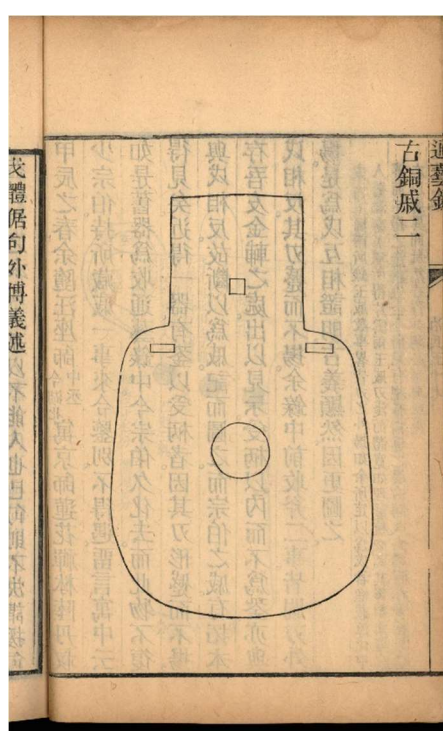
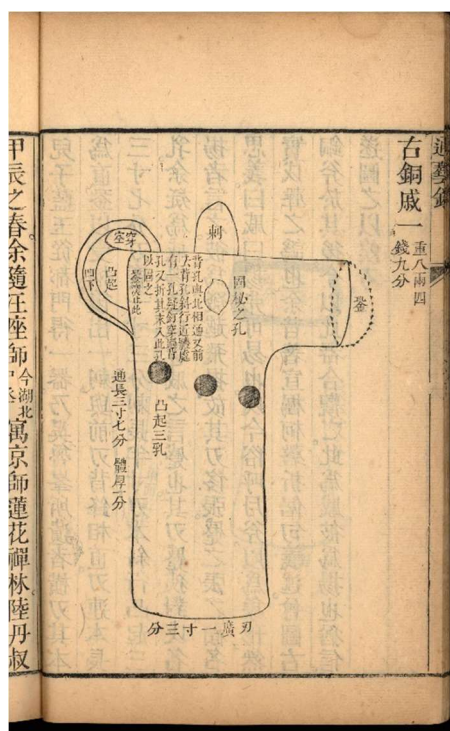


Figure 68 (Right): Bronze fu-axe in *Tongyi lu*⁷⁴¹



⁷⁴⁰ Cheng Yaotian, *Tong yi lu*, "Xuanzhu": 2b.

⁷⁴¹ Cheng Yaotian, *Tong yi lu*, "Yeshi": 51b–52a.

*Figure 69 (left): Bronze qi-axe in Tongyi lu*⁷⁴²

*Figure 70 (right): Bronze qi-axe in Tongyi lu, based on Jin Fuzhi's 金輔之 ink rubbing*⁷⁴³

Similar to his other material inquiries, Cheng also kept a continuously expanding collected record to strengthen his claim. For the current issue, Cheng mentioned the existence of another bronze axe kept by Lu Feichi 陸費墀 (1731-1790), who planned to show Cheng the piece in 1784 but missed the chance. Yet after Lu had “long passed away,” Cheng had a chance to see an ink rubbing of this axe from his townsman and eminent scholar Jin Bang 金榜 (1735-1801), which, as shown in *Figure 70*, also had a confining blade end despite its wider shape. With two stretching-end axes identified as *yang*, and two confining ones as *qi*, the pieces and names “reinforced each other” and knitted into a well-ordered *mingwu* argument.⁷⁴⁴

This section uses two specific cases by Cheng Yaotian to demonstrate how the material inquiry of antiquarian objects could benefit the study of *mingwu* issues in *Shi*. In both cases, there is an epistemic priority of the material features over the commentary tradition, where hidden material textures were brought to the foreground with new typological significance. Similar to his natural studies, a characteristic feature of Cheng's material inquiry was his *object-specific* approach. From the two illustrated specimens of the *wanlan* vine, the three investigated nests of the *guoluo* wasp, to the twenty odd bronze pieces from the dagger-axe family and the four bronze pieces from the axe family, there was a lasting impetus to pin down his evidential reasoning and observation record to the level of *individual items*. For sure, in order to establish a *mingwu* claim with general epistemic significance, Cheng had to finalize his reasoning back to the level of generic features. That said, his synthetic move from the individualities to the categories distinguished him from previous scholars who started with the categories directly. Just like the mid-Qing phonologists who pinned down their reconstruction to the most specific rhyming chains in *Shi*, this

⁷⁴² Cheng Yaotian, *Tong yi lu*, "Yeshi": 56b.

⁷⁴³ Cheng Yaotian, *Tong yi lu*, "Yeshi": 57b.

⁷⁴⁴ Cheng Yaotian, *Cheng Yaotian quanji*, 2: 123.

alternative approach offered Cheng a *localized* vantage point to account for the inner richness of specific objects.

Frontier Knowledge

From Duan Yucai's Jiaoshan tripod to Cheng Yaotian's *wanlan* specimens, I have suggested the epistemological significance of long-distance inquiry in recovering the hidden textures of *wu* from geographical concealment. In this regard, the Qing scholars had a natural advantage over their predecessors, due to the active material and epistemic flows in a multi-ethnic empire between the hinterland, the boarder, and beyond. In the past decade, scholars have made significant progress in charting global and trans-regional flows of frontier commodities, highlighting not only their economic and cultural value but also epistemic significance.⁷⁴⁵ That said, fewer have explored their connections to the classical learning—one of the “hard-core” intellectual activities that located in the innermost hinterland of the Han ethnicity.

The prolific existence of *mingwu* objects across the vast Qing borderland and newly conquered territories offered a new venue for the advancement of *mingwu* studies. Regarding the field of *Maoshi*, Shen Qingya's 沈青崖 (*juren* 1723) *Maoshi mingbian lu* 毛詩明辨錄 (Records of clear distinctions in *Maoshi*), offered some interesting cases. As a middle-ranked official famous for his geographical studies, Shen had served a decade (1729-1738) in the northwest provinces of Shaanxi and Gansu, and in particular five years (1733-1738) at Jiuquan 酒泉 for military logistics, which was not far from the western frontier

⁷⁴⁵ For the economic value and material culture of the frontier commodities, see, e.g., Lai Hui-min 賴惠敏 and Wang Shih-ming 王士銘, “Qing zhongye qi minchu de maopi maoyi yu jingcheng xiaofei,” 清中葉迄民初的毛皮貿易與京城消費 *Gugong xueshu jikan* 故宮學術季刊 31, no. 2 (2013): 139–78; Jonathan Schlesinger, *A World Trimmed with Fur: Wild Things, Pristine Places, and the Natural Fringes of Qing Rule* (Stanford: Stanford University Press, 2017), chs. 2-4; David Bello, *Across Forest, Steppe, and Mountain: Environment, Identity, and Empire in Qing China's Borderlands* (Cambridge: Cambridge University Press, 2016), chs. 2-3; for the epistemic significance of frontier plants, see, Bian and Saarela, *The Manchu Mirrors and the Language of Natural History in High Qing China*, ch. 4.

of the day.⁷⁴⁶ When the eminent Cheng-Zhu scholar Sang Tiaoyuan 桑調元 (1695-1771) wrote a preface for the work, he made a special emphasis on Shen's frontier experience, who, "with personal experience at the frontier regions" (*qinli biandi* 親歷邊地), was particularly accurate in his "distinction of the people and the objects."⁷⁴⁷ For instance, in "Good Ploughs" (*liang si* 良耜, MS #291), the ode offered a vivid description to the fertilizing effect of green manure:

荼蓼朽止	The downy-heads and smartweed decay,
黍稷茂止	the millet becomes luxuriant. ⁷⁴⁸

Although the use of green manure was prevalent due to the intensification of crop cultivation in early modern China, Shen's entry featured inclusion of local practices likely drawn from direct observation.⁷⁴⁹ Shen first mentioned a common practice in paddy fields in Jiangsu and Zhejiang, where the peasants dug holes in the ground to produce green manure from decayed grass and mud.⁷⁵⁰ But more interesting was another relevant practice at Dunhuang, the westernmost county of Gansu:

As for the cultivation of melons in Dunhuang, one should avoid the rain. To make plots and cultivate melons on sand ground, one may dig a hole one inch or so below the roots, and stuff it with bitter bean seedlings. As the seedlings decay on their own, the melons will thrive and bear bigger fruits.

燉煌種瓜，忌見雨水。於沙地上作畦種瓜，離根下一寸許挖孔，采苦豆苗塞之。俟其自朽，則瓜茂而實大。⁷⁵¹

⁷⁴⁶ For his official career in the northwest provinces, see, Liu Yuyi 劉於義 and Shen Qingya 沈青崖, *Shanxi tongzhi* 陝西通志 (1735), juan 23: 16a; Huang Wenwei 黃文煒 and Shen Qingya 沈青崖, *Chongxiu suzhou xinshi* 重修肅州新志 (1737), "Suzhou" 8: 19b. For Shen's imprisonment due to an unjust accusation in 1738, see, Xu Yaoguang 許瑤光 and Wu Yangxian 吳仰賢, *Jiaxing fuzhi* 嘉興府志 (1879), juan 52: 63b;

⁷⁴⁷ Shen Qingya, *Maoshi mingbian lu*, "Sang xu" 桑序: 2a-2b.

⁷⁴⁸ Zheng Xuan, *Maoshi zhuan jian*, 474. With slight adaptation, the translation follows Karlgren, *The Book of Odes*, 251.

⁷⁴⁹ For the prevalent use of green manure, see, Francesca Bray, *Science and Civilisation in China, Volume 6, Biology and Biological Technology, Part II: Agriculture* (Cambridge: Cambridge University Press, 1984), 293–95.

⁷⁵⁰ Shen Qingya, *Maoshi mingbian lu*, juan 9: 12b–13a.

⁷⁵¹ Shen Qingya, *Maoshi mingbian lu*, juan 9: 13a.

A native of Jiaxing 嘉興, Shen had multiple ways to learn about practices in the Jiangnan area. Yet the vivid account of Dunhuang must be a fresh record from his official experience in the far west. Speaking of the military policy against the Zungar state, the general tendency in the Yongzheng era was one of strategic retrenchment. Besides an unsuccessful military attempt in 1731, the Qing had reduced their garrisons in Hami, Barköl, and Turfan, the bridgeheads beyond Gansu province, and stressed more on the consolidation of military supplies within western Gansu.⁷⁵² And this became the background for reclaiming Dunhuang, the westmost settlement of Gansu that had been deserted since the mid-Ming. A new administrative unit was established 1725, with 2405 households immigrating between 1727 and 1729 to cultivate some 300,000 *mu* of arable land.⁷⁵³ Meanwhile, the Suzhou Military Supply Bureau (*Suzhou junxu ku* 肅州軍需庫), where Shen served as a circuit intendent between 1733 and 1738, was also an *ad hoc* institution specifically established for frontier affairs in 1732. Being responsible for the logistic management of the entire region westward from the Jiayuguan 嘉峪關 pass, the post certainly covered the newly exploited Dunhuang some 400 kilometers away.⁷⁵⁴ As a collateral support for the use of green manure in *Maoshi*, this account thus benefited from the most recent military advancement on the northwest border of the day.

In *Maoshi mingbian lu*, the frontier evidence was also not limited to the northwest borderland. Another impressive example came from the northeast, where Shen noted the use of animal skins for objects of daily use. In the ode “Plucking Bracken” (Caiwei 采薇, *MS* #167), there is one line describing the arms of the king’s troop: “ivory bow-ends, *fish-skin quiver*” (*xiang mi yu fu* 象弭魚服).⁷⁵⁵ The Mao

⁷⁵² Peter Perdue, *China Marches West: The Qing Conquest of Central Eurasia* (Cambridge and London: The Belknap Press of Harvard University Press, 2005), 240-241, 252-255, 329-331.

⁷⁵³ Chen Guangwen 陳光文, “Qingdai Dunhuang nongye wenti yanjiu,” 清代敦煌農業問題研究 *Dunhuang xue jikan* 敦煌學輯刊, no. 1 (2020): 62–64.

⁷⁵⁴ For the establishment and responsibility of the Military Supply Bureau, see, Zhang Lianyin 張連銀, “Yongzheng chao xilu junxu buji yanjiu: yi liangshi, shengchu wei zhongxin” 雍正朝西路軍需補給研究——以糧食、牲畜為中心 (PhD Dissertation, Xiamen University, 2007), 187–88.

⁷⁵⁵ Zheng Xuan, *Maoshi zhuan jian*, 219.

commentary, as shown in the translation, simply took *yu* 魚 as fish. However, things became complicated under Lu Ji's detailed account, which connected the skin to a miraculous "fish beast":

The "fish" quiver is [made of] the skin of "fish beast." The "fish beast" is similar to the pig, which lives in the east sea. It has the alternative name of "fish cat." Its skin has dotted patterns on the back, while purely azure below the abdomen. Today it is used for the bow quiver. Even after the skin dried and made into quiver for years, when the tide flows or it is about to rain, all the fur would rise up; when the tide ebbs or during sunny days, the fur would be back to normal. It can sense the wet air of the sea even thousands of *li* away—this is a natural correspondence.

魚服，魚獸之皮也。魚獸似豬，東海有之，一名魚狸。其皮背上斑文，腹下純青。今以為弓步叉者也，其皮雖幹燥以為弓矢服經年，海水將潮及天將雨，其毛皆起；水潮還及天晴，其毛復如故。雖在數千裏外可以知海水之潮氣，自相感也。⁷⁵⁶

The miraculous resonance between the skin fur and the sea air was typical for the cosmology of categorical correspondence in Lu Ji's age. That said, question remained regarding what the "fish beast" specifically referred to. The alternative name "fish cat" as well as Lu Ji's pig analogy would align the beast with dolphin, or "sea swine" (*hai tun* 海豚/ *hai xi* 海豨, *Figure 71*), but their smooth skin was not compatible with the description of the miraculous fur in the entry. This became the point of departure for later hermeneutics, where Shen Qingya proposed his alternative reading by aligning the beast with a frontier commodity in his own time:

Lu Ji said: "This is the skin of the 'fish beast.' Even if it has been dried and made into a quiver for years, when the tide flows or it is about to rain, all its fur would rise up." This is talking about the "fish skins" produced in the state of Russia east of the pass, whose light-colored fur can be tinted to make caps. Its vulgar name is the "sea mule skin."

陸璣曰：“魚獸之皮。雖乾燥以為矢服經年，海水潮及天將雨，其毛皆起。”是以今關東俄羅斯國所產魚皮、淺毛可染作帽者而言也，俗名海驢皮。⁷⁵⁷

⁷⁵⁶ Lu Ji, "Maoshi caomu niaoshou chongyu shu," 17.

⁷⁵⁷ Shen Qingya, *Maoshi mingbian lu*, juan 6: 5b.



Figure 71: “Sea Swine” (haixi 海豨) in Zhao Zhiqian’s 趙之謙 (1829-1884) *Yiyu tupu* 異魚圖譜 (Illustrated Catalogue of Exotic Fishes), dated 1861. Ink and color on paper, 35.5 x 224 cm. Spring Auction, China Guardian, 2017. This literary rendition of the “swine-fish” highlighted the relative unfamiliarity of the dolphin even till the late Qing.

Despite his mention of the resonating effect of the fur, the mysterious elements in Lu Ji’s account were largely reduced in Shen’s entry. Most impressively, the miraculous description of remote sensing was replaced by a marine industry that really took place “thousands of *li* away”—the making of fur hats out of Russian “fish skins.” Judging from the vulgar name “sea mule,” which normally referred to the beaver, Shen offered an idiosyncratic interpretation to the “fish beast” in Lu Ji’s commentary.⁷⁵⁸

In his recent monograph, Jonathan Schlesinger traces the rising material culture of fur costumes from frontier trade in the high-Qing era.⁷⁵⁹ Thanks to the newly signed Kyakhta Treaty between the Qing and the Russia empires in 1728, during Shen’s time, the main location for such exchanges would be Kyakhta on the outer Mongolia border.⁷⁶⁰ Among the Russian goods at this post, animal fur played a

⁷⁵⁸ Wang Zuwang 王祖望, “*Qingong shoupu* wuzhong kaozheng jiyao,” 《清宮獸譜》物種考證紀要 in *Qingong shoupu* 清宮獸譜 (Beijing: Gugong chubanshe, 2014), 19.

⁷⁵⁹ Schlesinger, *A World Trimmed with Fur*, ch. 1.

⁷⁶⁰ Although the treaty opened two ports at Kyakhta and Tsurukaitu respectively, only the former became successful. See, G. F. Muller and Peter Simon Pallas, *The Conquest of Siberia and the History of the Transactions, Wars, Commerce, Carried on between Russia and China from the Earliest Period* (London: Smith Elder and Co., 1842), 42-45, 85-87.

predominant role, in which sea beaver constituted an important category.⁷⁶¹ On the one hand, the sea-otters, the most important fur commodity from the Kamchatka peninsula and the New Discovered Islands, were called by the Russian merchants as beavers (*bobri morskii*) due to their similar appearance; on the other hand, there were also a large quantity of real beaver skins imported from the Hudson's Bay and Canada on sale there.⁷⁶² Although in the Kyakhta trading lists, these two categories were not carefully distinguished,⁷⁶³ a later account from the British East India Company still highlighted the large demand for both kinds of furs, including 8,608 otter skins and 36,983 beaver skins exported to Guangzhou in the single year of 1791.⁷⁶⁴ No matter whether Shen's "sea donkey" referred to both kinds of exotic skins or to authentic beavers, the account indicated a close connection with the international trade of the day. In fact, the beaver skin was precisely the raw material for "Vermeer's hat" in his painting *Officer and the Laughing Girl*, whose vogue in the early seventeenth-century Europe has been well analyzed by Timothy Brook from a global perspective.⁷⁶⁵ As for its prevalence in the Qing empire, it came after the adoption of Manchu attire, and was in particular related to the hierarchical sumptuary order for "warm hats," the formal winter cap for Qing officials.⁷⁶⁶ For the fur caps used in the coldest weather, "the nobles used sable, while the common [officials] used dyed weasel or sea mules."⁷⁶⁷ Having served as a middle-ranked

⁷⁶¹ According to a recent calculation, the fur trade constituted as much as 85% of Russian exports at Kyakhta between 1757 and 1784. See, Michal Wanner, "The Russian-Chinese Trade in Kyakhta, Its Organisation and Commodity Structure, 1727–1861," *Prague Papers on the History of International Relations*, no. 2 (2014): 43.

⁷⁶² Muller and Pallas, *The Conquest of Siberia and the History of the Transactions, Wars, Commerce, Carried on between Russia and China from the Earliest Period*, 75–76, 119–120.

⁷⁶³ For instance, in a 1769 trading list from the Court of Foreign Affairs, neither the names of sea otter or beaver was mentioned. Instead, these most previous furs were labeled under the descriptive term "silver-needle skins" (*yinzhen pi* 銀針皮) and divided into three categories according to their quality. See, Lai Hui-min and Wang Shih-ming, "Qing zhongye qi minchu de maopi maoyi yu jingcheng xiaofei," 143–44.

⁷⁶⁴ H. B. Morse 馬士, *Dong Yingdu gongsi dui hua maoyi biannian shi (yi liu san wu - yi ba san si nian)* 東印度公司對華貿易編年史（一六三五—一八三四年）（Guangzhou: Guangdong renmin chubanshe, 2016), 2: 206.

⁷⁶⁵ Timothy Brook, *Vermeer's Hat: The Seventeenth Century and the Dawn of the Global World* (New York and London: Bloomsbury Press, 2008), ch. 2, esp. p. 42–46.

⁷⁶⁶ Schlesinger, *A World Trimmed with Fur*, 28–29, 32–33.

⁷⁶⁷ Xu Ke 徐珂, *Qing bai leichao* 清稗類鈔 (Beijing: Zhonghua shuju, 2010), 13: 6193.

official in Beijing, the center of the fur industry, Shen had much opportunity to get acquainted with its material features.⁷⁶⁸

Nevertheless, the beaver thesis still had a major inconsistency with Lu Ji's description—it did not resemble the pig at all! In *Maoshi duoshi*, Doronga adopted a different approach to the puzzle. Based on the marine environment of his Manchurian homeland, he proposed three candidates with valuable skins:

The left of the [Shanhaiguan] pass (i.e., the Manchuria) neighbors to the sea to its southeast. For the fish skins that can be made into utensils, the stingray is the most expensive, and then follow the fur seal and the dolphin.

關左東南臨海，魚皮之可為器者，沙魚最貴，次則為海狗、海豚。⁷⁶⁹

According to Doronga, Lu Ji's pig analogy seemed to suggest the dolphin, while his naming of a “fish cat” seemed to refer to the fur seal due to their facial similarity. That said, this ambiguity was soon settled by a key criterion—since neither the stingray nor the dolphin has fur, the “fish beast” had to be the fur seal.⁷⁷⁰ Similar to Shen Qingya's beaver, neither of these interpretations had a solid philological basis from early texts. Instead, their insights originated from the distant material evidence that became newly accessible in their own era—frontier trading for Shen, and borderland economy for Doronga.

If frontier records were still exotic pieces in Shen's *Maoshi mingbian lu*, for Doronga, his Manchu nativity became a main thread that defined the perspective of the entire work. The above-quoted line offered a typical example. Doronga did not base his reasoning on material evidence of China proper,

⁷⁶⁸ Shen had served in the Grand Secretariat and the Board of Revenue as middle-ranked officials in Yongzheng 5-7. See, Qin Guojing 秦國經, ed., *Qingdai guanyuan lili dang'an quanbian* 清代官員履歷檔案全編 (Shanghai: Huadong shifan daxue chubanshe, 1997), 1: 156. For the prosperity of the fur industry in Beijing, see, Lai Hui-min and Wang Shih-ming, “Qing zhongye qi minchu de maopi maoyi yu jingcheng xiaofei,” 156–66.

That said, the soft and tender texture of the beaver skin was not an ideal choice for quiver making. Out of this awareness, Shen merely aligned the beaver with the “fish beast” in Lu Ji's commentary but not the “fish” in the original ode. Instead, he attributed the quiver to the tough and decorated skin of the stingray (*shayu* 鯊魚, Dasyatidae). Although for Shen himself, the attribution was based on the material designs of his own time, recent studies have shown a much longer history of the stingray decorations back to the Han-Tang era. See, Shen Qingya, *Maoshi mingbian lu*, juan 6: 5b; Ou Jia 歐佳, “Woguo guwenxian suojian 'jiaoyu' kaolue,” 我國古文獻所見“鯨魚”考略 *Liyun yuyan xuekan* 勵耘語言學刊, no. 1 (2020): 69–72.

⁷⁶⁹ Doronga, *Maoshi duoshi* (12-juan edition), juan 8: 6a.

⁷⁷⁰ Doronga, *Maoshi duoshi* (12-juan edition), juan 8: 6a.

or a geographical concordance between the past and the present, but started with Manchuria directly, a distant land beyond the reach of the central-plain people in the Western Zhou. Such a Manchu-oriented perspective was widely observable in the work, throughout which one could identify as many as 133 occurrences for the phrase “left of the pass” (*guan-zuo* 關左)—a term Doronga reserved specifically for Manchuria. Accompanied this featured perspective was his strong self-consciousness in local specificity, which constituted the key point for his second preface to *Maoshi duoshi*:

Given the broadness of the world and the vastness of our territory, what I have traveled does not reach its ten-thousandth. How much could I have witnessed! Just think about the single region left of to the pass: Within its 2000 odd *li* from the east to the west, and 3000 odd *li* from the north to the south, what we observe already varies from each other...If you notice the difference in one region, how could you know that there won't be further differences in other regions? If you make a denial based on observation in one region, how could you know that it will not turn into an affirmation in other regions?

天下之大，疆域之廣，余之所遊，未及萬分之一，則所見者有幾？試以關左一隅計之：東西二千餘里，南北三千餘里，而所至之地，所見之物，已不能畫一。……於一隅而見其異，焉知其不易地而又異，於一隅而見為非，焉知其不易地而見為是？⁷⁷¹

Admittedly, Doronga's Manchuria orientation was relevant to his limited travel experience within the pass. But this was not the sole reason, for his repeated reference frequently surpassed the need of evidential analysis and transformed the entry into a zoography of Manchuria. This was most salient when the flora and fauna at his hometown conformed with the textual knowledge of *Shi*. For instance, in his entry on the trout (*zun* 鱒), a common fish appearing in *MS* #159, Doronga not only confirmed the natural traits mentioned in the classic texts, but also mentioned two of its local names “left of the pass,” as well as its “prevalence in the Songhua and other rivers” (*songhua zhu jiang jie youzhi* 松花諸江皆有之).⁷⁷² For the common grass liquorice (*ling* 苓) in *MS* #125, he confirmed its existence in the “Alchuka plain on the north frontier,” an important Manchuria garrison near today's Harbin, and also praised its strong flavor

⁷⁷¹ Doronga, *Maoshi duoshi* (12-juan edition), "Second Preface," 2b-3a.

⁷⁷² Doronga, *Maoshi duoshi* (12-juan edition), juan 7: 19a.

due to the fertile land of the place.⁷⁷³ For the hawfinch (*sanghu* 桑扈) in *MS* #215,⁷⁷⁴ Doronga included as many as five colloquial names, three from the “left of the pass,” and two from “north Liaoning.”⁷⁷⁵ With the classic names anchored back to his hometown landscape, such “redundant” information offered a good display of his Manchu identity.

But the greater gain came from those cases with geographical differences. Sometimes—as we can fairly imagine—the Manchuria land would lack any exact correspondence for the species in *Shi*. But there were also cases when the borderland witnessed a greater diversity. For instance, for the aspen tree (*yang* 楊) in *MS* #228, Doronga first quoted Wang Xiangjin’s 王象晉 (1561-1653) *Qunfang pu* 群芳譜 (Catalogue of variegated blossoms), one of the most authoritative works on agronomic plants, which mentioned two kinds of aspen altogether—the “white aspen,” and the “green aspen.” As a supplement to this account from China proper, Doronga noted that in the “left of the pass,” there were also the red colored and gray colored ones besides the two kinds mentioned by Wang.⁷⁷⁶ There were also cases where the same species exhibited varied natural traits at different places. For Manchuria, the most typical difference would be a later biological cycle due to its colder weather. This was mentioned for a variety of common plants, such as the birch-leaf pear (*gantang* 甘棠) in *MS* #16 which blossomed one month later than Li Shizhen’s record, and the “wild celery” (*jin* 葷) in *MS* #237 which sprouted two months later than the record in the *Greater Dai’s Liji*.⁷⁷⁷ Besides, he also recounted some more subtle geographical differences, such as the lack of lacquer for the lacquer tree (*MS* #50), as well as the sweet taste of the bitter gourd (*MS* #34) in Manchuria.⁷⁷⁸ Although in such situations, Doronga normally left the

⁷⁷³ Doronga, *Maoshi duoshi* (12-juan edition), juan 3: 10a.

⁷⁷⁴ For the modern identification of this bird as the hawfinch, see, Yu Xing and Zhang Weibang, *Qingong niaopu*, 557.

⁷⁷⁵ Doronga, *Maoshi duoshi* (12-juan edition), juan 9: 14b.

⁷⁷⁶ Doronga, *Maoshi duoshi* (12-juan edition), juan 6: 1b.

⁷⁷⁷ Doronga, *Maoshi duoshi* (12-juan edition), juan 2: 6b–7a, juan 11: 2b.

⁷⁷⁸ Doronga, *Maoshi duoshi* (12-juan edition), juan 3: 4b, 16a.

abnormality open due to the lack of a direct comparison with China proper, such accounts still added a valuable “ethno-biographical” record for further studies.

Put together, *Maoshi duoshi* offered an idiosyncratic example of a Manchu-oriented *mingwu* study of *Shi*. As an advanced form of frontier evidence, the Manchuria cases were not only used for the determination of uncertain *mingwu* terms, but also served as a unique lens to see the flora and fauna of the central plain from a comparative angle. If Shen Qingya’s exotic accounts of the distant frontiers represented a *central-peripheral* perspective that extended from the central plain to the newly conquered borderlands, Doronga adopted a *local-universal* perspective that saw through the parallel of geographical diversifications from the most familiar singularity of his hometown. In her now-classic book *Translucent Mirror*, Pamela Crossley demonstrates a simultaneity of rulership from the Qianlong era onwards, which tended to express the same imperial intention through a multiplicity of parallel cultural frameworks.⁷⁷⁹ This featured ideology for the multi-ethnic empire made a clear contrast with the more traditional China-Barbarian (*huayi* 華夷) rhetoric that prioritized the Han majority.⁷⁸⁰ Did the Manchu scholar and the Han official, out of an entirely sub/un-consciousness, happen to conform with these two geographical logics of state ideology? That is, for sure, an inspiring question with no final answer. But both perspectives, as we have seen, enriched themselves from the expanded territory of the multi-ethnic Qing empire, transforming frontier observations into meaningful material textures that were not easily accessible in previous times.

Imperial Channels

The active search for frontier material evidence was by no means limited to the private scholars. As one can reasonably imagine, the agent who had the mightiest power and greatest resource for such collective inquiries would be the one at the top of this “material empire”—the Qing emperor. Although

⁷⁷⁹ Pamela Crossley, *A Translucent Mirror: History and Identity in Qing Imperial Ideology* (Berkeley: University of California Press, 2002), 11–12.

⁷⁸⁰ Ge Zhaoguang 葛兆光, *Zhai zi zhongguo: Chongjian youguan 'zhongguo' de lishi lunshu* 宅茲中國：重建有關“中國”的歷史論述 (Beijing: Zhonghua shuju, 2011), 44–49.

certain massive epistemic projects, such as the cartographic survey for the “Complete View of the Imperial Territory” (1708-1718) through western methods, were carried out earlier, it was not until the Qianlong emperor that supreme material power penetrated into the rising philological interests and brought court-sponsored evidential learning to a new height.⁷⁸¹

As already shown in Chapter Two, the imperially sanctioned *Yuzuan Shiyi zhezong* (1755) still worked primarily on the earlier paradigm of surface associations and cross-references. But things changed significantly after the mid-eighteenth century, when one could identify a “philological turn” from Qianlong’s own writings. The 900 odd essays composed in the first fifty years (1735-1785) of his long reign were compiled into two anthologies, a 30-juan *Yuzhi wen chuji* 御製文初集 (First collection of the imperially composed essays, henceforth *First Collection*) with 507 titles from 1735 to 1763, and a 44-juan *Yuzhi wen erji* 御製文二集 (Second collection of the imperially composed essays, henceforth *Second Collection*) with 411 titles from 1764 to 1785.⁷⁸² Despite the longer coverage and greater title counts for the *First Collection*, in this anthology only four essays were included under the category of “Investigation and Distinctions” (*kaobian* 考辨), the most typical genre of evidential studies, which constituted half of *juan* 14.⁷⁸³ As a contrast, in the *Second Collection* the corresponding section spanned over five complete *juan*. With a finer differentiation between “Investigations” (*kao*) and “Distinctions” (*bian*), a significantly greater number of 17 essays were included under these two categories.⁷⁸⁴ Regarding

⁷⁸¹ For a brief account of the cartographic survey, see, Catherine Jami, *The Emperor’s New Mathematics: Western Learning and Imperial Authority During the Kangxi Reign (1662-1722)* (Oxford and New York: Oxford University Press, 2012), 255–57.

⁷⁸² For the title counts, see, Shen Chu 沈初 et al.’s colophon in Hongli 弘曆, “Yuzhi wen sanji,” 御製文三集 in *Qianlong yuzhi shiwen quanji*, 10: 989.

⁷⁸³ Hongli 弘曆, “Yuzhi wen chuji,” 御製文初集 in *Qianlong yuzhi shiwen quanji*, 10: 308.

⁷⁸⁴ Admittedly, for both the *First Collection* and the *Second Collection*, we can find a few more evidential writings under the more diversified categories of “Essays” (*shuo* 說) and “Records” (*ji* 記). That said, the *kaobian* section alone is already sufficient to demonstrate this philological turn. See, Hongli 弘曆, “Yuzhi wen erji,” 御製文二集 in *Qianlong yuzhi shiwen quanji*, 10: 583–84. For the wane of Neo-Confucian writings and wax of evidential ones in Qianlong’s anthologies, also see, Hsia Chang-Pwu 夏長樸, “Qianlong huangdi de jingxue sixiang jiqi fazhan: jianlun yu *Siku quanshu zongmu bianzuan* de guanxi,” 乾隆皇帝的經學思想及其發展——兼論與《四庫全書總目》編纂的關係 *Jingxue wenxian yanjiu jikan* 經學文獻研究集刊, no. 1 (2018): 183–86.

his methodological preferences in general, Hsia Chang-Pwu suggested that 1773 was the watershed year for the emperor to promote Han learning over Song learning.⁷⁸⁵ Recalling Kai-wing Chow's identification of the 1750s to the 1770s as the key moment for the prevalence of Han learning in ritual studies, as well as Ori Sela's labeling of 1770 as the index year for the "quantum leap" in philological learning, we can observe that the timeline for the emperor's philological turn was consistent with the broader scholarly interests.⁷⁸⁶

Among the scholarly works composed or sanctioned by the Qianlong emperor, material evidence loomed particularly large in two sub-fields: the study of treasured objects and large-scale geography, to which the imperial collection and dispatching systems for the court were unmatched by any private scholars. With the Qing dynasty regarded as a "material empire," the mid-Qing court was the hub for gathering material objects, both in the substantial and the conceptual sense. This was best represented by the voluminous printed catalogues of imperial collections, such as the *Xiqing gujian* 西清古鑒 (The Ancient mirror of western clarity) series for ancient bronzes and the *Shiqu baoji* 石渠寶笈 (Precious book box of the stone drain) series for paintings and calligraphy, as well as the painted catalogues of myriad objects such *Niaopu* 鳥譜 (Catalogue of birds), and *Shoupu* 獸譜 (Catalogue of beasts). Unprecedented in the massive amounts collected, global scope of their origins, and verisimilar technique of illustration, such works represented the climatic power of material mobilization in the mid-Qing era.⁷⁸⁷ In Chapter Six, I will revisit this important aspect by showing how the vast imperial collection of ancient bronzewares benefited court learning in the identification of the *xi*-vase, a sacrificial vessel that appeared

⁷⁸⁵ Hsia Chang-Pwu, "Qianlong huangdi de jingxue sixiang jiqi fazhan," 177–82.

⁷⁸⁶ See, Chow, *The Rise of Confucian Ritualism in Late Imperial China*, 132–135, 160; Sela, *China's Philological Turn*, 85–88, 199–204.

⁷⁸⁷ For trans-regional collections such foreign bronzes from central Eurasia and exotic animals from the far continents, see, Hui-chun Yu, "The Intersection of Past and Present: The Qianlong Emperor and His Ancient Bronzes" (PhD Dissertation, Princeton University, 2007), ch. 5; Lai Yu-chih, "Qinggong dui ouzhou ziranshi tuxiang de zaizhi," 1–75; Lai Yu-chih 賴毓芝, "Tuxiang, Zhishi yu Diguo: Qinggong de shihuoji tushui," 圖像、知識與帝國：清宮的食火雞圖繪 *Gugong xueshu jikan* 故宮學術季刊 29, no. 2 (2011): 1–75.

in *MS* #300. Comparable to the frontier evidence in private learning, such unparalleled collections brought forth material textures that were not easily accessible in the past eras or outside the court.

The other realm which witnessed a superiority of court learning was the evidential study of geography, where the emperor was able to launch on mass scale on-site surveys that were not easily affordable by individual scholars. In his essays on the sources of the Luan 灤 River and the Ji 濟 River, the Qianlong emperor repeatedly emphasized the necessity of on-site investigation, fulfilled either through his personal witness or personnel he dispatched.⁷⁸⁸ During the high-tide of mid-Qing evidential learning, the most representative imperial sanctioned project of this kind was the search for the origin of the Yellow River, which concluded in the 36-juan monograph *Heyuan jilüe* 河源紀略 (Concise Records on the Source of the Yellow River). Although today we are clear about its source in the Bayan Har Mountains in East Qinghai, the issue was much more complicated in the pre-modern era out of a combination of limited on-site explorations and geographical imagination. When the Anhui scholar Wang Wufeng 汪梧鳳 (1726-1771), a disciple of Jiang Yong and classmate of Dai Zhen and Cheng Yaotian, explained the Yellow River as a *mingwu* term in his *Shixue ruwei* 詩學女為 (Studies of *Shi* on your own), he listed three parallel sources for the river:⁷⁸⁹ Congling 葱嶺 or today's Pamir Mountains, Yutian 于闐 in today's south Xinjiang, and Kunlun 崑崙 on the Tibetan Plateau.⁷⁹⁰ Based on historical geography, we know that the former two sources are in fact referring to the north and south courses of the ancient Tarim River before the Tang dynasty, which flowed in parallel and converged into the Lop Nur (*Figure 72*). Despite radical changes of the river courses in the following centuries, by the mid-Qing, the source areas and the ending point still remained largely the same (*Figure 73*).⁷⁹¹ The final source, Kunlun, marked by Wang as the joint name for three mountains west to the Xingxiuhai 星宿海 (Mongolia: *odon dalai*;

⁷⁸⁸ See, Hongli, "Yuzhi wen erji," 718, 720, 728.

⁷⁸⁹ For his connections with Jiang, Dai, and Cheng, see, Wang Wufeng, *Shixue ruwei*, "Self-Preface," 1a.

⁷⁹⁰ Wang Wufeng, *Shixue ruwei*, juan 3: 25b.

⁷⁹¹ Fan Zili 樊自立, "Lishi shiqi Talimu he liuyu shuixi bianqian de chubu yanjiu," 歷史時期塔里木河流域水系變遷的初步研究 *Xinjiang dili* 新疆地理, no. 2 (1979): 22–29.

Manchu: *odon tala*), is then consistent with the modern identification of the Yellow river's source.⁷⁹²

However, several classic texts, including *Shanhaijing* 山海經 (Classic of the mountains and seas), *Shiji* 史記, *Hanshu* 漢書, and *Shuijingzhu* 水經注 (Commentaries on the classic of rivers), had indicated a subterranean “underflow” between the Lop Nur and the closer source of the Yellow River, thus joining the two rivers into one. With only textual references at hand, Wang took an agnostic attitude to this possible underflow, merely confirming the closer source on the Tibetan Plateau as the major one.⁷⁹³

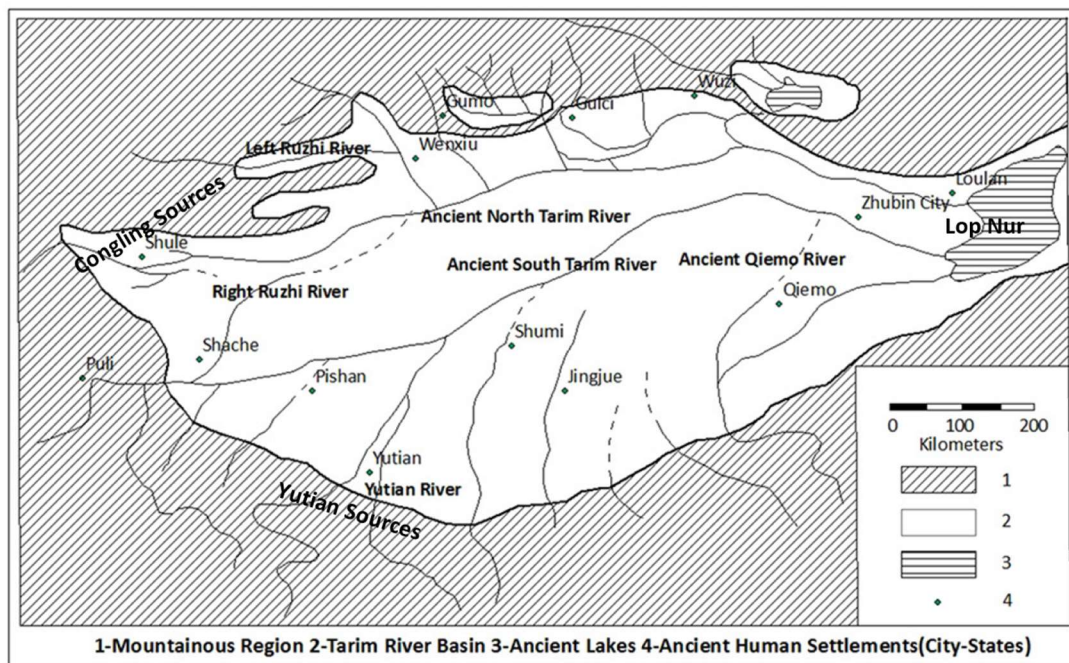


Figure 72: Reconstructed Courses of the Tarim River in the 5-6th Centuries⁷⁹⁴

⁷⁹² Wang Wufeng, *Shixue ruwei*, juan 3: 24b; Huang Shengzhang 黃盛璋, “Lun Huanghe heyuan wenti,” 論黃河河源問題 *Dili xuebao* 地理學報 21, no. 3 (1955): 296–99.

⁷⁹³ Wang Wufeng, *Shixue ruwei*, juan 3: 25b.

⁷⁹⁴ Adapted from Y. Liu et al., “Socio-Hydrologic Perspectives of the Co-Evolution of Humans and Water in the Tarim River Basin, Western China: The Taiji-Tire Model,” *Hydrology and Earth System Sciences* 18 (2014): 1294.

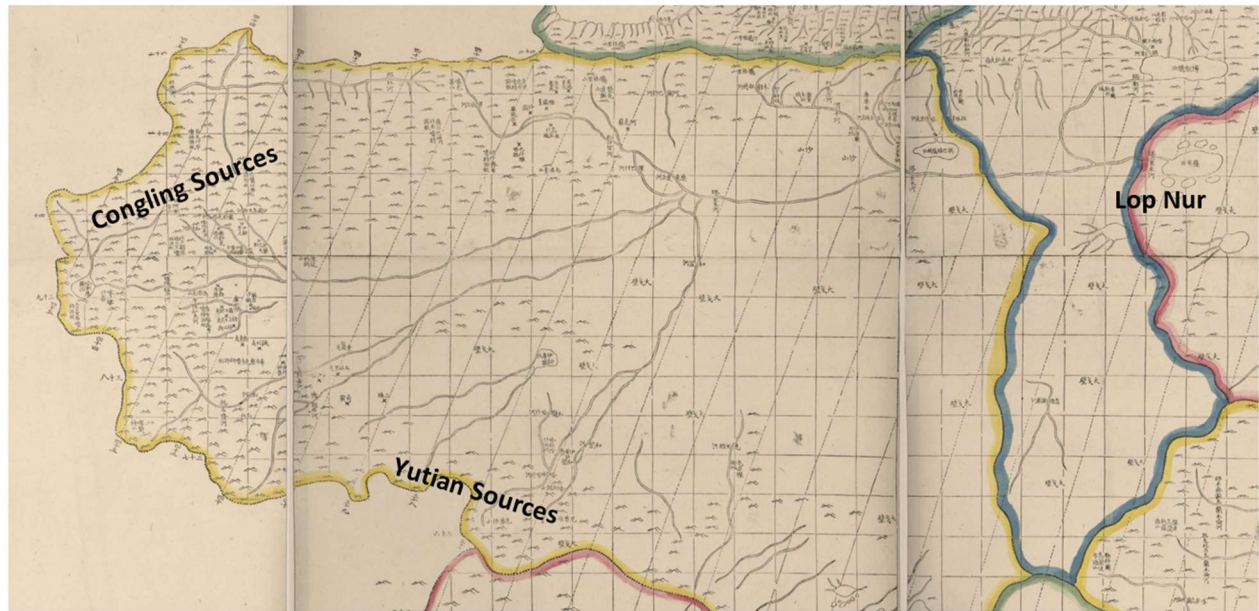


Figure 73: Tarim River in *Huangchao yitong yudi quantu* 皇朝一統輿地全圖 (1832)⁷⁹⁵

This becomes the epistemic background to comprehend the advancement of Qianlong's imperial project, which is noteworthy from two perspectives. The first concerns the exact locations of the Yellow River's source. Before the Qing, Xingxiuhai was widely regarded as the closer source.⁷⁹⁶ Through two expeditions in 1704 and 1717 under the order of the Kangxi emperor, the sources were further traced back to the three mountains, each with a stream joining into Xingxiuhai.⁷⁹⁷ Wang's entry thus represented the cutting-edge understanding of the closer source in the mid-eighteenth century. That said, the Kangxi expeditions failed to identify the main source among these three upper streams, nor did they trace the sources back to the exact place of origin. And these became the places where the Qianlong emperor took a step further. He had Amida 阿彌達 (1744-1791), son of the Grand Councilor Agūi 阿桂 (1717-1797), to lead a new expedition in 1782. The team not only identified the Altan River of the Bayan Har Mountain as the main source, but also pinned the origin to a specific place near "Aletan gadasu chilao" 阿

⁷⁹⁵ Li Zhaoluo 李兆洛 and Dong Lifang 董立方, *Huangchao yitong yudi quantu* 皇朝一統輿地全圖 (1832).

⁷⁹⁶ See, Ji Yun 紀昀 and et al., *Qinding heyuan jiliie* 欽定河源紀略 (Beijing: Zhonghua shuju, 2016), juan 24: 2b.

⁷⁹⁷ Huang Shengzhang, "Lun Huanghe heyuan wenti," 299–300.

勒坦噶達素齊老 (Man: *altan gadasu ciloo*), a Mongolian name rightly interpreted by the emperor as the “Polaris Rock” (Mon: *altan gadasu cilagu*) (Figure 74).⁷⁹⁸ Noting “hundreds of golden streams flashing out” from a pond on its top, this was the first correct identification of the main source of the Yellow River in Chinese history.⁷⁹⁹ Only after a decade, this refined discovery was already incorporated into the entry on the Yellow River when Dong Guixin 董桂新 (1773-1804) compiled his *mingwu* monograph *Maoshi duoshi lu* 毛詩多識錄 (Records on the Extensive Inquiries of *Maoshi*, 1795).⁸⁰⁰ The acceptance of cutting-edge geographical knowledge in both Wang and Dong’s entries highlights the significance of imperial surveys to the private *mingwu* studies of the day.



Figure 74: Amita 阿彌達, *Heyuan tu* 河源圖 (section), dated 1782. Woodblock print in 10 leaves, 58 × 70 cm each. Library of Congress, USA. Noted the bilingual labels of the Altan River (阿勒坦郭勒/ *altan*

⁷⁹⁸ Ji Yun and et al., *Qinding heyuan jilüe*, juanshou, "Shangyu" 上諭, 1a-b. For the biographical data of Amida, see, Zhongyang yanjiuyuan lishi yuyan yanjiusuo 中央研究院歷史語言研究所, "Renming quanwei renwu zhuanji ziliao ku 人名權威人物傳記資料庫," accessed June 30, 2021, no.000336. For the historical context and team members of this expedition, see, Liu Hui 劉惠, "1782 nian Amida fengming kancha huanghe heyuan shishi kao," 1782 年阿彌達奉命勘察黃河河源史實考 *Zhongguo lishi dili luncong* 中國歷史地理論叢 34, no. 1 (2019): 16–18.

⁷⁹⁹ Ji Yun and et al., *Qinding heyuan jilüe*, juanshou, "shangyu" 上諭, 1b; Liu Hui, "1782 nian Amida fengming kancha huanghe heyuan shishi kao," 15.

⁸⁰⁰ Dong Guixin 董桂新, *Maoshi duoshi lu* 毛詩多識錄, draft manuscript, Shanghai Library, no. T293869-73 (prefaced 1795), juan 9: 21b. For the biographical information of Dong, see, Ma Buchan 馬步蟾, ed., *Chongxiu Huizhou fuzhi* 重修徽州府志 (1827), juan 11.3: 52a-b.

gool) and the Polaris Rock (噶達素齊老/ gadasu ciloo). The precise origin of the river is labelled as the “Sky’s Pond” (天池/ abk[a]i bilten omo).

Meanwhile, thanks to the incorporation of the Zungar territory in the mid-18th century, the farther sources of the Tarim river also received a systematic survey, which involved not only the main sources but also the minor branches from the south, west, and north sides.⁸⁰¹ For the local names on the waterways with diverse linguistic origins, the work provided Chinese interpretations whenever possible. The result was therefore a translingual feast, which involved not only the more frequent Uyгур and Mongolian names, but also ones from Gyalrongic (*xifan yu* 西蕃語), Dzungar (*zhun yu* 準語), and Farsi languages (*pa’erxi yu* 帕爾西語).⁸⁰² And then came the major issue on the possible connection of the two river systems, for which *Heyuan jilüe* endorsed the underflow thesis through not only an exhaustive study of the transmitted texts, but also a variety of material evidence. This included the existence of underground rivers at other places, the non-increasing water level of the Lop Nor which implied an underground outflow, as well as the yellow color of the Gadasu source that could naturally take place when the underflow passed through the desert. Although some of these proofs had already been mentioned in Qianlong’s own essays on the river’s source, it was in fact Wang Niansun who knitted them into the most elaborated essay to refute the separation of the two river systems.⁸⁰³ Without the necessary knowledge on evaporative balance, this was indeed a “great synthesis” that appeared to be the most likely. As one of the six compilers of the work, Wang Niansun was responsible for the entire section of “Rectifications” (Bian’e 辨訛) in *juan* 21-25, an exhaustive critical review of all the major transmitted texts on the River source from the new vantage point, where he not only drew in active material evidence from the recent expedition, but also incorporated his cutting-edge discoveries in textual collation into this

⁸⁰¹ Ji Yun and et al., *Qinding heyuan jilüe*, *juan* 1: 8a–16b.

⁸⁰² Ji Yun and et al., *Qinding heyuan jilüe*, *juan* 9-10.

⁸⁰³ See, Ji Yun and et al., *Qinding heyuan jilüe*, *juanshou*, “Shangyu” 上諭, 2a; “Yuzhi heyuan shi” 御製河源詩, 2a; *juan* 22: 3a–6b.

critique.⁸⁰⁴ Recalling Qian Daxin's involvement in the compilation of *Rehe zhi* 熱河志 (Gazetteer of Rehe) as well as Dai Zhen's collation of the mathematic classics for the *Siku quanshu* project, this was another typical case of intimate collaboration between court learning and leading evidential scholars of the Jiangnan area.

But the emperor also left his imprint behind the scenes. In a recent article, Liu Hui has traced Qianlong's tampering with Amida's description of the Yellow River's source, where the "two streams of yellow water" in the original report was altered into "a hundred golden flows of bursting streams" in *Heyuan jilüe*, thus greatly increasing the likelihood of the underflow.⁸⁰⁵ The gain of this deliberate move, instead, was a geographical symbolism. Noting the repeated association of the farther west sources of the river with the Qing's military success, we can see that the unifying implication was apparent in the Yellow River's joining of the "west territory" with the "central plain."⁸⁰⁶ That said, the motif of the "underflow" must bear a more subtle meaning, for the work not only incorporated the newly conquered Dzungar territory through the Lop Nor channel, but also, without further proof, suggested another underflow which linked the upper stream of the Yellow River in Qinghai to the nearby water system of the Koko Nor (Qinghai Lake). And this latter channel, though on a lesser scale, was associated explicitly with the Yongzheng emperor's incorporation of Qinghai in the 1720s, thus forming an excellent parallel with the Dzungar case.⁸⁰⁷ Tracing further back to the 1680s, one may also analogize these underflow claims to the Kangxi emperor's tracing of mountain veins, where Mount Changbai, stretching southwest over the Liaodong peninsula, was argued to traverse the Gulf of Bohai and reemerge on the Shandong peninsula to get connected with Mount Tai, thus joining the most important Manchu and Chinese

⁸⁰⁴ For the identification of Wang Niansun as the author of the "Rectification" section, as well as his incorporation of recent collating discoveries from *Shanhai jing*, see, Liu Siliang 劉思亮, "Wang Niansun shoupi ben *Shanhai jing* chukao: Jianji Heyuan jilüe 'Bian'e' zhi zuanxiu zhe," 王念孫手批本《山海經》初考——兼及《河源紀略·辨訛》之纂修者 *Wenxian* 文獻, no. 3 (2021): 171–75.

⁸⁰⁵ Liu Hui 劉惠, "Qianlong chao chonggou huanghe heyuan de shijian yu guojia rentong," 乾隆朝重構黃河源的實踐與國家認同 *Qinghua daxue xuebao* 清華大學學報 33, no. 2 (2018): 150–51.

⁸⁰⁶ Liu Hui, "Qianlong chao chonggou huanghe heyuan de shijian yu guojia rentong," 153.

⁸⁰⁷ Ji Yun and et al., *Qinding heyuan jilüe*, juan 2: 24a-b.

mountains together through an “under-vein” beneath the sea.⁸⁰⁸ With full epistemic significance, these invisible channels therefore indicated a long-celebrated form of geomantic flow which sustained a unifying dynamic *across different ethno-geographical spaces*. Together with the exhaustive on-site expedition, textual analysis, translingual verification, and imperial endorsement, this case offered a good exemplification for the unique advantage of court learning in revealing well-ordered material-philological textures through its unparalleled mobilizing power.

If the above examples of frontier evidence highlight the revealing of material textures from geographical concealment, the following case on the hydrological study of the Jing and Wei rivers moves back to the more typical form of intensive observation—but also with a featured imperial mark. In “East Wind” (Gufeng 谷風, *MS #25*), the ode mentions the confluence of two branches of the Yellow River:

涇以渭濁	The Jing River is turbid—due to the Wei River,
湜湜其沚	Though its shore still looks limpid. ⁸⁰⁹

What was the relationship of the two rivers? The Mao commentary merely mentioned a difference in turbidity, while Zheng Xuan’s message was clearer: “The Jing River, due to [the *confluence* of] the Wei River, was therefore contaminated by the Wei” (*jing shui yi you wei, gu jian wei zhuo* 涇水以有渭，故見渭濁)—a clear Jing versus a turbid Wei.⁸¹⁰ However, the reading witnessed a 180 degree turn from Kong Yingda onwards. Kong suggested that the turbid impression of the Jing was caused by a *contrast* of the Wei—thus a clear Wei versus a turbid Jing. Although this alternative reading seemed less straightforward, it was adopted by Zhu Xi and became the standard interpretation in later times.⁸¹¹

⁸⁰⁸ For a careful analysis of this mountain vein, see, Stephen H. Whiteman, *Where Dragon Veins Meet: The Kangxi Emperor and His Estate at Rehe* (Seattle: University of Washington Press, 2020), 68–70.

⁸⁰⁹ Zheng Xuan, *Maoshi zhuan jian*, 51

⁸¹⁰ Zheng Xuan, *Maoshi zhuan jian*, 51.

⁸¹¹ Correspondingly, Zheng Xuan’s opposite note was frequently changed into “*gu jian wei zhuo*” 故見謂濁 (the Jing...was therefore referred as turbid) or “*gu jian qi zhuo*” 故見其濁 (the Jing...was therefore seen as turbid) to form a consistency. See, Kong Yingda, *Maoshi zhengyi*, 147–49; Zhu Xi, *Shi jizhuan*, 32.

Stepping into the Qing, the turbidity of the Jing River was so widely known that Qian Chengzhi 錢澄之 (1612-1693) simply interpreted the character *yi* 以 in the original ode as *shi* 使—“the Jing makes the Wei turbid.”⁸¹² Meanwhile, the imperially sanctioned *Shijing* commentaries also noted that the Jing river was the turbid one.⁸¹³

However, the issue reemerged in Qianlong’s mind when he referred to the imagery in a poem he wrote in 1790.⁸¹⁴ Through a syntactic analysis of three more usages which shared the same pattern of “A *yi* B x,” the emperor pointed out that each of the cases indicated a causal relationship, where A was always the *direct recipient* of B’s effect for the attribute of x. Therefore, it should be the Wei that made the Jing River turbid, rather than the opposite as suggested by Zhu Xi.⁸¹⁵ Here, it is hard to say whether Qianlong’s meticulous analysis resulted from a keener sensitivity to the grammar or a looser nativity to the Chinese language. But his multilingual background must have contributed to a more alienated view of the classic text, from where a closer attention was drawn to the syntactic pattern that a native Chinese literatus would be too familiar with to analyze.⁸¹⁶

⁸¹² Qian Chengzhi 錢澄之, *Tianjian shixue* 田間詩學 (Hefei: Huangshan shushe, 2005), 1: 89.

⁸¹³ See, Wang Hongxu 王鴻緒, “Qinding shijing zhuanhuo huizuan,” 欽定詩經傳說彙纂 in *Yingyin Wenyuange siku quanshu*, 83: 156; Sun Jiagan 孫嘉淦, *Yuzuan shiyi zhezhong* 御纂詩義折中 (Taipei: Guangwen shuju, 1981), juan 3: 14b.

⁸¹⁴ Hongli 弘曆, “Yuzhi shi wuji,” 御製詩五集 in *Qianlong yuzhi shiwen quanji*, 9: 180.

⁸¹⁵ For instance, for the phrase “*zuo yi you lei*” 左以右累 (the left is implicated by the right), Qianlong explained it as “the left, because of the right, was implicated” (*zuo zhe yin you er shoulei* 左者因右而受累). Here, the character *shou* 受 highlighted the passivity of A for being the *direct recipient* of B’s effect. This syntactic analysis is compatible with Zheng Xuan’s confluence thesis (the Wei River as a direct cause) but not Zhu Xi’s contrast thesis (the Wei River as a reference), thus making a meaningful distinction between the two. See, Hongli, “Yuzhi wen sanji,” 10: 968.

⁸¹⁶ For instance, in the imperially sanctioned Manchu translation of *Shijing* (1768), this line goes as “ging šui muke wei šui muke i turgunde duranggi ocibe...” (although the Jing River, because of the Wei River, becomes turbid...). Here, although the translation uses an adjective rather than the passive verbal form, the sense of direct causation was much stronger than the Chinese original, to the extent that Zhu Xi’s referential reading would appear awkward. Meanwhile, after confirming the clearness of the Jing and the turbidness of the Wei from on-site evidence, the emperor also made a follow-up critique to the ambiguity of Zheng Xuan’s commentary. According to him, the line would be much clearer if Zheng switched “*you*” 有 into “*ru*” 入, and added an “*er*” 而 inside, thus making the line into “*Jing shui yi ru wei, gu jian wei er zhao*” 涇水以入渭, 故見渭而濁 (Due to the confluence of the Jing River into the Wei River, it becomes turbid after meeting the Wei). Such a grammar-based discussion of textual change, being rare in classical studies, also testified to the emperor’s linguistic sensitivity. See, Hongli 弘曆, sanctioned, “Han i araha ubaliyambuha irgebun i nomun,” 御製繙譯詩經 in *Yingyin Wenyuange siku quanshu*, Classics 185: juan 2: 14b; Hongli, “Yuzhi wen sanji,” 10: 970.

Despite the uniqueness of Qianlong's syntactic analysis, he was certainly not the first scholar to be aware of this more natural interpretation. The real obstacle, as one can imagine, was not the classic's grammar but the Song commentaries. In this regard, Qianlong's endorsement of Zheng Xuan rather than Zhu Xi was consistent with the rising authority of Han scholars in the late-eighteenth century. That said, the syntactic analysis alone was not sufficient to reverse Zhu Xi's influential claim. In order to make a solid verification, the emperor turned to the material authority for his final judgment. Taking advantage of the bureaucratic system at hand, he ordered Qin Cheng'en 秦承恩 (1742-1809), the provincial governor of Shaanxi, to identify in person the water condition of the two rivers. And this became the background for a well-composed water report whose level of detailedness was seldom paralleled in the material-evidential analysis of the day.

Apart from a brief summary on the up-stream conditions of the two rivers, the observation record of the converging point can be divided into three sections. The first is an apt record of the water appearance from the surface, which not only takes account of their general difference in color but also pays attention to the more subtle visual effects in the converging process:

At the converging point, the Jing River water is on the north, and the Wei River on the south. The former is clear; the latter is turbid—this can be identified with a single glance. After their confluence, although the entire river turns turbid, within several *zhang* from the north shore, the clear water is still discernable. Only after seven or eight *li* farther down does the clear and turbid flows mix into one.

至合流處，則涇水在北，渭水在南，涇清渭濁，一望可辨。合流以後，全河雖俱渾濁，然近北岸數丈許尚見清泚。過此七八里外，清濁始混而爲一。⁸¹⁷

Here, the detailed and assertive lines on the converging point offered a picture-like depiction that testified to its convincingness from first-hand observation.

Yet this single observation, conducted after the spring flood, could not guarantee a similar water condition at other times. To wipe out this possible seasonal difference, the observers also made a “careful

⁸¹⁷ Hongli, “Yuzhi wen sanji,” 10: 969.

interview” of the boat and bank dwellers and along the rivers, and the findings became the second part of the report. According to these local people, although the Jing River was generally clear, and particularly so in the autumn and winter, there were still two exceptions. First was during the time of spring thaws and summer floods, when the river, with turbulent water, had little difference from the Wei. Second was the flooding period of the Wei River. When its water overflowed into the Jing, it would also cause seven or eight *li* of turbidity. That said, it was not comparable to Wei, which was always turbid throughout the year. Correspondingly, the water from the Jing River was directly drinkable during the clear period, while for the Wei River, the water only became drinkable after sedimentation. Moreover, the locals also offered a revealing explanation for this difference. According to them, this was because the Jing River had a stone riverbed, while the Wei had a sand one.⁸¹⁸ These on-site interviews effectively expanded the evidential base from a single time to seasonal changes around the year, and from the water surface to its interior conditions. For the first time in the commentary history of this ode, the two rivers went beyond the plain labels of “clear” versus “turbid” and became epistemic *wu* for material inquiry with their full inner richness.

But these oral claims needed further material verifications, and this became the third part of the on-site report, where the observers not only probed the riverbeds to confirm the difference, but also drew water samples from the “rapid flow of the two rivers” to check their turbidity. According to the report, “for the Jing River, one *shi* of water yields three odd *sheng* of sediment,” a concentration slightly above 3%, while “for the Wei River, one *shi* of water yields more than one *dou* of sediment,” thus a concentration over 10%.⁸¹⁹ This experimental verification was particularly impressive in the report, where the daily lore about drinkability was specified into a quantifiable measurement of sediment concentration.

This on-site observation was more than a mere fulfillment of the imperially ordered survey, for the situation at the converging point indeed contributed to a deeper understanding of the poetic lines. If

⁸¹⁸ Hongli, “Yuzhi wen sanji,” 10: 969.

⁸¹⁹ Hongli, “Yuzhi wen sanji,” 10: 969.

one takes the Jing River as the turbid one, the following line on the “limpidness of its shore” (*shi shi qi zhi* 湼湼其汜) would be challenging to interpret. Although Zhu Xi managed to fix the logic by claiming a lower water speed—and thus a clearer appearance—at the “tributary shore,” his interpretation was apparently tortuous.⁸²⁰ As a contrast, the on-site observation suggested a much straightforward reading, for the “several *zhang* of clear water” by the north shore after the confluence makes a perfect correspondence with the mentioning of the limpid shore in the ode. After establishing the hermeneutic superiority of his on-site observation, Qin also drew on an extensive list of previous texts to support his claim, as well as exploring the possible cause of the confusion. This included not only five quotations of classic commentaries, but also two from literary works, one from an official history, one from a stele inscription, and one from a local gazetteer. With full support in “eyewitnesses,” “textual references,” and “local interviews,” Qin wrapped up the entire report in a palace memorial (*Figure 75*), concluding that the clearness of the Jing and the turbidness of the Wei was “beyond the slightest doubt.”⁸²¹

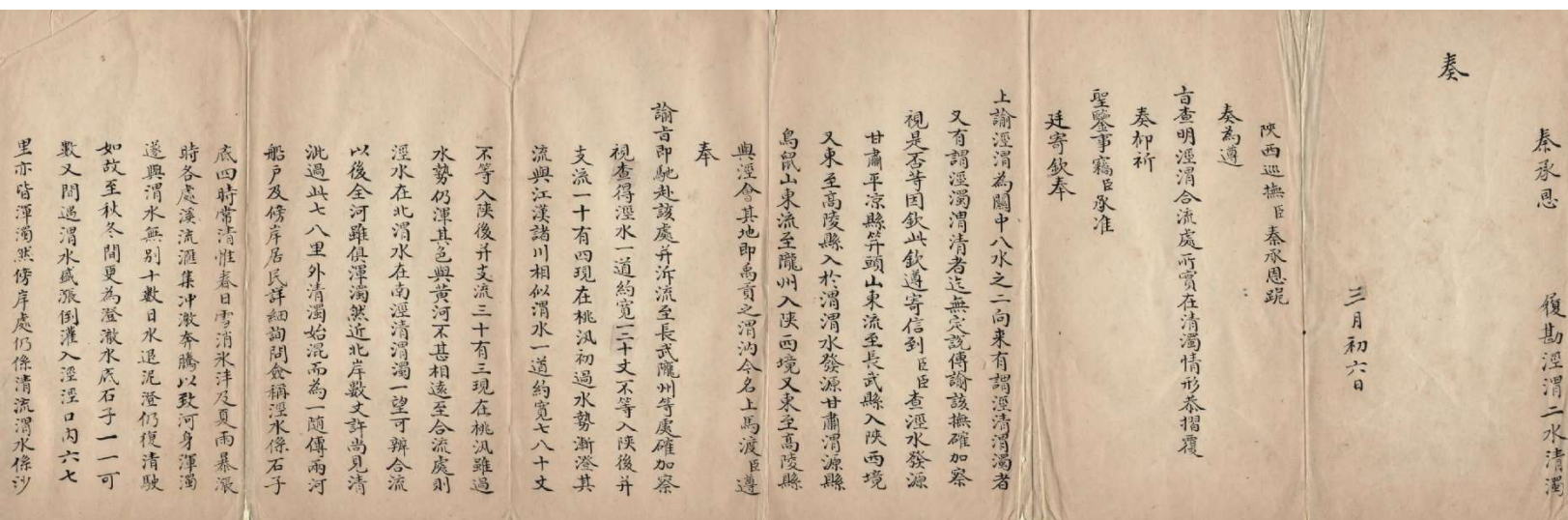


Figure 75: Duplicated copy of Qin Cheng'en's palace memorial, dated on the sixth day of the third month, Qianlong 55 (April 19th, 1790)⁸²²

⁸²⁰ Zhu Xi, *Shi jizhuan*, 32.

⁸²¹ Hongli, “Yuzhi wen sanji,” 10: 969–970.

⁸²² Qin Cheng'en 秦承恩, “Fukan Jing Wei ershui qingzhuo,” 復勘涇渭二水清濁 in *Junjichu dangzhe jian* 軍機處檔摺件, Archive Collection, Palace Museum of Taipei, no.043056.

Although modern hydrological study has confirmed a greater visual clearness of the Jing River in general, the seasonal differences on a day-by-day basis suggest a more complex picture. On the one hand, most of the claims in Qin's local interviews, such as the clearest water condition in the autumn and winter, as well as the turbidness of both rivers in the summer flood, are consistent with modern observations. On the other hand, there are also a few days, particularly during the spring, when the Wei River appears clearer. According to Chao Xiaohong's statistics based on the data from 1977, although one was able to see a "clear Jing" versus a "turbid Wei" for 178 days of the year, there were also 44 days (mostly in March) when there was indeed a "turbid Jing" versus a "clear Wei."⁸²³ As aptly observed by Chao, in the formation of this report, Qin had intentionally avoided many contradictory records from the Ming-Qing era.⁸²⁴ The report was thus closer to a conclusion-driven essay than a fairly-documented one. That said, the emperor only fixed the conclusion but not the approach of the demonstration. Qin's joint use of material and textual sources, and in particular his experimental revealing of refined material textures from the visual surface to the interior, still exemplified an advanced level of geographical *mingwu* inquiry of the day.

Needless to mention, an evidential inquiry like this was never a mere classical question for the emperor, but always with a political message as well. After reading Qin's report, the Qianlong emperor composed two poems to set his tone to the evidential findings:

撫臣親履勘	With an on-site expedition in person, the provincial subject
二水別分明	has distinguished the two rivers assuredly.
涇暫有時濁	The Jing River is turbid for some moments,
渭恒無日清	Yet no time would the Wei River be clear.
暫賓自非實	The temporary guest is by no means the reality,

⁸²³ Meanwhile, based on the data of year 1943, Chao Xiaohong also identifies 134 days of "clear Jing-turbid Wei," and 88 days of "turbid Jing-clear Wei." See, Chao Xiaohong 鈔曉鴻, "Jing Wei qingzhuo: Qianlong chao de kaocha bianxi jiqi gongyong yiyi," 涇渭清濁: 乾隆朝的考察辨析及其功用意義 *Zhongguo shehui kexue* 中國社會科學, no. 12 (2015): 186–87.

⁸²⁴ Chao Xiaohong, "Jing Wei qingzhuo," 191.

恒主合當名	and the permanent host should bear the name.
格物致知要	The investigation of <i>wu</i> and attainment of knowing is crucial,
問朱可力行	Could Zhu Xi really carry this out?
絜矩於爲政	Analogizing it to governance,
益當衡鑒明	One should be particularly clear like the balance and the mirror.
僞清乃誠濁	Fake clear is in fact turbid;
祛濁始真清	Only by removing the turbid can it becomes truly clear.
兩可寧爲實	How can the ambivalence become the reality?
一成要正名	To establish the one, the rectification of names is necessary.
那能不求解	How can one leave it unsolved?
惟是勉躬行	The only thing is to practice diligently in person. ⁸²⁵

The political implication becomes particularly apparent in the second poem, where the two rivers are analogized to the “clear” and “turbid” flows in officialdom. As already suggested by Chao Xiaohong, these messages can be contextualized to the discipline of perpetrators of examination frauds and relief embezzlements.⁸²⁶

That said, this political implication does not overshadow the epistemic interest of the case *per se*, where the emperor, in the first poem, makes an accurate summary of the key discovery—not a simple clear-turbid dichotomy, but a contrast between “some moments turbid” and “no time clear.” More impressive are the following lines, where the emperor generalizes color contrast into an epistemological discussion between the temporary “guest” (*bin* 賓) and the permanent “host” (*zhu* 主). Just as both rivers have a turbid time, the message of this guest-host metaphor is a seemingly ambivalent situation where the guest and the host are mixed up for the moment. Yet as suggested in the second poem, “ambivalence” cannot be real. Like the “fake clear” water, such a misleading situation is destined to be a temporal

⁸²⁵ Hongli, “Yuzhi wen sanji,” 10: 971.

⁸²⁶ Chao Xiaohong, “Jing Wei qingzhuo,” 190-191, 193-194.

appearance, since according to the emperor, the reality is only “one.” Therefore, the key concern is to distinguish between “guest” and the “host” from their mixed-up appearances: Only at the permanent “host” can one establish a stable connection between the “name” (*ming* 名) and the “reality” (*shi* 實), so as to fulfill the “rectification of name” or the construction of knowledge. If so, how should one penetrate the mixed-up appearances to perceive the hidden reality? The answer, as the emperor tells us in the final couplets of both poems, lies in active, personal engagements (*lixing* 力行/ *gongxing* 躬行), an intensive, hands-on “investigation of things” that even its theoretical founder Zhu Xi failed to undertake.⁸²⁷ From material engagements to a guest-host distinction to the rectification of names, the two poems map out a systematic methodology for inquiring the hidden reality of *wu*, a featured approach that tilted significantly to the material side.

The format of this imperially authored evidential study was as revealing as its content. In the emperor’s third anthology of prose, the findings were compiled into a lengthy essay named “Documentary on the Clearness of the Jing River and the Turbidity of the Wei River” (Jing qing Wei zhuo jishi 涇清渭濁紀實, henceforth “Documentary”), which included the emperor’s syntactic analysis, hypothesis, and decree for on-site observation at the beginning, followed by Qin Cheng’en’s extensive report. The two poems, along with a summary of the background at the beginning, and some succinct notes on Qin’s findings as interlinear annotations, appeared in the fifth anthology of poetry. This could be taken as a concise version of the study, which also appeared in the prose anthology as an attachment to

⁸²⁷ Zhu Xi, as a southern Song scholar who spent his entire life under the Song-Jin opposition, certainly had no chance for an on-site observation and must have based his argument on the earlier commentaries. However, the situation was more complicated for the Tang predecessors who made the same argument. According to Shi Nianhai’s modern study, due to the changing population density of the upstream, and the erosion of the riverbed, the turbidity of the two rivers witnessed several rounds of changes throughout the historical time. In the Spring and Autumn period, as well as the post-Tang era, the Wei River was indeed more turbid than the Jing River—thus confirming Qianlong’s finding. However, in the Sui-Tang period, the turbidity of the two rivers became reversed. Therefore, instead of a hasty textual misinterpretation, the tortuous “turbid-Jing thesis” by Kong Yingda and his fellows was more likely a deliberate reconciliation between the classic record and the material evidence at hand. Although the neglect of this possible historical dimension had discounted the emperor’s critique to Zhu Xi, it also confirmed his prioritization of direct material evidence over historical records. See, Shi Nianhai 史念海, *Heshan ji erji* 河山集二集 (Beijing: Sanlian shudian, 1981), 199-200, 207-209.

the documentary.⁸²⁸ For the documentary essay, Qin's report constituted the predominant part, which offered the key information and occupied seven-tenths of the space. Here, it is noticeable that the report was not in the format of an evidential treatise, but a palace memorial—a “direct quotation” whose original form the emperor apparently managed to keep when incorporating it into the documentary. When compared to the duplicated memorial preserved in Taipei (*Figure 75*), the quotation was astonishingly faithful to the original. Apart from the removal of a formulaic beginning, and a supplementary ending for further survey plans turned down by the emperor, the entire body text of the memorial was accurately preserved. This included not only the on-site findings that were directly related to the evidential discussion, but also the concluding adulatory words to the emperor that were characteristic for a palace memorial.⁸²⁹ Typical formatting requirements, such as the head-raising indent and the smaller font for the character “*chen*” 臣 (your subject) were also strictly preserved (*Figure 76*). Moreover, although the ending notes for further survey were dropped off, the emperor retained the last two characters “cautiously memorialize” (*jinzou* 謹奏), thus using the formulaic ending to keep the general format intact. Such features made clear the emperor's intention to include not only the evidential information but also the original taste of the memorial form. With faithful quotation and mimetic editing, the report was unmistakably presented as both an evidential report and a palace memorial. It was not merely *used* for

⁸²⁸ See, Hongli, “Yuzhi shi wuji,” 9: 213; Hongli, “Yuzhi wen sanji,” 10: 967-971.

⁸²⁹ In the entire quotation, only one character differed from the original memorial (orthographical variations excluded), which must be considered a highly faithful quotation during the day when strict principles of academic reference were not yet established. Quoting *Shanxi tongzhi* 陝西通志, the memorial suggests that the sluice on the Jing River closes in the fourth month to “prevent the turbid water from jamming the canal” (*fang zhuo shui yuqu* 防濁水淤渠), while opens in the seventh month to “channel the Jing River to irrigate the field” (*yin Jing shui guandi* 引涇水灌地). The text also appears the same in the original *Shanxi tongzhi*. However, in the quotation of “Documentary,” the latter line is altered into “channel the *clear* water to irrigate the field” (*yin qingshui guandi* 引清水灌地). The logic for the alternation is apparent. By changing “Jing 涇” into “qing 清” (clear), the character can form a parallel contrast with the character “zhuo 濁” (turbid) in the previous sentence—an antithesis-based rectification that was common in high-Qing philological reasoning. That said, the current change is neither necessary nor well-supported, which can only be taken as an *ad hoc* rectification for strengthening of the general claim on the *clearness* of the Jing. In fact, in both the draft manuscript and the ink rubbing/ embroidered scroll of “Documents” (specified below), the character also goes as “Jing.” Such evidence further confirms the faithfulness of the “Documentary” in its earlier versions—the alternation only took place in the reediting of the anthology. See, Hongli, “Yuzhi wen sanji,” 10: 969-970; Liu Yuyi and Shen Qingya, *Shanxi tongzhi*, juan 39: 76b.

political purpose of official discipline but by itself was a political product, which bore the dual nature as an intellectual work and an official document.

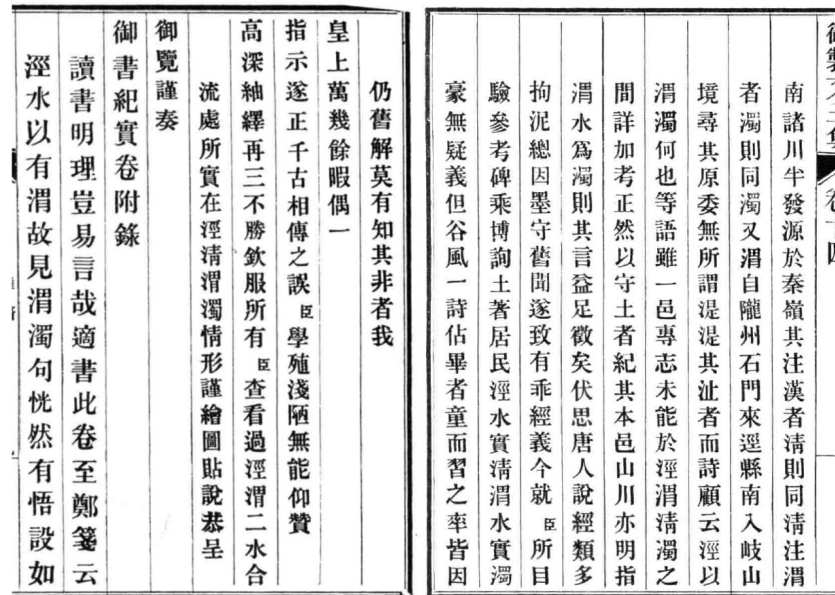


Figure 76: Printed Copy of “Documentary,” ending section. The left column shows the lengthy adulatory words close to the end, which is terminated by a formulaic sentence on the submitting of the memorial, beginning with the word “*suoyou*” 所有 (for all the...). The inclusion of this part, which is only tangential to the evidential reasoning, adds an unmistakable flavor of palace memorial to “Documentary.”⁸³⁰

What was the gain for preserving this original context for the evidential reasoning? The first must be a sense of credibility. Without a chance to conduct the survey in person, the palace memorial was the least mediated official channel for information control, which offered the freshest account for the situation on spot.⁸³¹ In this sense, the unparalleled reliability of the memorial format *per se* also contributed to the cogency of the “Documentary.” And at the same time, the political context also granted the emperor a unique position to buttress the report with his own imperial authority. Right before the direct quotation of Qin Cheng’en’s memorial, the emperor added an autocratic note that, if anyone suspected Qin’s memorial as groundlessly catering to the emperor’s own idea, one could personally verify the case at the rivers themselves. And if the report was indeed problematic, “I would punish Cheng’en for the crime without

⁸³⁰ Hongli, “Yuzhi wen sanji,” 10: 970.

⁸³¹ Beatrice S. Bartlett, *Monarchs and Ministers: The Grand Council in Mid-Ch’ing China, 1723-1820* (Berkeley, Los Angeles, and Oxford: University of California Press, 1991), 49–50.

insisting on the fault” (*zhen dang zhi Cheng'en zhi zui, bu hu guo ye* 朕當治承恩之罪，不怙過也).⁸³²

This open attitude not only proclaimed the emperor's confidence in the findings, but also reaffirmed his own supreme political-intellectual authority. Impressively, the draft manuscript of the “Documentary” is still preserved today, which shows that the autocratic note was later added onto a clear copy where the evidential reasoning was already complete (*Figure 77*). Here, the carefully written regular script of the clear copy, the extensive quotation of Qin's formatted memorial, and the cursive, vermilion notes by the imperial hand right beside it again reminds us of the typical power dynamic between the emperor and the provincial governor in the numerous palace memorials with vermilion rescripts. The evidential report, despite its content, was firmly framed within the imperial channel of state governance.

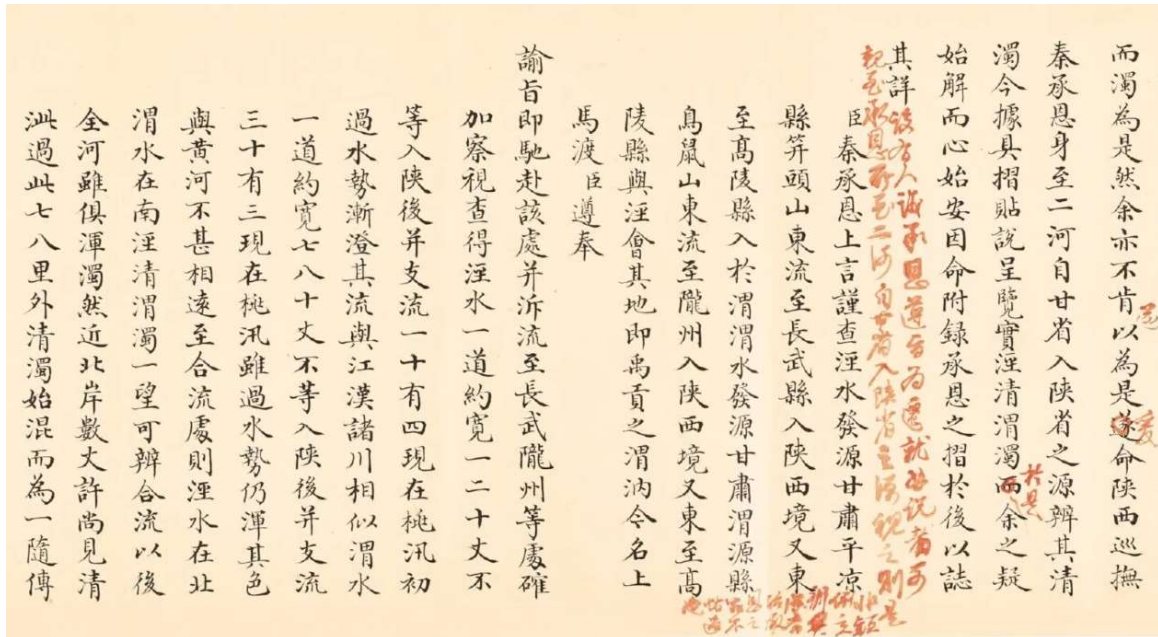


Figure 77: Hongli 弘曆, “Documentary on the Clearness of the Jing River and the Turbidity of the Wei River” (*Jing qing Wei zhuo jishi* 涇清渭濁紀實), section. Clear draft in black with corrections in vermilion, size unknown. Sotheby Hong Kong, Spring Auction 2020, Lot. 2543.

When the emperor assigned the survey to Shaanxi, he ordered Qin Cheng'en to “make illustrations and attach explanations” (*huitu tieshuo* 繪圖貼說) in his report—a supplementary visual

⁸³² Hongli, “Yuzhi wen sanji,” 10: 968.

dimension that was prevalent in the imperial accounting of visual evidence.⁸³³ Although Qin also mentioned the accompany of illustration(s) in his memorial, it was not included in the “Documentary,” nor do they come together with the copies of the memorial in today’s archive. That said, we can still catch a sight of this visual dimension from its trans-medial representations, when the emperor ordered the leading court official-artistic Dong Gao 董誥 (1740-1818) to supplement the “Documentary” with a cartographic painting, which must have been based upon Qin’s illustration. Despite the unknown status of Dong’s original work, it was widely reproduced in the form of an ink rubbing (*Figure 78*). Throughout his long reign, the Qianlong emperor had a lasting tradition to bestow imperially composed or sanctioned works on high officials. In the eighth month of the same year, this painting facsimile was carved together with the “Documentary” and two poems to make 188 ink-rubbing copies. Bestowing them on the nobles and high officials throughout the empire, this illustrated rubbing thus became the “completed form” of the evidential project that reached a wide circulation.⁸³⁴ Besides, this evidential set was also reproduced into embroidered handscrolls, where the image, though rendered in a different color scheme, was clearly based on the same original work (*Figure 79*).⁸³⁵

⁸³³ *Shangyu dang* 上諭檔, Archive Collection, First Historical Archive of China, Qianlong 53-1-30, 2nd entry.

⁸³⁴ For a complete name list of the recipients, see, *Shangyu dang*, Qianlong 55-8-26, 3rd entry.

⁸³⁵ There are two known copies of the embroidered scroll preserved today, one at the Palace Museum of Taipei (*Figure 79*), and the other at the Cleveland Museum of Art (no. 1915.618.a), which shared the same composition yet with different color schemes and mounting designs. As mentioned in Footnote 828, the reproduced “Documentary” text of the two embroideries follows the character *jing* 涇 in Qin Cheng’en’s original memorial rather than the revised character *qing* 清 in the *Third Anthology* (1795). This indicates an early dating of the two embroideries.

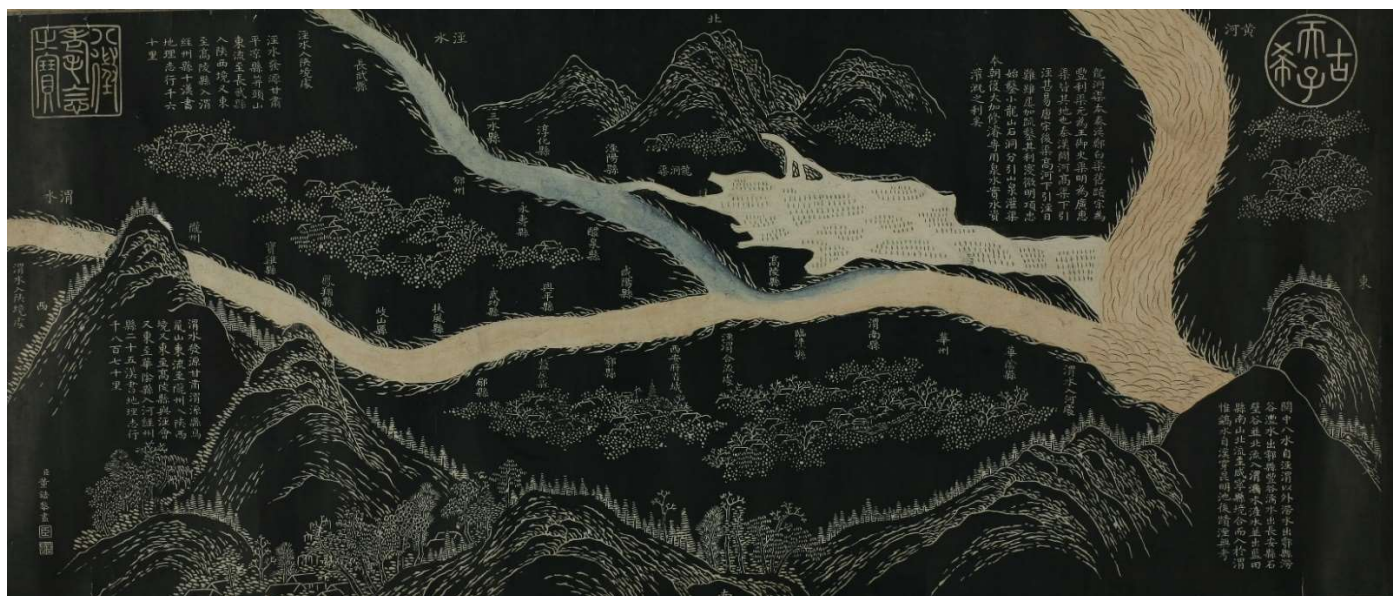


Figure 78: Dong Gao 董誥, *Illustration on the Clear Jing River and the Turbid Wei River* (*Jing qing Wei zhuo tu* 涇清渭濁圖, illustration section), dated 1790. Ink rubbing with color, 29 x 351 cm. National Library of China, mounted scroll no. 350.

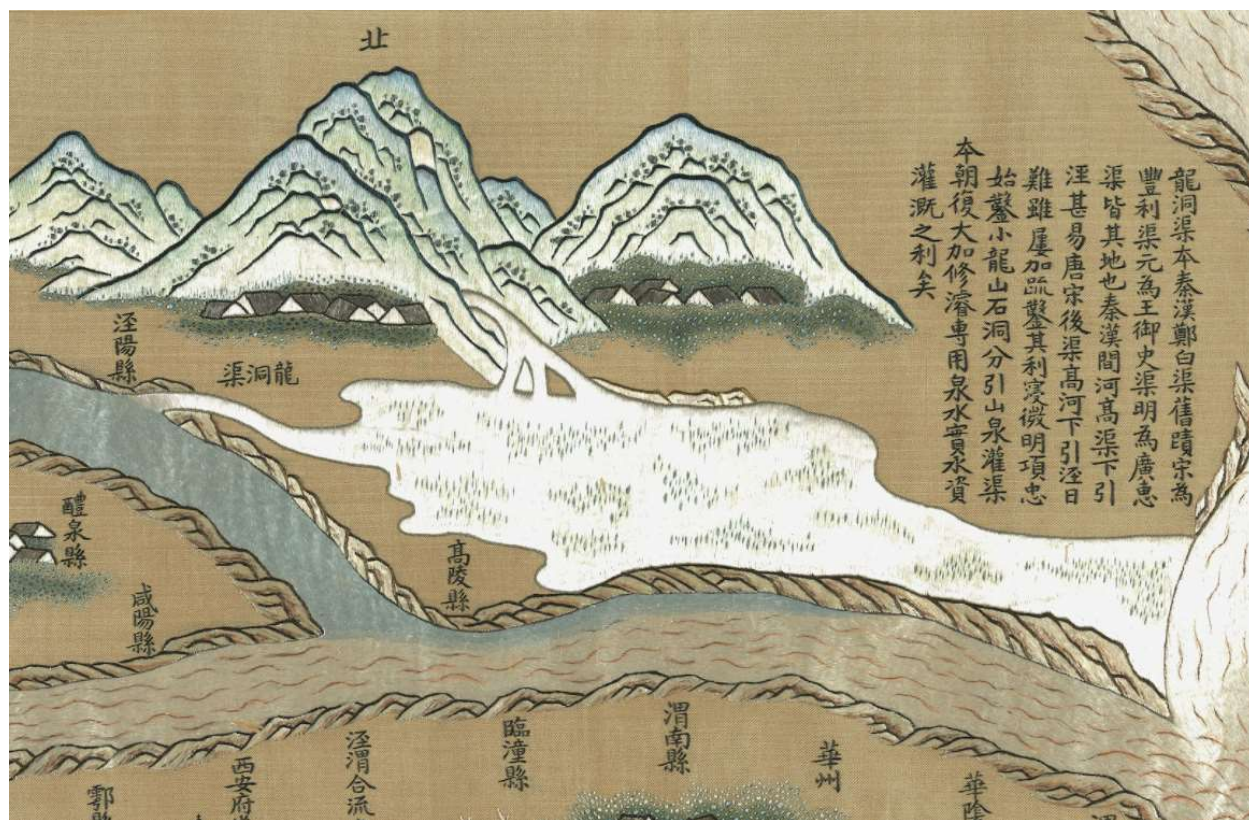


Figure 79: Dong Gao, *Illustration on the Clear Jing River and the Turbid Wei River* (detail), ca. 1790. Chinese embroidery in handscroll format, 28 x 354.5 cm. Palace Museum of Taipei.

In spite of the texture strokes on the surrounding mountains, the body part of the two rivers is drawn in a plain, cartographic manner, with local administrative names added. According with the theme of the work, the most eye-catching motif of the illustration is the color difference for the two rivers. This is particularly the case for the ink rubbing, where the two rivers are rendered creatively with contrasting colors later added to the rubbing surface, which was by definition an art of black and white. The illustration of the converging point works closely with Qin Cheng'en's report, where the extension of the clear flow into the northern shoal of the near downstream offered an excellent visual exegesis to the two lines in *Maoshi*. That said, one may not use the geographic names below to measure the spread of the clear water along the shore. The ending point at Weinan 渭南 county or Huazhou 華州 sub-prefecture would indicate an extension more than ten times longer than the reported "seven-to-eight *li*" of clear flow (and also note the different end points on the rubbing and the embroidery). This manneristic distortion marks a prioritization of visual impact over cartographic precision, such that the situation at the merging point can be understood in a single glimpse.

If the color contrast of the Jing and the Wei is the most salient motif on the illustrations, the second eye-catching component is no doubt the irrigation system above the converging point, namely the Longdong 龍洞 Canal. This is particularly the case on the ink rubbing, where the system is the only colored area besides the Jing, Wei, and the Yellow River mainstream. Meanwhile, its significance is also suggested through the accompanying textual explanation, which, as the longest of the four textual blocks on the illustration, offers a succinct historical account on this benevolent hydraulic construction, in contrast to the mere geographical information of the Yellow River branches in the other three textual blocks. With the renowned Zheng Guo 鄭國 Canal in the Warring States as its progenitor, the Longdong Canal was considered the most important construction in the Qing irrigation systems of the Guanzhong 關

中 valley.⁸³⁶ As mentioned by the accompanying text, due to the lowering of the Jing riverbed, the water source for this system experienced a gradual shift from the Jing River to the mountain streams, and the Qing hydraulics were praised for “using the stream water exclusively.” Although in the historical references by the end of Qin Cheng’en report, he indeed mentioned the progenitors of this irrigation system and the historical change of the riverbed, they were merely raised as supplementary evidence for the water condition of the Jing River. Neither the name “Longdong Canal” nor its new life in the Qing was discussed, which did not fit into the striking position of the motif in the illustration at all.⁸³⁷

This unexpected emphasis pushes me to look further into the irrigation system. The initial move to cut off the Jing River from the canal took place in 1737, and it was repeatedly renovated by the succeeding Shaanxi governors throughout the Qianlong reign.⁸³⁸ Although the scope of irrigation—like the limpid flow on the northern shoal—had been largely exaggerated in the illustration, the Longdong system was indeed a representative hydraulic achievement in Shaanxi in the Qianlong era.⁸³⁹ That said, its striking presence in an illustration centered around the evidential investigation of the Jing and Wei still needs an explanation. Considering the “deviating” nature of this irrigation motif that involved additional local knowledge as well as the eulogizing tone in the accompanying text, it must come from Qin Cheng’en’s original illustration rather than an invention of the court painter. If for the emperor, the watercolor of the two rivers evoked a proper distinction and discipline of his subjects, the illustration demonstrated an “official’s view” which drew a closer connection between the evidential investigation and hydraulic management.

⁸³⁶ For a brief history from the Zheng Guo Canal to the Longdong Canal and their significance, see, Pierre-Étienne Will, “Clear Waters versus Muddy Waters: The Zheng-Bai Irrigation System of Shaanxi Province in the Late-Imperial Period,” in *Sediments of Time: Environment and Society in Chinese History*, ed. Mark Elvin and Liu Ts’ui-jung (London: Cambridge University Press, 1998), 286-306, 318.

⁸³⁷ Hongli, “Yuzhi wen sanji,” 969–70.

⁸³⁸ See, Kang Xiping 康欣平, *Weibei shuili jiqi jindai zhuanxing (1465-1940)* 渭北水利及其近代轉型 (1465-1940) (Beijing: Zhongguo shehui kexue chubanshe, 2018), 76-82, 101-103.

⁸³⁹ Instead of flowing into the Yellow River mainstream as suggested by the illustration, the Longdong canal in fact terminated at the Shichuan 石川 River west to Weinan 渭南 county, which means that the illustration has doubled the extent of the canal.

This connection is particularly revealing for us to comprehend the possible origin of Qin's evidential techniques. Indeed, the emperor's order was a special one, and it was rare for a high provincial governor like Qin to be personally involved in an on-site evidential survey for official reasons. But such on-site survey was much more common in hydraulic management. For instance, both eminent officials Chen Hongmou 陳宏謀 (1696-1771) and Bi Yuan 畢沅 (1730-1797) had personally investigated the Longdong canal for renovation when serving as provincial governor of Shaanxi.⁸⁴⁰ Interestingly, the discussion of “clear” (*qing* 清) and “turbid” (*zhuo* 濁) water also loomed large in the Longdong case, since the necessity of protecting the clear water of the mountain streams from the (comparatively) muddy water of the Jing River was precisely due to the silting up of the canal by the ever decreasing flow of the river.⁸⁴¹ And even more impressively, when Chen Hongmou arrived at the site to figure this out, his procedure was also to “conduct observations around, examine past relics, consult with local folks, and check out previous records”—an evidential portfolio which precisely reminds us of Qin Cheng'en's material investigations, local interviews, and textual references.⁸⁴²

As for the hands-on and quantitative inclinations in on-site surveys, they were also common in hydraulic management. For instance, in his southern tour to Zhejiang in 1762, the Qianlong emperor once considered building stone sea dikes along the coast of the Hangzhou Bay. When he dispatched the senior official Liu Tongxun 劉統勳 (1700-1771) to check its feasibility, the latter's response was also a hands-on “experiment” (*shiyān* 試驗), where he selected three locations to pile wooden stakes into the shore so as to figure out a detailed account for their different “sand nature” (*shaxing* 沙性).⁸⁴³ Meanwhile, when

⁸⁴⁰ Kang Xinping, *Weibei shuili jiqi jindai zhuanxing (1465-1940)*, 101–2.

⁸⁴¹ See, Chen Hongmou 陳宏謀, “Zouqing xiu Longdong qu gong yi yi nongtian zhe,” 奏請修龍洞渠工以益農田摺 in *Gongzhong dang zouzhe* 宮中檔奏摺, Archive Collection, Palace Museum of Taipei, no.403000313. For a briefer essay in print, also see, Chen Hongmou 陳宏謀, *Peiyuan tang wenxi* 培遠堂文檄 (Guilin: Guangxi sheng xiangxian yizhu bianyin weiyuanhui, 1943), juan 30: 7a-b.

⁸⁴² Chen Hongmou, “Zouqing xiu Longdong qu gong yi yi nongtian zhe”. 周遭相度，徧查舊跡，諮詢老民，合之記載。

⁸⁴³ See, He Weiguo 和衛國, *Zhishui zhengzhi: Qingdai guojia yu Qiantangjiang haitang gongcheng yanjiu* 治水政治：清代國家與錢塘江海塘工程研究 (Beijing: Zhongguo shehui kexue chubanshe, 2015), 165.

the emperor made his personal inspection of the sea dike, he also ordered to establish a measure (*libiao* 立標) such that the rise and fall of the sand bed could be accurately recorded.⁸⁴⁴ If the hands-on test of the “sand nature” reminds us of Qin Cheng’en probing of the riverbed, the quantitative measuring of the sand flow here evokes Qin’s calculation of the concentration ratio.

From the general approaches to the specific methods, the above similarities between hydraulic management and Qin’s evidential report highlight an epistemological consensus regarding what constituted a good material investigation in bureaucratic channels. In recent years, scholars have demonstrated a rise of “technocratic culture” in the hands-on material management of the Qing bureaucracy.⁸⁴⁵ Although Manchu bondservants and the Imperial Household Department have been spotlighted in these studies, the material-oriented, expertise-intensive approach is regarded with an epistemological significance that goes far beyond the specific group.⁸⁴⁶ In this respect, Yijun Wang’s more recent study on copper coin reforms in the early Qianlong era offers an apt case by demonstrating the prevalence of “technocratic epistemology” for both Manchu and Han officials.⁸⁴⁷ In fact, in his monograph on Chen Hongmou two decades ago, William Rowe already aligned this scholar-official with a featured “pragmatic, technocratic, ‘hands-on’ approach to governance.”⁸⁴⁸ Despite his lack of the later conceptual frameworks, Rowe’s study showed evidence of a wide span of material expertise in Chen’s agronomic management, and, as most relevant to our current discussion, hydraulic engineering.⁸⁴⁹ This technocratic epistemology sheds important light on the methodic origin of Qin Cheng’en’s survey, which,

⁸⁴⁴ Hongli, “Yuzhi wen chuji,” 10: 374.

⁸⁴⁵ Chen, “The Rise of Technocratic Culture in High-Qing China,” 19–26; Ko, *The Social Life of Inkstones*, 11, 15–17.

⁸⁴⁶ Chen, “The Rise of Technocratic Culture in High-Qing China,” 10–17; Ko, *The Social Life of Inkstones*, 191–201.

⁸⁴⁷ See, Wang, “From Tin to Pewter,” ch. 5, esp. p. 194, 196.

⁸⁴⁸ William T. Rowe, *Saving the World: Chen Hongmou and Elite Consciousness in Eighteenth-Century China* (Stanford: Stanford University Press, 2001), 3.

⁸⁴⁹ Rowe, *Saving the World*, ch. 7, esp. p. 222–231. For the relevance of this earlier account to the discussion of “technocratic epistemology,” see, Wang, “From Tin to Pewter,” 21–22.

by the time of the late-Qianlong era, must have grown into a widely acknowledged norm for a well-grounded memorial on material issues.

In this chapter, we have examined the revealing of refined material textures in the mid-Qing *mingwu* studies of *Shi*. On the one hand, scholars of evidential and natural studies had significantly improved the intensity of observation and detailedness of representation in their material engagements, confirming an inner richness of the *mingwu* objects through the revealing of refined material textures that were not discernible in an immediate contact. On the other hand, the study of *mingwu* objects also benefited greatly from the growing material power of the Qing empire, such as new evidence from the frontier, court-sponsored surveys, and the technocratic culture in the imperial network. In this sense, the development of material studies could be taken as a collaborative effort of literati and court learning. Admittedly, a boundary between these two sides was never apparent. Just as we have seen in the cases above, leading literati scholars could take part in court's evidential projects, while imperial surveys also benefited from the study of local participants—and a similar collaboration could be said for the scholarly background between Han and Manchu ethnicities. However, despite the explanatory power of such dichotomies, one thing is clear from this chapter. Even if court learning and the Manchu background had indeed taken a unique, if not leading role in facilitating material studies, this evidential trend was by no means confined to a single group, but was in fact consistent with the more refined material understandings in the broader intellectual sphere.

This shared epistemological understanding was also salient in the philological aspect. In fact, when the Qianlong emperor launched his multilingual scholarly projects in the court, the misleading surface of the Chinese transliterations was a major aspect that the emperor aimed to rectify. One of the emperor's favourite examples was the term “*eba*” 峨拔 that appeared in a place name, for which the Han official 方觀承 (1698-1768) drew classical references from Zheng Xuan and the “Greater Hymns” of *Shi*

to interpret it as “sacrificing to the spirits of the road” (*baji xinglu shen* 輓祭行路神).⁸⁵⁰ In claiming this, Fang must have taken the character *ba* 輓 in its literal meaning in Chinese. However, as critiqued by the emperor, the term was in fact a transliteration from Mongolian, which, more often written as *ebo* 鄂博 (Mongolian: oboo), had nothing to do with the classics at all:

Ebo is a Mongolian word, which means to pile up—the piling up of stones to indicate a sacrificial site. The Mongols have, indeed, no idea about the “Greater Hymns” and the claim by Mr. Zheng [Xuan]. Although the characters *ebo* are slightly closer [to the meaning], they are nothing but sound-based transliterations. How can there be any specific meaning inside them!

夫鄂博乃蒙古語，為堆砌之義，堆砌石以表祭處。蒙古固不知大雅及鄭氏之說也。即鄂博字略近，亦不過對音書之，有何取義於其間哉！⁸⁵¹

Transliterations are arbitrary in the use of characters. As a result, a literary reading of the Chinese characters on the surface can be misleading, and the right way is to seek the original language based on sound. Does this methodological critique not remind us precisely of Wang Niansun’s prioritization of sound to graph? From this vantage point, were the classical texts not “transliterations” from Old Chinese that demanded a proper translation through the phonological approach? In both cases, the misleading textual appearance indicated an inner richness that could only be mapped out into more refined philological textures through language expertise. Like the material aspect, there was also a shared evidential trend in mid-Qing private and court learning on the philological aspect.

More revealingly, this chapter and Chapter Three also collectively portray a broader epistemological consistency in the parallel development of the material understanding and the philological understanding. Both pointed to an inner richness of the epistemic object through the revealing of well-ordered, localized textures. It is under this epistemological parallel that the material and the philological aspects join together under the more traditional definition of *wu*: a specific event, a focus

⁸⁵⁰ Hongli, “Yuzhi wen erji,” 10: 617. Although not specified here, the most likely line from the “Greater Hymns” drawn by Fang was “we take a ram to sacrifice to the spirits of the road” (*qu di yi ba* 取羝以輓) in *MS* #245. See, Zheng Xuan, *Maoshi zhuan jian*, 384; Karlgren, *The Book of Odes*, 202.

⁸⁵¹ Hongli, “Yuzhi wen erji,” 617. As a favorite example, the case appears at three different places in the emperor’s anthology. Also see, Hongli, “Yuzhi wen erji,” 690, 721.

of concern. In this sense, if there were one sentence to capture the entire evidential enterprise, it would be a collective inquiry for the refined textures of specific *wu*. This is the great message that the *mingwu* study of *Shi* teaches us.

Chapter Six: The Bifurcation of *wu*

In the autumn of 1795, Ruan Yuan, then the educational commissioner of Shandong, sent his draft commentary of *Maoshi* to Zang Yong, who was at the time serving at Bi Yuan's office in Hubei.⁸⁵² This initiated a debate between the two on the dating of the ode "Conjunction in the Tenth Month" (Shiyue zhi jiao 十月之交, *MS* #193). Although the preface to the ode marked it as a critique to the King You 幽 of Zhou (r. 782-771 BCE), Zheng Xuan had suggested this was a later attribution by Mao Heng, and Zheng instead associated the ode to King Li 厲 (r. ca. 877-841 BCE).⁸⁵³ The ode has a special position in the history of Chinese astronomy as it offered the earliest record of a solar eclipse in the Chinese classics:

十月之交	At the junction (of sun and moon) in the tenth month,
朔日辛卯	on the first day of the month, the day <i>xinmao</i> ,
日有食之	the sun was eclipsed. ⁸⁵⁴

Based on the Keplerian system used for the Yongzheng calendar, Ruan Yuan confirmed in his commentary the existence of a solar eclipse on the 1st day, 10th month, 6th year of King You (Sep. 6th, 776 BCE), which was a *xinmao* day. This astronomical calculation aligned him with the preface, which attributed the ode to the time of King You.⁸⁵⁵ In contrast, Zang Yong took Zheng Xuan's commentary seriously, which, together with two other sources from the Han scholar Liu Xiang 劉向 (77-6 BCE) and the Lu School of *Shi*, led him side with the attribution to the time of King Li instead.⁸⁵⁶ The debate apparently went into the following year, when Jiao Xun, sojourning at Ruan Yuan's new Hangzhou office

⁸⁵² Chen Hung-sen 陳鴻森, "Zang Yong nianpu," 臧庸年譜 *Zhongguo jingxue* 中國經學 2 (2007): 270–71; Zang Yong, *Baijing riji*, juan 6: 1a.

⁸⁵³ Zheng Xuan, *Maoshi zhuan jian*, 269.

⁸⁵⁴ Zheng Xuan, *Maoshi zhuan jian*, 269 The translation follows Karlgren, *The Book of Odes*, 138.

⁸⁵⁵ For the calculation process, see, Ruan Yuan, *Yan jing shi ji*, 91–93. For the difference between the Yongzheng calendar and the Kangxi calendar mentioned below, see, Li Rui's 李銳 letter in Jiao Xun, *Jiao Xun quanji*, 10: 4756.

⁸⁵⁶ Zang Yong, *Baijing riji*, juan 6: 2b–3b.

in the ninth month of 1796, helped him to settle the problem with a more detailed calculation.⁸⁵⁷ Based on the Tychonian system used for the Kangxi calendar, Jiao not only confirmed Ruan's dating to the sixth year of King You, but also, through an exhaustive calculation year by year, made clear that there was no *xinmao* day that was the first day of a lunar tenth month throughout the 37-year reign of King Li.⁸⁵⁸ In a triumphant tone, he concluded the calculation as "sufficient to shut the mouth" of those who attributed the eclipse to the time of King Li.⁸⁵⁹

Although Zang Yong's response to the new calculation remains unknown, the debate marks a clear difference between the parallel logics of material and textual evidence. On the one hand, Ruan Yuan and Jiao Xun, both of whose names appeared in *Chouren zhuan* 疇人傳 (Biographies of Astronomers), represented an expanding group of Qing evidential scholars who were familiar with astronomical calculations and accepted its priority over authoritative commentary.⁸⁶⁰ On the other hand, Zang Yong's text-derived refutation also made clear that the priority was not a consensus accepted by all evidential scholars of the day. In his study two decades ago on early-Qing astronomical learning, Willard Peterson already paid attention to this epistemic tension between the "texts of historical tradition" and the

⁸⁵⁷ Jiao Xun, *Jiao Xun quanji*, 5: 2053, 9: 3913.

⁸⁵⁸ Jiao Xun, *Jiao Xun quanji*, 5: 2049-2051, 2054-2066.

⁸⁵⁹ Jiao Xun, *Jiao Xun quanji*, 5: 2067. In fact, according to modern astronomical studies, even this King You dating is still problematic. For despite the occurrence of the eclipse on the day, it was only observable in the high-latitude areas, which did not include the Zhou capital. Instead, a serious calculation would suggest 735 BCE as the most possible year, which means an alternative dating in the era of King Ping 平 (r. 770-720 BCE). Yet this would further deny the King You dating in the preface, thus creating a greater tension between the textual and the material evidence. See, Zhang Peiyu 張培瑜, Xu Zhentao 徐振韜, and Lu Yang 盧央, "Zhongguo zaoqi de rishi jilu he gongyuanqian shisi zhi gongyuanqian shiyi shiji rishi biao," 中國早期的日食記錄和公元前十四至公元前十一世紀日食表 *Nanjing daxue xuebao* 南京大學學報, no. 2 (1982): 380-81.

⁸⁶⁰ In his calculation essay, Jiao Xun listed eleven previous scholars who preferred a King You dating. The first five, spanning from the Six Dynasties to the Yuan, were primarily renowned for their skills in astronomy. The following three, Fan Chuyi, Li Chu 李樗, and Feng Fujing, were important *Shijing* scholars who were not capable for the calculation on their own, but merely quote the Tang calendar to support the claim. The rest three, Jiang Yong, Dai Zhen, and Yan Ruoqu 閻若璩, were all top-tier Qing evidential scholars familiar with the calculative skill. This name list is an epitome for the rising significance of astronomical calculation among the Qing evidential scholars. See, Ruan Yuan 阮元, *Chouren zhuan huibian* 疇人傳彙編 (Yangzhou: Guangling shushe, 2009), 616-621, 687-692. For a general account of this rising significance, also see, Limin Bai, "Mathematical Study and Intellectual Transition in the Early and Mid-Qing," *Late Imperial China* 16, no. 2 (1995): 50.

“numbers or observable phenomena.”⁸⁶¹ The name-thing compound, bearing both textual and material logics, had no guarantee for a hermeneutic consistency between the two. Once this was the case, different takes on epistemic priority could effectively create bifurcated interpretations on the two sides. Meanwhile, similar to the philological cases, competing evidence on the material side alone also created further space for bifurcations. In this chapter, I will examine these bifurcating categories of *wu* through three complex cases. The first two cases focus on the epistemic tension between the philological and the material sides. In the first case, the material side gained slightly an upper hand, while in the second case the philological had the advantage. Yet in neither case was the parallel cogency of the two sides reducible to a single epistemic priority, thus indicating a more diversified epistemological world than the scientific view of later times. The third case deals with a special kind of bifurcation, where the irreconcilability of the philological and the material sides foregrounded the poetic nature of the *mingwu* images as a literary medium. Such bifurcating dynamics not only offer an intrinsic explanation for the literary-hermeneutic turn of *Shi* studies in the nineteenth century, but also, on a broader level, sheds important light on the epistemological potentials and limits of the indigenous intellectual world before the full impact of the scientific worldview.

The Flowering *yao* Grass in the Fourth Month

The ode “Seventh Month” (*MS* #154), renowned for the richness of its phenological information, mentions the natural trait of a *yao* grass:

四月秀萋

In the fourth month, there is the flowering of the *yao* grass.⁸⁶²

The lack of specificity for this *mingwu* term in the Mao commentary opened a field of contention for later scholars. Before the mid-Qing era, three of the prevalent interpretations include Zheng Xuan’s

⁸⁶¹ Peterson, “Changing Literati Attitudes toward New Learning in Astronomy and Mathematics in Early Qing,” 385.

⁸⁶² Zheng Xuan, *Maoshi zhuan jian*, 198.

snakegourd (*wanggua* 王瓜) thesis, Qiu Guangting's 邱光庭 (fl. early 10th c.) sow thistle (*gucai* 苦菜) thesis, and Cao Cuizhong's 曹粹中 (*jinshi* 1124) polygala (*yuanzhi* 遠志) thesis, yet none of them offered an ideal solution.⁸⁶³

The development of philological analysis in the mid-Qing era opened new possibilities for interpretation of the *mingwu* term. On noticing a similar phenological claim in the “Xia xiaozheng” 夏小正 chapter of the greater Dai's *Liji*, that in the fourth month “the *yōu* blossoms” (*xiu you* 秀幽), Dai Zhen suggested *yōu* 幽 and *yao* 萋 were phonetically interchangeable. And according to *Zhanguo ce* 戰國策 (Strategies of the warring states), *yōu* 幽 referred to the “tender plant of *yōu* 莠, which looks similar to millet grain.”⁸⁶⁴ Although Dai Zhen made no further specification of the *yōu* plant, the same philological logic was adopted by his contemporary Lu Wenchao. Starting from the classic text *Guangya*, where *yao* 萋 was directly explained as *yōu* 莠, Lu elaborated the reasoning with a more extensive array of supporting texts, and attributed the plant to the bristlegrass (*gouwei cao* 狗尾草) explicitly.⁸⁶⁵ Belonging to the same Gramineae family, it indeed appears similar to the millet plant.⁸⁶⁶

From the original character *yao* 萋 to the phonetic loans *you* 幽/莠 and to the attribution of the bristlegrass, the mid-Qing scholars mapped out an evidential chain that was philologically acceptable. Nevertheless, this interpretation received a systematic critique by Cheng Yaotian in his *Investigation of the Nine Grains*. Here, it is noticeable that Cheng did not deny the tenability of the philological link *per*

⁸⁶³ The snakegourd, maturing only in the seventh month, was already doubted in Kong Yingda's commentary due to its material inconsistency. As for the endive and polygala, although they work better in the natural trait, neither can be unproblematically linked to the name *yao*. Moreover, both have small flowers, which also fail to work closely with the verb *xiu* 秀, which is explained in its original meaning as “fruiting without (typical) flower” (*bu rong er shi* 不榮而實) in the Mao commentary. See, e.g., Kong Yingda, *Maoshi zhengyi*, 500–501; Qiu Guangting 邱光庭, “Jianming shu,” 兼明書 in *Yingyin Wenyuange siku quanshu*, 850: 236. Yan Can, *Shi ji*, 2: 400–401; Feng Fuming, *Liujia shi mingwu shu*, juan 29: 12a–14b.

⁸⁶⁴ Dai Zhen, *Dai Zhen quanshu*, 1: 329.

⁸⁶⁵ Lu Wenchao 盧文昭, *Lu Wenchao quanji* 盧文昭全集 (Hangzhou: Zhejiang daxue chubanshe, 2017), 6: 135.

⁸⁶⁶ And due to this reason, the bristlegrass also has only degraded flowers, thus working well with the interpretation of the verb *xiu* 秀 in the Mao commentary.

se, but delivered his critique from the other material channels through his featured “eyewitness” (*mu yan* 目驗). In the essay, Cheng raised two pieces of counter evidence. The first concerned the blossoming of the bristlegrass, which, according to Cheng’s observation, took place in the sixth month rather than the fourth, as suggested in *Maoshi* and “Xia xiaozheng.” Yet Cheng did not stop at this direct evidence. Instead, he continued to raise two more collateral supports from “Yüeling” and “Xia xiaozheng,” with the former mentioning the blossoming of sow thistle (*kucai* 苦菜) in the fourth month, and the latter the blossoming of horseweed (*peng* 蓬) in the seventh month. Having confirmed the consistency of these records to the natural timeline of the plants, Cheng used these lateral cases to underline the epistemic reliability of classic texts. This general consistency thus further strengthened Cheng’s material critique, since “it should not be the case that only the blossom of the bristlegrass comes two months late.”⁸⁶⁷ Meanwhile, based on a quotation from the entry *yao* 萋 in *Shuowen*, where the plant was mentioned by Liu Xiang 劉向 (77-6 BCE) as having a bitter taste, Cheng raised another piece of counter evidence: in his personal trial, bristlegrass tasted sweet. With both eyewitness and tongue tasting, Cheng made clear through his multi-sensory critique that the interchangeability of *you* and *yao* could not be solely determined by pronunciation.⁸⁶⁸

Impressively, Cheng did not end here, but further generalized the conclusion to a methodological level:

Phonological-based interchangeability is essential for the analysis of characters. Yet one has to raise several collateral supports to confirm its tenability. Only after this could the (phonological) thesis be established. If not, which character has no pronunciation, and which pronunciation has no connection? Could each of these cases be associated with one another?

音語相轉，是考字要義。然必旁舉數事，證之使確，乃可定其說。不然，何字無音，何音無轉，舉可比而同之也哉？⁸⁶⁹

⁸⁶⁷ Cheng Yaotian, *Cheng Yaotian quanji*, 3: 25. 是皆與經傳不爽其時，不應莠獨遲兩月始成秀也。

⁸⁶⁸ Cheng Yaotian, *Cheng Yaotian quanji*, 3: 25.

⁸⁶⁹ Cheng Yaotian, *Cheng Yaotian quanji*, 3: 25-26.

Given the overflow of phonetic loans in mid-Qing philological analysis, this was indeed a sober critique.⁸⁷⁰ For the *mingwu* study of natural objects, material traits would be an integral aspect of the “collateral support.” Just as the case of *yao* grass, in *Tongyi lu*, it was frequent for Cheng Yaotian to deny pre-established philological claims through counterevidence from nature.⁸⁷¹ In such instances, material evidence served as the final judgment, which indicated a higher epistemic priority over philological evidence.

Although any serious evidential scholar of the mid-Qing era would not refuse this methodological claim in general, the specific case of *yao* grass appeared more complex. In his commentary to *Guangya*, Wang Yinzhi listed both Dai Zhen’s thesis and Cheng Yaotian’s counter-thesis with a good summary of their arguments. Nevertheless, he did not follow Cheng for a simple prioritization of the material evidence, but proposed an alternative possibility through further reflection on the philological aspect of naming. According to Wang, it was common for different kinds of trees and grasses to share the same name. Therefore,

[To say that] “*you*” has the alternative name of “*yao*,” it is not referring to the “blossoming *yao*” in *Shi*.

莠一名萋，非謂《詩》之秀萋也。⁸⁷²

In other words, there could well be two kinds of *yao*. One was the *yao*-as-*you* mentioned in *Guangya*, which could be reasonably identified as the bristlegrass; the other was the *yao* in *Maoshi*, a somewhat different kind of grass that blossomed in the fourth month. To strengthen this nomenclative differentiation, Wang raised three more supporting quotations from Guo Pu, Wei Yao 韋曜 (204-273), and Xu Kai 徐鍇 (920-974), which suggested either *yao* as a specific kind of *you*, or both as

⁸⁷⁰ For a similar critique of excessive phonological connections by Fang Dongshu, the renowned attacker of Han learning, also see, Fang Dongshu, *Hanxue shangdui*, 132–33.

⁸⁷¹ See, e.g., Cheng’s material-based distinction between *lang* 莠 (Chinese fountain grass) and *lang* 蔴 (infertile grain), *ji* 稊 (non-glutinous broom corn) and *ji* 稷 (sorghum) on Cheng Yaotian, *Cheng Yaotian quanji*, 3: 27, 36.

⁸⁷² Wang Niansun, *Guangya shuzheng*, 4: 1557.

bristlegrass.⁸⁷³ Together with the evidence in Dai Zhen's thesis, Wang argued for a separate philological tradition on the equivalence of *yao* and *you*, which, from the vantage point of nomenclative differentiation, could no longer be judged by the counterevidence in natural traits. In this way, the material inconsistency in Cheng Yaotian's natural observation was completely neutralized, transforming into a textual plurality that one could solve solely through philological analysis.

Similar to Cheng Yaotian's critique of Dai Zhen, here Wang Yinzi did not deny the evidential validity of Cheng's observation. Instead, the divergence was caused by a different prioritization of the competing evidence, thus making the debate a bifurcation of epistemic stances. If for Cheng, his methodological critique of Dai Zhen indicated a prioritization of natural evidence, what was the epistemological significance of Wang Yinzi's defense? Although Wang did not elevate his defense to a theoretical level, one could indeed find similar nomenclative differentiations in his other *mingwu* discussions, where apparent inconsistencies in the evidential sources were left in parallel through a pluralistic interpretation. For instance, for the term *mei* 黹 in *MS* #213, Wang made a clear distinction between the two meanings of "single-dyed" (*yi ru* 一入) leather and "madder-dyed" (*maosou ran* 茅蒐染) leather that were later confused in the Mao commentary; for the term *qishi* 戚施 in *MS* #43, he also differentiated between the interpretations of a person "tender in face" (*mianrou* 面柔) and a person who "cannot raise up (head)" (*buneng yang* 不能仰) that were later entangled in Zheng Xuan's commentary. In both cases, Wang made clear that one should not draw a forced reconciliation (*bu ke qiang tong* 不可強同) for the competing meanings.⁸⁷⁴ Comparable to the pluralistic interpretation of *yao* grass, such differentiations offered a more inclusive view to sustain inconsistent evidence from varied sources.

In our discussion on the philological technique of "general pattern" in Chapter Three, we have mentioned how Wang Yinzi summarized 12 categories of common philological errors based on the two

⁸⁷³ Wang Niansun, *Guangya shuzheng*, 4: 1557.

⁸⁷⁴ Wang Yinzi, *Jingyi shuwen*, 1: 362-363; 4: 1655-1656.

thousand entries in *Jingyi shuwen*. Among these errors, one category was precisely relevant to our current discussion, namely, “One Should Not Draw a Forced Interpretation Based on Inconsistent Classic Meanings” (Jingyi butong buke qiang weizhi shuo 經義不同不可強為之說). According to Wang, although it was an obligation for the classical scholar to synthesize different transmitted teachings,

There were also cases where the inconsistent teachings were after all unable to be reconciled. Given that the authors of the classics already had varied words regarding their knowledge, (later) scholars should also just leave the theses in parallel. If one must want to force them together and write off the difference, it would contrarily lead to a confusion with the original meanings lost. This is what one calls “a separation brings good to both, while a combination brings harm to both.”

然不齊之說，亦有終不可齊者。作者既所聞異辭，學者亦第兩存其說。必欲遷就而泯其參差，反致使溷轂而失其本指。所謂離之則兩美，合之則兩傷也。⁸⁷⁵

Although the examples raised by Wang himself under this category only concerned textual irreconcilables in the commentary tradition, the material-based inconsistency raised by Cheng clearly fit into the broader methodological claim—not to mention that, under Wang’s nomenclative differentiation, the material inconsistency was also transformed into a textual one between the *Maoshi* and the *Guangya* traditions. It is from this vantage point that we come to realize the methodological critique implied in Wang’s defense: If the character *yao* 葦 had indeed been used as a synonym for *both* bristlegrass that blossomed in the sixth month *and* another plant that blossomed in the fourth, one may simply accept their inconsistency and “leave the theses in parallel.” By using the blossoming time of the bristlegrass as counterevidence for the phenological description in *Maoshi*, Cheng was assuming an identical reference to the *yao* plant in the two textual traditions, which did not have to be the case. Due to this reason, Cheng risked placing himself precisely into the trap of a “forced reconciliation.”

Having been baptized by the modern worldview after the scientific revolution, a contemporary reader would have little difficulty in following Cheng’s reasoning—an “ethnobotany” full of natural historical rigor. As a contrast, Wang’s defense appears quite disappointing at first glance, which seems to

⁸⁷⁵ Wang Yinshi, *Jingyi shuwen*, 4: 1939.

fudge the real problem and dwell on the trivial. However, as demonstrated in the epistemic analysis above, this impression is more of our own epistemological projection than the situation in Wang's own time. We have been too familiar with the one-to-one correspondence of name and species in modern biological taxonomy. Yet this would become an epistemic trap for pre-modern *mingwu* studies, where the tautonymy of plant names was common. Unlike Cheng Yaotian, for whom the material observations determined the validity of philological claims, for Wang Niansun it was the philological distinction that determined the relevance of material evidence. What distinguished Cheng and Wang was not a difference in the tenability of argumentation, but one in epistemic stance. For mid-Qing evidential scholars, there was no guarantee for a priority of the “thing” over the “name,” the material over the textual, the ideal of natural history to the ideal of philology.

“The Sacrificial Vases Are Great”

In the previous example, we have demonstrated a competing epistemic priority in the study of a natural object—*yao* grass. In this section, we will turn to another field where material evidence tends to gain an upper hand in the modern era, namely, the study of ritual vessels. If in the previous example, the nomenclative differentiation only suggested possible alternatives for the material evidence, this case will demonstrate a prevailing prioritization of textual records over excavated objects among the leading evidential scholars of the mid-Qing era, which might sound astonishing for a modern reader.

The ritual object under inquiry comes from the ode “The Closed Palace” (Bi gong 闕宮, *MS* #300). In a depiction of the ancestral palace sacrifice of the Lu 魯 state, the ode goes:

犧尊將將

The *xi*-vases are magnificent.⁸⁷⁶

⁸⁷⁶ Zheng Xuan, *Maoshi zhuan jian*, 487.

Despite the simplicity of the line, extensive debate took place regarding the specific design of the *xi*-vase, a perplexing term which we have briefly encountered in Ma Ruichen's phonetic analysis in Chapter Three. Yet the problem was far beyond a philological issue but also involved a knotty complication when material evidence was considered.

The description of the vessel already varied in the Han texts. In his *Rectified Meanings*, Kong Yingda offered a good summary of these early divergences among three general theses. The first referred to a vase with bird-related decorations. This came from the Mao commentary to the line, which noted the vase bore the decoration of "whirling (phoenix) feather" (*suoyu* 沙羽).⁸⁷⁷ The same idea was also confirmed by Zheng Xuan in his *Liji* commentary, though not mentioned in Kong's summary.⁸⁷⁸ Meanwhile, the same vessel was also mentioned in *Zhouli* under the alternative name *xian*-vase 獻尊, for which Kong also noticed a relevant commentary by Zheng Zhong, who suggested the vase bore the decoration of "kingfishers" (*feicui* 翡翠). Despite the minor difference in the decorative pattern, these early texts pointed to a bird-related theme. The second thesis came from Ruan Chen 阮譔 (fl. late Eastern Han), whose now-lost *Sanli tu* 三禮圖 (Illustrations on the three rites) was among the earliest of its kind. According to a preserved quotation from this work, the *xi*-vase bore not a bird decoration but an ox one, with the figure drawn on the vase belly. The third thesis, initiated by Wang Su (195-256), was the most informative. In this thesis, Wang mentioned the excavation of some Spring and Autumn vessels in the Shandong area during the Taihe 太和 era (227-233), which were identified as gifts from the Qi senior official Ziwei 子尾 (d. 534 BCE) to her daughter. According to Wang, there was a *xi*-vase among them, which was in the shape of a sacrificial ox. Although the decorative motif remained the same, it changed from a two-dimensional surface decoration to a three-dimensional form. After listing these three

⁸⁷⁷ For the association of *suoyu* with the phoenix, see Zheng Xuan's interpretation in *Zhengzhi* 鄭志, as quoted in Kong Yingda, *Liji zhengyi*, 939.

⁸⁷⁸ Kong Yingda was clearly familiar with Zheng's interpretation. For Kong's quotation and analysis of the claim, see, Kong Yingda, *Liji zhengyi*, 937, 939-940.

competing theses, Kong Yingda simply left the question open, noting that he “had no idea which is right” (*wei zhi shu shi* 未知孰是).⁸⁷⁹

Stepping into the Song, the rise of antiquarian studies shed new light on this conundrum, when the rise and fall of the competing theses reflected a broader shift in the epistemic priority of the day. In the study of Song antiquarianism, scholars have identified two systems in the Song design of ritual objects, a textual-based “classicist system” represented in Nie Chongyi’s 聶崇義 (*jinshi* 949) *Sanli tu*, and a material-based “antiquarian system” epitomized by the imperially sponsored *Xuanhe bogu tu* under Huizong’s reign (r. 1101-1125), as well as the official manual *Shaoxi zhouxian shi dian yitu* 紹熙州縣釋奠儀圖 (Shaoxi illustrated handbook for prefectural and county sacrifices, henceforth *Shaoxi Handbook*) promulgated in 1194.⁸⁸⁰ As the state orthodoxy of ritual paraphernalia for the first century of the Song, *Sanli tu* was primarily a synthesis of classic commentaries, ritual liturgies, and past illustrations, where it was the hermeneutic faithfulness to these transmitted sources rather than the actual design of ancient objects that was the primary concern.⁸⁸¹ This bookish orientation was well discernable in the entry on the *xi*-vase, where Nie reviewed the three above-mentioned theses through an extensive list of references. The “2-D bird thesis” of Zheng Xuan was synthesized from *Liji*, *Zhouli*, as well as Mao Heng and Zheng Xuan’s classic commentaries; the “2-D ox thesis” of Ruan Chen came from his notes and his own illustration in the earlier *Sanli tu*; the “3-D ox thesis” of Wang Su was based on the quotation in Kong Yingda’s *Rectified Meanings of Maoshi*, and was further supported by the observation of a similar vessel

⁸⁷⁹ Kong Yingda, *Maoshi zhengyi*, 1416–17.

⁸⁸⁰ For the distinction of the two traditions, see, Chen Fang-mei 陳芳妹, *Qingtong qi yu songdai wenhua shi* 青銅器與宋代文化史 (Taipei: Taida chuban zhongxin, 2016), 125; Ya-hwei Hsu 許雅惠, “Song Yuan Sanli tu de banmian xingshi yu shiyong: Jianlun xinjiu liqi biange,” 宋、元《三禮圖》的版面形式與使用——兼論新舊禮器變革 *Taida lishi xuebao* 臺大歷史學報 60 (2017): 82–83.

⁸⁸¹ For the compilation background of *Sanli tu* as a state orthodox, see, François Louis, *Design by the Book: Chinese Ritual Objects and the Sanli tu* (New York: Bard Graduate Center, 2017), ch. 2. For the evidential basis of *Sanli tu*, see, Kishima Fumio 木島史雄, “Hoki o meguru rei no hosō: kōkogaku/ keisho kaishaku reigaku/ kinsekigaku/ kōshōgaku,” 簠簋をめぐる禮の諸相——考古學 / 經書解釋禮學 / 金石學 / 考證學—— in *Chūgoku no reisei to reigaku* 中國の禮制と禮學, ed. 小南一郎, Kominami Ichirō (Kyoto: Hōyū Shoten, 2001), 330–42; Jeffery Moser, “Recasting Antiquity: Ancient Bronzes and Ritual Hermeneutics in the Song Dynasty” (PhD Dissertation, Harvard University, 2010), 41–58.

design in Nie's own days, where the ox was cast three-dimensionally with a lotus base on the back. Nevertheless, only the two earlier theses received Nie's endorsement, with schematic illustrations offered on the side (*Figure 80*).⁸⁸² Although Nie mentioned nothing about the logic of this preference, the most likely explanation, as already suggested by Jeffery Moser, was the “formal similarities” between Zheng's textual description and Chen's annotated illustration (both suggesting a vase-shaped vessel which were distinguished merely in their two-dimensional décor).⁸⁸³ Note that Wang Su's thesis was the only one that drew heavily from material evidence—not only the contemporary corroboration by Nie, but also the self-proclaimed excavated evidence in the original text—the exclusion of Wang's thesis thereby highlighted Nie's prioritization of classic sources over material evidence.⁸⁸⁴



⁸⁸² Nie Chongyi 聶崇義, *Xinding sanli tu* 新定三禮圖, Harvard Yenching Library, no. T110/2452B (Beijing: Tongzhi tang, 1673), juan 14: 4a.

⁸⁸³ In his own words, Moser attributes the choice to the “formal similarities between Zheng and Chen's illustrations.” However, the *Sanli tu* entry only suggests a direct consultation to Ruan Chen's illustration. Judging from Nie's words, “today I illustrate [Ruan's design] in parallel to [the one from] Zheng's idea on the left” 今與鄭義並圖於右 (emphasis add), it seems more likely that the illustration of the bird design was reified by Nie himself according to textual descriptions, rather than copied from a transmitted “Zheng's illustration.” See, Moser, “Recasting Antiquity,” 70–71; Nie Chongyi, *Xinding sanli tu*, juan 14: 4a.

⁸⁸⁴ Although in the *Sanli tu* entry, Nie only introduced Wang's design brief without mentioning the excavation, his quotation of the thesis from Kong Yingda's *Rectified Meanings* suggested that he must be familiar with the complete text. See, Nie Chongyi, *Xinding sanli tu*, juan 14: 4a.

*Figure 80: Illustrations of the xi-vase in Sanli tu, with the two designs according to Zheng Xuan (left) and Ruan Chen (right)*⁸⁸⁵

As already mentioned in Chapter Three, due to the accumulated excavation of ancient bronzewares, the Northern Song witnessed a boom in antiquarianism from the mid-11th century onwards. Under this trend, scholars became exceedingly aware of the distance between textual inferences in the *Sanli tu* tradition and actual designs of ritual paraphernalia from the Three Dynasties, which offered a critical vantage point for the reconceptualization of these *mingwu* objects based on the new material evidence.⁸⁸⁶ This epistemic shift was well captured in the entries on the xi-vase in *Xuanhe bogu tu*, the annotated catalogue of antique bronzes in the imperial collection of the Huizong era (r. 1101-1125). Among the 41 *zun*-vases in the catalogue, two were identified as a “xi-vase from the Zhou dynasty” (*Zhou xizun* 周犧尊), both of which were in the three-dimensional shape of an ox as described by Wang Su (*Figure 81*). The accompanying annotation was even more revealing. After confirming the formal similarity between these two vessels and the one excavated in Shandong in Wang Su’s record, it endorsed Wang’s three-dimensional thesis as “having its own basis” (*you zi lai ye* 有自來也). As a contrast, the bird thesis of the “Han scholars” was critiqued as “laughable,” whose unwarranted inference, according to the *Bogu tu* compilers, was precisely due to the buried status of the vessels at that time.⁸⁸⁷ Compared to the choice in the *Sanli tu*, here the conclusion was reversed. With the unearthing of ancient bronzewares taken as the defining factor for the proper identification of the xi-vase, the *Bogu tu* compilers expressed a new priority which placed material evidence firmly above textual hermeneutics.

⁸⁸⁵ Nie Chongyi, *Xinding sanli tu*, juan 14: 4a.

⁸⁸⁶ See, e.g., Sena, *Bronze and Stone*, ch. 2; Moser, “Recasting Antiquity,” ch. 2, p. 191-200.

⁸⁸⁷ Wang Fu 王黼, *Boru zhai chongxiu xuanhe bogu tulu* 泊如齋重修宣和博古圖錄 (Boru zhai, 1588), juan 7: 6b–7a.

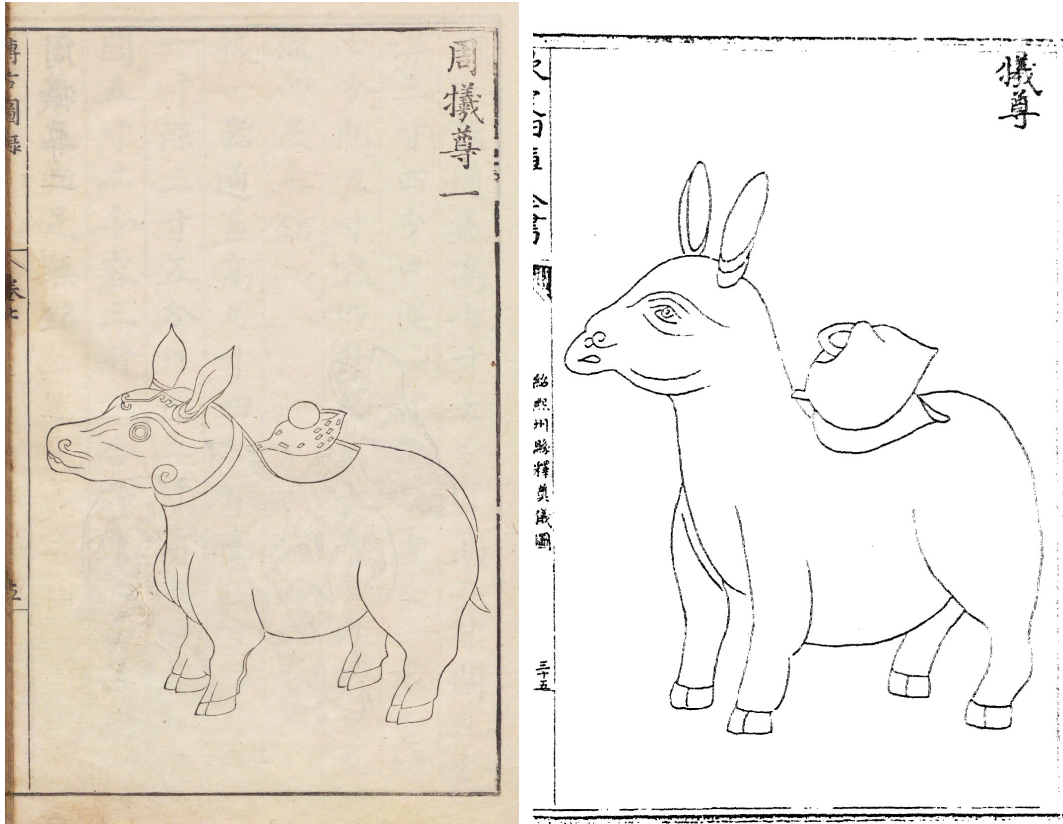


Figure 81 (left): Illustration of the *xi*-vase in *Xuanhe bogu tu*⁸⁸⁸

Figure 82 (right): Illustration of the *xi*-vase in *Shaoxi Handbook*⁸⁸⁹

This antiquarian movement culminated in a systematic reform of ceremonial paraphernalia under Huizong's reign. The classicist system of the *Sanli tu* designs was replaced by a set of newly cast vessels based on ancient bronzes in the imperial collection.⁸⁹⁰ Stepping into the Southern Song, this new system of antiquarian designs had influence on the local level thanks to the promulgation of *Shaoxi Handbook* in 1194, which, as the standard manual for sacrificial ceremonies in counties and sub-prefectures, also adopted the three-dimensional ox design for the *xi*-vessel (Figure 82). Admittedly, the influence of *Sanli tu* never died out in the Southern Song—Zhu Xi's careful listing of both Ruan Chen's and Wang Su's

⁸⁸⁸ Wang Fu, *Boru zhai chongxiu xuanhe bogu tulu*, juan 7: 5a.

⁸⁸⁹ Zhu Xi 朱熹, "Shaoxi zhouxian shidianyi tu," 紹熙州縣釋奠儀圖 in *Yingyin Wenyuange siku quanshu*, 648: 20.

⁸⁹⁰ Ya-hwei Hsu 許雅惠, "Antiquities, Ritual Reform, and the Shaping of New Taste at Huizong's Court," *Artibus Asiae* 73, no. 1 (2013): 139–49; Moser, "Recasting Antiquity," 200–214.

theses in his interpretation of the *xi*-vase in his *Collected Commentary* offered a good example.⁸⁹¹

Nevertheless, Ya-hwei Hsu's study of preserved Song-Yuan artifacts has shown that the antiquarian system indeed gained an upper hand as time passed, which became the predominant design of sacrificial vessels in the Yuan dynasty.⁸⁹²

The Ming was a special period in the history of sacrificial vessels, when the founding Hongwu emperor (r. 1368-1398) ordered all of the vessels to be made in ceramics with reference to the design of daily utensils. This "ceramification" and "daily-utensilization" of the vessels brought about what was named by Ching-fei Shih as a "third system," which targeted neither the textual nor the material evidence from ancient times.⁸⁹³ Therefore, although the *xi*-vase of this period went back to an ox-decorated wine pot that reminds us of Ruan Chen's thesis, this contemporary design had little direct influence on the scholarly conceptualization of the *xi*-vase as a classic *mingwu* object.⁸⁹⁴ For instance, both Feng Fujing and He Kai continued to endorse the three-dimensional thesis after an extensive elaboration on the alternative hermeneutic possibilities, and in both entries, the material evidence from Huizong's imperial collection constituted a key support.⁸⁹⁵ Moreover, when the Qianlong emperor, under a new tide of antiquarian fervor, decided to restore the ancient designs in 1748, the *Bogu tu* illustrations also served as a major archetype.⁸⁹⁶ After nearly four centuries of implementing the porcelain system, the material-based,

⁸⁹¹ An important external reason was the Jurchen invasion in the 1120s, after which the Song lost most of the newly cast vessels and could only temporarily switch back to the *Sanli tu* tradition in the beginning years of the Southern Song. See, Hsu, "Nansong jinshi shoucang yu zhongxing qingjie," 7-8; Zhu Xi, *Shi jizhuan*, 367.

⁸⁹² Hsu, "Song Yuan Sanli tu de banmian xingshi yu shiyong," 83-87.

⁸⁹³ Ching-fei Shih, "The New Idea of Ritual Vessels in the Early Ming Dynasty: A Third System?," in *Ming China: Courts and Contacts 1400-1450*, ed. Craig Clunas, Jessica Harrison-Hall and Yu-ping Luk (London: British Museum Press, 2016), 118-19. Also see, Wang Guangyao 王光堯, *Mingdai gongting taoci shi* 明代宮廷陶瓷史 (Beijing: Zijincheng chubanshe, 2010), 77-79.

⁸⁹⁴ For the design of excavated Ming porcelain *xi*-vases, see, Shih, "The New Idea of Ritual Vessels in the Early Ming Dynasty," 115-116, 118-119; Lin Yiting 林奕婷, "Cong shiwu kan mingdai cizhi jiqi de mianmao," 從實物看明代瓷質祭器的面貌 *Dongfang bowu* 東方博物, no. 3 (2019): 60-64.

⁸⁹⁵ See, Feng Fujing, *Liujia shi mingwu shu*, juan 54: 9b-10b; He Kai, "Shijing shiben guyi," juan 24b: 25a-b.

⁸⁹⁶ Another important archetype was a set of bronze sacrificial vessels at the Qufu 曲阜 Confucian Temple which were believed to be made in Western Han by the time. According to a record of the Imperial Workshop on Qianlong 13-5-4, the design the *xi*-vase and the *xiang* (elephant/ image)-vase 象尊 were based on the illustrations from *Bogu tu*, while the archetype of the *shan* (mountain)-vase 山尊 was the bronze vessel of the Confucian

three-dimensional design again became the standard form of the *xi*-vase (*Figure 83*), with the validity of Wang Su's thesis confirmed.⁸⁹⁷



Figure 83: Illustration of the newly designed *xi*-vessel in *Beiwu zhaocheng* 備物昭誠. Ink and color on paper, 48 volumes in 6 cases, 37.2 cm x 34.8 cm. Palace Museum of Beijing.⁸⁹⁸

Temple. See, Zhongguo diyi lishi dang'anguan 中國第一歷史檔案館 and Xianggang zhongwen daxue wenwu guan 香港中文大學文物館, eds., *Qinggong neiwufu zaobanchu dang'an zonghui* 清宮內務府造辦處檔案總匯 (Beijing: Renmin chubanshe, 2005), 16: 291; Ching-fei Shih 施靜菲, "Cong 'qi' dao 'li' de shijian: Qianlong chao *Huangchao liqi tushi* zhong de jiqi," 從「器」到「禮」的實踐：乾隆朝《皇朝禮器圖式》中的祭器 *Gugong xueshu jikan* 故宮學術季刊 37, no. 4 (2020): 18–33; Wu Hsiao-yun 吳曉筠, "Kongmiao yu Qianlong chao jiqi de shezhi," 孔廟與乾隆朝祭器的設置 *Gugong xueshu jikan* 故宮學術季刊 37, no. 2 (2020): 101–2.

⁸⁹⁷ For the total piece of bronzes in the four *Mirrors*, see, Yu, "The Intersection of Past and Present," 4.

⁸⁹⁸ According to Yu-Chih Lai's study, *Beiwu zhaocheng* was a set of minimized sample illustrations for the newly designed ritual vessels which was homological to the colored manuscript copy of *Huangchao liqi tushi* 皇朝

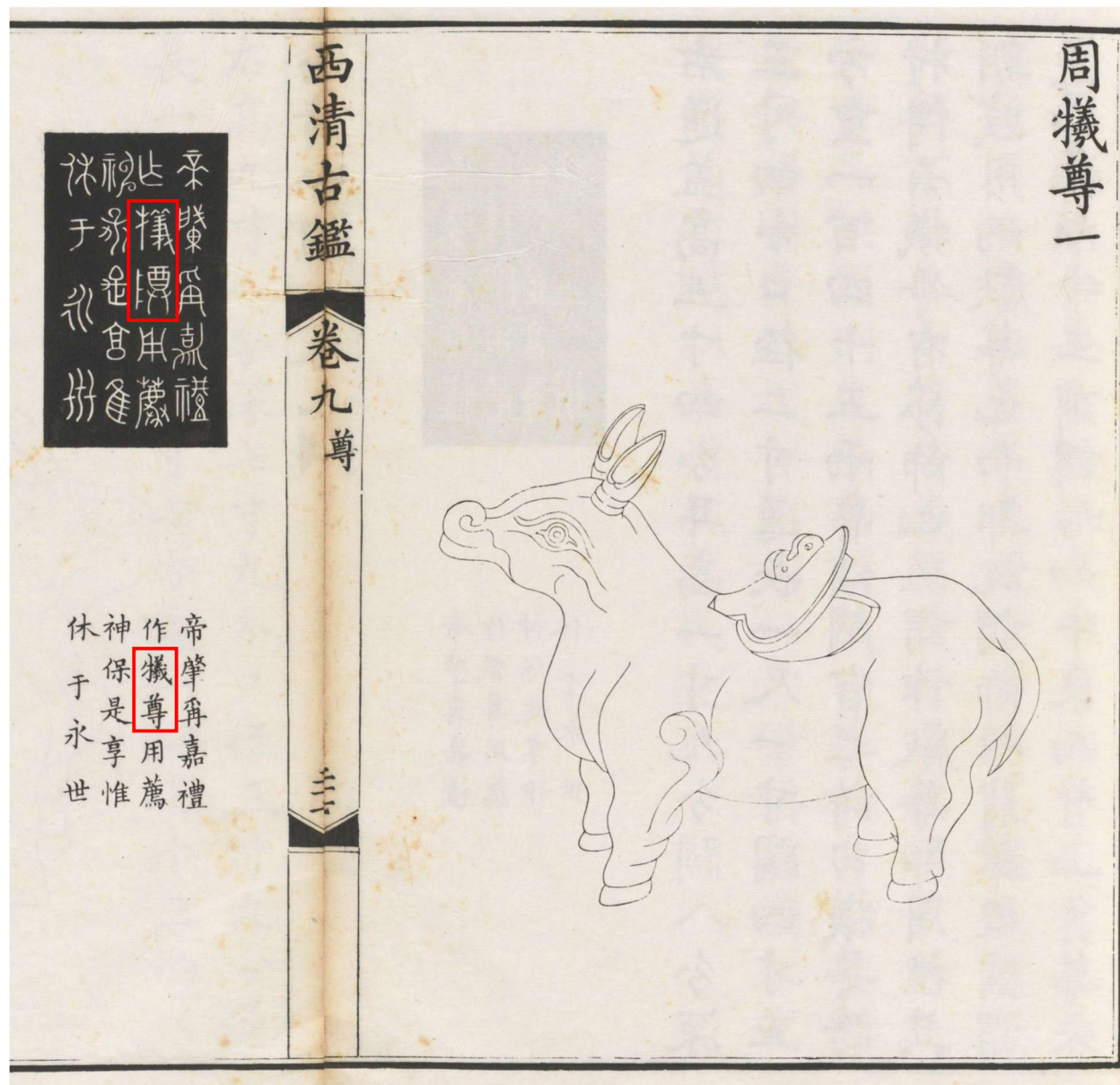


Figure 84: Illustration of a xi-vase in Xiqing gujian, with the self-naming “xizun” 犧尊 appearing in the inscription (marked red).⁸⁹⁹

禮器圖式. See, Lai Yu-chih 賴毓芝, “Tu’ yu li: Huangchao liqi tushi de chengli jiqi yingxiang,” 「圖」與禮：《皇朝禮器圖式》的成立及其影響 *Gugong xueshu jikan* 故宮學術季刊 37, no. 2 (2020): 25–26.

⁸⁹⁹ Liang Shizheng 梁詩正, *Yuzhi xiqing gujian* 御製西清古鑒, Harvard-Yenching Library (Beijing: Wuying dian, 1755), juan 9: 27a-b.



Figure 85: The *xi*-vase bestowed to the Qufu Confucian Temple in 1771. Zhou Dynasty, 39cm x14.5cm x 29cm. Confucius Museum, Qufu.⁹⁰⁰

Meanwhile, this victory of the three-dimensional thesis was also discernable in the newly compiled bronzeware catalogues of the imperial collection. In an astonishing array of 4,105 bronzewares recorded in *Xiqing gujian* 西清古鑑 (The Ancient Mirror of the Western Clarity, 1755), *Ningshou jiangou* 寧壽鑒古 (The Ningshou Mirror of Antiquity, 1776-1781), and the two series of *Xiqing xujian* 西清續鑑 (Supplemented Mirror to the Western Clarity, 1793)—normally referred as the “four mirrors of the Qianlong era”—38 pieces were identified as a *xi*-vase from the Zhou dynasty.⁹⁰¹ Among these vases, none followed the Mao-Zheng or the Ruan Chen thesis; almost all of them bore a three-dimensional ox shape.⁹⁰² And in particular, for the first account of the *xi*-vase in *Xiqing gujian*, the vessel not only had a

⁹⁰⁰ Photo credit: Confucius Museum at Qufu, Shandong province. <http://www.kzbwg.cn/wwwjj/2020-07-01/1298.html>. Accessed Aug. 5th, 2021.

⁹⁰¹ See, Liang Shizheng, *Yuzhi xiqing gujian*, juan 9: 27a–42b; Liang Shizheng 梁詩正, *Ningshou jiangou* 寧壽鑒古, photocopy of the Ningchou Palace manuscript edition (Shanghai: Hanfen lou, 1913), juan 4: 9a–23b; Wang Jie 王傑, *Xiqing xujian jiabian* 西清續鑒, photocopy of the Ningshou palace manuscript edition (Shanghai: Hanfen lou, 1910), series 1: juan 5: 27a–33b, series 2: juan 1: 25a–b.

⁹⁰² The only two exceptions came from the no.13 and no.14 of the *xi*-vases in *Xiqing gujian*. Bearing a three-section cylindrical shape, they were disparate from the other *xi*-vases in the catalogues, and appeared closer to the mountain-vase (*shanzun* 山尊) in the antiquarian tradition. The only basis for the categorization was their

inscriptions, which bore either an “ox-shaped” (*xi xing* 犧形) character  or character component  in the inscribed self-names. That said, the association of these ideographs to the “ox” meaning was merely tentative, which

three-dimensional ox shape, but also an inscription, in which the name of “*xizun*” 犧尊 could be univocally identified (*Figure 84*). Under the principle of self-naming, this opening case offered a strong support for the compilers’ allegiance to Wang Su’s thesis.

Apart from the publication of *Xiqing gujian*, another important channel for the circulation of such antiquarian knowledge was the emperor’s bestowal of ancient sacrificial vessels to Confucian temples with public access. This took place three times, at the temples of the Imperial Academy (1768), Qufu (1771), and Rehe (1779), each in a set of ten “Zhou model bronzewares” from the imperial collection, accompanied with illustrated descriptions endorsed by the emperor.⁹⁰³ Such descriptions reached a broader circulation not only through a full quotation in the local gazetteers where the temples were located, but also went into more serious antiquarian works by the leading evidential scholars of the day.⁹⁰⁴ For instance, in the very beginning of Bi Yuan and Ruan Yuan’s influential *Shanzuo jinshi zhi* (Records of Bronzes and Stones in Shandong), one could find a complete quotation of the imperial descriptions of the ten bestowed vessels at Qufu.⁹⁰⁵ In particular, for the *xi*-vase in this set, which is still preserved on site at the Qufu Confucius Museum today (*Figure 85*), the description made a clear confirmation of its three-dimensional design through the consistency among Wang Su’s thesis, the *Bogu tu* records, and the material evidence of the vessel. With a complement on the descriptions as “making the most specific evidential explanations on the design and inscriptions” (*kaoshi guanzhi zuixiang* 考釋欵識最詳), the

meant that the two vases were at best regarded as minor alternatives for the *xi*-vase. See, Liang Shizheng, *Yuzhi xiqing gujian*, juan 9: 40b, 41b.

⁹⁰³ Although contemporary scholars have denied the dating of some of the vessels, all of them were believed to be authentic Zhou bronzewares and were carefully picked up from the imperial collection. See, Yu, “The Intersection of Past and Present,” 121–30; Wu Hsiao-yun, “Kongmiao yu Qianlong chao jiqi de shezhi,” 103–9; Chang Lin-sheng 張臨生, “Zhenyan xiangsan de guozijian zhoutan shi qi,” 真膺相糝的國子監周範十器 *Gugong wenwu yuekan* 故宮文物月刊 73, no. 4 (1989): 50.

⁹⁰⁴ See, e.g., Pan Xiang 潘相, *Qufu xianzhi* 曲阜縣志 (Qufu, 1774), juan 10: 1a–11b; Heshen 和珅, “Qinding Rehe zhi,” 欽定熱河志 in *Yingyin Wenyuange siku quanshu*, 496: 199–204.

⁹⁰⁵ Bi Yuan 畢沅 and Ruan Yuan 阮元, eds., *Shanzuo jinshi zhi* 山左金石志 (1797), juan 1: 1a–5a.

quotations in *Shanzuo jinshi zhi* connected the material-based epistemology of court learning with the cutting-edge evidential studies of the day.⁹⁰⁶

Although in the Qing dynasty the excavated evidence was quite consistent regarding the material design of the *xi*-vase, the situation was much more complex on the side of classic hermeneutics. Many scholarly works—particularly those with imperial sponsorship—continued to follow Wang Su and *Bogu tu* for the three-dimensional thesis.⁹⁰⁷ Yet a number of other scholars, including some of the best philologists of the time, began to express their reservations. We may start with Wang Fuzhi's 王夫之 (1619-1692) *Shijing baishu* 詩經稗疏 (Insignificant commentaries on *Shijing*), an important early-Qing work on *mingwu* studies of *Shi*. After presenting the bird thesis of Mao Heng and Zheng Xuan, which he had no problem with, Wang launched a harsh yet interesting critique of the three-dimensional thesis:

As for the *xi*-vases in *Xuanhe bogu tu*, they were cast into the shape of an ox. With delicate carvings and portrait, they were not similar to the antique unadorned designs at all, which were definitely not sacrificial vessels of the Shang-Zhou era. Instead, they must be forged by bogus antique dealers of the day who stole the ideas of Wang Anshi and Lu Dian to hoax the Huizong emperor—thus they are not worthy of credit.

若《宣和博古圖》有犧尊，鑄作牛形，刻肖纖巧，純不類古樸之製，斷非商周彝器，而當時偽骨董家竊王安石、陸佃之說做為之以給徽宗者，蓋不足信。⁹⁰⁸

For the first time, the validity of Huizong's collection per se was put into serious doubt. If the ox-shaped vases were only later forgeries, this would shake the basis of the entire three-dimensional thesis, although the foundation of Wang's critique, an aesthetic judgment of the vessel, was at best subjective. In fact, his dramatic attribution of the design to "bogus antique dealers" reflected the situation more of his own era

⁹⁰⁶ Bi Yuan and Ruan Yuan, *Shanzuo jinshi zhi*, juan 1: 2b. The inscribed bronzes in the bestowed set reached an even wider circulation in scholarly works. See, e.g., the full quotation of the bronze inscription and imperial description of the Ya *zun*-vase 亞尊 at the Qufu temple in Ruan Yuan 阮元 and Zhu Weibi 朱為弼, eds., *Jiguzhai zhongding yiqi kuanzhi* 積古齋鐘鼎彝器款識, Naikaku Bunko of Japan, no. 2567 (1804), juan 5: 1a-b.

⁹⁰⁷ See, e.g., Gu Donggao 顧棟高, "Maoshi leishi," 毛詩類釋 in *Yingyin Wenyuange siku quanshu*, 88: 78; Wang Wufeng, *Shixue ruwei*, juan 25: 7a-b. For the endorsement of the three-dimensional thesis in the imperially sponsored works, see, Wang Hongxu, "Qinding shijing zhuanhuo huizuan," 748; Sun Jiagan, *Yuzuan shiyi zhezong*, juan 20: 9a.

⁹⁰⁸ Wang Fuzhi 王夫之, *Chuanshan quanshu* 船山全書 (Changsha: Yuelu shushe, 2011), 3: 214.

than the time of the Huizong emperor, when the duplication of antique bronzes was done mainly for imitation than forgery.⁹⁰⁹ In contrast, antique forgeries loomed large in the late-Ming literati culture and extended well into Wang's time.⁹¹⁰ For instance, in *Zunsheng bajian* 遵生八箋 (Eight discourses on the art of living), Gao Lian 高濂 (ca. 1527 - ca. 1603) mentioned both the skilled forgers in Suzhou whose counterfeit bronzes—including precisely the *xi*-vase—could reach “half price of the ancient ones,” and the vulgar casters of bronze burners whose “sophisticated designs had nothing to do with the ancients’ ideas in the sacrificial vessels and tripods.”⁹¹¹ Such records suggested the discursive background for Wang's antiquarian critique.

Despite the possible anachronism of Wang's historical inference, he was not alone in making this aesthetic critique. The mid-Qing scholar Sun Xidan 孫希旦 (1736-1784), author of the influential *Liji jijie* 禮記集解 (Collected commentaries on *Liji*) and supporter of Ruan Chen's thesis, made a similar critique based on the unfavorable aesthetic features of the three-dimensional design. According to Sun, although the ox-shaped vase might have indeed existed in the past, it had a “weird form” (*xingzhi guiyi* 形製詭異) that appeared discordant with other sacrificial vessels, and thus could not be taken as a ritual object used in ancestral temples.⁹¹² But how could they come to know about the “proper” aesthetics of the

⁹⁰⁹ Although discussions on the *authenticity* of bronzewares already emerged in the Huizong era, as one could find in Zhao Mingcheng's (1081-1129) *Jinshi lu* on a bronze bell discovered in Zhenghe 2 (1112), it seems that the *forgery* of ancient bronzes only became a topic for antiquarian writing in the southern Song, when Zhao Xihu 趙希鵠 (1170-1242) first mentioned a formula for patina making the under the title of “Bogus Antique Bronzes” (*wei gu tongqi* 偽古銅器). See, Zhao Mingcheng 趙明誠, *Jinshi lu* 金石錄, Naikaku Bunko, no. 2471 (Dezhou: Yayutang, 1762), juan 11: 4a-b; Zhao Xihu 趙希鵠, *Dongtian qinglu* 洞天清錄, Quansong biji, series 13 (Zhengzhou: Daxiang chubanshe, 2019), 232; also see, Cheng Changxin 程長新, Wang Wenchang 王文昶, and Cheng Ruixiu 程瑞秀, “Tongqi bianwei qianshuo (shang),” 銅器辨偽淺說 (上) *Wenwu* 文物, no. 8 (1989): 36–37.

⁹¹⁰ Craig Clunas, *Superfluous Things: Material Culture and Social Status in Early Modern China* (London: Polity Press, 1991), 108–15; Bruce Rusk, “Artifacts of Authentication: People Making Texts Making Things in Ming-Qing China,” in Miller; Louis, *Antiquarianism and Intellectual Life in Europe and China, 1500-1800*, 180–81.

⁹¹¹ Gao Lian 高濂, *Zun sheng ba jian* 遵生八箋, Harvard-Yenching Library (Yashangzhai, Wanli era), juan 14: 28a–32b. 製度花巧, 與古人彝鼎之義, 殊無取法。For the lifespan of Gao Lian, see, Xu Shuofang 徐朔方, “Gao Lian de shengping he tade *Yuzan ji chuanqi*,” 高濂的生平和他的《玉簪記》傳奇 *Hangzhou shifan xueyuan xuebao* 杭州師範學院學報, no. 5 (1993): 14.

⁹¹² Sun Xidan 孫希旦, *Liji jijie* 禮記集解 (Beijing: Zhonghua shuju, 1989), 3: 643.

ancient style? Without the establishment of standard objects as in modern archaeology, the critiques based on “sophistication” and “weirdness” were inevitably an anachronistic imposition of their own imagined “unadornedness” as the ancient style.

That said, there was still something meaningful in these unsubstantiated critiques. Without denying the facticity of the ox-shaped vessels, they made clear that the production and function of these bronzewares were subject to complex determinations and was not readily associable with the *xi*-vase mentioned in the classics. Although the ancients may have indeed used “sophisticated” and “weird” designs for sacrificial vessels, it did not necessarily mean that the ox-shaped vessel at hand belonged to one of them. And in particular, although the Song antiquarians may have had little intention of forgery in their duplications, it did not mean that later scholars would still be capable to distinguish them properly from authentic ones. Ya-hwei Hsu has mentioned how Southern Song people, after losing the majority of their ancient bronze collections in the Jurchen invasion, were already unable to identify the Northern Song antiquarian replicas from authentic antique ones.⁹¹³ The situation several centuries later can be imagined. In fact, a modern scholar has charged the “Four Mirrors of Qianlong” for excessive inclusion of forged pieces, and casted doubt on more than half its *xi*-vases.⁹¹⁴ In particular, the most powerful piece of material evidence—the *xi*-vase with a self-named inscription that appeared in the first position in *Xiqing gujian* (Figure 84)—has precisely been dated to the Song dynasty.⁹¹⁵ It is from such vantage points that we come to realize the significance of the aesthetic critiques. Despite the arbitrariness in their reasoning, their questioning of the reliability of the bronze collectables was both valid and inspiring. Through a

⁹¹³ Hsu, “Nansong jinshi shoucang yu zhongxing qingjie,” 32–33.

⁹¹⁴ According to Liu Yu, among the 1,179 inscribed pieces in the “Four Mirrors,” 397 have at least a questionable authenticity. Meanwhile, for bronzes marked with “golden and silver inlaid” (*cuo jinyin* 錯金銀) in the textual description, most were also inauthentic—which means, either forgeries or late artifacts that were mistaken as antique ones. For the 38 “Zhou *xi*-vases” recorded in the “Four Mirrors,” 18 were marked with “golden and silver inlay,” 2 with “golden inlay,” and 2 with “silver inlay,” constituting 58% percent of all the accounted vases. See, Liu Yu 劉雨, *Qianlong sijian zongli biao* 乾隆四鑑綜理表 (Beijing: Zhonghua shuju, 1989), 10.

⁹¹⁵ Liu Yu, *Qianlong sijian zongli biao*, 68.

refusal of non-reflected material evidence, the critiques contributed to a more open attitude in epistemic priorities, paving the way for further *mingwu* interpretations from different perspectives.

If the aesthetic critique cast a meaningful charge against the ox-shaped vessels in the imperial collections, the following critique from Zang Lin's 臧琳 (1650-1713) *Jingyi zaji* 經義雜記 (Assorted notes on classic meanings) targeted the other pillar of the three-dimensional thesis—the antiquarian record of Wang Su. As the great-grandfather of Zang Yong, Zang Lin was another pioneer of textual-evidential studies in the early Qing. Recall that in Kong Yingda's summary, the three theses were tied to different philological readings for the character *xi* 犧 of the vessel's name. If one wishes to follow the bird thesis of Mao and Zheng, that means the character *xi* (together with the character *xian* 獻 in its alternative name *xianzun* 獻尊) will be read as *suo* 沙/娑, for only in this way can the name be connected to the “whirling” bird. On the other hand, if one wishes to follow the rest two theses of ox, that means the character will be taken as *xi* 犧 (pure-colored ox) directly. After a full quotation of Kong Yingda's summary, along with the Zheng Xuan commentaries left out by Kong, Zang Lin admitted that the ox theses of Wang Su and Ruan Chen appeared “more straightforward” (*jiao zhijie* 較直捷), which must be referring to the phonetic aspect. Meanwhile, he also praised these ox-theses as “possibly acquired from eyewitness,” and not the same as those acquired through “hearsay.”⁹¹⁶

Nevertheless, even this double support from the phonetic and the epistemological aspects did not gain Zang's preference. In the next breath, he reiterated Mao and Zheng's bird thesis with a justification that the ancient pronunciations of *xi* 羲, *xian* 獻, and *suo* 沙 were close to each other. The linkage between the “*xi*”-vase and the “whirling” bird decoration was thereby tenable. That said, as a mere legitimization, this at best put the three theses in a parallel position. In order to further establish his preference, Zang turned to the textual authority of these early commentators as the final criterion:

⁹¹⁶ Zang Lin, *Jingyi zaji*, juan 6: 10a-b. 或得於目驗，與傳聞者不同。

The commentary to *Maoshi* was a pre-Qin old text, which both Zheng Zhong and Zheng Xuan based on. Therefore, even though there were indeed ox-shaped vases excavated in later times, one should not alter the message of the poetic and ritual (classics) the according to them. After all, it was Wang Su who created the alternative thesis simply for the sake of making a difference from Zheng (Xuan).

毛詩傳爲先秦古書，二鄭咸所依據。後世卽出犧牛之尊，要不得以此改詩禮之義。終是王肅好與鄭難，故爲異說耳。⁹¹⁷

In this concluding remark, Zang took a surprising move through his separate treatment of the textual and the material aspects. Similar to the aesthetic critiques above, he did not deny the factuality of the excavated evidence, but regarded it as inferior, if not irrelevant, to the authoritative message of classic commentaries. And within this philological realm, the hermeneutic authority of Mao and Zheng was well established, which could easily win over the controversial Wang Su who was infamous for his forgery of *Kongzi jiayu* 孔子家語 (Family sayings of Kongzi) and his disputatious attitude towards Zheng Xuan.⁹¹⁸ This hierarchical view of textual authority was particularly salient in *Jingyi zaji*, which, as remarked by the Republican era scholar Mao Guangsheng 冒廣生 (1873-1959) in his annotated copy, was filled with a “sectarian view” (*menhu zhi jian* 門戶之見) in “advocating the Zheng and dismissing the Wang.”⁹¹⁹ As an extreme case, Zang even charged that Wang’s tampering with *Maoshi* and his forgery of *Jiayu* were more severe than the book burning of the First Emperor.⁹²⁰ It is from this vantage point that we come to understand that Zang’s insistent refusal of the ox-related reading was more a “sectarian” critique of Wang’s commentary than a serious philological-antiquarian discussion. In his recent review on the sectarian ideals of the Qing classical learning, Luo Jianqiu mentions a shifting emphasis in the mid-Qing era from “classical explanations” (*jingshuo* 經說) to “philological reasoning”

⁹¹⁷ Zang Lin, *Jingyi zaji*, juan 6: 10b–11a.

⁹¹⁸ Thanks to newly excavated manuscripts, scholars today tend to confirm the authenticity of *Kongzi jiayu*. For the harsh critiques of Wang Su’s forgery by Qing scholars, see, Liu Wei 劉巍, *Kongzi jiayu gong'an tanyuan* 《孔子家語》公案探源 (Beijing: Shehui wenxian chubanshe, 2014), ch. 4.

⁹¹⁹ See, Mao’s annotation on the cover page of Zang Lin, *Jingyi zaji*, vol.2. 此書多申鄭絀王，經生家門戶之見。

⁹²⁰ See, Zang’s commentary on MS #241 in Zang Lin, *Jingyi zaji*, juan 30: 8b–9a.

(*xiaoxue* 小學).⁹²¹ Compared to the meticulously revealed philological textures in the mid-Qing evidential entries, this preconceived judgment about Zheng and Wang reflected a premature status that was, again, arbitrary in its reasoning. Nevertheless, this downplaying of the antiquarian records, just as the aesthetic critiques above, also helped the readers to keep a cool mind in front of the material claims.

It is with this background that we step into a more serious philological analyses empowered by the newly developed philological techniques. In the Shanghai Library, there is a largely unknown draft manuscript *Jingyi gao* 經義稿 (Draft on the Classic Meanings) under the name Tao Jun 陶鈞, which should be a late-Qing work due to its citation of Zhu Junsheng's 朱駿聲 (1788-1858) *Shuowen tongxun dingsheng* 說文通訓定聲 (Comprehensive meanings and correct sounds in *Shuowen*) first printed in 1848.⁹²² In an entry named "Explanations on the *xi*-Vase and the *xian*-Vase" (Xizun xianzun jie 犧尊獻尊解), Tao reexamined the issue from a purely textual-philological approach, through which he reached a conclusion that, strictly speaking, differed from any of his predecessors. According to Tao, the dual names of *xian* 獻 and *xi* 犧 indicated the ceramic substance and the ox shape respectively. To establish the former claim, Tao first suggested that the radical of *xian* 獻, or *yan* 𤝵, was graphically close to *xi* 虛, or the radical for the character *xi* 戲, and according to *Shuowen* the character *xi* 虛 referred to ceramic wares. Based on this important clue, Tao creatively argued that the original name of the vase should be "xizun" 虛尊 so as to reflect its ceramic material, and the character was later confused as *xi* 戲 and then *xian* 獻 due to graphic similarity. The alternative name *xi* 犧, being homophonic with the character *xi* 虛, captured precisely the phonetic aspect of this original character. Moreover, the aesthetic ideal in *Liji*,

⁹²¹ Luo Jianqiu 羅檢秋, "Qingdai hanxue de jiafa guannian bianxi," 清代漢學的家法觀念辨析 *Zhongguo shi yanjiu* 中國史研究, no. 2 (2018): 70–71.

⁹²² For the attribution of the work to the unknown Tao Jun based on the name beside an essay title in the work, see, Pan Jingzheng's 潘景鄭 (1907-2003) bibliographic note on the cover page of the work. For the citation of *Shuowen tongxun dingsheng*, see, e.g., Tao Jun 陶鈞, *Jingyi gao* 經義稿, draft manuscript, Shanghai Library, no. 823109-11 (Qian-Jia era), PDF p. 122.

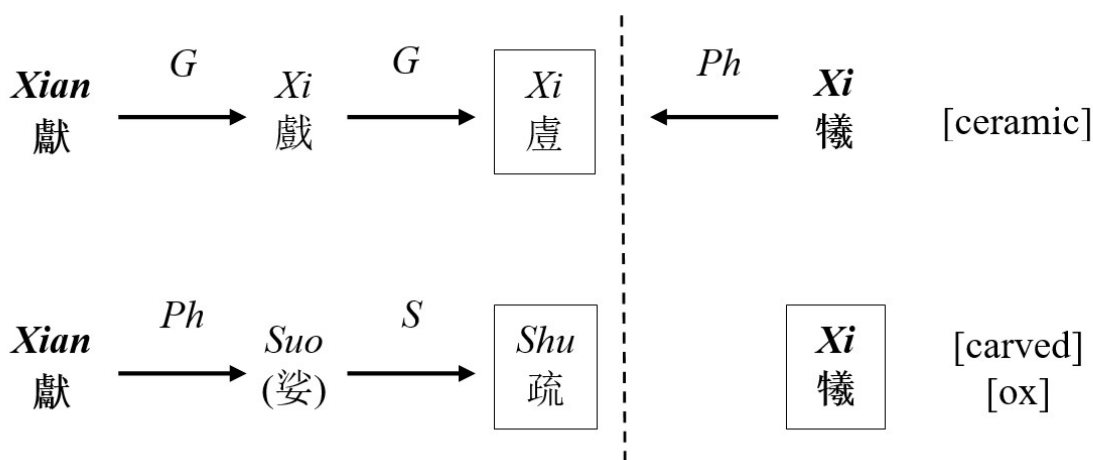
which “preferred an unadorned design” (*yi su wei gui* 以素為貴) for the vessels, was also compatible with the ceramic substance of the vase.⁹²³

As for the second claim about the ox shape, Tao first quoted *Liji* and the Mao Commentary to connect the name *xi* 犧 with the “pure-colored ox” (*xiniu* 犧牛) in the classics. In this way, the vase became associated with the ox motif. But how to determine that it had a three-dimensional form? According to Tao, the secret still lay in the alternative name of *xian* 獻. In the chapter “Positions of the Bright Hall” (*Mingtang wei* 明堂位) of *Liji*, there was a phrase “*zhou xiandou* 周獻豆” (the Zhou court [used] carved *dou*-vessel), where the character *xian* was explained as “carving” (*shuke* 疏刻) by Zheng Xuan. From here, Tao inferred that the *xian*-vase should be similarly understood as a “carved” vase.⁹²⁴ Put together, the *xi*-vase, or *xian*-vase, was thereby a *carved ceramic vessel with an ox motif*. From this vantage point of conceptual synthesis, Tao then listed an extensive array of eight problematic interpretations, ranging from painted bird and painted ox to alternative claims such as the wooden vase in *Huainan zi*. Among the major theses, the only one that remained unmentioned was the one by Wang Su. Did this imply Tao’s endorsement of the three-dimensional design? Probably, but not for sure. Tao did not specify whether his “carved vase” referred to a three-dimensional “sculpture” or a two-dimensional engraving. But in any sense, Tao kept an apparent distance from the antiquarian tradition, as he was the only one who concluded that the vase was ceramic. Was he, thereby, inspired by the “third tradition” of the porcelain vessels? Unlikely, because such vessels involved no process of carving. And more importantly, Tao’s entry was a textual-philological analysis from head to toe, unconcerned with material evidence at all. Even if the philological conclusions indeed were accordant with certain material designs in history, these would have still fallen out of Tao’s concern. The entry thereby foregrounded the potency of pure philological analysis, highlighting the inner richness of this philological name.

⁹²³ Tao Jun, *Jingyi gao*, PDF p. 121-122.

⁹²⁴ Tao Jun, *Jingyi gao*, PDF p. 122.

That said, Tao's philological reasoning per se was more dazzling than convincing. A careful reader may have already realized that Tao was working on two overlapping logics in his demonstration (*Chart 3*). On the one hand, to argue for the ceramic substance of the vase, the character *xian* 獻 was connected to *xi* 戲 and then to *xi* 虛 on the basis of *graphic* similarity. On the other hand, in his demonstration for the carved form of the vase, the same character *xian* was taken as *shu* 疏 according to the commentary tradition. Although Tao did not specify the underlying logic here, it had apparently little to do with the graphic links above. And if we move back to the origin in the *Liji* commentary, we would find the explanation by Kong Yingda: *Xian* 獻 was *homophonic* to *suo* 娒, which, bearing the meaning of “sparse” (*xishu* 希疏), was thereby *semantically* connected with “*shuke*” 疏刻 (to carve out, i.e., to make things sparse).⁹²⁵ Although either of the philological chains was justifiable, they were based upon different logics (graphic links versus phonetic-semantic links) that could not be readily integrated. The same can be said for the name of *xi* 犧. To support the ceramic claim, the character was taken as a *phonetic* loan of *xi* 虛, while to argue for the ox form, the same character was taken alternatively as it was.



⁹²⁵ Kong Yingda, *Liji zhengyi*, 951. 獻音娒, 娒是希疏之義, 故為疏刻之。

LEGEND	
<u>G</u>	: graphic link
<u>Ph</u>	: phonetic link
<u>S</u>	: semantic link
	: taken as the original character

Chart 3: Schematic diagram on the philological reasoning in Tao Jun's entry

Under a “substance-form” distinction, as Tao noted at the very beginning of his entry, each of the names had been interpreted twice—*xian* 獻 as both the *xi* 虛-ceramic (substance) and the *shu* 疏-carving (form); *xi* 犧 as both the *xi* 虛-ceramic (substance) and the *xi* 犧-ox (form). Given the epistemic independence between substance and form, a distinction with considerable “modern” flavor, one could indeed expect for a further synthesis for the observations from the two sides. However, since the two rounds of interpretation worked on disparate philological logics, there was no way to establish both of them, and a forced synthesis—as in the case of Tao's “ceramic vessel in the form of a carved ox”—was in fact an illegitimate overmining despite its localized cogency. In Chapter Three, I demonstrated the potential of hermeneutical plurality in both the multiple choices of phonological connections and the varied categories of character variants. Although accompanying evidence would trim down most of the possible linkages, there was no guarantee for a singular result—particularly when this was induced by different directions as in the current case. Recall also the case of self-bifurcation in Chapter Four, when the same scholar adopted multiple competing theses at different stages of the revision process. From this vantage point, the current case can be regarded as an *immediate* self-bifurcation, where two competing sub-theses were forcibly overlapped with each other. Thanks to the newly developed philological techniques, a philological term became as overdetermined as a material object, though the plural determinations, like the material excess, were never easily totalizable. In this sense, the schizophrenic

foraging in both the substantial and the formal aspects marked the potency and limit of Tao's purely philological approach at the same time.

Given the over-determinacy of Tao's thesis, would it be possible to further trim down the plural philological possibilities through other relevant evidence? In this regard, Wang Niansun offered an exemplary case, which, though completely missed by Tao Jun, had turned into the dominant interpretation of the *xi*-vase in the nineteenth century. After a full quotation of Kong Yingda's summary, Wang also took the second chain from *xian* 獻 to *shu* 疏 (carving) in *Liji* seriously, with a further support from Gao You's *Huainan zi* commentary, which interpreted the *xi* 犧-vase also as an "engraved vase" (*shulou zhi zun* 疏鏤之尊).⁹²⁶ On confirming the phonological connection from *xi* 犧 to *suo* 娑 and to *shu* 疏 in ancient times, Wang sided with the references that took the vessel as a "carved" vase.

Unlike Tao, this was the only philological chain that Wang built in the entire entry—thus making clear the sole denotation of "carving" in the names of the vessel without risking the trap of over-interpretation. As for the substance and specific design of the vase, the record in *Huainan zi* offered a revealing entry point:

Take a tree of a hundred hand spans in diameter, cut it down, and make it into *xi*-vases. Engrave them with knives and awls, sprinkle them with blue and yellow. [They are] elaborately adorned and brilliantly inlaid, [with] dragons, snakes, tigers, and leopards, intricately finished with patterns and designs.

百圍之木，斬而爲犧尊。鏤之以剗剗，雜之以青黃。華藻鏤鮮，龍蛇虎豹，曲成文章。⁹²⁷

As mentioned above, this alternative claim also appeared in Tao's entry. Yet it only fell under his critique there due to its suggestion of the "wrong," non-ceramic substance. In contrast, Wang took it more seriously, and raised a similar quotation from *Zhuangzi* to confirm the wooden substance. As for the decorated motif, Wang also paid attention to the more diversified description in this record, based on

⁹²⁶ Wang Niansun, *Guangya shuzheng*, 3: 1152; Liu An and Liu Wendian, *Huainan honglie jijie*, 59.

⁹²⁷ With slight adaptations, the translation follows John S. Major et al., *The Huainanzi: A Guide to the Theory and Practice of Government in Early Han China* (New York: Columbia University Press, 2010), 97.

which he proposed a more inclusive design for the vessel as bearing the “engraved portrait for a multitude of things.”⁹²⁸

Strictly speaking, this open conclusion was different from any of the past theses. Nevertheless, for Wang, the descriptions by the Mao and the Zhengs in the commentary tradition were still “not far” from the point. Although differed in the specific motifs of decoration, they shared the same idea of “patterned engravings” (*diaowen kelou* 彫文刻鏤). As a contrast, the ox-related theses by Ruan Chen and Wang Su became the real target of his critique. Drawing references from *Shuowen* and *Maoshi*, Wang made clear that *xi* 犧 was the generic name for all sacrificial animals, and did not have to be an ox. Comparing to his own identification of *shu* 疏 (carving) as the original character, Ruan’s ox interpretation was critiqued as a typical case of “surface reading” (*wangwen shengyi* 望文生義) originating from the “ox” (牛) component of the character.⁹²⁹

The more impressive critique was directed at Wang Su, or the antiquarian tradition in its entirety. Here, the wooden substance of the vessel became the key factor. Recall that Wang Su’s claim was based upon a vessel excavated in his own time that was attributed to the Spring and Autumn period. Noting the seven-century gap between the two, Wang Niansun proposed the following soul-searching question: Was it made of wood, or made of bronze? Neither seemed to work— “If made of wood, it could not remain intact for seven hundred years; if made of bronze, it would be incompatible with the record in *Zhuangzi* about ‘cutting down trees to make the vase.’”⁹³⁰ From this double contradiction, Wang Niansun concluded that the excavated vessel had nothing to do with the *xi*-vase, but was merely an ox-shaped vessel wrongly categorized by Wang Su due to his problematic association of the *xi* character with an ox. From this vantage point, the two “*xi*-vases from the Zhou” in *Xuanhe bogu tu* also received a

⁹²⁸ Wang Niansun, *Guangya shuzheng*, 3: 1152. 刻而畫之為眾物之形。

⁹²⁹ Wang Niansun, *Guangya shuzheng*, 3: 1151-1152.

⁹³⁰ Wang Niansun, *Guangya shuzheng*, 3: 1154. 以木為之，則不能經七百年而不壞；以金為之，則又與《莊子》「破木為尊」之說不合。

corresponding explanation. As possibly the strongest bookish support of the antiquarian design for most of the scholars, these ox-shaped vessels were regarded as “forged pieces inspired by Wang Su’s idea,” and thus even more insignificant.⁹³¹ Although Wang Niansun mentioned nothing about the more recent catalogues and material evidence, the same critique was certainly extendable to later eras and thereby offered a denial of the entire tradition of three-dimensional antiquarian design.

Despite a continued arbitrariness in historical claims about Song forgeries, this time the decline of the antiquarian tradition was well supported with textual-philological evidence. But how to account for the apparent lack of support from the material side? Here, the wooden substance of the conceptualized *xi*-vase offered an expedient solution: Nothing left; they had all decayed! In the study of classical *mingwu* concepts, the cogency of material evidence was always associated with the endurance or stability of the referential object at hand. Astronomical observations in the present could be used to calculate celestial phenomena in the past, as the movement of the planets were believed to follow constant rules.

Bronzeware was treasured as convincing historical evidence, as they were able to endure the erosion of time. In this sense, the conceived wooden nature of the *xi*-vase was crucial for strengthening the priority of the textual records, from which vantage point the large accumulation of ox-shaped vessels could be easily regarded as irrelevant. Thanks to this intrinsic cohesiveness, the wooden substance of the *xi*-vase became almost a consensus among the leading scholars of *Shi* in the nineteenth century. Although some of them continued to interpret *xi* as the painted feathers rather than engravings so as to work closer with the commentary tradition, the text-derived framework of the wooden design continued to be largely followed.⁹³²

Comparing to Wang Fuzhi’s aesthetic refutation of the antiquarian tradition, the more systematic critiques by Tao Jun and Wang Niansun highlighted the development of philological analysis in the following centuries. In particular, the mature form of Wang Niansun’s reasoning almost had a magic

⁹³¹ Wang Niansun, *Guangya shuzheng*, 3: 1153-1154. 則又襲王肅之說而偽爲之者。

⁹³² See, e.g., Ma Ruichen, *Maoshi zhuanjian tongshi*, 3: 1146-1147; Chen Huan, *Shi maoshi zhuan shu*, 3: 1099; Wang Xianqian, *Shi sanjia yi jishu*, 2: 1082-1083.

power of self-demonstration. So long as one started with a serious treatment of the textual sources, they would confirm their authority through a natural unfolding of the intrinsic logic. But why start with this textual priority? Why not follow the bronze catalogues, which, backed up by the antiquarian connoisseurship of the imperial collections, offered an immediate answer to the conundrum? —Not to mention that it was further supported by a significant sub-tradition of transmitted texts! Recall the unreserved deriding of the commentary tradition by the antiquarian advocates, we must conclude with the following observation: Given the level of philological and antiquarian studies of the day, both the text-derived and the material-derived stances bore an intrinsic impetus of self-realization, such that one's epistemic stance at the starting point would largely determine the direction of reasoning that followed. From the aesthetic critique to the systematic philological rebuttal, and from the two accounts of a *xi*-vase in *Xuanhe bugu tu* to the 38 pieces in the Qianlong *Mirrors*, one can identify the refinement of evidential analysis on both sides, which is consistent with our general observations in Chapters Three and Five. Discussions regarding the relevance of the material objects to the philological names also marked an autonomy of the two realms. Neither was necessarily subordinated to the other, nor was there a guarantee of hermeneutical convergence. The push and pull between the philological and the material sides thus became an implicit choice, which remained largely a contested field in the mid-Qing period.

It has been natural for us to follow the mid-Qing inferences of historical astronomy based on formulaic calculations from then. However, if the length of the tropical year, as believed by Qian Daxin and many of his mid-Qing followers, escaped from any precisely modeling but kept changing in history, then the textual records of celestial phenomena from first-hand observations in the past would alternatively gain an upper hand in epistemic authority.⁹³³ In this sense, Minghui Hu's apt distinction between Dai Zhen's "cosmological realism" that prioritized formulaic calculations and Qian Daxin's

⁹³³ For the debates on the length of the tropical year, see, Sela, *China's Philological Turn*, 139–54; Chen Zhihui 陳志輝, "Rong xixue yu ji juexue: Jindai zhishi zhuanxing shiyu zhong de Qianjia tiansuan zhuanmen zhi xue" 融西學於繼絕學：近代知識轉型視域中的乾嘉天算專門之學 (PhD Dissertation, Shanghai jiaotong daxue, 2013), section 3.4.

“textual empiricism” that prioritized historical records was far from a qualitative contrast between modern and pre-modern scholarships but an actual difference in the contested field of epistemic stances.⁹³⁴ Similarly, we have been accustomed to following the antiquarians in treating excavated bronzewares as unmediated material records from the past. However, if a haphazardly recovered ancient bell, as believed by Northern Song ritual scholars in the 1030s, did not necessarily follow the perfect design and was thereby less reliable than mathematical calculations from the classics, the textual tradition would continue to keep its epistemic authority despite an apparent difference with the material side.⁹³⁵ This collective stance, only eighty years earlier than the systematic, antiquarian-based ritual reform in the Huizong era, also captured an overturn of epistemic priority in a relatively short historical period, indicating that neither side was naturally superior to the other. As modern scholars baptized by natural science and archaeology, we have always to be cautious about the plural and fluid epistemological possibilities beyond our own commonsensical choices.

From these comprehensive push and pull between the two epistemic sides, is it possible to identify certain generic patterns for the mid-Qing period? It might be helpful to reflect upon the above bifurcations from multiple scales. There were differences in personal interest and expertise. As we have seen from the bifurcation on the *yao* grass, Cheng Yaotian was more inclined to material studies than Wang Niansun and Duan Yucai, who were more accomplished in philological analysis. There were differences in scholarly schools. As shown from the bifurcation over the solar eclipse, the “Wan School” (Ruan Yuan, Jiao Xun) was more open to a wide span of material-related knowledge such as astronomical mathematics and geographical studies, in contrast to the “Wu School” (Zang Yong) that had a more concentrated focus on textual criticism.⁹³⁶ There were differences in social identities. As suggested from

⁹³⁴ For the discussion of “cosmological realism” and “textual empiricism,” see, Hu, *China's Transition to Modernity*, 147–51.

⁹³⁵ See, Patricia Ebrey, “Replicating Zhou Bells at the Northern Song Court,” in Wu, *Reinventing the Past*, 184–88.

⁹³⁶ For the definition of the Wan School and the Wu School, see, Zhi Weicheng 支偉成, *Qingdai puxue dashi liezhuan* 清代樸學大師列傳 (Shanghai: Taidong tushu ju, 1928), 49, 131.

the synchronic bifurcation on the *xi*-vase, the private learning of literati scholars was closer to the bookish philological approach, while court learning, backed by the imperial collections, tended to emphasize more on the material side. There was also the difference in intellectual trends. As shown from the diachronic changes in the case of the *xi*-vase, the rise of antiquarian fervor helped to tilt the balance towards the material side, while the development of philological techniques contributed to a reversal to the textual side. Despite a continuing oversimplification of these dichotomous analytical categories, this multi-scaled perspective contributes to a better elucidation of the complex dynamics in the epistemological field, in particular the contesting yet parallel developments in the philological and material aspects.

Following these observations, it is imaginable there can be another round of material inclination under the new developments in archaeology in the modern era. Although due to a lack of self-named vessels, the generic term “bird-and-beast vases” (*niaoshou zun* 鳥獸尊) has often been preferred to classic names, scholars have generally agreed about Wang Su’s three-dimensional thesis as closest to the point.⁹³⁷ That said, minor voices in defense of the textual tradition have never died out. In a recent article, Zhang Yanyong warns about an unbalanced prioritization of excavated materials over transmitted texts in the current studies, as well as the inclination to draw hasty correspondence between the two sides.⁹³⁸ Following this methodological reflection, Zhang offers a defense of Wang Niansun’s thesis, which, according to him, cannot be sufficiently rejected by the current excavated evidence.⁹³⁹ This remaining space for textual autonomy, looming behind the curtain of modern archaeology, marks a resonance with the multifaceted epistemic potentials of a mid-Qing *ming-wu* compound.

⁹³⁷ See, e.g., Rong Geng 容庚, *Shang Zhou yiqi tongkao* 商周彝器通考 (Shanghai: Shanghai renmin chubanshe, 2008), 325–26; Xu Zhongshu 徐中舒, “Shuo zhunyi,” 說尊彝 *Zhongyang yanjiuyuan jindaishi yanjiusuo jikan* 中央研究院歷史語言研究所集刊 7, no. 1 (1936): 71–74.

⁹³⁸ Zhang Yanyong 張雁勇, “Guanyu Zhouli niaoshou zunyi xingzhi yanjiu de fansi,” 關於《周禮》鳥獸尊彝形製研究的反思 *Shixue yuekan*, no. 3 (2016): 29–32.

⁹³⁹ Zhang Yanyong, “Guanyu Zhouli niaoshou zunyi xingzhi yanjiu de fansi,” 25–27.

The Magpie Nest Occupied by the *jiu*-Bird

In the above sections, we have demonstrated the epistemic limits and incompatibilities in the bifurcation of *wu*. Nevertheless, the hermeneutic contest between the material and the philological side did not always end up with a bivalent result. In many other cases—particularly for natural objects that were at home as poetic imagery—the ambivalence at the diverging point would instead foreground the poetic nature of the *mingwu* descriptions and thereby initiate a literary turn in the interpretation. In this section, we will use an example on the *shijiu* 鴝鳩 bird to illustrate the point.

In *Maoshi*, the lines that bear a close relationship with the *shijiu* bird appear in two places. The first is the ode “Magpie Nest” (Quechao 鵲巢, *MS* #12), which mentions a featured dwelling habit of the *jiu* 鳩 bird:

惟鵲有巢	It is the magpie who has the nest,
惟鳩居之	It is the <i>jiu</i> bird who inhabits it.
之子于歸	This young lady goes to her new home,
百兩御之	A hundred carriages escort her. ⁹⁴⁰

Although the ode only mentioned the name *jiu*, a generic term for pigeon-shaped birds, the Mao commentary marks the bird here clearly as *shijiu* 鴝鳩, with a further confirmation of its habit as “not building its own nest but dwelling in a magpie’s completed nest.”⁹⁴¹ This migrant habit, apparently, is an evocative analogy to the newlywed in the following lines who moves to a new family. The other description comes from the homonymic ode “Shijiu” 鴝鳩 (*MS* #152), which begins with a portrait of the bird’s family:

鴝鳩在桑	The <i>shijiu</i> bird is in the mulberry tree,
其子七兮	Its young ones are seven.

⁹⁴⁰ Zheng Xuan, *Maoshi zhuan jian*, 16. The translation follows Karlgren, *The Book of Odes*, 7.

⁹⁴¹ Zheng Xuan, *Maoshi zhuan jian*, 16. 鴝鳩不自為巢，居鵲之成巢。

淑人君子	The good man, my lord,
其儀一兮	his fine deportment is one. ⁹⁴²

According to the Mao commentary, the mentioning of the nestlings here is related to a typical trait of the *shijiu* bird, which feeds its children “from top to down in the morning” and “from down to top in the evening.”⁹⁴³ This “evenness” is thus evocative of the fine deportment of the “good man.”

Despite the relative clarity of these natural descriptions and their connection to the poetic messages, what on earth is a *shijiu* bird? This has provoked heated debate since the beginning of the commentary tradition. In this section, I will use two extensive analyses by Jiao Xun and Doronga—two of the leading scholars of material studies that we have been familiar with—to elaborate the complexities and expediencies in settling this conundrum.

The initial difficulty originated from a philological divergence in early commentaries. According to Guo Pu’s (276-324) *Erya* commentary, *shijiu* referred to *bugu* 布穀, a cuckoo. However, in his philological work *Fangyan* 方言 (Regional Words) three centuries earlier, Yang Xiong 揚雄 (53 BCE-18 CE) made a distinction between the two names, and explained *shijiu* as *dairen* 戴鵲, or hoopoe—though this did not work particularly well with the classic text of *Erya*, where *shijiu* and *dairen* appeared in different entries which thereby implied a distinction between the two.⁹⁴⁴ Despite the high authority of *Erya* and the Guo Pu commentary, for this specific case, Yang Xiong’s alternative interpretation was endorsed by some important works in the encyclopedic (*ya* 雅) tradition, such as Sun Yan’s 孫炎 (fl. early 3rd c.) *Erya* commentary as well as Zhang Yi’s 張揖 (fl. early 3rd c.) *Guangya* 廣雅 (Expansions to *Erya*). It was not until the *Rectified Meanings* that the philological bifurcation witnessed a substantial breakthrough, when Kong Yingda turned to natural observations for help. As a bird widely spread in

⁹⁴² Zheng Xuan, *Maoshi zhuan jian*, 188. The translation follows Karlgren, *The Book of Odes*, 95.

⁹⁴³ Zheng Xuan, *Maoshi zhuan jian*, 188. 鵲鳩之養其子，朝從上下，莫從下上。

⁹⁴⁴ See, Shao Jinhan, *Erya zhengyi*, 944, 971.

China, the hoopoe was noted by Kong as breeding in a cave rather than a nest, thus dismissing Yang Xiong's claim as unwarranted.⁹⁴⁵

As a prelude for further inquiries on the term, these early debates were listed in detail in the beginning section of Jiao Xun's entry. If the hoopoe thesis was ruled out due to its natural inconsistency, would this indicate that the cuckoo was the final answer? Not yet. The *Shi* odes, as quoted above, described far more specific natural traits than nest dwelling, which, as summarized by Jiao, concerned its "virtue of evenness" as well as its dwelling in the *magpie's* nest. Did these conform to the actual behavior of cuckoo birds? Interesting enough, in modern zoology, the cuckoos indeed offer a typical case for brood parasitism, in which, by laying eggs in the nests of a wide range of other bird species, they cause the host to incubate the egg and feed the young like its own.⁹⁴⁶ On the one hand, although for the narrowly defined *bugu* 布穀 bird, or the common cuckoo (*Cuculus canorus*, which sings in double notes like "goo-ko"), the magpie was a rare choice among its twenty-odd reported host species in China, such records do exist.⁹⁴⁷ On the other hand, for some other species of parasitic cuckoos, the magpie is chosen as the host more frequently. This is particularly the case for *zigui* 子規, or the Indian cuckoo (*Cuculus micropterus*, which sings in four notes like "bo-ko-ta-ko"), a close relative of the common cuckoo which takes the azure-winged magpie as its major host.⁹⁴⁸ Although a nomenclative distinction of the two birds could be

⁹⁴⁵ See, Jiao Xun, *Jiao Xun quanji*, 4: 1528-1529.

⁹⁴⁶ Robert B. Payne, *The Cuckoos* (New York: Oxford University Press, 2005), 132-33.

⁹⁴⁷ In a nation-wide study of parasitic cuckoos in China, Yang et al. have identified 25 host species from a total of 57 parasitic records for the common cuckoo, in which one record (1.8%) from one species (azure-winged magpie) belongs to the magpie genera. See, Canchao Yang et al., "Diversity of Parasitic Cuckoos and Their Hosts in China," *Chinese Birds* 3, no. 1 (2012): 12-13.

⁹⁴⁸ According to Yang et al., among the 142 total records of brood parasitism for 11 cuckoo species in China, 9 records (6.3%) take the magpie as the host bird. In specific, in a field study conducted at Rizhao, Shandong province, scholars have identified as many as 18 cases of Indian cuckoo parasitism from a total of 183 nests of the azure-winged magpie. This high ratio is consistent with Yang et al.'s observation of the Indian cuckoo on a broader scale that, among the 5 host species of its 8 records of parasitism, the azure-winged magpie constitutes the highest frequency (3 records, 37.5%). See, Yang et al., "Diversity of Parasitic Cuckoos and Their Hosts in China," 12-13; Zhang Shoufu 張守富, Zhang Shougui 張守貴, and Yan Fengjun 閔豐軍, "Sisheng dujuan, da dujuan jisheng xing fanzhi xixing diaocha," 四聲杜鵑、大杜鵑寄生性繁殖習性調查 *Shandong linYE KEJI* 山東林業科技, no. 5 (2017): 68-69.

dated back to *Erya*, they were frequently mixed up in actual usage.⁹⁴⁹ In any sense, modern zoology has no problem with the poetic description of the cuckoo's occupying the magpie's nest, which means that it might have indeed originated from an eyewitness with epistemic significance.⁹⁵⁰

Nevertheless, probably due to the covert behavior of cuckoos, none of the later pre-modern scholars seemed to have realized this natural fact. Instead, out of a failure to secure material evidence for the cuckoo thesis, from the Song onwards, scholars began to suggest doubts and resolutions in their own ways, which, though lacking enough biological cogency according to modern standards, was sufficiently revealing for showcasing the underlying dynamics in the epistemic construction of *mingwu* terms of the day. Note that in the original ode, the occupying bird was solely mentioned under the generic term of “*jiu*” 鳩. On noticing the broader hermeneutic space of this term, Ouyang Xiu was the first to cast a serious doubt on the cuckoo thesis, who, based on natural traits, referred *jiu* to a clumsy bird incapable of nest building which “differed significantly” from the cuckoo.⁹⁵¹ Although this pioneering claim was left out in Jiao Xun's entry, he included the doubts by Zhang Zai 張載 (1020-1077) and Huang Chun 黃樞 (*jinshi* 1177).⁹⁵² However, unlike Ouyang who managed to settle the natural deficiency by an alternative attribution, Zhang and Huang chose a different route. As reasoned by Jiao Xun:

⁹⁴⁹ The early distinction in *Erya* was based on Guo Pu's commentary. See, Shao Jinhan, *Erya zhengyi*, 944, 962. For the mix-up of the two birds, a revealing example comes from *Bencao gangmu*, where Li Shizhen lists several alternative names for the *bugu* bird that are onomatopoeic to its calls. However, apart from the bi-syllabic names *jiaju* 鵲鳩, *huogu* 獲谷, and *guogong* 郭公, it is noteworthy that Li also included some quadrisyllabic names such as *a-gong a-po* 阿公阿婆, *ge-mai cha-he* 割麥插禾, and *tuo-que po-ku* 脫却破袴, which, similar to the onomatopoeic description *bu-ru gui-qu* 不如歸去 for the *zigui* bird, was more likely referring to the four-note call of the Indian cuckoo rather than the two-note one of the common cuckoo. See, Li Shizhen, *Bencao gangmu*, juan 49: 3a, 10a.

⁹⁵⁰ For a zoological confirmation of the *Maoshi* description, also see, Guo Fu and Needham, *Zhongguo gudai dongwuxue shi*, 302–3.

⁹⁵¹ Ouyang Xiu, *Shi benyi*, juan 2: 1a-b.

⁹⁵² In fact, Jiao was well aware of the significance of Ouyang Xiu's claim, as it was quoted extensively in his earlier 30-juan draft edition of the work. In this earlier edition, the clumsy bird was first identified by Jiao as the crested myna (*bage* 八哥), thereby as a support for his own thesis (see below). However, in the manuscript, this identification was later crossed off. And finally, the entire quotation of Ouyang Xiu was deleted in the new edition. Note that Ouyang offered merely a description of the bird's trait without associating it with more specific names. It seems that the final deletion of Ouyang's claim was due to this difficulty of identification. See, Jiao Xun, *Maoshi caomu niaoshou chongyu shi* (30 juan), juan 2: 3b.

...for the so-called “virtue of evenness” and the “occupancy of the magpie’s completed nest,” I have not seen the case. The [Mao] preface says, “With accumulations of virtue and feats, the state ruler achieved his nobility. Leaving her own family, the wife moves in and owns it.” Was it the case that the [Mao] commentary was based on this to make the inference on [the natural traits of] *shijiu*? Hence some Song scholars suggested that [the ode] only took the two creatures as metaphors, which did not have to bear this [natural] coherence.

...所謂「均一之德」及「居鵲成巢」，未見其然。《序》云：「國君積德累功以致爵位，夫人起家而居有之。」《傳》或本此以推于尸鳩邪？故宋儒有謂止取二物爲喻，不必有此理。⁹⁵³

Here, the “Song scholars,” as noted by Jiao himself in smaller characters, refers to Zhang and Huang exactly.⁹⁵⁴ Instead of attempting for any further reconciliation between the textual and the material side, their choice reminds of an important alternative: to move back to the non-evidential poetic rhetoric and moral message of the lines.

Similar to the analytical distinction of the material from the philological, in the previous chapters, I have intentionally refrained from going into this literary-hermeneutic dimension too early, though, as the necessary substratum for every piece of *Shi*, it is never absent. If, as suggested by Zhang and Huang, the two birds were a merely metaphorical device for the marriage, one could well change them into other movable creatures without bothering for their consistency with natural traits. By rendering the natural images evidentially irrelevant, the poetic reading thereby offered a “way of exit” for *mingwu* analysis. Although theoretically speaking this literary substratum always offers a hermeneutic alternative, it will remain unnoticed most of the time when the *mingwu* analysis goes smoothly. However, the poetic nature would soon loom large when the epistemic reasoning faces obstacles, as demonstrated here from the natural deficiency of the cuckoo bird. The dynamic was even more typical in Jiao Xun’s review of the problem, where it was precisely the lack of proof for the even virtue and the nest occupancy that propelled him to reflect upon the literary mediation of the Mao commentary. If the natural traits described

⁹⁵³ Jiao Xun, *Jiao Xun quanji*, 4: 1529.

⁹⁵⁴ Zhang Zai’s claim was quoted from Lü Zuqian. For the original text of these claims, see, Lü Zuqian, “Lü shi jiashu dushi ji,” 48; Li Chu and Huang Chun, “Maoshi jijie,” 65.

by Mao, just like the text-derived cases in Chapter One, were merely a hypostatized inference from the moral message, there would be no more need for a further epistemic discussion.

Nevertheless, Jiao did not stop at this fallback choice, but came up with an alternative attribution of the *shijiu* bird. On noticing the interpretation of *shijiu* as *juyu* 鷓鴣, or the “crested myna” (*bage* 八哥) in Cui Bao’s 崔豹 (fl. late 3rd c.) *Gujin zhu* 古今注 (Commentaries on the Past and the Present), Jiao suggested a genealogy from Yan Can and Li Chun to Li Shizhen and Mao Qiling 毛奇齡 (1623-1716) for this alternative interpretation—though a more careful examination of the original texts would reveal it as more of Jiao’s own synthesis than an actual hermeneutic tradition. In Li Chun’s *Collected Commentaries*, he merely affirmed *shijiu* as *juyu* without providing any evidence, and in Yan Can’s *Shi ji*, it was quoted after the mainstream cuckoo thesis as a minor alternative, with no further verification of its validity.⁹⁵⁵ Among the quoted texts, Li Shizhen was the first who made a clear description of the crested myna’s natural trait to “dwell in magpie nests and tree holes” (*ju quechao shuxue* 居鵲巢樹穴), yet he made no connection of the bird with the poetic line or the *shijiu* bird at all.⁹⁵⁶ As for Mao Qiling’s claim in *Xu shizhuan niaoming* 續詩傳鳥名 (Supplementary to bird names in the *Shi* commentary), a representative early-Qing *mingwu* monograph on the birds in *Maoshi*, the case was even more complex. On the one hand, his physical description of the bird—similar to the magpie yet with a shorter tail and a feathered crest—was indeed consistent with the crested myna. On the other hand, although the term “*jiu*” here, as Jiao Xun would prefer, was interpreted as “*juyu*,” the latter was not taken as the myna but a “generic name” for *bugu* 布穀, *daisheng* 戴勝, and *jiaju* 鷓鴣, with no essential distinction drawn among them. As a result, although Mao Qiling offered a vivid description of the *jiu*’s contending for the magpie’s nest during the second and third months, which was “visible for everyone with eyes,” it was still impossible to

⁹⁵⁵ See, Li Chu and Huang Chun, “Maoshi jijie,” 330; Yan Can, *Shi ji*, 2: 384.

⁹⁵⁶ Li Shizhen, *Bencao gangmu*, juan 49: 4b–5a. In *Bencao gangmu*, Li continued to interpret *shijiu* as *bugu*, or the cuckoo.

determine whether this precious natural confirmation was referring to the cuckoo or the myna.⁹⁵⁷ In other words, none of these earlier texts alone offered a complete association between the bird in the ode, the trait of nest occupancy, and the species of crested myna, though, by joining the quotes together, one could indeed speak for a textual basis for this alternative interpretation.⁹⁵⁸

As a scholar with interest in natural observation, Jiao further supported this myna thesis with field research, where an “old local” explained the mechanism for him: In order to occupy the magpie nest, the crested myna left “filthy things” inside, and the magpie, as a clean bird, would thus abandon the nest and make a new one elsewhere.⁹⁵⁹ In a revised and more succinct edition of this entry in *Maoshi bushu* 毛詩補疏 (Supplemented commentary to *Maoshi*), this attribution was further strengthened with his own eye-witness:

Behind my study, there was a magpie nest at the top of a mulberry tree. Later an egg dropped off from the nest, and it was a crested myna’s egg. It is because the magpie, to avoid the Grand Duke Jupiter, migrates after the tenth month each year. Its empty nest is then occupied by the crested myna.

余書塾後柘顛有鵲巢，已而有卵，自巢墜下，則鵲卵。蓋鵲巢避歲，每歲十月後遷移，其空巢則鵲居之。⁹⁶⁰

Despite the different explanations on the mechanism of nest occupancy, natural observation was sufficient to work jointly with the textual evidence to justify the myna thesis. Hence Jiao concluded, that “if one accepts [the description of nest occupancy in] the *Mao Commentary* as the real situation” (*ruo yi maozhuan wei shishi* 若以毛傳為實事), the term “*shijiu*” should be taken as crested myna. From this vantage point, he even proposed a daring suggestion of the name “*bage*” 八哥 (alternative name for the

⁹⁵⁷ See, Mao Qiling 毛奇齡, “Xu shizhuan niaoming,” 續詩傳鳥名 in *Yingyin Wenyuange siku quanshu*, 86: 279, 289-90.

⁹⁵⁸ As far as I know, the first who made a clear association of all these aspects was the Southern Song scholar Lou Yue 樓鑰 (1137-1213), though the entry was not mentioned by Jiao, nor seemed to reach a wide influence in the high-Qing era. See, “Da Yang Jingzhong lun shi jie” 答楊敬仲論詩解 in Lou Yue 樓鑰, *Lou Yue ji* 樓鑰集 (Hangzhou: Zhejiang guji chubanshe, 2010), 3: 1135-36.

⁹⁵⁹ Jiao Xun, *Jiao Xun quanji*, 4: 1530. 鵲愛潔，八哥以穢物置其巢中，鵲則別營巢，因入而居之。

⁹⁶⁰ Jiao Xun, *Jiao Xun quanji*, 3: 1407-1408.

crested myna) as a phonetic turn of “*bugu*” 布穀 (normally taken as the cuckoo). If this was the case, Cui Bao’s myna interpretation would no longer be a minor alternative but compatible with Guo Pu’s cuckoo interpretation in the *Erya* commentary. That said, the philological support for the myna thesis was after all weak in the early commentaries, and Jiao was crystal clear that the natural observation of “nest occupancy” was the real foundation of his claim. In a tentative yet triumphant tone, Jiao concluded his entry with a methodological note to “leave Guo [Pu] aside for Cui [Bao], and to abandon classic interpretations for eyewitness for the time being.”⁹⁶¹

At first glance, the conclusion seems to fall back once more onto the epistemic tension between the philological and the material sides, where Jiao chose to side with the later. However, a more careful review of the entry will draw our attention to the *conditional* claim right before the concluding section, which, as noted above, marked clearly that the entire evidential outcome that followed was based upon the very premise that the description in the *Mao Commentary* reflected the “real situation.” What if the imagery of the two birds were merely poetic rhetoric without a serious evidential significance? What if the natural description in the *Mao Commentary* was not the “real situation” but a fabricated trait inferred back from the ode’s moral message? As shown above, such possibilities were indeed taken into consideration by both Jiao and his predecessors. And even if they were finally rendered up by some more preferred alternatives, the possibility—just as the inextricable literary mediation of the lines—always loomed. With a lasting awareness of this non-evidential aspect, the conditional premise thus placed the philological-material complexity under a broader background of literary mediation. When one became too hasty in knowledge constructions, it reflected upon its shaky basis; yet when one got stuck in evidential inconsistencies, it also offered a way out. As a third dimension beyond the philological and the material, this literary mediation further enriched the hermeneutic possibilities in *mingwu* analysis.

⁹⁶¹ Jiao Xun, *Jiao Xun quanji*, 4: 1530. 姑置郭而取崔，姑舍古訓而據目驗。

A comparable channel towards the literary dimension is also discernable from Doronga's entry on the bird. Renowned for his strong inclination towards natural studies, Doronga paid less attention to the philological twists in the early commentaries. After a brief mention of the cuckoo thesis in the *Erya* commentary, he stepped into the critical reviews by the Song scholars directly. Based on his natural observation that the cuckoo bird never occupied magpie nests, Doronga first endorsed Ouyang Xiu's claim that the nest-occupying bird was not the cuckoo, or the traditionally interpreted *shijiu*.⁹⁶² This was accompanied by a longer quotation from Yan Can's *Shiji*, which was in fact also relayed from Ouyang Xiu's *Shi benyi*.⁹⁶³ As already mentioned above, in this longer description, Yan (or Ouyang) referred to a "clumsy" bird instead, which was merely able to build a sketchy branch frame that frequently dropped the nestlings onto the ground. As a contrast, the magpie was able to build a solid nest, and abandoned it after the breeding season. In such occasions, "if there happens to come a *jiu* bird, it will occupy the empty nest" (*rongyou jiu lai, chu bi kongchao* 容有鳩來，處彼空巢). According to Doronga, despite its meaningfulness in recovering from the error in early commentaries, the description suggested that the clumsy *jiu* was a turtle dove (*banjiu* 斑鳩), which, though indeed not good at nest building, had no habit of occupying a magpie's nest.⁹⁶⁴ The insufficiency of the explanation, as pinpointed by Doronga, was due to a lack of first-hand eyewitnesses. For the conditional phrase "*rongyou*" 容有 (if there happens to...) made clear that it was a "hypothetical claim" (*xuanni zhi ci* 懸擬之辭) without direct observation.⁹⁶⁵

Then what was the bird that Doronga attributed to through natural observation? Once again, out of his unique familiarity with the Manchurian ecology, Doronga pointed to an "alternative kind of *jiu*" that was "extremely common left of the pass." With a similar size and appearance to the sparrowhawk, blueish-gray color of feather, the migrating habit of "arriving in the spring and leaving in the autumn," as

⁹⁶² Doronga 多隆阿, *Maoshi duoshi* (2-juan edition) 毛詩多識, National Library of China, no. 65263 (Wuxing: Qiushu zhai, 1925), juan 1: 21a-b.

⁹⁶³ However, it seems that Doronga had no access to the original text of *Shi benyi* and treated the quotation here as Yan Can's own observation. Again, this testified to the lack of reference books in the Liaoning area.

⁹⁶⁴ Doronga, *Maoshi duoshi* (2-juan edition), juan 1: 21b.

⁹⁶⁵ Doronga, *Maoshi duoshi* (2-juan edition), juan 1: 22b.

well as the secular name of *qingyuan* 青鳲 (lit. azure falcon), it was unmistakably referring to the Amur falcon (aka. Eastern red-footed falcon, *Falco amurensis*). According to Doronga, the bird did not build its own nest but merely “seized the magpie’s completed nest” for breeding, which, flying in flocks and combating with magpies indomitably, was “frequently observed” in the spring and summer.⁹⁶⁶ This habit of secondary nesting and its prevalence in the northeast China have indeed been confirmed by modern observations.⁹⁶⁷ Here, it is noteworthy that the Amur falcon not only makes use of the magpie nest for breeding (like the cuckoo), but really occupies it. In this sense, it fits better with the description in the *Mao Commentary* than any of the theses mentioned above. Backed up by this solid material evidence from natural observations, Doronga went on to associate the bird with the names of *mingjiu* 鳴鳩 (warbling *jiu*) and *hujiu* 鵲鳩 (falcon *jiu*) in the early texts based on its call and appearance, though such philological connections, like the ones in Jiao Xun’s entry, were merely tentative justifications for the alternative interpretation. In any sense, Doronga was crystal clear about his core competence. In a triumphant tone, he made a methodological reflection on the insufficiency of Song scholars, who were able to pin down the problem yet failed to find the proper attribution:

For the errors made by earlier scholars, later scholars were also capable of identifying them. However, without a witness of the creature [in person], they would but fail to point out the real signification. It is hence clear that the study for the elucidation of *wu* cannot be [solely] based upon secondary sayings.

先儒之誤，后儒亦見之，而未見此物，慙有以實指之而不能。可知明物之學，難以耳為憑也。⁹⁶⁸

⁹⁶⁶ Doronga, *Maoshi duoshi* (2-juan edition), juan 1: 21b, 23a. 每當春夏之季，青鳲成羣，且飛且鳴，與鵲爭鬪，不勝不已，見之熟矣。

⁹⁶⁷ In a field study conducted at the Zuoja Natural Reserve, Jilin province between 1996 and 2007, Zhou et al. monitored a total of 325 magpie nests, among which 133 were reutilized by other birds, and the Amur falcon contributed the largest number (40). In particular, within the 133 reutilized nests, 19 were newly constructed rather than abandoned ones, which thus indicated a usurpation by the secondary dweller. Among these cases, a predominant proportion of 11 were occupied by the Amur falcon. Such statistics confirms not only the prevalence of the nest-occupying Amur falcon in the Manchuria region, but also Doronga’s description about its contest with the magpies. See, Tong Zhou et al., “Patterns of Magpie Nest Utilization by a Nest Raptor Community in a Secondary Forest,” *Progress in Natural Science* 19 (2009): 1256. For a similar attribution of the *jiu* bird in the ode to the Amur falcon (*hongjiao sun* 紅腳隼), also see, Li Haixia 李海霞, *Hanyu dongyu mingming yanjiu* 漢語動物命名研究 (Chengdu: Bashu shushe, 2002), 141–42.

⁹⁶⁸ Doronga, *Maoshi duoshi* (2-juan edition), juan 1: 23a.

If the credibility of Song scholars still suffered partly from indirect sayings, Doronga placed first-person eyewitness to a paramount position in his own interpretation. This material orientation was also discernable from the way he conceptualized his own learning—a “study for the elucidation of *wu*” (*mingwu zhi xue* 明物之學). Although in the premodern context, one may not take the “*wu*” here as material object directly, the homophonic change from “*mingwu*” 名物 (name-things) to “*mingwu*” 明物 (elucidation of things) still captured a revealing move towards the material side.

Similar to the case of Jiao Xun, till here, the entry seems to suggest an overwhelming victory of the material over the philological. But this was not the end of the story. Despite the accuracy of the natural observation on its own, was it similarly successful for the interpretation of the ode? Intriguingly, Doronga attached a further note to the end of the natural attribution:

This ode mentions the falcon’s occupancy of the magpie nest, which is comparable to the marriage of a daughter from another state with the duke. At a quick glance of the general idea, [the natural description] indeed conforms with the classic’s message, and there is no need to read further into the natural traits of the falcon for far-fetched interpretations. If, say, to talk about the clumsiness of the falcon—to be clumsy is not a feminine virtue, and how about the feminine works?

此詩言鳩居鵲巢，如異國之女來嫁諸侯。略觀大意，自合經旨，不必向鳩之性情，曲為穿鑿。如曰取鳩之拙，則拙非婦德也，如婦功何？⁹⁶⁹

Despite the limitation of Confucian gender hierarchy, the point here is apparent. Just as the philological and the material sides did not guarantee a necessary convergence, here the reminder of confusion also testified to an independent organizing logic of the poetic analogy and the moral message expressed which merely came across with certain aspect or layer of the inner richness of *wu*. Following Doronga’s rhetorical questions, we may continue to ask: Given the relentless territorial contest between the falcon and the magpie, does it indicate a quarrelsome life after the marriage? Noting the final expulsion of the magpie out of its own nest, does it suggest a doomed ending for the duke’s marriage? The apparent

⁹⁶⁹ Doronga, *Maoshi duoshi* (2-juan edition), juan 1: 23a.

farfetchedness of such associations foregrounded a constraining effect of the literary-hermeneutic dimension for evidential excess of *wu*, which could only reveal its full significance through an independent “study for the elucidation of *wu*.”

But there were also cases where the literary aspect witnessed an excess over the evidential. For the current case, the best example was the other major biological clue for the *shijiu* bird, namely, its well-ordered breeding habit, or the so-called “virtue of evenness.” Since in the ode (*MS* #152) where the clue originated, the bird was mentioned directly as *shijiu* rather than the generic name *jiu* (cf. p. 400), Doronga did not align it with the newly identified Amur falcon but kept the cuckoo interpretation in the commentary tradition. Yet be it falcon or cuckoo, the outstanding observer apparently found it difficult to associate the poetic descriptions with the natural world. For the opening description about the “seven young ones” of the bird, Doronga already underlined its literary nature as a “spontaneous evocation” (*ouju yi qixing* 偶舉以起興), for which one did not have to take the number literally.⁹⁷⁰ As for the “virtue of evenness” that was further elaborated by the *Mao Commentary*—to feed the nestlings top down in the morning and bottom up in the evening—Doronga made a more serious critique based on a reasoning from natural observation that was familiar to him. The cuckoo’s feeding of its nestlings, suggested Doronga, was widely observable. It was always the case that when several young ones nestled in the same nest, which, quarrelsomely competing for food, how could the adult bird remember which one had been fed and accurately follow a fixed order? To make this possible, reasoned Doronga, there had to be seven separate nests, which, for sure, was never witnessed in nature. Out of this apparent lack of natural support, Doronga concluded that the feeding behavior was a “forced analogy” (*fuhui* 附會) derived from the *Zuo Commentary*, where the cuckoo bird was associated with the official position of the Minister of Works

⁹⁷⁰ Doronga, *Maoshi duoshi* (2-juan edition), juan 1: 83a.

(*sikong* 司空). Since the official was in charge of harnessing water and ground (*ping shuitu* 平水土), which required a professional ethic of evenness, the same virtue was attributed back to the bird.⁹⁷¹

In Chapter One, I have discussed several cases of text-derived biological descriptions in the Song dynasty, such as the gender-separated osprey and the mouth-delivered rabbit. After almost a millennium, it seems that scholars had moved back to the place they set off from, with the only exception that, thanks to the newly developed evidential techniques, now they were fully aware of the non-evidential literary mediations that were going on. With Doronga's nature-oriented analysis of the Amur falcon and his literary reading of the cuckoo bird placed side by side, we come to realize that his more accurate observation of the natural world did not solve the conditional concession in Jiao Xun's entry, but merely transferred the epistemic uncertainty from one place to another. For Jiao, natural confirmation and literary mediation were superimposed in a conditional structure, while Doronga split the inconsistency into two entries with a divergent emphasis on the analytical logics on either side. In this sense, it was precisely due to Doronga's intensified natural analysis on the one end that he had to loosen the epistemic control at the other. The excess of natural observation in the first entry and its subordination to literary mediation in the second were in fact two sides of the same coin.

That said, be it for Jiao Xun's superimposition or Doronga's split, both cases indicated a bifurcating logic between the evidential signification of natural traits and the literary mediation of poetic message, which became particularly salient when the epistemic inquiry faced obstructions that were not easily reconcilable. As already suggested from Jiao Xun's entry, for the case of the *shijiu* bird, the literary explanation had long served as a way out of the epistemic quagmire. Apart from the abovementioned claims by Lü Zuqian and Li Chun, one could find several more before the mid-Qing era. As a leading scholar of *Shi* who was contemporary to Lü, Wang Zhi 王質 (1135-1189) also denied the habit of nest occupancy and took it as a confusion between a causal phenomenon and a biological norm. According to

⁹⁷¹ Doronga, *Maoshi duoshi* (2-juan edition), juan 1: 83b–84a. 總由誤泥春秋傳鳴鳩為司空，司空平水土，其德均一之意而附會之。

him, there might be a random occasion when a cuckoo entered an empty magpie nest, which was come across by the poet, while later scholars, in their far-fetched interpretations, unwarrantedly regarded it as a norm.⁹⁷² If, for Wang nest occupancy was still believed to be based upon real observation despite its contingency, the eminent mid-Ming scholar Yang Shen took it as an “evocative analogy” (*xingkuang zhi yan* 興況之言) directly, which, like “the crow seized the phoenix nest,” was but a fictive description. In the early Qing, a similar decline for further evidential inquiry was also suggested by Yao Bing. After confirming the literary function of the two birds as an analogy for people from different clans, and the nest occupancy for the new wife’s moving on marriage into the husband’s house, he remarked that the “the message of the ode was just this” (*shiyi zhi ci* 詩義止此) and there was no need for the various complex theses.⁹⁷³

As demonstrated from the cases of Jiao Xun and Doronga, although mid-Qing scholars had greatly benefited from the newly developed evidential techniques, those sharpened tools did not guarantee any substantial reconciliation for intrinsic inconsistencies. Instead, by pushing the analytical possibilities to the extreme of the day, they contributed to a clearer demarcation of the limits of evidential inquiry, which in the meantime constituted the boundary for non-evidential poetic readings. Just as the irreconcilables in advanced philological bifurcations led to a critical reflection upon the epistemic premises behind them, the advanced bifurcations of *wu* here also foregrounded the literary mediation of poetic messages. For the history of *Shijing* studies, this speaks to two important trends in the 19th century.

The first was the search for “esoteric words containing great principles” (*weiyan dayi* 微言大義) in the New Text study of *Shi*, which, bearing little interest in the evidential aspect of the *mingwu* images,

⁹⁷² Wang Zhi 王質, “Shi zongwen,” 詩總聞 in *Yingyin Wenyuange siku quanshu*, 72: 446. 當是詩人偶見鵲有空巢，而鳩來居，後人附會，必欲以為常。

⁹⁷³ 詩義止此，諸說紛紜，儘可不必。By the end of Chapter Four, we have mentioned Shen Langkun’s *Tianjian shixue buzhu* as representative for a new round of erudite reference in the late Qing. For the current discussion on *jiu*-bird in the ode “Magpie Nest,” Shen not only listed Jiao Xun’s myna thesis and Chen Qiyuan’s cuckoo thesis, but also all the above three literary explanations by Wang Zhi, Yang Shen, and Yao Bing. With no attempt for a final judgment, this case offered an excellent example for Shen’s erudite juxtaposition of competing theses. See, Shen Langkun, *Tianjian shixue buzhu*, “Shaonan”: 1a–2a.

would rush through these obstacles and focus on close readings of poetic messages directly. Following the New Text school of the Changzhou scholars, Wei Yuan's 魏源 (1794-1857) *Shi guwei* 詩古微 (Ancient subtleties of *Shi*) was the representative work in this line.⁹⁷⁴ As noted by Li Ciming 李慈銘 (1830-1894) after reading Wei's anthology, the evidential learning of the classics had reached the extreme (*wuyi fujia* 無以復加) of fineness by the Daoguang era (1820-1850). Some talented scholars, "distressed by its complexity and voluminosity" (*ku qi fanfu* 苦其繁富), knew that they could not surpass their predecessors and turned to "deep implications" instead.⁹⁷⁵ This general dynamic between the epistemic limit of evidential studies and the rise of New Text classicism worked well with the foregrounding of poetic message in the study of *Shi*.

The second trend concerns the literary reading of *Shi*. At the beginning of Chapter Two, we have briefly mentioned the prevalence of literary readings as a major feature for the study of *Shi* in the Ming dynasty. As shown in *Table 19*, late Qing witnessed another wave of this literary trend, when works such as Chen Jin's 陳澧 (1787-1868) *Shi song* 詩誦 (Recitation of *Shi*), Chen Jikui's 陳繼揆 (fl. mid-19th c.) *Du feng yibu* 讀風臆補 (Supplementary to the *Conjectural Commentary in Reading the Airs*), and most notably Fang Yurun's 方玉潤 (1811-1883) *Shijing yuanshi* 詩經原始 (Explorations on the origin of *Shijing*) began to re-emphasize the aesthetic dimension following their late-Ming predecessors. These literary readings, as suggested by Lu Chen-yu in a recent article, are essential for comprehending the upcoming literary turn of *Shijing* studies in the Republican era.⁹⁷⁶ Although a serious explanation of these literary-hermeneutic moves calls for more comprehensive analyses, this foregrounded mediality in the

⁹⁷⁴ See, Elman, *Classicism, Politics, and Kinship*, ch. 5; Fang Ruili, *Qingdai sanjia Shi wenxian yanjiu*, 234–37; Cao Zhimin 曹志敏, *Xueshu tanqiu yu chunqiu dayi: Wei Yuan Shi guwei yanjiu* 學術探求與春秋大義：魏源《詩古微》研究 (Beijing: Shehui kexue wenxian chubanshe, 2011), 60–85.

⁹⁷⁵ Li Ciming 李慈銘, *Yueman tang dushu ji* 越縕堂讀書記 (Beijing: Zhonghua shuju, 2006), 869. 自道光以來，經學之書充棟，諸儒考訂之密，無以復加。於是一二心思才智之士，苦其繁富，窮年莫殫，又自知必不能過之，乃初為西漢之說，謂微言大義，汨於東京以後。

⁹⁷⁶ Lu Chen-yu 呂珍玉, "Deng Xiang *Shijing yican* shuping," 鄧翔《詩經繹參》述評 in *Dijiu jie Zhongguo jingxue guoji xueshu yantaohui lunwen xuanji* 第九屆中國經學國際學術研討會論文選集, ed. Tung Chin-yu, 董金裕 (Taipei: Wanjuanlou tushu, 2020), 292.

bifurcation of *wu*, similar to the mutual deconstruction in the philological bifurcation of Chapter Four, mapped out a noteworthy intrinsic dynamic.

*Table 19: Temporal Distribution of Literary Commentaries on Shi*⁹⁷⁷

Dynasty	Time Range	No. of Titles
Ming		10
Qing	Before 1750	3
	1750-1800	3
	1800-1850	3
	After 1850	7
In Total		26

But more thought-provoking was the impetus of field specialization implied in these hermeneutic bifurcations. On the one hand, evidential inquiry could only actualize its full potential by separating itself from literary-hermeneutic convolutions (e.g., the “clumsiness” of the Amur falcon). On the other hand, the literary-hermeneutic aspects also frequently foregrounded their own organizing logic that went well beyond the accommodability of the evidential realm (e.g., the “evenness” of the *shijiu* bird). A similar dynamic was also discernable within the evidential realm between the philological and the material aspects, where the frequent charge of far-fetched philological reasoning (e.g., Tao Jun’s overmining of the *xi* 犧 character for the sacrificial vase) and the lack of relevance of the material evidence (e.g., the inclusion of controversial artifacts in the *Four Mirrors* of Qianlong) offered vivid footnotes. From the above examples, we have already caught a glimpse of this diverging logic, though the disparity could reach a far greater extent in more extreme cases. In the remaining space of this section, I will use two brief examples to highlight this methodological difference.

⁹⁷⁷ Based on Zhang Honghai 張洪海, *Shijing pingdian shi* 《詩經》評點史 (Shanghai: Shanghai shehui kexueyuan chubanshe, 2018), 23–25.

The first example comes from Chen Jikui's *Du feng yibu*. As a supplement to Dai Jun'en's 戴君恩 (1570-1637) *Du feng yiping* 讀風臆評 (Conjectural commentaries in reading the airs), a representative work of late-Ming literary commentaries, Chen openly aligned his work with this earlier aesthetic tradition. The ode under discussion here is the "Small Carriage" (Xiaorong 小戎, MS #128). As a snapshot for the riding in a war chariot, the ode boasts a high density of *mingwu* terms that created formidable challenges to any interpreters before the excavation of bronze chariots from the tomb of the First Emperor.⁹⁷⁸ The following lines from the first stanza are among the most perplexing:

遊環臂驅

There are slip-rings and side-bars,

陰剗塗續

There are covered traces and silvered linkage.⁹⁷⁹

Recalling the endless discussions on the position of *gui* 軌 in Chapter Four, this was the métier of mid-Qing philologists, under whose hands the position of the "slip-ring" and the functioning of the chariot's tracking system received extensive analyses.⁹⁸⁰ Nevertheless, in Chen Jikui's *Du feng yibu*, this inevitable challenge for every philological scholar was completely suspended in his literary reading. Praised as "marvelously abstruse and almost unreadable" (*jianse shenqi, dai buke du* 艱澀深奇, 殆不可讀), he compared the lines to the penta-syllabic poems of Han Yu 韓愈 (768-824) and Liu Zongyuan 柳宗元 (773-819), who were renowned for their intricate and archaistic style.⁹⁸¹ Instead of delving into the epistemic details, Chen stopped at the immediate surface of the *mingwu* terms for their literary effect. Under this poetic eye of deliberate agnosticism, the evidential challenge was transformed into an alluring puzzle for aesthetic appreciation.

⁹⁷⁸ For a systematic analysis of the chariot-related *mingwu* terms in this ode, see, Yang Zhishui, *Shijing mingwu xinzheng*, 223–45.

⁹⁷⁹ Zheng Xuan, *Maoshi zhuan jian*, 162.

⁹⁸⁰ For a good example of such *mingwu* reasonings, see, Hu Chenggong, *Maoshi houjian*, 565–67. That said, Sun Ji has shown how the pre-modern scholars had systematically confused the names and positions of these tracking components due to a lack of direct material evidence. See, Sun Ji, *Zai chi zai qu: Zhongguo gudai chema wenhua*, 12–13.

⁹⁸¹ Chen Jikui 陳繼揆, *Du feng yibu* 讀風臆補, draft manuscript, Shanghai Library, no. 141418-19 (prefaced 1853), juan 2: "Qin" 3a.

Just as the supplementary nature of Chen's work, this aesthetic language was nothing new compared to the late-Ming forerunners. Nevertheless, the revival of such literary readings indicated a special significance under the background of a well-developed philological enterprise that had stretched its influence to almost every epistemic field of the day. If the above example suggested a bold translation of the evidential into the literary, the following marked a reversal foray from the literary to the evidential. This is not a case from *Shi*, but from Tang poetry that had an undisputable literary nature. The text was a famous poem from Li Bai 李白 (701-762), when he, in honor of the imperial consort Yang Yuhuan 楊玉環 (719-756) and the peonies in the palace garden, composed a set poem that began as follows:

雲想衣裳花想容	Clouds call to mind her robes, the flowers recall her face.
春風拂檻露華濃	Spring breezes brush the railing, dew full on the blossoms. ⁹⁸²

Despite the text of the poem being well established, our old friend Wang Niansun identified a case of character variation from Cai Xiang's 蔡襄 (1012-1067) quotation of the lines, where the first character appeared as *ye* 葉 (leaves) rather than *yun* 雲 (clouds). For previous scholars, this was normally regarded as a typo by Cai, yet Wang Niansun took it seriously with his full philological rigor. According to him, since the set poem worked as an appreciation for both the consort and the flower (which was suggested more clearly in the second poem), this was why the parallels were drawn between the "leaves" and the "robes," as well as the "flowers" and the "face." If the character was *yun* (clouds) instead, "the meanings would no longer match perfectly" (*ze yi bumi* 則義不密). Therefore, one should use Cai's work to "rectify the error of recent prints" (*zheng jinke zhi miu* 正近刻之謬).⁹⁸³ Here, the method of textual collation and syntactic pattern were typical for this accomplished philologist. The terminology used in the

⁹⁸² The translation follows Stephen Owen, *The Great Age of Chinese Poetry: The High T'ang* (New Haven and London: Yale University Press, 1981), 116.

⁹⁸³ Although this case was retold by Wang Niansun's younger son Wang Jingzhi 王敬之 (1778-1856) and thus might be less formal than the entries for academic publications, the idiosyncratic focus and meticulous reasoning still offer a vivid portrait of a typical philological mind. Wang Niansun and Wang Yinzhi, *Gaoyou erwang heji*, 3: 1462.

reasoning also reminds us of his project of “error rectification” for the classic texts, which was as typical as the remark about “marvelously abstruse” for literary commentary. That said, was the “perfect match” an important concern for poetic composition? Not to mention that the leaf analogy obviously lacked the gentle, and somewhat mysterious lure of the cloud as a possibly gauze-like robe. In both cases of Wang Niansun and Chen Jikui, the surprising, if not bold take of the commentators highlighted a *de facto* specialization in hermeneutic dimensions, each with its own epistemic premises, analytical techniques, and style of reasoning, which became increasingly striking thanks to the epistemic developments in the mid-Qing era.

In a late-18th century draft manuscript *Maoshi niaoshou caomu benzhi* 毛詩鳥獸草木本旨 (Original messages of the birds, beasts, grasses, and trees in *Maoshi*) at the Nanjing Library, Lu Yicheng 陸以誠 (*bagong* 1777) developed a thoughtful, three-fold structure for his work, where each *mingwu* entry was divided into three subsections: “Explanation of Sound” (*shiyin* 釋音), which dealt with the phonetic aspect of the *mingwu* name; “Identification of *wu*” (*bianwu* 辨物), which focused on the material features of the *mingwu* object; and “Original Message” (*benzhi* 本旨), which concerned the literary-hermeneutic messages of the word within the specific ode. Although the manuscript itself still worked within the scope of bookish erudite learning, which incorporated little of the newly developed evidential techniques in the former two subsections, the threefold division was indeed a fitting epitome for what was going on in the broader field of *mingwu* studies from the Qianlong era onwards. After a long intellectual journey through the past four chapters, we should now be acquainted with the key message in the phenomena of bifurcation, namely, a centrifugal dynamic of epistemological plurality accompanying the refined epistemic textures of specific *wu*. The competing stances, priorities, and hermeneutic dimensions, like the clustering petals of a bud, collectively constituted a holistic complexity of *wu*.

It is from this vantage point that we come to realize the epistemic significance of Lu Xun's essay on the *guoluo* wasp at the very beginning of this dissertation. In the bifurcating cases discussed above, most of the Qing scholars would still make their epistemic choice at the diverging point, either through a direct prioritization or a conceding arrangement. And when these competing theses are placed side by side—as Shen Langkun had already done in the late Qing—one can sense a clear inconsistency among them. As a contrast, the discussion of the *guoluo* wasp in Lu Xun's essay offers a disparate impression. In the essay, the same phenomena of the wasp's breeding were described and explained *twice*. In the first round, the narrator followed the bewitching thesis that was typical for the commentary tradition, while the second round adopted the parasite thesis of the eminent French entomologist Jean-Henri Fabre, which could hardly be more biologically oriented. From the perspective of Qing *mingwu* studies, this would be a typical case of immediate self-bifurcation between the textual and the material. Nevertheless, we do not sense a similar incompatibility from Lu Xun's essay at all. The secret is that the two rounds of explanations are unfolded from now-independent epistemic realms. The first explanation, presented as a “pretty story” of the “old folk,” followed the language and style of the folklore. The second explanation, in contrast, aligned explicitly with Western entomology in the scientific discourse of “motory nerve” and parasitism. With the same phenomena presented twice, the two explanations no longer referred to the same *ming-wu* compound as for the Qing scholars. Instead, each pointed to a different target of inquiry—the wasp *as* a motif in the folklore, and the wasp *as* a species in modern biology, each with its own epistemic significance, logic of reasoning, and language of presentation. Readers would neither confuse the scientific truth with the folk lore, nor refuse a folk tale because of its scientific inaccuracy. The apparent disparity of the two descriptions thus found no incompatibility, as they had been separated into different epistemic realms.

The common name for such separated realms is “discipline,” which, for the Republican era scholars, mostly referred to the modern disciplinary divisions introduced from Japan and the West in recent decades. For *Shijing*-related studies, if Lu Xun's above demarcation between folklore and natural

science was still embedded with a literary touch from the fiction genre, other leading scholars of the day such as Fu Ssu-nien 傅斯年 (1896-1950) and Hu Shih 胡適 (1891-1962) made more explicit methodological claims. For Fu, a modern scholar may bear “three attitudes” in the study of *Shijing*: to appreciate it as literature (*wenci* 文辭), to treat it as a valuable historical source (*lishi cailiao* 歷史材料), and to take it as a sourcebook for ancient linguistics (*yanyu xue* 言語學).⁹⁸⁴ For Hu, the study of *Shijing* was first divided into philological research of its text and thematic study of its meaning, in which the latter was further approached from sociological (*shehuixue de* 社會學的), historical (*lishi de* 歷史的), and literary (*wenxue de* 文學的) perspectives.⁹⁸⁵ And this ever more refined division could be further enriched by the fruitful folkloric and cultural-anthropological studies of Gu Jiegang 顧頡剛 (1893-1980) and Wen Yiduo 聞一多 (1898-1946).

At the same time, this disciplinary view also casts a fresh light upon the categorization of the pre-modern works on *Shi*. When the Shanghai Commercial Press launched the massive project of *Congshu jicheng chubian* 叢書集成初編 (Complete collection of books from various collectanea, series one) to reprint four thousand pre-modern works in 1935, the *Shijing*-related works no longer came at the beginning Classic Division as in *Siku quanshu*. Instead, the collection was ordered according to a modernized library classification system, where comprehensive commentaries such as Lü Zuqian’s *Dushi ji* appeared in the subdivision of “Complete Anthologies of Poetry” under the “Category of Literature” (*wenxue lei* 文學類), specialized *mingwu* studies, such as Chen Dazhang’s *Shizhuan mingwu jilan*, showed up in the subdivision of “Biology” under the “Category of Natural Science” (*ziran kexue lei* 自然科學類), while commentaries on the *Erya* series, such as Wang Niansun’s *Guangya shuzheng*, showed up in the subdivision of “Historical Semantics” under the “Category of Philology” (*yuwen xue lei* 語文學).

⁹⁸⁴ Fu Ssu-nien 傅斯年, *Shijing jiangyi gao* 詩經講義稿 (Beijing: Zhongguo renmin daxue chubanshe, 2004), 11.

⁹⁸⁵ See, “Tantan shijing” 談談詩經 in Hu Shih, *Hu Shi quanji*, 4: 606.

類).⁹⁸⁶ In modern disciplinary divisions, these epistemic fields could be as far apart as possible. Yet we have demonstrated in the past chapters that such works could speak directly to each other, if not working directly on the same *mingwu* problem. This sharp contrast highlighted how much had changed in the epistemic inquiry of *wu*.

Admittedly, from the classification of Kongzi's students into four specializations (*sike* 四科), to the bibliographical system of the "Four Divisions" (*siku* 四庫), and the Jesuit introduction of early modern disciplines in the West and the enlarging scope of the "classics" in the Qing dynasty, Chinese scholars had always kept an eye on the specialized classification of the ever-expanding knowledge fields.⁹⁸⁷ That said, these classifications were mainly based on the object of inquiry, which touched little upon the methodological issues behind them. The one that indeed bore a serious methodological reflection, which, noted by Luo Zhitian as the closest to modern disciplinary divisions, was the three-fold division of "meanings and principles" (*yili* 義理), "evidential learning" (*kaoju* 考據), and "literary studies" (*cizhang* 辭章) in the mid-Qing era (with the addition of a fourth field of "statecraft" in the late Qing), each with its own style of reasoning and language of presentation.⁹⁸⁸ Yet just as literary interpretation could only offer a fallback choice but not settle philological-material inconsistencies, this threefold division was too general to make any substantial resolution to the bifurcating dynamics within the field of "evidential learning." It was not until the advent of modern disciplinary divisions that the divergent aspects of the *mingwu* object began to find their own places in philology, biology, archaeology, anthropology, folklore studies, and so on. For sure, disciplinary division was not a panacea. The

⁹⁸⁶ See, Zhonghua shuju bianjibu 中華書局編輯部, *Congshu jicheng chubian zongmu suoyin* 叢書集成初編總目索引 (Beijing: Zhonghua shuju, 2012), 151-152, 167-168, 202-205.

⁹⁸⁷ See, Zhang Qing 章清, *Huitong zhongxi: Jindai zhongguo zhishi zhuanxing de jidiao jiqi bianzou* 會通中西：近代中國知識轉型的基調及其變奏 (Beijing: Shehui kexue wenxian chubanshe, 2019), 51-57, 71-82; Luo Zhitian 羅志田, "Xixue chongji xia jindai Zhongguo xueshu fenke de yanbian," 西學衝擊下近代中國學術分科的演變 *Shehui kexue yanjiu* 社會科學研究, no. 1 (2003): 108-9; Chang So-an 張壽安, "Cong 'liujing' dao 'ershiyi jing': 19 shiji jingxue de zhishi kuozhang yu dianfan zhuanji: 從"六經"到"二十一經": 十九世紀經學的知識擴張與典範轉移," in *Wanqing minchu de zhishi zhuanxing yu zhishi chuanbo* 晚清民初的知識轉型與知識傳播, ed. Chang So-an, 張壽安 (Beijing: Beijing shifan daxue chubanshe, 2018), 28-31.

⁹⁸⁸ Luo Zhitian, "Xixue chongji xia jindai Zhongguo xueshu fenke de yanbian," 109.

contemporary methodological critique discussed in the case of the *xi*-vase makes clear that there is no easy solution once and for all. That said, the new disciplinary schemes in the Republican era created an efficacious space for methodological reflections and greatly enlarged the accommodability of competing epistemic stances. This inclusive specialization offered a substantial breakthrough for the dilemma of epistemic bifurcations in the mid-Qing evidential study of *wu*.

In 1918, the young Fu Ssu-nien listed seven major problems in the Chinese academic fields of the day, in which the foremost concerned the lack of disciplinary specializations. According to him, Chinese learning tended to take a certain “scholar” (*ren* 人) rather than “field of learning” (*xue* 學) as the basic unit, and thus unfolded primarily around “academic schools” rather than “disciplines.” In contrast, modern learning in the West “solely took disciplinary fields as the basic unit” (*quan yi kexue wei danwei* 全以科學為單位). With “strict and clear demarcation of fields,” this was why Western learning could reach the deep and specific.⁹⁸⁹ Although addressing a different context, it is not off the mark to change the basic unit of “scholar” into *wu*, and “academic schools” into “*mingwu* categories” to make a critical reflection on pre-modern *mingwu* studies. In the history of modern Chinese scholarship, the shifting translation of “science” from *gezhi xue* 格致學 to *kexue* 科學 in the beginning years of the 20th century has been regarded as a symbolic moment for the replacement of traditional learning by modern disciplines.⁹⁹⁰ Note that in the former translation, the term *gezhi* 格致 abbreviated the Confucian epistemological motto of *gewu zhizhi* 格物致知, “the investigation of *wu* and extension of knowledge,” where *wu* were located at the center of inquiry; the later translation *kexue* 科學, as we have already seen from Fu Ssu-nien’s usage, took the specialization of academic fields as organizing principle. The change of translation thus epitomized precisely a shifting emphasis from the holistic complexity of *wu* to its

⁹⁸⁹ See, “Zhongguo xueshu sixiang jie zhi jiben wumiu” 中國學術思想界之基本誤謬, in Fu Ssu-nien 傅斯年, *Fu Sinian quanji* 傅斯年全集 (Changsha: Hunan jiaoyu chubanshe, 2000), 7: 22.

⁹⁹⁰ See, Sang Bing 桑兵 and Guan Xiaohong 關曉紅, eds., *Jieshi yici ji zuo yibu wenhuashi* 解釋一詞即作一部文化史 (Shanghai: Shanghai renmin chubanshe, 2021), 71–74.

multiple manifestations in modern disciplines. The epistemic bud had now blossomed, each petal stretching toward a different direction.

Conclusions

I am not concerned, therefore, to describe the progress of knowledge towards an objectivity in which today's science can finally be recognized; what I am attempting to bring to light is the epistemological field, the *episteme* in which knowledge, envisaged apart from all criteria having reference to its rational value or to its objective forms, grounds its positivity and thereby manifests a history which is not that of its growing perfection, but rather that of its conditions of possibility; in this account, what should appear are those configurations within the space of knowledge which have given rise to the diverse forms of empirical science.

—Michel Foucault, *The Order of Things*⁹⁹¹

In his influential work *The Order of Things*, Foucault mapped out three general modes of “episteme” in the past centuries in the “Western” world across the knowledge of language, nature, and wealth—resemblance in the Renaissance age, representation in the Classical age, and history in the modern era.⁹⁹² In this dissertation, I have also elaborated on several basic patterns in the inquiry into *wu* across the second millennium of Chinese history, including the *ming-wu* dialectics in the middle period, the surface references in the late Ming, the revealing of refined textures in the mid Qing, as well as the discipline-based studies in the modern era. In the Chinese context, do these diachronic patterns, like the Foucauldian “episteme,” also indicate broader epistemological significance beyond the immediate field of *Shi* in particular or classical learning in general?

For the far-reaching epistemological transition across early modern China, scholars have been more familiar with the disparate modes at its two ends, with a cosmological premodern world on the one side, and an atomic modern world on the other. For Yu-yu Cheng, this was the stark contrast between the *correlative* association of categories in traditional Chinese poetics and strict classifications and orderings in the modern era; for Wang Hui, this was the intellectual shift from the cosmic “coherence” (*tianli* 天理) in Neo-Confucian learning to the common “principles” (*gongli* 公理) in the modern scientific

⁹⁹¹ Michel Foucault, *The Order of Things: An Archaeology of the Human Sciences* (New York: Vintage Books, 1994), xxii.

⁹⁹² Foucault, *The Order of Things*.

discourse.⁹⁹³ That said, the possible modes in the middle, and in particular the epistemological features of evidential learning, were still largely understudied. It is at this point that my case study on *mingwu* analyses of *Shi* speaks to the broader epistemological realm.

As keenly observed by John Henderson, in the early and middle periods, cosmological thinking remained the basic organizing mode for the Chinese knowledge world. Although from the Song onwards, correlative schemata such as five phases, eight trigrams, and human-heaven correspondences were largely replaced by the Neo-Confucian ordering of “coherence” (*li*), both worked under a cosmological pattern of interconnected *wu*. In recent works, this is well demonstrated by Ya Zuo on the prevailing trend of “system building” in Song epistemology that involved both modes, as well as by Nathan Vedal on the lasting intellectual significance of cosmological thinking in Ming linguistic studies.⁹⁹⁴ As demonstrated in Chapter One, the *ming-wu* dialectics in the middle period not only incorporated knowledge from a wide span of epistemic fields but also guaranteed such associations through an overarching correlative framework. In this sense, the transmitted *mingwu* knowledge and its entanglements in the middle period precisely worked as local manifestations for the cosmological worldview of the time.

Just as the accumulation of *mingwu* knowledge would not necessarily end up with hermeneutic consistency but may have brought about a referential surface of contending theses, the actual Neo-Confucian query of *li* did not guarantee any universal coherence in human understanding. Chang Woei Ong shows how mid-Ming scholars such as Wang Tingxiang 王廷相 (1474-1544) and Li Mengyang 李夢陽 (1473-1530) had already deviated from this universal coherence for a pluralistic view.⁹⁹⁵ With the epistemic focus shifted from the external world to innate knowing following the rise of the Wang Yangming school, this pluralistic move became even more salient in the late Ming. At the core of the

⁹⁹³ See, Cheng Yu-yu, *Yin pi lian lei*, 262–66; Cheng Yu-yu, *Zi yu yan*, 64–74; Wang Hui, *Xiandai zhongguo sixiang de xingqi*, 1: 47–53.

⁹⁹⁴ Zuo, *Shen Gua's Empiricism*, 147–50; Vedal, *The Culture of Language in Ming China*, ch. 1.

⁹⁹⁵ See, Chang Woei Ong, “The Principles Are Many: Wang Tingxiang and Intellectual Transition in Mid-Ming China,” *Harvard Journal of Asiatic Studies* 66, no. 2 (2006): 461–94; Chang Woei Ong, *Li Mengyang, the North-South Divide, and Literati Learning in Ming China* (Cambridge: Harvard University Asia Center, 2016), ch. 3.

move was what Willard Peterson named a “epistemological mire” of intuitive learning: “If the innate knowing of honest men is not concordant, then whose learning is certain, or even to be accepted by others?”⁹⁹⁶ Since the late 16th century, scholars increasingly came to accept the idea of intellectual plurality. When Li Zhi 李贄 (1527-1602) and Lü Kun 呂坤 (1536-1618) suggested the idea of oneness, they were basically concerned with how to accommodate diversity rather than achieve unity.⁹⁹⁷ This pluralistic intellectual view, as shown in Chapter Two, also echoed with the heteroglossic attributes in the artworks, vernacular novels, and print culture of the day. Both worked in congruity with the information overflow and contending theses in the erudite learning of *wu*.

And there comes the mid-Qing era, when evidential inquiry is characterized by Ya Zuo as an individuation of *wu*, and Yang Rur-bin as a separation of *wu* from its metaphysical aspect.⁹⁹⁸ Both insights are compatible with the general decline of cosmological thinking described by John Henderson, and can be accounted for by our observations on the emerging inwardness of *wu* with localized textures.⁹⁹⁹ But what are these “textures” on earth? Is it merely an expedient analytical tool for this dissertation? Certainly not. Yu-yu Cheng points out that in the 1930s, literary scholars had already used the English word “texture” to correspond to the Chinese idea *jili* 肌理 (the *li* of skin folds) in denoting the sensory weightiness or the “internal structure” in the language of the new poetry. And Qian Zhongshu 錢鐘書 (1910-1998) further traced this comparability back to the mid-Qing scholar Weng Fanggang, who famously centered his poetic criticism around the idea of *jili*.¹⁰⁰⁰ However, as an apt translation, the word “texture” denoted much more for the mid-Qing intellectual sphere.

⁹⁹⁶ Willard J. Peterson, “Arguments over Learning Based on Intuitive Knowing in Early Ch’ing,” in *Cambridge History of China: The Ch’ing Dynasty to 1800, Volume 9, Part 2*, ed. Willard J. Peterson (Cambridge: Cambridge University Press, 2016), 512.

⁹⁹⁷ Ong, “The Principles Are Many,” 493; Mizoguchi Yūzō, *Chūgoku zen kindai shisō no kussetsu to tenkai* 中國前近代思想の屈折と展開 (Tokyo: Tokyo Daigaku Shuppankai, 1980), 18–24.

⁹⁹⁸ See, Zuo, *Shen Gua's Empiricism*, 235, 77; Yang Rur-Bin 楊儒賓, “Yuan wuli xue,” 原物理學 *Dongya guannianshi jikan* 東亞觀念史集刊, no. 7 (2014): 287–89.

⁹⁹⁹ For the decline of cosmological thinking in the 17th-18th centuries, see, Henderson, *The Development and Decline of Chinese Cosmology*, chs. 6-7.

¹⁰⁰⁰ Cheng Yu-yu, *Zi yu yan*, 288–90.

In the history of Chinese philosophy, Dai Zhen was renowned for his reinterpretation of *li*, which appeared at the very beginning of his representative philosophical work, *Mengzi ziyi shuzheng* 孟子字義疏證 (An Evidential Commentary on the Meanings of Terms in *Mengzi*):

Li is a term that makes reference to the close examination [of things] for the subtle and minute characteristics that should be distinguished in order to separate [things]. This is why it is called “the *li* for separating things.” When applied to concrete materials, it appears in the expressions “the *li* of the folds in the skin,” “the *li* of capillary pores,” and “the *li* of decorations.” When things are successfully separated so that the individual strands are not intertwined, this is called the “well-ordered *li*.”

理者，察之而幾微必區以別之名也，是故謂之分理。在物之質，曰肌理，曰腠理，曰文理。得其分則有條而不紊，謂之條理。¹⁰⁰¹

Instead of searching for cosmological coherence, here the new definition of *li* is stripped of any metaphysical implications and brought back to the minute distinctiveness of specific *wu*. Although such refined distinctions are still associated into well-ordered “strands,” they no longer fit into a cosmological framework but are localized patterns differentiated from one another.¹⁰⁰² This far-reaching claim can be read together with the following claim by Qian Daxin, who used the same metaphor of non-intertwined strands to reinterpret the notion of “*jing*” 經 (Confucian classics) under the context of silk weaving:

I suppose the meaning of *jing* (classics) comes from silk weaving. A textile maker gathers the many threads and accumulate them, such that the individual strands of *li* are not intertwined, this is called *jing*.

予唯經之義取乎治絲。製布帛者，聚眾絲而積之，使其有條理不紊亂，是之謂經。¹⁰⁰³

Just as Confucian classics, as the great carrier of knowledge, were reinterpreted by their well-ordered strands, the shifted focus from unitary coherence to localized distinctions had a general

¹⁰⁰¹ Dai Zhen, “Mengzi ziyi shuzheng,” 149. With minor adaptations, the translation follows Tiwald and Van Norden, *Readings in Later Chinese Philosophy*, 319–20.

¹⁰⁰² For a similar contrast between the Neo-Confucian cosmological integration of *li* and Dai Zhen’s localized differentiation of *li*, also see, Wen Yu, “The Search for a Chinese Way in the Modern World: From the Rise of Evidential Learning to the Birth of Chinese Cultural Identity (1600-1905)” (PhD Dissertation, Harvard University, 2018), 348–50.

¹⁰⁰³ Qian Daxin, *Jiading Qian Daxin quanji*, 9: 329.

epistemological significance in redefining the relationship between *li* and *wu*. As Dai Zhen continued to elaborate:

Song scholars... did not solely talk about “the *li* of [a specific] thing or affair,” but a “[single] *li* that is distributed to [all] things and affairs.” To seek for the *li* of [a specific] thing or affair, one has to dissect and analyze the thing or affair into minutest detail and only then acquire its *li*. But if it is a [single] *li* that distributed to [all] things and affairs, one may simply seek for *li* from one’s profound mind, saying, “the source is One, yet its manifestations are myriad.”

宋儒...不徒曰“事物之理”，而曰“理散在事物”。事物之理，必就事物剖析至微而後理得；理散在事物，於是冥心求理，謂“一本萬殊”。¹⁰⁰⁴

With the cosmological connections denied, for Dai Zhen, *li* is brought back to the specific *wu*. And due to this, one has to “dissect and analyze” (*pouxi* 剖析) the epistemic target in its minutest details. On the one hand, the emphasis on minute details and differentiations highlights the refined and localized nature of *li*; on the other hand, its relocation to specific *wu* and the arduous process of dissection bespeak an inner richness. Put together, is not Dai Zhen’s reinterpretation of *li* a perfect match for the “textures” that we have discussed in Chapters Three and Five? The allusion to silk weaving makes this English word an even more apt translation, which is precisely derived from the Latin verb *texere*—to weave. In most works on mid-Qing intellectual history, Dai Zhen has long been depicted as an idiosyncratic figure due to his uncommon zeal for philosophical reasoning.¹⁰⁰⁵ Nevertheless, despite indifferent responses from his contemporaries, Dai’s philosophical reconstruction offered the *de facto* epistemological framework for the entire evidential movement—a collective inquiry for the well-ordered *li*-as-textures from the inner richness of specific *wu*.

Meanwhile, as demonstrated in Chapters Four and Six, due to the holistic nature of a specified *wu*, it was subject to a variety of epistemic approaches that frequently led to the trivialization of bifurcating results. This methodological limit then waited for the advent of modern disciplinary divisions to accommodate, through which the holistic complexity of *wu* were transformed into multiple

¹⁰⁰⁴ Dai Zhen, “Mengzi ziyi shuzheng,” 6: 210.

¹⁰⁰⁵ Yü Ying-shih, *Lun Dai Zhen yu Zhang Xuecheng*, 107–15.

manifestations each bearing its own disciplinary-based principles. In this way, we finally arrive at the modern worldview of common “principles” (*gongli* 公理) described by Wang Hui, which witnessed an ever-expanding specialization of fields and division of labor in the genealogy of scientific knowledge.¹⁰⁰⁶ From this vantage point, the basic patterns of *mingwu* studies discussed in this dissertation offer revealing snapshots of the *longue-durée* epistemological transformations in the second millennium in China. And in particular, the well-ordered *textures* (*tiaoli*) of the mid-Qing era, adding a crucial chain between heavenly *coherence* (*tianli*) and scientific *principles* (*gongli*), is essential for a better understanding of the far-reaching intellectual shifts between the decline of Chinese cosmology and the advent of modern science in early modern China.

¹⁰⁰⁶ Wang Hui, *Xiandai zhongguo sixiang de xingqi*, 4: 1395-1403.

Appendices

Appendix 1: Stability Test: Principal Component Analysis with Six Sources Excluded

As suggested in Footnote 175, in order to test the stability of the PCA result on the *mingwu* monographs, another round analysis is conducted with six frequently-quoted sources excluded, including *Erya*, Guo Pu's *Erya* commentary, and Lu Ji's commentary for the *mingwu* tradition, as well as the Mao commentary, Zheng Xuan's commentary and Kong Yingda's *Rectified Meanings* for the commentarial tradition of *Shi*. As presumably the most bibliographically-related sources to the *mingwu* study of *Shi*, this removal aims at examining the stability of the result by focusing on the “external” sources alone. The first two principal components continue to explain a good majority of the total variations (72.5%, 11.4%), and both eigenvalues are larger than one this time (7.98, 1.25). Judging from the score ranking of the sources (*Table 20*, *Table 21*), both principal components remain stable in their interpretation. And in particular, with the enlisting of new sources such as Cai Bian's *Mingwu jie*, Duan Yucai's *Shuowen* commentary, and the phonological reference *Guangyun* 廣韻, the contrast between broadness and validity on the second dimension becomes even more salient.

Table 20: Top 15 Sources with the Highest Scores on the First Principal Component
(with six sources removed)

Score Rank	Source	Score	Total Quotes	Quote Rank
1	陸佃 埤雅	33.67	274	1
2	說文解字	27.38	266	2
3	禽經	26.77	228	3
4	禮記	20.70	197	4
5	羅願 爾雅翼	12.88	121	5
6	淮南子	10.91	101	7
7	左傳	10.22	103	6
8	莊子	9.72	98	8
9	嚴粲 詩輯	7.60	75	9

10	揚雄 方言	7.20	72	10
11	崔豹 古今注	6.43	62	12
12	尚書	6.26	63	11
13	本草	5.84	58	15
14	廣雅	5.19	58	15
15	周禮	5.18	61	13

Table 21: Top 15 Sources with the Highest and Lowest Scores on the Second Principal Component
(with six sources removed)

Rank	Source	Score (highest)	Source	Score (lowest)
1	陸佃 埤雅	10.33	說文解字	-16.21
2	禽經	8.64	禮記	-5.89
3	羅願 爾雅翼	3.40	漢書	-4.47
4	邢昺 爾雅疏	2.93	周禮	-3.10
5	張華 禽經注	2.57	尚書	-2.75
6	張華 博物志	2.24	左傳	-2.60
7	酉陽雜俎	2.07	史記	-2.35
8	鄭樵 通志	1.50	玉篇	-2.04
9	本草經	1.44	段玉裁 說文解字注	-1.90
10	崔豹 古今注	1.20	莊子	-1.84
11	陶弘景 本草注	1.12	左傳正義	-1.84
12	山海經	1.12	廣韻	-1.83
13	鹽鐵論	1.12	楚辭	-1.76
14	蔡卞 毛詩名物解	1.04	鄭玄 禮記注	-1.74
15	淮南子	1.01	春秋	-1.70

The loadings plot remains stable as well, where we continue to observe a clear contrast between the clustering of encyclopedic works that contribute positively to the second principal component, and the deviated works by Jiao Xun, Dorong, and Mao Qiling that place a greater emphasis on the validity side. The only noteworthy difference comes from Yao Bing and Chen Dazhang, where the former tilts

backward to the cluster, and the latter splits out slightly. Such evidence confirms the transitional nature of these two works. As the most extensive *mingwu* monographs in the early 18th century, they continued to work on the encyclopedic ideal, yet already involved some subtle difference from their late-Ming predecessors in the referential structure.

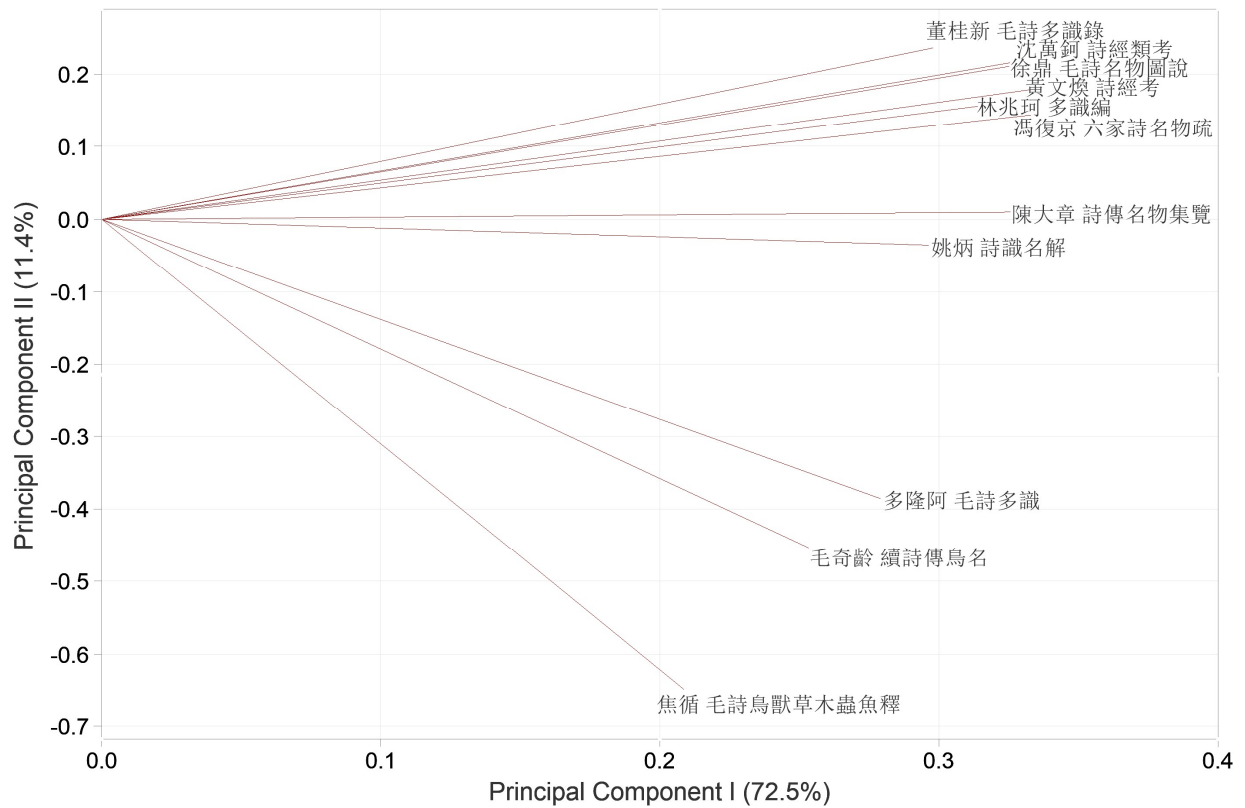


Figure 86: Loadings plot for principal component analysis (with six sources removed)

Appendix 2: Bibliographical List in Feng Fujing's *Mingwu Commentaries*¹⁰⁰⁷

Division	Subcategory	Original Title	Total Counts (by Feng)
Classics 經類	Book of <i>Shi</i>	詩	60
	Book of Changes	周易	7
	Book of Documents	尚書	11
	Three Rites	禮	33
	Classic of Music	樂	10
	Spring and Autumn	春秋	17
	Classic of Filiality	孝經	2
	Analects	論語	7
	<i>Mengzi</i>	孟子	3
	<i>Erya</i>	爾雅	14
	Philological Studies	小學	22
	Classical Exegeses	經解	11
	Apocryphal Texts	讖緯	41
	Subtotal		283
Histories 史類	Official History	正史	22
	Miscellaneous History	雜史	16
	Officials and Rites	職儀	12
	Miscellaneous Biographies	雜記傳	6
	Geographical Gazetteers	地志	55
	Genealogies	譜系	4
	Subtotal		115
Philosophies 子類	School of Confucianism	儒家	15
	School of Daoism	道家	17
	School of Legalism	法家	3
	School of Logicians	名家	1
	School of Moism	墨家	1
	School of Diplomacy	縱橫家	1
	School of Agrarianism	農家	14
	Miscellaneous Schools	雜家	51
	School of Fiction	小說家	23
	Astronomy, Calendar, and Divinations	天文曆術	32
	Military Strategies	兵法	6
	Medicine and Healing	醫方	19

¹⁰⁰⁷ Based on Feng Fujing, *Liujia shi mingwu shu*, "Shumu" 書目, 1a-13a.

	Subtotal		183
Collections 集	Collected Anthologies	總集	23
	Individual Anthologies	別集	28
	Subtotal		51
In Total			587

Note: 1. Both the source counts for each subcategory and the sum-ups are provided by Feng Fujing himself.

Appendix 3: Statistics on the Philological Study of Ancient Names (count by entries)

Before 1600			1600-1700			1700-1750			1750-1800			1800-1850		
Name	Born Year	No. of entries	Name	Born Year	No. of entries	Name	Born Year	No. of entries	Name	Born Year	No. of entries	Name	Born Year	No. of entries
王逸	ca. 90	1	方以智	1611	3	盧文弨	1717	1	孫星衍	1753	1	張文虎	1808	2
葉夢得	1077	1	黃生	1622	1	錢大昕	1728	12	陳鱣	1753	19	陳立	1809	1
洪興祖	1090	1	朱彝尊	1629	1	鄭環	1730	31	鈕樹玉	1760	1	俞樾	1821	71
朱熹	1130	1	臧琳	1650	1	桂馥	1736	8	嚴可均	1762	1	何秋濤	1824	1
王應麟	1223	2	江永	1681	1	孫志祖	1737	5	阮元	1764	1	李慈銘	1830	6
楊慎	1488	1	惠棟	1697	2	王念孫	1744	1	洪頤煊	1765	2	陶方琦	1845	39
						汪中	1744	3	趙坦	1765	6	承培元	1843 <i>yougong</i>	1
						洪亮吉	1746	1	王引之	1766	379	陳瑒	1844 <i>juren</i>	1
						錢馥	1748	10	臧庸	1767	1			
									金鶚	1771	31			
									俞正燮	1775	2			
									張澍	1781	299			
									苗夔	1783	1			
									王筠	1784	1			
									朱駿聲	1788	233			
									沈濤	1792	1			
									何紹基	1799	1			
									茆泮林	d.1845	2			
									王萱齡	1821 <i>fugong</i>	28			
									包慎言	1835 <i>juren</i>	1			
Scholars in Total		6			6			9			17			8

Key Scholars in Total	0			0			3			6			2
Entries in Total	7			9			72			980			122

- Notes: 1. The statistic data in the above table bases upon Zhou Fagao's index in *Zhou Qin mingzi jiegu huishi bubian* 周秦名字解詁彙釋補編, which is summarized from his exhaustive collection of 68 pre-modern and modern scholars on the philological study of ancient names.¹⁰⁰⁸ In the index, each entry of *Chunqiu mingzi jiegu* (as well as each name that is not covered by the work yet discussed by other scholars) is assigned with a numerical code. When a specific name was discussed by a scholar, the corresponding code will appear in the index under the scholar's name. The table is thus drawn by counting the number of codes under each scholar name.
2. Based on the above compilation principle, if a scholar discussed the same ancient name in multiple entries, the table only counts it once.
3. Due to the focus of the current study on the Ming-Qing era, the table only included scholars that born before 1850. The scholars are listed by temporal order, according to their born years. When the birth year is unavailable, an estimation is made based on other biographical data (e.g., death year, the year obtaining a scholar degree).
4. In the table, scholars who contributed no less than 10 entries are regarded as "key scholars" and highlighted in gray shade.

¹⁰⁰⁸ Zhou Fagao 周法高, *Zhou Qin mingzi jiegu huishi bubian* 周秦名字解詁彙釋補編 (Taipei: Zhonghua congshu weiyuanhui, 1964), 156–65.

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