Scholarly Culture in Sixteenth and Seventeenth-Century China

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Scholarly Culture in Sixteenth and Seventeenth-Century China

A dissertation presented

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Abstract

This dissertation traces the development of scholarly disciplines in late imperial China. This project focuses on linguistic study during a period when philology was woven into a comprehensive system of analyzing language, music, and cosmology. Historians typically assert that China underwent an important intellectual transition in the 18th century, arising from a new emphasis on the philological analysis of texts. I argue instead that the intellectual shift over the course of the 15th through 19th centuries can be more accurately understood as a change in methods of studying language, rather than a newly found attention toward it. Philology flourished in the 16th and 17th centuries, but was not an isolated field, as it would come to be in the 18th. Instead, it drew methods and materials from various intellectual traditions such as cosmology and music. Current notions of intellectual development in late imperial China have tended to anachronistically map later disciplinary demarcations onto the past. I demonstrate, on the basis of a large body of influential yet understudied philological texts from the 16th and 17th centuries, that intellectual change in this period should be defined primarily by shifts in reasoning and methodology, rather than by transitions in fields of scholastic interest.

16th century scholars believed that everything in the world belonged to a greater coherent system, the underlying unity of which provided a universal basis for producing knowledge. This mode of thinking, which drew on methods from disparate fields, was written out of the intellectual history of China, beginning with 18th century court scholars who saw in it the reasons for the decline of the Ming Dynasty (1368–1644). Nevertheless, its implications for the history of scholarship in China are significant. For instance, phonetic methods for describing linguistic
sound emerging at the end of the 19th century drew directly from 16th century discussions of Sanskrit and cosmology. The totalizing mode of thought that characterized 16th and 17th century scholarship in China was not, as is commonly held, an impediment to linguistic and scientific thought. Instead, it fostered innovative approaches to describing the nature of language.
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INTRODUCTION

Writing in the mid-17th century, Xiao Yuncong 蕭雲從 (c. 1596–1673) proposed a program for the would-be philologist, intent on studying the language of ancient texts. According to Xiao, one should master, in this order: the hexagrams and divination methods of the *Yijing*, the principles of *qi* and *yin-yang* theory, mathematics, musical pitches, and finally traditional Chinese methods of phonology. Only the last of these has any clear relation to the study of language as we understand it today. Xiao was no outlier, however. The study of language, which captivated scholars throughout the 16th and 17th centuries, was bound up with subjects which bear little relation to our current approach to linguistic research. This dissertation explores why scholars in the 16th and 17th century established connections between seemingly incompatible fields. I identify disciplinary interconnectedness as a fundamental characteristic of scholarship from this period, an approach based on the notion that the underlying coherence of all things in the world provided a universal system for creating knowledge.

Opening a work of 16th-century Chinese scholarship transports one into a vastly different world from the present. A study of astronomy could double as a treatise on morality. A tract on music might contain a discussion of prognostication. As early as the 18th century, such amalgamations were characterized as cobbled together with no apparent reason (douding 鰐釘, in the words of Qing scholars). The premise of this dissertation is that 16th-century scholars perceived such connections between seemingly different subjects for a reason. Intellectual change in China has often been traced according to which disciplines (according to our modern

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1 Xiao Yuncong 蕭雲從, *Yi cun* 易存, SKQS CMCS, p. 7a.
2 Cf. Wang Bangzhi 王邦直, *Lüli zhengsheng* 律呂正聲, SKQS CMCS.
definitions) attracted the greatest attention at a given time. By delineating boundaries and shifts in notions of discipline I offer a new and productive way to understand intellectual change in China. As modes of knowledge production changed, so too did the connections between and boundaries surrounding disciplines.

The standard narrative of late imperial Chinese intellectual history claims that an important transition took place in the 18th century, following the consolidation of the Qing state. In its simplest form, the argument claims that scholars from the 14th through 17th centuries neglected concrete evidence-based learning in favor of abstract metaphysical speculation. Scholars in this period took seriously the Neo-Confucian proposition that anyone could attain sagehood, although the locus of moral authority was debated. Increasingly, the dominant form of Neo-Confucian practice subscribed to anti-intellectual position that morality could not be apprehended from observation or study, but instead came from accessing the innate goodness of the mind. Beginning in the late 17th century and increasingly through the 18th, scholars rejected abstract philosophy in favor of concrete learning, especially philology. Various explanations have been advanced to explain the cause of this transition, including: a desire on the part of Qing scholars to reject what they perceived as a leading cause of the fall of the Ming dynasty; an intent to pursue an innocuous occupation that the new Qing rulers would see as benign; the internal logic of trends in Chinese thought which swings as a pendulum from anti-intellectualism toward intellectualism.3 Precedents for the new philological bent in Qing thought have been sought in

Ming scholars, as well, in order to demonstrate that the 18th century approaches did not develop ex nihilo.  

The most widely-cited argument for intellectual change in the late imperial period is Benjamin Elman’s 1984 Philosophy to Philology: Intellectual and Social Aspects of Change in Late Imperial China. This foundational study in Chinese intellectual history defines the split in intellectual culture before and after the mid-18th century as a contrast between the scholarly goals of “sagehood” and “exacting research.” The underlying intellectual cause of this shift, as Elman sees it, was a series of debates in the 17th and 18th centuries over the authenticity of the so-called Old Text classics, which spurred a broader philological investigation of the Confucian classics. Elman describes this transition separating the intellectual life of the Ming and Qing as a Kuhnian paradigm shift, in which the epistemological premises of knowledge creation changed. In a nod to Foucault, he further argues that the discourse of scholarly engagement shifted, as well, to emphasize data as the highest form of evidence. Elman rightly identifies a key difference in reasoning between the earlier and later period: the first is characterized by the deduction of theory based on “rationalist principles” (such as yin and yang), while the second stressed


4 Lin Qingzhang 林慶彰, Mingdai kaojuxue yanjiu 明代考據學研究 (Taipei: Taiwan xuesheng shuju, 1983); Benjamin A. Elman, From Philosophy to Philology: Intellectual and Social Aspects of Change in Late Imperial China, pp. 40–49.

5 Benjamin A. Elman, From Philosophy to Philology: Intellectual and Social Aspects of Change in Late Imperial China, pp. 5-6.
“verifiable facts.” Nevertheless, he identifies the concrete instantiation of this transition in terms of what fields scholars pursued: in this case, a shift between Neo-Confucian philosophy and its goal of sagehood to philology. Hence, for Elman the locus of authority in the Ming was the “moralist,” while the Qing witnessed the rise of the “specialist.”

Elman further asserts that the social structure of knowledge production shifted from the diffuse and amateurish attempts of Ming scholars to a robust sense of scholarly community in the Qing, which valued cumulative progress in specific disciplines, as well as collaboration and discussion. I argue that the Ming philologists too saw themselves as part of a shared intellectual project within the discipline of philology. They aligned themselves within a past and present scholarly tradition and a contemporary community of likeminded scholars. The creation of a specialized discipline and community of philology is thus not a defining moment of change in late imperial China. Instead, employing sociological ideas of disciplinary boundary, originating in Bourdieu’s notion of “field,” I argue that the shifting demarcations of disciplinary boundaries across time in late imperial China are a more accurate measure of change.

Previous attempts to characterize intellectual change in late imperial China have largely accepted the presentation of the late Ming intellectual landscape as described in the 18th century. As early as the late 17th century, Gu Yanwu (1613–1682) evaluated the scholarship of the preceding two centuries in harsh terms as misguided and imprecise. This picture of Ming scholarship was solidified in the late 18th-century Siku quanshu, an imperially commissioned collection of thousands of literary and scholarly texts. In particular, the annotated

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6 Benjamin A. Elman, *From Philosophy to Philology: Intellectual and Social Aspects of Change in Late Imperial China*, p. 29

7 Benjamin A. Elman, *From Philosophy to Philology: Intellectual and Social Aspects of Change in Late Imperial China*, pp. p. 48
bibliography of the *Siku quanshu* provided critical evaluations of a large body of Ming scholarship. Texts discussed in this dissertation received such negative appraisals from *Siku quanshu* editors as “mishmash scholarship” (休み之學), “baseless” (非有根據), and “cockamamie” (出於杜撰). The flourishing scholarly world of the 16th and 17th century has generally been neglected by historians, in large part as a result of this negative depiction generated in the 18th century by scholars intent on demonstrating their departure from the past.

Recent research has attempted to upend this appraisal of the Ming by arguing that the Ming did produce a set of outstanding scholars, whose work adheres to rigorous standards. For example, works of mathematics and acoustics have been upheld as models of exacting scholarship, which demonstrate that Ming thought was just as capable as later periods of generating evidence-based knowledge. Ultimately, by offering only select counterexamples these reappraisals confirm earlier evaluations of the Ming, implying that the vast majority of Ming scholars could not live up to this standard. This approach does not provide a representative picture of thought in this period, but focuses on a few figures who fit modern definitions of proper scholarship. In addition, by focusing on the aspects of a scholar’s work that conform with our present expectations of validity, we end up with an ahistorical picture of even the “great minds.”

Dagmar Schäfer offers another possibility, by providing an in-depth analysis of an influential late Ming scholar, but one whose worldview and methodologies do not reflect our current notions of scholarly rigor. Situating Song Yingxing 宋應星 (1587–1666) in a context of

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8 Wei Xiaohu 魏小虎, ed., *Siku quanshu zongmu huiding 四庫全書總目彙訂* (Shanghai: Shanghai guji chubanshe, 2012), pp. 1371, 1372, 1375.

9 Roger Hart, *Imagined Civilizations: China, the West, and Their First Encounter* (Baltimore: Johns Hopkins University Press, 2013), Ch. 4.
the *qi*-based analyses of material things, Schäfer argues that Song in fact invoked a radical epistemological stance—that technological and craft observation were valid sources of knowledge creation, as “an interface between cosmological principles and human action.” Her approach removes the question of “Why China did not have a scientific revolution,” ever looming in the background of history of science in China. Forgoing a teleological narrative of scientific progress, her work provides a compelling analysis of ways of knowing in the late Ming. Nevertheless, she highlights Song Yingxing as “idiosyncratic” and “exceptional,” despite his adoption of frameworks and terminology from his contemporaries. Her aim in focusing on one uniquely rich individual is to avoid a “unified or linear narrative of knowledge” in favor of providing a window into “one of the multitude of moments and influences on knowledge production.”

I adopt a different approach in this dissertation. Following recent research on the history of scholarship in early modern Europe, I posit that an intellectual context is not best measured by its few most outstanding minds. In this dissertation, I survey a broad body of largely untouched material in order to provide a representative characterization of 16th and 17th century thought. Some of the figures and works I discuss were highly influential, both for contemporaries and future generations, often in unexpected ways. Others were ephemeral. On its own, each

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individual text of the latter category provides little insight into contemporary intellectual culture. In the aggregate, important trends in late Ming thought which have gone unnoticed become apparent. This approach also provides the necessary context with which to evaluate the subsequent centuries. For instance, heralded advances of late 19th century philology, such as a push toward alphabetical spelling systems, have roots in 16th century discourse. It is clear that scholarly priorities and methods did shift over the course of the 15th through 19th centuries. However, as this dissertation contends, we cannot begin to characterize this shift without an adequate understanding of the first half of this period.

I analyze approaches to a branch of scholarship that has been unduly neglected in accounts of this period, namely philology. Language was a central concern for scholars in the 16th and 17th century, the reasons for which will be briefly enumerated in a following section. Philology is upheld in the current literature as the crucible in which the epistemological revolution of the 18th century was forged. According to the standard narrative, the turn to close attention to the language of ancient texts signified the new mindset of 18th-century scholars intent on shedding the preoccupation with metaphysical philosophy characteristic of previous centuries. I argue that we cannot characterize change in this period as a shift in interest toward the discipline of philology. By highlighting the centrality of philology in this earlier period, I demonstrate that the premise of the standard narrative cannot stand. In its place, I provide an alternative way of coming to terms with intellectual change in late imperial China: shifts in disciplinary boundaries.

Disciplines in History

The question remains as to how we will define a discipline within the context of Chinese
history. As Thomas Becher observes, “one way of looking at disciplines is through a structural
framework, noting how they are manifested in the basic organizational components of the higher
education system.”14 Such an approach assumes that it is institutions, primarily academic, that
“draw the map of knowledge.” Institutions certainly played a role in the establishment of
disciplinary boundaries in China, as well. Notably, the civil service examination defined certain
areas of specialization, as well as a broader field of “examination learning.” So too did
academies, which focused on codifying modes of learning, often framed as in preparation for or
in opposition to the examinations. Another way of describing disciplines would be to consider
them “the smaller units on the map of learning at any given point in cultural time.”15 My study
will adopt such an approach, focusing on a wide set of issues to define a discipline: community,
 scholarly tradition, values, and conceptual structures.16

The overarching structural identifier of disciplines in Chinese history is the
bibliographical category. By categorizing texts, scholars as early as the Han dynasty defined the
boundaries of knowledge. Early methods of categorization listed six overarching categories of
knowledge: the six arts (六藝), philosophical literature (諸子), poetry (詩賦), military (兵書),
mathematical (數術), and technical (方技). Each of these was further divided into subfields. For


16 I borrow here from Becher’s assessment of Arthur King and John Brownell’s 1966 The Curriculum and the Disciplines of Knowledge. See Tony Becher, Academic Tribes and Territories: Intellectual Enquiry and the Cultures of Disciplines, p. 20. Becher et al.’s discussions are focused on disciplines in the modern academy. However, they provide a useful entry point for considering the nature of disciplines in premodern times, which have not been theorized to the same extent.
instance, the “six arts” was divided into categories for each of the classical texts in the Confucian tradition, as well as philology. From around the 3rd century, a new method of categorization emerged, characterized by a four-part subdivision, which coexisted with six and seven-part categorizations. Early Tang court scholars codified a new four-part system which in broad strokes would persist into the 20th century: Classics (including philology), Histories, Masters (primarily philosophical texts of the Warring States period), and Literary Collections. Despite a range of available methods, this four-part system remained popular in the Ming with one scholar claiming that none of the other methods could equate it in terms of simplicity (精簡) and comprehensiveness (盡均).17

The existence of a bibliographic category implies the beginning of a discipline. Specifically, it establishes filiation between a set of texts, transforming them into a tradition. In many cases a kind of methodological coherence is also assumed. For instance, texts in the paleography category (zixue) frequently are organized according to a relationship with the early dictionary Shuowen jiezi. Late imperial scholars from Hu Yinglin 胡應麟 (1551–1602) to Zhang Xuecheng 章學誠 (1738–1801) debated the appropriate categorization of scholarly works, indicating that these categories were considered a significant way of structuring and constructing borders around knowledge.18 These traditions of learning in late imperial China lack some features often considered hallmarks of a discipline: professional organizations devoted to

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17 Qi Chenghan 祁承燦, Gengshen zhengshu xiaoji 庚申整書小記, in Zhongguo muluxue ziliao xuanji 中國目錄學資料選輯, ed. Chang Bide 昌彼得 (Taipei: Wenshizhe chubanshe, 1972), p. 430. Other experiments in categorization persisted after the Tang. Zheng Qiao, for instance, employed 12 overarching categories, which were further divided into a set of 155 sub-categories.

their study and specialist venues for publication of their research. I use “discipline,” rather than the more innocuous “scholarly tradition” or “field,” to differentiate an important aspect of scholarly study in the late imperial period. Prior to the Ming, scholars of philology largely framed their work as belonging to a scholarly tradition. That is to say, they claimed to contribute to a scholarly project tracing back to antiquity and culminating in their own work. This cumulative approach to scholarship did not disappear in the Ming. What was new in the Ming was a sense that this knowledge could be framed not only in relation to the past, but also within a contemporary field of study. Institutional support of scholarship was less present in the late Ming than the 18th century; but scholars still made clear their allegiance to particular disciplines and communities. Literary schools and associations manifested themselves on unprecedented levels during the Ming, and classics discussions associations flourished at the end of the dynasty. Similarly, schools of contemporary philological thought referenced each other, and maintained a level of communication in pursuit of generating new knowledge that is rare in earlier periods. Beyond the existence of bibliographical traditions of knowledge, based on a shared methodology, disciplines in late imperial China were composed of communities. While philologists might identify themselves first as scholars (xuezhe 學者), rather than specialists, they operated within a community with shared aims. Observing this fact from a negative perspective, Fang Yizhi 方以智 (1611–1671) claimed that a greater synthesis of knowledge was

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not practiced by his contemporaries who “each kept to their specialties” (各護專門).  

Similarly to early modern Europe, where a new genre of philological treatise played a large role in the construction of philology as a discipline, so too did new venues and modes of discussing philology appear in Ming China. Philological research in earlier periods of Chinese history primarily appeared in two forms: 1) classical commentaries and 2) dictionaries and rhyme tables. Independent discussions of language were few and far between. Yang Shen 楊慎 (1488–1559), a great thinker of the 16th century, was perhaps the pivotal figure in generating a body of independent philological work ranging from dictionaries to treatises on language. Despite Yang’s formidable contemporary reputation, his approach to philology did not attract a wide following. However, in the years and decades following Yang’s initial publication of wide-ranging philological treatises, independent studies of language flourished as a genre. Although such works sometimes contained rhyme tables or were published in conjunction with a dictionary, they also circulated as independent discussions of language, a new genre representative of the increasingly disciplinary nature of philology. As this dissertation will show, such works while not entirely uniform, did share a set of methodological assumptions. Foremost among them was the idea that philological knowledge could be validated through correlations with a set of related fields, including, music, cosmology, and mathematics. My use of the term ‘discipline’ in the context of late imperial China refers to the practices of knowledge creation in a particular field bound together by a contemporary community and its methodological standards. I

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20 Fang Yizhi 方以智, *Fushan wenji houbian* 浮山文集後編, XX SKQS, j. 1, p. 34b.

21 The creation of new philological genres in Ming China in some respects echoed the historically-minded philological methods developing in contemporary Florence, which also were characterized by new genres. See Anthony Grafton, *Joseph Scaliger: A Study in the History of Classical Scholarship* (Oxford: Oxford University Press, 1983), pp. 21–44.
do not mean to imply a direct comparison with the disciplines of the modern academy.

I use ‘philology’ as a translation of the Chinese term xiaoxue (小學), or ‘the lesser learning,’ which encapsulated the following branches of study: yunxue (韻學, lit. ‘the study of rhymes’), xunguxue (訓詁學, lit. ‘the study of glosses’), and zixue (字學, lit. ‘the study of characters’), sometimes translated as phonology, etymology, and paleography. Phonology, or yunxue, refers to the study of the sounds of language. While often translated as etymology, xunguxue was less a study of the history of words, and was primarily aimed at glossing the meaning of terms. Zixue, usually translated as paleography or grammatology, involved the study of historical character forms. That xiaoxue was an accepted category in the 16th and 17th centuries is evidenced in book catalogues and bibliographies from the period, which frequently categorized these various fields of linguistic study under the broader valence of philology/xiaoxue. Given the breadth of content falling under the purview of philology, many scholars specialized in one of the three branches, rather than ‘philology’ as a whole. As the 16th century bibliographer Hu Yinglin commented, “among those broadly learned from past to present, none have been able to master all [elements of philology]” (古今博洽，未能兼该). Nevertheless, Hu categorized it as a single field with several sub-disciplines.

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22 There are exceptions within the categorizations. For some, xiaoxue seems to refer exclusively to exegetical writings on the meaning of words (xungu 訓詁), or primers in the term’s general sense of ‘elementary education.’ Occasionally, the three primary arenas of philological study are contained in separate categories. In other instances, xunguxue is isolated, and categorized under the Classics, usually under the heading of Erya 禘雅. Given the flexibility of disciplinary boundaries in this period it should not be surprising to see still further variations. For instance, Jiao Hong’s influential bibliographical catalogue Guoshi jingjizhi 國史經籍志 categorizes philology as composed of not only phonology and etymology, but also mathematics.

A key problem in the approach of previous historians to philology is their focus on philology almost exclusively within the context of the study of the Classics. Current research typically observes that Ming and earlier Neo-Confucian scholars undertook a meaning-based (義理 yìlǐ) approach to understanding the Classics. This approach valued an interpretation of the Classics that illuminated the underlying coherence of the texts themselves. Ming scholars are understood to have taken this to extremes, under the influence of Wang Yangming, bringing highly idiosyncratic readings into the mainstream. Qing scholars, on the other hand, felt the texts could only be understood based on a historically precise analysis of their language. This different approach to knowledge may hold true to some degree in the field of classical exegesis. As this dissertation will show, however, the valence of philology was historically much wider than classicism alone. Ming and Qing scholars alike shared an intense interest in the nature of language, as well as categorizing language across time and region.

One of the central questions of this dissertation is how we demarcate the boundaries of a discipline. As Andrew Abbott has argued, in researching the history of social, professional, and disciplinary boundaries, we have tended to “start with what we know emerged and then seek its origins.” Such a teleological approach imagines historical actors to hold a crystal ball, guiding their path toward an inevitable future. The intellectual history of late imperial China has made similar assumptions: benighted Ming dynasty scholars made primitive attempts at philology,

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24 For an exception, see Mårten Söderblom Saarela, “‘Shooting Characters’: A Phonological Game and Its Uses in Late Imperial China,” forthcoming in the Journal of the American Oriental Society.

25 Wang Fansen, Quanli de maoxiguan zuoyong: Qingdai de xianshi, xueshu yu xintai, p. 159.

some of which even foreshadowed the superior scholarship of the Qing.\textsuperscript{27} The underlying premise of this dissertation is that 16\textsuperscript{th} and 17\textsuperscript{th} century thinkers did not believe they were producing subpar scholarship. While their work may appear misguided today, they believed they were producing valid scholarship. Further, many late Ming scholars were aware of approaches that would eventually gain sway in the 18\textsuperscript{th} century. They consciously rejected these methods on the basis of their convictions of scholarly validity.

It is well-established that boundaries of scientific knowledge in the past differ from the present.\textsuperscript{28} As Shapin and Shaffer note, however, much work remains to be done to establish how “scientific actors allocated items with respect to their boundaries (not ours).”\textsuperscript{29} Beyond simply noting that disciplinary boundaries were flexible in the early modern world, I hope to reconstruct the rationales underlying cross-disciplinary modes of thinking. Although combinations of certain fields in late imperial China may seem arbitrary to the modern eye, I believe that they operated according to rules that were widely accepted among contemporaries. Without an accurate understanding of the categories of scholarly pursuit in the early modern world, as manifested in disciplines, a “history of science” or “history of humanities” is impossible. Such terms only become meaningful when their functionality in a particular time period can be demonstrated. This dissertation aims to analyze the nature of a specific, and centrally important, discipline in late Ming China. In so doing, the ultimate goal is to provide new ways of thinking about


disciplinary boundaries that can provide a contextualized approach to the history of knowledge in China.

As Thomas Gieryn describes, producers of knowledge demarcate boundaries to assert legitimacy. Scholars in the Ming drew disciplinary boundaries that differed both from earlier and subsequent periods in their pursuit of scholarly validity. This dissertation will explore a number of motivations for late Ming thinkers, the most pressing of which was comprehensiveness. Ming scholars drew on varied fields and disciplines, incorporating their methods and materials into philology, to go beyond what they saw as the limits of human observation. Theoretical correlations between philology and other disciplines were perceived as a more objective basis for scholarship because of their universality.

The ability to traverse various disciplines in late Ming China is different from the ideal of “broad-learnedness” or “erudition” (boxue 博學), a frequent alternative if not mainstream current of thought in many periods of Chinese history. An adherent of boxue might be comfortable writing on topics as varied as history, philology, and astronomy. But he would not try to unite their study within the borders of a single discipline, or see their methods as fundamentally related. Boxue flourished, in particular, during the Southern Song, when scholars such as Zheng Qiao (1104–1162) and Wang Yinglin 王應麟 (1223–1296) compiled massive encyclopedias encompassing the learning of many different intellectual traditions. As Peter Bol has observed, the boxue ideal captured the minds of important intellectuals in the 16th century, too, looking for a way to investigate the external world, which contemporary Neo-Confucian thought had abandoned. Scholars such as Hu Yinglin 胡應麟 (1551–1602) conceived of boxue as

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a method of knowledge production based on historical evidence.\textsuperscript{31} This method did not presume coherence, and accorded pride of place to observable fact.

Hu Yinglin’s history-based boxue approach to knowledge was much more in line with that of centuries to come.\textsuperscript{32} Coherence was central to the mode of knowledge production I will discuss in this dissertation, and which I argue commanded significant attention during the 16\textsuperscript{th} and 17\textsuperscript{th} centuries. Throughout the 16\textsuperscript{th} and 17\textsuperscript{th} centuries totalizing thinkers aimed to produce knowledge, based on the premise that the universe constituted a coherent system. Thus, when scholars came across problems that could not be easily solved within the confines of a single discipline, they drew correlations from others. So long as a theoretical linkage could be established between two fields, such as music and language for instance, the established facts of one could be used to solve for unknowns of the other. Hence, the putative shared originary sound linking music and language allowed late Ming scholars to apply musical knowledge, such as the


\textsuperscript{32} Hu Yinglin in fact contested coherence based notions of disciplinary boundaries in his treatise on bibliography. Lu Shen 陸深 (1477–1544), an influential scholar from Songjiang (in Shanghai today), produced a catalogue of books separating books on phonology (韻書) from philology (小學). Instead, he grouped philology, or elementary learning, with medicine (醫藥). His reasoning was “If one is not instructed at a young age, one will not achieve greatness. If one is not treated at an early stage, one will not quickly recover. It is the same principle.” (不幼教者不懋成，不早醫者不速起，其道一也). Hu disputed this claiming that philology belongs within the rhyme category, while medicine under technical skills (技): “they are not at all related, and should most definitely not be mixed together into a single smear” (絕不相蒙，尤不應混列一塗). The 18\textsuperscript{th} century \textit{Siku quanshu} editors similarly criticized Lu Shen’s bibliographic categories for “violating ancient method” (非古法). Lu Shen’s vision, if not his particular categorization, was highly representative of late Ming approaches to knowledge. See Hu Yinglin, \textit{Jingji huitong} 經籍會通, in \textit{Shaoshi shanfang bicon} 少室山房筆叢 (Beijing: Zhonghua shuju, 1958), p. 26, and Lu Shen 陸深, “Jiangdong cangshu mulu xiaoxu” 江東藏書目錄小序, in \textit{Baoyantang xu miji wushizhong} 寶顏堂續秘籍五十種, (ca. 1572–1620 edition, held at Harvard-Yenching Library), Vol. 26, p. 7a.
number of pitches in the scale, to linguistic problems like the number of rhyme groups in Chinese. Scholars in this period did not predominantly pursue knowledge in service of Zhu Xi’s injunction to “investigate things” (gewu zhizhi 格物), as has sometimes been claimed: that is to say, observing the material world in order to realize coherence (li 理) and ultimately become a moral actor. For the most part, philological thinkers saw themselves as contributing to disciplinary scholarship. The realization of coherence was a method, not the goal.

Boxue and coherence based approaches to knowledge were not necessarily antithetical. Fang Yizhi, for instance, compiled encyclopedias touching on a wide range of topics in the manner of a typical boxue scholar. However, the methodology he employed in discussing these topics embraced correlations with many different fields. If we turn our gaze to how people studied, rather than what they studied, the contour of late imperial intellectual history begins to depart significantly from the standard narrative. Fang Yizhi, for instance, is often aligned with Gu Yanwu as representative of a new approach to scholarship in the mid-17th century by virtue of their shared commitment to broad learning, and philology in particular. Nonetheless, when we look at how they approached philology, it becomes clear how little they have in common. Fang represents a culmination of late Ming coherence-based thinking; Gu by contrast pursued an evidence-based methodology that would be widely adopted in the 18th century.

The field of intellectual history has largely focused on “radical” developments in Neo-Confucian thought under the influence of Wang Yangming in the late Ming. That the intellectual culture of this period was much richer should not be surprising. What is more unexpected is the centrality of philology in particular to Ming thinkers. Even the specialized history of linguistics in China has until recently largely neglected the Ming. Moreover, the recognition of historical

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33 For studies of Ming philology, see Geng Zhensheng 赓振生, Ming Qing dengyunxue tonglun
linguistic change has typically been seen as the measure of progress and sophistication in Chinese philology. This is perhaps based on comparison with the west where the mature philology of the 19th century was rooted primarily in historical research into different stages of languages. Hence debates over progress in the history of linguistics in China tend to take a side on whether scholars before the 18th century recognized the issue of historical change. This dissertation breaks out of this framework by demonstrating that philology flourished in the 16th and 17th centuries. Its priorities and methods were new and innovative, and yet not primarily historically-based. Philology was not an isolated field, like linguistics today. Instead it drew reasoning and methods from many different subjects, such as cosmology, music, and Neo-Confucian philosophy. Its study had far-reaching implications for Ming scholars, who saw its potential to reform society, refine literature, and establish cultural unity.

**Why was Philology Important in Late Imperial China?**

Writing about early modern Europe, Rens Bod has claimed that “rarely has a discipline brought about such major societal changes as philology.” Whether or not we agree with Bod’s

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tracing the origins of critical thinking to philology, there is no denying that philology was a prestigious discipline in many regions of the early modern world. In late imperial China, many of the most creative and innovative thinkers devoted themselves to philological endeavors. What use did they see in this seemingly innocuous discipline?

During the tumultuous mid-17th century, the scholar Sima Yan 司馬衍 wrote in the preface to a contemporary’s dictionary:

Alas, ever since there have been errors in writing, the meaning of words has been corrupted; since the meaning of words has been corrupted, the minds of men have become confused; since the minds of men have become confused, the affairs of the world have been ruined; since the affairs of the world have been ruined, heresies have arisen; and since heresies have arisen, the Way of the sages has perished.

鳴呼，自圖書謬而文義亂，文義亂而人心惑，人心惑而世事壊，世事壊而異端起，異端起而聖人之道亡矣。37

Tracing back the corrupt morals of his age to errors to the contemporary form of written script may seem hyperbole. But to contemporary thinkers, the implications of language in both spoken and written form were immense.

The courts of both Ming and Qing China devoted considerable energy to defining linguistic standards, although their power to enforce these standards may have been limited. Alluding to a passage in the Liji 禮記, scholars in late imperial China frequently referred to a key role of the ruler as ensuring that his people “write in a shared script” (書同文). The first Ming emperor, Zhu Yuanzhang, commissioned a dictionary, which went through several early editions, to further this goal by providing a model for character forms and pronunciation. He also

prescribed ways of writing and speaking.\textsuperscript{38} While the Ming court quickly lost linguistic authority in practice, the political and societal implications of language were widely acknowledged. Private scholars claimed to inherit the mantle of establishing a “shared script,” thereby assuming the governmental responsibilities of “rulership, rites, music, and education” (道術治統禮樂教化).\textsuperscript{39}

As will be discussed in greater length in Chapters 5 and 6, literary figures too debated the standards for a unified Chinese language. Poetry functioned as a social currency. Although anyone in the 16\textsuperscript{th} century would agree that poetry should rhyme, there was considerable debate about what words could be rhymed together. One’s method of rhyming and the knowledge of phonology that this displayed was another layer of connoisseurship one could deploy in the social composition of poetry. Anxiety about proper pronunciation, especially in the context of classical recitation, was also pervasive in late imperial China, when the ability to cite freely from the Classics was de rigueur among elites. This is attested in widely-circulated jokes from the period, which parody the effects of a lack of phonological knowledge, non-standard accent, and inability to recognize characters.\textsuperscript{40}

An understanding of the essential terminology and methods of philology was also expected of any member of the educated elite. Civil service examination questions occasionally tested such knowledge, which is also presented in encyclopedic surveys of knowledge for

\textsuperscript{38} Adam Schorr, “The Trap of Words: Political Power, Cultural Authority, and Language Debates in Ming Dynasty China,” (Diss. UCLA, 2004), pp. 36–42.

\textsuperscript{39} Lü Weiqi 呂維祺, Tongwen duo 同文鐸, SKQS CMCS, fanli, p. 11a.

\textsuperscript{40} See, for example, Feng Menglong, Feng Menglong's Treasury of Laughs: a seventeenth-century anthology of traditional Chinese humour, trans. Hsu Pi-ching (Leiden: Brill, 2015), pp. 73–75. See also Sishu xiao 四書笑 (Taipei: Tianyi chubanshe, 1985), [4a–b]; Jieyun bian 解愠編, XX SKQS, j. 8, [2–3]; Jiang Guoxiang 蒋國祥 Tangli shiyun 唐律詩韻 (at Taiwan Normal University), p. 15a–b.
literati. Hence, while not every scholar in late imperial China specialized in philology, it can be assumed that the texts discussed in this dissertation, although challenging for the modern reader, would have been generally accessible for a contemporary elite audience.

Philology mattered in late imperial China. Even in the mid-17th century, as north China began to fall to rebel forces, Fang Yizhi exclaimed, “Who could claim that philology can be neglected?” By establishing an order for words and their pronunciation, scholars felt they were solidifying the bedrock of their civilization. While the term philology today has connotations of bookworms analyzing linguistic minutiae, the philologist in late imperial China played a central role in the intellectual life of his time.

Dissertation Outline

Each chapter in this dissertation explores the correlations that 16th and 17th century Chinese scholars established between non-linguistic fields and philology. By highlighting the motivations and methods underlying these correlations, I demonstrate a fundamental shared assumption among thinkers from this period: knowledge within a single discipline can be verified and enhanced by drawing from other fields. Chapter 1: “Cosmological Phonology in Ming China: Scholarship before the Rise of ‘Evidential Learning’” investigates how 16th century scholars revitalized 11th century cosmological methods as a way to comprehensively describe acoustic phenomena. By associating language with natural processes and numerical calculations, scholars felt they could develop an objective index of sound. Chapter 2: “Neo-Confucianism and

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41 For example, two provincial exams in 1549 (Fujian and Shaanxi) featured questions on philological matters. See examinations preserved in Tianyige cang Mingdai kejulu xuankan 天一阁藏明代科举录选刊 (Ningbo: Ningbo chubanshe, 2010).

42 Fang Yizhi 方以智, Tongya 通雅 (Beijing: Zhongguo shudian, 1990), xu, p. 1a.
New Ways of Understanding the History of Language” demonstrates that Neo-Confucian philosophers, who were engaged in metaphysical speculation, in fact devised concrete and new ways of analyzing language. Commonly depicted as inhibiting scientific innovation in China, these thinkers produced in-depth studies of ancient script forms, which they viewed as keys to moral behavior. Chapter 3: “Letters from the Western Regions: Grappling with Phonetic Scripts in Late Imperial China” considers the unlikely interaction during the late 16th century between Buddhist clergy and secular Chinese scholars, who consulted the former for their knowledge of the Sanskrit alphabet. Studies of Sanskrit writing instigated a widespread debate over the utility of phonetic writing in comparison to the logographic Chinese script. Chapter 4: “‘There is Music in the Heart of Man’: Late Imperial Concepts of Musical and Linguistic Sound” illustrates the ways in which late imperial scholars traced both music and language to a shared fundamental sound. Scholars argued that the mathematical derivation of musical pitches could therefore be used to establish verifiable categorizations of ancient phonology. They likewise argued that the language of ancient texts could be used to reconstruct the music of antiquity. Chapter 5: “‘The Marvel of Natural Harmony’: Literary Phonology in 16th and 17th Century China” and Chapter 6: “Opera, Language Standardization, and Phonetic Methods in Late Imperial China” examine the phonological studies by composers of opera and poetry. Literary figures believed that they were not only creating a practical method for poetic rhyming, but also defining the proper standard for a unified Chinese language and devising new methods of phonetic notation.

Prerequisites

This dissertation is a study in intellectual history. Because the philological texts cited presume an understanding of concepts in several specialized fields, however, I will here provide
a brief overview of key technical ideas and terminology. Chinese historical linguistics is an enormous field, but the necessary material for grasping the arguments of scholars in this dissertation is limited and straightforward. I have broken down this information into the following categories: the Chinese syllable, historical stages of the Chinese language, topolects, script, and methods of linguistic analysis in pre-modern China.

*The Chinese Syllable*

The structure of the Chinese syllable is an (optional) initial, composed of a consonant, combined with a final. The final is composed of a vowel, occasionally followed by a consonant. The final may also contain a medial vowel, comprised of a short vowel sound, located between the initial and the main vowel. For example, the syllable *jiang*, is comprised of the initial -j- combined with the final -iang, itself made up of the medial vowel -i, the main vowel -a, and the consonant -ng (see Figure 1). The term ‘rhyme’ is often used in Chinese historical phonology interchangeably with ‘final,’ although some omit the medial vowel in discussing ‘rhyme.’

In addition, each syllable bears a tone. The precise number of tones differs among varieties of Chinese. However the medieval tradition of Chinese phonology which established the terminology of the discipline defined four tone categories: ‘level’ *ping* 平, ‘rising’ *shang* 上, ‘falling’ *qu* 去, and ‘entering’ *ru* 入. The first three are characterized by tonal contour (for instance the ‘falling’ tone is pronounced with a descending pitch), and indicated in romanization via diacritics (eg. ā, á, à). The ‘entering’ tone is typified by its ending in a stop consonant, -p, -t, or -k. Modern Mandarin does not contain an ‘entering’ tone.
Historical Stages of the Chinese Language

The Chinese language can be split into roughly three periods of historical development: Old Chinese, Middle Chinese, and Old Mandarin. Each of these stages is marked by particular phonological properties. I do not discuss these phonological elements below, with the exception of the loss of an entering tone in Old Mandarin, which was a critical issue for late imperial scholars.

Old Chinese (Ch. Shanggu Hanyu 上古漢語)

Old Chinese refers to the Chinese language of the Zhou period. The Classics of Chinese antiquity were written in this language, and it therefore served as the model for written Literary Chinese in imperial China. Old Chinese may not have had tones; consonants at the end of syllables have been hypothesized to have developed into tones at a later period. Among late imperial scholars, the study of Old Chinese was centered around classifying its rhyme groups, primarily on the basis of rhyme patterns in the Shijing 詩經.
Middle Chinese (Ch. Zhonggu Hanyu 中古漢語)

Middle Chinese refers to the Chinese language of the 7\textsuperscript{th} through 10\textsuperscript{th} centuries, as it was codified in the foundational lexicographic works of this period. The phonological terminology created in these works, remained in use through the late imperial period, and to some degree in the present. Middle Chinese is occasionally divided into an early and late period. According to this division, Early Middle Chinese represents the language of the 6\textsuperscript{th} and 7\textsuperscript{th} centuries, as typified in the early rhyme dictionary \textit{Qieyun}. Late Middle Chinese, as spoken in the 8\textsuperscript{th} through 10\textsuperscript{th} centuries, is described in the rhyme table tradition.

Old Mandarin (Ch. Jingu Hanyu 近古漢語)

Old Mandarin was first codified in the Yuan dynasty rhymebook, \textit{Zhongyuan yinyun 中元音韻}. This early Mandarin, originating in north China, is notable for its loss of the entering tone (identifiable in Middle Chinese by its ending in a stop coda \texttt{-p}, \texttt{-t}, or \texttt{-k}), a feature that remains in present day Mandarin.

\textit{Topolect} (Ch. fangyan 方言)

Chinese topolects, or varieties of Chinese spoken in different regions, often misleadingly translated as “dialects,” are largely unintelligible.\textsuperscript{43} Beyond phonological differences, they contain significant differences in vocabulary, and to a lesser degree syntax. There are seven major topolect groups in Chinese.\textsuperscript{44} The northern, or Mandarin, topolect group largely developed


\textsuperscript{44} The seven are delineated in S. Robert Ramsey, \textit{The Languages of China} (Princeton: Princeton University Press, 1987).
out of Old Mandarin, and possesses no entering tone. The considerably more diverse topolects of southern China are generally more conservative in retaining elements from Middle Chinese phonology.

Script

Chinese characters are logographs. Each character represents a meaning and a single syllable. Despite the presence of a phonetic element in the majority of characters, their pronunciation is not accurately derivable from the written graph. While the origin of the Chinese writing system, as with many others, is pictographic, characters did not function pictographically or ideographically for most of their history. Most Chinese characters contain two components: a semantic and phonetic element. For example, the character 情 qíng meaning ‘emotion’ is composed of a semantic element ‘heart’ and a phonetic element qīng 青. In this case, the syllables are homophonous but bear different tones. Neither the meaning ‘emotion,’ nor the precise pronunciation qíng can be inferred directly from the character.

The earliest attested Chinese script is the oracle bone script (jiaguwen 甲骨文), a form of writing found on animal scapulae and turtle plastrons used in divination ceremonies of the Shang dynasty. This sophisticated logographic script, examples of which date back to the 14th century BCE, was unknown to scholars of the 16th and 17th century and only attracted scholarly attention at the turn of the 20th. The legendary Cang Jie 倉頡, who supposedly created a writing system inspired by the patterns of bird and animal footprints, was typically upheld by Ming thinkers as the inventor of Chinese writing.45 The earliest scripts Ming scholars were aware of include

45 For the Cang Jie legend, see Mark Edward Lewis, Writing and Authority in Early China (Albany: State University of New York Press, 1999), pp. 272–73.
various styles of Zhou dynasty (1046–256 BCE) script, as preserved on ritual bronzes and documented in lexicographic works. Ming scholars generally referred to the scripts of antiquity as seal script (zhuan 篆). When intended in a specific sense, Ming scholars used the term ‘seal script’ to refer to the standardized writing of the Qin dynasty (221–206 BCE). Other scripts from this period which they occasionally referenced include: Zhòu script (zhouwen 籀文), a variety of ancient script attributed to an 8th century BCE dictionary in Shuowen jiezi, and sometimes used to refer generally to the script forms preceding the unified Qin seal script; and Bird and Worm script (niaochong shu 鳥蟲書), an ornate decorative seal script. The ‘clerical’ script (li 隶), although in fact having earlier origins, was associated with official documentary writing of the Han dynasty (206 BCE–220 CE). From the 3rd century CE, a new set of scripts developed, including regular script (kaishu 楷書) in which the Chinese script today is formally written, and cursive script (caoshu 草書), appearing in various degrees of abstraction in calligraphic art. Ming philological discourse typically described this evolution of script forms as a process of decline and corruption, in which newer forms distorted the precedents of antiquity.

Methods of Glossing Pronunciation: Fanqie and Rhyme Tables

Fanqie (反切, occasionally 翻切) is a method of glossing the pronunciation of a syllable. Documented as early as the late 2nd century, fanqie remained a common method of “spelling” in late imperial China. According to this method, the pronunciation of a single Chinese character, representing one syllable, is “spelled” by means of two characters. The first fanqie character represents the initial of the glossed character, while the second character represents the final. For example, tóng 同 can be glossed in fanqie as tú 徒 + hóng 紅 (this formula in Chinese would be written 徒+紅切). While an important innovation in the history of Chinese phonology, fanqie
spellings can present ambiguities. The most significant issue in *fanqie* was the lack of standardization. Differentiations of tone and the presence or absence of medial vowels in the final (-iang, for instance, as opposed to -ang) can be inferred, but are not explicit and are subject to speculation. *Fanqie* readings were employed primarily in rhyme books (*yunshu 讀書*) and classical commentaries.

The rhyme table (*dengyun tu 等韻圖*) tradition, originating from roughly the 10th century, provided significantly greater phonological detail than possible with *fanqie*. Rhyme tables in essence comprise a matrix of initials, tones, voicing, medial vowels, and rhymes. Voicing (*qingzhuo 清濁*) refers to the presence or absence of aspiration, as evident in the difference between Eng. ‘pit’ (unvoiced, *qing 清*) and ‘bit’ (voiced, *zhuo 濁*), or ‘tent’ (unvoiced) and ‘dent’ (voiced). The format of rhyme tables was not standardized either, although they generally shared several characteristics. The head of each column was typically an initial, while rows were organized according to elements of the final (including rhyme, medial vowel, and tone). In the medieval tradition, a set of 36 initials was adopted to encompass all existing Chinese initials; this system remained in use among many late imperial scholars. Similarly to *fanqie*, syllables glossed in the body of a rhyme table represented the combination of an initial (at the head of its column) and a final (at the head of its row). The tables provide more detailed description of the final than *fanqie*, although the phonological nature of many the technical descriptions remains debated.46

Additional technical terminology will be explained throughout. In Chapter 5, a set of terminology and concepts specific to Chinese musicology will be introduced.

Scholarly fields are constantly in a process of boundary formation. What may appear as a logical disciplinary separation in one time or place may not hold true in another. It is well-documented that a shift took place in the late imperial Chinese intellectual world between the 16th and 18th centuries. This shift is most often characterized as a transition from focusing on metaphysics and philosophy to practical and evidentiary scholarship. However, such an analysis tends to view fields or domains of scholarship largely along the lines of present day conceptions of scholarly disciplines. In this chapter I present an alternative way of understanding intellectual transition between the 16th and 18th centuries in terms of the boundaries surrounding disciplinary scholarship. During the mid-16th through the 17th centuries, phonological scholars redefined the boundaries of their discipline to incorporate cosmological methods, which established correlations between the cosmos and the sounds of language. The unique nature, as well as popularity of this kind of scholarship, reveals important differences in Ming scholarly and intellectual culture from periods preceding and following it. Rather than anticipating a time when cosmological and numerological thinking would be denigrated in China as the “premodern cast of Chinese traditional society,” I will instead investigate what it had to offer for a contemporary audience. 16th and 17th-century scholars found that abstract theoretical models based on cosmological theories could be meaningfully adapted for use in a specific scholarly discipline. Whereas earlier cosmological theorists in the 11th century had employed examples from particular disciplines in order to highlight the unified nature of universal processes, scholars in

Ming and early Qing China applied cosmology in order to contribute to and improve on scholarship within a given field. In the case of phonology, cosmological methods allowed scholars to claim that they were more effectively cataloging all possible sounds and rectifying omissions in the preceding phonological tradition, unhindered by regional bias.

As Anthony Grafton has written, “reconstructing a discipline as it was just before some original system of science or scholarship transformed it is a demanding task. It forces one to read bizarre and obsolete books. It requires one to see the sense in what now seem misguided answers to outlandish questions.”\(^2\) Such is the task facing a reconstruction of the philological disciplines in 16\(^{th}\) and 17\(^{th}\) century China before the rise of *kaozhengxue* (考證學 evidentiary learning), which bears a close resemblance to what we would recognize today as historical linguistics. As Wouter J. Hanegraaff notes in a study of esotericism in the west, one great challenge in this kind of study is that the ways of thinking described may “violate our most basic canons of logic and common sense.”\(^3\) By situating this chapter within the intellectual and historical context of the Ming world based on contemporary sources, rather than later appraisals, I hope to account for these ways of thinking, which seem unscientific to us today. Specifically, I hope to answer the following questions: Why did mid-late Ming scholars employ cosmological theory to answer questions in specialized disciplines? How did the mid-late Ming use of cosmology differ from that of earlier periods? What can this difference tell us about the formation of disciplines in late imperial China? How widespread was this approach among Ming scholars, and how did they transmit their ideas among each other?


Shao Yong in the Song Context

Shao Yong 邵雍 (zi Yaofu 堯夫, hao Kangjie 康節 1011–1077), the great cosmological thinker of the Northern Song, was immensely influential for late Ming philological scholars. His work provided a theoretical model that would inform significant innovations in linguistic thought in the 16th and 17th centuries. His relation to philology differed from that of Ming scholars. For Shao Yong, phonology provided evidence for the existence of consistent universal processes. Ming scholars understood such processes as providing a method to advance knowledge within the discipline of phonology.

Shao was one of the five founding fathers of Neo-Confucianism, as designated by the great codifier of Neo-Confucian thought Zhu Xi 朱熹 (1130-1200). Nevertheless, Zhu Xi was ambivalent about Shao Yong’s place in the Neo-Confucian tradition, and would often denigrate what he perceived as the bizarre nature of Shao’s thought.4 Although assigned an important place in the origins of Neo-Confucian thought in the Northern Song, he is generally considered to have had little influence on the later development of Neo-Confucianism.5

One of the primary goals of Neo-Confucianism, as it came to be understood in late imperial China, was the apprehension of li 理: the unitary, all-pervading, yet variegated

4 See, for example, Huang Shiyi 黃士毅, compiler, Zhuzi yulei huijiao 朱子語類彙校 (Shanghai: Shanghai guji chubanshe, 2014), p. 2529.

coherence that ties together all things.\(^6\) The notion of *li*, however, featured only peripherally in Shao Yong’s work, which was much more concerned with the centrality of number (*shu* 數), or more accurately the mathematical “generation of systematic relationships between members of finite sets.”\(^7\) His thought, which emerged from a long tradition of correlative thinking, emphasized a mechanistic system in which numerical cycles based on the number four (among other numbers) explain and constrain the functioning of the universe and the progression of history.\(^8\) His was an approach in which theory overrode observation, and the rules of number and category could explain all phenomena. This was not a comfortable position for many contemporary and later thinkers, who preferred a system in which the recognition of cosmic correspondence and numerological pattern was predicated on the apprehension by humans of the perfectly moral coherence of Heavenly Principle (天理).

Shao’s magnum opus, the *Huangji jingshi shu* [皇極經世書 Book of august principle traversing the ages] is our main source for understanding Shao’s thought, and circulated in several different editions during the Ming. This text is comprised of 14 *juan*, a full four of which contain a set of rhyme tables, in which Shao applied the combinatory schemes which characterize the rest of the work to spoken sounds. In order to discuss the important role these tables played in Ming phonology, it will be necessary to give a brief overview of the original

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\(^8\) See Alain Arrault, *Shao Yong (1012-1077): Poète Et Cosmologue* (Paris: Collège de France, 2002). For other studies, which attempt to bring Shao in line with moral and Neo-Confucian philosophy respectively, see Don J. Wyatt, *The Recluse of Loyang: Shao Yung and the Moral Evolution of Early Sung Thought* (Honolulu, Hawaii: University of Hawai’i Press, 1996) and Anne D. Birdwhistell, *Transition to neo-Confucianism: Shao Yung on Knowledge and Symbols of Reality*. 
The tables, entitled the “Shengyin changhe tu” (聲音唱和圖 Tables of finals and initials singing and harmonizing), occupy juan 7 to 10 in Huangji jingshi shu. They are in fact the first extant rhyme tables from China, despite the fact that the phonological components of the later 12th century rhyme tables seem to have been codified as early as the 10th century.9 Within the tables Shao correlated the four tones of Chinese (level 平, rising 上, falling 去, and entering 入) with the sun, moon, stars, and celestial bodies (日月星辰).10 In addition he correlated four categories of consonant-vowel combination with water, fire, wood, and stone (水火木石). In his tables, Shao defined 160 possible syllable finals and 192 possible initials.11 To obtain these numbers, Shao created 12 categories of initial, within which each had two sets of voiceless (清) and voiced (濁) initials.12 Multiplying these initials by the above-mentioned four divisions yields 192 (12 x 2 x 2 x 4). He further created 10 categories of final, within which each had two sets of labialized (薦) and non-labialized (闌) finals.13 Multiplying these finals by the four tones yields

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10 Traditional analyses of Chinese phonology, dating back to the 5th century, identified four tonal categories, the first three characterized by a tonal contour, and the final ‘entering’ tone by its ending in a stop consonant ([p], [t], or [k]).

11 Recall from the Introduction that the structure of the Chinese syllable is an (optional) initial, composed of a consonant, combined with a final. The final is composed of a vowel, occasionally followed by a consonant. The final may also contain a medial vowel, comprised of a short vowel sound, located between the initial and the main vowel. For example, the syllable jiang, is comprised of the initial j- combined with the final -iang, itself made up of the medial vowel -i, the main vowel -a, and the consonant -ng.

12 Here voicing refers to the presence or absence of aspiration, as evident in the difference between Eng. ‘pit’ (unvoiced) and ‘bit’ (voiced), or ‘tent’ (unvoiced) and ‘dent’ (voiced).

13 In Middle Chinese phonology, labialization refers to the presence of the medial vowel [u] in the final.
160 (10 x 2 x 2 x 4). He arrived at the numbers 10 and 12 for categorizing initials and finals not from observation, but rather from the calendrical concept of 10 heavenly stems and 12 earthly branches. The process of “call and response” (唱和) referred to in the title of the tables was the combination of initials and finals, generating a theoretical 30,720 syllables (192 initials x 160 finals).

The attitude of modern linguists to Shao’s tables is varied. Some see it as of solely cosmological significance, and of little use for the purposes of linguistic analysis. Li Xinkui and Mai Yun, in their history of phonological texts in China, have written that “Shao was not fundamentally a phonologist, and was simply using phonology to prove his cosmology.” Lin Tao argues that even though Shao’s work resembles a rhyme table, he was solely concerned with expounding the relationship of heaven and earth, *yin* and *yang*. In a similar vein, Alain Arrault has claimed that “the purpose of his phonological analysis is not to develop a rhyme dictionary…but to give an exhaustive reporting on all sounds possible.”

However, as early as Zhou Zumo’s pioneering work on Shao Yong’s phonology from 1942 there has been another flourishing strain of linguistic scholarship that attempts to describe the nature of central plains Chinese phonology in the Song dynasty based on Shao’s tables. For a more in-depth analysis of this process, see Alain Arrault, “Numerical Speculations of Shao Yong,” *Monumenta Serica* 61.1 (2013): 183–201.


17 Alain Arrault, “Numerical Speculations of Shao Yong,” p. 195

18 Zhou Zumo 周祖謨, “Songdai Bian Luo yuyin kao” 宋代汴洛語音考, in *Wenxue ji* 閒學集, 2 vols. (Beijing: Zhonghua shuju, 1966), v. 2, pp. 581–655. For research that pursues this approach in taking Shao’s tables as a legitimate tool for research into Song dynasty pronunciation, see also
Zhou, the greatest evidence in support of the linguistic accuracy of Shao’s table was that it could largely be corroborated in the rhymes Shao and others actually used in poetry. Subsequently, a number of scholars have pointed out the possible flaws in this logic. Hirata Shōji is, I believe, the most circumspect, in describing the work as of primarily cosmological significance, but one in which to some degree Shao was unable to entirely escape the phonological structure of the language he was familiar with.

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Edwin G. Pulleyblank, *Middle Chinese: A Study in Historical Phonology* (Vancouver: University of British Columbia Press, 1984); Zhu Jianing 竹家寧, “Lun Huangji jingshi shengyin changhe tu zhi yunmu xitong” 論皇極經世聲音和圖之韻母系統, in *Jindaiyin lunji* 近代音論集 (Taipei: Taiwan xuesheng shuju, 1994), pp. 139–58, and Hirayama Hisao 平山久雄, “Shō Yō ‘Kōkyoku keisei seion shōwa zu’ no on’in taikei” 邵雍『皇極經世聲音唱和図』の音韻体系, Tōyō bunka kenkyūjō kiyō 120 (1993): 49–107. Tōdō Akiyasu has argued that Shao’s table is emblematic of Song learning 末學 in that just as Song commentaries rejected the former commentary-subcommentary tradition, so too did Shao reject the Qieyun tradition in favor of reflecting an actual spoken language (see his Chūgokugo on’in ron 中国語音韻論 [Tōkyō: Kōnan shoin 江南書院, 1957], p. 116). Richard VanNess Simmons argues that a few key features of Shao Yong’s dialect can be inferred from the tables: 1) obstruents (濁) in the level tone formed a category of their own, 2) sonorants (次濁) were categorized as qing (清) in the rising tone (上) and zhōu (濁) for all other tones, and 3) qing and zhōu groups were distinct in syllables belonging to the departing (去) or entering (入) tones. See his *Chinese Dialect Classification: A comparative approach to Harngjou, Old Jintarn, and Common Northern Wu* (Amsterdam: John Benjamins, 1999), pp. 11–14.


20 Hirata Shōji, “‘Huangji jingshi shengyin changhe tu’ yu ‘Qieyun zhizhang tu’ — shi lun yuyan shenmi sixiang dui Songdai dengyunxue de yingxiang,” p. 200 In this section, Hirata also cites Korean linguist Yu Ch’ang-gyun in support of this appraisal. Zhao Yingtang 鄭養棠, *Dengyun yuanliu* 等韻源流 (Beijing: Shangwu yinshu guan, 2011 [reprint]),
More telling than debates over whether Shao’s tables adhered to an actual spoken language is the way Shao wrote about and structured his own tables. Later Chinese rhyme tables frequently included blank spaces when the author could not find a Chinese character that matched the phonological description for a particular position in the table. Shao was remarkably different in that he prescribed a precise number for how many phonological positions in his tables should contain no character, based on cosmological principles. Shao categorized such positions as initials or finals he believed to exist in Chinese, but which could not be written with a Chinese character (youyin wuzi 有音無字 or yousheng wuzi 有聲無字), and even sounds that he claimed were theoretically possible, but did not exist in spoken language (wuyin wuzi 無音無字 or wusheng wuzi 無聲無字). According to Shao’s calculations, there should be exactly 48 (out of 160) finals with no corresponding character, and 40 (out of 192) initials with no corresponding character. He arrived at the number 48 by multiplying 4 (the number of tones for finals) by 12 (the number of earthly branches), which Shao associated with initials. He arrived at the number 40 by multiplying 4 (the number of consonant-vowel combinations for each initial in his system) by 10, the number of heavenly branches, which Shao associated with finals. The remaining characters which could be notated with Chinese characters, namely 112 finals and 152 initials, represent what Shao referred to as “functional finals” (用聲) and “functional initials” (用音), that is to say linguistic sounds that he believed should exist in spoken language. Shao designated the 48 finals and 40 initials which could not be notated as their “substantial” (體)

p. 100. As noted above, Lu Zhiwei also argues that Shao’s tables are intended for numerology, but agrees with other linguists who claim that they are useful in an important sense above other phonological studies from Tang and Song in seemingly recording a vernacular, rather than reconstruction of ancient pronunciation. See Lu Zhiwei 陸志韋, “Ji Shao Yong Huangji jingshi de ‘Tiansheng diyin’ 記邵雍皇極經世的‘天聲地音’”, Yanjing xuebao 31 (1946): 71–80.
counterparts, sounds which theoretically could exist. Shao’s calculations were not based on a sense of linguistic reality, but instead on his conception of the cosmological processes underlying all things in the universe.

Additionally, at no point did Shao make any claim about describing language, or even the relevance of his project to any phonological concerns. As is written, most likely by a student of Shao’s, in “Shengyin changhe wanwu tongshu” [聲音唱和萬物通數 The harmony of finals and initials, the comprehensive number of the myriad things], a chapter in the Guanwu waipian, “it must be that by investigating pitches, the number [governing] living things can be known” (蓋考律而生物之數可知矣). Shao’s numeric phonological scheme was clearly intended to be taken in the same light as the numbers throughout the rest of the Huangji jingshi shu. In Shao’s view, the universe operates according to knowable principles that change according to a numerical process. As Shao’s son, and great interpreter, Shao Bowen 邵伯溫 (1057-1134) wrote, “we exhaustively explore finals, initials, and musical harmonics in order to exhaustively explore the numbers of the myriad things” (窮聲音律呂以窮萬物之數). By demonstrating that these numerical processes apply to language as well, Shao had provided another example of his theory in action.

Based on the structure of the tables, as well as Shao’s description of his own work, I hold that Shao Yong did not see himself as a phonologist, nor did he intend his work to contribute to

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21 Shao Yong 邵雍, Huangji jingshi shu 皇極經世書, ed. Wei Shaosheng 衛紹生 (Zhengzhou: Zhongzhou guji chubanshe, 1993), p. 401. The authorship of the waipian is debated. It is often considered to be the writing of Shao Yong’s students passing on Shao’s lectures. In any case, it was part of Shao’s legacy for later generations.

22 Shao Yong, Huangji jingshi, ed. Li Yixin 李一忻 and Wang Congxin 王从心 (Beijing: Jiuzhou chubanshe, 2003), j. 50, p. 341.
the field of philological scholarship. Rather it was purely another demonstration of how the numerical system underlying all phenomena was consistent. While the present-day historical phonologist may be able to carefully analyze Shao’s tables for traces of description, Shao himself, in his extensive discussion of the tables, made no claim for recording any actual language. Instead, he claimed he was revealing both “the comprehensive number of the four images” (四象通數) and “the comprehensive number of moving and growing things” (動植通數).

Ming scholars saw Shao Yong as a seminal figure in the realm of phonological scholarship, but felt it necessary to adapt his work in a way that would speak to the issues of the field as they saw them. This focus on Shao was not passive inheritance of a tradition, but a reenvisioning of how scholarship should work, based on the recovered methods of a neglected Song scholar. Ming scholars felt that Shao’s method had something to offer for contemporary linguistic debates, but were for the most part unwilling to adopt it wholesale without making considerable adjustments. As I will show below, some attempted to modify Shao’s scholarship to fit more neatly into the standard phonological tradition. Others expanded the cosmological content of his approach in an attempt to comprehensively account for all possible sounds. For Ming scholars, cosmological theory governed by numerical processes (shu 數) provided a method for accessing unobservable aspects of language in the present and antiquity. Their work was intended not so much to tell us how the world works as to improve flaws in the scholarly tradition by looking to natural patterns and universal constants.

Shao Yong’s Scholarship and the Ming Search for Comprehensive Knowledge

23 Shao Yong, Huangji jingshi shu, p. 184
In the following section, I look at phonological studies from late Ming by five scholars: Qiao Zhonghe 喬中和 (fl. 1611), Wu Jishi 吳繼仕 (fl. 1611), Ge Zhongxuan 葛中選 (1577–1636), Yuan Zirang 袁子讓 (jinshi 1601), and Chen Jinmo 陳簡謨 (c. 1600–1692). I argue that such texts were concerned with developing a new way to comprehensively describe sound based on the methods of Shao Yong. As opposed to Shao, they saw their scholarship as benefiting the field of phonological scholarship, and as containing functional applications for composition and recitation.

Qiao Zhonghe and the Universal Applicability of Cosmology

Qiao Zhonghe 喬中和 (zi Huanyi 還一) of Neiqiu 内丘 in present-day Hebei, attained “plucked” tribute student 拔貢生 status sometime during the Chongzhen reign (1627–1644) and subsequently served as Assistant Prefect 通判 of Taiyuan 太原, Shanxi province. He gained a formidable scholarly reputation that earned him several recommendations for promotion from jinshi-holding high officials.24 Although his official career did not take off thereafter, he composed a number of influential scholarly works. Several are concerned with the Yijing, while others comment on the Four Books [四書] and the Book of Poems [詩經]. The cosmological nature of his rhyme book, the Yuanyun pu [元韻譜 Table of primordial rhymes], can be understood in light of Qiao’s fascination with Yijing, the fountainhead of cosmological thought for late imperial scholars. To Qing editors of the Siku quanshu his phonological study was “seemingly investigating profundities to the utmost, but in actuality simply employing vulgar

24 Qiao Zhonghe 喬中和, Xiguo caotang hekan 西郭草堂合刊 (1879), Fan shu, pp. 1a–3a, Han shu, pp. 1a–2b, and Li shu, pp. 1a–2b.
[colloquial] sounds” (似乎窮極要眇。而實則純用俗音). However, Qiao was in fact a scholar with a complicated relation to both the cosmological and phonological tradition. As opposed to Shao Yong, who had used phonology as a tool to reveal underlying universal processes, Qiao Zhonghe employed cosmological methods to construct what was in his view a more reliable phonological description of Chinese.

A 1610 preface to the *Yuanyun pu* by one Cui Shuren 崔數仞 recounts Cui’s discussions and interactions with Qiao over the course of the work’s composition. Their reflections on the relevance of Shao Yong’s theories to phonological study are informative. Cui reportedly collaborated with Qiao on the composition of this text, originally titled *Wusheng yun gao* [五聲韻稿 Draft on rhymes in five tones], and Qiao ultimately revised the work 12 times in consultation with Cui. Unfortunately, without earlier manuscript evidence, we cannot trace the changes Qiao made over the course of editing the work. We can however sense a certain difference of opinion between Cui and Qiao based on the prefaces, which in turn helps us understand Qiao’s actual intentions in composing this work. Cui claims to have been disappointed with the state of phonological research as represented by the rhyme tables of Sima Guang 司馬光 of the Song and Liu Jian 劉鑑 of the Yuan. However, he subsequently read Shao Yong’s work: “because it discussed the essence of heavenly sounds [Shao’s terminology for syllable finals] and earthly tones [initials], I came to the new realization that characters have five

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25 Wei Xiaohu 魏小虎, ed., *Siku quanshu zongmu huiding* 四庫全書總目彙訂 (Shanghai: Shanghai guji chubanshe, 2012), p. 1412. Similarly, of his lectures on the *Four Books* which were based on *Yijing* trigrams and the Five Phases, the Qing editors wrote “they are all meaningless and forced interpretations” (皆穿鑿無理), p. 1146.

tones, like the heavens have five phases, the earth five directions, and people five constancies” (既論天聲地音之旨，別悟字有五聲，如天之有五行，地之有五方，人之有五常也). 27 Cui was not describing Shao’s actual tables, which in fact follow a four tone system. 28 Nevertheless, he was persuaded of the validity of Shao’s approach by its claim that phonology could be correlated with natural phenomena.

Qiao on the other hand seems to have had a somewhat less positive view of Shao’s merits. In his own preface, Qiao wrote: “in the past, Master Shao divided up the sun, moon, stars, celestial bodies, and water, fire, earth, and stone with ten finals and twelve initials to sing together in chorus. His effort was assiduous yet too forced” (昔邵子以十聲十二音，分日月星辰水火土石相唱和，用力精苦矣，而未免牽合). 29 In other words, for Qiao, Shao’s work represented an important yet flawed part of the phonological tradition. In particular, Shao’s overreliance on cosmological theory negatively affected the validity of his phonological discussions. Both Cui’s and Qiao’s prefaces juxtaposed Shao’s name with those from the standard rhyme table tradition, which further signals their vision of Shao as a phonologist with little concern for his greater theory of the numerical basis of everything in the universe.

Qiao believed that his system surpassed Shao Yong’s and yielded a greater number of possible sounds. In so doing, his method “exhaustively investigated the beginnings and ends of heaven and earth, while the transformations of inhalations and exhalations, and the sounds of all

27 Yuanyun pu, Cui xu, p. 5a–5b.

28 Here he may have been trying to find an origin for Qiao’s tables, which were based on a principle of five tones.

29 Yuanyun pu, Qiao xu, p. 23a–23b. Wang Yangming once similarly argued that Zhu Xi was ‘too forced’ (未免牽合附會) in his explanation of ‘investigating things’. The implication is of seeing things that are not really there. Wang Yangming 王陽明, Chuanxi lu 傳習錄, Deng Aimin 鄧艾民, ed. (Jilong: Fayan chubanshe, 2000), p. 30.
things in the universe are complete in this” (窮天地之終始始，而呼吸變化、萬彙之響盡此矣). Qiao constructed a set of rhyme tables and phonological concepts informed by cosmological phenomena. He defined 12 rhyme groups (as opposed to 16 in the standard rhyme table tradition) to reflect the 12 pitches of the Chinese musical scale, often invoked in the cosmological tradition. He further asserted there to be 19 initials (as opposed to 36 in the standard tradition) to reflect the combined numbers of heaven (9) and earth (10), as elaborated in the Yijing. The prefatory and paratextual material preceding the tables are likewise steeped in the cosmological language of Five Phases theory and the Yijing, as well as calendrical and musicological terminology.

Like Shao Yong, Qiao was fascinated with the total number of possible sounds in the universe, and adhered to cosmologically significant numbers and terms to structure his phonological system. Although couched in the language of the Yijing, Qiao nevertheless differed from the stiffly mechanical nature of Shao. Shao’s interest was only in correspondences and he was not concerned with accounting for any discrepancy between linguistic observation and his system. Qiao, on the other hand, seemed to acknowledge that he also had a duty to account for certain observable features of Chinese phonology. Therefore, although Qiao’s system nominally contained only 19 initials in order to fit the combined numbers of heaven and earth, Qiao occasionally inserted extra initials, in order to account for the discrepancy between the system and a sense of linguistic reality. Similarly, although the 19 initials multiplied by the 4 designations of medial vowel should yield 76 initial-medial combinations, he chose instead to limit the number to 72 because 4 combinations would have no corresponding characters. This would not be an issue for Shao Yong who justified the inclusion of sounds that could not be

30 Yuanyun pu, shimu, p. 39b.
notated as substantial (體), rather than functional (用) sounds. At the same time, Qiao was also able to justify his choice cosmologically, by highlighting the importance of the number 72 in the lunar calendar.\(^{31}\)

Where Qiao Zhonghe and Shao Yong appear to diverge even more clearly is in their relationship to a scholarly tradition. Importantly, Qiao related his phonological study to a historical and contemporary discipline of phonological scholarship, positioning himself as inheriting its best aspects and correcting faults. For example, in his “Explanation of Voiced and Unvoiced Sounds” (Qingzhuo shi 清濁釋), Qiao defended his claim for a tripartite, rather than four-way, voicing distinction by arguing: “This is not my prejudiced opinion. Lan Tingxiu’s ‘early plum’ and Yang Sheng’an’s Original glosses also formerly were the same” (此非我臆也，蘭廷秀之早梅，楊升庵之原訓，亦已先得同然矣).\(^ {32}\) Lan Mao 蘭茂 (zi Tingxiu, 1397-1470) was an earlier Ming scholar from Yunnan who wrote the Yunlüe yitong 韻略易通. This text includes the ‘Early Plum’ poem (早梅詩), which consists of 20 characters representing the set of initials in his phonological system. Yang Shen 楊慎 (zi Sheng’an, 1488-1559) was one of the most famous philological scholars of Ming times, who also spent much of his life in Yunnan (having been banished during the Great Ritual Crisis in 1524). Lan Mao and Yang Shen were considered by contemporary scholars to be members of standard phonological tradition. Qiao apparently took them as authorities who could support his own phonological claims. Hence, even

\(^{31}\) Linguists, however, have argued that other aspects of his rhyme table are divorced from any actual contemporary linguistic phenomenon, and simply represent Qiao’s desire to fit sounds into a model. See Wang Yinfeng 汪银峰, “‘Yuanyun pu’ yanjiu” “《元韵谱》研究” (Thesis. Jilin University, 2004), p. 15.

\(^{32}\) Yuanyun pu, shimu, p. 36a. Original glosses refers to the work [韻林原訓 Original glosses from the forest of rhymes] by Yang Shen.
if cosmology should be able to account for linguistic phenomena, Qiao felt the necessity to bolster his claims with evidence from specialists. Alternatively, this could be interpreted as a demonstration of the fact that cosmologically-determined categories could be corroborated by the work of more traditional scholars, even when they did not use these methods. In either case, it shows a much more direct association with the discipline of phonology than Shao Yong demonstrated.

At the same time, Qiao also used these scholars as a foil against which to demonstrate the improvements of his system. Hence, in another section, Qiao criticized Yang Shen for merely following in the footsteps of Wu Yu 吳棫 (1100~1154), a Song dynasty phonologist who studied rhyming in the *Shijing*. 33 Relating to the tradition of phonological scholarship was an essential part of Qiao’s own work; it allowed him to corroborate his findings, as well as to demonstrate why his approach was more valid within this specific field.

Ming scholars such as Qiao Zhonghe commonly adapted cosmological theory to answer questions within a specialized field. I interpret this differently from those who argue that the particular discipline loses relevance to the demonstration of the theory in action (as was the case, I believe, for Shao Yong). 34 In the case of phonology, scholars who adopted this methodology were responding to a problem specific to the discipline. For instance, Qiao devised a system of tonal categorization to replace a formerly influential one contained in Zhou Deqing’s 周德清 (1277–1365) *Zhongyuan yinyun* [中原音韻], a text which will be discussed at greater length in

33 *Yuanyun pu, shimu*, p. 35a. In the preface, Qiao also criticized aspects of Lan Mao’s ‘Early Plum Poem.’ See *Yuanyun pu, Qiao xu*, pp. 23b–24a.

Chapter 6. For the moment, it will suffice to note that Zhongyuan yinyun represented one of the most significant steps in post-Song phonological analysis by redistributing the entering tone among the other three tones because it had already disappeared from the standard northern language. It also was the first work to divide the traditional ping (level tone) into yinping and yangping, based on the voicing of the initial. Therein lay the problem for Qiao. Zhou’s system was not coherent in his view since it assigned yin and yang to only one of four tones. Qiao argued instead that a clearer system, which was also cosmologically relatable, would view all tones as part of an yin and yang system.\(^35\) To accomplish this, he maintained Zhou’s division of the level tone into two, but further categorized the rising tone as yin and the falling tone as yang, with the ru entering tone representing the transition from yin to yang, to create a total of five tones. In other sections of the paratextual material, Qiao asserted that five was the proper number of tones to correspond with the Five Phases (五行) and Five Pitches (五音).\(^36\) As with other aspects of Qiao’s tables, it is quite possible that in this case Qiao in fact attempted first to describe the phonology of a variety of Chinese, and only then ascribed cosmological significance. A five-part tonal division was reflected both in the contemporary Nanjing koiné and in some northern topolects.\(^37\) Qiao further argued that his categorizations should be self-evident on the

\(^{35}\) Yuanyun pu, shimu, p. 31b. Modern linguistic scholarship still divides tones into yin and yang in a sense totally devoid of any cosmological meaning (much like what were originally heavenly stems 甲乙丙丁 now function neutrally as a, b, c, d). This division clearly had more implications in Qiao’s time, as we can see that his description of the entering tone is tied to the notion of yin transforming into yang at its peak.

\(^{36}\) Yuanyun pu, shimu, p. 27a.

basis of actual speech (試以口呼之，人人自解). In any case, we again see that Qiao was concerned with the application of his methodology to the specific field of phonology. He claimed his designations were reflected in spoken language, and also conform to an overall pattern.

While we might look at Qiao’s conception of language as artificial, he believed he was correcting the inconsistencies in the earlier phonological tradition. Qiao was a theorist, but if he were to sell his theory effectively to another field, he would have to demonstrate that it responded to and acknowledged the history of that discipline. In perhaps a subtle criticism of Shao Yong, Qiao added that “The transformations [of yin and yang tones] cannot be investigated by number, but can all be examined through coherent principle” (幻化不可以數詮而咸可以理究). For Qiao, the persuasive power of number (數), which governed Shao Yong’s universal system, had to be modified on the basis of philological reasoning.

Qiao was fascinated with cosmological theory and wrote several works directed at explaining the Yijing, as well as a discussion of the Four Books within a Five Phases framework. One may therefore be inclined to make the argument that, like Shao Yong, Qiao Zhonghe was primarily a theoretician. However, based on the contents of the rhyme book itself, we cannot place Qiao so easily into the category of cosmological theorist (rather than specialist) as we can with Shao. Throughout the rhyme table, Qiao related his work to a phonological tradition. Shao

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38 Yuanyun pu, shimu, p. 31b.

39 Another possible intention, although not one that Qiao himself addresses, is accessibility. According to Qiao’s son Bo’s 聰 (b. 1605) description of the work, the Yuanyun pu was “simple and natural, clear and understandable” in such a fashion that “women and children would all understand rhymes” (簡易自然，明白通曉，以是閨閣兒女無不知讀). These may well be platitudes, but such an intention is not inconceivable, given Qiao’s distaste for inconsistent systems. Qiao Zhonghe 喬中和, Shuo Yi 說易, SKQS CMCS (Chongzhen era (1627–1644) edition), xiaoji, p. 1a.

40 Yuanyun pu, shimu, p. 31b.
Yong would argue that he had found in phonology another demonstration of why his theory of the way the universe works was correct. But Qiao was in some sense arguing that by means of cosmological theory (which could be applied to many things), he had created a more accurate description of the nature of the Chinese language. Hence, one mission of Qiao’s was to replace Zhou Deqing’s system with a more coherent one.

Qiao’s criticism of Shao Yong, that he was “too forced,” is telling. Qiao seems to have felt that Shao Yong was correct to observe a relationship between the workings of the universe and phonology. But Shao’s attempt to fit everything into a single, mechanical system, was not going to accurately describe actual linguistic phenomena from Qiao’s perspective. In this sense, I think we can say that theory and description went hand in hand for Qiao. He wanted to demonstrate that thinking in terms of the Five Phases and cosmology could yield an improved framework for analyzing language. At the same time, he would modify his seemingly rigid system to incorporate phenomena that the numbers would not accommodate. He was not necessarily a phonological specialist, but he framed his project as one that would improve the state of phonological scholarship, unlike Shao whose goal was to shed light on the workings of the universe.

*Ge Zhongxuan and Wu Jishi: Cosmology as an Inartificial Standard*

Qiao Zhonghe saw certain parallels between language and music that informed the construction of his rhyme tables, including his five-part tonal system which mirrored the Five Pitches of the Chinese scale. Qiao’s contemporaries, Ge Zhongxuan 葛中選 (zi Jianyao 見堯, *hao* Danyuan 澹淵 1577–1636), and Wu Jishi 吳繼仕 (zi Gongxin 公信, *hao* Cangshuzi 蒼舒子 fl. 1611), devoted their scholarship to elaborating the argument in favor of this connection, as I
discuss in Chapter 4. Scholars such as Wu and Ge in fact drew these theoretical connections between music, number, and phonology under the inspiration of Shao Yong. Cosmology played a formative role in the development of music theory in antiquity. While medieval scholars had established links between music and language, Shao combined the disparate associations of cosmology, music, and language into a single system.\(^{41}\) Like Qiao Zhonghe, Wu Jishi and Ge Zhongxuan saw their work as benefitting and complementing the existing discipline of phonology. Although their scholarship is often identified as representing primarily an interest in cosmology and exposing universal processes, I argue that they were concerned with issues of application to the pressing concerns of contemporary philologists. Frustrated by the limitations of earlier methods, Wu and Ge turned to cosmology to create a more comprehensive description of sound.

Wu Jishi of Xiuning in Anhui province appears to have held a low level official position for a short period before abandoning officialdom for a life of scholarship.\(^{42}\) In addition to his phonological and musical study, the *Yinsheng jiyuan* [音聲紀元 A record of the origins of sounds, prefaced 1611], Wu wrote several works on the *Yijing* and edited a compilation of earlier diagrams explaining several of the Classics. His scholarship attracted the attention of some of the great minds of his time. Jiao Hong (1540–1620), a high official and prolific scholar, provided prefaces for several of Wu’s works, including *Yinsheng jiyuan* (1611 preface), and the Fushe (復社 Restoration Society) leader Wu Yingji (1594–1645) prefaced another of his

\(^{41}\) Recall that Shao Yong associated phonological terms with musical pitches, specifically the initials with *lü* 立 and finals with *lü* 呂.

extant works.

One primary claim Wu made, and one that we see among many of his contemporaries, is that a cosmological approach allowed for the study of sound in a more general way than focus on a particular dialect or standard of Chinese would permit. Wu argued that, "as to the differentiation among sounds southern, northern, eastern, and western, this is all simply a matter of humans, and is not the heavenly disposition of heaven" (至如聲有南北東西之殊，此皆人耳，非天之天也). By avoiding a particular regional standard, he believed that his rhyme tables allowed for “even [the sounds of] insects, birds, and beasts to all be included in these initials and finals” (雖昆蟲鳥獸，總不出此音聲之外). As Wu noted, “northerners are clear with regard to initials and muddled when it comes to finals” (北人明于音而溷于聲), and vice versa for southerners. By removing his system from subjective description based on his own dialect or a standard koiné, Wu was claiming to create a comprehensive index of sounds. In his view, aligning his study with perceived natural phenomena, also removed the artificiality and errors brought about by a manmade system.

In an effort to account for sounds in a more general sense, Wu turned to Shao Yong who “was the only one since farthest antiquity with exceptional understanding” (千古之下，惟邵子有獨詮之識). Wu argued that even Cang Jie himself, the legendary creator of Chinese

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43 Wu Jishi 周繼仕, *Yinsheng jiyuan 音聲紀元*, SKQS CMCS (ca. 1611 edition) [hereafter *Yinsheng jiyuan*], *xu*, p. 2b.

44 *Yinsheng jiyuan*, j.1, p. 1b.

45 *Yinsheng jiyuan*, j. 1, p. 14a We still see this today in the way that southern topolects of Chinese preserve the rhymes of Middle Chinese to a much greater extent than northern ones.

46 *Yinsheng jiyuan, xu*, p. 1b.

characters, had been unable to assign characters to every meaningful sound. This claim that characters in themselves were insufficient to represent all existing sounds allowed Wu to argue the superiority of his sound-based approach.\(^{48}\) His system was more elaborate than Shao’s (although he claimed it was simpler), and correlated each of the 24 solar terms (節氣) of the lunar calendar with a final (which Wu referred to as 淮) and each of the 5 pitches of the pentatonic scale (五音) with a set of initials (which Wu referred to as 盛).

Each of these phonological categorizations had further cosmological justification. For instance, in his first rhyme group (-uan), associated with the first solar term Lichun (立春 ‘the beginning of spring’), Wu claimed that “its qi is located in Gen in the second pentad of the tiao wind.\(^{49}\) Its qi is warm and cold. Its qi seems dense and undispersed, and even when it emerges it does not do so completely. Thus its original rhyme is something like 转. It must be that it is the sound of being rolled up (juan) and unopened” (其氣在艮，乃條風之中候，其氣溫寒，氣猶鬱而未散，氣雖出而猶未遂，故其音元有類於涓卷吝決，蓋卷而未舒之音也).\(^{50}\) For Wu, the quality of the sound is affected by constant properties of the universe, as represented here by geomantic theories. As Wu later explained, “the wind arrives and the pitch follows” (蓋風至而

\(^{48}\) 既無其字，吾不得而悉字之，邵子不得而悉字之，蒼顔亦不得而悉字之也，而其聲與音終不忘也. *Yinsheng jiyuan*, j. 1, p. 22a. Here he is more or less copying a mid-Ming argument by Sang Yue 桑悅 (1447-1513) in a 1476 preface to an important mid-Ming rhymebook. See Zhang Fu 章黼, *Xinbian bingyin liansheng yunxue jicheng* 新編音律聲韻學集成 (1581 edition, held at Harvard-Yenching Library), Sang xu, p. 6a–6b.

\(^{49}\) The Gen trigram from the *Yijing* was associated with the direction northeast, and also bears an association with the Lichun solar term. The tiao wind (one of eight winds from Han cosmology which represented the 8 cardinal and ordinal directions) is also associated with the direction northeast and Lichun. Each of the 24 solar periods is further divided into 3 pentads (hou).

\(^{50}\) *Yinsheng jiyuan*, j. 1, p. 2a.
In this case, he derived the syllable *juan* for this particular rhyme group because it was homophonous with his characterization of that solar period’s *qi* as contained or rolled-up (*juan*). In his words, his work was “exhausting the fixed number of sounds according to the natural origins of heaven and earth” (因天地自然之元，盡音聲一定之數). For Wu there was a finite number of sounds, and this was paralleled by and measurable according to the natural correlates to sound (winds, solar terms, harmonics, etc.). His rhyme tables were hence structured around cosmological, geomantic and musical principles, the logic of which seems to have been as difficult to understand in the Qianlong period as it is today.

Wu’s rhyme tables were surrounded by the cosmological and musicological terminology that permeated his theoretical descriptions. Nevertheless, the overall format is similar enough to a standard rhyme table for their meaning to be generally intelligible even to the contemporary scholar. The first set of tables, entitled “Ershisi qi yinsheng fenyun qianpubiao” [二四氣音聲分韻前譜表 Twenty four solar terms table of finals and initials divided by rhyme], is organized according to rhyme or final. For this set of tables, he created 24 rhyme groups to match the 24 solar periods of the lunar calendar. Within each rhyme table, he listed his set of 66 initials (a number derived from a multiplication of the 5 pitches in the Chinese scale with the 12 harmonics, with the addition of 6 extra pitches), arranged by place of articulation. The characters

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51 *Yinsheng jiyuan*, j. 1, p. 5b.
52 *Yinsheng jiyuan*, xu, p. 2a.
53 Although the *Siku quanshu zongmu tiyao* editors acknowledged that many of his correlations have solid classical precedents, they found Wu to err in his acceptance of the Ming music theorist Li Wenli’s (李文利 whom Wu cites throughout *Yinsheng jiyuan*) perversion of harmonic theory. Hence, they conclude “we do not see how it would be permissible to examine sounds with this [work]” (以是審音，未睹其可). Wei Xiaohu, ed., *Siku quanshu zongmu huiding*, p. 1405.
listed in the table were placed under each initial (representing the combination of that initial with the given rhyme), and further ordered according to the four tones. For instance, in his fourth (of 24) rhyme group, -i, under the initial n-, for instance, Wu lists the following four characters: ni 尼, nii 你, nih 膩, and niec 湿. That is, the combination of the initial of n- plus the final -i in the four tones.

Most interestingly, Wu seems to have been familiar with the Latin alphabet and occasionally inserted such characters into his tables when there did not exist an appropriate Chinese character (Figure 1.1).

Figure 1.1: Latin letters in Wu Jishi’s rhyme tables.

It is unclear how Wu would have learned the Latin alphabet, given the 1611 publications of his text. Matteo Ricci’s Xizi qiji [西字奇迹 The miracle of western characters] had been circulating since 1605. However, it is unlikely that he would have been able to learn the script on his own

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54 *Yinsheng jiyuan*, j. 2, p. 10a, 10b.

55 Three of the original four passages were transcribed and published by Cheng Dayue 程大約 (c. 1541–1616), a manufacturer of ink cakes. See Cheng Dayue 程大約, *Cheng shi moyuan 程氏墨苑*, SKQS CMCS (Wanli era (1572–1620) edition), j. 6 *xia*, pp. 35a – 43b. For the marketable dimensions of this inclusion, see Craig Clunas, *Pictures and Visuality in Early Modern China* (Princeton, NJ: Princeton University Press, 1997), pp. 93–94. As Chen Shiyuan has observed,
from these few biblical stories transcribed in a Romanization. Moreover, Wu’s attempts at the Latin letters are upper case, rather than the lower case introduced in *Xizi qiji*. The considerably more influential *Xiru ermuzi* [西儒耳目資 An aid to the eyes and ears of scholars from the West] compiled by Nicolas Trigault 金尼閣 (1577–1628) was only printed in 1626 by (Philip) Wang Zheng 王徵 (1571–1644). This work too Romanized characters in lower case Latin letters. Wu associated with scholars such as Jiao Hong 焦竑 (1540–1620), who did have recorded interactions with Matteo Ricci. It is therefore conceivable that he received personal instruction from a Jesuit teacher. Ultimately, it is uncertain the degree to which Wu understood western languages and the use of an alphabet, given his haphazard use of Latin letters. Nevertheless, his attempt to involve alphabetical scripts in phonological research speaks to his belief that the role of the phonologist was to document all possible sounds, regardless of their appearance in a specific language, and most importantly not limited by a particular script.

Wu’s second set of tables was in fact based on an earlier and very influential Yuan rhyme table from the mainstream phonological tradition. Wu’s tables differed from this rhyme table by these texts enjoyed another life in a work by the late Ming publisher Wang Tingne. Evidently, Wang removed the Chinese characters from the text in Cheng’s collection and rearranged the Romanized text to make it appear as if Matteo Ricci had composed a poem for him. See Chen Yuan 陳垣, “Ba Mingji zhi Ouhua meishu ji luoma zhuoyin” 跋明季之歐化美術及羅馬注音, in *Chen Yuan shixue lunzhu xuan* 陳垣史學論著選, ed. Chen Lesu 陳樂素 and Chen Zhichao 陳智超 (Taipei: Muduo chubanshe, 1982), p. 236.

56 This is in fact the first instance of capital Latin letters I have encountered in a Chinese text, or European text written for a Chinese audience. The Portuguese-Chinese dictionary compiled as a draft manuscript by Michele Ruggieri (1543–1607) and Matteo Ricci, probably in the 1580s, does contain uppercase letters. There may have been a Chinese-Portuguese dictionary, as well. See Paul Fu-Mien Yang, “The Portuguese-Chinese Dictionary of Michele Ruggieri and Matteo Ricci: An Historical and Linguistic Introduction,” in *Dicionário Português-Chinês: Michele Ruggieri (1543-1607) & Matteo Ricci (1552-1610)*, ed. John W. Witek (Lisbon: Instituto Português do Oriente, 2001), pp. 185–186.

57 See for instance the use of Latin letters in *Yinsheng jiyuan*, j. 2, p. 16a.
virtue of his adherence to cosmological principles. Specifically, he attempted to squeeze the contents of the earlier rhymebook, arranged according to the traditional 16 rhyme categories (she 撚), into only 12, justified by his belief that rhyme should be compatible with the 12 harmonic pitches of the Chinese scale.\footnote{58}

This combination of the seemingly unrelated elements of music, cosmology, and phonology has led various scholars to either criticize the work’s insufficiency as a linguistic record, or to see its primary purpose as actually expounding universal principles.\footnote{59} However, in my reading of the work, Wu Jishi was a scholar who shared characteristics with many of his contemporaries, even among the more traditional textually oriented philological scholars. It is true he made claims that “with [the tables] one may regulate astronomical calculations and compose music, which comes close to their main purpose” (以之治曆制樂，庶乎其旨哉).\footnote{60} However, he also believed he was creating a system that would supplement and improve on existing phonological traditions, and therein be useful for functional application. Hence, he believed he was creating a simpler (簡易 or 易入) system than what existed in both traditional rhyme tables and Shao Yong’s work.\footnote{61} In addition, he indicated that despite the broader societal implications of his scholarship (through the transformative power of ritual and music), it would

\footnote{58} Wang Songmu, Mingdai dengyun zhi leixing ji qi kaizhan, p. 295.


\footnote{60} Yinsheng jiyuan, j. 1, p. 1b. By composing music, he is referring to a revival (復興) of the music of the Five Emperors and Three Kings of antiquity. See j. 4, p. 17a.

\footnote{61} Yinsheng jiyuan, j. 1, p. 10b; j. 4, p. 14a. In comparison to Shao Yong his system is indeed more transparent. However, it is neither as consistent or simple as most standard rhyme tables.
also have functional benefits, such as “distinguishing dialect sounds, writing arias”, (辨方音，度歌曲) and “composing texts” (修詞).\(^{62}\)

What appeared to Qing and later scholars as abstruse theory was not necessarily conceived of by the author or his contemporaries in the same light. Jiao Hong’s preface, in addition to noting the work’s higher order implications, claimed that it would be useful for “providing glosses on the classics, correcting the text of the histories, editing the philosophers, and gathering the literary collections” (詮經、正史、訂子，叢集), and could therein compete with other works in the Ming philological tradition by scholars such as Zhao Huiqian 趙㧑謙 (1351–1395), Huang Jian 黃諌 (ca. 1412–1470), and Yang Shen 楊慎 (1488–1559).\(^{63}\) A preface to Wu’s Qijing tukao (七經圖考) by Fushe leader Wang Yingji claimed that Wu’s “Qijing tukao, Shengyin jiyuan [sic], and Sanli zhengding zhushu are all books to aid in understanding the Classics and illuminate the Way” (所著七經圖考、聲音紀元、三禮正定定疏，皆經明道之書).\(^{64}\) Wang here aligned Wu’s phonological scholarship with interpretations of and commentaries on the Classics. It would appear that both the author and other contemporary readers did not necessarily see a conflict between claims to be expounding principles of the universe and providing concrete benefits on the local level of a particular field. The purpose of the text therefore differed from Shao Yong’s, which was solely designed to explain the workings of the universe. Wu’s tables were ultimately intended to function as a phonological tool; that is to say, both as a theoretical description of language, and as a functional reference for

\(^{62}\) Yinsheng jiyuan, j. 4, p. 25a.

\(^{63}\) Wu Jishi, Liujing shimo yuanliu, p. 155.

\(^{64}\) Wu Jishi, Liujing shimo yuanliu, p. 137.
composition and recitation. Similar to other tools for literary composition, such as rhyme
dictionaries, Wu’s work was in part intended to serve as a reference for determining what words
rhyme together in a literary context.

Like other Ming thinkers, and in opposition to Shao Yong, Wu Jishi framed his work
within a disciplinary history. In his own words, “those who study rhymes should first be made to
understand the methods of each past scholar, then understand the applications of each, and the
merits and demerits of each” (為韻學者先使知古人各家作法，又使知各家用法，又知各家
得失). Wu clearly put this into practice himself as his own text made constant reference to
previous phonological scholarship, especially that of Shen Yue 沈約 (441–513) and Zheng Qiao
鄭樵 (1104–1162). Even more notably, he was well versed in the work of contemporary Ming
scholars, such as Wang Yingdian 王應電, Chen Shiyuan 陳士元 (1516–1597), and Li Deng 李
登. 66

Wu, a native southerner, was also opposed to the realization of northern phonology in
Zhou Deqing’s Zhongyuan yinyun. For Wu, when Zhou redistributed the ru entering-tone among
the other three tones (as discussed above with Qiao Zhonghe), he “had not created a universal
theory” (未為通方之論). 67 Perhaps more importantly, he had ignored the cosmological
principles that should inform a discussion of language. According to Qiao Zhonghe, it was
incoherent of Zhou Deqing to assign yin and yang only to the level tone and not the others. For
Wu Jishi, it was Zhou’s ignoring the importance of a cosmologically justifiable sequence. In his

65 Yinsheng jiyuan, j. 1, p. 12a.
66 Yinsheng jiyuan, j. 1, p. 20b; j. 4, p. 10b.
67 Yinsheng jiyuan, j. 1, p. 19b.
words, “in the principles of creation, since one cannot have spring, summer, autumn without winter, so sounds necessarily cannot have level, rising, falling, without entering” (夫造化之理，既不能有春夏秋而無冬，則聲音必不能有平上去而無人). 68 This attitude was shared by many Ming thinkers who saw the cosmological principles underlying linguistic sound as a stronger source of evidence than documentation of northern pronunciation. 69 As opposed to Shao Yong, scholars such as Qiao Zhonghe and Wu Jishi were not interested in demonstrating the power and fundamental underlying effect of numbers on all things. Instead, such assumptions underlay their attempts to create a coherent system for describing phonology in the fullest way possible.

While not every contemporary would necessarily embrace the fusion of music, cosmology, and phonology, their mutual relationship was a relatively common premise among Ming scholars. Ge Zhongxuan 葛中選 (zi Jianyao 見堯, hao Danyuan 澹淵), for instance, similarly theorized a cosmological union of music and language in an effort to go beyond the limits of human observation. Presumably fulfilling the hopes of his parents in naming him ‘Passed the Test,’ Ge earned a juren degree in 1600 in his home province of Yunnan. He subsequently held office as a local official in Jiayu 嘉魚 county, Huguang circuit, and later as Chief Minister of the Pasturage Office 苑馬寺. If his name was more broadly known, however, it was through the power of his scholarship. As Jiao Hong recounted in his 1618 preface to Ge’s magnum opus, the Tailü [泰律 Grand pitches], a number of prominent literary-intellectual

68 Yinsheng jiyuan, j. 4, p. 13b.
figures, including Dong Yingju 董應舉 (jinshi 1568) and Zhong Xing 鐘惺 (1574–1624) gathered in Nanjing to hear Ge expound his theories.\textsuperscript{70} Jiao Hong himself, although often praised today as a forerunner of evidential learning, clearly took interest in this style of scholarship given his prefaces to both Wu Jishi’s and Ge’s work. The musical aspects of Ge’s scholarship will be discussed, alongside Wu’s, in Chapter 4. Here I focus on his use of cosmology and reference to Shao Yong, in addition to his relation to the phonological tradition. As with Wu Jishi, and the other scholars in this chapter, Ge believed that number and cosmology added a degree of objectivity to his phonological scholarship.

Like Shao Yong, Ge Zhongxuan was not bothered by many blank spaces serving as placeholders for a syllable with no corresponding character in his rhyme tables. His concern was much more with sound than script, and, like Qiao Zhonghe, one of his theoretical interests was in the number of possible sounds. He believed there to be 16 possible categories of initial, one of which had no corresponding Chinese character. His first set of rhyme tables contained two columns for each of the 16 initial categories, one for the unvoiced initial and one for the voiced. Much like in a standard rhyme table, each column was divided into four wide rows (determining the medial vowel),\textsuperscript{71} within which there were the four divisions of tones. He further believed there to be 12 rhyme categories, based on the 12 pitches in the harmonic scale. For each of the 12 rhyme categories, he claimed there to be 512 possible sounds (16 initials \(\times\) 2 [voiced/unvoiced] \(\times\) 4 [rows] \(\times\) 4 [tones]), creating an overall 6,144 possible existing sounds (512 \(\times\) 12), which he

\textsuperscript{70} Ge Zhongxuan 葛中したこと: Tailü 泰律 (Yunnan: Yunnan tushuguan, 1914) [hereafter Tailü], tici 3a.

\textsuperscript{71} So for instance, in his first rhyme group, [əŋ], the first row syllables end in [əŋ], the second in [in], the third in [un], and the fourth in [iun]. See Geng Zhensheng, Ming Qing dengyunxue tonglun, pp. 195–96.
referred to as “the sounds of heaven and earth” (天地之聲). 72

Like other cosmologically-inclined scholars, Ge was intent on delineating the precise number of possible existing sounds. His spoken language surely did not contain so many distinctions, 73 but he did not claim this to represent a single spoken language. Other rhyme tables from the standard tradition also produced many more possible syllables than any natural language could possess. However, it was primarily rhymebooks following in the cosmological tradition of Shao Yong that discussed the precise number of total existing sounds, and expressed an intent to catalog them. 74 Ge boasted that more than half of the sounds contained in his charts had no corresponding Chinese character. Many of his contemporaries saw the role of the phonologist as restoring orthodoxy or correctness (zheng 正) to the corrupted contemporary language. Ge, on the contrary, argued that dialect and foreign language phonemes were “all the royal sounds of heaven and earth, each of which has its proper place and cannot be neglected” (皆天地王音，各有位次，無一可遺). 75 The fact that they did not have a corresponding character did not diminish their status. 76

Similarly to Wu’s use of the Latin alphabet to represent sounds, Ge did not feel bound to the confines of existing Chinese characters. In a remarkable innovation, Ge invented a new indexical set of characters for describing linguistic sound. His composite characters were capable

72 Tailü, j. 6, p. 9b.

73 For reference, modern Mandarin contains some 400 distinct syllables, while Cantonese contains some 1700.

74 See, for example, Fang Yizhi 方以智, Tongya 通雅 (Beijing: Zhongguo shudian, 1990), j. 50, p. 31a; Yinsheng jiyuan, j. 1, p. 11b; Chen Jinmo 陳冠謨, Huangji tuyun 皇極圖韻, SKQS CMCS, p. 3b.

75 Tailü, j. 8, p. 19b.

76 Tailü, j. 8, p. 20b.
of reflecting the initial, final, tone, and voicing of a syllable.\textsuperscript{77} From the perspective of the history of phonetic notation in China, this is a surprisingly early development. This history is usually told from the perspective of education reform, with phonetic notation implicitly being understood to be more accessible than Chinese characters. In the context of 17\textsuperscript{th} century thought, it becomes clear that these phonetic characters were designed to satisfy a cosmological problem, namely, the theoretical existence of more sounds than the Chinese script was capable of notating. The ability to make use of Ge’s notation system would require sophisticated phonological knowledge, and was not aimed primarily at accessibility.

Underlying Ge’s innovative phonological system was a dense web of cosmological theory. In a section called “Liu qi fen” (“Division of the Six \textit{Qi}” 六気分), Ge discussed the cosmological underpinnings of sound, and in particular his rhyme groups, in an extended list of correlations including the nature of its \textit{qi}, color, taste, wind, number, \textit{Yijing} hexagram, and so on.\textsuperscript{78} Just as Wu Jishi tried to align his rhyme groups with solar periods and geomantic properties, so too did Ge attempt to justify his system through the claim that phonology operated according to natural principles, as he understood them. To Ge, the basis of his system in the natural patterns of the universe allowed him to claim that it could not possibly have “emerged from man’s creation” (\textit{豈出於人為}).\textsuperscript{79}

Ge Zhongxuan’s work was largely theoretical. However, as with other scholars discussed


\textsuperscript{78} \textit{Tailü}, j. 6, pp. 1a-7a.

\textsuperscript{79} \textit{Tailü}, j. 8, p. 2a.
in this chapter, his understanding of Shao’s tables and the application of cosmological methods was guided by their relation to the field of phonology. Hence, Ge equated initials in Shao Yong’s tables with those in the Tang rhyme book *Tangyun* 唐韻, and explained the equivalency between the technical language Shao Yong created and that of the standard phonological tradition.\(^{80}\)

Compared to some contemporaries, he also had less praise for Shao. In his view, Shao’s method may have been well-structured (整齊) in comparison to the standard rhyme tables, but in the end he “merely took the names of pitches to represent the singing and harmonizing of *yin* and *yang*, and was still not precise” (徒以律呂之名象陰陽之唱和，猶未精密).\(^{81}\) In Ge’s view, Shao’s method of “singing and harmonizing” had emerged alongside numerous other incomplete attempts to describe Chinese phonology, none of which had “truly understood sound and pitch” (非真知聲律).\(^{82}\) As with Qiao Zhonghe and other scholars in this period, Ge took Shao as a philologist by virtue of his approaching a phonological problem. Shao Yong himself may have had no interest in the kind of precision Ge was referring to, but in the new context of phonological scholarship, Shao’s work would be held accountable according to the standards of the discipline.

Although Ge’s highly idiosyncratic method was based almost entirely on a complicated set of musical, numerological, and cosmological correlations, he also felt the need to relate his study to the phonological tradition and contemporary scholarship. As opposed to many others discussed in this dissertation, he actually embraced Zhou Deqing’s tonal divisions, as well as its

\(^{80}\) *Tailü*, j. 10, p. 21b.

\(^{81}\) *Tailü*, j. 10, p. 23b. Cf. Huang Daozhou’s criticism of Shao Yong cited later.

\(^{82}\) *Tailü*, j. 8, p. 1b.
adoption in the work of his contemporary Li Deng 李登. At the same time, he criticized the close colleague of Jiao Hong (who himself prefaced Ge’s work), Chen Di 陳第 (1541–1617), frequently upheld as the originator of critical historical phonology in China, as well as other luminaries like Yang Shen, for their attempts to understand rhyming in the Shijing. This was understandably an issue of major contention since it affected recitation practice of a major Classic. For Ge Zhongxuan, these scholars simply attempted to “accommodate modern pronunciation to [ancient pronunciation], and were not thoroughly ancient” (以今音遷就之耳，非盡古也). For Ge Zhongxuan, Chen’s approach, which attempted to uncover ancient pronunciations and gloss them with a contemporary character sharing that pronunciation, was too subjective (自我作). Ge’s alternative approach would recognize that “sounds also contain number” (聲亦有數). Based on cosmological calculations, Ge felt he had derived the number of possible sounds in the universe, including those of antiquity, as well as a way to document all these possibilities. In uncovering something from distant antiquity, an abstract system based on number and cosmology appeared to Ge to be a more reliable method of discussing linguistic change over time than studying the sparse remaining textual record or glossing ancient pronunciation according to the spoken language of his time.

In addition to correcting pronunciation in recitation of the Shijing, Ge saw other functional applications of his system. For instance, he addressed a widespread concern with the

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83 Tailü, j. 8, p. 17b. However, he also criticized Zhou’s destruction of the ru tone category, which was an error (謬) born solely out of convenience for musical composition (箏管度曲之便). See Tailü, j. 12, pp. 10b–11a.

84 Tailü, j. 10, p. 13b.

85 Tailü, j. 10, p. 13a–b.
earlier method of transcribing foreign sounds in Chinese which simply chose a close phonetic
equivalent among Chinese characters and added a mouth radical (囗) to indicate foreign origin.\textsuperscript{86}

In his view, he had provided a more precise way for “translators to notate according to a method
the speech of birds and beasts [foreign languages] and the Sanskrit chants of the western regions
without having to borrow a character, add a mouth radical, and muddle Chinese writing” (象胥
鳥言獸言與西方梵呪可以法譜，不必借字從囗，以混華書).\textsuperscript{87} Evidently Ge envisioned his
invented characters functioning as a tool for transcription. Ge’s tables allowed for a great number
of sounds that did not exist in Chinese, which allowed him to claim that he had created a
comprehensive index of sounds, rather than a tool solely for use in literary Chinese composition,
as rhymebooks were intended.

As difficult as it may be to imagine, these cosmology-inspired phonological methods did
come to experience application outside of the world of these theorists and even beyond China.

Korean scholars embraced Shao Yong’s system as a means for describing Chinese
pronunciation. The single most well-known linguistic achievement of premodern Korea, namely
the han’gul syllabary promulgated by King Sejong (1418–1450), was created by scholars who
were well-versed in and inspired by Shao Yong’s work.\textsuperscript{88} In the 17\textsuperscript{th} and 18\textsuperscript{th} centuries, Korean
scholars continued to experiment with ways of adapting Shao Yong’s methods for describing

\textsuperscript{86} Wu Jishi, as well, disparaged this practice. See \textit{Yinsheng jiyuan}, j. 1, p. 17a–b.

\textsuperscript{87} \textit{Tailü}, j. 12, p. 6b. Cf. Wu Jishi’s and Chen Jinmo’s similar claims to be able to account for the

\textsuperscript{88} See Wang Songmu 王松木, “‘Huangji jingshi-shengyin changhe tu’ de sheji linian yu yinyun
xitong”—jian lun xiangshu Yixue dui Hanguo yanwen chuangzhi de yingxiang”《皇極經世·聲音唱合圖》的設計理念與音韻系統—兼論象數易學對韓國諺文創制的影響, \textit{Zhongguo
Hanguo wenzi chuangli de yingxiang” 浅析中国宋理学对韩文字创立的影响, \textit{Wenhua
Chinese pronunciations for a Korean audience. Ch’oe Sŏk-chŏng 崔錫鼎 (1646–1715), for instance, wrote the Kyŏngse hunmin chŏngŭm tosŏl [經世訓民正音圖說 Tables to explain Correct Sounds to Educate the People {i.e, the Korean syllabary} through {Shao Yong’s} Traversing the Ages], which explicitly linked the Korean script, and its ability to enable Chinese pronunciation, with Shao Yong’s work.\textsuperscript{89} Hwang Yun-sŏk’s 黃胤錫 (1729–1791) Isu sinp’yŏn 理藏新編 further associated Shao Yong’s charts with more typical texts of the Chinese phonological tradition.\textsuperscript{90} In Vietnam, as well, Shao Yong’s name came to be associated with Chinese phonology, as evidenced by the great Vietnamese scholar Lê Quý Đôn’s 黎貴惇 (1726–1784) description of Shao’s method in a general discussion of phonology.\textsuperscript{91}

Current research has seen the roots of evidential learning in a few select figures, such as Yang Shen and Chen Di, removing them from their historical context. Their contemporaries are usually represented as benighted adherents to outmoded ways of thinking about language. In fact, scholars like Ge Zhongxuan were aware of the challenge from Chen Di, and actively

\textsuperscript{89} See Ch’oe Sŏk-chŏng 崔錫鼎, Kyŏngse hunmin chŏngŭm tosŏl 經世訓民正音圖說 (Seoul: Yŏnse Taehakkyo Ch’ulp’anbu, 1968). For epistolary discussions of Shao Yong’s phonology between Ch’oe and Chŏng Che-du 鄭齊斗 (1649–1736), see Ch’oe Sŏk-chŏng 崔錫鼎, Myŏnggok chip 明谷集 (Seoul: chŏjakkwŏn cha Minjok Munhwa Ch’ujinhoe: parhaengch’ŏ Kyŏngin Munhwasa, 1995), j. 13, pp. 60b–64a and Chŏng Che-du 鄭齊斗, Hagok chip 霞谷集 (Seoul: chŏjakkwŏn cha Minjok Munhwa Ch’ujinhoe: parhaengch’ŏ Kyŏngin Munhwasa, 1995), j. 2, [unpaginated] 25b-28b See also a discussion of Shao Yong’s phonology as utilized in Korea in Osada Natsuki 長田夏樹, “‘Kōkyoku keisei sho’ seion zu no onka to ‘Inryaku itsū’ no on’in taikei ni tsuite—‘Keirin ruiji’ no chousengo to arawasu kanjion no taikei to kanren shite” 『皇極経世書』声音図の音価と『頒略易通』の音韻体系について—『雜林類事』の朝鮮語と表わす漢字音の体系と関連して, in Osada Natsuki ronjutsu shū (ge) 長田夏樹論述集 (下) (Kyōto: Nakanishiya Shuppan, 2001), pp. 620–21.

\textsuperscript{90} See Hwang Yun-sŏk 黃胤錫, Isu sinp’yŏn 理藏新編 (Seoul: Asea Munhwasa, 1975), j. 12 and 20.

\textsuperscript{91} Lê Quý Đôn’s 黎貴惇, Văn dại loại ngữ 芸臺類語 (Taibei: Guoli Taiwan daxue chuban zhongxin, 2011), j. 6, \textit{tiao} 4.
attempted to counter with a new alternative for scholarship, fusing music, cosmology, and phonology in unprecedented ways that surpassed what they saw as the subjective findings of more traditional scholarship.\(^2\) This alternative may not have ultimately won the day in the 18th century. But as this chapter demonstrates, it was one with a substantial following for much of the Ming dynasty, and remained influential for later periods and other regions in various ways.

**Yuan Zirang and the Compatibility of Cosmology and Tradition**

Some years earlier in 1603, Yuan Zirang 袁子疆 (zi Zijian 子簡, jinshi 1601) from Chenzhou 郴州, Huguang province (present day Hunan) printed a work which presented another direction in which Shao’s method could be applied to the field of phonology. After achieving his jinshi degree, Yuan went on to serve as a Magistrate 知州 in Jiading 嘉定 and Meizhou 眉州, and eventually as a Vice Director within the Ministry of War 兵部外郎. In the case of Yuan Zirang, Shao Yong’s methodology and tables could be included alongside other texts in the standard phonological and paleographic tradition. While this would require tampering somewhat with Shao’s original tables and intentions, he nevertheless saw Shao’s general approach as valuable for the philologist. Late Ming compilations of various sources are often considered to be primarily cut-and-paste from various sources without any particular motivation.\(^3\) In this

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\(^2\) Ge did also occasionally engage in moments of empirical observation that have garnered praise from modern linguists. Most notable is his “An Explanation of How Sounds are Determined by the Tongue” (聲主舌說), which makes the case for the primacy of the tongue (over the other traditional categories of teeth, throat, and lips) as a speech organ. See Tailü, j. 11, pp. 5b–6b. See also Wang Songmu, *Mingdai dengyun zhi leixing ji qizhankai*. (2011), pp. 305–6 and Zhang Yulai 张玉來 and Dai Fei 戴飞, “Lun Ge Zhongxuan ‘Tailü’ de yinyunxue jiazhi” “论葛中选《太律》的音韵学价值,” *Shandong daxue xuebao* 4 (2012): 155.

\(^3\) For somewhat of a corrective, see Benjamin A. Elman, “Collecting and Classifying: Ming Dynasty Compendia and Encyclopedias (*Leishu*),” in *Qu'était-ce qu'écrire une encyclopédie en
section, I will therefore, in addition to explaining the way Shao Yong’s method came to be employed in the Ming, attempt to demonstrate that Ming scholars were ecumenical, but could nonetheless be discriminating in their selection of materials. In the case of Shao Yong’s method, its appearance in a compilation of materials for studying phonology was not a random inclusion based on a superficial connection, but instead represented a conscious choice to present a different, complementary way of investigating rhymes. It also speaks to the commonly held belief among many Ming scholars that cosmology and phonology could go together meaningfully for the purposes of advancing a particular discipline, as shown in the cases of Qiao Zhonghe, Wu Jishi, and Ge Zhongxuan.

Yuan’s approach to Shao’s rhyme tables is one of reconciliation and accommodation. The influx of western ideas in the late Ming, continuing through the early Qing, has often been highlighted as one of the primary intellectual factors in the development of new ways of thinking in this period.94 At the same time, Chinese scholars revised earlier modes of thinking and applied them to new problems. The selection of Shao Yong as a methodological model for Ming scholars was not passive acceptance of a tradition, but an active choice that came about during a period of search for such models. At the same time, they were not afraid to modify and adapt Shao’s text to match their sense of disciplinary scholarship.

In contrast to the other scholars in this chapter, whose relationship with Shao Yong was implied methodologically and through citation, Yuan Zirang transcribed several of Shao’s original tables wholesale into his work. However a close reading shows minor additions that

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demonstrate Yuan’s adaptation of Shao’s work. For example, in each table of Shao’s original text, Shao had written the number of combinations possible in a way that reflected his cosmology, more than linguistic consciousness. Hence, the set of 12 initials, which Shao described as “fire-stone” initials, harmonize with the 112 functional finals, making 1344 possible syllables bearing these initials, as noted in the original tables.\(^95\) Yuan Zirang added a comment to the table noting that there were in total 5376 such syllables (1344 x 4).\(^96\) The reason for this addition I believe was to restore a more traditional sense of phonological coherence to the tables. Shao’s division of these initials into four separate tables is based on his divisions of elements, in this case fire-water, fire-fire, fire-earth, and fire-stone, rather than a linguistic distinction. But from the perspective of the phonologist, these could all be combined into a single category. Yuan’s revision was likely based on the fact that the overall number of these combinations would be important to a philologist, rather than divisions based on super-linguistic categories.

Yuan acknowledged that “singing and harmonizing and the mutual production of heavenly finals and earthly initials releases the mysteries of the Two Nodes, and exhausts the number of the myriad things” (天聲地音倡和相生，洩兩儀之秘，盡萬物之數).\(^97\) At the same time, there were some “questionable” (可疑) aspects to Shao’s tables that justify what Yuan politely referred to as his “superfluous additions” (贅).\(^98\) For example, Shao’s distinctions of non-labialized \(pi (=he)\) in standard terminology, referring to the presence of the medial

\(^{95}\) Recall that Shao correlated his grades of consonant-vowel combination \((kai, fa, shou, bi)\) with four elements: water, fire, wood, and stone (水火木石).

\(^{96}\) 發音清濁共五千三百七十六. Yuan Zirang 袁子讉, Zixue yuanyuan 字學元元, SKQS CMCS (1603 edition) [hereafter Zixue yuanyuan], j. 9, p. 5a.

\(^{97}\) Zixue yuanyuan, j. 9, p. 11b.

\(^{98}\) Zixue yuanyuan, j. 9, pp. 1b, 11b, 14a.
vowel [u] in the final) and labialized 翕 xi (=kai 開, without medial [u]) finals seemed arbitrary. In addition to making corrections to perceived errors in Shao’s tables, Yuan made a special attempt to reconcile Shao with the phonological tradition by claiming that Shao was essentially creating a table along the lines of the more traditional Sisheng dengzi [四聲等子], but with a different set of terminology. As Yuan put it, “the tables in [Huangji] jingshi and [Sisheng] dengzi mutually explain the sounds of heaven and earth. Their marvels both lead back to the same place” (經世圖與等子，互相闡明天地之聲音，其妙同歸於一). Although explaining the sounds of heaven and earth seems more like Shao Yong than traditional phonology, Yuan went on to claim that the finals (聲) in Shao’s table “refer to rhymes, or the divisions of 24 rhyming categories in [Sisheng] dengzi” (即韻也，即等子中所分二十四攝也). Similarly, Shao’s initials (音) were equivalent to the 36 initials of Sisheng dengzi. Yuan’s emphasis throughout was on the ways in which Shao Yong’s method could be equated with the tradition.

The remaining question then is why Yuan felt it was beneficial to incorporate and modify Shao’s methodology in the first place. Wang Songmu and others have rightly pointed to the implications of the title Zixue yuanyuan [字學元元 Investigation into the origins of

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99 Zixue yuanyuan, j. 9, p. 14a.

100 Traditional here is not meant to imply purely descriptive, or devoid of theoretical concerns. But the canonical phonological texts of the tradition, such as Sisheng dengzi, were generally more concerned with analysis of language. In other words, Shao Yong falls outside of the main tradition in his concern for demonstrating the workings of the universe.

101 Zixue yuanyuan, j. 9, p. 13a.

102 Zixue yuanyuan, j. 9, p. 1a.

103 即切也，即等子中所押三十六字母是也. Zixue yuanyuan, j. 9, p. 1a.
paleography], as well as Yuan’s own preface, in discussing his greater goals. Yuan was not concerned with describing later accretions to Chinese phonology, which he routinely referred to as ‘vulgar sounds’ (俗音), but rather with describing a more primordial (元) ‘correct sound’ (正音). It seems that Shao Yong’s tables represented a higher, philosophical plane of phonology, as Yuan described his progression in the study of phonology from basic poetic rhymes, to Sisheng dengzi, through Buddhist rhyme table methods, and ending with Shao Yong. His brother, Yuan Ziqian 袁子謙, appropriately cited the Yijing in his colophon to Zixue yuanyuan, exclaiming: “Oh how great, the origin [indicated by the Yijing trigram] Qian. The myriad things rely on it for their beginning” (大哉乾元，萬物資始). The theme of origin was essential to Yuan’s conception of the purpose of phonology, and for this he needed a way of talking about phonological processes that was not attributable to a specific historical period. By retaining Shao Yong’s method in the service of phonology (rather than within its original context as part of a universal theory), he identified its worth as a timeless descriptive system for language. During the late Ming, many phonological scholars intentionally adopted Shao’s method in some form or another to get at something that other methodologies did not seem to allow for them. While some modern day scholars look to Shao’s tables for evidence of northern Chinese phonology during a

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106 Zixue yuanyuan, zixu, p.1a.

107 Zixue yuanyuan, xu, p. 1a.
specific period (11th century), what appealed to scholars like Yuan Zirang was the seeming
timelessness of Shao’s table. For these scholars, Shao’s method was not predicated on the sounds
of a particular time or place, and was therefore valuable as a study of the original or fundamental
form of Chinese speech sounds.

Why then was it necessary to modify the tables from their original form? I believe that in
Yuan’s case the search for compatibility was a way of justifying its inclusion in a general study
of phonology. By equating elements of Shao Yong’s tables with those in Sisheng dengzi, and by
removing apparent inconsistencies, Yuan Zirang could show that behind the cosmological
terminology was a recognizable system of describing Chinese. While Shao Yong’s tables nicely
made the point that sounds are created in many, if not infinite, permutations, some of his specific
examples did not match the Chinese language Yuan’s audience would expect. Hence it was
necessary not merely to justify its use by demonstrating equivalency within the tradition, but also
to alter it to fit that tradition.

As with Qiao Zhonghe, Yuan Zirang exemplified the position that a system such as
Shao’s is valuable as a theoretical model, but theory must bend to the scholarly tradition if it is to
be applied. Yuan seems to have recognized Shao himself had different intentions, as he began his
discussion of Shao Yong with the following quote from Shao’s son, Bowen: “[Shao Yong] used
the changes of pitches, initials, and finals to exhaustively investigate the number of moving,
growing, flying, and running things, what the Yijing refers to as the number of the myriad things”
(以律呂聲音之變窮動植飛走之數，易所謂萬物之數也).108 Yuan Zirang, however, was not
interested in the number of the myriad things, but rather in numbers within the context of
phonology. A numerical demonstration of possible sounds was important to Yuan, but divorced

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108 Zixue yuanyuan, j. 9, p. 1a.
from its original context, adjustments would have to be made in order for it to fit a new context.

This new context specifically entailed the phonological analysis of the Chinese language, as well as functional application. Although all the texts discussed in this chapter focus on theoretical phonology, they also make clear their intended applications. In the case of Zixue yuanyuan, his ‘correct tones’ zhengyin (正音) was not only an idealized abstraction of accurate pronunciation. Instead it was meant to form a basis for the way people spoke. Therefore, throughout the text, Yuan advised readers to pronounce syllables according to their position in the medieval tables, rather than their current pronunciations (俗呼).\(^{109}\)

This difference of context is important if we are to understand the mid-late Ming resurgence of cosmological scholarship. While it has often observed that Ming thinkers embraced the Yijing and cosmological methods, this is often viewed from a perspective of continuity with Song Neo-Confucian, or even Han dynasty cosmology.\(^{110}\) Scholars like Qiao and Yuan in my view evince something quite different from continuity. They were instead restoring a form of cosmology that had largely been neglected after the early Song. More importantly, they adjusted it to fit a new context of scholarly application to specific fields.

In the case of Yuan Zirang, the purpose of a cosmological system was to provide a model for understanding phonology when linguistic “impurities” had crept into the language over time and space.\(^{111}\) Chen Di 陳第 (1541–1617), the most acclaimed phonologist of Ming times, has

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\(^{109}\) Zixue yuanyuan, j. 2, pp. 2b, 10b, 17b.


\(^{111}\) I derive this sense of linguistic impurity from Yuan’s disregard for what he refers to as ‘vulgar sounds’ (俗音) that appear in local languages. This is reinforced by a statement by Fan Chunjing’s 范醇敬 (jinshi 1583) preface to Zixue yuanyuan that states that Yuan “directly
often been praised for his foresight when he wrote: “It must be that temporally there is past and present, spatially there is north and south. That characters have transformation and sounds have shifts is truly something this situation necessarily brings about” (蓋時有古今，地有南北；字有更革，音有轉移，亦勢所必至). His approach to this problem was an influential reconstruction of the sounds of ancient Chinese based on the *Shijing*. For many of Chen’s contemporaries, however, a similar sense of linguistic change promoted a turn toward cosmological analysis of sound. An abstract theoretical model, less grounded in ancient texts, was seen as an alternative way of understanding linguistic change over time.

*Chen Jinmo, Huang Daozhou, and the Perfection of Shao’s Method*

As discussed above, Qiao Zhonghe was skeptical of the persuasive power of number (數) in Shao Yong’s system. Numerical relationships nevertheless remained a powerful scholarly methodology for many Ming scholars. One such scholar in particular, Chen Jinmo, who specialized in the study of mathematics and language, embraced Shao Yong’s numerical methods as a way to further abstract sound from script in the study of Chinese phonology.

Chen Jinmo 陳覿謨 (zi Xianke 猉可, hao Su’an 硚菴, 1600?–1692?), from Zuili 橐李 (present-day Jiaxing, in Zhejiang province), was a disciple of the famed Neo-Confucian scholar Huang Daozhou 黃道周 (1585-1646). He studied as a Government Student (諸生) until the end of the Ming, at which point he abandoned his formal studies. Although his recorded discussions investigated the fundamental origins [of language], and carefully distinguished its later degenerative stages” (直窮本始詳辨末流). *Zixue yuanyuan*, Fan xu, p. 1b.

with Huang Daozhou cover cosmological and philosophical matters, he appears to have first
countered Huang’s name in the context of the examination preparation manuals Huang
composed. Chen was familiar with the new learning of the Jesuits, and wrote on the relationship
of western and Chinese surveying methods.\footnote{K.W. Fung, “Chen Jinmo (1600?–1692?) zhi
shengping ji xixue yanjiu—jian lun qi zhuzuo yu Ma Lixun (Robert Morrison, 1782–1834) ‘Ying Han
zidian’ zhi Zhong-xixue yuan” 《英漢字典》之中西學緣, *Ming Qing shi jikan* 9 (2007): 223,
227, 233, 252–254.} He is known from several extant mathematical
works and two phonological studies. The most relevant to this dissertation is the earlier *Huangji
tuyun* [皇極圖韻] which was printed in 1634.\footnote{His later study, the *Yuanyin
tongyun* [音統論], was published posthumously in 1714.}

Chen was convinced, like Shao Yong, that phonology could reveal “the number of
moving, growing, flying, and running” things (動植飛走之數).\footnote{Chen Jinmo 陳著謨, *Huangji
tuyun* [皇極圖韻], SKQS CMCS (1632 edition) [hereafter *Huangji tuyun*], p. 1a.} Similarly to Qiao Zhonghe
who, as discussed above, claimed he could expand Shao’s system, Chen also believed that in
some sense Shao’s findings were incomplete. Chen attributed this to the fact that Shao was only
cconcerned with the Chinese of the Central Plains and based his tables on the phonological
information present in the Tang dynasty rhyme book *Tangyun*.\footnote{更因邵子以中土之音止據《唐韻》，未盡攝古今之韻. *Huangji tuyun*, pp. 5b–6a.} Other Ming phonological
scholars juxtaposed Shao’s name with those of the standard phonological tradition. Chen went a
step further in inferring Shao’s working methods. By implying that Shao was copying an older
work from the standard tradition, Chen was, like many of his contemporaries, defining Shao in
some sense as a phonologist. While for some of Chen’s Ming contemporaries this was a positive
way to reinforce Shao’s scholarly credentials, Chen intended to do what Shao had been unable:
to truly create a comprehensive description of sounds.

This led Chen to construct a set of nine tables modeled after the *Luoshu* and *Jiugong* diagrams in order to represent “the implicitly suggested essence of [Shao] Kangjie’s *Huangji*” (為康節《皇極》引而不發之旨).\(^{117}\) The *Luoshu* diagram (Figure 1.2) was, according to legend, first observed on the back of a turtle emerging from the Luo River by the Great Yu, the legendary first emperor of the Xia dynasty. There are, however, no extant occurrences of the diagram prior to the Song dynasty. The diagram is a magic square, comprising a 3 x 3 grid, in which any three numbers (represented by circles) added vertically, horizontally, or diagonally equal 15.\(^{118}\)

![Figure 1.2: The *Luoshu* diagram, pictured above, was a magic square which featured prominently](image)

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\(^{117}\) *Huangji tuyun*, p. 45b.

Figure 1.2 (Continued) in late imperial cosmological discussions.\textsuperscript{119}

Chen’s tables involve a complicated fusion of cosmological and phonological principles.\textsuperscript{120} The first table contains 36 Chinese characters, grouped in 9 sets of 4, each of which is assigned a number. Eight subsequent tables, which manifest 8 other permutations of ordering the 9 sets, feature the same 36 characters, this time only represented by the previously assigned number. According to Chen’s system, the numbers in the latter 8 tables represent syllable finals, while the numbers in the first table represent syllable initials. Mimicking the process of fanqie, each initial set (in the first table) is combined with each final set in a corresponding position (in the latter tables), with every combination yielding one syllable. This process would ultimately yield all permutations of 36 characters multiplied with each other (36 x 36), or 1296 syllables. Spread across the 4 tones, Chen ultimately claimed to be able to account for 5,184 syllables (1296 x 4).\textsuperscript{121} Echoing the sentiments of contemporaries like Wu Jishi and Ge Zhongxuan, Chen felt that his cosmologically-informed system could go beyond the sounds producible by man, but also include “that which [Zheng Qiao] referred to as ‘the crying of cranes and whispering of wind, the crowing of cocks and barking of dogs, thunderbolts shocking the heavens, and

\begin{itemize}
  \item Zhang Li 張理, \textit{Yixiang tushuo neipian} 易象圖說內篇, (China: Tongzhi tang, 1673), j. 1, p. 8b.
  \item \textit{Huangji tuyun}, p. 3b. See also Chen Jinno, \textit{Yuanyin tongyun}, SKQS CMCS (1714 edition), j. 1, pp. 13b, 40b. Note that Chen’s later work adheres exclusively to 5,184 as the total number of sounds. In sections of \textit{Huangji tuyun}, Chen in fact doubles the number to 10,368. See \textit{Huangji tuyun}, pp. 3a–b, 55a. I believe in this case the reason is to substantiate his larger cosmological claims by adding together the 5,184 combinations of initials and finals with the ultimately identical 5,184 combinations of finals and initials.
\end{itemize}
mosquitoes and gnats buzzing past one’s ear” (豈惟盡人，所謂鵷鶗風聲，雛鳴狗吠，雷霆驚天，蚊虻過耳，不出此也).\(^{122}\)

By replacing characters with numbers, Chen took Shao’s method to the extreme, and also went beyond his contemporaries in terms of abstraction. His reason for using numbers in place of characters was “the ease of examining numbers” (數之易稽).\(^{123}\) From a scholar of mathematics, this is not a surprising assertion. More than any previous or contemporary system, however, Chen seems to have isolated the study of sound from the script. Many of his contemporaries, as well as later scholars such as Pan Lei, bemoaned an overreliance on script in discussing Chinese phonology.\(^{124}\) By essentially removing script from the equation, Chen created one of the first alternatives to Chinese characters in the Chinese tradition. It is notable that, although Chen reportedly paid attention to western learning and published his works well after the introduction of the roman alphabet in the context of Chinese phonological scholarship, Chen did not see romanization as the key to comprehensive phonological description. It has often been argued that alphabetization was not seriously pursued from Han times until near the end of imperial times because of various cultural factors.\(^{125}\) According to John deFrancis, that China did not achieve full Latinization in the mid-20\(^{th}\) century was due to “the apathy of the masses and the opposition

\(^{122}\) Huangji tuyun, p. 3b. These four examples, themselves allusions to earlier texts, are juxtaposed by the Southern Song scholar Zheng Qiao, in the preface to his rhyme table (one of the earliest extant).

\(^{123}\) Huangji tuyun, p. 47b.

\(^{124}\) Pan Lei, Leiyin 頭音 (Wujiang: Pan shi Suichu tang, ca. 1662–1722), j. 1, 1a.

of the entrenched scholarly, educational, and government establishment.”

Those few who looked toward alphabets have been portrayed in such literature as the forward-looking among a generally stagnant conception of writing. Chen presented an alternative way of thinking about the sounds of language; one that did not abandon Chinese characters per se, but perhaps even more radically advocated for a conception of sound entirely removed from script. Such a sentiment was echoed by Chen’s contemporaries, such as Wu Jishi, who argued that “the marvelous applications of sound are not located in written script” (音聲妙用不在文字). As noted above, Ge Zhongxuan invented a set of symbols to serve as a way of indicating phonological positions in his rhyme tables. Chen and his contemporaries offered the remarkable potential of means outside of Romanization for discussing phonology beyond the confines of Chinese characters.

Although Wang Songmu has rightly pointed out that Chen was ultimately concerned with illuminating the cosmological foundations of the universe, Chen did in fact interact with the phonological tradition and functional use. For example, Chen expressed the desire for his study to provide an orderly and structured approach to phonology that could serve as an introduction to the field (冀頌學者網在綱，學者得門而入). Chen also saw his study as potentially possessing literary application. He blamed a fictional interlocutor for always trying to connect his study of rhymes with literary composition (何子必以愚之制鬍為詞章設也).

Nevertheless, he later proceeded to explain how his understanding of Shao’s system fit into the

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127 Yinsheng jiyuan, j. 1, p. 11a–b. This appears to be paraphrased from Zhao Yiguang, Xitan jingzhuan, fanli, p. 20a.
128 Huangji tuyun, p. 1b.
129 Huangji tuyun, p. 8a.
world of literary rhyming.

As with Qiao Zhonghe, Chen disagreed with Zhou Deqing’s influential rhymebook which distributed the entering tone among the other three tones, and divided only the level tone into *yin* and *yang*. In his view, Zhou Deqing incorrectly assigned *yin* to unvoiced (清) and *yang* to voiced (浊) syllables. More importantly, Zhou had not seen the necessity of assigning *yin* and *yang* to all four tones. Chen was not the only one who took issue with this—Wang Jide, the formative figure in Kunqu opera, and Chen’s near contemporary, also advocated an analysis of Chinese that divided each tone into *yin* and *yang*. This distinction may in fact have been recognizable to their ears due to the fact that Wu topolect, the native tongue for both Chen Jinmo and Wang Jide (Zhejiang natives from present-day Jiaxing and Shaoxing respectively), may have naturally contained such a distinction. Even if outside of his primary intent, Chen was aware of, and made explicit, the possible functional applications of his study. In his view, good lyrics should take note of the proper divisions of *yin* and *yang*. Therefore, his work, having corrected errors in the tradition, would be applicable and in fact should be used in literary contexts, even if that was not the primary motivation for its composition.

In another of his tables, Chen indicated the traditional rhyming distinctions of ‘interchangeable use’ (通用) and ‘singular use’ (専用). His justification was that this would “facilitate understanding of the origins of rhyming divisions among the literati involved in prosody [i.e., literary endeavors]” (以便聲律之士識音韻分合之端). Hence, even if his stated

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130 I believe the criticism is that in theoretical cosmology, *yang* is associated with *qing* (clear) and *yin* with *zhuo* (turbid).


132 *Huangji tuyun*, p. 43a.
concern was to uncover fundamental principles of the sound, Chen could conceive of more functional applications of his tables. Therefore it should not wholly surprise us that one of the most important late Ming drama theorists, Shen Chongsui 沈寵綬, saw fit to discuss the usefulness of Chen’s work for lyricists.133

Similar to other Ming cosmological phonologists, and in contrast to Shao Yong, Chen also invoked figures from the standard phonological tradition, such as Shen Yue, Zheng Qiao, and the imperial standard Hongwu zhengyun [洪武正韻].134 Importantly, he also referenced his near-contemporary Li Deng 李登, an important phonological scholar from Shangyuan (Nanjing).135 His later work reveals that he was also familiar with Wu Jishi’s cosmological phonology and Zhao Yiguang’s application of Sanskrit studies to Chinese phonological theory.136 This framing of scholarship within contemporary discussions is highly telling of the new community and disciplinary nature surrounding philology in the late Ming.

What then did other Ming cosmological scholars feel about Chen’s work? Huang Daozhou 黃道周 (1585–1646), Chen’s teacher and one of the most influential late-Ming Neo-Confucian thinkers, clearly took an interest in the work.137 When another disciple asked Huang

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133 For more on this, see Chapter 6.
134 Huangji tuyun, pp. 5b–6a.
135 Huangji tuyun, p. 60b.
136 Chen Jinmo, Yuanyin tongyun, j. 2, pp. 55a–56b.
137 As with many others we think of today as great thinkers and moral philosophers of the time, like Wang Yangming, Huang may have had considerable contemporary fame as an examination essay stylist, and Chen notes that these were the works of Huang’s he initially studied (嘗習夫子制義). Chen Jinmo, Su’an qian 碑裁甄, SKQS CMCS (Chongzhen era edition), p. 1a. Huang’s scholarship was eclectic, and it is difficult to summarize it as essentially Neo-Confucian or cosmological. For instance, he wrote essays respectively refuting and expounding Ruan Ji’s essay “Sheng wu aile lun” (聲無哀樂論) and Gongsun Longzi’s “Baima feima” (白馬非馬_).---
why Chen had started a discussion of cosmological theory from the perspective of phonology, Huang answered: “This is what Chen is good at. Inferring [from this smaller topic] is just more convenient. Whenever you read a book, you first follow what is clear, and then understand what is unclear, just as a while after entering a dark room, it then becomes clear” (是其所長，引伸到便。凡讀書先因其明，後通其晦，如入暗室久便分明也). Hence, Huang understood Chen’s intentions to be approaching more abstruse cosmological concepts through the comparatively concrete field of phonology. Huang also praised Shao’s Huangji tuyun, claiming that it “comprises the great and subtle, from what [other works of cosmological and phonological scholarship such as] Zhu’s Seal did not catch sight of and Shasui [Lü Kun] did not fully record” (皇極韻圖包括弘微，自祝鈐所未覩，沙隋所錄記). From statements such as these, it is generally concluded that Huang Daozhou and Chen Jinmo were in agreement on the nature of cosmological scholarship. However, a closer reading of Huang’s writings...
demonstrates his reservations.

Later in the passage referenced above, the same disciple pressed Huang Daozhou, saying:

“[Chen] Xianke also extolled what you said, that ‘things have no set sound, each accords with its place. Places have no set tone, each depends on its meaning.’ If these few words have fully expressed its profundities, then Xianke’s rhyme tables also contain this meaning. Why do you not highly commend him?” (献可亦称夫子所云，物無定聲，各隨其方，方無定音，各依其義，數言已盡其蘊，則獻可《圖韻》亦包得此意。為何不讚歎他？)\(^{142}\) In his answer, Huang expressed discomfort with both Shao Yong’s and Chen’s methods. To Huang, Shao’s application of cosmology to determine whether there did or did not exist characters for a certain sound “just gets a vague outline, and is not a concrete calculation” (只得影響，非為實測).\(^{143}\) Similarly Huang’s concerns with Chen’s phonology seemed to stem from a sense that universal constants are not applicable to language, as something which is always changing. Huang Daozhou has been seen as a representative of the height of late Ming cosmology and its application to the sciences under Shao Yong’s influence.\(^{144}\) Yet here we see him expressing distress at the fact that Shao’s and Chen’s numbers are not “tidy” (難以齊).\(^{145}\) Huang claimed that when he himself looked at the trigrams, “as soon as I want to investigate sounds, I just end

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142 Huang Daozhou, *Rongtan wenye*, j. 17, p. 31b.
143 Huang Daozhou, *Rongtan wenye*, j. 17, p. 31a.
up speculating, and having speculated, descend into minor tributaries” (一欲審聲，便生卜度，既生卜度，便落波流). Hence, it was possible to accept the validity of cosmology and its application to certain fields without recognizing its universal value or applicability. Chen Jinmo came perhaps the closest to following Shao Yong’s model among Ming phonologists. Nevertheless, he adapted his scholarship to fit discussions within the contemporary field of phonology. Although his mentor, the great cosmologist Huang Daozhou, had reservations about it, Chen was a representative of a powerful intellectual trend, the premises of which were accepted by a substantial portion of the scholarly community.

Chen’s work was widely circulated, and even formed the basis for influential early 19th century Protestant missionary discussions of Mandarin. In the mid-17th century, it caught the eye of Fang Yizhi, one of the most brilliant minds of his age. Fang adopted a cosmological approach in his own phonological scholarship. Fang argued, like Ge, Wu, and Chen, that there was a finite number of sounds (音有定), as opposed to the infinite (無定) and misleading written characters. What appeared to be differences in pronunciation from various regions of the world was the result of differences in articulation, in Fang’s view, but not the fundamental sound. Echoing Chen Jinmo’s approach (as well as Ge Zhongxuan’s claim that “sounds also contain number” [聲亦有數]), Fang created new systems of describing sound with the cosmological justification that “sound and numbers share the same origin” (聲數同原).

Much has been made of Fang’s distinction between zhice (‘material investigations’ 質測)

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146 Huang Daozhou, Rongtan wenye, j. 17, p. 33a.


148 Fang Yizhi, Tongya, j. 50, pp. 1a, 28a, 31a.
and tongji (‘comprehending seminal forces’ 通機), to use Willard Peterson’s translations. The former is held to have represented his concrete studies (something the West was strong in, according to Fang), the latter his more metaphysical speculations (which the West was weak at). It was his openness to zhice which has been considered radical. In light of what I have discussed in this chapter, it may be fair to say that instead Fang has articulated a common viewpoint among his contemporaries. The study of things could be intertwined with and be a reflection of universal processes; at the same time, an understanding of universal processes could serve as a useful methodology for scholarship in a specialized discipline. Gu Yanwu, with whom Fang is often aligned, understood the methods and purposes of scholarship differently. For Gu, things, and specifically words, were historical. Their meaning could not be properly understood from the heavens, and could only be ascertained based on comparison among texts from the same historical period.

**Shao Yong in the Broader Ming Discourse on Language**

Among the scholars discussed above, there is great variation, in terms of commitment to either cosmology or phonology. What they share is the conviction that a) cosmology can and should be applied to this field, and b) that Shao Yong’s methods must nevertheless be adapted to speak to the discipline of philological scholarship. It is difficult from these case studies alone to gauge the degree to which this scholarship was accepted more broadly. Indeed, most of the above studies were only printed once or twice in the Ming, and only Chen Jinmo is well-represented in contemporary accounts or bibliographies. Hence, in this section I will discuss appeals to Shao Yong and his method in broader Ming linguistic discussions, in order to demonstrate that this style of scholarship was generally accepted as valid in the Ming
The juxtaposition of Shao’s work with what has come to be considered the traditional phonological canon was commonly seen outside of studies by cosmological phonologists. For example, in a preface to a Tang dynasty treatise on whistling, the famed Suzhou painter-scholar Tang Yin 唐寅 (zi Bohu 伯虎, 1470–1524) discussed Shao Yong’s method alongside a description of the standard fanqie method of spelling characters. Similarly, Zhou Zhikui 周之夔 (zi Zhangfu 章甫, b. 1586, jinshi 1631), in the preface to a rhyme study by Li Zongyan 李宗延 (zi Jingzhe 景喆, 1555–1627), claimed that Li “combined Shao Kangjie’s Huangji numbers and Sima Wengong’s initials” (合邵康節皇極數與司馬溫公字曆). Ji Ben 季本 (1485-1563), a well-known disciple of Wang Yangming’s, also aligned Shao Yong with the development of the phonological tradition from Shen Yue 沈約 (441–513) through Zheng Qiao 鄭樵 (1104–1162).

References to Shao Yong and his phonology abounded in Ming texts. Shao himself did not relate his work to the broader phonological tradition, and from what we can tell through his own writings and those of his closest contemporary interpreters, his method was concerned with proving the validity of a universal system, not related to the field of phonology. However, for the majority of Ming thinkers, it was precisely what Shao had to offer as a theoretical model in the field of phonology that made his tables interesting. Ji went so far as to claim that Shao’s work might be useful in its theoretical phonology, but that one “would be hindered if he wished to seek the Way in it” (而欲求道於此則窒礙矣). Foreshadowing the words of many later Ming thinkers.

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150 Zhou Zhikui 周之夔, Qicao ji 棄草集 (Yangzhou: Jiangsu Guangling guji keyinshe, 1997), wenji j. 1, p. 28a.
151 Ji Ben 季本, Shuoli huibian 說理會編, SKQS CMCS, j. 15, p. 17a.
phonologists, Ji claimed that Shao’s method could “exhaust the changes of finals and initials” (盡聲音之變). Although from his point of view, this would not tell us much about the Way, it was certainly a contribution to the world of phonology. Ming scholars frequently citation of Shao Yong is not indicative of straightforward inheritance or mimicry. Their use of Shao’s methodology reinforces the fact that late Ming thinkers had a strong cosmological interest. However, in this new context, Shao Yong himself no longer held the key to the Way, but was seen, by some at least, as a scholar who provided an important abstract theoretical model to function alongside more concrete, traditional works.

The association between Shao Yong and the phonological tradition has roots even earlier in the Ming. Most notably, an early Ming scholar Zhao Huiqian 趙榷謙 (c. 1350–1395) compiled an influential rhymebook entitled Huangji shengyin wenzi tong [皇極聲音文字通 皇家音齊文字通] Comprehensive characters for the august ultimate finals and initials]. The printing history of this text is complicated, and we do not have a complete version today. It is nonetheless evident that Zhao was modeling his tables after those of Shao Yong and his Song dynasty commentators. According to Jiao Hong’s biography of Zhao, he was originally on the committee to compile the imperial dictionary Hongwu zhengyun, but was removed on account of his young age (perhaps a euphemism for his seeming inability to get along with his older colleagues). Nevertheless, it is reported by the compilers of his literary collection that some of the great minds of his time, such

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152 Ji Ben, Shuoli huibian, j. 15, p. 17a.


154 Jiao Hong 焦竑, Guochao xianzheng lu 國朝獻徵錄 (Taipei: Mingwen shuju, 1991), j. 100, pp. 73b–74a.
as Song Lian 宋濂 (1310–1381), Song Jizi 宋季子, and Lin You 林右 (1356–1409) appreciated the superiority of his work, going as far as to claim that his lexicographical work was “not inferior to Mencius’s refutation of heterodoxies” (其功不在孟氏闢異端之下).\(^\text{155}\)

Mid-Ming discussions of phonology also touched on Shao Yong’s contributions.\(^\text{156}\) In fact, the famed Suzhou scholar Wang Ao’s 王鏊 (1450–1524) discussion of phonology in *Zhenze zhangyu* 震澤長語, opens with a brief description of Shao Yong’s system.\(^\text{157}\) Extended theoretical discussions of the relationship between Shao Yong and the standard tradition come to us primarily from the late Ming. But this new association is something we can see taking place from early on in the dynasty. Economic factors and their effect on print culture, as well as sociopolitical circumstances certainly influenced the way many scholars approached their work in the Ming. However, changes in the intellectual sphere do not always map neatly onto or reflect these spheres. We can say with greater certainty why these methods were appealing in the late Ming because of the greater amount of discussion surrounding them. This should not preclude a possible earlier precedent for these motivations, given the apparent earlier Ming use of these methods.

Although unlikely a primary cause, an additional possible motivation for upholding Shao as an important model in the history of phonology could be the simple fact that he was Chinese. Most early accounts of the rhyme table tradition (such as that of Zheng Qiao) emphasize the fact that the study of phonology came to China through Indian monks. An eminent Neo-Confucian

\(^\text{155}\) Zhao Huiqian 趙為謙, *Zhao Kaogu wenji* 趙考古文集, SKQS, j. 1, p. 51b; j. 2, pp. 34b–35a.

\(^\text{156}\) See, for example, Sang Yue’s 桑悅 (1447-1513) 1476 preface to Zhang Fu 章黼, *Xinbian bingyin liansheng yunxue jicheng* 新編併音連聲韻學集成 (1581 edition, held at Harvard-Yenching Library).

thinker and former student of Wang Yangming, Huang Zuo 黃佐 (1490-1566), in response to the question of whether Shao Yong’s phonological method could be equated with the standard tradition originated by Buddhist monks, replied that “this would be to forsake China and follow barbarian teachings” (是舍中國而從狄教). For Huang, Buddhist monks devised a system that was more appropriate for Indian phonology than Chinese. Wu Jishi, author of Yinsheng jiyuan discussed above, claimed that Shao Yong’s tables, properly modified, could be “a crucial pivot for employing that which is Chinese to transform that which is foreign” (用夏變夷之一機). By this he likely referred to the traditional phonological categories, understood to have Indian origins, which Wu criticized elsewhere. Writing in the early Qing, the Jiangxi scholar Huang Yunshi 黃雲師 similarly praised Qiao Zhonghe’s work of cosmological phonology, the Yuanyun pu, for “presenting the correct pronunciations of China, and not overly trailing the creations of [Buddhist scholars from] the Western regions” (為中夏正音而無過踵於西域之所製).

If we push our study broader still, we can see the importance of Yijing and cosmology in other areas of philological scholarship. Cosmological justifications are even evident in one of the most famous and influential pieces of Ming philological scholarship, the Zihui 字彙. Published in 1615, Zihui, by the Anhui scholar Mei Yingzuo 梅膺祚, was the first dictionary to designate a

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158 Huang Zuo 黃佐, Yongyan 庸言, SKQS CMCS (1552 edition), j. 10, p. 28b.

159 Yinsheng jiyuan, j.4, p. 12b. There has been a persistent thread throughout Chinese history of criticizing fanqie for its foreign origins. Cf. Wei Liaoweng 魏了翁 (1178–1237), as cited in Hirata Shoji 平田昌司, “‘Zhongyuan yayin’ yu Song Yuan Ming Jiangnan ruxue—‘tuzhong’ guannian, wenhua zhengtong yishi dui Zhongguo zhengyin lilun de yingxiang” ‘中原雅音’與宋元明江南儒學－－‘土中’觀念、文化正統意識对中国正音理论的影响, in Jindai guanhua yuyin yanjiu 近代官话语音研究, ed. Geng Zhensheng (Beijing: Yuwen chubanshe, 2001), p. 58.

160 Yinsheng jiyuan, j. 4, p. 16a.

set of 214 radicals (much reduced from earlier dictionaries) that would later be adopted in the Qing court-commissioned Kangxi zidian and become known as the Kangxi radicals. Mei’s cousin, the well-established playwright Mei Dingzuo 梅鼎祚 (zi Yujin 禹金, 1549–1615), wrote a preface to Zihui, which related a cosmological basis for the lookup system created in the text.\(^{162}\) In this preface, Mei lamented that no study of characters had involved a number-based system until his cousin’s work. His argument was that a number-based system (in other words, number of strokes in a character) is ultimately the most straightforward and clear for readers (檢者便若指掌閲者曠若).\(^{163}\) However, there was a deeper theoretical justification for just why such a system should be better. Mei claimed that “It must be that for everything in the universe, once its form (形) is established, then a sound (聲) emerges. ‘Three (is the number of) heaven, two of earth, and on these the other numbers rely.’ Numbers emerge from symbols (象)” (蓋天地之所有，形立則聲生，參天兩地而數倚焉。數生於象者也).\(^{164}\) As opposed to Shao Yong and many Ming scholars, this analysis puts priority on the study of characters, rather than phonology. In affirming his cousin’s qualifications in compiling this dictionary, he wrote that Yingzuo specialized in the Yijing as a student. While studying at the Imperial Academy, he “finely studied the six principles of character formation, and realized their fundamental basis in the Yijing had numbers that could be followed” (精治六書悟其終始於易有數可循也).\(^{165}\) The


\(^{163}\) Mei Yingzuo 梅鼎祚, Zihui 字彙 (1615 edition), xu, p. 2a.

\(^{164}\) Mei Yingzuo, Zihui, xu, p. 3b. The section in quotation marks is a citation from the Yijing.

\(^{165}\) Mei Yingzuo, Zihui, xu, pp. 4b–5a.
origin of Chinese characters in the symbols (象) of the *Yijing* was a common trope in philological scholarship dating back to the Han dynasty, and one frequently alluded to in the late Ming. The connection between number and script, as mediated through the *Yijing*, would have been readily apparent to a contemporary scholarly audience.

The word-retrieval method of *Zihui* has come to be considered one of the greatest breakthroughs in the history of Chinese lexicography, by virtue of its improved rationality and usability. Returned to its Ming context, we can see an attempt to align this method with universal principles that *Yijing* numerology could provide. Mei Dingzuo, although acknowledging the practical benefits of the system, evidently felt that associating it with cosmological theory would bolster its validity. Yet when we enter the work itself, it becomes even clearer how removed scholarship in this period was from Song dynasty Shao Yong-style cosmology. In the *Yunfa zhitu* 韻法直圖, a Ming rhyme table Mei included in his dictionary (but did not compose), there are many examples of sounds with no characters assigned, indicated as in many other rhyme tables, by an empty circle. However, in one rhyme group, there is just blank space which indicates ‘no sound or character’ (無聲無字), something familiar from Shao’s tables. However, rather than providing an explanation grounded in Shao’s cosmological theory of substantial and functional numbers, the author merely explains this as a product of the fact that the rhyme group in question was a ‘tooth-gnashing’ rhyme (咬齒之韻). A physical explanation had replaced the cosmological one.

Despite the move away from cosmology taking place within *Zihui*, late 17th century

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thinkers continued to see the role of number, and its cosmological significance, as central to the work’s importance. For example, Yu Desheng 虞德升, an early Qing philologist, compiled a dictionary, organized with reference to Mei’s number-based lookup system. His justification was that these numbers were reflective of “the natural qualities of ⁹ and ⁷, and cannot be forced with strength of intellect” (皆理氣之自然，非智力之能強也). While some contemporaries would criticize Shao Yong for forcing phonology into a numerical system, others saw the virtue of number in its pure demonstrability.

Conclusion

Max Engammare has written that the Renaissance in Europe was “a world that lives in numbers” (un monde qui vit dan les nombres). This was a period when scholars like Francesco Zorzi, author of the 1525 De harmonia mundi totius (On the harmony of the whole world), could seek a “harmonious syncretism between Plato, Pythagoras, Kabbalah, Hermeticism and Christianity, between geometry, arithmetic and music, between heaven and earth, God and man.” The 16th and 17th centuries could be seen as such a period in Chinese history, as well. Cosmology and xiangshu studies had steady adherents from the Han dynasty on with an intensification in the Song dynasty as a result of Shao Yong’s scholarship. But it was during the

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169 Another notable example of cosmological accretions to Zihui is the mid-17th century Zengbu zihui [增補字彙], a work figuring in the complicated lineage connecting Zihui to Kangxi zidian [康熙字典]. The editor Tang Xueshen 湯學紳 inserted Qiao Zhonghe’s cosmologically-based rhyme tables from Yuanyun pu as a supplement.


171 Max Engammare, Soixante-trois: La peur de la grande année climactérique à la Renaissance, p. 37.
Ming when this interest in numbers came to be applied more widely, and in areas that were not the traditional purview of cosmology. Further, as this chapter has attempted to demonstrate, the interaction between cosmological and empirical approaches was complicated, neither approach completely subjugated to the other. In this sense, the widespread revival of scholarly cosmology in a new context is even more akin to Daniel Stolzenberg’s description of seventeenth century European scholarship as a “complex moment when empiricism and esotericism coexisted.”

In the 16th and 17th century, many Chinese phonologists employed seemingly esoteric methods without a sense that they contradicted other more traditional methods of textual study. Rather, they saw cosmology as a necessary supplement to reinvigorate the discipline.

Similarly to 17th century Europe, as well, the transition away from employing cosmological methods was gradual, and scholars of evidentiary learning grappled with the legacy of the cosmological phonologists well into the 18th century. Fang Yizhi 方以智, the great mid-17th century polymathic scholar, based his phonological studies on cosmological concepts, and was well-versed in the writings of Chen Jinmo. Gu Yanwu 顧炎武 would reject the methods of many Ming scholars. But his influential student Pan Lei’s 潘耒 (1647–1708) most important contribution, in addition to editing the works of Gu, was a phonological study written under the influence of Shao Yong’s theories meant to capture all possible sounds in the world. Even the biggest names of early 18th century phonology, such as Li Guangdi 李光地 (1642–1718) and Xiong Shibo 熊士伯, discussed the merits of Shao’s approach in describing the nature of sounds.

It was perhaps finally with Jiang Yong 江永 (1681–1762) that Shao came under serious attack


for a lack of phonological utility. Yet Jiang too resorted to cosmology to explain certain linguistic phenomena. Once one of the major modes of phonological analysis, it continued to influence scholars in the height of the so-called evidentiary learning movement.¹⁷⁴  

Chen Jinmo, in a later work, argued that there was something enigmatic about phonology that aligned it with the unknowable depths of cosmology:

The world refers to sounds and characters as the ‘lesser learning’ (xiaoxue). Those who write in flourishing styles loathe it and put it aside, while the textual scholars are narrow-minded and do not understand it. Thus for thousands of years there has been no one to reveal its origins. Granted it is only one branch of the Six Arts, but if one does not study broadly and investigate it for years it cannot be verified. Yet it is not something scholars can comprehend. If one does not profoundly over the course of several years awaken to the truth it cannot be understood. Yet it is not something those who have awoken to the truth can explain. I therefore consider it the closest thing to ‘cosmological studies’ (xiangshu).

Cosmological methods provided a way of discussing sound and language in abstract terms. This led scholars to speculate about the number of possible sounds in existence. It also heightened a sense that the Chinese script was not sufficient to represent all of these sounds. This inspired remarkable new methods to represent sounds via number, new phonetic notation systems, and foreign alphabets.

Some scholars, such as Qiao Zhonghe, invoked cosmologically significant numbers from the cosmological tradition in their theoretical discussions of phonology, only to adjust these

¹⁷⁴ See Li Guangdi 李光地, Rongcun bieji 榕村別集 (1736 edition), (Shanghai: Shanghai guji chubanshe, 2009), j. 1, pp. 1a–12b; Xiong Shibo 熊士伯, Dengqie yuansheng 等切元聲, SKQS CMCS (ca. 1662–1722 edition), j. 3, p. 3a–b; Jiang Yong 江永, Yinxue bianwei 音學辨微, XX SKQS (1759 edition), pp. 25b–26b.

¹⁷⁵ Chen Jinmo, Yuanyin tongyun, j. 2, p. 57b.
numbers in practice based on a sense of linguistic reality.\(^\text{176}\) There are similar historical occurrences before the Ming of adjustments to numerological calculations on the basis of pragmatic or empirical observation.\(^\text{177}\) What is worth noting in this case of cosmological phonology in the Ming is that Ming scholars were consciously applying cosmology for the first time in this field. This is different from the study of astronomy, for instance, in which cosmological theory was a defining element in the genesis of the discipline. Hence, both the use of cosmology, and adjustments where it conflicted with observation, are to be expected in fields like astronomy and acoustics. In the case of phonology, it is remarkable that cosmology was being invoked with foreknowledge of potential discord.

Underlying the correlations scholars made between cosmological and linguistic elements was a question of what should be the basis of unity. While unity in the Neo-Confucian tradition had formerly predominantly been attributed to \(li\) (principle or coherence), a new tension emerged in philological scholarship with the resurgence of the idea that unity could be demonstrated through \(shu\) (numerical relationships). Scholars such as Ge Zhongxuan, Chen Jinmo, and Fang Yizhi embraced the potential of \(shu\) to document all possible sounds and connect language to broader cosmological phenomena. Qiao Zhonghe, as mentioned above, questioned the ability of \(shu\) to surpass \(li\) in the context of linguistic analysis. A later 17\(^{th}\) century reader, however,

\(^{176}\) Recall that Qiao Zhonghe actually included 21 initials in his system, despite his overarching 19 categories meant to represent the combined numbers of heaven (9) and earth (10).

\(^{177}\) For example, the cosmographical geological system of “field allocation” (\(fenye\) 分野) came to be significantly altered in the Tang due to changed political boundaries. To a lesser degree, Yang Xiong adjusted numbers of importance in his cosmology when they did not conform to commonplace calculations, such as the number of days in a year. See John B. Henderson, *The Development and Decline of Chinese Cosmology*, pp. 19, 70.
recognized Qiao’s scholarship as proving “the compatibility of *li* and *shu*” (理數相通).\textsuperscript{178} As a late Ming court scholar claimed, in a debate over how to define the relationship of musical and linguistic sounds, “principle is illuminated according to number, and number is defined according to principle” (理因數而明，數因理而定).\textsuperscript{179} From an orthodox Neo-Confucian perspective, the realization of coherent principle was the fundamental task one must accomplish to achieve sagehood. The applications of numerical thinking were questioned and limited in scope. In the late Ming, number could be seen as compatible with and even to supplant principle. Scholars still believed in the premise of unity, but the basis of this unity was contested. Cosmological systems in some sense could appeal to proponents of both principle and number: they could be seen as reflective of underlying coherent principle, but also as infallible arithmetical schemes.

Cosmology had become an accepted part of the scholarly landscape in 16\textsuperscript{th} and 17\textsuperscript{th} century China. It was qualitatively different from much cosmology in earlier periods in its complex interactions within specific disciplines. This relationship was at times uncomfortable, and even a scholar like Huang Daozhou who seriously pursued the relationship between cosmology and astronomy and mathematics, was hesitant about its use with regard to phonology. Cosmology did not provide the only, or necessarily most prevalent, mode of scholarship at the time. Based on my reading of documents from the period, it would seem to be the case that no single method or approach prevailed over all others in this period. However, in the varied, yet broadly consistent, way that late Ming scholars in this chapter have been shown to adapt cosmology for their purposes, we can see a notable contemporary trend. Cosmology was seen as

\textsuperscript{178} Fan Tengfeng 梁騰鳳, *Wufang yuanyin* 五方元音, SKQS CMCS, *tushuo*, 4a.

\textsuperscript{179} Xia Yan, *Guizhou zouyi* 桂洲奏議 (1541 edition in Harvard-Yenching Library), j. 17, 4a–b.
providing a solution to problems in alternative scholarly methods, which emphasized the historical or regional study of language. By adapting the methods of Shao Yong, Ming scholars felt they had constructed an inartificial way of uncovering linguistic principles.

By moving my study to a period before the imminent collapse of the Ming, I hope to have shown that these new developments in thought were not necessarily a direct reaction to outside political circumstances or social turmoil. There may be other contemporary societal causes—certainly the highly commercialized atmosphere of the late Ming affected the way people approached scholarship. Ultimately, these scholars themselves expressed their scholarship not in terms of politics or societal forces, but within a framework of the development of disciplinary knowledge.\(^{180}\) As we see in the case of cosmological phonology, there are mid-, and even early, Ming antecedents. This should call into question some of the common assumptions of newness associated with late Ming culture. For scholars in this Ming tradition, cosmological significance may have been imputed in their disciplinary research, but the goal of their scholarship was not primarily to demonstrate the underlying workings of the universe. The re-adoption of cosmology was a conscious methodological choice that contemporary scholars viewed as something that could substantiate and supplement other forms of knowledge.

\(^{180}\) Cf. Dagmar Schäfer’s argument that in the late Ming “the strategies of authorizing one’s method of gaining knowledge…were involved with, and often subservient to, sociopolitical purposes.” *The Crafting of the 10,000 Things: Knowledge and Technology in Seventeenth-Century China*, p. 134.
CHAPTER 2
NEO-CONFUCIANISM AND NEW WAYS OF UNDERSTANDING THE HISTORY OF LANGUAGE

This chapter explores the relationship between Neo-Confucianism and study of the Chinese script in the 16th and 17th centuries. I focus primarily on the learning of the heart-mind, hereafter xinxue (心学), which is typically characterized as a turn to internality which eschewed reading texts in favor of self-reflection. Prior to the rise of xinxue, Neo-Confucian scholars primarily followed the Song dynasty philosopher Zhu Xi’s 朱熹 (1130–1200) proposal that the way to understand the coherent principle (li 理) pervading all things was to observe it in external things. Through a cumulative process of observing and learning, one would ultimately apprehend the coherent principle in one’s own mind, as well as be able to act as a moral person. Wang Yangming 王陽明 (1472–1529), whose teachings promoted a new xinxue approach to moral self-realization, argued that the mind was equivalent to li. In his view, by eliminating selfish desire and seeing oneself as one with all things, one could uncover the innate goodness (liangzhi 良知) present in the mind. In this way, he believed that the intellectual work of apprehending principle could be effectively replaced by activating the mind’s innate ability to know the good.

It has generally been argued since the 18th century that Ming scholars avoided scholarly inquiry and close attention to texts as a result of Wang Yangming’s influence.¹ In this formulation, those

¹ Hu Qiguang 胡奇光, Zhongguo xiaoxue shi 中国小学史 (Shanghai: Shanghai renmin chubanshe, 1987), p. 229. Cf. Mark Elvin, The Pattern of the Chinese Past (Stanford: Stanford University Press, 1973), pp. 226–27, which similarly attributes a lack of developed scientific thought in China to the influence of Wang Yangming’s intuitionist philosophy. It has also been argued that linguistic skepticism in the most radical branches of late Ming xinxue actually inspired scholars like Jiao Hong 焦竑 (1540–1620) to turn to philological scholarship. Although this research is correct to observe that xinxue and philology were not mutually exclusive, its conclusions are problematic and reinforce the misleading notion that evidential learning was initiated by a select few exceptional thinkers at the end of the Ming dynasty. For a critique of this
few scholars who did pay attention to philological issues were at odds with the dominant *xinxue* philosophy of the times. In this chapter I show that many Ming scholars in fact saw philological study as a valid method for realizing *xinxue* values in a number of contexts. In other words, philosophy and philology were not antithetical fields to late Ming thinkers. The standard narrative of late imperial intellectual history has identified a turn toward philology and concrete learning at the end of the Ming to replace *xinxue* metaphysical speculation. I argue that many *xinxue* thinkers in fact promoted philology as a morally-engaged pursuit. Their methods were influential for contemporary philological scholars, and also prompted later developments in this field going forward into the Qing dynasty. *Xinxue* scholars advocated an approach to language that saw the ancient script as providing unmediated access to the minds of the sages.

**Wang Anshi and Etymology in the Ming**

The study of the Chinese script (*zixue* 字學), which concerned the Ming dynasty *xinxue* thinkers, constitutes a long tradition of philological scholarship, tracing back to the seminal *Shuowen jiezi* [說文解字 Explanation of simple and complex graphs] from the Han dynasty. The author of *Shuowen jiezi*, Xu Shen 許慎 (c. 58–147), identified six principles of character formation (*liushu* 六書) which would come to form the basis of understanding Chinese characters for most of Chinese history.² These six principles are outlined in Table 1:

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² The term *liushu* occurs as early as the *Zhouli*, but the principles were first explicitly defined (with some debate) by Eastern Han scholars, and most carefully by Xu Shen.
Table 2.1: The Six Principles of Character Formation, as Codified by Xu Shen

<table>
<thead>
<tr>
<th>Six Principles of Character Formation</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>‘Pictographic’ (象形 xiangxing): hieroglyphic drawing of the object meant to be represented</td>
<td>‘wood’ (木 mu)</td>
</tr>
<tr>
<td>‘Indicative’ (指事 zhishi): an ideogram representing an abstract idea</td>
<td>‘above’ (上 shang) / ‘below’ (下 xia)</td>
</tr>
<tr>
<td>‘Compound meaning (會意 huiyi): two pictographic or ideographic characters combined</td>
<td>‘bright’ (明 ming) = ‘sun’ (日 ri) + ‘moon’ (月 yue)</td>
</tr>
<tr>
<td>‘Phonetic loan’ (假借 jiajie)</td>
<td>‘quilt’ (被 bei) comes to be used to write the homophonous bei (passive marker)</td>
</tr>
<tr>
<td>‘Semantic-phonetic’ (形聲 xingsheng)</td>
<td>‘emotion’ (情 qing) = heart radical (semantic element) + 青 qing (phonetic element)</td>
</tr>
<tr>
<td>‘Turned and annotated’ zhuanzhu 轉注 (Meaning unclear—possibly involving characters that share similar meaning or form. It remains a debated category.)</td>
<td>Xu Shen’s example is ‘deceased father’ (考 kao) and ‘aged (老 lao)</td>
</tr>
</tbody>
</table>

The intended meanings of several of these principles are not fully understood, and in fact remained fluid through the late imperial period. As a result of the canonical status of Shuowen jiezi, however, the terminology itself was largely consistent throughout Chinese history. Chinese characters historically were overwhelmingly created according to the semantic-phonetic principle. This fact was acknowledged by most scholars of the script until the 11th century when the leading statesman Wang Anshi 王安石 (1021–1086) proposed a new way of understanding Chinese characters. For Ming dynasty scholars, both the canonical Shuowen jiezi and the radical interpretations of Wang Anshi provided models for understanding the nature of writing.

Wang Anshi, Grand Councilor to Emperor Shenzong, presented his analyses of script in a

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dictionary entitled *Zishuo* [字說 Explanation of characters] which he promulgated in the school and examination system. Our knowledge of the nature of Wang Anshi’s no longer extant dictionary is incomplete, and contemporary citations indicate that it may not have been as monochromatic as is its reputation. It is generally known, however, for its privileging only one way of analyzing characters over all the others: Wang interpreted every component of a given character as having semantic importance for the character’s overall meaning (more or less equivalent to the *huiyi* principle in *Shuowen jiezi*). Wang Anshi believed that understanding the way the sages had constructed characters would give insight into the coherent system that existed in antiquity. For example, he claimed a genetic relationship between the characters for ‘heaven’ 天 and ‘husband’ 夫 because he analyzed them as both being constructed from the same two components, ‘big’ 大 and ‘one’ 一. Wang explained the relationship between the two characters as denoting that “the husband is heaven to his wife” (夫者妻之天故也). According to Wang, that a husband is still not as great as heaven could be inferred from the fact that the character ‘one’ 一 occurred at the top of ‘big’ 大 in the character for heaven, symbolizing the fact that nothing surpasses heaven.4 Similarly, Wang looked at the three characters ‘literatus’ 士, ‘craftsman’ 工, and ‘talent’ 才 as all composed of two horizontal strokes 二 and a vertical stroke ｜. The arrangement of the two strokes 二 was meaningful for Wang as representing the degree to which the class of person had potential to ‘attain’ 達. ‘Laborers’ 工 are blocked off at both

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ends of the upright stroke, and therefore have no potential to attain. The ‘literatus’ is blocked off at the bottom, but has the potential to attain upwards by virtue of his “ambition toward the Way” (志於道), while the ‘talent’ can attain in all directions. Wang believed that the very strokes of characters created by the “former kings” (先王) of antiquity “all have meaning, and come from what is natural” (皆有義，皆出於自然). By analyzing the way characters were put together, as well as juxtaposing them against each other (as in the previous examples), Wang felt that one could gain considerable insight into antiquity. These insights maintained application to the present in his view. The examples above, for instance, could be used to justify societal roles.

As is well documented in contemporary anecdotes from Song biji, such an understanding was not acceptable to many scholars, who relentlessly criticized or parodied Wang Anshi’s lexicographical scholarship. Su Shi 蘇軾 (1037–1101) famously quipped that if Wang Anshi was correct to gloss ‘waves’ (bo 波) as the ‘skin’ (pi 皮) of ‘water’ (shui 水), then surely ‘slipperiness’ (hua 潤) must be the ‘bones’ (gu 骨) of water (shui 水). Less known is the fact that his approach was not universally repudiated, even in the later part of the Northern Song through the Southern Song when most of Wang Anshi’s learning was rejected for political reasons.

This ambivalence heightened during the Ming. On the one hand, Su Shi 蘇軾 (1037–

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8 Huang Fushan, Wang Anshi ‘Zishuo’ zhi yanjiu, p. 41.
Wang’s most outspoken critic, was elevated to the status of a cultural hero, and his parody of Wang Anshi’s *Zishuo* immortalized in Feng Menglong’s *Jingshi tongyan* [警世通言 Stories to Caution the World]. On the other hand, various thinkers began to reevaluate Wang’s contribution to philological scholarship. Perhaps, some scholars averred, Wang Anshi’s approach was not so misguided after all. Wang Shenzhong 王慎中 (c. 1509–1559), for instance, praised the “profound meaning” of Wang’s preface (序) to *Zishuo*, as well as the memorial with which he presented it to the emperor (進字說表). Guo Zizhang 郭子章 (1543–1618) noted that many of the preserved fragments contained valid analyses. Both scholars further opined that without an extant copy of the complete text it would be unfair to give it a definitive evaluation. Others thought that to dismiss Wang’s approach on account of his politics was unreasonable, given his considerable insights into the construction of Chinese characters. While Wang Anshi aimed to set his *Zishuo* apart from the approach in *Shuowen jiezi*, late Ming scholars, such as Xie Zhaozhe 謝肇淛 (1567–1624) and Gu Yanwu 顧炎武 (1613–1682) claimed that both works were engaged in the same lineage of character exegesis.

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Although the full text of *Zishuo* was no longer extant by Ming times, citations of *Zishuo* taken from extant Song works were not uncommon. Li Shizhen 李時珍 (1518–1593), in his influential materia medica *Bencao gangmu*, listed *Zishuo* as a work consulted, and frequently cited from it. Even the early 18th century court-sponsored *Kangxi zidian*, heralded since its publication for the precision and breadth of its citations, included a number of citations attributed to *Zishuo*.14 These citations can all be found in extant Song dynasty works, and there is no reason to believe that Li Shizhen or the Qing court compilers would have seen a copy of *Zishuo*. Nevertheless, it is clear that by the 16th century Wang Anshi’s long-maligned etymological scholarship experienced a reappraisal. As this chapter reveals, this reappraisal was part of a larger reevaluation of how to understand the Chinese script and the meaning of words.

Huang Zuo 黃佐 (1490–1566), a Neo-Confucian thinker of the mid-Ming, repudiated *Zishuo* according to the standard criticism of its interpretations being “forced” (穿鑿 chuan’ao). Still, he thought, the fact that one contemporary Neo-Confucian xinxue scholar in particular seems to have found value in it meant that the text could not be entirely without merit.15 That scholar was Wei Jiao 魏校, and his dictionary, the *Liushu jingyun* 六書精蕴, provided new ways of thinking about the Chinese script as containing embedded meaning that would strongly influence his contemporaries and later generations.

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14 See, for instance, entries for *song* (松 ‘pine tree’), *tan* (菅 ‘sedge’), *zhu* (蛛 ‘spider’), *xiang* (象 ‘elephant’), *he* (alt. char=犭, ‘badger’), *xue* (鵲 ‘bullfinch’). The trend to include natural history-related definitions can perhaps be attributed to the fact that Song encyclopedias heavily cited these sections of Wang’s work.

15 Huang Zuo 黃佐, *Yongyan* 庸言, SKQS CMCS (1552 edition), j.4, p. 15a.
Xinxue and Philology in the Ming

Wang Yangming was the most creative and influential thinker in the Neo-Confucian tradition since Zhu Xi. His xinxue teachings served as the basis for most of the developments in Neo-Confucian thought for the hundred years to follow. However, throughout this period lasting from the mid to late Ming, there was no consensus on what actually constituted xinxue. Nowhere is this more evident than in Huang Zongxi’s 黃宗羲 (1610–1695) compendious discussion of Ming thought, Ming ru xue’an [明儒學案 Records of the Ming Scholars]. Despite the broad implications of its title, Huang’s conception of ‘scholars’ (or ‘Confucians’ ru 儒) is largely focused on those involved in some form of xinxue. For Huang, xinxue orthodoxy could be equated with adherence to the teachings of Wang Yangming, as evidenced by the fact that his judgments of many individual thinkers evaluated the degree to which they understood or explicated Wang Yangming’s theories. Scholars who predated Wang Yangming became part of an imputed xinxue lineage leading up to Wang, despite what Huang Zongxi saw as Wang’s inexplicable neglect to reference them (不知陽明後來從不說起). In general he interpreted the fact that later scholars departed from Wang Yangming’s interpretations as a result of their not understanding the true essence of Wang’s thought, rather than a considered opposition. Another way to interpret these divergent interpretations, however, would be that the general notion of xinxue had a wide following in the mid to late Ming, but Wang’s approach was not taken to be the final word. Generally xinxue thinkers were in agreement that scholars should set their focus on the mind (xin), and that coherent principle (li) was not separate from or external to the mind.

Most felt that literary culture (詞章) was not the key to understanding the workings of the mind. Philology, too, was seen by some as antithetical to true xinxue. However, Wei Jiao, a mid-Ming contemporary of Wang Yangming, devised an alternative xinxue in which the minds of the sages were only accessible through the words they wrote.

Wei Jiao (z. Zicai 子才, h. Zhuangqu 莊渠, s. Gongjian 恭簡, 1483–1543) was a major thinker of the mid-Ming with a distinguished official career. He was born in Kunshan 崑山 county in Suzhou prefecture. After obtaining his jinshi degree in 1505, he began his career as Department Director at the Nanjing Ministry of Justice (南京刑部郎中). His most influential position, for which his deeds have been recounted in multiple sources, was Vice Intendant of Education in Guangdong (廣東提學副使). While in Guangdong, Wei took a strongly anti-Buddhist stance, ordering the destruction of Buddhist relics and confiscating temple estates. An innovative educator, he established a community school plan that came to be emulated by later Intendants. Dismayed by the educational advantages of students in cities, Wei created a rotation system in which students from the countryside would spend some time learning in the more established urban schools. His final years in office were spent in the capital as Chief Minister of the Court of Imperial Sacrifices and head of the Directorate of Education (太常寺少卿掌祭酒)

17 The late Ming Neo-Confucian master Liu Zongzhou 劉宗周 (1578–1645), in summing up the history of xinxue in his dynasty, observed Wang Yangming’s contribution as a necessary attack on these two branches of learning. See his “Zhengxue zajie” 證學雜解 in Huang Zongxi, Ming ru xuean, p. 1575. There are clear exceptions to this generalization. Scholars like Tang Shunzhi developed literary theories as an extension of their xinxue beliefs. See Zuo Dongling 左東嶺, Mingdai xinxue yu shixue 明代心學與詩學 (Beijing: Xueyuan chubanshe, 2002), pp. 108–148.

18 Huang Zongxi, Ming ru xuean, p. 47.

19 Sarah Schneewind, Community Schools and the State in Ming China (Stanford: Stanford University Press, 2006), pp.104–6, 149.
In 1530 he retired and returned to Suzhou, where he shifted his priority to scholarship and teaching. His students included such Suzhou luminaries as the literary scholars Gui Youguang 歸有光 (1507–1571) and Tang Shunzhi 唐順之 (1507–1560), as well as the military strategist Zheng Ruozeng 鄭若曾 (c. 1503–1570).  

As a Neo-Confucian thinker, Wei Jiao was one of the most prominent figures of his day. In many contemporary works, his name is in fact paired with Wang Yangming’s as one of the main representatives of contemporary Neo-Confucian scholarship. That these two in particular were taken to represent a polarity in contemporary xinxue thought can be seen from Huang Wan’s 黃绾 (1477–1551) comment that “those who think Wang Yangming is right consider Wei Jiao to be in error, while those who think Wei Jiao is right consider Wang Yangming to be wrong” (是伯安者則以子才為謬，是子才者則以伯安為非). Wei and Wang disagreed with each other on philosophical grounds; they also belonged to opposing political factions. In his scholarly opposition to Wang Yangming, Wei contributed a way of thinking about language and the nature of the Chinese script as tied to the values of antiquity that would

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20 Gui and Zheng were also related to Wei through marriage. See DMB, vol. 1 p. 204–5; Zhang Chuanyuan 張傳元 and Yu Meinian 余梅年, Gui Zhencuan nianpu 歸震川年譜 (Shanghai: Shangwu yinshuguan, 1936), p.8.

21 Surprisingly, his name is absent in the Dictionary of Ming Biography.

22 Xu Xiangmei 徐象梅, Liangzhe mingxian lu 兩浙名賢錄, SKQS CMCS (ca. 1620–1627 edition), j. 4, p. 35b; Lu Shiyi 陸世儀, Sibian lu jiyao 思辨錄輯要, SKQS, j. 28, pp. 8b–9a; Huang Wan 黃绾, Huang Wan ji 黃绾集, ed. Zhang Hongmin 張宏敏 (Shanghai: Shanghai guji chubanshe, 2014), pp. 331–335; or in slightly more extended lists as in Lu Wenchao 廬文弨, ed., Changjun bayi yiwenzhi 常郡八邑藝文志, XX SKQS, j. 6, p. 27b.

23 Huang Wan, Huang Wan ji, p. 334. Huang goes on to argue that the contemporary dispute over this issue is misguided, since the two are ultimately in the same camp.

shape both Neo-Confucian thought and the world of philology.

Wei’s *Liushu jingyun* [六書精蘊 *Essential meanings of the six principles of character formation*], printed in 1540 by his nephew Wei Ximing (魏希明 1502–1540), is a dictionary of Chinese paleography, organized topically (rather than according to the shape or sound of characters). Like Wang Anshi before him, Wei believed that the ancient forms of characters were relevant to understanding antiquity. Wang Anshi had seen ancient characters as a representation of antiquity as a coherent system, reflected in the sages’ ability to perceive the natural world. Wei Jiao, on the other hand, believed that uncovering the meaning behind the construction of the original characters could reveal the *xin* (heart/mind, hereafter mind) 心 of the sages. As he states in the preface:

> Writing is nothing other than a painting of the mind, that which embodies the principles of everything in heaven and earth. The ancient script apprehended before me that which is common in my mind with everyone else’s. What is it that is common among our minds? It is what is so naturally, what is clarified by the study of the mind, connected as though one.

文者，非他也，心之畫也，所以體天地萬物之撰也。古文先得我心之所同然耳。心之所同然者，何也？自然而然也，心學而明也，貫若一矣。

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26 The description of Chinese characters as a “painting of the mind” originated with Yang Xiong 揚雄 (53 BCE–18 CE), but came to be appropriated by Ming dynasty *xinxue* scholars as a justification for philology. The phrase “embodying the principles of everything of heaven and earth” comes from *Xici zhuan 繫辭傳*.


Scholars should not get mired in books, but instead broaden [the workings of the minds of the ancients] among the myriad things of the world. They should not merely seek [the workings of the mind] in the myriad things of the world, but rather reflect them in their own minds. That the mysterious workings of heaven are not a slave to [physical] things is the same now as in antiquity. Ah, if heaven wishes to restore This Culture/script, this is the beginning!

Although Wei Jiao never explicitly mentions Wang Anshi in his work, the final sentence above is almost certainly a reference to the conclusion of Wang Anshi’s preface to Zishuo which states: “Heaven plans to restore Our Culture and is using me to aid its beginning.” Wei Jiao and Wang Anshi differed in that Wang primarily looked to characters for a reflection of the coherent system the sages had apprehended from natural phenomena. In his view, the fact that they were created by man (人之所制) was secondary to their basis in the natural order of “what is so-of-itself” (出於自然). Wei would agree that characters ultimately revealed “what is naturally so” (天然是然), but his concern was much more with the human aspect of their derivation. Explaining the purpose of the work in a letter to another scholar, he claimed that he was revealing the “methods of the minds of the ancients” (古人之心法). By understanding the process by which the sages created writing, Wei believed that we could understand the way the minds of the sages worked.

Like Wang Anshi, Wei Jiao was committed to Zhou dynasty zhuan [篆 seal script] forms

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29 Perhaps referencing Zhuzi yulei 朱子語類: 天機之不器於物者，在方為方，在圓為圓.

30 Liushu jingyun, xu, pp. 5b–6a.


33 Wei Jiao 魏校, Zhuangqu yishu 莊渠遺書, SKQS, j. 12, p. 19b.
of characters, which had been standardized in the 3rd century BCE. This is evident from the fact
the entire text of Wei’s dictionary, including definitions and the preface, is written in a modified
zhuan script (Figure 2.1). For Wei, as well as a number of other xinxue thinkers, understanding
antiquity and ancient values meant experiencing and living them. Wei practiced this in writing
outside of his dictionary, as well. His commentary to the Daxue [大学 Great learning] begins
with a transcription of the text in an ancient script (Figure 2.2). In some preserved examples of
calligraphy from letters Wei wrote, we can see that even brief notices to students would
sometimes employ archaic variant characters. Although the contemporary popularity in Suzhou
of such artistic pursuits as calligraphy and seal-making may have played a role in Wei’s adoption
of this stylized script, the primary justification was not aesthetic. Instead, Wei believed that the
earliest forms of written characters (that he was aware of) demonstrated the intentions of the
ancient sages in ways that the later simplification of characters glossed over.

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34 Wei’s disciple Xu Guan 徐官 (discussed below) annotated the published version of the
dictionary, providing kaishu [regular script] 楷書 “translations” of some more difficult to
recognize zhuan forms.

35 Wang Gen 王艮 famously insisted on wearing what he considered to be ancient garments (言
尧之言，行尧之行，而不服尧之服，可乎). See Huang Zongxi, Ming ru xuean, p. 709.

36 See his Daxue zhigui 大學指歸.

37 See examples Xu Guan preserved in Xu Guan 徐官, Gujin yin shi 古今印史, SKQS CMCS,
moji, pp. 1a–6b.

38 Zhuan script was used in the production of seals. However, many contemporary calligraphers
upheld the Song dynasty view that the regular kaishu script reflected moral rectitude. For
scholars of the ancient script like Wei, it was precisely the opposite, the association of kaishu
being a departure from ancient morals.
Figure 2.1: An excerpt from the preface to *Liushu jingyun*, highlighting the modified ancient script Wei Jiao employs throughout.\textsuperscript{39}

Figure 2.2: The opening of the *Daxue* in Wei’s revised version, imitating an ancient script.\textsuperscript{40}

\textsuperscript{39} *Liushu jingyun*, xu, p. 5b.

\textsuperscript{40} Wei Jiao 魏校, *Daxue zhigui* 大學指歸, SKQS CMCS, j. 1, p. 1a.
Wei’s explications of characters based on ancient forms were reflective of contemporary issues and debates in the field of xinxue. For example, the character ‘to obtain’ 得 (de) (the form of which Wei employs is shown in Figure 2.3), he writes:

Figure 2.3: Zhuan script form of ‘to obtain’ [de 得]

De- pronounced with the initial of duo and the final of ze- is composed of the graphs for jian 'to see' and shou ‘hand’. Why is that? What our vision can reach is empty and not necessarily real. But if we hold something in our hands, then it is something we possess ourselves. This should persuade people that knowledge and action are united.

The unity of knowledge and action (zhixing heyi) was one of the major tenets of xinxue as defined by Wang Yangming; evidently Wei agreed with Wang on this point. Traditional analyses of this character interpreted the upper component of the character to be a shell (bei 貝), which served as a form of money in antiquity. Having a ‘shell’ or money in one’s hands was thus representative of obtaining something. Wei interpreted the upper component as the similar character ‘to see’ (jian 見) to represent knowledge. Orthodox Neo-Confucian doctrine, based on

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41 Liushu jingyun, j. 4, p. 12a.
the codifications of Zhu Xi, claimed that one must first observe things and acquire knowledge before putting it into action. In other words, one must first learn what is morally correct, or else one’s actions may immoral. *Xinxue*, on the other hand, held that knowledge and action could not be separated; according to Wang Yangming, knowledge could only be acquired through action. Wei Jiao felt he had achieved a concrete way of demonstrating that this had been the view of ancient sages through his philological exegesis of characters.

The majority of the entries in Wei’s dictionary provide similar *xinxue* inspired explanations of ancient character forms. In ‘knowledge’ (*zhi* 知), for instance, Wei discourses specifically on *liangzhi*, the innate understanding of goodness that *xinxue* scholars advocated recovering. In other examples, he sought to demonstrate that certain characters imply the fundamental unity of all things in the world.\(^{42}\) Recognition of this unity was a central feature of *xinxue* for which it was the basis of all morally-informed decisions. Wang Yangming argued that the removal of selfish desire (*私欲*) could lead to the recognition of unity with all things, and cautioned against seeking this knowledge outside of the mind (*揣測測度於其外*).\(^{43}\) Wei Jiao implicitly proposed the alternative that this unity could fruitfully be explored in the written texts of antiquity, through insight the writing system provided into the minds of the sages.

Wei’s dictionary achieved a good deal of fame during his lifetime. Prior to printing, Wei circulated the manuscript among a coterie of scholars. In particular, Wei corresponded with many of the most prominent *xinxue* thinkers of the age for assistance in writing the definitions.

In a revealing letter to Zou Shouyi 鄒守益 (1491–1562), a student of Wang Yangming’s, Wei

\(^{42}\) See, for example, *Liushu jingyun*, j. 3, p. 3a; j. 4, p.57a.

\(^{43}\) *Daxue wen* 大學問, in *Wang Yangming 王陽明, Wang Yangming quanji* 王陽明全集, ed. Wu Guang 吳光, Qian Ming 錢明, Dong Ping 董平, Yao Yanfu 姚延福 (Hangzhou: Zhejiang guji chubanshe, 2010), pp. 1015–16.
wrote:

The character ‘knowledge’ (知 zhi) in the third juan of Liushu jingyun, the character ‘centrality’ (中 zhong) in the fourth juan, the character ‘sort’ (格 ge) from the sixth juan, and the character ‘numinous’ (靈 ling) from the second juan have some correspondence with your previous letter. I wish that you might read through them and amend any mistakes.

六書精蕴中，三卷知字，四卷忠字，六卷格字，二卷靈字，與來教有相符處，願取一觀，訂其得失。④5

This is not an isolated case. Wei requested revisions from such prominent officials and thinkers as Cui Xian (1478–1541), Hu Zuanzong (1480–1560), Huo Tao (1487–1540), Xiong Jia (1478–1554), and Gan Gongliang (jinshi 1508). Wei Ximing, recounting the publication process in his colophon, notes Wei Jiao’s reluctance to print the work, so long as he could continue to improve it (今也，吾未衰，尚希吾學有進也)。④6 The improvements Wei sought were evidently developed out of collaborative discussion of xinxue and philological values with leading contemporary scholars.

In addition to widely distributing manuscripts of his work, Wei transmitted his style of xinxue philology through his students. For example, Wang Yingdian, following the model of his teacher, compiled a dictionary of ancient script forms, organized topically, entitled Tongwen beikao [同文備考 A complete study of the unified script]. This work was printed by Wang Zongmu (1524–1592), himself a noted xinxue scholar. Wang Yingdian felt that his work could complement Wei’s: “[Wei Jiao’s] Jingyun primarily illuminates the Way, but has

④4 This is evidently from an earlier manuscript, as the character zhong is now in the third volume with zhi.

④5 Wei Jiao, Zhuangqu yishu, j. 11, p. 30a–30b.

④6 Liushu jingyun, ba, p. 1a.
implications for the arts. [My] Beikao primarily discusses art, but relates it to the Way. For this reason, they complement each other well” (夫精髓者，主明道而寓諸藝者也，備考者，主述藝而括夫道者也，斯故並行而不悖矣). By art, Wang is likely referring to the proper calligraphic forms of writing characters, given that he places emphasis on the different kinds of strokes in his prefatory material. Still, Wang argued, “it is also not acceptable to refer to this [art] as something apart from the Way. Thus by observing their [i.e., the sages’] writing, we can see the Way. When we illuminate their Way, then education is established. Is it merely art?” (若謂是為非道，亦不可，觀其文可以見道，明其道而敘斯立矣，藝云乎哉). While acknowledging the different focus of his work, Wang believed it would ultimately contribute to the same project as Wei’s Liushu jingyun. Wang’s work contained considerably more characters than Wei’s. Nevertheless, Wang drew from his teacher’s work throughout, citing or paraphrasing definitions from Liushu jingyun. He also cited things reportedly from Wei’s personal instruction (師云) which had not been included in Wei’s dictionary. The volumes of Tongwen beikao were organized according to categories, following a model close to Wei Jiao’s (for a comparison see Table 2.2).

47 Wang Yingdian 王應電, Tongwen beikao 同文備考, SKQS CMCS (1540 edition) [hereafter Tongwen beikao], xu, p. 4a.
48 Tongwen beikao, xuwen, p. 13b.
49 Tongwen beikao, fanli, p. 3b.
Table 2.2: Thematic categories compared in Wei Jiao’s *Liushu jingyun* and Wang Yingdian’s *Tongwen beikao*.

<table>
<thead>
<tr>
<th>Liushu jingyun</th>
<th>Tongwen beikao</th>
</tr>
</thead>
<tbody>
<tr>
<td>象數 (Images and numbers)</td>
<td>天文 (Heavens)</td>
</tr>
<tr>
<td>天文 (Heavens)</td>
<td>地理 (Earth)</td>
</tr>
<tr>
<td>地理 (Earth)</td>
<td>人容 (Appearance of Humans)</td>
</tr>
<tr>
<td>人倫 (Human relations)</td>
<td>人道 (The Way of humans)</td>
</tr>
<tr>
<td>人體 (Body of humans)</td>
<td>人體 (Body of humans)</td>
</tr>
<tr>
<td>宮室 (Dwellings)</td>
<td>動物 (Animals)</td>
</tr>
<tr>
<td>飲食 (Food)</td>
<td>植物 (Plants)</td>
</tr>
<tr>
<td>衣服 (Clothes)</td>
<td>用物 (Goods)</td>
</tr>
<tr>
<td>器用 (Implements)</td>
<td></td>
</tr>
<tr>
<td>草木 (Plants and treese)</td>
<td></td>
</tr>
<tr>
<td>鳥獸 (Animals and birds)</td>
<td></td>
</tr>
<tr>
<td>虫魚 (Insects and fish)</td>
<td></td>
</tr>
<tr>
<td>Section on phonology</td>
<td>Section on phonology</td>
</tr>
</tbody>
</table>
The content of the dictionary was also heavily imbued with Neo-Confucian values. As with Wei, Wang chose the ancient character forms he believed best conformed with the intent (rather than sound) of the character. Hence, for ‘virtue’ [de 德], he followed Wei Jiao in choosing an obscure form 去, composed of the characters ‘upright’ [zhi 直] and mind [xin 心], claiming that “when man is first born, he is upright. This is the heavenly nature of his original mind” (人之生也直，此本心之天德也).\(^{50}\) This differs from the traditional, and still accepted, exegesis of this character as composed of a semantic and phonetic component. Citing Wei Jiao, Wang also disputed the common form of ‘to believe’ [xin 信], composed of the characters ‘man’ and ‘speech,’ as he believed the speech of men in and of itself cannot be believed.\(^{51}\) Both chose instead an alternative character composed of the characters ‘speech’ and ‘mind.’ This character, they argued, better reflected the xinxue of the sages by indicating that truth emerged from a correspondence between one’s speech and one’s mind.

Like Wei Jiao, Wang’s interest in ancient script forms did not just constitute scholarly research, but also translated into practice. As noted above, Wei Jiao dashed notes to students using archaic characters. Wang Yingdian more formally presented a scroll of his archaic calligraphy to his colleague, and fellow Wei Jiao student, Tang Shunzhi 唐順之 (1507–1560) (himself a renowned contemporary literary figure). Tang wrote in appreciation that Wang’s transcription of the names of the 64 hexagrams from the Yijing in ancient script illuminated their meaning.\(^{52}\) Some contemporary scholars similarly advocated a return to antiquity through literary

\(^{50}\) Tongwen beikao, j. 4, p. 1b.

\(^{51}\) Tongwen beikao, j. 4, p. 14b.

\(^{52}\) Tang Shunzhi 唐順之, Tang Jingchuan wenji 唐荆川文集 (Shanghai: Shangwu yinshuguan, 1922), j. 17, p. 16b
style.\textsuperscript{53} For \textit{xinxue} scholars practicing antiquity was a valid enterprise. But more important was closely studying relics, in this case the script, to understand the way the ancients’ minds worked.

Another such student of Wei Jiao’s was Xu Guan 徐官, whose \textit{Gujin yinshi} [古今印史 A history of seals past and present] analyzed the meanings of ancient characters on personal seals. It was evidently at least in part a product of discussion with Wei Jiao. For example, Xu claims to have been puzzled by the seal used by the early Ming court scholar Song Lian 宋濂 (1310–1381) for his surname. He thereupon showed it to Wei Jiao, who reportedly “deliberated over it for some time” (玩之良久) before exclaiming that Song Lian had employed an appropriate character.

Wei’s demonstration was based on the strokes of the variant character Song Lian used, which Wei intuited to capture the original meaning of the character.\textsuperscript{54}

While this selectivity of character forms may seem arbitrary today, it achieved a broad currency in contemporary discussions of etymology outside of this circle of scholars. Later in the Ming, for example, Gao Panlong 高攀龍 (1562–1626) a founding member of the reformist Donglin Academy, echoed a definition cited above: “Characters are a painting of the mind. The eye strikes them and the mind is preserved. For example, ‘virtue’ is composed of ‘upright’ and ‘mind,’ as an upright mind is virtuous” (夫字心畫也，目擊而心存，如德從直從心，直心為德也).\textsuperscript{55} In the early Qing, Dong Yue 董說 (1620–1686), author of \textit{Xiyu bu} [西遊補 A supplement to \textit{Journey to the West}] and an \textit{Yijing} commentator, wrote essays on the meaning of

\begin{itemize}
    \item \textsuperscript{53} Daniel Bryant, \textit{The Great Recreation: Ho Ching-ming (1483–1521) and His World} (Leiden: Brill, 2008).
    \item \textsuperscript{54} Xu Guan, \textit{Gujin yin shi}, p. 9b.
    \item \textsuperscript{55} Gao Panlong 高攀龍, \textit{Gaozi yishu} 高子遺書, SKQS, j. 12, p. 23a.
\end{itemize}
characters following the style of, and directly citing, Wei Jiao.\textsuperscript{56} While superficially similar folk etymologies have a long history in China, such discussion in elite circles as something both philosophically and philologically significant was new.\textsuperscript{57}

*Xinxue* scholars took particular interest in Wei’s method. In a postface to Wei’s dictionary, Lu Ao 陸鏊 (*jinshi* 1502) defended the work against the potential criticism that Wei neglected the fundamental task of “restoring the Way of antiquity” (復古道), which was “to rectify the minds of men” (正人心). Lu countered that this rectification could not “come out of nothingness” (憑虛而正). By focusing his attention on philology, Lu argued that Wei had placed “explicating the learning of the mind (*xin*

\textit{xue*) on solid ground, as well as provided the necessary tools for students to “understand the Classics” (通經).\textsuperscript{58} Wei’s nephew, Ximing, who was ultimately responsible for printing the work, claimed in a colophon that: “my uncle’s work does not lie in the six principles of character formation. It lies in the explication of the learning of the mind” (伯父之作，匪在六書，在闡心學也).\textsuperscript{59} Lu Ao and Wei Ximing could envision a *xinxue*-based criticism of Wei’s dictionary, but argued that philological and *xinxue* endeavors need not be opposed.

This opinion was echoed among prominent contemporary *xinxue* scholars. For instance,

\begin{thebibliography}{99}
\bibitem{56} Dong Yue 董說, *Fengcaoaon qianji* 豐草庵前集 (Shanghai: Shanghai shudian, 1994), j. 5, pp. 14a–17a.
\bibitem{58} *Liushu jingyun, houxu*, pp. 1b–5b.
\bibitem{59} *Liushu jingyun, ba*, p. 1b.
\end{thebibliography}
Luo Hongxian 羅洪先 (1504–1564), one of the most influential proponents of Wang
Yangming’s theories,60 associated closely with both Wei Jiao and Wang Yingdian. He wrote a
colophon for Wang’s Tongwen beikao, which connected Wang’s etymological scholarship to the
‘teachings of the sages’ (聖教). Luo indicated that he had some reservations about Wang’s work,
but was in agreement that the learning of the ancient sages had been obscured by the
transformation of the Chinese script over time. Paraphrasing the Xici zhuan [繫辭傳 Appended
Verbalizations to the Yijing], Luo claimed that “script can not fully express speech” (書且不盡
言矣), but argued that we would be even farther from the intentions of the sages if we
disregarded their script (而況非其書也).61 The writings of Wei and Wang seem to have held a
particular attraction for scholars in the xinxue center of Jiangxi, such as Luo Hongxian and Zou
Shouyi. These scholars were designated by Huang Zongxi as the orthodox interpreters of the
teachings of Wang Yangming. However to some extent they endorsed reading and the
accumulation of knowledge as valid pursuits. Wei’s scholarship in particular provided them with
a concrete example of how close textual study could be beneficial to xinxue.

Gu Yingxiang 顧應祥 (1483–1565), an idiosyncratic xinxue thinker, went farther in
attempting to justify Wei’s style of philology by arguing that it had been a part of the xinxue
tradition since its creation. In a preface to Xu Guan’s Gujin yinshi, Gu cited a passage from the
collected sayings of Lu Xiangshan 陸象山 (1139–1193), the famed Song dynasty philosopher
whose early emphasis on the mind as principle was appreciated by Ming xinxue scholars, to the

60 According to Huang Zongxi’s assessment.
61 Luo Hongxian 羅洪先, Luo Hongxian ji bubian 羅洪先集補編, ed. Zhong Caijun 鍾彩鈞 and
267.
effect that ancient character forms were preferable to modern. Gu conceived of learning ancient forms as having direct benefit to the xinxue goal of recovering one’s original mind: “If today’s scholar can restore his lost mind while writing characters, causing each dot and stroke to have a precedent, and not violate the ancient, then he will be very near the Way” (今之學者，苟能於作字之時收其放心，一點一畫使皆有來歷而不背於古，則於道其庶幾矣). Similarly to cosmological scholars, Gu Yingxiang also felt that the natural basis of xinxue provided a superior method of scholarship to the study of ancient texts alone. Hence, in his preface to a phonological treatise by the renowned mid-Ming scholar Yang Shen, Gu wrote: “Generally, any learning of the ancients that has been passed down to later generations is only remnants. But if one examines natural sounds, seeking accord with one’s own mind, then one will be near the Way” (大抵古人之學凡可以傳於後世者皆其跡，而審夫自然之音，以求契於吾之心，則於道也幾矣). Late Ming scholars recognized that they had only limited access to the range of texts that would have been available in antiquity. The innate knowledge present in the mind, however, or in other cases, cosmological and musical correlations, provided a standard for scholarly judgment that surpassed the textual record.

Like Luo Hongxian, Gu Yingxiang also had reservations about Wei Jiao’s methods. In another work, Gu praised Wei Jiao’s scholarship on ancient character forms, but questioned the logic of a wholesale return to writing in the ancient script. Gu saw the transformation of script over time as a natural condition of historical change (時勢使然，蓋有不得不變者). Moreover,

62 Xu Guan, Gujin yin shi, xu, p. 2b.

63 Gu Yingxiang 顧應祥, Zhuanzhu guyin lüe 轉注古音略 (1532 edition at National Central Library of Taiwan), xu, p. 2b.

64 Gu Yingxiang 顧應祥, Jingxuzhai xiyin lu 靜虛齋惜隠錄, SKQS CMCS, j.6, p.7b.
it would be difficult to replace a standard script that already been established for so long. As Gu pointed out, even Confucius was willing to bend to popular custom over antiquity if there were reasonable justification. Hence, Gu proposed a compromise: when the occasion called for writing in ancient script styles one should attempt to faithfully emulate the ancient, presumably according to Wei Jiao’s analyses. In other cases, regular script, as prescribed in the dynastic standard *Hongwu zhengyun*, would be acceptable.

As the examples of Luo Hongxian and Gu Yingxiang show, major *xinxue* scholars were reading the philological works of Wei and his school. On the one hand, they seemed to share a sense that Wei was somewhat eccentric in the degree to which he advocated studying and practicing the ancient script. However, they agreed with the basic premise that the ancient script contained important traces of the minds of the sages. It is important that they also characterized this scholarship as philology (訓詁), and aligned it within the philological tradition of character analysis beginning with Xu Shen in the Han dynasty. Hence, they were in fact acknowledging that philology was beneficial to *xinxue*. Wei himself did not argue that philology was the sole component of *xinxue*. As he wrote in a letter to a fellow Neo-Confucian scholar Zhang Bangqi 張邦奇 (1484–1544), “reading the works of the sages now, one should aim to experientially understand them oneself. If you get mired in the language and characters, then you will chase the branch and forget the root” (今讀聖賢之書，便當尋向自己身上體貼做去，若滯於言語文字間，則是逐末忘本矣). He similarly criticized Han dynasty commentators for looking at the

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65 *Lunyu* 9.3: 麻冕，禮也；今也純，儉。吾從眾。

66 Gu Yingxiang, *Jingxuzhai xiyin lu*, j.6, p. 8a.

Classics solely from a philological perspective. The distinction seems to be that Wei did not see philology as an end in itself. However, he believed its methods provided crucial access to the minds of the sages and should therefore not be neglected.

This remained part of the xinxue tradition well past Wei Jiao’s lifetime, as evidenced by Li Fu 李紘 (1673–1750), one of the most productive xinxue thinkers of the Qing dynasty. His explanations of important philosophical terms similarly parsed the component parts of characters. It has been argued that Li’s adaptation of xinxue to incorporate philological argumentation was a product of the philological age he lived in. Earlier precedents to this style of exegesis, however, would indicate that Li may have been drawing on a xinxue tradition that competed with Wang Yangming’s vision in the mid-Ming.

The persistence of Wei Jiao’s method in Neo-Confucian circles is even clearer in a late Ming or early Qing dictionary by one Wu Shilin 吳士琳, entitled Zhengyun yi 正韻翼 An aid to {Hongwu} Correct Rhymes. We know very little about Wu Shilin, except that he was from Xin’an 新安, Anhui province. Xin’an was the birthplace of the great codifier of Neo-Confucian thought, Zhu Xi, and has generally been considered a stronghold of Zhu’s thought, in the face of

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68 Wei Jiao, Zhuangqu yishu, j.6, p. 6a.

69 Li Fu 李紘, Mutang biegao 穆堂別稿 (Shanghai: Shanghai guji chubanshe, 2009), j. 9, pp. 2a–3a; Li Fu, Mutang chugao 穆堂初稿, XX SKQS, j. 18, p. 18a–18b.


71 A copy of this text is preserved at the National Library of China.
the popularization of xinxue in the Ming. Nevertheless, Wang Deyuan 汪德元, a teacher at the famous Neo-Confucian academy in Xin’an, the Ziyang Academy 紫陽書院, helped Wu in editing his dictionary, perhaps for use in instruction at the Academy. The work itself is clearly modeled after Wei Jiao’s, and explicitly cites Wei throughout. Its mission was similarly to uncover the xinxue of the ancient sages. Given the profound implications of philology, Wu asks “who would dare call it a lesser Way?” (敢云小道). Guo Qitao has noted the influence of xinxue in popular Neo-Confucian discourse geared toward non-elites in Xin’an. Wu Shilin’s dictionary is an example at the elite level of how xinxue scholarship could be attractive in an environment of orthodox Cheng-Zhu Neo-Confucianism.

Cheng-Zhu scholars may have held aversion to Wang Yangming’s discrediting of reading as a path to moral knowledge. Other forms of xinxue existed, however. The basis of alternate forms of xinxue in textual study, such as that of Wei Jiao, may have attracted scholars who would otherwise have ignored the xinxue message. It has been posited by Yü Ying-shih that late Ming philology in large part emerged out of “metaphysical controversies in the Ming,” as thinkers sought more concrete ways to support their positions in philosophical debate. In this way, philology “gradually replaced moral metaphysical speculation.” Benjamin Elman has further argued that late Ming-early Qing philological scholars consciously envisioned themselves

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73 Wu Shilin, Zhengyun yi, j. 9, p. 1a.
74 Qitao Guo, Ritual Opera and Mercantile Lineage, p. 143–145.
as reconstructing a form of long neglected Han dynasty learning. As the following sections will show, *xinxue* played a large role in defining the terms of philological debate in late imperial China. Philology was not a reaction against or departure from metaphysical *xinxue* philosophy. Instead, adherents to *xinxue* incorporated philology into their philosophical systems. This in turn influenced contemporary philologists, who adopted analytical methods from *xinxue* philosophers.

**Xinxue in the World of Philology: Thematic Ordering**

Wei Jiao’s dictionary was not only influential in the Neo-Confucian *xinxue* community, but also within the world of philological scholarship. As shown above, numerous dictionaries in the style of Wei’s *Liushu jingyun* were produced in the 16th and 17th centuries. Wei’s dictionary in particular assumed a place as one of the standard reference works on the etymology of characters. Its widespread use, as well as the perception that it was a philological text, is evident from many contemporary bibliographical catalogues where it is included under sections related to philology (see Table 2.3).

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76 Benjamin A. Elman, *From Philosophy to Philology: Intellectual and Social Aspects of Change in Late Imperial China* (Cambridge, Mass: Council on East Asian Studies, Harvard University, 1984), p. 44.
Table 2.3: Wei Jiao’s *Liushu jingyun*, as it is categorized in various Ming bibliographies.\(^{77}\)

<table>
<thead>
<tr>
<th>Ming bibliography</th>
<th>Bibliographic category associated with Wei Jiao</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Guoshi jingjizi</em> 國史經籍志 by Jiao Hong 焦竑 (1540–1620)</td>
<td>Writing 書 j. 2, 57b, p. 249</td>
</tr>
<tr>
<td><em>Xingrensi chongke shumu</em> 行人司重刻書目 by Xu Tu 徐圖</td>
<td>Calligraphy and Painting 書畫類 36b, p. 636</td>
</tr>
<tr>
<td><em>Chaoshi baowentang shumu</em> 晁氏寶堂書目 by Chao Li 晁瑒 (1507–1560)</td>
<td>Dictionary (rhyme book) 韻書 xia, 1a, p. 775</td>
</tr>
<tr>
<td><em>Xuanshangzhai shumu</em> 玄賞齋書目 by Dong Qichang 董其昌 (1555–1636)</td>
<td>Dictionary (character book) 字書 j.1, 12a, p. 1496</td>
</tr>
<tr>
<td><em>Xu shi jiacang shumu</em> 徐氏家藏書目 by Xu Bo 徐勃 (1570–1642)</td>
<td>Character (studies) 字類 j. 4, 7a, p. 1710</td>
</tr>
<tr>
<td><em>Maiwangguan shumu</em> 溝望館書目 by Zhao Qimei 趙琦美 (1563–1624)</td>
<td>Philology 小學 zi, 50a, p. 1436</td>
</tr>
<tr>
<td><em>Jingutang shumu</em> 近古堂書目 by Zhou Hongzu 周弘祖 (1559 jinshi)</td>
<td>Philology 小學 shang, 8a, p. 1160</td>
</tr>
</tbody>
</table>

Yang Shen 楊慎 (c. 1488–1559), perhaps the most famous philologist and critic of Neo-
Confucianism of the mid-Ming, cited Wei (both critically and approvingly) in several works.\(^{78}\)

By the end of the dynasty, Wei came to be seen alongside Yang Shen and Zhao Yiguang
(another late Ming philological scholar) as one of the dynasty’s most significant etymological
scholars.\(^{79}\) Citations of sections of *Liushu jingyun* continued well into the Qing, appearing
throughout the *Kangxi zidian* and other such reference works.

Wei’s method of parsing characters remained contentious, especially among serious

\(^{77}\) All page numbers refer to Feng Huimin 馮惠民 and Li Wanjian 李萬健, ed., *Mingdai shumu tiba congkan* 明代書目題跋叢刊 (Beijing: Shumu wenxian chubanshe, 1994).

\(^{78}\) See for example Yang Shen 楊慎, *Danqian zonglu* 丹鈞總録, SKQS, j. 16, p. 23a, and *Sheng’an ji* 升庵集, SKQS, j. 42, pp. 9b–10a.

\(^{79}\) See Dai Chong 戴重, *Hecun ji* 河村集 (Beijing: Beijing chubanshe, 1997), j. 3, [6a].
philological scholars. However, another aspect of his dictionary did gain larger traction: namely, the thematic organization of entries. In premodern China there existed three primary methods of dictionary entry lookup: 1) those based on sound (usually arranged according to rhyme), 2) those based on script (involving features such as the number of strokes in and shared components among characters), and 3) thematic or semantic arrangements. The famous rhyme dictionaries of the Song dynasty, such as *Guangyun* 廣韻 and *Jiyun* 集韻, set the model for sound-based systems, while *Shuowen jiezi* was the progenitor of script-based methods.

The first two methods were commonly employed in lexicographical works, while the latter was reserved primarily for encyclopedias.80 The thematic arrangement of entries in philological works was heavily associated with Neo-Confucianism. In such works, not only were terms organized by overarching category; the very ordering of terms within a category often reflected a philosophical message. *Beixi ziyi* [北溪字義 Master Beixi’s meaning of words], a Southern Song exegesis of important Neo-Confucian terms is a prime example. In this work, each subsequent definition builds upon premises established in the previous definition.81 This principle remains at work in Wei Jiao’s dictionary, and can be found in other Ming dictionaries.

In one exemplary work, the *Renzi ce* [認字測 Conjectures on the recognition of characters], the compiler, one Zhou Yu 周宇 (fl. 1580s), actually offered an explanation for his specific ordering of characters. For example, in explicating the sequence of characters defined in

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80 Increasingly, however, lexicographical works came to follow a thematic arrangement, such as the famous late Song–Yuan dynasty etymological dictionaries of Dai Tong 戴侗 and Yang Huan 楊桓.

81 It is worth mentioning that early Song dynasty scholars tried to similarly identify meaning in the ordering of sections in *Shuowen jiezi*. See Xu Kai 徐锴, *Shuowen jiezi xizhuan* 說文解字繫傳 (Beijing: Zhonghua shuju, 1987), j. 31–j. 32.
one section of his lexicon (‘heaven,’ ‘great,’ ‘correct,’ ‘center’), Zhou writes, “only heaven is
great, therefore [the character] ‘great’ comes after [the character] ‘heaven.’ When there is
something great it must be correct, and therefore [the character] ‘correct’ comes after [the
character] ‘great.’ When something is correct its way is centered, and therefore [the character]
‘center’ comes after [the character] ‘correct’.” And so Zhou proceeds to outline the ordering of
each and every dictionary entry, placing importance on the sequence of each individual
character. This implies that his dictionary was in some sense meant to be read from beginning to
end in order to capture the significance behind the progression from one entry to the next. Thus
in his view the dictionary was intended to contain two levels of meaning: that of the individual
entry, and that of the relationship of entries to one another, as conveyed by their ordering.

Zhou’s dictionary does not appear to have circulated especially widely, but it
occasionally appears in Ming personal library catalogues. As a result of the philosophical nature
of its entries and ordering principles, the Qing catalogers of the Siku quanshu categorized the text
under the zi 子 heading of philosophical literature. However, Ming catalogers identified this
work as a philological text, placing it alongside other works of more traditional philology. In
ddition to its philological appeal to Ming scholars, it also attracted the attention of important
Neo-Confucian thinkers, such as Feng Congwu 馮從吾 (1556–1627) and Qu Jiusi 瞿九思 (1573
juren). Feng was a student of Xu Fuyuan 許孚遠 (1535–1604), who also taught the most
acclaimed Neo-Confucian philosopher of the late Ming, Liu Zongzhou 劉宗周 (1578–1645).
Feng reports in his preface to the Renzi ce that when he first encountered the work, he exclaimed:

82 Zhou Yu 周宇, Renzi ce 認字測, SKQS CMCS (1611 edition), xu hou, p. 1b.
83 For example Jiangyin Li shi deyuelou shumu zhailu 江陰李氏得月樓書目摘錄 by Li Echong 李鶚翀, p. 3b, and Xu shi jiacang shumu 徐氏家藏書目 j. 4, p. 8b, in Feng Huimin and Li Wanjian, ed. Mingdai shumu tiba congkan.
“Oh how profound, these thoughts. The Way must be located here!” (思深哉，道盖在此乎). He further claimed that the work would “have benefits for the minds of men and the Way of the world” (于人心世道有裨益). Feng was one of a prominent group of scholars who expressed distress at some of the more radical directions of contemporary xinxue thought. To him as well, philology appeared as a way to keep xinxue on solid ground. Feng was in turn a close colleague of the polymathic Neo-Confucian scholar Lü Weiqi 呂維祺 (1587–1641), whose compendious lexicographical collection Yinyun riyue deng [音韻日月燈 A sun and moon lamp to illuminate phonology] consulted both the works of Wei Jiao and Zhou Yu. Lü Weiqi did not adopt a thematic organizational system, but nevertheless claimed grander socio-ethical implications of his work, which caused a contemporary scholar to describe it as “truly a guide for the study of principle [in other words, Neo-Confucianism]” (實理學之南車).

It was not only Neo-Confucians who saw Wei’s method of ordering the entries of a dictionary as valuable. Some contemporary scholars evidently saw thematic arrangements as more philologically convincing. Although Wei Jiao implemented this organizational system on

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84 Zhou Yu, Renzi ce, xu, pp. 1b–2b. Philosophical ties aside, Feng was also dedicated to promoting the Guanzhong/Shaanxi “Guanxue” school, and wrote an intellectual genealogy of the school entitled Guanxue bian 關學編. Zhou Yu, not coincidentally, was from this region.


86 Lü’s wide-ranging list of philological scholarship consulted also includes Shao Yong’s Huangji jingshi, and the Jesuit Nicolas Trigault’s Xiru ermuzi. See Lü Weiqi 呂維祺, Yinyun riyue deng 音韻日月燈, SKQS CMCS, juanshou, pp. 1b, 2b.

87 Lü Weiqi, Yinyun riyue deng, title page.
the basis of xinxue convictions, other philological scholars adopted it for its merit as a way of understanding the relationships between terms. Han Qia 韓洽, a Ming loyalist, compiled a massive dictionary in the early years of the Qing dynasty focused on ancient script. One of his primary targets was Wei Jiao whose analyses of characters he largely repudiated as absurd. As he charges in the Editorial Principles of his Zhuanxue cejie [篆學測解 Speculations of the zhuan script]: “[Wei Jiao’s] Jingyun focuses on discussing the Way throughout. It consistently prioritizes philosophical principles over actual phenomena. Its mistakes are alternately hackneyed and superficial” (如精薈一書主講道，每以義理為先，事物為後，或失則腐，或失則浮).\(^\text{88}\) He nevertheless saw Wei’s work as containing some philological value. Later in the same Editorial Principles, Han upholds the organizational system of Wei Jiao’s over the stroke-based systems of other contemporary works: “presently I somewhat adhere to [Wei’s] Liushu jingyun and [Wang Yingdian’s] Tongkao, dividing sections according to heaven, earth, man, and things. When it comes to works like Zihui, these are just explanations for illiterates and have nothing to do with the study of characters” (今略依六書精薈備考以天地人物分之，至於字彙等書，止為不識字人說法，與字學無干).\(^\text{89}\)

The system of lookup in Zihui [字彙 Assemblage of characters] employed a simplified array of radicals that would come to be adopted in the Kangxi zidian. It is commonly seen as one of the major philological advances of the late Ming-early Qing. Contemporary accounts also

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\(^{88}\) Han Qia 韓洽, Zhuanxue cejie 篆學測解 (1820 edition, held at National Library of China), fanli, p. 7b.

\(^{89}\) Han Qia, Zhuanxue cejie, fanli, p. 9a.
indicate that it was one of the most popular reference works of the time.\textsuperscript{90} Its successor *Zhengzi tong* 正字通, written in response to and also largely based on *Zihui*, embraced this model of simple character lookup, and encountered similar dismissal at the hands of contemporary scholars. Li Fu, for example, argued that because the character ‘humaneness’ (*ren* 仁) contains the character for ‘person/other’ (*ren* 人), it was based on an awareness of others; the character ‘righteousness’ (*yi* 義), because it contained the character for ‘self’ (*wo* 我), was based on self-awareness. *Zhengzi tong* placed ‘righteousness’ under the ‘lamb’ (*yang* 羊) radical (which serves as the upper component of the character), and thus “misunderstood the meaning of character” (不知字意) in his view.\textsuperscript{91} The long-lasting contribution of reference works like *Zihui* and *Zhengzitong* in terms of practicality has obscured the fact that its acceptance was not immediate in all circles. For some late imperial scholars, a layer of meaning, often moral, was conveyed in the written form of the character itself. A proper dictionary, in the eye of such scholars, should reflect this.

Wu Yuanman 吳元滿, a prolific lexicographer of the late Ming, similarly criticized the earlier philological tradition for interspersing human-related categories with animal and plant-related ones. For instance, Dai Tong’s 戴侗 (1241 *jinshi* 金氏) *Liushu gu* 六書故 placed the categories for ‘animals’ 動物 and ‘plants’ 植物 between those for ‘humans’ 人 and ‘works and affairs’ 事. Wu praised Wei Jiao for being the first philological scholar to recognize that “humans are the most numinous” (惟人最靈) among all living things, and therefore including all things related to


\textsuperscript{91} Li Fu, *Mutang chugao*, j. 18, p. 18a.
human activity before those of plants and animals. He further embraced the greater specificity
embodied in Wei’s categories: “Those with emotion are animals [as opposed to plants, which are
without emotion]. Those born from an egg are flying birds, while those born from an embryo are
walking animals. Thus birds and animals are the 10th section. Those that are born in water or
through transformation are the fish and insects, which cannot be intermixed within the birds and
animals. Thus fish and insects are the 11th section” (有情者為動物，卵生者為飛禽，胎生者為
走獸，故鳥獸第十，溼生化生者為魚蟲，不可雜於鳥獸之內，故蟲魚第十一). For many
such scholars, the organizational system of a dictionary was reflective of broader universal and
natural principles.

Although these categorizations were developed in depth by xinxue lexicographers, one
evidently did not need to adhere to xinxue to accept the underlying premises of these
categorizations and their application to philology. Like Han Qia, Wu criticized Neo-
Confucianism’s influence on philology. In particular, Wu believed that after Zhu Xi’s text for
elementary moral learning, entitled Xiao-xue 小學, coopted the traditional name for ‘philology’
(xiaoxue 小學), scholars largely disregarded the true philological tradition of studying
characters. Much research has documented the rise of “concrete learning” (實學) in the late
Ming in response to political and social issues, as well as the empty discourse of xinxue
scholars. More recently, a return to Zhu’s definition of gewu as ‘investigating things’ has been

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92 Wu Yuanman, Liushu zongyao (1997/1584), lun 4a–4b/474. These four categories of birth (四
生) are Buddhist in origin, but experienced new natural historical applications during the Ming in
the hands of scholars such as Li Shizhen.


94 Early examples include Yamanoi Yū 山井淵, “Minmatsu Shinsho ni okeru keisei chiyō no
gaku” 明末清初における經世の學, Tōhōgaku Ronshū 1 (1954): 136–50, and Ono Kazuko 小野
seen as leading to a resurgence in textual scholarship in late Ming and early Qing. However, as the previous examples show, philology, a discipline heavily associated with “concrete learning,” expressed a direct relationship with xinxue scholarship in the late Ming. Philological scholars in many cases did not see themselves as reviving earlier textually-oriented forms of Neo-Confucianism or Han-Tang dynasty classicism. Rather, they were engaging in dialogue with xinxue approaches to understanding the nature of language.

**Xinxue in the World of Philology: the Importance of Character Forms**

Despite the widespread acceptance and influence of Wei Jiao’s methods in the late Ming, some contemporaries took issue with his approach to character analysis. As Xue Xi 薛蕙 (1489–1539), a contemporary of Wei’s caustically opined, “if explanations of characters were sufficient to illuminate the Way, then Confucius’ disciples should have written *Shuowen* [jiezi]!” (字説足以明道，孔門當為說文矣). Some later scholars, like Han Qia (fl. 17th century), set out to entirely repudiate Wei’s method of character analysis. Others, like Zhao Yiguang 趙宦光 (1559–1625), acknowledged the insights Wei had, while criticizing his tendency to force an

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96 This is in a letter to Cui Xian 崔銑 (c. 1478–1541), criticizing Cui’s approach to the Classics. Cui himself had reservations about Wei Jiao’s dictionary. See Cui Xian 崔銑, *Cui shi huan ci* 崔氏洹詞, SKQS CMCS (1554 edition), j. 7, p. 26a.
interpretation on characters (時出卓見，但病其牽合).\textsuperscript{97}

Even among his critics, the influence of his methods is apparent. As discussed in the previous section, various scholars adopted his thematic organization. Han Qia, despite his stated aversion to definitions that emphasized philosophy over philology, occasionally composed entries heavily influenced by contemporary Neo-Confucian thought.\textsuperscript{98} In some cases, it seems that Han felt he would need to respond to Wei Jiao on Wei’s own terms to demonstrate his superiority as a scholar. For instance, in his metaphysically dense definition of the character 
zhong (中 ‘centrality’), Han wrote: “I needn’t have gone into such philosophical depth here. But because my predecessor [Wei Jiao] did it, if I did not do the same, I fear those who are fond of philosophy would still think his explanation [of the character] is better” (上論不必如此講道理，因前輩既如此講道理矣，今若不講，恐有好講道理者，猶以彼為妙).\textsuperscript{99}

Zhao Yiguang also shared a number of premises regarding the study of characters with Wei Jiao. For instance, Zhao declared in his preface that:

If the meanings of characters are preserved, then our minds comprehend the ancient, and present day language completely transmits the essence of sagely truths. If the six principles of character formation are lost, then the glosses are in error and the classics and commentaries are subjective and absurd. Thus the distinction of great and fine, precise and general in the greater and lesser learning lies in this. The lesser can be a part of the greater, but the greater cannot encompass the lesser.

字義存，則吾心通乎古而今言皆傳心聖諦，六書失，則詁訓謬而經傳皆聽說妄談，故大小二學，巨細精粗之辨在是，小可入大，大未可該小\textsuperscript{100}

\textsuperscript{97} Zhao Yiguang 趙宦光, Shuowen changjian 說文長箋, SKQS CMCS (1631 edition), fanli, p. 16b.

\textsuperscript{98} See, for example, entries for \textit{yu} (欲 ‘desire’), \textit{dao} (道 ‘path/Way’), \textit{lü} (律 ‘harmonic pitch’).

\textsuperscript{99} Han Qia, Zhuanxue cejie, j. 3, 2b.

\textsuperscript{100} Zhao Yiguang, Shuowen changjian, zixu, pp. 2b–3a.
Zhao Yiguang saw an understanding of the construction of characters as integral to understanding antiquity. He also argued that, despite philology’s common description as the “lesser learning,” it was both necessary for and contained implications beyond the “greater learning” of metaphysical philosophy. As with Wei Jiao, this translated into practice for Zhao. Although his work is printed in standard script, as opposed to the deliberately archaic script of Wei Jiao’s work, Zhao employed many uncommon archaic variant character forms (Figure 2.4). For example, Zhao used two different characters for different senses of the character hao 好. In a grammatical distinction that premodern philologists characterized as ‘active’ 動 versus ‘inactive’ 靜, hao 好 when pronounced in the falling tone is a transitive verb meaning ‘to like,’ while in the rising tone it is a stative verb meaning ‘to be good.’ For most scholars, this simply affected reading pronunciations of the single character. Zhao, on the other hand, shared the belief of Wei Jiao, and later scholars under his influence such as Wu Shilin, that the ancients would have necessarily created a different character for each possible meaning. Zhao therefore wrote the transitive form of hao 好 as 敢.
Other responses to Wei Jiao’s approach to etymology, such as that of Hao Jing 郝敬 (1568–1639), developed more elaborate propositions of how to understand written language. Hao Jing was a classical commentator with only remote ties to xinxue. After achieving his jinshi degree, he held a number of official positions from the county to capital level. His ability to offend, however, resulted in his demotion to the lowest rank following his capital appointments. As a result, he retired from officialdom and devoted himself to classical

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101 Zhao Yiguang, Shuowen changjian, zixu, p. 5a.

scholarship, earning Huang Zongxi’s posthumous praise as “truly a most outstanding authority among Ming classical scholars” (明代窮經之士，先生實為巨擘).103 Hao wrote a dictionary, entitled Dushu tong [讀書通 Reading comprehensively], which like Wei Jiao’s work, had grander aims than simply glossing characters. As the title of the work suggests, it also comprised a theory of reading and approaching the Classics. Although Hao does not explicitly mention Wei Jiao by name, his criticisms of contemporary scholarship are clearly a response to etymological methods like those of Wei Jiao, which put emphasis on deciphering the underlying meaning of words based on the form of their characters. As Hao explained, “The ancients used characters like they used money. Money cannot be used as clothing and food; clothing and food are simply bought with it. Characters cannot serve as moral principles; moral principles are simply borrowed from them” (古人用字如用錢，錢不可當衣食，而衣食但資焉，文字不可當義理，而義理但借焉).104 He further averred that “the ancients valued meaning in their use of characters, and did not emphasize the strokes or forms of the characters” (古人用字貴義，不主點畫形象).105 In Hao’s view, the many variations in characters “were all manmade, and not a completely fixed method from antiquity” (悉由人作，非古一定法也).106 For Hao, learning to properly read the Classics was a matter of mastering the inherent flexibility of the Chinese script, and the meanings of the terms themselves, rather than their written representations.

This idea that many characters in antiquity were interchangeable (通用) had considerable

103 Huang Zongxi, Ming ru xuean, p. 1313; cf. Records of Ming Scholars, pp. 220–221.

104 Hao Jing 郝敬, Dushu tong 讀書通 (Ming xylograph, held at the Beijing Normal University Library), j. 1, p. 9b.

105 Hao Jing, Dushu tong, j. 3, p. 5a.

106 Hao Jing, Dushu tong, j. 1, p. 2b.
persuasive power for premodern scholars, and to some degree informs the study of ancient texts
to this day. Perhaps the most famous example of its use in practice is Zhu Xi’s emendation of a
line in of one of the *Four Books* to read “the Way of great learning lies in renewing the people
(*xinmin*)” (大學之道在新民) over the received text “the Way of great learning lies in loving the
people (*qinmin*)” (大學之道在親民). This seemingly minor change had considerable
implications and became a major source of debate as Wang Yangming came to assert the latter
reading in support of his valuation of internal cultivation over external. The increasingly pressing
question for both philological and Neo-Confucian scholars was whether to view the texts of
antiquity as historical products or not. Could it be that the development and use of writing in
antiquity was at a different stage from the present (i.e., were character forms and usage in flux in
antiquity)? Or were the sages faultless, and our inability to maintain ancient usage a result of
contemporary moral and scholarly decay?

To some degree, Wei Jiao, as well as Wang Anshi before him, did not see history as
relevant to understanding language. In their view, every aspect of how the sages wrote was
intentional, universal, and meaningful for the present. It is well-documented that the notion that
language differed according to time and place became increasingly persuasive to some Ming
dynasty scholars. Some, like Jiao Hong and Chen Di, viewed these differences as meaningful
and worthy of research. Others saw this approach as obfuscating the primary goal of reading,
which was apprehending meaning from a text. Hao Jing, for instance, believed that meaning
transcended regional pronunciation. He listed several examples of pronunciation differing
according to region, arguing that the meaning was not altered despite the difference in
pronunciation. For example *jiu* 酒 ‘ale’ would still mean ‘ale,’ regardless of whether it was
pronounced in the rising tone as in standard rhyme books, or in the falling tone as it would be in
Wu dialect. Hao Jing’s flexible view toward both character forms and pronunciation was somewhat extreme for the time, but not unique. In fact, Luo Hongxian (1504–1564), employed an argument about the flexibility of pronunciation and terms as a way of solving an apparent issue with contemporary Neo-Confucian interpretations of the Classics:

The dialects of Yunnan and Jiangxi are very different, but the things being referred to [in either dialect] are the same. If one exclusively seeks things based on the dialect, you will never get them… The *Yushu* refers to ‘mind’ but not ‘nature;’ *Zhongyong* refers to ‘nature’ but not ‘mind;’ the *Daxue* refers to ‘mind’ and ‘intent,’ but not ‘nature’ and ‘emotion;’ *Mengzi* refers to ‘mind’ and ‘nature,’ and also ‘emotion’ in order to verify ‘nature.’¹⁰⁷ There are many examples of this. We Confucians should follow the general meaning when explaining these kinds of words. If we must stick to one word, then the *Yushu* will be incomprehensible… Thus, ‘nature,’ ‘mind,’ ‘intent,’ and ‘emotion’ are only one single thing.

雲南與江西，鄉音遠不相同，而所指物件則同。若盡各執鄉音尋物件，終不可得 也...虞書言心不言性，中庸言性不言心，大學言心言意，不言性情，孟子言心言性， 又且情以騐性，如此者不一而足，即為吾儒解此種語言，亦當隨其意意為說，必 欲脛於一言，便自虞書不通矣...由此則性心意情，亦只一物.¹⁰⁸

Ouyang Xiu 歐陽修 (1007–1072) famously noted in the 11th century that ‘human nature,’ an issue that concerned many of his contemporaries and would come to central importance among Neo-Confucian thinkers, was in fact a relatively uncommon term in classical texts. Therefore, he argued, it was receiving undue attention from his contemporaries.¹⁰⁹ Luo Hongxian explained this concern away by arguing that the ancient sages inconsistently referred to such concepts as ‘nature’ with different terms. To take these different terms as referring to distinct things would be akin to not recognizing that different topolect pronunciations of a term nevertheless referred

¹⁰⁷ See *Mengzi* 告子上: 乃若其情，則可以為善矣，乃所謂善也.


to the same thing (as in Hao Jing’s example that ‘ale’ would still be ‘ale’ regardless of its tone in various topolects).

Jiao Hong, one of the great late Ming thinkers, similarly believed that words refer to things, but are not intrinsically meaningful. Hence, he praised one contemporary’s observation that Chinese *tian* 天 and Xiongnu *chengli* 撞犁 (*tângrî*) both refer to the same ‘heaven.’ However he disagreed about the flexibility of proper pronunciation with regard to the Classics, and famously criticized the popular *xieyun* method of reading ancient rhymes, in which one changed the pronunciation of a character on an ad hoc basis to fit the rhyme scheme of a poem: “if (the *xieyun* method holds true), then ‘east’ (dong) can be pronounced ‘west’ (xi), and south (nan) can also be pronounced north (bei)” (如此則東亦可音西，南亦可音北). This historical view of language would set him apart from many contemporaries, including Wei Jiao, who was strongly persuaded by “the marvels of *xieyun*” (叶韻之妙).

Despite his usual depiction at the forefront of Ming evidential research, Jiao Hong nevertheless stood somewhere in the middle of the contemporary debate over how much emphasis should be laid on the structure of characters in glossing their meaning. He repeatedly criticized Han dynasty scholars for “not understanding the meaning behind the creation of characters” (失制字之意), which came about as a result of their “not investigating the fundamental meaning of the six principles of character formation” (不考六書之本意). As

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with Wei Jiao, Jiao Hong felt that if one pondered ancient character forms, their “meaning would immediately appear” (其義立見). At the same time, Jiao argued that excessive attention to “moral principles” (義理) contained in characters was misguided. To support this claim, Jiao cited a well-known passage from Zheng Qiao’s *Tongzhi*, which lists numerous examples of character variants from antiquity, described as “all products of the sages’ hands” (盡出聖人之手). Wei and his followers seem to have believed so strongly in the intentionality behind the sages’ writing that variants could be embraced as meaningful for capturing different senses of a term. Jiao pointed out that the vastness of variation precluded the possibility of such an interpretation. This allowed him to claim, like Hao Jing, that “writing is generally based primarily on recording and naming; how could it be about the meaning of the script itself? Those who choose character [forms] based on the meaning have misunderstood writing” (大抵書以記命為本，豈在文義，以義取文者，書之失也). As Han Qia remarked, in a passage cited above, Wei Jiao’s approach to character exegesis “prioritized moral principles” (以義理為先). This method gathered a large following among Ming scholars, particularly *xinxue* thinkers, and its popularity was sufficient to warrant rebuttals from prominent scholars, such as Hao Jing and Jiao Hong. In this way, the efforts of both *xinxue* advocates and their opponents in the 16th and 17th centuries fueled a robust discourse on the nature of written language.

**Conclusion**

This chapter has focused primarily on scholars who embraced Wei Jiao’s methods. The

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115 Jiao Hong, *Jiao shi bisheng*. 
examples above show that even among those who disagreed, many felt the need to respond, given their widespread contemporary adoption. In many cases, their disagreement did not amount to a total rejection, but rather a modification. From this perspective, we can see that the discipline of philology in late imperial China did not form solely as a way to reclaim moral authority from those who eschewed textual learning. Contrary to received opinion, mid-to-late Ming scholars were deeply involved in philological projects, in many cases in direct connection with xinxue thought. An increasingly sophisticated notion of linguistic change over time has long been heralded as one of the key scholarly developments in the late Ming dynasty. In the same period, philology also came to be used as a tool to transcend history and access the enduring principles of antiquity.
The inaccurate notion that Sanskrit studies in China effectively ended by the 12th century is a commonplace confirmed in the two main English language studies of Sanskrit in China.\(^1\) This chapter will focus on a substantial body of philological discussions of Sanskrit, which emerged during a renaissance of Sanskrit studies in China during the 16th and 17th centuries. Scholars in this period turned to Sanskrit, and phonetic scripts more generally, as a method to supplement Chinese character-based approaches to phonology, or the study of the sounds of language. The phonetic nature of the Sanskrit script allowed scholars to document more sounds than possible with Chinese characters alone. While most scholars affirmed the fundamentally “Confucian” (or “classicist” ru 儒) nature of language study, consultation with Buddhist experts in Sanskrit was increasingly accepted as a way to supplement existing methods of phonological description. Advocates of Chinese writing reform since the early 20th century have often argued that China ought to adopt a phonetic writing system to replace its current character-based script. Intuitively, the simplicity of phonetic scripts makes this proposal seem reasonable, especially to a western audience. Historians have typically claimed that the lack of script reform in China

before the 20th century was a result of a lack of exposure to or consideration of phonetic scripts. This chapter will show that scholars in China had more access to phonetic scripts than is generally assumed. Late Ming thinkers did not, however, see phonetic scripts as inherently more intuitive than the logographic Chinese script. Some argued for the utility of Sanskrit as a tool for corroborating or complementing traditional phonological methods; others actively attacked such phonetic scripts as inferior to the Chinese writing system. As a result of this interaction with phonetic scripts, new conceptions of the nature of writing systems as a conduit of culture emerged.

**Sanskrit Scripts in China**

Despite the focus of this chapter on the late imperial period, it will nevertheless be useful to discuss the early history of Sanskrit studies in China, both in order to give the reader the necessary background to understand the writings of late imperial scholars and to provide a way of understanding the great difference in approach to the language across time. My treatment of Sanskrit studies in medieval China differs from most accounts, which consider the early study of Sanskrit in China to represent a single continuous tradition. I propose a new delineation of how Chinese thinkers interacted with Sanskrit, which elucidates the variation in Chinese uses of phonetic scripts over time. The first period, lasting from roughly the 3rd through 6th centuries, consisted primarily of the transcription of Sanskrit sounds, paying little attention to script, for the purposes of Buddhist scriptural translation and the recitation of dhāraṇī. The second period, beginning in the 7th century and lasting through the 12th century, saw the beginning of a

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discourse surrounding the nature of Sanskrit scripts, albeit largely tied to Buddhist values. The strikingly different approach to Sanskrit in the late imperial period is characterized by the attempts of secular scholars to incorporate Sanskrit scripts into comprehensive phonological systems, coexisting alongside the continued search for doctrinal values in Sanskrit among monks.

The early period of Sanskrit study in China, lasting through the 12th century, was largely related to the explication of Buddhist texts. The first clear mentions of Sanskrit as a language in Chinese texts occur in the 3rd and 4th centuries. During this period, Chinese monks, like Faxian (c. 337–422) traveled to India and mastered Sanskrit for the purposes of scriptural translation. Concurrently, Indian scholars in China, including most famously Kumārājīva (344–413), produced influential translations of Buddhist sūtras and also composed studies of Sanskrit phonology. Knowledge of Sanskrit among the Chinese elite was initially limited to a small group of monks who made pilgrimages to India. By the late 4th century, however, there is evidence that this knowledge was already spreading to scholars outside of this restricted circle.³

Categorizing Sanskrit phonology was a perennial issue for Chinese scholars. It was further complicated by two conflicting presentations of Sanskrit phonology in early Buddhist texts. The two contemporary strains of categorizing Sanskrit sounds were reflected in the two alphasyllabaries of Sanskrit circulating in 4th and 5th century China: one with around 50 syllables, and one with 42. Xie Lingyun, and likeminded scholars under the influence of the presentation of Sanskrit phonology in the Mahāparinirvāṇa sūtra (Dabo niepan jing 大般涅槃 ³ For example, the highly erudite layman and poet Xie Lingyun 謝靈運 (385–433), composed a work known as Shisiyin xun xu 十四音訓敘 An explication of the fourteen sounds]. This treatise, now only partially preserved, was based on discussions with the Chinese monk Huirui 慧叡, who had traveled to India to gain linguistic expertise. See Hui Jiao 慧皎, Gaoseng zhuan 高僧傳, Congshu jicheng, Vol. 177 (Beijing: Zhonghua shuju, 1991), p. 116.
elaborated a system of approximately 50 syllables, which corresponds relatively closely to traditional Indian descriptions of Sanskrit phonology. The other, and perhaps most influential, way of understanding Sanskrit phonology in China was a set of 42 syllables. First introduced in the *Lalitavistara sūtra* (*Puyao jing* 普曜經), and subsequently elaborated in the *Prajñāpāramitā sūtra* (*Boreboluomiduo jing* 般若波羅蜜多經), this system was commonly known in the late imperial period as the “Huayan letters” (*Huayan zimu* 華嚴字母), based on its appearance in the popular *Avatāmsaka sūtra* (*Huayan jing* 華嚴經). This syllabary bore little relation to traditional Indian analyses of Sanskrit phonology, and notably excluded a number of important Sanskrit syllables, while incorporating several extremely rare ones. This alphasyllabary was more likely derived from Gāndhārī than Sanskrit. Nevertheless, for many Chinese Buddhist monks up to the present, this system has represented the orthodox Sanskrit alphasyllabary by virtue of its appearance in influential sūtras.

The fixation with the transcription and pronunciation of Sanskrit sounds in early medieval China was linked to the ritual chanting of dhāraṇī, consisting of a string of (often meaningless) Sanskrit syllables, frequently contained at the end of scriptures. The efficacy of such chants and spells was considered to be linked to the chanter’s ability to accurately

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4 In the West, it is often referred to as the *Arapacana* alphabet because of the ordering of the first five syllables: *a*, *ra*, *pa*, *ca*, *na*.


pronounce the syllables. In some cases, the syllables themselves were considered mnemonic devices for recalling aspects of Buddhist doctrine. For instance, the first syllable in the most widely-adopted Sanskrit alphasyllabary, a (Ch. 阿), was meant to recall the notion of “originally unborn” (Sk. ādyanatpāda, Ch. anoubotuo 阿提阿耨波陀), while the following syllable, ra (Ch. luo 羅), recalls separation from “defilement” (Sk. rajas, Ch. luoshe 羅闍). The early commentarial tradition on Buddhist texts describes this alphabet itself as a kind of dhārāṇī, an understanding of which would introduce the reader to both essential doctrinal concepts and the fundamentals of the Sanskrit language.

Texts of this period referred to Sanskrit as “Brahma language” fanyan 梵言, which like the English term, refers to a language rather than a specific script. It is not definitively known what script contemporary scholars had access to. The Lalitavistara sūtra, translated into Chinese in 308 CE, documents the existence of some 64 scripts the Buddha claimed to have been familiar with, including the Chinese script. While Chinese scholars were aware of different scripts, they primarily took an interest in the proper transcription of the sounds of Sanskrit.

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9 Zhou Guangrong 周广荣, Fanyu “Xitan zhang” zai zhongguo de chuanbo yu yingxiang 梵语《悉昙章》在中国的传播与影响 (Beijing: Zongjiao wenhua chubanshe, 2004), p. 44.

10 There is little in the way of description of the nature of Sanskrit scripts during this period with the important exception of an essay by the fifth century monk Sengyou 僧祐 (445–518). See a partial translation in Daniel Boucher, “On Hu and Fan Again: the Transmission of ‘Barbarian’ Manuscripts to China,” The Journal of the International Association of Buddhist Studies 23, no. 1 (2000), pp. 19–22. Emperor Wu of Liang 梁武帝 (464–549) produced a text which in its extant form lists the Sanskrit alphabet in both the Siddham script and Chinese translation. The text is
There is no concrete evidence of instructional materials related to the script (as opposed to phonetic transcriptions of Sanskrit) prior to the Tang dynasty (618–907). By the 7th century, the Siddham script, known in Chinese as xitan 悉曇, had developed as one of the most widespread scripts used to notate Sanskrit in India, and was the primary script to which Tang scholars of Buddhist texts had exposure. As there is no consensus on the script’s original name in India, it is currently known by the name bestowed upon it in China during this period. The Siddham script represents an important historical moment in the development of Indian writing systems: it is the ancestor of such major scripts today as Devanāgarī, Bengali, and Tibetan. As with other Brahmic scripts, Siddham is not an alphabet, but rather an abugida (otherwise termed alphasyllabary, pseudoalphabet, semisyllabary). Each Siddham character therefore represents a consonant-vowel combination, the assumed vowel being a unless altered by a diacritic. For example, the character for k (क, to use the equivalent in Devanāgarī) would be read ka, unless cited, however, in the much later Shittanzō 悉曇藏 by the 9th century Japanese monk Annen 安然. It is unclear whether the script was present in the original document. Takakusu Junjirō 高楠順次郎 and Watanabe Kaigyou 渡邉海旭, ed., Taishō shinshū Daizōkyō 大正新修大藏經, Taibei: Shihua yinshua qiye youxian gongsi, 1990. Vol. 84, no. 2702, pp. 410b5–411t6.

11 Tang discussions of a work called Xitan zhang 悉曇章, which attribute the text to an earlier period, have resulted in most present research holding this work to be from before the Tang. There were indeed discussions of Sanskrit phonology from this earlier period, such as Kumārajīva’s Tongyun 通頌. The usage of Sanskrit scripts in these texts is unclear.


modified by a series of diacritics indicating a different vowel (for example, kā का or ku कु).

Vowels have independent forms when not associated with a consonant. This differs from a syllabary, like that of Japanese, in that a syllabary has a separate character for each consonant-vowel combination, rather than diacritics. Finally, consonantal clusters, such as kla and kra, are notated by ligatures to differentiate from kala and kara.

Figure 3.1: An explanation of standalone vowels in Siddham script from the early Chinese primer on Siddham, Xitan ziji, delineating the differences between long (長) and short (短) vowels.\(^{15}\)

The precise period of the Siddham script’s introduction to China is debated.\textsuperscript{16} Regardless of when it initially entered China, it was not until the sixth century that Indic scripts, separate from the sounds of Sanskrit, began to gain broader significance. During this period, lasting through twelfth century, a significant number of Buddhist exegetical works discussed the Siddham script.\textsuperscript{17} What is notable in these texts is the increased presence of the script itself, over solely Chinese transcription. Without further evidence, it is not possible to definitively explain why such a change occurred. It is likely related to the ritual function of the script in Esoteric Buddhism, which entered China in the seventh century. For example, Kūkai 空海 (774–835), the great Japanese Buddhist scholar of Esoteric Buddhism who studied Chinese and Sanskrit in China, argued that the act of reading and writing the Siddham letters was itself an important part of Buddhist practice. In his view, the pictographic aspects of Chinese characters posited the misleading existence of external things separate from language. A phonetic script, on the other hand, acknowledges the illusory nature of all things, in Kūkai’s view, because letters on their own signify nothing; the apparent reality of external things can be attributed entirely to how

\textsuperscript{16} It is often claimed that Siddham studies began in China as early as the fourth century, based on the existence of a fifth century bibliography listing a work titled \textit{Xitan mu} 悉曇慕, attributed to the fourth century monk Daoan 道安. We cannot be certain that the term \textit{xitan} here would have referred to a specific script, and the contents of this text cannot be inferred from the title. See Nagao Gadjin, “Siddham and its Study in Japan” \textit{Acta Asiatica} 21 (1971): 3. Scholars of Indian paleography consider the Siddham script to have only developed in the sixth century. According to Van Gulik, the earliest Buddhist manuscripts preserved at Dunhuang, as collected by Aurel Stein, are written in Gupta and Kharoṣṭhī. See \textit{Siddham: An Essay on the History of Sanskrit Studies in China and Japan}, p. 47

language, in the form of letters, differentiates things.\(^{18}\)

The Chinese scholar Yixing 行 (673–727), whose work was influential on Kūkai, similarly saw the Siddham script as meaningful in its shape, as well as pronunciation. In his commentary on the Mahāvairocana Tantra, Da Piluzhena chengfo jing shu 大毘盧遮那成佛經疏, a seminal work in the history of Esoteric Buddhism, Yixing made several arguments regarding the relationship of form and meaning in the Siddham script. In particular, he saw meaning in the dots and diacritics characteristic of Indic scripts. For instance, he identified the Siddham letter \( a \) to represent the “enlightened mind” (Skt. bodhicitta, Ch. puti xin 菩提心).

In turn, he believed \( aṃ \), which is modified in the Siddham script with the addition of one dot above the character \( a \), to embody “the meaning of enlightenment” (Skt. bodhy-artha, Ch. puti yi 菩提義).\(^{19}\) The close relationship between these concepts of enlightenment was something that could be inferred from the script itself, in his view, as the two were separated only by a single dot. Increased usage of the script among Chinese scholars during this period.

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could also indicate recognition of the fact that Siddham and Chinese represented very different kinds of writing system, or at least, that the Chinese script could not effectively transcribe Sanskrit syllables. This consciousness appears absent in the earlier tradition.

Although Sanskrit studies was not explicitly linked with Chinese phonological studies at this point, Buddhist monks in the Tang and Song dynasties made significant contributions in the field of Chinese phonology. Most notable is the identification of phonological aspects of the syllable that came to be adopted in rhyme tables from the Song forward.\textsuperscript{20} As a result, present-day scholars have gone to great lengths to demonstrate that Sanskrit models, which the monks are assumed to have been familiar with, informed many of the important philological concepts and methods developed in this period. The application of terms from Sanskrit phonology to Chinese, as well as parallels between earlier Indic forms of phonological categorization with those adopted in China, have been raised as evidence to support this connection.\textsuperscript{21} The weight of circumstantial evidence suggests the existence of certain links between the two, but the degree to which Sanskrit models informed Chinese is difficult to determine. The study of Sanskrit was not explicitly incorporated into secular philological scholarship during this period. Through the Tang dynasty, and even into the Song, explicit discussions of Sanskrit phonology and script remained within the domain of Buddhist scholarship.

The linkage between Buddhist Sanskrit studies and the formation of the field of Chinese phonology was a claim cemented in the Southern Song dynasty in the writings of Zheng Qiao.\textsuperscript{20} W. South Coblin, “Reflections on the Shòuwēn Fragments,” in \textit{The Chinese Rime Tables: Linguistic Philosophy and Historical-Comparative Phonology}, ed. David Prager Branner (Amsterdam: John Benjamins, 2006), pp. 115–116.

Shen Kuo 沈括 (1031–1095) was perhaps the first to articulate the theory that Chinese phonology as a discipline was developed according to Indian methods, but it was Zheng Qiao’s discussion of this topic that became the locus classicus for late imperial scholars. Both Shen and Zheng believed that the principles of the field had existed in China since antiquity, but that their transmission had been lost and only returned through Buddhist monks. Zheng Qiao, in particular, attributed the major accomplishments of phonological scholarship to Buddhist contributions. In what would come to be a commonplace about the different philological priorities of the indigenous tradition and Indian scholarship, Zheng asserted that Indian scholars were concerned primarily with sound, while Chinese scholars focused on script. As a result, Zheng claimed that the relatively new genre of rhyme tables was something that “many Buddhist disciples can speak of, but Confucians uniformly do not understand” (釋子多能言之，而儒者皆不識). As such passages from Zheng Qiao’s encyclopedic work, Tongzhi 通志, came to be excerpted and paraphrased in later encyclopedias, this perception of phonology as a discipline with strong Indic and Buddhist connections came to be established as a trope.

While Zheng highlighted the connection between Buddhist and phonological learning, he interestingly represents perhaps the first attempt to discuss the nature of Sanskrit scripts in a secular setting. His understanding of the script appears to be quite confused in his claim for certain kinds of equivalence between Chinese and Sanskrit scripts. For instance, he argued, inaccurately, that Sanskrit contained some pictographic characters and similarly to Chinese

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22 See Shen Kuo 沈括, Mengxi bitan 夢溪筆談, SKQS, j. 15, 1a–4a, pp. 792–94.

23 Zheng Qiao 鄭樵, Tongzhi 通志, SKQS, j. 35, 21a, p. 421.
employed the practice of phonetic loan (jiajie). The script Zheng employs in his examples is also garbled and may be partially fabricated, although scholars have noted similarity between some of Zheng’s characters and Siddham script, as well as Grantha, a south Indian script used to write Sanskrit. Despite the fact that Zheng did not fully grasp the nature of Sanskrit scripts, his discussions were significant in that they initiated an explicit discourse comparing the nature of Sanskrit and Chinese scripts outside of a Buddhist context. His discussions of Sanskrit are contained within a juan of his encyclopedia otherwise concerned with Chinese philology more broadly. In another juan, comprised of a rhyme table for Chinese, Zheng argued that Buddhism’s success in entering China was largely a result of the ability of monks to effectively communicate the sounds of the original texts. By employing the rhyme table method, which he considered to be Buddhist in origin, Zheng claimed that Confucianism too could be proselytized in India.

Buddhist scholars continued to pay attention to both Chinese and Sanskrit phonology following the Song dynasty, although no major studies of Sanskrit were produced between the Song and Ming. Zheng’s fusion of the two in a secular setting did not attract an immediate following. In the Ming dynasty, however, a number of scholars outside of the Buddhist clergy turned to Sanskrit and the Buddhist monks who were experts in its phonology, in the hopes of creating comprehensive systems of describing linguistic sounds. Phonetic scripts in the Ming

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25 For more on this, as well as a complete translation of Zheng’s discussion of Sanskrit, see Victor H. Mair, “Cheng Ch’iao’s Understanding of Sanskrit,” In Mair, China and Beyond: A Collection of Essays (Amherst: Cambria Press, 2013), pp. 185–205. For corroboration against the Siddham script, see Li Bohan 李柏翰, “Ming Qing xitan wenxian ji qi dui dengyunxue de yingxiang” 明清悉曇文獻及其對等韻學的影響, (PhD diss., National Tsing Hua University, 2015), pp. 44–47.

were not seen as an alternative to Chinese characters, but as useful phonological tools for linguistic analysis. With the rise of interest in such methods came the first attacks on phonetic scripts as inferior methods of representing language.

**Ming dynasty (1368–1644) Interest in Sanskrit**

The involvement of Buddhist monks in philology did not conclude with the temporary end of Siddham studies at the end of the Song dynasty. Major lexicographical works were produced by monks in the mid-Ming. These in turn came to be cited in the non-Buddhist philological literature. Toward the late Ming, this involvement on the part of Buddhist monks increased—or perhaps their scholarly activities were better recorded by secular scholars. In particular, a new specialty in phonology seems to have emerged among certain monks, who came to be known as ‘rhyme masters’ *yunzhu* 韻主, ‘rhyme master monks’ *yunzhu heshang* 韻主和尚, or ‘rhyme teachers’ *yunshi* 韻師.

The activities of these ‘rhyme masters’ are recorded primarily in the works of Zhao Yiguang 趙宦光 (1559–1625) and Liu Xianting 劉獻廷 (1648–1695). As Liu recounts:

> During the mid-Ming, the study of graded rhymes (*dengyun*) flourished in the world. Yanfa (temple) in Beijing, (and the temples of) (Mount) Wutai, (Mount) Emei of Sichuan, (Mount) Funiu of the central region, and (Mount) Putuo in the southern seas, all had rhyme master monks. They purely enlightened students by reciting rhymes. Scholars looked at Chan meditation as the greater gate to enlightenment, and graded rhymes as the lesser gate to enlightenment.

當明中葉等韻之學盛行于世，北京衍法，五臺，西蜀峨眉，中州伏牛，南海普陀，皆有韻主和尚，纯以唱韻開悟學者，學者目參禪為大悟門，等韻為小悟門。  

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27 These include most notably the dictionary *Pianyun guanzhu ji* 篇韻貫珠集 by the monk Zhenkong, and the *menfa* 門法 genre dedicated to explicating medieval rhyme tables.

Huang Zongyan 黃宗炎 (1616–1686), brother of the great thinker Huang Zongxi and a formidable scholar in his own right, reluctantly acknowledged monks and musicians to be the phonological experts of his day (今日聲音之專門), as well. However, by the early Qing, as Liu Xianting reports, phonological expertise was decreasing among monks. It is doubtful that there were many such experts during Ming times either, but scattered accounts throughout Ming documents verify their existence. A brief account of the process of working with such monks is contained in Zhao Yiguang’s (1559–1625) Xitan jingzhuan [Authoritative text on Siddham script]. According to Zhao, if one encountered trouble in understanding traditional Chinese rhyme tables, one could consult a ‘rhyme teacher’ who would elucidate the pronunciation of each syllable and further demonstrate the shape of the lips and mouth with his hands. Zhao also went into considerable depth on the process of chanting rhyme tables as a method for understanding phonology, based on the practice of rhyme teachers. The process evidently involved slow, rhythmical chanting of syllables while marking beats (點版徐唱). The reciter would begin by clarifying the pronunciation of syllable initials before systematically chanting the contents of the rhyme table.

29 Note that he resented the fact that this caused contemporary scholars to believe “that the sounds of antiquity are inferior to those of the present, and the sounds of Chinese are inferior Sanskrit” (聲音古不如今，華不如梵). See Zhou Yi xunmen yulun in 周易尋門餘論 in Huang Zongxi 黃宗羲, Yixue xiangshu lun 易學象數論, Zheng Wangeng 鄭萬耕, ed. (Beijing: Zhonghua shuju, 2010), pp. 376–77.

30 See, for instance, an account of phonological discussion with the rhyme master monk Pumen 普門 in the preface to Yang Zhenyi 楊貞一, Shiyin bianlüe 詩音辯略, SKQS CMCS, xu, pp. 1b–2a.


32 Xitan jingzhuan, p. 39.
Buddhist monks in the Ming also considered phonology a worthwhile task for the purposes of achieving an understanding of Buddhist truths. One such monk in particular, Ren Chao 仁潮 of Yan Mountain (northeast of Beijing), documented the importance of Sanskrit study carefully:

Only the Huayan letters [that is, Sanskrit in Chinese character transcription] have been transmitted today. But without knowing their origins, even though those who recite them are a multitude, they do not know why they are letters, how they establish names, how they are applied, or how they can be used to grasp the dharma. Because the ancients transcribed them into Chinese characters, they thereupon lost their transmission. I once asked of western monks, and only then understood the method of generation of letters.

Although Indic scripts received increasing attention from the seventh century onward, Chinese monks still relied primarily on transcriptions of Sanskrit syllables, which would have obscured the differences between a phonetic script and Chinese. As mentioned earlier, practitioners of Esoteric Buddhism in the Tang theorized the importance of learning Siddham script. Similarly, Ren Chao, whom Zhao Yiguang consulted regularly, believed that it was not enough to imitate the sounds of Sanskrit with reference to Chinese. For Ren Chao, efficacious pronunciation of Sanskrit syllables could only be achieved with a thorough understanding of the script, and its potential to represent sounds that Chinese characters could not. As he elaborates in another text, both the sounds and script of Sanskrit were intrinsically numinous:

Sanskrit characters are like ancient zhuan script. Since the beginning of the universe, there was at once their writing, and over the course of tens of thousands of years, there was no change from past to present. This is different from the writing here where ‘seal’ zhuan and ‘clerical’ li scripts have changed and been corrupted [into the contemporary standardized characters]. It originally came from brahma heaven (fantian 梵天), and is thus called brahma writing (fanshu 梵書). The gold and silver wheel-turning kings [who

33 Xitan jingzhuan, p. 87.
ruled the entire world] in turn inherited it. Thus where one writes Sanskrit characters, demons keep their distance; when one chants Sanskrit sounds, ghosts and spirits pay their respects in awe. It must be that it is the jade tone of the heavenly emperor (Indra)—who would dare not submit? For this reason, when the buddhas explain the dharma, they all use Sanskrit sounds. The eight groups of spiritual beings obey and transmit them. As result, one may call to heaven and heaven will respond; one may summon insects and the insects will obey. Only the sounds of Sanskrit are the most numinous and spirit-like for comprehending the hidden and the apparent… Only the use of Sanskrit writing can make the dirty clean, the ignorant wise, the prematurely dead long-lived, the sick healthy, destroy evil and assist the correct and bring benefit to all beings. There are 64 kinds of writing in the world, the first is Sanskrit, the second is Kharoṣṭhī, …among the 64 scripts, Sanskrit is the first. Thus one may know that Sanskrit is the king of scripts.

Ren Chao’s argument is built on a perhaps intentionally faulty description of the history of Sanskrit scripts. The Sanskrit language could in fact be represented in numerous scripts, which were developed in different historical periods. In fact, one of the popular scripts for rendering Sanskrit in Ren Chao’s own time was quite different from the Siddham script that had initially captured scholars’ attention in the Tang dynasty.\(^\text{35}\) Contemporary Ming discussions of Sanskrit actually equated different script forms with historical Chinese scripts like ‘seal’ and ‘clerical.’\(^\text{36}\) Ren Chao’s misunderstanding, whether willful or not, of Sanskrit script as remaining unchanging from antiquity allows him to claim that the script itself acts as a direct and uncorrupted line to the

\(^{34}\) Ren Chao, *Fajie anli tu* 法界安立圖 (1607 preface), (Kyoto: Akitaya Heizaemon 秋田屋平左衛門, 1654), j. 1.1 (*shang zhi shang*), pp. 11b–12a.

\(^{35}\) For example, the Sanskrit characters employed in Zhao Yiguang’s *Xitan jingzhuan* resemble the Lantsha/Rañjana script used for writing Sanskrit in Tibet and Newari in Nepal.

\(^{36}\) *Xitan jingzhuan*, p. 89.
origins of the universe. As noted above, Kūkai’s Esoteric interpretation of the value of Sanskrit
script was its ability to represent the underlying unreality of all things. Ren Chao instead ascribes
the same magical potential long understood to inhere in Sanskrit chanting to the script itself.
Hence, in his view, the script can drive off demons and prolong life. Ren justifies his exaltation
of the script in an allusion to the Lalitavistara sūtra, in which the Buddha claimed there to exist
64 scripts in the world. He interprets the fact that the Buddha lists Sanskrit first as indicating its
priority as the most important script (Chinese characters, Qin shu 楚書, are the twentieth).

Scholars outside of the Buddhist clergy, such as Zhao Yiguang and Liu Xianting,
consulted with Buddhist monks who specialized in phonology. Some, like Tan Zhenmo 譚貞默
(1590–1665), a high official and classical scholar, came to learn how to efficaciously practice
Sanskrit writing and chanting. Most, however, were primarily concerned with the applications
of their Sanskrit study to the field of Chinese philology. The knowledge of Sanskrit they
transmitted, which had been primarily of religious concern in earlier periods, came to interest the
broader community of philological scholars.

Zhao Yiguang and the Utility of Sanskrit

Notions of the relevance of Sanskrit to a complete understanding of phonology became
increasingly common during the Ming dynasty. One scholar in particular, Zhao Yiguang (1559–

37 See Tan’s “Fomu zhunti fenxiu xidi yiwen baochan xu” 佛母准提梵修悉地儀文寶讖序, in
Kawamura Kōshō 河村孝照, ed., Shinsan Dai Nihon zoku Zōkyō 新纂大日本續藏經, (Tokyo:
and Hanshan Deqing 懦山德清 (1546–1623), a philologically-inclined monk, whose fame
earned him the opportunity to live at the imperial palace on the invitation of the Wanli emperor’s
mother, the Dowager Empress Cisheng. See Wu Jiang, Enlightenment in Dispute: The
Reinvention of Chan Buddhism in Seventeenth-Century China (Oxford: Oxford University Press,
demonstrates new possibilities in scholarship that arose in the late Ming. Zhao was a member of the literary elite of Suzhou prefecture. Although Zhao was a distant descendant of the Song dynasty royal house, official service was not a major factor in his recent family history. His father had failed in the examinations and pursued a life of scholarship and writing, a path that Zhao Yiguang would follow. In addition to authoring many scholarly works, Zhao was also one of Suzhou’s most well-known book collectors and publishers. Among the works he published were the literary collections of his wife, Lu Qingzi 邵卿子 (fl. 1590), an accomplished poet who came to be one of the few women of the period to be anthologized in collections devoted to general literati poetry. Zhao’s partially extant poetry collection indicates that he was extremely well connected, both within the Suzhou literary-artistic scene, as well as with highly-placed officials, such as Shen Shixing 申時行 (1535–1614), Zhu Guozhen 朱國楨 (1557–1632), and Ye Xianggao 葉向高 (1559–1627). Zhao was widely recognized by contemporaries as one of the foremost philological scholars of his age, and his authority in this domain is demonstrated by frequent references to his work in late Ming scholarship. Although he authored numerous philological studies, his work was targeted by Gu Yanwu in the late seventeenth century as an example of poor Ming dynasty scholarship. Perhaps as a result of Gu’s influence, Zhao’s contemporary fame as perhaps the leading figure of philology was largely forgotten, and few of

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40 See poetic exchanges in Zhao Yiguang 趙宦光, *Hanshan mancao* 寒山蔓草, SKQS CMCS.
his works remain extant today.

Among the still extant works of Zhao is a study of Sanskrit writing entitled *Xitan jingzhuan* [悉曇經傳 Authoritative text on Siddham script]. The only known copy of this work, held at the Nanjing Library, is only partially preserved, and leaves many questions unanswered. Nevertheless, the remaining portions of the text give valuable insight into how classical scholarship in the late Ming could interact with that generated within a Buddhist context.

The ability of gentry to assemble at and fund the construction of Buddhist temples has been attributed, in part, to ecumenical attitudes during this period toward the “three teachings” of Buddhism, Daoism, and Confucianism. This attitude is visible even within the domain of classical scholarship in a discipline like philology, which was formally considered a branch of Confucian classical learning. As Zhao writes in the preface to *Xitan jingzhuan*:

> The Buddha and Confucius were both able to preach. Buddhism achieves breadth, while Confucianism achieves the generalities... There is no greater or lesser among them, and they alternately serve as lord and minister.

Zhao signs this preface as “a disciple of Confucius” (孔氏之徒), and refers to his approach throughout the text as that of “us Confucians” (吾儒). Nevertheless, the neglect of phonology among his fellow classical scholars appeared to Zhao as “the shame of us Confucians” (吾儒家之恥). In order to rectify this, Zhao considered it necessary to draw on the Buddhist tradition of phonological scholarship. Such a viewpoint is paralleled by the philosophical compatibility

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42 *Xitan jingzhuan*, p. 2.

43 *Xitan jingzhuan*, p. 9.
between Buddhism and Confucianism among contemporary thinkers. Zhao’s example provides a new context for understanding the nature of the “three teachings fusion:” that of textual scholarship. Zhao Yiguang was likely receptive to Buddhist scholarship as a result of the current intellectual and religious climate. The motivation underlying this approach, however, was more in line with other contemporary scholars who were attempting to devise comprehensive systems for documenting linguistic sounds.

Zhao Yiguang was convinced of the Sanskrit origins behind important phonological tools from the Chinese tradition, such as fanqie and rhyme tables. In addition, like his consultant Ren Chao, he believed that Sanskrit sounds were best represented with a Sanskrit script, as opposed to the transcriptions that characterized most Buddhist writings of his time. In his view, “if one transcribed [a text] into Chinese characters, it will lead to confusion because China places emphasis on shapes, while India places value on sound” (若翻成華字，反致淆亂，因震旦宗於象形，天竺貴乎聲明). Inspired by the possibilities for phonological description in a phonetic script, Zhao advocated the application of Sanskrit script to Chinese phonological tools. In describing a rhyme table he included in the text (unfortunately in a no longer preserved section), Zhao writes:

Now the Chinese and Sanskrit languages are not entirely commensurate. In the first row [of the table in] the first chapter, although there are Chinese words, they lack characters. I thus supplement them making do with similar sounding Sanskrit letters... Presently using Sanskrit writing to supplement Chinese words is ultimately fitting a square peg in a round hole, how can I avoid the criticisms of those in the know? It’s simply unavoidable.

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44 See, for example, Timothy Brook, Praying for Power: Buddhism and the Formation of Gentry Society in Late-Ming China, pp. 83–88, and Edward T. Ch’ien, Chiao Hung and the Restructuring of Neo-Confucianism in the Late Ming (New York: Columbia University Press, 1986).

45 Xitan jingzhuan, p. 103.

46 Xitan jingzhuan, p. 102.
While he did not see the phonetic system of Sanskrit script as infallible or entirely able to represent the sounds of Chinese, it could be used to approximate sounds more accurately than a notation that relies solely on Chinese script. Evidently this resulted in a rhyme table in which he supplied a Sanskrit character for blank spaces with no corresponding Chinese character.

Zhao further argued:

Its 34 shapes [here, consonants] are the mother and 16 sounds [here, vowels] are the father. Although its transformations are limitless, it is very simple to grasp the method. It is not like Chinese writing in which recognizing one [character] is only one, and recognizing 10 [characters] is only 10. Even if one comprehensively acquires tens of thousands, it is difficult to go farther than a step...It must be that in the method of Sanskrit writing, one matter is said in one way, and one thing is said in one way. It is not like Chinese writing in which sound and meaning become mixed up, and there are many cases of [words with] the same sound but different meaning.

Zhao clearly had a more sophisticated understanding of the nature of Sanskrit scripts than Zheng Qiao in the Song dynasty, and many of his contemporaries, for that matter. By interacting directly with the script, rather than Chinese transcriptions of Sanskrit, he recognized how a prescribed number of characters could be used to generate many sounds. Zhao Yiguang was not a script reformer in the sense of wanting to replace the Chinese script. He could however acknowledge limitations of Chinese characters, and saw phonetic writing as having

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48 Xitan jingzhuan, pp. 10–11.
supplementary value for the purposes of rhyme table phonology.

Figure 3.2: A description of how Sanskrit consonants are modified to combine with vowels, inspired by the standard Chinese rhyme table, from an extant portion of Zhao Yiguang’s *Xitan jingzhuan*. The top row (labeled ‘mothers’ 母) represents consonants, while the first column (labeled ‘sounds’ 聲) represents vowels. The first column would be read *ka*, *kā*, *ki*, *kī*, and so on, while the second column would do the same with the initial *kh*-.

Even more strikingly, Zhao argued in a dictionary of ancient character forms (*Shuowen changjian* 說文長箋) that some characters in their original form were constructed according to principles of Sanskrit writing. In his view, “when the Sanskrit language came east, it changed our

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49 *Xitan jingzhuan*, p. 98.
Chinese characters” (梵語東來，易我華字).

According to his analysis, certain Chinese characters were made up of two elements, both bearing phonetic significance. For example, he identified shen 神 as composed of shí 石 and yīn 聲, the former representing the syllable initial (sh-) and the latter representing the syllable final (-en). The traditional interpretation of shen 神, on the other hand, would see shí as containing semantic significance, and only yīn as bearing phonetic information. What is most innovative about such an interpretation is its breaking free from the traditional six principles of character formation prescribed in Shuowen jiezi, as there is no such principle characterized by multiple phonetic elements. Few other contemporary scholars would venture outside of these principles. Zhao envisioned Sanskrit as not only allowing for more comprehensive phonetic representation of linguistic sounds than the Chinese script, but also as a model for reinterpreting the way the Chinese script itself was composed.

The Broader Influence of Sanskrit in the Ming

Zhao Yiguang wrote one of the most extended studies of Indic scripts and phonology to be produced in premodern China. He was not alone, however, in his belief that Sanskrit phonology and its relation to Chinese were significant. Zheng Qiao’s discussion of the nature of Sanskrit remained influential, especially as a result of its unattributed inclusion in the encyclopedia Zhenze changyu [震澤長語] by the mid-Ming scholar Wang Ao 王鏊 (1450–1524). The section on phonology from Zhenze changyu, and its discussion of Sanskrit, came to be cited in later encyclopedias and philological works. Further, its notable pairing of Shao Yong’s

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50 Zhao Yiguang 趙宦光, Shuowen changjian 說文長箋, SKQS CMCS, j. 32, pp. 31a–31b.

51 For the original passage, see Wang Ao 王鏊 Zhenze changyu 震澤長語, SKQS, j. xia, 14b–16b, pp. 220–21. For citations of Zheng Qiao in late Ming encyclopedias, see, for example,
cosmological phonology and Indic scripts in its discussion of phonology (yinyun 音韻) is reflective of new ways of understanding the field of phonology in the Ming. Prior to the Ming, both Shao Yong’s cosmology and the study of Sanskrit were considered to have only tangential implications for the study of Chinese phonology. During the Ming, an increasing sense of the value of cross-disciplinary scholarship allowed scholars to connect these elements from disparate traditions in new ways for application within a specific discipline, in this case phonology.

Many broad encyclopedic discussions of phonological methods included a discussion of Sanskrit. Yuan Zirang 袁子諱 (fl. 1601), for instance, in his Zixue yuanyuan [字學元元 Origins of the study of characters], included a volume discussing the Sanskrit alphasyllabary. Yuan argued that this alphasyllabary could serve as “an aid to the 36 initials and 24 rhyme groupings [of the Chinese rhyme table tradition]” (三十六母 二十四撮之翼). Wu Jishi 吳繼仕 (fl. 1579–1611) cited Zhao Yiguang on issues related to Sanskrit and Chinese phonology throughout his Yinsheng jiyuan [A record of the origins of sound]. Another contemporary, Chen Jinmo 陳讚謨 (ca. 1600–1692), embraced the erhe (二合 “melding of two”) and sanhe (三合 “melding of three”) spelling methods, by which Buddhist scholars divided Sanskrit syllables into two or three parts as a way of analyzing the consonant clusters foreign to Chinese. In his words:

Buddhists further claim that their teachings contain erhe and sanhe sounds, and the Confucians do not. Among us Confucians there have never been many specialists in phonology—how would they be able to understand erhe and sanhe? They do not realize that whenever one expels a sound, there is necessarily [initial] breath, sound, and [concluding] harmony, mixed together into one, and only after this is the sound perfectly

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52 Yuan Zirang 袁子諱, Wuxian tang zixue yuanyuan 五先堂字學元元, SKQS CMCS, j. 10, p. 1b.
Like Zhao Yiguang, Chen aligned himself with “us Confucians” (吾儒), but felt that Buddhist techniques of phonological analysis of Sanskrit were applicable to Chinese, as well. Specifically, he envisioned a tripartite division of the Chinese syllable, as an extension of the indigenous bipartite methods.

One of the persistent concerns among late Ming philological scholars, as shown in Chapter 1, was how to notate all possible linguistic sounds. In the search for comprehensiveness, theoretical phonologists applied cosmological methods to derive a number for possible existing sounds, as well as ways to represent these sounds. The literary scholars to appear in Chapter 6, too, employed new methods of notating the pronunciation of syllables beyond existing Chinese characters. Contemporary scholars also embraced phonetic scripts as a useful supplement for notating the range of linguistic sounds.

Fang Yizhi 方以智 (1611–1671), in particular, employed phonetic scripts as a phonological tool. With regard to the famed Jesuit dictionary *Xiru ermuizi* [西儒耳目資 An aid to the eyes and ears of western scholars], which employed the Latin alphabet, Fang wrote: “It can validate my [rhyme] grades and divisions” (是可以證明吾之等切). As he wrote in the preface to another work: “I once combined ancient rhymes, Siddham, and the Great West [i.e., Latin alphabet] with [traditional Chinese rhyme scholarship] of Shen Gong, Sima Guang, and Shao

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53 Chen Jinmo 陳蓋謐, *Yuanyin tongyun* 元音統韻, SKQS CMCS, p. 39.

Yong, and thereupon understood that natural rhyming fundamentally does not allow artificial creation” (嘗以古韻詢太西, 合之珪溫康節, 乃知天然之節, 本不容造作, 而享其中和者也). 55 As scholars in the late Ming increasingly sought to devise comprehensive systems for describing linguistic sounds, some turned to phonetic scripts for corroboration. In certain cases, they were used to substitute for sounds that would be difficult to represent with Chinese characters. In other cases, as Fang Yizhi shows, these writing systems were seen as more clearly illustrating the principles underlying indigenous methods of spelling through the combination of characters. In Fang’s view, there existed fundamental phonological properties, the universal nature of which could be apprehended on the basis of the similarity of phonetic notation systems in different scripts. Perhaps the great difference between Sanskrit and Chinese also led scholars to believe that accounting for the sounds of both languages would effectively encompass all possible sounds. Wen Deyi 文德翼 (fl. 1630s), for instance, in prefacing a work that claimed to describe all linguistic sounds in the universe, wrote that the author had “exhausted the sounds of Chinese and Sanskrit” (華梵之聲盡矣). 56

In addition to the benefits of phonetic scripts for phonological analysis, some found the organization of sounds in the Sanskrit alphasyllabary especially compelling. In particular, as several scholars reported, the fact that the alphasyllabary begins with the phoneme a indicated that it follows a natural pattern because this is the first sound a child makes. 57 We can infer possible influences of Sanskrit phonological analysis on earlier periods of Chinese phonology. In

55 Fang Yizhi 方以智 Fushan wenji houbian 浮山文集後編, XX SKQS, j. 2, p. 2a.


57 Xitan jingzhuan, p. 93, Shuowen changjian j. 67, 20a.
the late Ming, however, this discussion is explicit, and made possible as a result of both an increasingly relaxed attitude among literati toward Buddhism, as well as a scholarly world in which disciplinary divides were much more fluid than today. Finally, a desire for comprehensiveness drove scholars to draw from foreign methods to supplement the limitations of phonological representation in the native script.

Advantages and Disadvantages of Phonetic writing

The use of phonetic scripts as phonological tools in the late Ming forced contemporary scholars to acknowledge the clear differences with their native script. The majority of scholars from this period saw the utility of phonetic script as, at best, corroborative. At the same time, the increasing presence of these scripts in philological discourse gave rise to the first concerted efforts to assert the superiority of Chinese writing.

Some scholars, like Zhao Yiguang and Fang Yizhi, would acknowledge certain advantages in phonetic writing. However, the consultation and use of phonetic scripts did not necessarily equate to a sense of the fundamental inadequacy of Chinese characters. The passage most commonly cited as evidence of contemporary disdain for the Chinese script is Fang Yizhi’s claim that: “The confusion of characters is due to their interchangeability and borrowing but, if a concept pertained to a single word and each word had a single meaning, as in the distant West where sounds are combined in accordance with concepts, and words are formed in accordance with sounds, so that there would be neither duplication nor sharing, wouldn’t that be superior?”

(字之紛也，即緣通與借耳，若事屬一字，字各一義，如遠西因事乃合音，因音而成字，不重不共，不尤愈乎)\(^{58}\) This quote is never placed in its fuller context. Fang believed that “if

scholars understand the origins of this, they will save energy in explicating writings” (學者知此原委，則解書省力). The most important element of a clear writing system, in Fang’s view, was that “one concept has one character” (字各一義). According to Fang, this was achieved in the west by means of a phonetic script. It was also possible in Chinese; one must be wary in reading ancient texts in his view, however, because writers in antiquity had violated this principle by relying on “interchangeability and borrowing” (通與偕) between homophonous characters. With the passage returned to its context, it becomes evident that Fang was not arguing that a phonetic writing system is inherently better than Chinese. Clear differentiation among characters could satisfy the ideal of “one concept for each character.” Zhao Yiguang, for instance, as well as a number of Neo-Confucian philologists discussed in the Chapter 2, believed that recovering ancient script forms would allow one to overcome the confusion caused by interchangeable characters. In their view, the original forms of characters in antiquity were sufficiently differentiated.

Script reform, as it existed during the Ming, involved attempts to assign specific meanings to particular forms of characters, which had previously been considered interchangeable. For some, like Zhao Yiguang, it is possible that the desire for reform was linked to a concrete understanding of Sanskrit. Not everyone agreed that Sanskrit methods had relevance to Chinese, however. A certain degree of ambivalence, and in some cases outright opposition, toward non-Chinese scripts existed among other contemporary scholars. Research on the history of the Chinese script and script reform has characterized the majority of premodern Chinese scholars as possessing a stagnant view toward script, which explains their failure to

59 Fang Yizhi 方以智, Tongya 通雅 (Beijing: Zhongguo shudian, 1990), j. 1, p. 18a–18b.
adopt phonetic scripts. Ming reactions to the increased role of such scripts reveal that ideas about the nature of writing in fact were not ossified. Despite the unquestioned dominance of Chinese characters generally thought to have existed in this period, several prominent scholars felt the need to address alternative writing systems and demonstrate their inferiority. These reactions are evidence of the broad influence such scripts had on conceptions of writing and language in this period.

Despite their exposure to phonetic scripts, late Ming scholars did not perceive them wholly favorably. As mentioned above, Yuan Zirang included a set of tables explicating the Sanskrit alphasyllabary (in Chinese transcription). However, he remained skeptical of a system that would require two characters to represent a single syllable (for example \textit{sta}, transcribed in Chinese as \textit{sezha}):

It is just that among [phonetic scripts] there are characters that are recited with two or three characters simultaneously. I am humbly unconvinced. Heaven and earth produce matter through one unity, and this Way connects the myriad things with one. How could there be one letter \([\text{母}]\) composed of two characters \([\text{字}]\)? Are you supposed to pronounce it from the first character, or the second character, or to pronounce them together?\footnote{Yuan Zirang, \textit{Wuxian tang zixue yuanyuan}, j. 10, p. 4b.}

Alluding to Confucius’ famous claim that “my Way is threaded together with one thing” (吾道一以貫之), Yuan argues that from a theoretical standpoint it is not acceptable for a letter, which generates more words (lit. ‘mother’ \textit{mu} 母), to itself be divisible into multiple parts. The universe was created out of one (referring to a concept known as the Supreme Ultimate \textit{taiji} 太極), and

Confucius summarized his ethical philosophy in one thought—could written language be more complicated? On a more practical level, Yuan felt that it was not clear how to pronounce these characters. Working solely on the basis of Chinese transcription, as would have been the case for many contemporary scholars, Yuan clearly did not have a good sense of the nature of Sanskrit scripts. For him, the phonetic Sanskrit writing, as read through transcription, was less transparent than Chinese characters because one could not determine which part of the syllable the various characters referred to. Yuan included a discussion of Sanskrit as a basis for comparison and corroboration with the standard rhyme tables of the Chinese phonological tradition, but did not see it as a superior system to Chinese.

The seeming incomprehensibility of Sanskrit and its use of multiple characters for a single word was baffling to other scholars, as well. For example, Hao Jing wrote:

Chinese is elegant; each character constitutes one meaning. Sanskrit is disorderly; several characters constitute one sound, and several sounds constitute one meaning. For example, Chinese nengren (Ch. 能仁, the ability to care for others) is Sanskrit shijiamouni [Ch. 釋伽牟尼, Sk. sākyamuni]. Chinese Shizun [Ch. 世尊, World-honored one] is Sanskrit lujianata [Ch. 路迦那他, Sk. lokanātha]… There are many [examples] of this nature. Reading them in Sanskrit, one must bind together the excessive sounds. But with Chinese writing, one character clearly has one sound.

Some contemporary scholars, like Wang Kentang and Zhao Yiguang, argued that a phonetic writing system was simpler than the Chinese. Hao Jing, on the other hand, considered Chinese more straightforward because meaning, as well as the sound of entire syllable, is embedded in each individual character. Hence, in Chinese, he saw a direct correspondence between ‘meaning’

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62 Hao Jing 郝敬, Dushu tong 讀書通 (1623 edition, held at Beijing Normal University Library), j. 1, pp. 14a–14b.
and writing or ‘characters’ (字). In Sanskrit, he believed that ‘characters’ were only equivalent to ‘sound’ (音). Thus, in his view, in order to obtain meaning from a Sanskrit text, one must go through the additional burdensome phonological operation of putting multiple sounds together before meaning becomes apparent. While a number of his contemporaries were attempting to tie Sanskrit into a universal phonological system commensurate with Chinese, Hao felt that, “Chinese is fundamentally different from Sanskrit” (華音本異梵語). To persist in the belief that Buddhist scholars and their use of foreign scripts had anything to contribute to Chinese was in his view equivalent to, and as absurd a proposition as the claim that the Buddha knew more characters than Confucius. 

Some scholars saw phonetic scripts as imprecise. Liu Xianting (1648–1695), for example, criticized the phonetic systems of Manchu, Latin, and Sanskrit, and proposed a rhyme table method which he believed could better describe sounds. Liu is often misleadingly identified, like Fang Yizhi, as a proponent of phonetic scripts by virtue of his consultation of these writing systems. Liu in fact believed that phonetic scripts contained redundant superfluous vowels, which in his view simply comprised tonal variations of the same vowel. He too seems to have based his understanding of these scripts largely on Chinese transcription, and did not see them as providing a superior system for notating all possible sounds.

Even cosmologically-minded scholars were less optimistic about the potential of Indian phonetic scripts to contribute to knowledge of Chinese or a universal phonological system. Ge Zhongxuan (1577–1636), for example, also decried the way in which the Sanskrit alphasyllabary captivated Chinese scholars. Like Yuan Zirang and Hao Jing, Ge focused primarily on

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64 Liu Xianting, *Guangyang zaji*, pp. 152–53.
transcriptions of the alphasyllabary. In Ge’s view, the fact that the Sanskrit script could be transcribed with the Chinese script meant that it did not have any potential use beyond what could already be accomplished by the Chinese script. Like an increasing number of contemporaries, Ge also disputed the idea that Buddhist scholars had had a fundamental and positive influence on Chinese phonology. As the examples of Yuan, Hao, Liu, and Ge show, Sanskrit writing was often conceived of in terms of Chinese transcription, which for various reasons, each scholar determined to be clumsy or inadequate. This often set the stage for a disavowal of Indic influence on Chinese phonological scholarship.

Indic scripts also came under attack at the hands of Jesuit converts pressed with the task of demonstrating the superiority of Christianity over Buddhism. The well-known nature of Sanskrit, compared to the freshly introduced Latin alphabet, compelled Yang Tingyun (1562–1627), a prominent Jesuit convert of the late Ming, to acknowledge the superficial similarity between the two, but argue that the former was fundamentally deceptive and intent on mystifying people. Gu Yingxiang (1483–1565), a prominent Neo-Confucian thinker, similarly noted the deceptive nature of Sanskrit in the following argument:

[It is] further claimed “The Chinese are not skilled with sound. When Indian monks chant for rain then rain responds, when they chant for a dragon then a dragon appears. Within the blink of an eye, changes occur in accord with the sounds. Even though Chinese monks may imitate their sounds, they have no experience, and have not perfected the Way of sound.” I consider this to be techniques of illusion. The people of China also have those who can summon thunder and rain through incantation. But illusions among the Chinese are few, while among the western monks they are many. China is a bright, sunny place; thus illusions are few. Foreign lands are dark, hidden places; thus illusions are many.

又謂華人不善音，梵僧呪雨則雨應，呪龍則龍見，頃刻之間，隨聲變化，華僧雖學其聲而無驗者，音聲之道未至也，予謂此幻術也，中國之人亦有以符呪召雷雨者，

65 Ge Zhongxuan, Tailü, j. 10, p. 16a.
66 Yang Tingyun, Tianshi mingbian 天釋明辨, pp. 76a–78b.
In Gu’s view, the geomantic properties of the region determined the effects attributed to the power of properly pronounced Sanskrit characters. In other words, the language itself did not inherently possess magical properties.

Gu further argued that Chinese characters were necessary for China on the basis of culture:

For what purpose are characters created? They are created to order all under heaven. The people of China have the mutual relations of lord and minister, superior and inferior, as well as the mutual bonds of rites, music, punishment, and governance. Their characters must be many. Although the sparse records of those foreign peoples each have their foreign characters, they are not many. It is not only Indians; the characters of the Hui Muslims and foreigners outside the southwestern reach of our culture are all this way. It is because they lack an influential cultural heritage.

For Gu, the multitude of Chinese characters was necessary, in order to encompass the extent of China’s civilization. Some of his contemporaries embraced the simplicity of phonetic scripts, while others rejected the notion that they were in fact simpler. Here Gu has effectively acknowledged the simplicity of Indic writing, but claimed that for just this reason it should be inapplicable to China, the civilization of which could only be communicated with a greater number of characters. This of course is based on the faulty assumption that characters are equivalent to ideas. Gu was perturbed by his contemporaries’ arguments that Indic scripts and the Chinese script could in some sense be commensurate, or at least supplement each other. As a Neo-Confucian thinker, Gu made the script itself a symbol of culture, and defined the purpose of

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67 Gu Yingxiang 顧應祥, *Jingzhai xiyin lu* 靜虛齋惜陰錄, SKQS CMCS, j. 6, p. 7a.

68 Gu Yingxiang, *Jingzhai xiyin lu*, j. 6, p. 5b.
writing as putting order to the world. The complexity of Chinese writing was therefore, in Gu’s view, a positive reflection of its sophisticated civilization.

The use of phonetic scripts, which developed in the Ming dynasty as a way of supplementing more traditional methods of phonological description, continued well into the Qing. The establishment of a new “state language” (guoyu 國語), the Manchu language, itself written in a phonetic script, ushered in a heightened sense of the utility of phonetic scripts for a discussion of phonology.⁶⁹ Although perhaps overshadowed by the Manchu script, specialized studies of Sanskrit writing continued to be published.⁷⁰ Some Ming scholars opposed the influences of this script, and many Ming and Qing thinkers alike repudiated the idea that Buddhist scholars had a formative influence on Chinese phonology. The idea that phonetic scripts are inherently superior to logographic scripts, a viewpoint assumed by most western scholarship today, was not evident to Ming scholars. Even at the turn of the 20th century, the great scholar and revolutionary thinker Zhang Taiyan (1869–1936) would argue that reading a phonetic script differed from reading the Chinese image-based script (象形) in that with a phonetic script one could “only recognize the sound, but would certainly be unable to know the meaning” (徒識其音，固不能知其義).⁷¹ Nevertheless, Sanskrit and other phonetic scripts maintained an enduring influence among phonologists who saw their potential to create a

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⁷⁰ For example, see Zhou Chun’s 周春 (1729–1815) Xitan aolun 悉昙奧論.

comprehensive phonetic notation system. These techniques were developed by a community of late Ming scholars who consulted with monks specializing in the scripts and phonology of Sanskrit and Tibetan, and to a lesser degree Jesuits with knowledge of the Latin script. While monks continued to emphasize the practice of phonology for the purposes of self-realization, secular scholars applied their methods in the pursuit of comprehensiveness.
CHAPTER 4

THERE IS MUSIC IN THE HEART OF MAN:
LATE IMPERIAL CONCEPTS OF MUSICAL AND LINGUISTIC SOUND

Intuitively, we might recognize some similarity between music and spoken language in that both communicate via the medium of sound. A major question in neuroscience today is the degree to which music and language activate similar parts of the brain.\(^1\) However, as Theodor Adorno observed, “the resemblance [between music and language] points to something essential, but vague.”\(^2\) This vagueness is enough to keep the modern disciplines of acoustics and linguistics isolated from each other. In late imperial China, however, language and music were seen as intimately linked. This fact is most evident in the numerous works of scholarship produced during this period which seamlessly combined these two fields. This chapter will look at how this linkage was justified, and what motivated it. The logic underlying this association reveals how late imperial scholars forged connections across disciplines. In addition it serves to highlight the methodological, rather than thematic shift, which I argue characterizes intellectual change over the course of the 16\(^{th}\) through 19\(^{th}\) century. Interest in ancient poetry as a key to understanding the language of antiquity was not new to 18\(^{th}\) century scholars (and a few predecessors), as is commonly argued.\(^3\) The way in which it functioned as a key, however, came

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to shift over time. 18th century scholars generally compared rhyme-words across poems as a method of delineating ancient categories of rhyme. Many 16th and 17th century scholars, on the other hand, believed that the putative musical accompaniment to these poems should serve as the basis of defining these categories.

Late imperial Chinese scholars saw music and speech as the later products of an original undifferentiated sound. Scholars of both music and phonology, or the sounds of language, believed that the combined study of the two disciplines could better achieve an understanding of this original sound, as well as improved frameworks for analyzing both music and language. Music contained two important components, which scholars believed could be fruitfully applied to the study of phonology: 1) extensive cosmological linkages (the implications of which we have seen in Chapter 1), and 2) mathematically-based categorizations of sound. At the same time, scholars believed the study of phonology had something to provide for music, as well. Musical pitches were considered by some to have emerged from the production of sound by the human voice. A precise understanding of human speech could therefore be seen as useful in reconstructing the lost music of antiquity.

Current research on the history of music in late imperial China predominantly focuses on music theory and the relationship between music and ritual.4 The fact that some of the most influential musical texts from this period include extensive discussion of language has largely

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been neglected. By focusing on aspects of these texts that reflect present-day ideas of what constitutes musicology, this research has painted Chinese music theory as primarily a mathematical science. Similarly, studies Chinese linguistics generally considers the musical correlations in such texts as irrelevant to their linguistic content. As this chapter will show, discussions of language existed in musical texts for a reason. Conceptions of the human voice and the phonological properties of an idealized ancient Chinese speech existed alongside mathematical calculations in the work of music theorists as a way of establishing the correct tuning of pitches. The perceived natural aspects of musical pitches in turn provided what phonological scholars considered to be a concrete basis for the discussion of linguistic sound.

Prerequisites

I will provide here a brief overview of key musicological concepts necessary to understand the content of this chapter.

The Chinese musical scale contained 12 basic pitches, like its western counterpart. The 12 pitch names referred to fixed pitches, although the actual value of these pitches varied dramatically across time according to their calculation. For convenience, I will refer to these

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pitches according to a single western equivalent, keeping in mind that the actual pitch values during the period with which this dissertation is concerned may have varied. Zhu Zaiyu, for instance, who developed a system of equal temperament in the late 16th century, identified a huangzhong pitch which has been estimated at 315Hz, close to today’s D# (311Hz) and probably sharper than the Ming court standard; the early Qing court, however, established the huangzhong pitch at an estimated 344Hz near today’s F (349Hz).

Table 4.1: Pitches of the fixed Chinese musical scale.

<table>
<thead>
<tr>
<th>黃鐘 huangzhong</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>大呂 dalü</td>
<td>C#</td>
</tr>
<tr>
<td>太簇 taicou</td>
<td>D</td>
</tr>
<tr>
<td>夾鐘 jiazhong</td>
<td>D#</td>
</tr>
<tr>
<td>姑洗 guxian</td>
<td>E</td>
</tr>
<tr>
<td>仲呂 zhonglì</td>
<td>F</td>
</tr>
<tr>
<td>林鐘 linzhong</td>
<td>G</td>
</tr>
<tr>
<td>夷則 yize</td>
<td>G#</td>
</tr>
<tr>
<td>南呂 nanlì</td>
<td>A</td>
</tr>
<tr>
<td>無射 wuyi</td>
<td>A#</td>
</tr>
<tr>
<td>應鐘 yingzhong</td>
<td>B</td>
</tr>
</tbody>
</table>

The calculation of pitches was derived arithmetically from the length of the pitch-pipe determined for huangzhong [hereafter C]. Especially from the Song onward, there were frequent

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8 Yang Yinliu 楊蔭瀏, Zhongguo yinyue shi 中國音樂史 (Taipei: Xueyi chubanshe, 1977), pp. 302, 311. These calculations are based on historical measurements of pitch-pipes.
court debates about how to ascertain the correct length of pitch-pipe for setting the pitch of C.\(^9\) Once this length was established, however, the method of calculating the subsequent pitches generally followed the method known as “adding and subtracting one third” (sanfen sunyi 三分損益). In this method, the length of the pitch-pipe would alternatingly have 1/3 of its length subtracted and added to produce the rest of the scale. For instance, if C was set at 9 cun 寸, then it would have 1/3 of its length subtracted (9 x 2/3), yielding a length of 6 cun. This produces a pitch a fifth higher than the original pipe (in this case G). The product would then have 1/3 of its length added (6 x 4/3), yielding a length of 8 cun with a pitch a fourth lower than the preceding pipe (in this case D).\(^10\) This alternating operation could be performed 12 times before (almost) returning to the original C pitch an octave higher.\(^11\)

These fixed pitch names were sometimes used as a music notation system, in which case usually only the first character was used (for instance huang 黃=C, da 大=C#, etc.). Certain pitches could have upper (qing 清) and lower (bei 倍) octave variations, although the permissibility of this in court music was also debated. The musical examples I present later in modern western notation are transcribed from texts which notated pitch in this manner. The fixed pitches as a group were typically referred to as the twelve lüli 十二律吕, referring to the pitch-

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\(^10\) This method was also referred to as “mutual production separated by 8” (geba xiangsheng 隔八相生), as this method did not proceed chromatically, but rather by producing a pitch 8 steps (a fifth higher/a fourth lower) removed from the preceding.

\(^11\) The fact that the 13\(^{th}\) iteration yielded a pitch slightly sharper than C was one of the major issues concerning premodern music theorists. Many solutions were proposed to this problem, including theoretical scales of more than 12 pitches, ranging from 18 to 360 subdivisions of the octave. The solution to this problem accepted today, that is the logarithmic division of the octave into 12 equal parts, was discovered in China by Zhu Zaiyu in the late 16\(^{th}\) century.
pipes, the length of which determined their tuning.

In addition to the fixed pitches, there were 5 (or occasionally 7) relative pitches (wuyin 五音 or wusheng 五声), which defined the only pitches usable in a given mode. The relative pitches were similar to the movable-do solfege system (do, re, mi, fa, sol, la, ti) used in the west today. In other words they represent a position in the scale, rather than a specific pitch (in the west, for instance, do in the key of C major would be C, while in the case of E major do would be E). These 5 or 7 pitches represent the first 5 or 7 produced via “adding and subtracting one third” on a given do, creating either a pentatonic or heptatonic scale.\(^{12}\) Table 4.2 lists the relative pitch names, the western equivalent I will use, and a transcription in fixed musical pitches taking gong/do as C and D, respectively, as examples.\(^{13}\) The terms in parentheses are the pitches added when a heptatonic, rather than pentatonic, scale is employed.

Table 4.2: Relative pitches in Chinese music.

<table>
<thead>
<tr>
<th>Relative pitch</th>
<th>宮 gong</th>
<th>商 shang</th>
<th>角 jue</th>
<th>(變徵 bianzhi)</th>
<th>徵 zhi</th>
<th>羽 yu</th>
<th>(變宮 biangong)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Western solfege</td>
<td>do</td>
<td>re</td>
<td>mi</td>
<td>(fa)</td>
<td>sol</td>
<td>la</td>
<td>(ti)</td>
</tr>
<tr>
<td>Transcription taking C as do</td>
<td>C</td>
<td>D</td>
<td>E</td>
<td>(F#)</td>
<td>G</td>
<td>A</td>
<td>(B)</td>
</tr>
<tr>
<td>Transcription taking D as do</td>
<td>D</td>
<td>E</td>
<td>F#</td>
<td>(G#)</td>
<td>A</td>
<td>B</td>
<td>(C#)</td>
</tr>
</tbody>
</table>

As in the west, do here does not refer to a specific pitch, but rather to the tonic note of a given

\(^{12}\) In other words, proceeding up a fifth, down a fourth. So if do is C, then the pitches calculated will be C-G-D-A-E-B-F#.

\(^{13}\) As with solfege in the west, the relative pitches in the Chinese scale, while not fixed in pitch, do relate fixed intervals between pitches. I refer to the tonic gong as do, as this conveys more information about the mode for the lay reader than the intervals between pitches. Some scholars, like Joseph Lam and Rulan Chao Pian, start the scale on gong with fa, which accurately captures the intervals of the Chinese heptatonic scale.
mode. In other words, any of the 12 pitches can function as *do*. The terms for the five relative pitches were also employed in the field of phonology as labels for the place of articulation of syllable initials in the medieval rhyme table tradition. The *do* category encompassed laryngeals (*houyin* 喉音), such as *eing 影* and *hau 曉*; the *re* category encompassed sibilants (*chiyin 齒音*), such as *sem 心* and *tshung 從*; the *mi* category encompassed velars (*yayin 牙音*), such as *gwen 群* and *khei 溪*; the *fa* category encompassed dentals (*sheyin 舌音*), such as *nei 泥* and *teing 定*; the *sol* category encompassed labials (*chunyin 唇音*), such as *being 並* and *pang 幫*. There is no evidence of extended theoretical associations between the pitches and categories of articulation during the medieval period. As this chapter will show, late imperial scholars imputed greater meaning to these labels.

There are several terms commonly used to refer to “sound” in this period: *sheng 聲*, *yin 音*.

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14 There are exceptions. Qu Jiushi, for instance, not only interpreted these terms to refer to fixed pitches, but in fact specifically to mean the first five chromatic pitches of the 12 fixed pitches. Joseph Sui Ching Lam, “Creativity within bounds: State Sacrificial Songs from the Ming Dynasty (1368-1644 A.D.)” Ph.D. diss. Harvard University (1988), p. 236.

15 During the period with which this dissertation is concerned, scale modes (*diao 調*) were defined as follows: a fixed pitch which functions as *do* (the tonic note from which the scale is built) + a relative pitch representing the starting and cadencing note. Hence, *linzhong yu* 林鐘羽 would be interpreted as the mode in which *do* was G (*linzhong*) and the starting and cadencing note was *la* (in this case D). In *linzhong shang* 林鐘商 the starting and cadencing note would be *re* (in this case A). In both cases, because *do* is G, the notes of the scale would be G-A-B-(C#)-D-E-(F#). However, *linzhong yu* would theoretically start and end on D, while *linzhong shang* would start and end on A. The combination of fixed and relative pitches created a total of 60 or 84 possible modes, depending on whether the pentatonic or heptatonic system of relative pitches was used. The construction and number of possible modes, along with the derivation of pitches, consumed a great deal of scholarly attention in late Ming China. See Joseph Sui Ching Lam, “Creativity within bounds: State Sacrificial Songs from the Ming Dynasty (1368-1644 A.D.)” Ph.D. diss. Harvard University (1988), pp. 225-244.

16 In the early medieval tradition, these relative pitches appear to have designated pitch tones, rather than syllable initials. See Li Xinkui 李新魁, *Hanyu dengyunxue 汉语等韵学* (Beijing: Zhonghua shuju, 1983), p. 36.
The classical texts which informed the acoustic thought of late imperial thinkers seem to imply a difference between sheng and yin. Sheng typically refers to a sound or pitch devoid of any context, including those of animals and natural phenomena. Yin describes sound in a musical or linguistic context. Therefore, in this chapter I will generally follow the common practice of translating sheng (or shengyin) as “sound” and yin as “tone.” I will occasionally sacrifice consistency for accuracy. Sheng and yin could have technical senses in both the musical and linguistic literature of late imperial China, but these technical senses were not standardized. For example, one scholar might use sheng to refer to syllable initials, while another would use yin. In such cases, I alter the translation to reflect the writer’s particular usage. Both sheng and yin were also used without any apparent distinction in meaning in certain contexts. The five relative pitches, for instance, could be alternatively referred to as the five sheng 五声 or the five yin 五音.

**Primordial Sound**

Late imperial scholars made two primary, and occasionally conflicting, claims about why language and music were linked. The first was based on the premise that sound, as the product of some kind of movement of qi, existed prior to its categorization as tone, either musical or linguistic. Hence both music and language were simply differing manifestations of qi-based sound (shengqi 聲氣). The second claim was that the human voice was in fact the basis of musical pitch. According to proponents of this theory, instrumental performance was artificial.

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17 As Erica Fox Brindley describes, the senses of sheng and yin in Warring States and Han times were also quite varied. See *Music, Cosmology, and the Politics of Harmony in Early China* (Albany: State University of New York Press, 2012), pp. 64–65. However, the classical precedents most frequently cited by late imperial thinkers indicate a relatively consistent interpretation of the classical differentiation (especially, 單出為聲，雜比為音).
mimicry of the human voice.

The titles of a number of late imperial phonological and musical studies include the term “primordial sound” (yuansheng 元聲 or yuanyin 元音).\(^\text{18}\) This term was invoked frequently in the 16\(^{th}\) and 17\(^{th}\) centuries, and is useful for understanding the logic of a link between music and language. I here present a number of late imperial interpretations of “primordial sound,” and how scholars used this as a justification for studying linguistic and musical sound together.

In Chapter 1, we analyzed a work of cosmological phonology entitled *Huangji tuyun* 皇極圖韻 by Chen Jinmo 陳蓋謙 (c. 1600–1692), one of the major phonological thinkers of the 17\(^{th}\) century. Chen also wrote an extended study building off this earlier work entitled *Yuanyin tongyun* (元音統韻 Ordering the rhymes of the primordial sounds). This work devotes considerable attention to the definition of sound, and specifically the relationship between linguistic and musical sound. Chen argued that both musical instruments (including the pitch-pipes lù 律) and written characters are “vessels” (qi 器). Vessels themselves are not intrinsically active (不靈), and must be activated by humans to produce sound.\(^\text{19}\) Hence the primordial sound, which Chen refers to as both the *yuanyin* and *yuansheng*, only becomes music when channeled through instruments and language through speech and writing as the result of human action.

Ge Zhongxuan 葛中選 (1577–1636) similarly claimed that “sound simply embodies the products of creation. Music is just one particular matter, characters are just one particular form…Flowing throughout the universe, revolving through the void, whatever passes the ears is


\(^{19}\) Chen Jinmo, *Yuanyin tongyun*, SKQS CMCS, j. 2, p. 4a.
music and whatever emerges from the mouth is sound” (聲音直體造化之撰，樂特一事耳，字特一形耳…瀰漫宇宙，盤旋空虛，過耳皆樂，出口皆聲). Asked to define “sound,” Ge replied that it is qi (“vital/material force” 氣). The claim that sound is related to qi, which can also refer to breath, goes back to antiquity. Most late imperial scholars would agree that this original sound was composed of qi, but there were different propositions for the implications of qi for sound.

Dong Yue (1620–1686), for instance, argued that sound was the product of qi’s “obstruction” (阻). Qi in and of itself was without sound (無聲), and could only produce sound when expelled through an enclosed area. Hence, when the legendary Ling Lun created pitch-pipes out of bamboo, he “obstructed the qi of heaven and earth in bamboo and produced sound” (阻天地之氣於竹而成聲). In the same way, Dong believed man created sound through the obstruction of the qi of heaven and earth as it passed through his “five orifices” (五藏). The encyclopedist Song Yingxing (1587–1666) similarly posited a soundless qi in collision or obstruction, but further theorized sound as the product of the interaction of different forms of qi. For instance, sounds produced by the human voice came about as the qi contained within a person collided with that outside.

Dong Yue and Chen Jinmo believed that the most natural sonic instantiation of “the qi of heaven and earth” was the wind and thunder. Chen argued that variations of sound created by different strengths of wind and thunder in turn defined the relative musical pitches. The pushing

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of *qi*, in the form of sound (*shengyin*), from the lungs through the oral cavity produced the counterparts to these relative pitches in human speech. Zhu Jian 朱簡 (b. 1570) claimed that “the natural *qi* of heaven and earth” (天地自然之氣) was expressed first as sound (*sheng*), and became tone (*yin*) when expelled through an instrument. In his view, rhyme (*yun* 韻) was the product of “the multitude of tones intermingling and taking form” (眾音錯出成章). Although most scholars similarly saw this as a natural process, Cheng Zongshun 程宗舜 (1502–1570) claimed that the “sounds of heaven and earth are unable to emerge of their own” (天地之聲不能自出), and instead were first harmonized in rhyming (language) and (musical) pitches (諧之音韻，協之律呂) by the sage-kings of antiquity in order to “promulgate the mysteries of heaven and earth, release the harmony of the myriad things, taking it as the foundation for stirring people’s hearts” (以宣天地之幽，以暢萬物之和，以為感動人心之本). Despite disagreements regarding the path of *qi*-based sound and its agency, it was widely accepted that this sound was not fundamentally musical or linguistic.

Such scholars saw the expression of the *qi* of heaven and earth as the factor linking the sounds of music and speech. This *qi*-sound could be channeled into either music or the human voice. However, another important contemporary claim linking music and language was that musical pitches were in fact derived from the production of sound by the human voice. As the classicist Hao Jing 郝敬 (1558–1639) opined, “When man opens his mouth, this is the primordial

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23 Chen Jinmo, *Yuanyin tongyun*, j. 1, pp. 4a–5a.


Writing in the late 17th century, the phonological scholar Shi Kui is similarly claimed that “there is music in the heart of man. When broadcast through the mouth it becomes song. This is the basis of music” (人心有樂，宜於口而為歌，此樂之本也). Many contemporary scholars acknowledged the primacy of the human mind, body, and voice in establishing correct musical pitches.

Zhu Xi 朱熹 (1130–1200) is recorded to have said that “musical pitches are just qi; man is also qi. Therefore they are related” (音律只是氣，人亦是氣，故相關). This dictum is cited frequently in late imperial arguments for the unity of music and speech. “Man” here generally seems to have been interpreted as “human speech” (人聲), and is in fact misquoted as such by the influential Ming musical scholar Li Wenli 李文利. Li further argued that because people were created by heaven with a unified original qi (天以一元之氣生人), the sounds produced by people were necessarily a natural reflection of correct musical pitches. The Neo-Confucian thinker He Tang 何塘 (1474–1543), while disagreeing with Li’s larger musicological arguments, conceded that the human voice was a valid measure of pitch because “the sounds of music and man each have five pitches, and the sounds of man are the more natural” (樂聲與人聲各有五音，而人聲尤為自然). Wu Weizhong 武位中 similarly argued that pitches of “the primordial sounds of heaven and earth” (天地之元聲) are established by the human voice, rather than

26 Hao Jing, Dushu tong (in Beijing Normal University Library), j. 1, p. 19a.
27 Shi Kui, Taigu yuanyin (in National Taiwan Normal University Library), j. 4, p. 24b.
28 Li Wenli, Dayue lülü yuansheng 大樂律呂元聲, SKQ SCMCS, j. 1, p. 9b.
29 Li Wenli, Dayue lülü yuansheng, SKQS CMCS, j. 1, p. 6b.
30 He Tang, He Wending gong wenji 何文定公文集 (in Harvard-Yenching Library), j. 9, p. 20b.
instruments because “only man contains the harmony of heaven and earth, and melds the intersection of yin and yang” (惟人合天地之和而合陰陽之節).  

Scholars such as Li Wenli and Wu Weizhong attempted to directly base musical pitch in linguistic utterances. The five relative pitches had served as labels assigned to the places of articulation for syllable initials since the medieval rhyme table tradition (see Prerequisites). The majority of scholars accepted the medieval associations between specific pitches and places of articulation and primarily sought to theorize why these associations ought to be true. Some, however, agreed with the premise of these associations, but debated which pitch correlated to which place of articulation. Qiao Zhonghe 喬中和 (fl. 1610–1641), for instance, rearranged the relations of places of articulation to pitches. Qiao argued that “sound emerges from the sea of qi [an acupuncture point below the navel]” (聲自氣海出). As a result, he believed that the places of articulation should be correlated with pitch based on the length of their distance from “the sea of qi,” because musical pitches varied based on the length of the pitch-pipe. This resulted in do being associated with labial (唇) phonemes, rather than the medieval laryngeal (喉) association, because the lips are farthest from the “sea of qi,” representing the longest, and therefore, lowest pitch-pipe.

These two common justifications for linking language and music, either in their shared qi-based origin or the basis of pitch in the human voice, did not necessarily contradict each other. Tang Shunzhi 唐順之 (1507–1560), for example, understood the pitch of C to be derived from the “origin of qi-based sound” (黃鍾者聲氣之元). He nevertheless claimed that “so long as one

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31 Wu Weizhong, Wenmiao yueshu 文廟樂書 (in Naikaku bunko), j. 2, 26b.
32 Qiao Zhonghe, Yuanyun pu 元韻譜, SKQS CMCS, juanshou, p. 29a.
takes the human voice as primary and cuts the pitch-pipes in imitation, then the primordial sound can be settled” (必以人聲為主而截管以效之，則元聲可得而定矣). ³³ For Tang, there was a primordial qi-based sound that preceded language and speech, but it could only be apprehended in the present world through the human mind and voice.

Even certain contemporary Neo-Confucian scholars who argued that everything in the universe was constituted on the basis of qi interactions saw value in basing a determination of pitches on the human voice. For instance, the Neo-Confucian thinker Zhan Ruoshui 湛若水 (1466–1560), in a discussion of the nature of sound, cited Zhu Xi’s contention that man and sound are related as a result of their qi constitution. Zhan went on to argue that “not only is the qi of man related [to pitch], but also the qi of heaven and earth, man and spirit” (不但人氣相關，天地人鬼之氣亦相關). As a result of what he saw as the universal nature of this shared qi, Zhan was an advocate of the widely-practiced houqi (“awaiting qi” 候氣) method of determining the length of the pitch-pipe for C. The houqi method, which had many variations, was based on the notion that the movements of qi as indicated by the settling of ash in a set of pitch-pipes could indicate the proper length of the pipes. According to the theory, as described in an influential Ming ritual text, the qi movements of each month could be correlated to a specific pitch. A set of partially buried pitch-pipes, filled with ash, were thought to be able to respond to the qi relevant to their pitch (in other words, one pipe would respond per month). The level of ash in the pipe, measured on a specific day, was understood to reflect this response to qi, and therefore set the proper length of the pitch-pipe.³⁴ In Zhan’s view, because the properties of qi which inhere in

³³ Tang Shunzhi, Jingchuan baibian 荊川稗編, SKQS, j. 42, p. 2a–b.

³⁴ See Joseph Lam, State Sacrifices and Music in Ming China: Orthodoxy, Creativity, and Expressiveness, p. 83.
sound were a universal product of the heavens, “to not trust houqi is to not trust heaven and earth” (不信候氣是不信天地也).³⁵ Zhan was nevertheless willing to acknowledge that the human voice could also serve as a basis for roughly determining the quality of pitches. In response to contemporary debates over whether C should be represented by the highest or lowest pitch-pipe, Zhan argued that “presently, when man is first born, his sound is low and turbid. After he has grown, his sound is high and clear. C is the pitch-pipe of sound’s first being born [and should therefore be low in pitch]” (今夫人物之初生也，其聲渾濁，其既長也，其聲清越，黃鍾聲之初生之管也).³⁶ While he would advocate for a precise measurement of this pipe via the houqi method, he saw general principles of sound as deducible from the human voice.

Other scholars, however, felt that the two systems of understanding sound were fundamentally incompatible. A number of proponents of the concept of the human voice as the origin of pitches vigorously debated the validity of the houqi method. Wang Tingxiang 王廷相 (1474–1544), as well as He Tang, derided the houqi method in favor of a human voice-based system.³⁷ Han Qia 韓洽 (fl. mid-17th century) similarly referred to houqi as “the extreme of illogicality” (不通之甚), and argued that the ancient sages had simply “used the human voice as

³⁵ Zhan Ruoshui, Guyue jingzhuan 古樂經傳, SKQS CMCS, j. xia, p. 52a, 53b. See also Zhan Ganquan xiansheng wenji, j. 16.

³⁶ Zhan Ruoshui, Guyue jingzhuan, j. xia, p. 55a.

evidence” (以人聲為據) in the creation of pitch standards. Liu Lian also decried the fact that “contemporary scholars claim that when qi is exhaled, sound [here, the five relative pitches] emerges” (世儒謂氣呼而聲出). Liu argued, to the contrary, that “the production of the five relative pitches is entirely based in the throat” (五音之出皆本於喉). Hence, he saw different pitches as a product of the relationship of the throat to other regions of the oral cavity, rather than the effect of qi colliding.

Such scholars took issue with the commonplace assumption that musical pitch could be determined by pitch-pipes or other musical instruments. For instance, Chen Jinmo argued that the 12 musical pitches derive from humans, rather than artificial instruments (律呂之生於人不生於器), and that “the pitch-pipes [used to set proper intonation] imitate people” (律效人), rather than the other way around. Zhang Yu 張敔, as well, argued that the length of the C pitch-pipe could not be measured with an ordinary ruler (非度之以凡尺), and would have to be based on the lowest pitch possible with the human voice (取其最下一聲). Yang Yunhe 楊雲鶴, likely a contemporary of Chen’s, similarly argued that: “Because the fact that sounds and tones stimulate and respond [to one another] is an unchanging principle, then music necessarily takes the human voice as its basis, and the human voice takes the human mind as its basis” (聲音感通，自有不易之理，則樂必以人聲為本，人聲以人心為本). It was the mind’s ability to

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38 Han Qia, Zhuanxue cejie 箴學測解 (in National Library of China), j. 15, p. 32b.
39 Liu Lian, Yuejing yuanyi 業經元義, SKQS CMCS, j. 1, p. 2b.
40 Chen Jinmo, Yuanyin tongyun, j. 2, p. 7a; xu, p. 1b.
41 Zhang Yu, Yayue fawei 雅樂發微, SKQS CMCS, j. 1, p. 1a.
42 Yang Yunhe, Yuelü canjie 樂律參解 (ms. in Naikaku bunko), j.1, [unpaginated, 8b–9a].
apprehend coherent principle (li 理), Yang claimed, that allowed for the production of sound. Musical instruments (qi 器) were not the origin of sound, in his view, but were built in such a way as to reproduce this sound. The mid-Ming poet Zhang Yan 張綸 (juren 1513) even argued that “if one wishes to obtain the correct qi-based sound, then it is necessarily only possible with a superman miraculously intuitoring the pitch of C. It is not something that can be settled by millet in a tube [as a standard for pitch-pipe measurement] or a cowbell” (若欲得夫聲氣之正，必有至人神悟黃鍾之律然後可，非黍筒牛鐸所能定也). This claim that musical pitch was derived from the human mind and voice occurs throughout musical scholarship from this period.

Perceptions of the origins of musical pitches and standards for their measurement were not unified in the late imperial period. The one connecting thread was a sense that on some level these pitches were related to human speech, either because they were both expressions of the same “primordial sound” or because speech was in fact the very basis of pitch. The notion of a fundamental unity of different varieties of sound provided 16th and 17th scholars with methods of phonological and musicological analysis, which in their view shifted the subjective study of linguistic categories in the direction of a precise science.

Music as a Tool for Phonological Analysis, and Vice-Versa

Late imperial scholars used this notion that linguistic and musical sounds were linked to propose new approaches within scholarship both on language and music. Present-day linguists

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43 Zhang Yan, Shiyyu tupu 詩餘圖譜 (in Harvard-Yenching Library), fanli, p. 1b. The musicological scholar Xun Xu 荀勖 (d. 289) is recorded in the Jinshu as having determined accurate musical pitches from cowbells.

44 For example, in addition to the works cited above, those of Huang Zuo, Wang Tingxiang, Wang Bangzhi, and Liu Lian.
who have noticed the discussion of music in linguistic works have tended to dismiss musical
correlations as baseless and irrelevant to the linguistic content.\textsuperscript{45} I will show that these
discussions were integral to their claims about the nature of language, based on perceptions of
the natural origin of musical pitches. Similarly, while research on Chinese music has disregarded
the linguistic discussions contained in the relevant texts, I will argue that language and the
human voice provided ways of thinking about musical pitch that were more persuasive to Ming
scholars than classical precedent and mathematical calculation.

Several works on sound from this period devoted an equal amount of discussion to
musical pitch and phonology. These include Wu Jishi’s 吳繼仕 Yinsheng jiyuan (音聲紀元
Recording the origins of sound), Ge Zhongxuan’s Tailü (泰律 Grand pitches), and Shi Kui’s
Taigu yuanyin (太古元音 Primordial sounds of distant antiquity). Cheng Yuanchu 程元初 wrote
a further pair of works using music to analyze speech titled Lülü yinyun guashu tong (律呂音韻
卦數通 Comprehending the 12 pitches, initials and rhymes, and the numbers of the trigrams) and
Huangzhong yinyun tongkuo (黃鍾音韻通括 A comprehensive examination of the pitch C and
initials and rhymes).\textsuperscript{46} Even more strikingly, some texts that would on the surface appear to be
primarily focused on musical sound proposed new methods of phonological analysis. For
instance, Huang Zuo 黃佐 (1480–1566), a prominent mid-Ming Neo-Confucian thinker, wrote a
piece of musicological scholarship entitled Yuedian (樂典 The canon of music), which features a
set of rhyme tables in its twenty-third juan. Huang’s contemporary Qu Jiusi 瞿九思 (jinshi 1553)

\textsuperscript{45} See, Geng Zhensheng, Ming Qing dengyunxue tonglun 明清等韵学通论 (Beijing: Yuwen

\textsuperscript{46} I have read the copy at Naikaku bunko; the only other copy I am aware of is at Sonkeikaku
bunko.
wrote a work called *Yuedao fameng* (樂道發蒙  An introduction to the way of music), the ninth *juan* of which, entitled “investigating sound” (*shenyin* 審音), was a discourse on the history of phonology. Finally, Dong Yue (1620–1686), a Ming loyalist and author of *Xiyou bu* (西遊補 A supplement to Journey to the West), wrote *Yue wei* (樂緯 The apocrypha of music), which is comprised largely of rhyme tables and correlations of music, phonology, and astrology. This seeming incongruity from a present-day perspective was in fact a critical characteristic of acoustic thought in the late imperial period.

One factor that attracted phonological scholars to music was what they saw as the concrete numerical basis of musicological scholarship. As discussed in *Prerequisites*, musical pitches were typically set by a series of arithmetical calculations. The existence of 12 distinct pitches built on an arithmetical calculation convinced some Ming scholars of their naturalness. Such scholars therefore organized phonological systems and categories according to what they perceived as musical constants. Hao Jing, for instance, believed every syllable to contain five possible tones, in line with the five relative pitches, and arranged his rhyme dictionary according to 12 rhymes, corresponding to the 12 pitches of the musical scale. Qiao Zhonghe, Ge Zhongxuan, Wu Jishi, Cheng Yuanchu, and Qu Jiusi also embraced 12-part categorizations of aspects of the syllable. Scholars would often use the name of a given pitch to represent an overarching rhyme category. Hence, Qu Jiusi and Wu Jishi aligned –*ang* rhymes with the pitch *huangzhong* (C), *yu* rhymes with *guxian* (E), and –*ong* rhymes with *zhonglü* (F). Qu believed these categories had the capacity to explain rhymes in ancient poetry that did not rhyme when read in the language of his time. For Qu, understanding the *li*, or coherent principle, underlying these correlations was essential for the study of sound. In his words, “when the coherent

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47 Qu Jiusi, *Yuedao fameng* (in Naikaku bunko), j. 9, pp. 23a–25b.
principle is set straight, then characters will naturally set themselves straight; when characters are set straight, then tones will set themselves straight; [then] not only can one accompany them with music, one may also apprehend the correct sounds of heaven and earth” (理正則字將自正，字正則音將自正，不惟被之於樂，可以得天地之正聲). While such rhyme categorizations do not appear robust to us today, their theoretical basis in perceived natural qualities of musical sound was persuasive to contemporary thinkers.

Similarly, the first rhyme table in Huang Zuo’s Yuedian, “Wusheng erbian gangling zongtu” (Comprehensive outline of the five relative pitches and two flat pitches 五聲二變綱領總圖) lists 16 rhyme groups and a set of 7 example characters for each group in the level tone, the differing initials of which are correlated with the 7 relative pitches of the heptatonic scale. His second table, “Wusheng erbian shiliu yun sisheng dengyin zhi tu” (Table of five relative pitches, two flat pitches, sixteen rhymes, and four grades 五聲二變十六韻四聲等音之圖), provides a more detailed expansion of the first table with example characters in all 4 tones and 4 grades of voicing. Huang’s system combines rhyme groups that were traditionally separated and attempts to reduce the “complicated” (繁碎) nature of the medieval tradition. Huang argued the relevance of this phonological analysis to music was that it could ensure the proper correspondence between pronunciation and sung pitch. In order for music to fit the text, Huang asserted that the standard for character pronunciation would have to be perfected. He criticized previous popular phonological systems as “constrained by dialect” (皆局於方言), and therefore

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48 Qu Jiusi, Yuedao fameng (in Naikaku bunko), j. 9, p. 35b.

49 Huang Zuo, Yongyan 庸言, SKQS CMCS, j. 4, p. 15a–b.
proposed a system based on his interpretation of “correctness” (正). Huang seems to have claimed validity for this system by defining phonological categories (in this case syllable initials) that align with musical ones (pitch names). Such claims were made possible as a result of the common theoretical understanding of a “primordial sound” that music and language both shared.

Music also served as a bridge between language and cosmology. For the most part, the cosmological associations discussed in Chapter 1, such as calendrical and geomantic properties, were linked to language via music. Music had been connected with cosmology since the earliest extant discussions of music in antiquity. In the early medieval period, literary figures made some association between music and language, which was further developed by phonological scholars in the late Tang. Shao Yong (1011–1077) in the Song was the first to merge these two streams, assigning some of the cosmological associations long assumed to inhere in musical pitches to language. Late Ming scholars continued to expand the theoretical relationship between these fields. For instance, Shao Yong had applied the notion of “call and response” (changhe 唱和) between yin and yang pitch pipes from the early acoustic tradition to analyzing the linguistic syllable, identifying the syllable initial as the “call” and the final as the “response.” Scholars in the 16th and 17th century proceeded to align rhyme groups with specific pitches, as well as the astrological correlations to these pitches.

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50 Huang Zuo, Yuedian, (in Harvard-Yenching Library), j. 17, p. 15a.


52 For example, Shi Kui, Taigu yuanyin (in National Taiwan Normal University Library), j. 2, p. 18a.
Music as a tool of phonological analysis remained present even during the height of the Evidential Learning movement in the 18th century when the field of philology had become largely isolated from other disciplines. A prominent example was Long Weilin (1689–1756), whose *Benyun yide* (本韻一得 Apprehending the original rhyme at once) was a musical-phonological study that shared certain features with those of his late Ming predecessors.

Although primarily geared toward phonological analysis, musical reasoning informed Long’s phonological categories, and provided him a method to refute the ancient rhyme groupings of the renowned 17th century evidentiary scholar Gu Yanwu (顧炎武 1613–1682). The degree to which the Tang archaist poet Han Yu (韓愈 768–824) adhered to ancient rhymes was a debated issue in the 17th century. Gu Yanwu argued that Han’s poetry had no actual basis in ancient rhyming. In response, Long affirmed:

Gu Tinglin (Yanwu) derided Han Wengong (Yu) for admiring antiquity but not being familiar with ancient tones. [In Gu’s view], the fact that Han’s poem “This day is worth savoring” interchangeably uses the rhymes “yang, tang, geng, geng, qing, qing” alongside “dong, dong, zhong, jiang” is most unreasonable. Gu did not realize that ever since the Three Dynasties, Han Yu was the only one who had a profound understanding of the study of rhymes. “Dong, dong, zhong, geng, geng, qing, qing” are all do rhymes, while “jiang, yang, tang” are all re rhymes. In music theory, do and re go together to symbolize the meaning of lord and minister…Master Gu was basing [his argument] on poems extant today and one or two ancient books, and therefore leveled this criticism. I would argue that of the 3000 ancient poems [from which Confucius supposedly culled 300] there are presently only one tenth preserved—how could we know that there were not rhyming characters that match those of Master Han?⁵³

５³ Sima Qian claimed that Confucius pared an initial 3000 poems into just 300 in his compilation of the *Shijing.*
As early as the Yueji, the chapter on music in the classical ritual text Liji, the five relative pitches had been associated with the proper ordering of society (聲音之道，與政通矣). In this system, do was associated with the lord (君), re with the minister (臣), mi with the people (民), fa with affairs (事), and sol with things (物). Han Yu’s rhymes in this particular poem all fell into either the do or re category of rhymes that Long had created. In Long’s interpretation this demonstrated Han’s recognition of the important mutual bond of lord and minister. More importantly, he questioned the basic premise of Evidential Learning as practiced by scholars like Gu Yanwu that the historical textual record could provide a sufficient basis for philological study. Given that we have only a small amount of rhyming text from antiquity, how could we approach it as a systematically answerable problem on the basis of piecemeal textual evidence? By incorporating musical evidence, a field with mathematical and cosmological basis, Long believed he could surpass the limitations of the textual record.

Similar to the use of cosmology by some phonologists, the correlation between music and phonology was seen as an inartificial method for getting at an unrecoverable past. As Wang Tingxiang argued “[these basic properties of sound] are the natural marvels of qi-based sound, and could not be forced by the efforts of man” (此聲氣自然之妙，非人力強而能為者). Musical acoustics was argued to have constant laws. If music and phonology were indeed connected, then these same laws should govern phonology. For late Ming scholars, and evidently

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some in the Qing, this reasoning was more persuasive than a gathering of linguistic textual evidence.

Late imperial scholars did not only see music as having something to offer for understanding phonology. A careful study of phonology and speech sounds was also seen as having implications for music. As discussed above, the perennial question of setting the pitch C was seen by some as answerable on the basis of pitches produced by the human voice, which was understood to be the origin of musical pitch. Scholars who advocated using the human voice as a general guide to setting pitches might argue, for instance, that the lowest pitch produced by the human voice should define the pitch C. Some scholars further theorized that not only was the human voice relevant to understanding musical pitch, but that phonological rhyme categories in particular defined pitches. Those who looked to phonological categories felt that certain syllables reverberated better at particular pitches.

The late Ming scholar Xing Yunlu 邢雲路 argued that standards for units of measurement may have changed over time, rendering an adherence to classical precedents meaningless in measuring pitch-pipes. In his view, however, “there is no past or present with regard to the human voice, which has remained the same” (人之聲無古今，一也). Xing believed that one could intuit the correct intonation of musical pitches by “calming one’s mind, contenting one’s qi, and slowly listening to the rising and falling of the human voice” (平其心，易其氣，徐聽人聲之高下上下). Jiang Yong 江永 (1681–1762), known for his important role in the Evidentiary Learning school of philology, also maintained the relevance of pronunciation

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56 Xing Yunlu, Gujin lüli kao 古今律曆考 (1600 microfilm in Harvard-Yenching Library), j. 35, p. 7b (note SKQS version erroneously transcribes 氣 as 器). Also cited in Jiang Yong, Lüliu xinlun 律呂新論, j. xia, p. 22a.
in defining pitches. Jiang disagreed with Xing’s contention that pitch could be determined on an ad hoc basis by listening to speech. He nevertheless felt that the production of pitches and sounds by the human voice was fundamentally linked to musical pitch. Hence, he argued that those “who wish to uncover the origins of qi-based sound” should consider both physical measurements of pitch-pipes and the sounds of the human voice (欲求聲氣之元，既酌乎分寸之度，空圍之量，更以人聲參訂之可也). As opposed to Xing Yuanlu, Jiang believed the ancients had left a concrete guide for linking the human voice to musical pitch: rhymes. Jiang argued that the first rhyme group of the medieval tradition, -ung, represented the pitch C. By blowing into the pitch-pipe at varying speeds until it resonated with the utterance of syllables in this rhyme group (吹以應之), Jiang claimed that one could accurately determine the correct pitch of C.\textsuperscript{57}

As cited above, He Tang felt that the human voice served as a better measure of pitch than musical instruments because it was more “natural” (ziran 自然). Wu Weizhong similarly claimed that “the clarity or turbidity, height or lowness of the human voice is mediated by the natural” (人聲之清濁高下，調於自然).\textsuperscript{58} This notion of the natural qualities of pitch in the human voice fortified some scholars’ sense that the voice ought to serve as the basis of musical pitch. For example, Dong Yue included a rhyme table in his musicological text Yuewei, entitled “Wuyin shierlù lüeli (五音十二律略例 Summary examples of the Five Relative Pitches and Twelve Fixed Pitches). This table correlated specific syllables with the twelve fixed pitches. As Dong explained in a separate work, “Deducing the Pitch of C” (測黃鍾), “I once deduced it via

\textsuperscript{57} Jiang Yong, Lülü chanwei 律呂闡微, SKQS, j. 4, pp. 23b–24b.

\textsuperscript{58} Wu Weizhong, Wenmiaoyueshu (in Naikaku bunko), j. 2, p. 26b.
the natural sounds of the throat and tongue [i.e., human speech], and was fortunate to get a
glimpse of the profundities of pitch, at once rectifying the falsehoods of a thousand years” (余嘗
以喉舌自然之音測之，幸窺見律奧，一正千年之非). Like Jiang Yong, Dong felt that
rhymes were a natural guide to musical pitches.

While claims about the correspondence of rhyme categories and musical pitch may at
first glance appear to be purely theoretical, they in fact had functional implications for
performance. In a memorial to the Jiajing emperor on July 12, 1535, the already powerful Grand
Secretary of the Hall of Military Power (武英殿大學士) Xia Yan 夏言 (1482–1548), who would
shortly become one of the most notorious Senior Grand Secretaries of the Ming, came out in
support of a proposal for music reform by a Vice Minister of the Court of the Imperial Stud,
Zhang E 張鴻. Zhang’s proposal cited Shao Yong’s study of language in support of his
definition of the proper musical scale for use in court music.60 In Chapter 1, we saw how Shao
Yong’s phonological theories, which were revived in the Ming, posited the number of possible
linguistic sounds that could exist, based on cosmological principles. Zhang argued that these
principles applied to musical pitch as well. According to his calculations, inspired by Shao’s
rhyme tables, the court scale should not go higher than D# an octave higher than the huangzhong
C pitch (jiaqing 夾清). The performance implications for this linkage of language and music are
even clearer in the following contemporary debates on the musical accompaniment to classical
poetry.

59 Dong Yue, Saoye lu (in Naikaku bunko), p. 6b.
60 Xia Yan, Guizhou zouyi 桂洲奏議 (1541 edition in Harvard-Yenching Library), j. 17, p. 4a–b, and
Guizhou xiansheng wenji 夏桂洲先生文集 (1638 edition in Harvard-Yenching Library), j.
12, pp. 70b–71a.
Can the Music of Antiquity be Reconstructed via Language?

The Shijing (Book of odes 詩經), in premodern times often referred to as the “300 pieces” 三百篇, comprised a collection of 305 poems or songs composed sometime between the 11th and 7th century BCE. Supposedly edited by Confucius himself, this compilation achieved canonical status during the Western Han dynasty (206 BCE–9CE). In late imperial China, it was a central part of the civil service examination curriculum, as one of the specialization options beyond the basic requirement of proficiency in the Sishu (四書 Four books).⁶¹ Shijing exegesis was a dynamic field, but Zhu Xi’s 12th century commentary, the Shi jizhuan (詩集傳 Collected commentaries on the odes), defined the standard for the examination curriculum. Two aspects of Zhu Xi’s exegesis of the Shijing left late imperial scholars particularly unsatisfied. The first was his glossing of rhyming. Zhu Xi adhered to his contemporary Wu Cailao’s xieyun (“forced rhyme” 叶韻) theory of reading in which the pronunciation of rhyme words could be altered on an ad hoc basis within an individual poem. Zhu Xi’s acceptance of this inelegant solution troubled many late imperial scholars. Efforts to either theoretically justify, or provide a superior alternative to, Zhu Xi’s method are documented in Chapters 1 and 6. The second aspect related to Zhu Xi’s conception of the putative underlying musical structure of the Shijing. I will presently examine the debates involving the music of this ancient text in order to demonstrate a concrete example of how contemporary scholars put theories of the connection of language and music into practice.

In his commentary on the early ritual compilation Yili (儀禮 Book of etiquette and

ceremonial), Zhu Xi provided an example of twelve songs from the *Shijing* in musical notation. He credits the melodies to his contemporary Zhao Yanyuan 趙彥肅, who in turn claimed that his was a transcription of melodies used at the Tang court in the 8th century. An example of one song, both in the original notation and in modern western musical notation, is provided below.

![Musical notation of the song](image)

*Figure 4.1: The top line of the lyrics is the Chinese text of the poem; the second line represents the musical notation Zhu Xi employed. In this musical notation, a given character is the first character of the pitch name (*huang* 黃 = *huangzhong* 黃鍾 [C]). The text of the poetic stanza in translation is: “With pleased sounds the deer call to one another, Eating the celery of the fields. I have here admirable guests; The lutes are struck, and the organ is blown [for them]. The organ is blown till its tongues are all moving. The baskets of offerings [also] are presented to them. The men love me, And will show me the perfect path.”*

Zhu Xi himself was ambivalent about these melodies. In particular, he was concerned that the correspondence of a single pitch to each character (直以一聲叶一字) could not capture the full emotional range of the poetry. Zhu Xi seems to have been referring to ornamentation, or singing multiple notes for each syllable. Later scholars fixated on this issue of the relation of the syllable, represented by a single character, with a musical pitch.

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62 In this and the following musical examples, the transcriptions are based on *lülü* notation. The melody by Zhu Xi has been transcribed previously. The subsequent transcriptions are my own. For transcriptions of Zhu Xi’s melodies, see Rulan Chao Pian, *Song Dynasty Musical Sources and Their Interpretation* (Cambridge: Harvard University Press, 1967) pp. 155–173, and Laurence E.R. Picken, “Twelve Ritual Melodies of the T’ang Dynasty,” in Benjámi Rajeczky, ed., *Studia Memoriae Belae Bartók Sacra* (Budapest: Aedes Academiae Scientiarum Hungaricae, 1956), pp. 147–173.
Despite the widely accepted nature of musical and linguistic sound sharing a fundamental basis, some scholars opposed the linkage of music and language in musical composition. Their opposition suggests the widespread acceptance, or at least awareness, of such a proposition. Zhang Xuan 張萱 (ca. 1553–1636), for instance, polemically wrote that if one insisted on direct correspondence between music and pitch, one might as well entrust the entire text of the Shijing to the god of fire to burn up (不當盡付之祝融乎). The reasons for skepticism of this link were varied. Ji Ben 季本 (1485–1563), for instance, disputed the relevance of paying attention to phonology with regard to the music of the Shijing by claiming that “the pitches of characters also contain do, re, mi, fa, and sol, which are different from the five [relative] pitches of music. It must be that [the pronunciations of] characters are established by [the places of articulation] the throat, tongue, lips, and teeth, while music is harmonized by its turbidity or clarity and how high or low the pitch is. It is not in accord with the characters” (字音亦有宫商角徵羽與樂之五聲不同蓋字以喉舌唇齒而定，而樂則以清濁高下而譜，不因乎字也). Ji therefore saw the relative pitch classification systems of music and language as parallels, rather than direct correspondences.

Zhao Yiguang 趙宦光 (1559–1625), echoing a dictum from the Shangshu, argued that “poetry is expressed putting what the mind is intent on into words” (詩發於言志). It would not be possible, in his view, for the poetry of antiquity to present an unmediated expression of the common people’s sentiments while conforming to precise musical requirements. The late Ming

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63 Zhang Xuan, Yiyao 疑耀 (in Harvard-Yenching Library), j. 4, p. 24b.

64 Ji Ben, Yuelü zuanyao 樂律纂要, SKQS CMCS, p. 31a.

65 Zhao Yiguang, Tanya (in Beijing Capital Library), yunxie, p. 6a–b.
classical scholar Hao Jing also opposed the idea that the characters of the *Shijing* represented musical pitches, or that the *Shijing* was even originally linked to music. In Chapter 2, we saw Hao Jing claim contemporary Neo-Confucian scholars were misguided in searching for universal truths in ancient character forms. Similarly with regard to pitch, Hao argued that “the ancients created characters to transmit meaning, not to transmit sound” (古人作字，以傳意，非以傳聲也). In both cases, Hao believed that the flexibility of character forms used in antiquity negated the possibility of assigning a definite interpretation of the sound or meaning of a character outside of its original context.

Wang Tingxiang believed that this flexibility was a quality of ancient poetry. In his view, “there are a fixed five pitches in the *qi*-based sound of the human voice, but there are no fixed characters in poetic verse” (五音在人聲氣有定，而詩章之字則無定). Zhu Zaiyu 朱載堉 (1536–1611), heir apparent to the sixth prince of Zheng 鄭, argued even more strongly against the view that characters should be associated with a specific pitch. In his view, assigning pitches to specific syllables was “the method of *qieyun* [dividing rhymes]” (切韻之法), referring to the spelling methods which preoccupied many contemporary phonological thinkers. Zhu himself wrote two no longer extant works on *qieyun* phonology, but considered this linguistic analysis to be irrelevant (不相關) for setting text to music. For example, Zhu noted that if characters are assigned a specific pitch value, then repeated characters would necessarily intone the same pitch.

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66 Hao Jing, *Dushu tong* (in Beijing Normal University Library), j. 1, p. 15b.
Because a common poetic technique in ancient poetry involved “reduplicated characters” (*diezi* 疊字), a direct character-melody correspondence would result in repetitive music (*pian pian xishu*).

In addition, Zhu believed that his system, in which characters did not directly correspond to pitches, allowed for greater freedom in transposition. To demonstrate this, he wrote out the music for several *Shijing* poems in all 12 keys.

Zhu Zaiyu also composed new melodies for the *Shijing* in place of those recorded by Zhu Xi in the Song dynasty, which similarly exhibited no direct correspondence between pitch and syllable. Writing in the 18th century, Jiang Yong believed that Zhu Zaiyu’s approach to composition was too flexible, appropriate for “fooling around” (拣弄) on the zither, but not acceptable in a ritual setting. Nevertheless, he accepted Zhu Xi’s view that sung poetry in antiquity likely included multiple pitches for some syllables. Like his younger contemporary Dai Zhen 戴震 (1724–1777), he also believed that any character could conceivably be sung at any pitch. Hence, Jiang claimed that to perform the *Shijing* with only one prescribed pitch for each character was merely “reciting the *Shijing*, not singing the *Shijing*” (是謂誦詩非歌詩也).

However, some scholars in the late Ming saw the separation of music and language as antithetical to the nature of composition in antiquity. The Ming literary scholar Zhang Weiran 張蔚然, for instance, criticized Chen Di, a major phonological scholar of the late Ming, on the grounds that his study of *Shijing* rhymes, too, could merely aid in recitation of the text (可資諷

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71 For Dai Zhen’s view, see *Shengyun kao* 聲韻考, XX SKQS, j. 4, p. 2b–3b.

During the 18th century, scholars of the evidentiary learning movement, such as Jiang Yong and Dai Zhen, praised Chen Di for his phonological rigor. They, too, were concerned with musical performance of *Shijing*, but viewed this as a separate matter from philology. However, because Chen Di did not take music into consideration, Zhang Weiran, writing in the 17th century, claimed that the true “sounds” of the *Shijing* were missing from Chen’s analysis (聲實闕焉). For some 16th and 17th century scholars both the linguistic and musical aspects of the text were intertwined under broader notions of “sound.”

Scholars who argued for the unity of music and language disputed the validity of Zhu Zaiyu’s approach to reconstructing ancient music and Zhu Xi’s view that a syllable could oscillate between multiple pitches. Late Ming scholars frequently cited the following famed dictum from the *Shujing* as a basis from which to build an argument on the unity of music and pitch: “poetry speaks what the mind is intent on, song makes this speech endure. Sound relies on this endurance, and pitches harmonize this sound” (詩言志，歌永言，聲依永，律和聲). While Zhao Yiguang had argued that poetry expressing “what the mind is intent on” precluded the possibility of closely lining up language and music, other contemporary scholars believed that passage in its entirety indicated that ancient poetry was inextricable from its musical accompaniment. Ge Zhongxuan, for instance, claimed that Zhu Xi’s score “does not pay attention to what pitch [a particular] syllable should be. I am afraid this is not the ancient intention” (不論此字當何音，恐非古意). Ge carefully associated pitch with pronunciation in

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74 See, for instance, Chen Jinmo *Yuanyin tongyun*, xu p. 1b; Shi Kui, *Taigu yuanyin* (in Taiwan Normal University Library), j. 4, p. 23b.

75 Ge Zhongxuan, *Tailü*, j. 10, p. 9b.
his rhyme tables, and believed this unity was the key to uncovering ancient music. Dispelling Zhu Xi’s claim that the ancients must have sung multiple notes on a single pitch for expression, Ge argued that the expressive potential of the *Shijing* was already complete in its grammatical particles and was not a musical matter.\(^6\) Instead, each syllable should be correlated with a single pitch, in his view.

The most widely cited discussion of the relation of music to the text of the *Shijing*, was that of Liu Lian 劉瀟 (*jinshi* 1478) an influential mid-Ming musical scholar, born to a military household in Shandong province. His magnum opus, the *Yuejing yuanyi* (樂經元義 Original meaning of the Classic of Music), attempted to ascertain what he believed would have been contained in the Classic of Music, a work purported to have existed in antiquity. In his view, “in both past and present there has been the argument that the Six Classics is missing the Classic of Music. I believe that the Classic of Music is not missing; the 300 pieces [contained in the *Shijing*] are the Classic of Music” (六經缺樂經，古今有是論矣。予謂樂經不缺，三百篇者樂經也).\(^7\) The guide to music of antiquity, according to Liu Lian, was contained in the characters of this text. As shown below in Figure 4.2, Liu composed new music to the *Shijing* on the basis of this unity of music and text. Although there is not a clear connection between phonological properties of a character and its assigned pitch, Liu insisted that each reoccurrence of a character be assigned the same pitch. In this way, the music reflects repetition that exists in the poetry. For instance, the last two notes of the fourth bar of my transcription occur again as the first two notes of the fifth bar, mirroring the repetition of the characters *chuisheng* 吹笙 in the text.

\(^6\) Ge Zhongxuan, *Tailü*, j. 10, p. 12a–b.

\(^7\) Liu Lian, *Yuejing yuanyi, xu* p. 1a.
Wu Jishi and Guo Zhengyu 郭正域 (1554–1612) similarly argued that musical sound was a unifying factor in the language of the poems in the Shijing. They claimed that although the poems were reportedly collected from different regions, their pronunciation was standardized as a result of the sage kings’ efforts to unify script and musical pitches. Guo, in particular, argued that music was the basis of speech sounds in antiquity (夫樂律聲音韻之本也).79 Zhang Ruizhong 張瑞鍾, a disciple of Huang Daozhou 黃道周 (1585–1646), cited Confucius as evidence of this unity. In the Analects, Confucius comments that “It was after my return from Wei to Lu that music was put right with the ya and song [poems from the Shijing] being assigned their proper places” (吾自衛反魯，然後樂正，雅頌各得其所).80 In Zhang’s interpretation, “if one were to say that music is just music and poetry is just poetry, then the Master should not have understood [the poems] finding their proper place as the putting right of music” (如云樂自

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78 Transcription based on the lülı notation in Liu Lian, Yuejing yuanyi, SKQS CMCS, j. 5, p. 14a.


Scholars in the 16th and 17th century believed speech and music were unified in antiquity, and separated in a corrupted later world. For them, the *Shijing* was the best model for understanding this unity.

Qu Jiushi, a Neo-Confucian music theorist of the mid-Ming, also believed that the musical and linguistic elements of the *Shijing* could not be separated. In his text *Yuedao fameng*, Qu copied out the twelve *Shijing* melodies preserved by Zhu Xi. After each melody, he included a complete list of repeated characters from the text, which were sung to a different pitch on each repetition in Zhu Xi’s score. After each example, Qu exclaimed, “the character is the same, but the pitch is different. What nonsense!”

Wu Jishi, who made extensive use of Qu’s theories in his own musico-phonological scholarship, in fact gave us examples of what the music of the *Shijing* could look like if written according to strict phonological principles. I have transcribed one such example in Figure 4.3. The melody is bizarre, and does not fit any of the eighty-four theoretical modes employed by late imperial musicians (see Footnote 15), as it appears to contain three consecutive semitones (B–C–C#). As in Liu Lian’s melody, repeated characters (except for the first two) are always assigned the same pitch. Moreover, this pitch is precisely the one assigned to the rhyme group for that particular character in Wu’s rhyme tables. For example, characters, such as *sheng* 笙, *kuang* 筦, and *jiang* 将 are

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81 Huang Daozhou, *Rongtan wenye* 榕壇問業, SKQS, j. 11, p. 25a.

82 Qu Jiushi, *Yuedao fameng* (in Naikaku bunko), j. 9, p. 2a.

83 Given the quality of the imprint, it is possible that the note I have transcribed as 太 C# could be 太 D. This too results in three consecutive semitones (D–D#–E).

84 Wu evidently adheres to the theory, embraced by Zhu Xi, that the first and last note of a melody in a given mode should be the same. He has therefore altered the first pitch of this melody, which I believe he would otherwise write as A#, to match the concluding pitch.
classified as C (huangzhong) rhymes in his tables, and are therefore assigned the pitch C in this melody.

Figure 4.3: Wu Jishi’s music for the same Shijing text as the previous two examples.\(^8^5\)

The evidential scholars of the Qing dynasty are often recognized for their use of the Shijing to determine ancient rhymes. Ming scholars were concerned with the broader “sounds” of this ancient text. In the preface to a no longer extant work on Shijing rhymes, Zhu Rangxu 朱錦栩 (1501–1547), prince of Shu 蜀, cautioned against focusing exclusively on the phonology of these texts. Zhu claimed that the 300 poems of the Shijing could all be sung. For Zhu, these poems embodied “the natural tones of heaven and earth” (天地自然之音). He further added, “the poems of the Shi[jing] are the sounds of the heart. If one neglects their basis and merely triflingly chips away at their rhymes and tones, then these are just the lyrics of a minstrel. How could this be the intent of the musical poetry of the ancients?” (詩者心之聲也，苟無其本而徒區區剽切于音韻之間，是則俳優之文而已，豈古人聲律之詩之義耶).\(^8^6\)

For many Ming thinkers, phonology and music were meaningfully connected, and a

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\(^8^5\) Transcription based on the lülü notation in Wu Jishi, Yinsheng jiyuan, SKQSCMCS, j. 6, p. 11b.

\(^8^6\) Zhu Rangxu, Changchun jingchen gao 長春競辰稿 (1549 edition, microfilm in Harvard-Yenching Library), j. 1, p. 23a.
separation of the two fields was artificial. Evidential Learning scholars of the 18th century for the most part followed the road initiated by Chen Di and further developed by Gu Yanwu. Use of the *Shijing* to understand ancient rhyming has often been heralded as a major linguistic contribution of these scholars. As I have shown, this text was extremely important to 16th and 17th century philological thinkers, as well. However, with the exception of Chen Di, most scholars of this period took the philological study of the *Shijing* in a different direction. They considered this text to provide insight into both the language and music of antiquity, as a representation of the original unity of these two manifestations of sound.

Conclusion

The combination of musical and linguistic modes of analysis exhibits some shared elements of the cross-disciplinary approach to scholarship evident in other chapters. For instance, establishing correlations between music and language was used to affirm the universal and inartificial nature of one’s methods. Music was also an important political and ideological tool. Its alignment with language therefore was seen to have implications for ordering the world, as in the Neo-Confucian and Buddhist contexts discussed in Chapters 2 and 3. In addition to these shared characteristics, the linkage between music and language demonstrates another function of the interdisciplinary approach. Music acted as a bridge between the two more distantly removed fields of language and cosmology, as a result of its independent historical linkages with those two fields.

The theorization of a link between music and language proved especially compelling for late imperial scholars. Certain aspects of the mid-late Ming approaches to language study came to decline over the course of the 18th and 19th centuries. However, the notion that music played a
role in understanding language did persist to a degree. Scholars during the 18th century, such as Long Weilin and Du-si-de 都四德, composed works of scholarship that combined the musical and linguistic. Even in the last 50 years of the Qing dynasty, scholars such as Zhou Yun 周謙 and Zhang Tao 張濤 composed studies, which derived phonological categories from pitches on the qin zither.\(^{87}\) Attempts to align musical composition with phonological elements of the text persisted well into the 20th century.\(^{88}\) The “primordial sound” (yuanyin 元音) by which Ming scholars referred to the form of sound that preceded its linguistic and musical manifestations continued to be referenced through the 19th century. This same term, yuanyin, remains in use today, now as the technical linguistic term for ‘vowel.’ In the late imperial period, this concept of an overarching sound allowed scholars to forge interdisciplinary connections, which they believed to provide an infallible method for reconstructing aspects of ancient speech and music.

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\(^{87}\) See Zhou’s 1893 Shanmen xinyu 山門新語 (in Harvard-Yenching Library) and Zhang’s 1863 Guyin kao yinyue yunxue huizuan 古音考音樂韻學匯纂 (in Fu Ssu-nien Library, Academia Sinica).

One of the hallmarks of the evidential learning movement of the Qing dynasty was the application and development of philological methods for the study of the Classics (jingxue 經學). In particular, it was a fascination with uncovering the sounds of antiquity that concerned many of these scholars. The Ming dynasty has been disparaged since the 18th century for producing only one scholar, Chen Di 陳第 (1541–1617), who could be seen to have similar aims to those scholars who appeared 200 years after his time.¹ As shown in the previous chapter, however, difference in method and motivation does not preclude scholarly activity. One of the major arenas for philological scholarship in the Ming dynasty was the literary, involving the discussions of rhyming and phonology in shi poetry (詩), ci lyrics (詞), and kunqu opera (崑曲). The present and following chapter will discuss the role of literary culture in shaping the production of philological scholarship in the 16th and 17th centuries.

Recent studies have discussed why literary figures considered an understanding of phonology to be integral to their literary production, as well as some of their concrete contributions to the field of phonology.² What remains unclear is how this fit into the broader

¹ Lin Qingzhang’s more generous assessment remains the authoritative work on Ming precedents for Qing evidential scholarship. Lin discusses, in addition to Chen Di, Yang Shen 楊慎, Mei Zhuo 梅鷗, Chen Yaowen 陳耀文, Hu Yinglin 胡應麟, Jiao Hong 焦竑, Zhou Ying 周嬰, and Fang Yizhi 方以智. See Lin Qingzhang 林慶彰, Mingdai kaojuxue yanjiu 明代考據學研究 (Taipei: Taiwan xuesheng shuju, 1983).

² See, for example, Kevin Conrad Schoenberger, “Resonant Readings: Musicality in Early Modern Chinese Adaptations of Traditional Poetic Forms” (Diss. Yale University, 2013), and Li Huei-mian 李惠綬, “Cong yinyunxue jiaodu lun Mingdai kunqiang duqu lun zhi xingcheng yu jiangou” 從音韻學角度論明代崑腔度曲論之形成與建構, Zhongguo wenzhe yanjiu jikan 31 (2007): 75–119.
scholarly context. Was this scholarship intended only for functional application in a literary context? How, if at all, did these literary scholars interact with the already developed field of phonology and other contemporary scholars outside of the literary sphere? Asking these questions allows us to break past the disciplinary boundaries that have tended to limit the way we approach historical problems. Most of the figures I will discuss in this chapter have heretofore appeared primarily in research concerning late imperial literature. By approaching them from the perspective of the history of scholarship and intellectual history, I hope to further our understanding of the development of specialized disciplinary scholarship and the role of the literary in late imperial Chinese intellectual culture.

Opera theorists and literary figures produced a substantial amount of phonological scholarship in the late Ming and early Qing dynasties. In so doing, they were interacting with a tradition of specialized classical scholarship and also contributing to it. This chapter explores how they incorporated the latest trends from the mainstream phonological tradition in their own work, and how in turn their scholarship was received by specialists working in the mainstream tradition. On the one hand, abstract cosmological discussions of sound developed by phonological thinkers in the mid-to-late Ming were absorbed into the formulations of practical phonology for singing devised by opera theorists. At the same time, ways of discussing Chinese phonology created by figures in the world of literary scholarship came to figure in broader contemporary philological debates on how to categorize the sounds of Chinese. While these fields would increasingly grow apart over the course of the Qing dynasty, literary and classical modes of scholarship cross-fertilized each other during this period lasting from roughly 1550–1700. Although we have inherited the mid-18th century separation of the literary and classical into different categories of scholarly endeavor, in the 16th and 17th century they could be seen to
be part of the same project.

The literary approach to studying Chinese phonology maintained a prominent position in the intellectual landscape through the Ming-Qing dynastic transition. Despite the immense socio-political implications of the Manchu conquest, intellectual affiliations and formations could persist. During this period from roughly 1550–1700, scholars such as Gu Yanwu famously began to forge new methods of phonological analysis, which would gain popularity in the 18th century, based on the historical analysis of ancient texts. Literary scholars in the 17th century, however, criticized this approach on the grounds that it ignored what they viewed as the fundamental literary qualities of ancient writings. This broad body of literary scholars was deeply invested in philological questions. But their analysis of theoretical phonology was shaped by and well within the purview of literary scholarship (wenxue 文學), before it came to be subsumed by classical scholarship (jingxue 經學) later in the Qing.

An Overview of the Influence of Literary Endeavors on Phonology prior to the Ming

The Ming dynasty was by no means the first moment in Chinese history in which phonological and literary fields interacted. What follows is a brief overview of this relationship leading up to the Ming dynasty. The discipline of Chinese phonology itself formed largely within a literary context in the 5th century. To be sure, earlier philological texts employed various forms of phonetic description. The 2nd century Shuowen jiezi [說文解字 Explanation of Simple and Compound Graphs], for instance, employed the “read as” (duruo 讀若) method in which the glossed character would be “read as” a common homophone. The early commentarial tradition on the Classics also innovated new phonetic methods, including most notably the fanqie method of glossing a single character with two common characters (one to represent the initial, the other
the final). However, it was not until the 5th century that there developed a systematic framework for the discussion of Chinese phonology, emerging from discussions of Chinese tones in the poetic circle of Shen Yue 沈約 (441–513). The apparently Indic origins of their codification of sounds is well-documented.\(^3\) Equally important, it seems to me, is the fact that this took place within a context of establishing literary norms.\(^4\) Although their designation of four tonal categories, level (ping 平), rising (shang 上), departing (qu 去), and entering (ru 入), was established for the sake of codifying a prosodic system for aesthetically pleasing poetry, it has remained in use among linguists up to the present.

The next major landmarks in literary phonology came within the context of the civil service examination system. Beginning in the Tang dynasty from some point in the 7th century, poetry came to be tested on the jinshi exam. Although the jinshi exam came to include a non-poetry track in the 11th century, the poetry track remained popular until its discontinuation in the Yuan dynasty. It soon became apparent that both candidates and examiners needed a convenient standard to apply in writing and grading poems submitted on the exams. The best-known, albeit long lost, Tang attempt at codification was the Tang yun [唐韻 Rhymes of Tang] by Sun Mian 孫愐. This text was evidently based on the earlier Qieyun [切韻 Divided rhymes] system, devised in the Sui dynasty by a committee of scholars, primarily for setting reading pronunciations for the Classics. Despite the fact that Ming readers would not have had access to the actual text of the Tang yun, its name was frequently invoked as representative of the Tang standard. The Northern Song imperial government produced several other influential

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rhymebooks. In particular, the *Libu yunlüe* [禮部韻略 Concise rhymes of the Ministry of Rites], was established as a standard for poetic composition in an examination setting. As will be discussed below, the Ming also created an official dynastic rhymebook, the *Hongwu zhengyun* [洪武正韻 Correct rhymes of the Hongwu Period], but the lack of poetry prompts on the examination may be one reason the text did not enjoy widespread use.

More germane to the subject of this chapter and the next is Zhou Deqing’s 周德清 (1277–1365) influential *Zhongyuan yinyun* [中原韻韻 Sounds and rhymes of the Central Plains], first printed in 1341. This rhymebook was intended to provide the librettist of Northern opera (*zaju* 雜劇) and songs (*sanqu* 散曲) a guide to the phonology of the northern language required for the composition of these genres. While the precise regional basis for the phonology of Zhou’s system is still a matter of debate, two elements within it are especially worthy of note.\(^5\) For the first time, the level *ping* tone was divided in two, yielding the separate categories of *yin ping* 陰平 and *yang ping* 陽平, based on the voicing of the initial. This became a contentious issue for many Ming scholars, especially from south China, who felt that the two-part division should be applied to more than just the level tone, based on distinctions present in their native dialects.\(^6\)

Most importantly for later Ming debates, the entering tone (*rusheng* 人聲), initially identified by

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\(^5\) Some believe it to represent the language of contemporary Beijing (then Dadu 大都). See F.S. Hsueh, *Phonology of Old Mandarin* (The Hague: Mouton, 1975), p. 18 Others see it as representative of the Luoyang dialect. See Li Xinkui 李新魁, *Hanyu yinyunxue 漢語音韻學* (Beijing: Beijing chubanshe, 1986), pp. 47–50 Another notable element of *Zhongyuan yinyun* is the fact that it is organized first according to rhyme group, and within each rhyme group according to tonal group. The macrostructure of the work is therefore on the level of rhyme group, rather than tone. For earlier rhyme books, the macrostructure was according to tonal group. Within each broad tonal group, characters would then be arranged according to rhyme.

\(^6\) For the application of *yin* and *yang* to other tone categories, see Hattori Shirō 服部四郎 and Tōdō Akiyasu 藤堂明保, *Chūgen on ‘in no kenkyū* 中原音韻の研究 (Tōkyō: Kōnan Shoin, 1958), p. 2.
Shen Yue in the 5th century, was removed as an independent rhyming category in Zhongyuan yinyun since this tone was already disappearing from the standard northern language. As the reader will recall from the Introduction, the entering tone is characterized by syllables which ended in the stop consonants -p, -t, or -k in Middle Chinese, a distinction maintained to this day in some southern dialects. In Zhongyuan yinyun, characters formerly classified as entering tone were distributed among the other three tonal categories.

The literary and linguistic have gone hand in hand in China from the medieval period onward in the contexts of regulated verse composition, examination poetry, and operatic genres. What makes the period from approximately 1550–1700 particularly worthy of investigation then is the renewed vigor of this relationship. Cultural and intellectual attitudes toward the nature of classical scholarship in this period saw ancient texts as of high literary merit. This sense of the literary nature of the Classics prompted scholars to investigate these texts along the philological lines formerly applied primarily to literary texts, especially with regard to their rhymes.

Shao Yong, Cosmology, and the Literary?

As shown in Chapter 1, Shao Yong’s cosmological approach to phonology, was refashioned by phonological scholars in the Ming. These theorists aimed to create a more comprehensive way of discussing the nature of the Chinese language, and in some cases, also

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7 We cannot determine definitively whether the entering tone was entirely nonexistent in northern varieties of Chinese. Hsueh may very well be correct in positing multiple contemporaneous stages, with certain regions exhibiting a greater loss of the entering tone than others. See F.S. Hsueh, Phonology of Old Mandarin, p. 95-96 Hugh Stimson argued that in Zhou Deqing’s time, the tripartite –p, –t, –k distinction had merged into a single glottal stop (represented in his romanization as –q) that was differentiated into three categories by tonal contour. See “Phonology of the Chung-yüan yin-yün,” Tsing Hua Journal of Chinese Studies, New Series 3 (1962): 148–54 and The Jongyuan in yunn; a Guide to Old Mandarin Pronunciation (New Haven, Conn.: Far Eastern Publications, Yale University, 1966), pp. 19–20.
claimed functional application of their findings to literary and operatic composition. In fact, this relationship turns out to have not been one-sided. Some literary scholars in the Ming embraced Shao Yong’s contributions to phonology, as well as those of his Ming adherents. The following section will discuss how Ming literary figures incorporated Shao Yong into their conceptions of phonology in order to demonstrate the fusion of literary and theoretical approaches to philology characteristic of this period.

In a practical rhyme dictionary for poetic application entitled *Yunlüe leishi* [韻略類釋: Categorized explanations of generalities of rhymes], Li Qifang 李齊芳 (fl. 1560s–1570s)\(^8\) aimed to create a handbook that would not burden the poet with unnecessary detail or the inclusion of all possible variants in the manner of many contemporary lexicographical works.\(^9\) Nevertheless, his understanding of the importance of philology went beyond the unpretentious aims of his dictionary, as demonstrated in his 1568 preface:

Shen Yue first enumerated the four tones, and Sun Mian carefully wrote the *Tang Rhymes*, thenceforth creating a model for the literary world. No one violated [these systems]—how could it just be a matter of the harmonious quality of tones? *Kai, fa, shou, bi* [Shao Yong’s four designations of consonant-vowel combination], the rising and falling of clear and turbid [that is, the voicing of initials], make accurate the *qi* of the four seasons and mediate the principles of birth and growth. Broadcasting them in music-accompanied poetry, they can harmonize the gods and men, and regulate yin and yang. Its implications are by no means negligible. Mr. Kangjie [Shao Yong], in his *Guanwu pian* [觀物篇: On observing things], believed that there was something to be obtained from working on rhymes—his intention was profound!

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\(^8\) I have been unable to locate biographical details about Li. Judging from the fact the two other scholars credited with editorial contributions in the front matter (Shen Zhan 沈藻 and Pan Yingzhao 潘應詔) are verifiably from Xinghua 興化, it is likely that Li too was from this Jiangsu county.

\(^9\) This involved taking the middle road (折衷), based on the traditional four part Shen Yue rhyme scheme, with corroboration from the official dynastic dictionary *Hongwu zhengyun* with regard to the correct form of characters. See Li Qifang 李齊芳, *Yunlüe leishi* 韻略類釋 (1568 edition at Peking University Library), *xu*, p. 4a.
In a most unexpected way, Li has referenced Shao Yong in a dictionary geared explicitly toward simplicity and functional application. By the mid-Ming, Shao Yong’s name had become clearly associated with the study of sound and rhymes in particular. Shao Yong was also a well-regarded poet, but it is clearly his phonology that is of concern here, as evident from the use of Shao’s own technical phonological terms. This is further indicative of Shao’s terminology having entered the common literary and phonological parlance to some degree, here placed alongside the standard phonological terms of clear and turbid. Although Li’s rhyme book was formatted for accessibility, this was not intended to downplay the world-ordering effects of sounds in the form of poetry. Literary endeavors in the Ming may have come off as frivolous to later critics of Ming culture, but a contemporary view might take much more seriously the civilizing and cosmological significance of these activities. Shao Yong’s analysis of sound in relation to greater cosmological processes provided a useful framework and justification for literati operating within such a conception of the purpose of literature.

Another such example occurs in the *Xiaoyu pu* [啸餘譜 Formularies for the remnants of howling] by one Cheng Mingshan 程明善 from She 敦 county, Anhui province. This work is a varied assemblage of texts for the composition of lyrics and arias, first printed in 1619. As one might expect, Cheng included the *Zhongyuan yinyun*, and its influential Ming successor the *Zhongzhou quanyun* [中州全韻 Complete rhymes of the central states], as well as other rhyme handbooks for the composition of various kinds of lyrics. The text begins, however, with a set of Shao Yong’s tables on rhymes and musical pitches. Although the *Xiaoyu pu* contains primarily

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10 Li Qifang, *Yunlüe leishi, xu*, p. 2a.
the texts alone with very little commentary, the prefatory material does give some insight into the unexpected inclusion of Shao Yong’s work in a collection of documents for the composition of sung genres. In Cheng’s own preface to the work, he wrote:

Only after man had howling noises, did he then have a voice. Only after he had a voice were there then pitches and music. These diffused into yuefu and lyric arias, all the remnants of his voice. Therefore Master Shao said, ‘the principles of things are limitless, and the Way of sounds is also limitless.’ Elevating numbers via sound he handled the changes of the myriad things of heaven and earth, past and present. The incantations of Daoist priests also contain sounds for which there are no characters. The dhāraṇī mantras of the Buddhists, although they may have characters, are difficult to pronounce. They [i.e., Buddhists] often venerate Sima [Guang’s] rhyme tables, while we Confucians on the contrary seldom approach them.

This discussion is largely paraphrased from an earlier work by Tang Yin 唐寅 (1470–1524).12 Nevertheless, his interest in Shao Yong appears to have a purpose, and his “Editorial Principles” demonstrates a further familiarity with the commentarial tradition on Shao Yong. Rhyme table discussions of phonology (such as either Shao Yong’s or Sima Guang’s) were useful because not all sounds were easily describable with Chinese characters. Theoretical phonology was important because all genres of sung text ultimately derived from the sounds produced by the human voice, and an understanding of these sounds would be applicable to one’s compositions in various genres. The study of rhymes was tainted for some due to its association with Buddhists, but as Cheng elaborated in the “Editorial Principles,” quoting a famous quote attributed to Confucius, “if the rites have been lost, seek them in the wild” (禮失而求諸野).

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11 Cheng Mingshan 程明善, Xiaoyu pu 嘯餘譜, XX SKQS (1619 edition), xu, pp. 1a–2a.

12 Tang Yin 唐寅, Tang Bohu xiasheng quanji 唐伯虎先生全集 (Taibei: Taiwan xuesheng shuju, 1970), j. xia, pp. 8b–9a
Despite its seemingly eclectic nature, the *Xiaoyu pu* seems to have circulated relatively broadly.\(^\text{13}\) The first edition of *Xiaoyu pu* contains another preface by one Ma Mingting 馬鳴霆. Ma similarly argued, “It must be that the vital force of heaven and earth assembles in the heart of man, and is expressed in song. Thus those who investigate sound explicate the solar periods and seasons according to a description of the sounds of the heart.\(^\text{14}\) But this period is subtle and elusive—if one does not plumb the origins of the universe, how could one easily distinguish these?” (蓋天地之精氣，結聚於人心，而發越於聲歌。故審聲者，就心聲之描寫以詮氣候。然此際微矣渺矣，非探天地之元，豈易辨此)\(^\text{15}\) It is difficult to imagine Cheng’s audience paying much attention to Shao Yong’s tables. But their inclusion, alongside the rhetoric from the prefaces, reflects a widespread contemporary understanding of the fact that analyzing phonology and sound in a more theoretical sense was part of a literary man’s responsibility. In the case of Li Qifang, there is no indication that he applied his knowledge of Shao Yong’s work to his own rhymebook. Nevertheless, it seems that Shao’s work had achieved somewhat of a canonical status as a source for the deeper importance of phonological scholarship. Literary scholars may not have actually implemented Shao Yong’s methodology in their own phonological scholarship. However, cosmology and Shao Yong’s theories in particular had emerged as a common way to

\(^{13}\) A second edition was published in 1662. Li Yu 李漁 (1610–1680), the famed literary figure and drama critic, wrote that “as soon as *Xiaoyu pu* and *Jiugong pu* came out, there was a model to follow, a clear master copy” (《嘯餘》、《九宮》二譜一出，則葫蘆有樣，粉本昭然). See Li Yu 李漁, *Xianqing ouji* 閒情偶寄, in *Zhongguo gudian xiqu lunzhu jicheng* 中國古典戲曲論著集成 Vol. 7 (Beijing: Zhongguo xiju chubanshe, 1959), p. 10.

\(^{14}\) The “sounds of the heart” is a famous definition for ‘spoken language’ (*yan* 言) by Yang Xiong 揚雄 (53 BCE–18 CE), as opposed to writing (*shu* 書), which he defined as the “images of the heart” (*z̄u̯* 心畫). See Yang Xiong, *Exemplary Figures—Fayan*, trans. Michael Nylan. (Seattle: University of Washington Press, 2013), p. 77.

\(^{15}\) Cheng Mingshan. *Xiaoyu pu, xu*, pp. 1b–2a.
justify the study of phonology for literary application.

Another important indication of the connection between the theoretical study of sound, Shao Yong’s theories, and the composition of sung genres is found in Shen Chongsui’s influential *Duqu xuzhi* [度曲須知 Prerequisites for aria composition], first printed in 1639. This work differs from those previously discussed in that the effects of Shao Yong’s methodology are more tangible. Despite the rudimentary implications of the title, this text is an important contribution to our understanding of a number of aspects of Kunqu opera in the Ming, and is further an impressive piece of philological scholarship. Like Cheng Mingshan’s *Xiaoyu pu*, Shen Chongsui included a set of rhyme tables in his text. In this case, they are taken from Chen Jinmo’s *Huangji tuyun*. As discussed in Chapter 1, Chen’s work was one of the most abstractly theoretical texts on phonology from this period. His rhyme tables took Shao Yong’s methods to extremes, replacing characters with numbers. While the tables that Shen Chongsui included in *Duqu xuzhi* are from a more conservative section of Chen’s work, which retain characters rather than employing numbers, their selection is nevertheless notable for several reasons. Perhaps most evident is the fact that there were many readily available tables from the standard philological tradition which Shen could have adopted. Shen did not directly state his approval of Chen’s cosmological methodology. However he made clear his sense, as with those involved with *Xiaoyu pu*, that abstract phonological theory was something important for those involved in literary composition.

One major concern of Shen’s seems to have been that people composing arias and poetry had only a superficial understanding of phonology and did not grasp the underlying nature of Chinese sounds. For example, he claimed that, on the one hand, Wei Liangfu 魏良輔 (1480–1566), renowned as the first great codifier of Kunqu opera, had made major contributions to a
descriptive system of Chinese phonology for use in Kunqu. On the other, he noted that contemporary readers of Wei’s writings only “saw that it was so, and did not understand why it was so” (見為然，不知其所以然).\textsuperscript{16} He further averred that many contemporary literary figures only understood how to match rhymes and avoid basic errors in prosody, but were not trained in the “principles of sound” (音理未熟).\textsuperscript{17} For Shen and at least some of his contemporaries, it seems these deeper principles included the cosmological basis of sound. His opening preface claimed that sounds “originated in the natural qualities of heaven and earth” (等天地之自然也), while another preface by Yan Junyan 顏俊彥 argued that “those who thoroughly comprehend tones and pitches necessarily have always expertly spoken of yin and yang, and understood the patterns of the stars” (從來通於音律者，必精述陰陽，曉明星緯).\textsuperscript{18} For scholars in this period, analysing linguistic sound in a theoretical sense involved understanding its cosmological basis. As Shen argued, knowledge of these “principles of sound” were necessary even for opera composition, presumably by providing the librettist with a more sophisticated ability to judge rhyme and prosody.

While the relation between sound and cosmological elements may seem forced, Shen and his contemporaries embraced them for a reason. In his discussion of Chen Jinmo’s tables, Shen claimed that the arrangement of sounds in the tables “comes from the natural world” (出天然).\textsuperscript{19}

\textsuperscript{16} Shen Chongsui 沈霑綬, \textit{Duqu xuzhi} 度曲須知, in \textit{Zhongguo gudian xiqu lunzhu jichen} 中國古典戲曲論著集成 Vol. 5 (Beijing: Zhongguo xiju chubanshe, 1959) [hereafter \textit{Duqu xuzhi}], p. 190

\textsuperscript{17} \textit{Duqu xuzhi}, p. 223.

\textsuperscript{18} \textit{Duqu xuzhi}, pp. 187, 189.

\textsuperscript{19} \textit{Duqu xuzhi}, p. 248.
Hence, although occasionally Shen believed that Chen’s tables erroneously included certain characters in particular sections, he nevertheless believed that “the sounds within the tables are of the natural world and infallible. There exist no other sounds from different regions or times past” (圖位之音，天然常正，五方無殊響，千古無異音). In other words, Chen may have misidentified the pronunciation of specific characters according to Shen, but that did not affect the validity of his tables as an encapsulation of all possible sounds in the universe. As will be discussed in the following chapter, Shen was concerned with creating a system that could accurately describe the pronunciation of Chinese characters for singers. His methods were inspired by Shao Yong and other scholars who pursued cosmological approaches for comprehensively describing the nature of linguistic sound.

In a preface to a later edition of Duqu xuzhi, Shen’s son Biao 沈標 further explicated the importance of Shao Yong’s work in a literary context, noting that “I once investigated the explanation of rhymes in Huangji [jingshi shu], is its exposition not sagely! It must be that finals create pitch for heaven and are based on yang, while initials create pitch for earth and are based on yin…by recording numbers by means of characters, the changes are limitless” (嘗考皇極音韻之說，其原委不猶哲哉。蓋聲以律天而主陽，音以呂地而主陰…以字記數，而變不可窮) He claimed that his father obtained Chen Jinmo’s tables, and “then realized the marvel of natural harmony in fanqie” (適得翻切天然譜合之妙). Shen Biao still characterized his father’s work as geared toward an audience of lyricists (詞家). Nevertheless, the relevance of cosmology to phonology so prevalent in other areas of Ming philology was acknowledged to a

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20 Duqu xuzhi, p. 249.

21 Duqu xuzhi, p. 318.
certain extent in the literary world as well.

Handbooks for aria composition, geared toward providing models for functional literary application, may seem incompatible with abstract discussions of Chinese phonology. But some literary figures, as well as the linguistic theorists discussed in the previous chapter, promoted the fusion of these ways of thinking about language. Wang Yangming himself, as recorded by his disciple Wang Ji 王畿 (1498–1583) in a discussion of the role of singing in ‘discussion meetings’ (jianghui 讲會), is claimed to have “used spring, summer, autumn, and winter, the four principles of growth, expansion, storing, and preserving, and kai, fa, shou, bi [i.e., Shao Yong’s four designations of consonant-vowel combination] as the rhythm for singing. He transmitted this throughout the empire, and only then did scholars understand the intention of the ancients in ordering people to sing” (以春夏秋冬，生長收藏四義，開發收閉，為按歌之節。傳諸海內，學者始知古人命歌之意).22 Shao Yong’s descriptions of the Chinese language experienced a revival during the Ming in a context quite removed from their creation and original intent. In the literary world, they provided a theoretical basis for understanding and discussing the sounds that they employed in their compositions.

The Literarization of a Classic

In his preface to a study of poetic rhyming Shitan congyun 詩壇叢韻 [Collected rhymes from the poetry world], the great mid-Ming scholar Cheng Minzheng 程敏政 (1446–1499), famed for his early union of the Zhu Xi and Lu Xiangshan xinxue doctrines of Neo-

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Confucianism,\textsuperscript{23} wrote that the text “is sincerely beneficial to contemporary writers of poetry” (誠有益於近世之為詩者).\textsuperscript{24} He then proceeded to recount the imperial achievements of the Ming dynasty in rhyme scholarship, namely the \textit{Hongwu zhengyun} and the encyclopedic \textit{Yongle dadian} (which was organized by rhyme). In concluding, he remarked:

\begin{quote}
I have heard that Master Shao Kangjie’s scholarship elevated tones and pitches in order to exhaust all the words in the world, to encompass all the images in the world, to extend all the changes in the world, to unite all the divinations in the world, compatible with the \textit{Changes} and the way of the sages. It is assuredly the correct learning of before-heaven of the Confucian scholars. But its transmission has already perished, and scholars of today cannot find its explanation, often criticizing it as bizarre. I am humbly embarrassed by this, and have thought to study it, but have been unable. Mr. Wu [Yuan, the author] has devoted himself to the study of tonal poetry, for a long time advancing to seek it, extending it by analogy. Is the correct learning of the Confucian scholars not well-nigh being made known here?
\end{quote}

Here Cheng Minzheng has linked literary scholarship (聲詩之學) to the “correct learning of the Confucian scholars” (儒者正學), which he defines as Shao Yong’s “before-heaven” learning. In Chapter 1, we saw how Shao Yong’s name could for the first time sit comfortably next to those of the mainstream phonological tradition. The previous section demonstrated that this came to be accepted more generally in the Ming literary world. The passage above speaks to another important facet of Ming scholarship and the fluidity of what we tend to assume as fixed disciplinary boundaries; namely, the strong connection of the literary (wenxue) and the classical

\textsuperscript{23} See \textit{Daoyi bian} [道一編 The Way is one].

\textsuperscript{24} Cheng Minzheng 程敏政, \textit{Huangdun Cheng xiansheng wenji} 璧墩程先生文集 (1507 edition, microfilm at Harvard-Yenching Library), j. 23, p. 4b.

\textsuperscript{25} Cheng Minzheng, \textit{Huangdun Cheng xiansheng wenji}, j. 23, p. 5a–5b.
(jingxue). That Cheng Minzheng could perceive in a work on poetic rhymes the key to Confucian learning speaks to this conflation of the literary and classical in Ming thought.

From a present-day perspective, the boundaries of ‘literary learning’ and ‘classical learning’ seem evident. At various points in Chinese history, the distinctions also mapped onto ours relatively closely. At other points, it is not as clear. As Bruce Rusk has discussed in the context of scholarship on poetry and the Shijing, classical studies could develop in connection with the literary, and the two in some ways helped define each other.\textsuperscript{26} Below I present a case in which a classical text, the Yijing, was treated in some sense as a literary one by Ming readers in the context of the study of rhymes. The difference in approach to the contentious issue of rhyming in the Classics between late Ming readers and those later in the Qing, particularly in the mid-18\textsuperscript{th} century, reflects the development and formation of fields in late imperial China. Qianlong era scholars of the mid-18\textsuperscript{th} century tended to see distinctions between fields that would have seemed artificial to many scholars in the 16\textsuperscript{th} and 17\textsuperscript{th} centuries.

To illuminate this connection between the literary and classical, I turn now to the Du Yi yunkao [讀易韻考 A Study of the rhymes in reading the Yijing], by Zhang Xianyi 張獻翼 (zi Youyu 卓幼于 1534–1601) of Changzhou 長洲 in Suzhou prefecture. Zhang was a member of the Suzhou literary elite known for his extravagance later in life, which ended, according to the rumors, when a bandit intruded on his soirée with a courtesan in an abandoned garden.\textsuperscript{27} The

\begin{itemize}
\item \textsuperscript{26} Bruce Rusk, \textit{Critics and Commentators: The Book of Poems as Classic and Literature} (Cambridge, Mass: Harvard University Asia Center, 2012), p. 13.
\item \textsuperscript{27} Qian Qianyi 钱谦益, \textit{Liechao shiji 列朝詩集} (Beijing: Zhonghua shuju, 2007), Vol. 8, p. 4578. It is on account of this ignominious end that Qian believes much of Zhang’s literary output was not preserved. An alternative story presented by Zhu Guozhen and Shen Defu, who claim instead that Zhang Xianyi was murdered by the enraged husband of a woman he consorted with. See Zhu Guozhen 朱國禎, \textit{Yongchuang xiaopin 湧幢小品}, SKQS CMCS, j. 21, p. 19 a–b, and Shen Defu 沈德符, \textit{Wanli yehuo bian 萬曆野獲編}, Li Xin 黎欣, ed. (Beijing: Wenhua yishu
Siku quanshu of the late 18th century understandably categorized Zhang’s analysis of ancient rhymes within the ‘philology’ 小學 subcategory of the Classics section 經部. Writing in the late 17th century, Zhu Yizun 朱彝尊 (1629–1709) commented that his authorship of this text, among other commentaries on the Yijing, qualified Zhang as a “Confucian scholar” 儀生. However, the contemporary prefaces to the Du Yi yunkao reflect a somewhat different understanding. First, it is noteworthy that, in addition to the preface by the author himself, the other two prefaces were by renowned literary figures of the Suzhou region, Wang Shizhen 王世貞 (1526–1590) and Huangfu Fang 皇甫汸 (1497–1582), rather than classicists (although it is worth noting that they both wrote on the Classics elsewhere, despite their general notoriety as literary men). In the epitaph he wrote for Zhang, Wang Shizhen claimed that Zhang’s early status as a local literary luminary was evident in the fact that contemporary “writers were ashamed did they not receive poetic correspondence from Zhang Xianyi” (操觚者以不得幼于一語為歉). As his preface to Zhang’s Du Yi yunkao indicates, this literary skill informed his classical scholarship, as well.

Wang Shizhen in his 1579 preface claimed that, “ever since Yichuan [Cheng Yi (1033–1107)] transmitted the coherent principle, and Ziyang [Zhu Xi] transmitted the numbers, those who study the Yijing have entirely abandoned other commentaries” (治周易者，自伊川氏之傳

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From Wang Shizhen’s perspective, Zhang’s text offered an important alternative—namely, a discussion of the *Yijing* that treats it as a work to be incanted or sung aloud in the manner of poetry. For Wang Shizhen, if anything Zhang had not gone far enough in discussing the rhymes of texts in antiquity. According to the preface, when Zhang approached him to write a preface, Wang exclaimed, “Among [texts] of antiquity that communicated in poetry, how could there only be the *Yijing*?” (古之通於詩者，寧獨易也):

![Image](image_url)

Indeed, the words of the *Shangshu* are also this way. As for Yao, Shun, and Yu’s yielding the throne to the next, [they made speeches of] at least several words, at most several tens of words. Further, the likes of Yi, Ji and Gaoyao’s instructions and admonishments for one another all rhymed and ultimately finished off in song…That lowly place India still claims that the sounds of Sanskrit chanting guide and teach more deeply than their classical texts. How much more so the *Yijing* in showing the course of *yin* and *yang*! The application of *yin* and *yang* is communicated through the five tones and twelve pitches. Could the appended sayings of the sages have that which cannot be intoned or sung?

Wang Shizhen believed the sages would have certainly recognized the superior ability of rhymed and sung text to communicate a message. This theme of the literary nature of all classical texts runs through the other prefaces. Huangfu Fang, for instance, cited from the *Shijing*, *Liji*, *Shangshu*, *Chunqiu*, *Laozi*, and *Zhuangzi* in his preface to illustrate the prevalence of rhyming in antiquity.

Zhang Xianyi’s brother, Zhang Jin 張津, in a colophon to *Du Yi yunkao*, added further description of the literary nature of the *Yijing*. He first claimed that Shao Yong “exhausted the


31 *Du Yi yunkao*, *xu*, p. 2a–2b.
changes of sounds, and thereupon expounded the subtleties of written script, connecting with musical pitches, and corresponding with the myriad things in heaven and earth”.（盡音聲之變，乃聞文字之精蘊，與呂律相貫徹，與天地萬物相協應）Similarly:

The three sages [King Wen, the Duke of Zhou, and Confucius] used the Yijing to show the way of yin and yang, and embraced the Way. But even though they cleansed their minds and hid them [in secrecy], and “their sympathies were with the people in regard both to their good fortune and evil,” if they did not study the sounds of rhymes and meanings of words in the hexagrams and line statements, but [just] appended words, how would they transformatively educate and succor the people so that they should be heartened and unwearied? Thus we know that the phrases of the Yijing necessarily rhyming is assuredly a natural principle and an inevitable situation. It would rhyme whether any one wanted it to or not. Only by means of rhymes could the Way and qi match each other. “Residing in peace” and “pleasure in study” would also go smoothly and easily, and the common people, regardless of whether or not they were virtuous, would all understand the principle that “peril may be turned into security, and easy carelessness is sure to meet with overthrow,” and entirely benefit all later generations.

Hence Zhang Xianyi’s and his peers could envision the Yijing as a literary text for several reasons. One is an assumption that all texts in antiquity, be they explicitly literary or not, rhymed. Another important reason was the notion that these texts were originally written to be accessible to the common people, and this necessitated a singable, rhyming format. Finally, as a reflection of greater cosmic processes, rhymed writing better mirrored natural correspondences.

This was neither the first, nor the last time that phonological features of the Yijing would capture scholars’ attention.33 Lu Deming 陸德明 (ca. 550–630) compiled a Zhou Yi yinyi [周易

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32 Du Yi yunkao, ba, p. 1a–1b.

33 Zhang Shanwen sees this tradition as running from Wu Yu, through Zhang Xianyi, Mao Qiling, Gu Yanwu, and culminating in Jiang Yougao’s 江有誥 (d. 1851) Yijing yundu [易經韻讀 Rhymed readings of the Yijing]. See Zhang Shanwen 張善文, Jiejing jingwei zhi xuanzi: Zhou Yi
Phonological explanations of the *Zhou Yi*, which later formed the basis for most of the citations in Lü Zuqian’s *Zhou Yi yinxun* [周易音訓 Phonological glosses of the *Zhou Yi*]. Sun Yi 孫奕 (fl. late 12th century) also wrote a *Zhou Yi zhiyin* [周易直音 Direct glosses of the *Zhou Yi*], which provided homophones for certain characters in the text. These earlier texts, although generally lacking in explicit prefatory material, appear to be guided toward general recitation and the pronunciation of every word in the text. There is no clear indication of interest in rhyming, or the literary aspects of the text.

Zhang Xianyi’s study attempts to demonstrate that the entirety of the *Yijing* was a rhyming text. In order to do this, he would cite any and all texts to make his point. For example, if we look at Zhang’s extended phonological gloss for “a flying dragon is in the sky” (飛龍在天), he cites the use of *tian* 天 in rhymes from such varied texts as the *Shangshu* and *Shijing*, all the way to poems by Han Yu 韓愈 (768–824), Su Shi 蘇軾 (1037–1101), Su Zhe 蘇轍 (1039–1112), and even the Yuan scholar Wu Lai 吳萊 (1297–1340). While these poets may have been imitating ancient rhymes, it is hard to conceive how they could be seriously used as a source for understanding the rhymes from, in some cases, well over one thousand years earlier. This

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34 The text of these, as well as some Qing works on the phonology of the *Yijing*, can be found in Yan Lingfeng 嚴靈峯, ed., *Wuqiubeizhai Yijing jicheng* 無求備齋易經集成 (Taipei: Chengwen chubanshe, 1976), Vol. 142.

35 *Du Yi yunkao*, j. 1, pp. 2b–5b.

36 It is worth noting, however, that Zhang Xianyi was not the first to attempt this kind of connection. Wu Yu, the well-known Song dynasty phonologist, similarly used Tang and 11th century poets in his general study of ancient rhymes, the *Yunbu* [韻補 Rhyme supplement], albeit not to the same extent. However, his most renowned work, the *Shi buyin* [詩補音 Supplemental pronunciations for the *Shijing*], though not extant in its full form, appears to have backed away
approach caused the *Siku quanshu* editors to describe Zhang as “having truly written this with no knowledge” (真不知而作也).\(^{37}\) Such an approach was, nevertheless, relatively common among 16\(^{th}\) and 17\(^{th}\) century scholars, who considered literary style, rather than historical period, to provide insight into the rhymes of antiquity.\(^{38}\)

Not all Ming scholars found Zhang Xianyi’s approach acceptable. Yang Shiqiao 楊時喬 (1531–1609), a famed scholar of the *Yijing* claimed that Zhang “often cited from Han, Tang, and Song historical works, as well as Buddhist texts, poetry and *fu*… He claimed that every phrase rhymed; sometimes there are forced or incomplete connections” (每舉漢唐宋史書及釋書詩賦等書…謂句句皆韻，或有強通，有未盡通).\(^{39}\) Zhang Xianyi must have believed the great figures of literature in the past had a deep understanding of ancient rhymes. Therefore, to cite Su Shi or Han Yu was as relevant as citing a Zhou text. In a discussion of the rhymes in a section of the ‘Appended Phrases’ to the *Yijing*, Zhang added, “when works such as the ‘Rhapsody on Sweet Springs’ [by Yang Xiong (53 BCE–18 CE)] often likewise conclude with one rhyme at

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38 See, for example, *Yunxie kao* 韻叶考 by Pan Wei 潘緯 (fl. 1563) and *Shi Sao yunzhu* 詩騷韻注 by Hong Sheng 洪昇 (1645–1704).

the end of each section, but match with a different rhyme in the middle part, they are all imitating
the use of rhymes in the ‘Appended Phrases’” (每於各節結語用一韻，中間另以他韻叶，如甘
泉賦等，往往如此，皆學繫辭用韻). Hence Zhang saw the *Yijing* as the forefather to a
particular literary rhyming style. The authors of these literary texts were intentionally modeling
their style off the *Yijing*, which further justified their inclusion as examples of ancient rhyming.
The commentaries of the Cheng brothers and Zhu Xi, mentioned in Wang Shizhen’s preface,
provided one method for understanding the coherence of the text. Zhang Xianyi had found
another that lay within the style.\(^41\)

Huangfu Fang’s preface to *Du Yi yunkao* would come to be cited in the preface to a later
Wanli era poetic rhymebook, *Yunshi bianlan* [韻釋便覽 An explanation of rhymes for
convenient perusal]. The author of the *Yunshi bianlan* preface, Sun Weicheng 孫維城 (1540–
1602), in addition to referencing Huangfu, exclaimed that “the Six Classics are all rhyming texts”
(六經莫非韻也).\(^42\) This can be juxtaposed against one of the most famous claims regarding the
Classics from the Qianlong period from Zhang Xuecheng 章學誠 (1738–1801): “the Six Classics
are all history” (六經皆史也).\(^43\) This distinction is telling. The Wanli era scholar saw the
Classics as timeless, and moreover as a model for poetic composition in the present day. By the

\[^40\] *Du Yi yunkao*, j. 5, p. 4b.

\[^41\] Zhang also noted stylistic rhyming practice connecting different sections of the *Yijing*. See *Du
Yi yunkao*, j. 6, p. 1a.

\[^42\] Sun Weicheng 孫維城, *Yunshi bianlan* [韻釋便覽 (1590 edition, held at Peking University
Library), *xu*, p. 4a. It seems that the author of this preface was consulting *Du Yi yunkao*, since in
addition to citing elements of Huangfu Fang’s preface, he additionally cited from Zhang Xianyi’s
preface (see *xu*, p. 5b).

\[^43\] For more on this argument, see David S. Nivison, *The Life and Thought of Chang Hsüeh-Ch’eng, 1738-1801* (Stanford, CA: Stanford University Press, 1966), pp. 201–204.
late 18th century, these texts were seen to belong to a specific historical context, an understanding of which was necessary for comprehending their meaning.

The late 17th century scholar Gu Yanwu was instrumental in developing this historical approach to phonology, which would become dominant in the 18th century. Gu also included a discussion of pronunciation in the Yijing, the Yi yin [Sounds of the Yijing 易音], in his seminal Yinxue wushu [Five Writings on Phonology 音學五書]. Gu would agree with Zhang and his preface writers that texts from antiquity could be used to understand ancient rhymes. In his preface to Yinxue wushu, Gu wrote, “the songs of emperor Shun, the songs of Gao-Yao, the Count of Qi’s arrangement [of Hongfan], and the appended (phrases) of King Wen and the duke of Zhou were all the same [as the words of the Shijing]. Hence, the 305 poems [of the Shijing] were the rhymebooks of the ancients” (帝舜之歌，皋陶之謨，箕子之陳，文王周公之繫，無弗同者。故三百五篇，古人之音書也). However, Gu believed that the ancient pronunciations were already gradually being lost in the Qin and Han dynasties, and there was no point in looking to later works to understand the rhyming of antiquity. Further, he was not concerned with the entire text of the Yijing because, unlike Zhang Xianyi, he held that “it is not tonal [i.e., does not rhyme] throughout” (不皆音也).

The contrast between Gu Yanwu and Zhang Xianyi is informative because it shows that, despite substantial differences in methodology, there was a concern with rhyming in antiquity that preceded Gu. The focus on ancient rhyming among 18th century scholars is often identified as a defining characteristic of the period’s intellectual culture. I would argue that 16th and 17th-

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century scholars were also fascinated with the rhymes of antiquity, but approached them with a very different methodology. Scholars such as Zhang pursued a mode of scholarship that later came to be disparaged, but there were clear intellectual convictions and intentions underlying their methods. By shifting our frame of reference to what Ming scholars considered important, we can see more clearly that differences in scholarly method and approach between the 16th and 18th century were not necessarily born of neglect in the earlier period. Different priorities, along with a different sense for why and how one should read, informed Ming approaches to philology. Late Ming literary culture viewed the Classics as repositories not only of moral values, but also literary style that could serve as a model for poetic composition in the present day. For Ming scholars, uncovering the precise nature of this literary style was also of greater cosmic importance, as a reflection of the sages’ literary modeling of the relationship of heaven and earth.

Today we can clearly distinguish between Zhang Xianyi’s literary approach and an evidentiary learning approach to philology represented by Gu Yanwu or Zhang Xuecheng. Gu understood the textual legacy of antiquity to be historical. Hence, no matter how much a Tang poet may try to imitate the ancient style, his poetry could not serve as usable evidence for a discussion of ancient rhyme categories. Zhang, on the other hand, was less interested in ancient texts as containing a historical language different from that of the present. Instead, he saw it as a canon of poetic usage that would be applicable to contemporary composition. The distinction between these two approaches, however, was not necessarily clear for a Ming audience. Zhao Yiguang 趙宦光, one of the great philological minds of the Ming, provides the following discussion of the phonological scholarship of his dynasty in an extremely rare volume entitled *Tanya* [彈雅 Plucking elegance], today preserved at the Capital Library of China:

Wu Cailao [Wu Yu 吳棫 (ca. 1100–1154)] wrote *Yunbu*, a book entirely about sounds that do not rhyme. It is clearly evidence-based (有據). This man was upset with the
mistaken readings of later generations and especially wrote this to become a model for showing people ancient pronunciations. That it is not at all similar to Mr. Zhang Zhixiang’s (張之象 ca. 1496–1577) Yunjing [a recent popular rhyme book] must be because it desires to use ancient rhymes.

Recently there was Chen Di’s Maoshi guyin [毛詩古音 Ancient pronunciations of the Odes] and Qu Song guyin [屈宋古音 Ancient pronunciations of Qu Yuan and Song Yu], which seem to be somewhat more complete. Before him there was Zhang Mi’s [Zhang Xianyi] Du Yi yunkao. Although he came before Chen Di, he mainly focused on vast inclusion and frequently erred. He did not verify as well as Mr. Chen, [but still] it is worth consulting. I wish to edit the works of Wu Yu, Chen Di, and Zhang Xianyi, and combine them into one book—this would almost fulfill their intention.

Zhao Yiguang listed Zhang Xianyi’s study of rhyming in the Yijing alongside Chen Di’s much acclaimed analyses of rhyming in the Shijing and Chuci. By the 18th century, these two works would be seen as representative of two completely different trends in Ming thought: the former an example of conservative and misguided notions of the history of language, the latter a direct predecessor to Gu Yanwu’s work. However, to a Ming audience they may have been achieving similar goals. Zhao likewise linked Zhongyuan yinyun, the rhyme dictionary for composition of northern operatic genres, with Chen Di’s study of ancient rhymes claiming, “recently there has been the Maoshi guyin of Chen Di. It should be combined with these rhymes [of Zhongyuan yinyun], so they can explicate each other and break open antiquity” (近有陳弟[sic]毛詩古音，當與此韻合集，互相發明，坐破千古). For Zhao, one of the most prominent philologists of

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46 Zhao Yiguang 趙宦光, Tanya 彈雅 (1622 edition, held at Capital Library in Beijing) [hereafter Tanya], yunxie, p. 13a–13b.

47 Tanya, yunxie 20a.
the late Ming, we need not draw a sharp distinction between the one work devoted to singing application and the other devoted to uncovering the sound system of antiquity.

It appears that Zhao Yiguang in fact met Zhang Xianyi to discuss phonology in the context of poetic rhyming. Their conversation, as reported by Zhao in a dictionary entry in his Shuowen changjian [說文長箋 Extended notes on Shuowen], reflects on the conservatism of the age. Zhao wrote, “when I was young I discussed rhymes with Zhang Youyu [Xianyi] and asked, ‘Shen Yue’s work, on a higher plane, does not match the authoritative pronunciations of antiquity, and on a lower plane does not correspond to local dialects. Why presently do we consider it a fault to depart from Shen’s rhymes in composing poetry?’ Youyu responded, ‘Poetry tends toward the Tang, and in the Tang [poets] tended toward Shen’s [rhymes]. To depart from this would be unreasonable’” (少時與張幼子論聲韻，問沈約所作，上不洽古正音，下不通方俗語，而今詩何必以出沈為失，幼于曰，詩趨唐，唐趨沈，去此乖矣).48 Zhao, who was more than willing to criticize the use of Shen’s rhymes in poetry, represented something of a middle ground between Zhang Xianyi and Gu Yanwu. He was more critical of the Song tradition of phonology than Zhang. However, he also delved into classical texts in his poetry discussions. In his words, “ancient pronunciations differed from [those of the] Han dynasty. Before the Han, literary texts entirely used ancient pronunciations, but later generations lost their readings. Generally, if one is able to recognize ancient pronunciations, then [it becomes clear that] the writings of the ancients were for the most part rhyming, and it is only the ancient pronunciations that have been lost” (古音異漢，漢已前文全用古音，而後世失其讀，凡能識

48 Zhao Yiguang 趙宦光, Shuowen changjian 說文長箋, SKQS CMCS (1631 edition), j. 29, p. 12a.
Hence, a recovery of the ancient language of the Classics would reveal the nature of their rhymes, and provide a method for contemporary poets.

Further, Zhao argued that the distinction of prose and poetry that seemed commonsense to some of his contemporaries was an artificial construction that went against how those in antiquity wrote. As he argued:

For the ancients, words created literary text (wen), and literary text had rhymes. If it did not rhyme it could not be called literary text. Later generations lost the readings 70-80% of the time, and changed characters 20-30% of the time. Thus ever since middle antiquity, things with rhyme were called poetry (shi), and without rhyme they were called prose (wen). Occasionally there would be prose (wen) with rhyme, and they would thereupon create another category to distinguish it. For example, [there are rhyming texts] like “Beishan yiwen” [北山移文 Proclamation on North Mountain] and Qianziwen [千字文 Thousand-character text]. “Beishan” is considered a letter (shu) [according to its categorization in Wenxuan] not wen, and Qianwen is considered poetry (shi) not wen. But where is wen after all? The ancients called all of it wen, and wen always had rhymes.

For Zhao, as for many of the other thinkers discussed in this chapter, writing in antiquity naturally rhymed. As he stated in another passage, “whenever the ancients opened their mouths and spoke, it rhymed” (古人出口即韻).}

Gu Yanwu took a considerably more tempered view: “The literary transformations of the ancients were skillful, and naturally accorded with pitches. Thus even texts without [consistent] rhyme often had some rhymes, while on the other hand even texts with [consistent] rhyme...

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49 Tanya, yunxie 6a
50 Tanya, tiba 10a
51 Tanya, yunxie, 5b
occasionally did not rhyme. Ultimately, they would not allow rhyme to harm the meaning” (古人之文化工也，自然而合於音，則雖無韻之文而往往有韻，苟其不然，則雖有韻之文而時亦不用韻，終不以韻而害意也).\textsuperscript{52} Hence, for Gu, the texts of antiquity were argumentative, the literary qualities of which were important, but secondary. However, a more representative late Ming view, and one which, as we will see in the following chapter, was more accepted in the early Qing as well, saw the Classics as repositories of literary, as well as, philosophical merit.

The boundaries of literary and classical studies themselves were fluid in the Ming, and we should not assume that the overarching bibliographical categories in place since the Han (which do separate the literary and classical) reflect an unchanging conception of disciplines and fields throughout Chinese history. Even at the turn of the 18\textsuperscript{th} century, phonological scholars could see classical texts as transmitting literary values, which were captured in the phonology of later writers.\textsuperscript{53} This cross-fertilization gradually faded from the forefront of philological scholarship in the mid to late 18\textsuperscript{th} century. Until that point, however, literary composition was one of the primary motivators for describing and attempting to understand the nature and history of the Chinese language.

\textit{Zhao Yiguang and Poetic Phonology}

The flourishing of new sung rhyming genres, such as Kunqu opera, was an important catalyst of philological activity in the late Ming. Phonology had been considered an important 


\textsuperscript{53} The great philological scholar Xiong Shibo 熊士伯, for instance, writing in 1712, admired the 8\textsuperscript{th} century Han Yu’s perceptive embodiment of ancient rhymes. See \textit{Gu yin zhengyi} 古音正義 (held at Taiwan Normal University Library), \textit{lun}, p. 4b.
factor in literary genre codification as early as the late Yuan, and the applicability of particular rhyme systems to specific genres was increasingly a concern in literary composition. Generally speaking, the philological discussions taking place in the world of sung genres, which will be discussed in Chapter 6, were more rigorous and innovative than those in the context of poetry, perhaps owing to the newness of the genres. In the case of regulated verse, although many studies of poetic rhyme continued to be produced throughout the period, there was a tendency toward the inheritance and reprinting of early poetic rhyming traditions.

Nevertheless, there were notable exceptions. The work Zhengyin junyan [正音捃言 or 正音擧行 Selected Explanations of Correct Pronunciation], for instance, by Wang Li 王荔 (Jiajing era juren) asserted a new categorization of rhyme groups closer to the spoken language of his time. The content of the text, printed in 1628, is clearly directed toward application in poetic composition, as it demonstrates the use of each rhyme word in the context of rhyming couplets. This can perhaps be understood as an attempt to provide a phonological model to match increasingly frequent calls for a literature that reflects a spontaneous and even vernacular style. Proponents of this mode of composition, such as Feng Menglong 馮夢龍 (1574–1645), were fascinated with the phonological details of local topolects, as evidenced by Feng’s careful phonological descriptions of Wu topolect pronunciation in his Shan’ge [山歌 Mountain songs].

56 See Feng Menglong, Shan’ge, the Mountain Songs: Love Songs in Ming China, trans. Ōki Yasushi and Paolo Santangelo (Leiden: Brill, 2011).
Yuan Hongdao 袁弘道 (1568–1610), famed for his advocacy of new vernacular styles, even claimed that different topolects were equally valid forms of speech, rather than aberrations.\(^57\)

The term ‘vernacular’ typically refers to the use of vocabulary and syntax from local topolects. However, in the late Ming, the phonology of spoken language also provided a model for new rhyme categorizations in regulated verse to supplant outdated texts.

The most striking discussion of Chinese phonology within the context of poetic scholarship is contained in the text *Tanya* by Zhao Yiguang. This work, which bears a 1622 preface by Zhao, is comprised of discussions of poetic technique, the history and origins of poetic styles, and appraisals of earlier poets. One volume in particular, entitled “Yunxie” [韻叶 Rhyming], is particularly relevant, although there is also some discussion of phonology in the volume “Shengdiao” [聲調 Tones and pitches]. At the end of the volume *Yunxie* there is also appended a short text *Yunwei fafa* [韻微發凡 An introduction to the subtleties of rhyme], which further elucidates Zhao’s phonological theories. I go into some detail on this text below because it has heretofore remained undocumented in the specialist literature, and further illustrates how the desire to establish literary standards could promote phonological scholarship in the late Ming.

Given that there was a long tradition of existing scholarship on poetic rhyming, one may wonder why Zhao considered it necessary to intervene. Zhao argued that “Only after distinguishing clear and turbid, investigating *yin* and *yang*, and then setting the characters can one speak of poetry” (等清濁，審陰陽，然後安字，始可以言詩).\(^58\) Zhao’s awareness of regional differentiation, in particular, inspired him to devise new ways of classifying a

\(^{57}\) See Yuan Hongdao 袁弘道, *Yuan Zhonglang quanji* 袁中郎全集, SKQS CMCS (1629 edition), j. 12, p. 5a–b.

\(^{58}\) *Tanya, shengdiao*, p. 2b.
standardized pronunciation. To give one example, Zhao cited the playful verse “West of the brook the cocks crow together, north of the house a deer rests alone” (kei sei cei dzei dhei 溪西雞齊啼，uc bec luc dhuc siuc 屋北鹿獨宿), in which each character in a line shares the same rhyme.\(^{59}\) Zhao claimed that northerners, unfamiliar with the entering tone, would read the second line as u bu e luh dhu siu (鵝彼路途鵝).\(^{60}\) For Zhao, the original intent of the couplet, which relied on a particular aural effect, would be lost on those who did not have a proper

\(^{59}\) Tanya, shengdiao, p. 5a.

\(^{60}\) I have tentatively chosen to romanize terms throughout this chapter and the following based on Yuen Ren Chao’s (趙元任) General Chinese (通字), a pandialectal transcription system (that is to say, a system designed to be pronounceable in any dialect according to a set of rules). It preserves more conservative features from many dialects, for the most part basing its initial consonants on those of the Wu dialect, vowels on those of Mandarin, and finals on those of Cantonese. I have so far found it superior for my purposes to the following systems: David Prager Branner’s reconstruction of rhyme table phonology, Ning Jifu’s reconstruction of Zhongyuan yinyun phonology, and W. South Coblin’s presentation and reconstruction of the Mandarin as recorded by the 17th century Dominican missionary Francisco Varo. Branner’s system is an extremely useful tool for understanding rhyme table phonology. However it preserves certain Middle Chinese distinctions that late imperial speakers would probably have ignored (e.g., reading 打 as treingQ, as opposed to Chao’s daa which reflects its pronunciation in Zhongyuan yinyun and one of its pronunciations in Hongwu zhengyun). Ning Jifu’s reconstruction reflects the important nasal distinctions of final –m and final –n that greatly concerned scholars of this period. However, as a reconstruction of Zhongyuan yinyun it does not include the equally important entering tone distinctions. Finally, Varo’s Mandarin does not maintain the final –m/-n distinction, which indeed was probably no longer existent in the koiné. However, one idiosyncrasy of Chao’s system which I may modify is that it features tonal spelling in order to avoid the use of diacritics. So, for instance, Mandarin zhāng, zhàng, zhǎng, would be differentiated as dyang, dyag, and dyaq. The rules are as follows: level tone (平) = no spelling change; rising tone (上) = double the last vowel before final –m or –n, double the u in final iu, change final –i, -u, -ng to –e, –o, –g, respectively; departing tone (去) = add –h after zero final, change final –i, -u to –y, -w, double final –n and –m, change final –ng to –q. The entering tone is recognizable for its ending in –p, -t, or –c. See Yuen Ren Chao 趙元任, A Project for General Chinese 通字方案 (Beijing: Shangwu yinshuguan, 1983); David Prager Branner and Yi Weng, Yintong: Chinese Phonological Database (http://americanorientalsociety.org/yintong/) and David Prager Branner, “A Neutral Transcription System for Teaching Medieval Chinese,” T’ang Studies 17 (1999): 1 111; Ning Jifu 宁继福, Zhongyuan yinyun biaogao 中原音韵表稿 (Changchun: Jilin wenshi chubanshe, 1985); W. South Coblin, Francisco Varo’s Glossary of the Mandarin Language (Sankt Augustin: Monumenta Serica Institute, 2006).
understanding of phonology.

Zhao was perhaps on the extreme side of emphasizing sound over meaning in the context of poetry. By the Ming, it was common to refer to the craft of poetry composition as “pushing [versus] knocking” (tuiqiao 推敲). This originates from what Stephen Owen has referred to as “the most famous anecdote about poetic craft in the Chinese tradition.”\(^1\) The poet Jia Dao 賈島 (779–843), so the story goes, was once agonizing over the decision of whether to use the verb “knock” or “push” within a line of poetry. Lost in thought, he unintentionally blocked the road where the eminent official and poet Han Yu 韓愈 (768–824) was passing through. Han, in response to Jia’s conundrum, ultimately judged the verb “knock” to be more appropriate.\(^2\) Zhao argued against this approach to poetry, claiming “what should be meant by ‘pushing [versus] knocking’ in the composition of poetry is tonal patterns…[what Jia Dao did] was merely clever artifice meant to impress an esteemed gentleman” (裁詩稱推敲者，聲調之謂也…此巧詐以動貴人耳).\(^3\) As opposed to other common criticisms of the idea of tuiqiao, Zhao was not opposed to deliberate and painstaking poetry composition. However, in his view, energy should be expended on the sound, rather than meaning, of the poetic phrasing. Citing an earlier work of poetry criticism, Zhao remarked that there was no harm in changing characters and adjusting the meaning of a line, but there should be no leeway in the tonal aspects of composition.\(^4\)

Zhao did not only share the view of many contemporaries that prosody and a general

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\(^2\) This quite possibly apocryphal anecdote is first recorded in the 10\(^{th}\) century collection *Jianjie lu* [鑑戒錄] by He Guangyuan 何光遠.

\(^3\) *Tanya, shengdiao*, p. 4b.

\(^4\) *Tanya, shengdiao*, p. 4b.
understanding of Chinese phonology were important to poetic composition. He also attempted to define new ways of understanding Chinese phonology. Zhao Yiguang was extremely prolific, but few of his works are still extant. The method of exposition in his extant works tends to be self-referential, and allusions to no longer extant works compound the difficulty of understanding his theories. However, by combining from the few extant works, including *Tanya*, we can obtain a glimpse into his phonological system. One of the hallmarks of his system appears to have been dividing rhyme groups into three categories: outer (外), inner (内), and middle (中). Another work of his, the *Xitan jingzhuan* [悉曼經傳 An authoritative study of Siddham], explains that “outer sounds” are “open-mouthed” (開口), “inner sounds” are “close-mouthed” (合口), and “middle sounds” “emerge from the nose” (鼻間出). His usage of terms open and close-mouthed equate with those of Zhou Deqing in reference to bilabial and alveolar nasal finals ([m] and [n] respectively), rather than those of the rhyme table tradition. This is evident from the fact that the rhyme groups he isolates as “inner sounds” or close-mouthed (tsim 侵, dhom 蕃, yem 鹽, heam 咸) have the characteristic –m ending, in contradistinction to similar phonemes in the “outer sounds” category, such as sien 先 and hon 寒.

Further illustrating the point in *Shuowen changjian* [說文長箋], while employing slightly different terminology, Zhao discussed the application of his tripartite classification to entering tone characters. His open-mouthed (開口) characters were 悉 sit, 實 zhit, and 質 jit, closed-

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65 Zhao Yiguang, *Xitan jingzhuan, fanli*, pp. 26a, 13a.

mouth (合口) were 執 jip, and middle-sounds (中聲) were 息 sic, 寤 djic, 職 jic. He also gave an example using falling tone characters, which matches the usage for level tone characters presented in Tanya. From this we can infer that his tripartite system was applied to the entering tone to distinguish the medieval three-way division of entering tone finals (preserved in Cantonese, but not in his native Wu dialect) into -t, -p, and -c. For the other three tone categories, he used the closed-open mouth distinction to differentiate -m and -n as finals. He further created his own division of rhymes into four grades (等), according to the nature of the final. His discussion of phonology in relation to poetry composition is interwoven with reference to his other specialized phonological studies, such as Tongyun fafan [通韻發凡 An introduction to

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67 Zhao Yiguang, Shuowen changjian, fanli, p. 11a–b.

68 For the level tone (discussed in Tanya), middle sounds included only –eng and –aeng rhymes, close-mouthed sounds included –m rhymes, with all other rhymes falling into the open-mouth category. It is curious that he considered –eng and –aeng to be middle sounds, but not –ung and –ang. This is possibly a reflection of his native Wu topeolec in which the Middle Chinese velar nasals [ŋ] at some point divided into both alveolar nasals [n] and velar nasals, depending on the preceding vowel. Hence, zieng 精 would be read with [in] as the rhyme, but dung 東 with [on]. However, his distinction of bilabial [m] and alveolar nasals may not have existed in his native language. See Ye Xiangling 叶祥苓, Suzhou fangyan zhi 苏州方言志 (Shanghai: Jiangsu jiaoyu chubanshe, 1988) pp. 68–69, 213–14. As a description of twentieth century Suzhou dialect, its relevance to late Ming times is unclear. Based on evidence from a mid-Ming rhyme table, Geng Zhensheng argues that Wu dialects did in fact preserve the [an]/[aŋ] in Ming times, but seems to have disappeared by the 18th century. If Zhao was in fact representing a characteristic of his spoken language, it would indicate that the Changzhou dialect of the early 17th century had already lost the distinction. Further, some contemporary sources indicate that Wu speakers confused bilabial and alveolar nasals. However, based on contemporary anecdotes and rhyme table evidence, Geng Zhensheng argues that the distinction was preserved in some Wu dialects at least until the early Qing. See Geng Zhensheng 耿振生, Ming Qing dengyunxue tonglun 明清等韵学通论 (Beijing: Yuwen chubanshe, 1992), pp. 154–160.

69 See Zhao Yiguang. Tanya, yunxie, p. 8b. The nature of this latter categorization is unclear. Based on his own description of the work, his no longer extant Zhengsu tongsheng pu [正俗通聲譜] elaborated on this system. See his abstract of the work in Zhao Yiguang, Shuowen changjian, Changjian jieti, p. 17a–b. He also mentions the system in Xitan jingzhu, and likely discussed it further in no longer preserved sections of this work. See Xitan jingzhu, fanli, p. 26a–26b.
comprehensive rhymes] and the Sanskrit-inspired *Xitan jingzhuan* (discussed in Chapter 3).\(^{70}\)

From this we can ascertain that Zhao saw his innovations in phonological learning as having direct literary application.

Zhao was not alone in discussing phonology with relation to poetry. Hirata Shōji has shown how figures associated with the “revive antiquity” (*fugu* 復古) ethos of poetry saw rhyming as an important way of signaling their adherence to antiquity, and that this further resulted in disputation of earlier Song dynasty explanations of ancient rhymes.\(^{71}\) Poetry composition was essential to elite self-identification. On the one hand, many publications on poetic rhymes catered to a broad audience and merely rehearsed old systems. Nevertheless, there were scholars such as Zhao Yiguang, deeply steeped in the poetic literary culture of the Ming,\(^{72}\) who came to define new ways of describing Chinese phonology within a context of poetic application.

The boundaries of literary and classical scholarship overlapped to a significant degree in the 16th and 17th centuries. Literary scholars during this period envisioned new ways of describing language. Employing the latest methodologies from contemporary cosmological thinkers, literary figures attempted to understand linguistic sound in the abstract, as a way to aid composition in a number of genres. In addition they looked to the texts of antiquity, not to describe different historical stages of the Chinese language as would be the case in the 18th century, but as a way of understanding ancient rhymes for contemporary composition. As the

\(^{70}\) *Tanya, yunxie*, pp. 9a, 15a.


\(^{72}\) Zhao’s poetry collection, *Hanshan mancao* 寒山蔓草, is full of poetic correspondence with the major literary figures of his day.
following chapter will show, newly developing operatic genres played a particularly strong role in promoting innovative ways of conceiving of Chinese pronunciation and a linguistic standard in the 16th and 17th centuries.
The previous chapter examined how literary scholars in the 16th and 17th centuries employed contemporary trends in cosmological scholarship to inform handbooks and discussions of language for literary composition, as well as develop new systems of phonological categorization. This chapter focuses on another significant arena of literary scholarship during this period: Kunqu 崑曲 opera composition. The origins of Kunqu, a form of southern opera, trace back to the 14th century, but the genre was formally codified over the course of the 16th century. One of the primary goals of this codification process was the establishment of a standard pronunciation for singing in the Kunqu style. Adherents of other sung genres also aimed to standardize their literary language during this period, and in so doing created new methods of describing language. As this chapter will demonstrate, the efforts and methods of operatic scholars through the 17th century were in fact intended to impact the broader world of philology, as well as establish a literary standard. Late Ming and early Qing classical scholars did not recognize the disciplinary boundaries of literary and classical studies in the same way as 18th-century scholars. In their view, even texts primarily geared toward literary application contained significant philological merit for describing the nature of linguistic sounds.

Editors, Operatic Culture, and the Obsession with Pronunciation

Brian Richardson has discussed in depth the role of editors in 15th century Italy in shaping the presentation of vernacular texts, and in particular contributing to the formation of a
standard Italian written vernacular.\(^1\) Opera editors and connoisseurs in the Ming also interacted with philology, and saw language standardization as an essential part of their scholarship.\(^2\) Casey Schoenberger has demonstrated the artistic concerns underlying debates over the relationship of language and music in Kunqu opera.\(^3\) Building on this previous research, I will show how drama critics interacted with contemporary philological scholarship and influenced the discipline of philology as practiced by specialists.

Zang Maoxun 賴懋循 (1550–1620), editor of the famed Ming compilation of Yuan dynasty northern-style opera, the *Yuanqu xuan* [元曲選 Selection of Yuan plays], was immensely concerned with the nature of the language in the plays he edited. As he stated in one of the prefaces to *Yuanqu xuan*, “most melodies are inferior that do not pay close attention to the *yin* and *yang* qualities [i.e., voicing] of characters, and oblique and level nature of rhymes” (自非精審於字之陰陽，韻之平仄，鮮不劣調).\(^4\) Zang also published an edited version of Tang

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\(^1\) See Brian Richardson, *Print Culture in Renaissance Italy: The Editor and the Vernacular Text, 1470-1600* (Cambridge: Cambridge University Press, 1994).


\(^3\) In particular, he demonstrates the close correlation of tonal pitch with melodic contour, and its effect on the mood of a tune. See Kevin Conrad Schoenberger, “Resonant Readings: Musicality in Early Modern Chinese Adaptations of Traditional Poetic Forms” (Diss. Yale University, 2013), pp. 126–145.

Xianzu’s 湯顯祖 (1550–1616) Mudan ting [牡丹亭 Peony Pavilion], perhaps the most acclaimed southern drama of the time (and present-day). Zang’s motivation in editing this renowned work was Tang’s lack of phonological and prosodic knowledge: “in his studies [Tang] has not even dipped into tones and pitches. He envies the reputation of past sages, and shows off with overflowing, ornate phrasing. Constrained by his small-town learning and composing according to extinct tunes, how could he not be the ridicule of the Yuan masters?” (學未窺音律，豔往哲之聲名，逞汗漫之詞藻，局故鄉之聞見，按亡節之絃歌，幾何不為元人所笑乎?).

Zang Maoxun was by no means alone in his criticism. Despite the popularity and influence of Tang Xianzu’s operas, his lack of regard for standards of rhyme, prosody, and music became a standard negative example for many late Ming critics. As is well documented, Mudan ting was revised at least six times during this period by various editors. Judging from extant copies, prosodic issues were at the top of the list for correction. Tang himself frequently responded to criticisms of his work, claiming for instance:

In the past there were those who disdained Mojie’s [Wang Wei 王維 (701–761)] painting of a banana palm in a winter scene, and cut out the palm to replace with a plum tree. Well, it remained winter, but it was not Wang Mojie’s winter scene.

昔有人嫌摩詰之冬景芭蕉，割蕉加梅，冬則冬矣，然非摩詰冬景也。 Tang is further famously credited with saying: “wherever my intent leads, I don’t care if it destroys the throats of everyone in the world” (余意所至，不妨拗折天下人嗓子). For Tang,

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5 Zang Maoxun, Fubaotang ji., p. 62.


7 The statement is recorded in the opera composer, theorist, and phonological scholar Wang Jide’s 王驥德 (d. 1623) Qu lü. See Wang Jide 王驥德, Qu lü 曲律, in Zhongguo gudian xiqu lunzhu jicheng 中國古典戲曲論著集成 (Beijing: Zhongguo xiju chubanshe, 1959), Vol. 4, p.
and adherents to his compositional style, an overemphasis on technical details would interfere with artistic expression.

Despite the popularity of Tang’s compositions, opera critics nevertheless overwhelmingly expressed a concern with the phonological and prosodic details of arias and recitative. A common trope among opera critics was that Tang had great talent, but his ignorance (willful or otherwise) of the technical aspects of composition affected the performability of his operas. Shen Chongsui, the greatest operatic phonologist of the late Ming wrote, “The four Yuming plays [of Tang Xianzu] are delicacies for the literary community. But just like preserved dragon meat is hard on the palate, they are suitable to treasure and read, but not to get up and sing, on account of their prosodic discord” (玉茗四種，豔炙詞壇，特如龍脯不易人口，宜珍覽未宜登歌，以聲

165. Interestingly, Tang’s name became associated with a particular lexicographical work that circulated in at least two editions. This work, which I will call Wuhou jing zihai 五侯鲭字海 (one of its myriad variant names), was a dictionary organized by 686 radicals. The opening volume was an encyclopedic text containing general histories of the script and categorizations of sound, as well as music theory, and differentiations of similar looking characters, and characters with different meanings distinguished by sound. Most interestingly, it contains a syllabary from Ryūkyū that Liu Kongdang 劉孔當 (1592 jinshi) claims to have acquired from interpreters in the Min region. The edition I looked at (located in the Peking University Library), containing 20 juan, lists numerous titles for this work within a single volume and across volumes, all of which carry some version of Tang Xianzu’s name in the form Tang Hairuo 湯海若. They include: Jingke Hairuo Tang xiansheng dingzheng Wuhou jing zihai 根刻海若湯先生訂正五侯鲭字海, Jingke Hairuo Tang xiansheng jiaoding yinshi Wuhou jing zihai 精刻海若湯先生校訂音釋五侯鲭字海, Jingjuan Hairuo Tang xiansheng jiaoding Wuhou jing zihai 精镌海若湯先生校訂五侯鲭字海, Jingjuan Hairuo Tang xiansheng jiaozheng Wuhao zibian 精镌海若湯先生校正五侯鲭字编, Tang Hairuo xiansheng dingzheng Wuhou jing zihai 湯海若先生訂正五侯鲭字海, and Jingjuan Hairuo Tang xiansheng dingzheng Wuhou jing zihai 精镌海若湯先生訂正五侯鲭字海. Further, in the PKU edition, the prefatory list of radicals for juan 6 and 7 is erroneously bound in the volume containing juan 3 and 4 (although I cannot ascertain at what point this binding error occurred). It seems clear that the publication was sloppy, and the attribution to Tang Xianzu likely false, as is usually claimed.

8 Also known as Yumingtang si meng [玉茗堂四夢], these four plays of Tang Xianzu’s are: Mudan ting [牡丹亭], Jinchai ji [紫釵記], Handan ji [邯鄲記], and Nanke ji [南柯記].
Of Zang Maoxun’s edited version of Tang’s most famous opera, *Mudan ting*, Mao Xianshu 毛先舒 (a phonologist to be discussed in detail below) wrote, “Although when Zang Jinshu [Maoxun] altered it, it lost its original flavor, it really then could roll off the tongue… I believe that if we look at it from the perspective of literary composition, Zang was a criminal toward Tang. But if we look at it from the perspective of prosody, then Zang was a meritorious servant of the ancients” (藏晉叔改之，雖失本來，卻頗上口…余謂以文章論，則晉叔為臨川之罪人，若以音律論，則晉叔乃古人之功臣也). 10 In a sense, Tang Xianzu, in his disavowal of prosodic norms, functioned as a catalyst for the renewed efforts toward codifying the phonological and musical aspects of dramatic performance. Although there was a widespread consensus that Tang’s approach was unacceptable, it simultaneously became apparent that there was also no single standard by which to correct it.

Debates about the standards for assessing correct pronunciation abound in works of late Ming operatic scholarship. Feng Menglong 馮夢龍 (1574–1645), in the preface to a chuanqi 楚妻 opera of his, *Shuangxiong ji* [雙雄記 A pair of heroes], wrote of recent librettists:

> They play with sounds according to their pleasure. They are not expert in the four tones, for example, reading 側 as rising tone *fven* [instead of departing tone *fiveen*], and 隔 as departing tone *zaq* [instead of level tone *zang*]. They do not accurately recognize characters, and do not distinguish the places of articulation, for example taking 銜 niang and 你 nii as tongue-tip sounds. 11 [These pronunciations are] suitable to the north, but not

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9 *Duqu xuzhi*, p.17.

10 This is from a letter to Li Yu, see Mao Xianshu 毛先舒, *Yun bai* 韻白, SKQS CMCS (1661–1722), p. 20b.

11 These are distinctions between alveolar consonants from the rhyme table tradition of 36 initials (三十六字母). I take Feng’s *shejian* (舌尖 tongue-tip) to refer *shetou* sounds (舌頭音 tongue-tip, i.e., apical consonants) in the standard rhyme table language. *Shetou* sounds only occur in the 1st and 4th (of 4) grades in the standard medieval rhyme tables, while *sheshang* sounds (舌上音 on the tongue, i.e., dorsal consonants) only appear in the 2nd and 3rd grade. According to the rhyme tables, 銜 niang and 你 nii are placed in the 3rd grade and can therefore only be *sheshang* sounds.
the south, which further cannot be based on the rhymes of the central regions.

Such comments on the lack of phonological precision in operatic texts, and what region or text should provide the basis of a standard literary language, are pervasive in late Ming discussions. Librettists and critics alike took a strong interest in how to accurately describe the sounds of Chinese, based on conceptions of the proper pronunciations of characters.

This interest could lead to in-depth philological discussion as a method for justifying one’s pronunciation claims. He Liangjun 何良俊 (1506–1573), for example, recounted the following discussion with fellow theorist Dun Ren 顿仁:

Old Dun never let [the rhymebooks] Zhongyuan yinyun and Qionglin yayun [Elegant rhymes of Celestial Forest] out of his hands. Hence, he was right eighty or ninety percent of the time about closed and opened mouth sounds [i.e., syllables ending in -m and -n, respectively], the four tones, and yin and yang [voicing] distinctions. But when the meaning of the text was not clear, there would occasionally be errors. For example, Ma Dongli’s [Zhiyuan 章致遠 (1250–1321)] A Lone Goose in Autumn over the Palaces of Han writes: “Felt-covered cart loaded with parting’s grief, rattling halfway down the hill.” He said the character “felt-covered” 彝 [commonly written as 毡] should be closed-mouthed [pronounced dyam]. I replied, “ 彥 should be open-mouthed [pronounced dyan].” He said, “My research into rhymes is quite extensive. This character is based on the written element dyam 𠧃, and should be closed-mouthed.” I replied, “If it were based on dyam 𠧃, then it should indeed be closed-mouthed. But this is nothing more than an abbreviated form created by scribes. This character was originally based on daan 亶. Daan 亶 is open-mouthed, and if you look into the correct form of the character dyan 彥, it is not based on dyam 𠧃.” He only then believed me that it should be open-mouthed.

However, in Zhongyuan yinyun, the use of which Feng opposed, they were classified under the initial 泥 nei, a shetou sound.


13 Stephen West and Wilt Idema, Monks, Bandits, Lovers, and Immortals: Eleven Early Chinese Plays (Indianapolis: Hackett Publishing, 2010), p. 188.
As the above example demonstrates, an interest in settling the pronunciation of sung words in an aria could inspire in-depth philological analysis. He Liangjun most likely referred to the *Shuowen jiezi* for the archaic form of the character cited in his argument. Regardless of the accuracy of He’s philological reasoning, it is apparent that the ability to attempt philological research was desirable for the drama critic.

A similar example of how a fixation on the pronunciation of sung Chinese resulted in an in-depth philological investigation occurs in Xu Fuzuo’s 徐復祚 (*zi Yangchu* 陽初, b. 1560) *Qu lun* [Discussions of Opera 曲論]. In his *biji* collection *Huadangge congtan* [花當閣叢談], Xu further expressed his concern with categorization of Chinese phonology by detailing characteristics of spoken Chinese in different regions, noting how they related to traditional rhyme groups. The interpretation of traditional rhyme categories was of great concern to literary scholars in this period. Most agreed that there should be a shared universal system, removed from any one particular topolect. The nature of proper readings and pronunciation, however,

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16 This is a matter of some debate in current scholarship. Kathryn Lowry in fact reads this passage by Xu Fuzuo as a call to abandon a single standard in favor of multiple regional varieties in the composition of arias. In her reading, Xu sees adherence to the standards of Shen Yue and *Zhongyuan yinyun* as impractical and aesthetically unpleasing. See *The Tapestry of Popular*
was a major battleground for literary scholars. Xu Fuzuo, for instance, attacked Wang Shizhen 王世貞 (1526–1590), one of the most acclaimed literary figures of the time, for his ignorance of phonological matters. In particular, Xu claimed that Wang did not fully understand the differentiation between voiced and voiceless initials. On the one hand this was about functional riming practice in literary composition. On the other, it represented an analysis of the very nature of Chinese phonology and how one ought to categorize the sounds of Chinese.

One of the focal points of operatic language debates was the Yuan dynasty rhymebook Zhongyuan yinyun, which eliminated the category of an entering tone, no longer present in northern varieties of China. Zhongyuan yinyun was created explicitly within a context of explicating rhymes for the purpose of aria composition, but came to figure in the broader Ming philological discourse. Xiao Yuncong 蕭雲從 (ca. 1596–1673), for instance, claimed Zhongyuan yinyun could substantiate the theoretical claims of the Song cosmologist Shao Yong: “[Shao

\[Songs in 16th- and 17th-Century China: Reading, Imitation, and Desire (Leiden: Brill, 2005), pp. 176–78. Although this would support her argument about Ming tastes, it is a less plausible interpretation of this particular document. Xu writes, “Generally, when writing Tang style regulated verse or quatrains, we should naturally use Tang rhymes, when writing ancient style verse, we should naturally use ancient rhymes. If we are writing arias, then we should absolutely use Zhongyuan yinyun. Once one starts using Shen Yue’s four tones [in the context of aria composition], as in the aforementioned passages, not only will singers harm their throats [trying to sing them], but listeners would also find it unpleasant to listen to.” He goes on to propose a universal standard for dealing with entering tone characters: “If we look at the zaju of the Yuan masters Ma, Guan, Wang, and Zheng, did they have this failing? If they did, then “the fresh bamboo pond pavilion” (sinhuang dhyicoc) [from Pipa ji] should be “pond fruit” (dhyicuoo). If sung [this way] I am afraid everyone would laugh uproariously. If it is not the case, then the coc character should be lightly sung at first, and then concluded with cuoo. It is thus for any entering tone character, not just coc, and can be inferred by similarity.” (大率吾輩為唐律絕句，自應用唐韻，為古體自應用古韻，若作曲，則斷斷當從中原音韻，入沈約四聲，如前所拈出數處，不但歌者嗤嗤，聽者亦自逆耳，試觀元人馬關王鄭諸公雜劇，有是病否，或曰若然，則新篁池閣，當作池果，唱乎恐笑破人口也，曰不然，以閣字輕出而後收之以果，此在凡入聲皆然，不但一閣字，觸類可通) Xu Fuzuo 徐復祚, Huadangge congtan 花當閣叢談 (Beijing: Zhonghua shuju, 1991), pp. 183–84.

\[Xu Fuzuo, Huadangge congtan, pp. 182–83.\]
Yong’s] *Huangji jingshi [shu]* has a [commentary by] Zhu Jing [Zhu Mi 祝泌], which says, ‘it is the interaction of initials and finals that produces *yin* and *yang.*’ In this way he explains the first splitting of finals and initials in terms of *yin* and *yang.* [But] by only discussing initials and finals creating *yin* and *yang,* he ultimately just made use of the name, and did not investigate its meaning. If there had not been Zhou Tingzhai’s [Zhou Deqing] distinctions [of *yin* and *yang* initials] within lyrics and arias, then [one could claim] I might be making it all up” (皇極經世有祝氏涇曰聲為與音而有陰陽，是以陰陽論聲音之始分，第音與聲為隂陽，終襲其名而莫測其義。非周挺齋詞曲之辨，則余為臆說矣).\(^{18}\) Xiao saw Zhou’s operatic rhyme handbook as providing concrete examples and validation of Shao Yong’s (and his own) theoretical treatment of *yin* and *yang* qualities of sound.

Similarly, Zhao Yiguang, in his *Tanya,* claimed:

Although [*Zhongyuan yinyun*] may seem too small and disorderly, nevertheless this work is of great benefit to the Classics. People of today only take it as a tool for application in aria composition — how pitiful. In antiquity there was no literary elite in the south. Thus the Classics all used northern tones. Northern tones lack the entering tone. Although this may seem incomplete, if you try to harmonize the entering tone in a musical tune, it will be too rough and will not match the music. Further, wherever their customs have spread, the three tones rule. If this book did not exist, when southerners read the Classics, they would mostly be shrike-tongued.\(^{19}\) Ever since this book emerged, ancient pronunciations have been comprehensible, and when the ancient pronunciations are comprehensible, the ancient tunes are clear as in the palm of your hand.

\(^{18}\) Xiao Yuncong 蕭雲從, *Yun tong* 韻通, XX SKQS, ba, [1a].

\(^{19}\) Mencius, *Tengwenggong* 1, refers to the speech of southerners as “shrike-tongued” (鴞舌).

\(^{20}\) Zhao Yiguang. *Tanya, yunxie,* p. 20a.
Certainly not everyone agreed with Zhao regarding the merits of *Zhongyuan yinyun* for understanding the language of antiquity. He Tang 何瑭 (1474–1543), an influential mid-Ming thinker, in a less than complementary preface to a new edition of *Zhongyuan yinyun* wrote that Zhou’s was “but a discussion of contemporary times. The ancient method was different… We could say Mr. Zhou was someone who did understand sounds, but not thoroughly” (然此亦近世之論耳，古法不然也…周氏蓋亦知音而未達者也).²¹ Xu Boling 徐伯齡, a mid-Ming scholar about which not much is known, criticized *Zhongyuan yinyun* for what he perceived as an overreliance on spoken dialect (方語市言).

It must be that analogizing according to principle, a universal pronunciation could travel anywhere. If one only uses one’s eyes and ears to find differences and similarities, how will one achieve the proper nature of all regions?

Others, like the musical scholars Liu Lian 劉濂 (1478 jinshi) and Han Bangqi 韓邦奇 (1479–1555) criticized Zhou Deqing as “not defining the rhymes of the central regions, but rather vulgar rhymes of the north” (非定中原音韻，乃定北鄙音韻耳) and as one who “did not know that he himself took the sounds of northern barbarians for the sounds of the central plains” (自不知以北狄之音為中原之音也).²³ In the Ming there were competing interpretations of the validity of the phonological system outlined in *Zhongyuan yinyun*. Some, like Xu Fuzuo, saw it as preserving essential distinctions (such as the bilabial nasal final *-m*) that had disappeared from


²² Xu Boling 徐伯齡, *Yinjing jun* 蟬精雋, SKQS, j. 7, pp. 8b–9a.

²³ Liu Lian 劉濂, *Yuejing yuanyi* 樂經元義, SKQS CMCS (1550 edition), j. 1, p. 34b; Han Bangqi 韓邦奇, *Yuanluo zhiyue* 苑洛志樂 (1548 edition, microfilm held at Harvard Yenching Library), j. 1, p. 4a.
many contemporary dialects, both northern and southern. Others saw it as only representing a single topolect, and inferior as a universal standard. In this way, a text originally construed as a reference for librettists, came to be invoked in theoretical discussions of how to define the characteristics of Chinese phonology and the possibility of a shared common language.

Operatic Linguistics and Standardization: China’s Language Question

The fact that opera theorists paid attention to contemporary developments and were concerned with pronunciation is not to say that they were attempting to document contemporary norms of speech. Interestingly, Shen Chongsui did describe common “errors” of pronunciation, particularly from Wu speaking regions, which can serve as a kind of evidence for the nature of Wu dialect at that time. However, his intention, along with that of his contemporaries, was clearly to set a prescriptive standard. In Ming China, we have little evidence of the “official establishment of norms,” nor the semiofficial “language academies” that preceded the creation of language standards in early modern Europe. Nevertheless, the nature of a unified common language was an important issue for Ming thinkers. While literary culture is typically not the arbiter of a language standard, there are other historical instances in which this has been the case. Discussions of a standardized language during this period occurred most frequently in

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26 In 12th century Iceland, the oral Eddic poetic tradition served as the norm for codifying the standard language. As Guðrún Nordal has argued, “the strength of the literary community” and
literary treatises. While literary scholars were typically preoccupied with the standards of pronunciation within specific sung genres, they also envisioned these standards as applicable to poetic and classical recitation. In this sense, their arguments had broader implications for elite spoken discourse.

To be sure, the Hongwu emperor’s commissioned dictionary, *Hongwu zhengyun* 洪武正韻, was intended to supply the dynastic standard for script and rhymed composition. The courts of previous dynasties had similarly commissioned lexicographic works. However in earlier periods, the requirement of poetic genres on the civil service examination forced literati to pay attention to these rhymebooks, as deviations from the official rhymes could lead to disqualification. The abolishment of poetic genres on the exams of Ming times perhaps made it so that elites did not feel compelled to pay attention to the official standard. Cai Yizhong 蔡毅中 (1548–1631), in a memorial to the Tianqi emperor from 1623, noted that: “Scholar-elites and erudite students from throughout the empire are submerged in superficial knowledge and inured to custom. They do not understand that *[Hongwu] zhengyun* is the orthodoxy for rhymes, meaning, and strokes. That in a single piece of their writings mistakes fill up the whole page probably originates from the fact that it is not used in the academic programs of the schools or the prosody of the exams” (天下學士大夫以及博士弟子，溺於見聞，狃於習俗，於音韻意

Qian Qianyi, in a preface to a later expanded edition of *Hongwu zhengyun*, also observed that his contemporaries only appeared to consult it in strictly official contexts. Outside of these contexts, “scholar officials set it aside on a high shelf, never to look back at it” (學士大夫束置高閣，不復省視). 28 This seems to have been the case at least as early as the late-15th century, when Lu Rong (1436–1494) noted that “*Hongwu zhengyun* rearranged [the categories] in *Tang yun* in a way that most closely matched human nature. But presently only memorials adhere to its strokes. When it comes to writing poetry, those at court and commoners alike still use *Tang yun*” (洪武韻分併唐韻，最近人情，然今惟奏本內依其筆畫而已。至於作詩，無問朝野，仍用唐韻). 29 Xu Fuzuo, also noted that “presently, for such things as strokes and radicals, only memorials adhere to it, while other documents do not entirely. In rhyming, only [poems to] imperial command adhere to it, while others do not entirely” (今偏旁點畫之類，唯題奏本用之，他不盡然也，音韻唯御製用之，他不盡然也). 30 Evidently, only in the context of documents

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27 Shen Guoyuan 沈國元, *Liangchao congxin lu* 兩朝從信錄 (Ca. 1628–1644 edition, held Harvard-Yenching Library), j. 17, p. 17b. The second line appears verbatim in a preface he wrote to the work *Zixue leibian* [字學類辨] by the Wuzhou 婺州 scholar Xu Yuji 徐與稷. See *Zixue leibian* (1621 edition, held at Beijing Normal University) *xu*, p. 2a–b. It is not entirely clear whether he is saying that examiners do not use *Hongwu zhengyun* as a standard for pronunciation in the more literary official genres required on the exams, or simply that the text has no relevance for the contemporary exams which do not focus on poetry. Another late 17th century scholar argued that the focus on *baguwen* in Ming exams resulted in the deterioration of phonological study generally in the Ming. See Jiang Guoxiang 蔣國祥, *Tang lüshi yun* 唐律詩韻 (1695 edition, held at Taiwan Normal University), p. 18a.

28 Qian Qianyi 錢謙益, *Qian Muzhai quanji* 錢牧齋全集 (Shanghai: Shanghai guji chubanshe, 2003), p. 881.


intended for the emperor’s view was there some attention paid to the imperial standard.\(^{31}\) In addition, although seeking to provide a literary standard, the *Hongwu zhengyun* could not be used in the composition of northern style arias, as it maintained the four tone system no longer applicable to the northern languages.

Aside from this early attempt to establish a standard, there were few later Ming official language policies. The Hongzhi emperor (1470–1505) did approve a memorial requesting to make the use of a Mongol-influenced dialect in the capital a punishable offence, on account of its perceived deleterious effect on morals.\(^{32}\) Neither the emperor, nor his officials, prescribed a correct alternative to this dialect, other than what they referred to vaguely as “the proper sounds of China” (中華正音). The next significant and concrete imperial directive regarding a national language would have to wait until a 1728 decree from the Yongzheng emperor.\(^{33}\) The idea of a *guanhua* 官話 or Mandarin koiné, was only loosely conceptualized in the Ming, and the term

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\(^{31}\) Other scholars have further pursued reasons for the general neglect of *Hongwu zhengyun*. According to Ning Jifu, the fact that the main compilers came from Wu dialect speaking regions, along with their generally low level of phonological expertise, inhibited their ability to compile a dictionary that others would accept as representing proper pronunciation. Hirata Shōji has posited that the connection of some of the compilers with the Hu Weiyong 胡惟庸 and Lan Yu 藍玉 factions, who were accused of treason, led to a reluctance to use the work. Zhang Zhumei has since criticized this assessment. However, Hirata’s observation that Ming loyalists emphasized their use of *Hongwu zhengyun* in poetry written after the Qing invasion is important to note. See Ning Jifu 宁忌浮, *Hongwu zhengyun yanjiu* 洪武正韻研究 (Shanghai: Shanghai cishu chubanshe, 2003), pp. 9–11, Hirata Shōji 平田昌司, “Hu Lan dang’an, Jianan zhi bian yu ‘Hongwu zhengyun’” 胡藍黨案、靖難之變與《洪武正韻》, *Nanda yuyanxue* 2 (2005): 24–95, and Zhang Zhumei 張竹梅, “Ye tan ‘Hongwu zhengyun’ yu ‘Hu Lan dang’an’” 也談《洪武正韻》與“胡藍黨案”, *Yuyan yanjiu* 2 (2010): 28–32.


itself rarely appears in Ming works. It was not until the 18th century that the imperial government, along with various philological scholars, made clear attempts to define the *guanhua*.\(^{34}\)

The opera critic Xu Fuzuo lamented how “a sage in the position of emperor can cause his empire to write in the same script, but not to speak with the same pronunciation” (聖人在天子之位，能使天下書同文，不能使天下言同音).\(^{35}\) Although ostensibly a comment on the difficulty of standardizing speech, late Ming opera theorists took up the mantle of creating a standard pronunciation in the face of perceived imperial neglect. Xu himself was intensely interested in establishing a standard, as well as in the historical circumstances that had resulted in the loss of a putative standard in antiquity. Xu understood the very existence of topolects in China as a result of people’s deficient understanding of phonology. Hence such errors as people of Shandong pronouncing 步 *buh* as 布 *buh*, 謝 *sieh* as 卸 *sieh*, 鄭 *dhyeq* as 正 *jaeq* (distinctions lost in modern Mandarin, as well), “all result from the study of rhymes being unclear, the *fanqie* spellings not being standardized, turbid and clear being different depending on location, and the mixing up of places of articulation” (皆因韻學不明，反切各異，清濁殊方，喉舌齒脣牙五音混雜故也).\(^{36}\) According to Xu, if phonology (韻學) and its methods (such as *fanqie*) were standardized and widely studied, perhaps there would not exist topolects and variant pronunciations. Although he seems to doubt the possibility of uniting pronunciation throughout all regions of the empire, that did not preclude his description of regional differences as errors

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36 Xu Fuzuo, *Huadangge congтан*, p. 182. These examples, too, come primarily from Lu Rong’s *Shuyuan zaji*. 

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Literary scholarship in the Ming hence provided an outlet for talking about what a unified standard for Chinese could look like.

It has been averred that southerners disparaged the lack of linguistic conservatism in northern dialects, and that this hindered the spread of the northern standard as a Mandarin during the Ming. This may not be entirely accurate as contemporary accounts document many southern scholars who looked to the north for a literary standard. Southern philological scholars could embrace northern standards for historical, aesthetic, and cosmological reasons. Xu Fuzuo, himself a native of Changzhou in Suzhou prefecture, criticized Zhang Fengyi 張鳳翼 (1527–1613) for “only using Wu tones. He incorrectly rhymed sien/tien with liem/siem following his pronunciation. He did not distinguish open and closed-mouth [endings in -m and -n], and further did not know that there exist Zhou [Deqing’s] rhymes” (但用吳音，先天、廉纖，隨口亂押，開閉罔辨，不復知有周韻矣). He also criticized Wang Jide who was greatly influential in establishing a dual system wherein northern rhymes (i.e., those of Zhou Deqing) would be used in northern arias, while southern rhymes (typified by inclusion of the entering tone) would be used for southern arias. Xu decried this, saying, “just because there are northern and southern arias, does this also mean there are northern and southern rhymes?” (曲有南北，韻亦有南北乎）In Xu’s view, there should be a single standard, which followed distinctions present in the

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39 Xu Fuzuo, *Qu lun*, p. 239.
northern language. Zhao Yiguang, cited above, advocated for a northern standard with the claim that “In antiquity there was no literary elite in the south,” as well as the fact that the entering tone was difficult to sing. Finally, Cai Qing 蔡清 (1453–1508) argued on the grounds of cosmology that the northern language should be adopted as the standard: “It must be that the central qi of heaven and earth is in China, and the central qi of China is in the central plains [which Zhongyuan yinyun is based on]. When qi achieves its centrality, then sounds achieve their proper nature” (蓋天地之中氣在中國，中國之中氣在中州。氣得其中，則聲得其正).\textsuperscript{40} Zhao Yiguang and Xu Fuzuo were both from the Suzhou region, while Cai Qing was from Fujian; none saw their native southern topolects as suitable for a literary standard.

Others claimed that certain southern dialects adequately reflected important phonological distinctions in the northern standard. Ling Mengchu, an author of vernacular fiction and opera critic from Wucheng county 烏程 in Kuaiji, Zhejiang, felt that the proper distinctions were only maintained in certain variants of the Wu topolect, claiming that “older arias never used to lightly employ the three closed-mouth rhymes 廉 liem/織 siem, 監 ceam/咸 heam, and 侵 tsim/尋 tzm interchangeably. Currently, the local dialects of the two prefectures Kuaiji and Piling seem stricter and naturally use them. [The speakers of these dialects] are able to do it without study. Only those of the eastern and western Wu region are confused and cannot understand it” (其廉織、監咸、侵尋閉口三韻，舊曲原未嘗輕借。今會稽、毗陵二郡，土音猶嚴，皆自然出之，非待學而能者；獨東西吳人懵然，亦莫可解).\textsuperscript{41} The characterization of certain dialects here as “stricter” is interesting in that it implies that they have deviated less from an imagined standard,

\textsuperscript{40} Cited in Ning Jifu, Zhongyuan yinyun biaogao, p. 240.

\textsuperscript{41} Ling Mengchu 凌濛初, Tanqu zazha 譚曲雜劄, in Zhongguo gudian xiqu lunzhu jicheng 中國古典戲曲論著集成 (Beijing: Zhongguo xiju chubanshe, 1959), Vol. 4. p. 259.
whereas other less rigorous dialects simply did not hold to this standard as strongly. It would be a stretch to consider this akin to the modern science of historical Chinese linguistics in which different historical layers of the language are sought in various modern dialects. Nevertheless, this earnest fascination with phonological categorization according to regional and historical divisions was a crucial part of the literary philology of the Ming. Although this curiosity about the Chinese language was embedded in the context of application in performance texts, the effects of their research was framed within the context of the broader world of Chinese philological scholarship.

Discussions of standardization and the nature of Chinese phonology among literary philologists were framed in relation to the mainstream phonological tradition. Hence, Shen Chongsui, in the Editorial Principles fanli to his Xiānsuō bian’ě [絃索辨訣], discussed the need to consult other works; this is born out in his citation of lexicographical texts, such as Pianhai [篇海], Yupian [玉篇], and Hongwu zhengyun [洪武正韻]. Late imperial operatic culture strongly promoted reflection on the nature of the Chinese language. Texts by literary figures may have been geared toward application in a composition setting, but as we have seen with Zhongyuan yinyun, this would not preclude other philological scholars from using such texts in settings removed from literature.

Of particular note is Wang Jide 王驥德 (d. 1623), an opera composer from Kuaiji 會稽 in Zhejiang province and the first great phonological opera scholar of the Ming. According to his Qulü [Rules for Arias 曲律], Wang had compiled a no-longer extant dictionary as a response to perceived inaccuracies in the operatic philological tradition, which corroborated evidence from

42 Duqu xuzhi, p. 24.
43 Duqu xuzhi, pp. 45, 54, 57, 61, 98, 121, 148, 150.
Hongwu zhengyun with other lexicographical texts. Surprisingly, Wang claimed as his guiding principle to “adhere to the Six Classics” (須本之六經). Hence, based on his description of the dictionary, he attempted to use rhymes from the Shijing to correct categorizations in Zhongyuan yinyun. In Chapter 5, I wrote of the process by which a classical text could be interpreted in a literary setting. Here we see how the techniques of the classicist could merge with those of the literary scholar. Especially from the 18th century onward, rhyming in the Shijing was the domain of those focused purely on the nature of the ancient phonological system. But in Wang Jide’s mind, there was no such distinction between the rhymes of antiquity in the Six Classics, and 17th century aria rhymes. According to Wang, Shen Jing (沈璟 1553–1610), a major figure in late Ming kunqu opera, had also planned to produce such a dictionary. In the early Qing, a number of operatic scholars similarly composed dictionaries, as will be discussed in greater depth below.

These two fields of the literary and classical, which we have separated as different disciplines with different motivations and techniques, were not necessarily so unrelated in this period.

There is a tendency in current scholarship on late Ming literary culture to associate those who have come down to us as the greater literary figures, beginning with Tang Xianzu, but also including Wang Jide, Xu Wei, Xu Fuzuo, and Ling Mengchu, with freedom and creativity as opposed to stodgy adherence to the rules. Hence K.C. Leung associates all of these figures together as advocates of *bense* [‘authentic quality’ 本色], in opposition to Shen Jing who stood

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45 The exception would be the many works that were devoted to simply explaining the rhymes of the Shijing for general recitation use.
for dry formalism. However, as demonstrated above, all of these figures, with the sole exception of Tang Xianzu, sided with Shen Jing on the necessity of studying and understanding phonology. The fascination with minutiae of pronunciation and singing is sometimes characterized as part of an elite strategy to form a boundary for ascension into true circles of connoisseurship. Many critics took evident glee in exposing the ignorance of those less qualified, indicating that such social forces may have played a role in the production of this scholarship. However, there is clearly more to the discussions of phonology and prosody than simply accruing cultural capital. Casey Schoenberger has discussed some of the aesthetic ramifications of prosodic and musical rules in Ming opera. As I have demonstrated above, this scholarship also wove in and out of contemporary philological discussions not exclusively related to opera or literature. Literary critics took outside scholarship seriously, and also made contributions that the broader world of scholarship would pay attention to.

Perhaps the closest historical parallel to the Chinese case occurred in near contemporary Italy. Editors, such as Pietro Bembo (1470–1547), sought to make the Tuscan dialect of the great authors, such as Petrarch and Boccaccio, the model for literary composition. This in turn inspired the production of linguistic descriptions and analyses of this language for the benefit of writers who would not be familiar with the dialect, as in the case of the 1516 *Regole grammaticali della*

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48 Kevin Conrad Schoenberger, “Resonant Readings: Musicality in Early Modern Chinese Adaptations of Traditional Poetic Forms.”
*volgar lingua* by Giovanni Francesco Fortunio (1470–1517).\(^{49}\) As with Wang Jide, who could conflate the study of rhymes in the *Six Classics* with those of southern opera, Bembo was able to “bridge the gap between the best contemporary classical scholarship and the application of its methods to editions of the great Tuscan authors.”\(^{50}\) Grammarians of the vernacular codified a linguistic system that was then enforced to varying degrees by editors throughout 16\(^{th}\) century Italy. As in China where Tang Xianzu’s plays went through numerous revisions, even the Italian masters were not exempt from correction by editors who held “confidence in the rightness of imposing a linguistic ideal.”\(^{51}\) Contested pronunciation in late Ming vernacular texts is also paralleled in that the Tuscan literary dialect was not unanimously accepted, as seen in the case of Florentine editors advocating spellings to reflect contemporary Florentine pronunciation.\(^{52}\) Similarly to China, as well, in which the classical literary language enjoyed pride of place in serious scholarly discourse, the “development of a prestige variety of the vernacular [in Italy]… took place under the shadow of Latin.”\(^{53}\)

Despite these similarities, the official status of vernacular languages differed in China. The great output of grammars and dictionaries that occurred during this period in Italy culminated in the 1612 *Vocabolario degli Accademici della Crusca*, the first work of what John

\(^{49}\) Brian Richardson, *Print Culture in Renaissance Italy: The Editor and the Vernacular Text, 1470-1600*, p. 66.


\(^{51}\) Brian Richardson, *Print Culture in Renaissance Italy: The Editor and the Vernacular Text, 1470-1600*, p. 184.

\(^{52}\) Brian Richardson, *Print Culture in Renaissance Italy: The Editor and the Vernacular Text, 1470-1600*, pp. 169–70.

\(^{53}\) John Considine, *Academy Dictionaries 1600-1800*, p. 11.
Considine has referred to as the “academy tradition” of dictionaries in early modern Europe.\textsuperscript{54} This pattern of academy-produced lexicographical works for national vernaculars is not paralleled in China. Rather lexicographic endeavors for vernacular or semi-vernacular texts remained in the hands of literary figures and critics, as all official dictionaries focused on the classical literary language. As statements from Ming figures above indicate, literary scholars in the Ming did not necessarily aim to emulate a vernacular or local language specific to a particular region. Their efforts were geared more toward the standardization of pronunciation for an artificial construction referred to as ‘elegant language’ (yayan 雅言).\textsuperscript{55} It is difficult to determine the effect this scholarship would have had on pronunciation of spoken Chinese outside of a performance context. Indeed it is hard to imagine that the lexicographic contributions of a handful of prescriptive elite scholars would meaningfully influence broader pronunciation habits. However, in so far as they affected conceptions of reading pronunciations, especially for classical texts, these works may have had a broader reach. Benjamin Elman has posited a continuum between classical and vernacular Chinese rather than a stark dichotomy.\textsuperscript{56} Certainly as a member of literati society, one would be expected to have famous lines from the Classics and the literary tradition at the tip of one’s tongue. But in order to recite or quote such lines, one would have to subscribe to a particular theory of pronunciation. In this sense, prescriptivism could have had real effects on spoken usage, as in certain dialects of Chinese today, which

\textsuperscript{54} John Considine, \textit{Academy Dictionaries 1600-1800}, pp. 9–27.


maintain specialized reading pronunciations.\(^{57}\)

**Opera I: Shen Chongsui and the Late Ming Theorization of Pronunciation**

The search for a literary standard, in combination with the criticisms of the creeping influence of dialect discussed in the previous section, may have been a reflection of a deeper concern about the nature of the Chinese writing system. In all accounts of the invention of the Chinese script I have found leading up to the late Ming, Cang Jie 倉颉, the legendary creator of the script, is hailed as a cultural hero. However, beginning in the late Ming, some scholars began to voice criticism toward the supposed inventor of Chinese writing.

Wang Kentang 王肯堂 (1549–1613), for instance, wrote:

What is the purpose of characters? They are to record sounds. For one sound there should be one character. Currently characters number in the tens of thousands, but how many sounds are there? Thus I say that Cang Jie was too incompetent. But it is still fortunate that there is the one method of jiajie [i.e., the use of homophones] by which we can understand through extension. Later men, however, again created characters and increased their number. Further, one character has tadpole script, greater and lesser seal script, clerk script, bafen script, cursive, and calligraphy, ancient and vulgar, truly uncountable variations. But they still continue to accumulate without end… What’s more there are sounds that cannot be spelled according to fanqie, such as the sounds of the birds and beasts, plants and trees. Any of these can [theoretically] be recorded and notated—how much more so the languages of men? I am indignant that Cang Jie did not understand this method [of alphabetic systems], and thus consider him too incompetent.

字何用哉, 以記聲也。有一聲, 即當有一字。今之字多至於數萬, 而為聲幾何。故吾謂倉頡亦太拙矣。然猶幸有假借一途可以旁通也, 而後之人輒復造字以益之, 且一字而有科斗焉, 有大篆焉, 有小篆焉, 有隸焉, 有八分焉, 有行焉, 有草焉, 有古焉, 有俗焉, 固已不勝其繁矣。。。且有不能反切者也, 童獸之音, 草木之聲, 莫不可記而可謳, 况人言語乎。吾恨倉頡不得此法, 故以為太拙。\(^{58}\)


As mentioned in Chapter 1, Wu Jishi, a cosmological phonologist similarly noted Cang Jie’s inability to document all possible sounds.\(^{59}\) This disillusionment with the Chinese writing system caused some to look to alphabetic systems for inspiration, especially Sanskrit (see Chapter 3).

Before this period, it was not uncommon to disparage others’ attempts at describing Chinese phonology. However it was extremely rare to criticize the script itself, which to some (discussed in Chapter 2), held the very essence of Confucian truths.

Although perhaps more expected from a scholar such as Wang Kentang who was deeply immersed in Buddhist texts and exposed to Sanskrit, similar sentiments arose among opera theorists. Shen Chongsui, perhaps the greatest technical theorist of *kunqu* opera in the Ming, also believed the legendary Cang Jie to have created an imperfect method. In one of the most significant, innovations in representations of Chinese phonology since the twelfth century, Shen Chongsui argued for representing the sounds of a Chinese syllable in three parts, rather than two as was the case in the earlier *fanqie* method. He referred to these three parts as the head (*tou* 頭), belly (*fu* 腹), and tail (*wei* 尾) of the syllable. Shen reported that:

> I have thought that if those in the past who collected rhymes were truly able to detail the spelling of each character according to [my method of] head, stomach, and tail and compile a dictionary, then one would not have to bother with the initials [of traditional rhyme table phonology]. It would become clear at one recitation—is this not simply a very pleasing thing? Especially since within [each rhyme group] there are many with sound but no character, which obstructs composition, we can only retrospectively resent that Cang Jie, and likeminded individuals, were incomplete in their creation of characters.

Wu Yuanman 吳元滿, a prominent scholar of the script, similarly criticized Cang Jie’s apparent


\(^{60}\) *Duqu xuzhi*, p. 225.
lack of completeness (未備). This was not as strong a criticism of the nature of the script as Wang Kentang’s. Nevertheless, for scholars like Shen Chongsui, there should exist a character for every conceivable sound in the rhyme table. That not being the case, he would have to devise a clearer way to detail the pronunciation of a Chinese syllable accurately.

The contributions of Shen Chongsui to new ways of describing Chinese pronunciation have been discussed in detail elsewhere. Unfortunately Shen only gave a few examples of the use of his tripartite system in practice, and there is some debate among contemporary linguists as to how much of the syllable each segment is supposed to represent. The head is understood to represent the initial consonant and sometimes a medial vowel. The stomach contains the main vowel, as well as the final, while the tail represents the final alone. For example, the character iew 優, is composed of the head i 依, stomach eu 歐, and tail u 嗡. Segmentation of the syllable into three parts would allow for greater specificity in phonological description, especially when the final character contained a diphthong (which is not always clear from two character spellings). Shen also proposed ways to emphasize distinctions in his normative version of

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64 Another important, and less discussed, aspect of his system is his adherence to the idea of the yin/yang distinction in these spellings. For a character that is yin, all the syllables used to spell it should also be yin, and vice versa for yang. Hence, in the above spelling for 優 iew, which Shen
Chinese that a southerner might overlook. In addition, he provided detailed (although not always entirely clear) descriptions of the articulation of various initials and finals. Shen believed that he had created a system, which captured the intricacies of Chinese phonology that had to some degree been obfuscated by the nature of the writing system. Such attention to phonological detail among some opera lyricists promoted lively discussion about the nature of the Chinese language in the late Ming. Works like the Zhongyuan yinyun, originally created within a context of literary composition, came to be seen alternatively as models for or failed attempts at uncovering the fundamental nature of Chinese.

To further illuminate how Shen saw his place in the broader world of Ming philology it is useful to see what kinds of texts Shen Chongsui was reading (or at least citing) in his work. Shen naturally referenced the works of like-minded philologically oriented opera scholars such as Wang Jide and Wei Liangfu, as well as Zhongyuan yinyun and the dynastic standard Hongwu zhengyun. However, his connection to the world of philological scholarship did not end there. As mentioned in the previous chapter, Shen included tables from Chen Jinmo’s Huangji tuyun, a contemporary work of abstract cosmological phonology. In other sections, Shen also referred to the Hongwu zhengyun bujian [洪武正韻補箋 Supplementary notes to Hongwu zhengyun]


66 See especially examples provided in Dong Zhongsì, “Mingdai Shen Chongsui yuyin fenxiguan de ji xiang kaocha.”
compiled by Yang Shiwei 楊時偉 in 1631, as well as Yunxue jicheng [韻學集成 Comprehensive compilation of rhyme-study] and Zhiyin pian [直音篇 On homophones] by Zhang Fu 章黼 (1535 jinshi) in 1460. The Hongwu zhengyun bujian is in turn notable for its additions to the official standard rhymebook from the scholarship of Chen Di, Yang Shen, and others. Shen Chongsui and a number of his contemporaries in the world of opera theory were actively engaged in contemporary developments in the field of phonology. Although they are often described as conservative adherents to standard codifications from several hundred years before their time, it would be more accurate to say they were paying attention to and contributing to the broader contemporary field of phonology.

Further, Shen himself saw possible applications of his work outside of opera composition. In praising the value of Chen Jinmo’s rhyme tables, Shen exclaimed that by reading them according to his method, “even examination candidates could also be expected to precisely understand the meanings of words without needing to bother themselves with the minutiae of phonological analysis” (即舉業家，亦期精通字義，無須音析毫芒). In Shen’s view, students could overcome recitation issues or thorny philological problems in classical texts in accordance with the rhyme table tradition, especially if one adopted his approach, which emphasized pronunciation in place of inherently unstable written characters. Shen certainly aimed his work primarily at singers and composers, but understood that his method had implications in other fields. It is also possible, as evidence in this chapter suggests, that he would not necessarily have seen his work as separated from classical studies in such a strict manner as it would later be.

Shen’s method was influential in the 17th century in both philological and operatic works. Chen Jinmo himself, whose tables had featured in Shen’s work, adopted Shen’s tripartite spelling

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67 Duqu xuzhi, p. 249.
method in phonological studies he wrote later in life. The other adherents of Shao Yong’s cosmological methods, such as Pan Lei 潘耒 (1646–1708) and Zhao Shaoji 趙紹箕 employed the notion of the head, belly, and tail of a character in their analyses of Chinese phonology. The Ming loyalist Han Qia 韓洽 similarly wrote a voluminous dictionary of seal script forms (篆), which cited Shen’s phonological descriptions. Even in the early 18th century, the great scholar and phonologist Li Guangdi 李光地 (1642–1718) praised Shen’s work as containing phonological worth that went beyond simply use in opera composition.

Phonology in the 16th and 17th century was not a discrete field as it is today, nor primarily a vehicle for explicating the Classics as it was for many scholars from the mid-Qing on. Ecumenical Ming scholars drew on a tradition of phonological literature developed in a literary context as a starting point from which to create more nuanced descriptions of the Chinese language. The following section will trace the intensification of this style of scholarship in the early Qing before its eventual fall from the forefront of Chinese philology.

**Opera II: Li Yu, Mao Xianshu, Chai Shaobing, and the Early Qing Scene**

New alternatives for literati learning, and especially philology, appeared in the mid-17th century. Nevertheless, discussion of phonology within the operatic and literary sphere remained one of the major arenas for philological research well into the 1680s. I will begin with a

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68 Chen Jinmo 陳葦謨, *Yuanyin tongyun* 元音統韻, SKQS CMCS, j. 1, p. 22a.


70 See, for example, Han Qia, *Zhuxu cejie, fanli*, p. 10b, *shengyun biao*, p. 3b.

71 See citation in Uruyama Ayumi, “‘Dokyoku shuchi’ no sanji setsuhō ni kan suru ichi kōsatsu,” p. 335.
reevaluation of Li Yu’s 李漁 (1610–1680) contribution to the field. Li Yu is perhaps the best known literary figure of the period. His creative genius, expressed in short stories, operas, essays, literary criticism, and pornography is well documented in recent literary scholarship. His portrayal in the work of Patrick Hanan and others is as a man desperate to claim an “enduring reputation.”73 His network of literary and scholarly friends was enormous, and he consciously positioned himself among them to secure his own social position. If there was one area he lacked originality, it is said to have been on technical matters such as prosody and music. As Hanan has written, for Li Yu, “in matters of language and form, originality may not even be desirable at all.”74 Giorgio Casacchia has described Li’s dictionary of poetic rhymes as entirely imitative, “without any really new achievement in the field of phonetics.”75 Li Yu was by no means one of the great phonological scholars of the early Qing. However, he was paying attention to current debates and trying to make an original contribution.

Clearly aware of recent literary scholarship on the nature of language, Li Yu praised Cheng Mingshan’s Xiaoyu pu, noted in the previous chapter for its inclusion of Shao Yong’s tables alongside model aria handbooks.76 Li Yu’s interest in phonology was linked to the demands of precision in writing opera lyrics. As he recounts, out of all the many regulated literary forms, from eight-legged essays and parallel prose to regulated verse, filling in the lyrics to a given tune was the strictest and most difficult linguistically: “the length of phrases, the

73 Patrick Hanan, The Invention of Li Yu, p. viii.
74 Patrick Hanan, The Invention of Li Yu, p. 51.
76 Li Yu, Xianqing ouji, p. 10.
number of characters, the tone (level, rising, departing, or entering) of a sound, the voiced or unvoiced, *yin* or *yang* nature of the rhyme all have a set, immovable form” (句之長短，字之多少，聲之平上去入，韻之清濁，陰陽皆有一定不移之格). 77

Li Yu inserted himself into contemporary discussions of how to characterize Chinese rhymes in a number of ways. For example, in his essay “*Iu* and *mu* should be separated” [魚模當分], Li argued that librettists should not blindly follow *Zhongyuan yinyun* in the composition of southern arias. Li’s essay was not original in content, but it does place him within a contemporary linguistic debate. 78 In addition, Li seems to have been paying attention to the latest developments in methods of “spelling” Chinese sounds. In an essay on the pronunciation of characters in singing, Li discussed Shen Chongsui’s method of dividing the syllable into three segments (which Li referred to as ‘head’ 頭, ‘tail’ 尾, and ‘remaining sound’ 餘音, as opposed to Shen’s ‘head’, ‘belly, and ‘tail’). In evaluating recent lexicographical works, including the 1615 *Zihui* [字彙 Assemblage of characters], Li noted that they maintained the traditional *fanqie* method of using only two characters. However, the three phonetic components of the character, for Li, were a “natural creation” (天造地設). 79 He went on to further abstract these phonetic components from their written characters by claiming: “The head, tail, and remaining sound of a character all must be hidden. One can only be called good at using the head and tail if, when you let the listener hear it, there is only the sound and not the character. As soon as there is the trace of a character, then you’ve muddied the waters, and it would be better to have nothing at all” (字...

77 Li Yu, *Xianqing ouji*, p.32,

78 Wang Jide, for instance, had written earlier on this topic. See Wang Jide, *Qu lü*, p. 113.

Although this remains within the context of singing, it is still significant in its relation of the standard philological tradition to phonetic methods developed in an operatic context, and its emphasis on sound (音) over script (字).

Li differed from many of his colleagues in the philological world of the late Ming and early Qing in his disregard for ancient pronunciations. As he wrote in the preface to a dictionary of poetic rhymes, “if the men of antiquity were around today, then the sounds they made would necessarily be the same as men of today” (使古人至今而在，則其為聲也，亦必同於今人之口).

In his opinion, if one were to imitate the ancient rhymes that no longer worked in the Chinese of his time, one would only succeed in “thwarting everyone’s pronunciation and grating on their ears” (聲天下之牙而並逆其耳乎).

Nevertheless, he actively paid attention to the activities of philologically minded colleagues. Hence, in the preface to another dictionary he compiled on ci lyric rhymes, Li expressed his familiarity with contemporary scholarship in literary phonology, as well as a desire to correct and contribute to it.

Li Yu in fact was not the

80 Li Yu, Xianqing ouji, p.100.
82 Li Yu, Liweng shiyun, p. 208.
83 For example, Li commented that, “For the rhyme group 支 ji/思 si, Zhongyuan yinyun suffers from being too strict. The characters it includes in the level tone are not even 100. Shen Qian’s 沈謙 Ciyun suffers from being too lenient. The characters it includes in the level tone nearly surpass 1000. It must be because it combines 微 vui, 齊 dzei, and 灰 xuei as interchangeable. I claim that within the rhyme group 支 ji, there are three sounds which seem to be the same but are different. They are 支 ji, 垂 djui, and 奇 gi” (支思一韻，《中原》病其太嚴，平聲不滿百字，去矜《詞韻》病其太寬，平聲幾至千餘字。蓋合微、齊、灰通用故也，予謂即「四支」一
passive inheritor of phonological norms. Rather he considered the phonological categorizations of past and contemporary scholarship, and occasionally deviated from the precedents when he felt he had devised a better system.

Li Yu may have been a unique literary genius and an inveterate self-promoter, but he was also a man of his times. As with other literary figures, beginning from several generations prior, Li Yu published dictionaries and proposed methods for thinking about Chinese phonology. He also maintained correspondence with leading contemporary phonologists. To some extent, Li Yu had become a member of the broader phonological community, both in his citation of and communication with other scholars. This was facilitated by the nature of contemporary philology, which greatly valued the study of phonology within a literary context.

Li’s most prominent colleagues in the field of phonology were Mao Xianshu 毛先舒 (1620–1688) and Chai Shaobing 柴紹炳 (1616–1670) who represent the culmination of literary philology in the late imperial period. Both scholars wrote widely on issues of philology and were regarded as experts in the community of philological scholars. They did not write opera like Li Yu, but they were well-regarded composers of poetry and ci. Their scholarship alternates between theoretical discussions of ancient Chinese phonology and practical application in contemporary literary forms in a way that would no longer occur when philology had moved primarily into the world of classical studies. They maintained scholarly communication with Gu

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84 Mao Xianshu, one of the great phonological scholars of the period, included a letter he wrote to Li Yu on the importance of attention to prosody in opera composition in one of his works on phonology. Mao Xianshu, Yunbai, pp. 30a–31a.

85 For a fellow philologist’s appraisal of Mao, see Xiong Shibo, Guyin zhengyi 古音正義, p. 1b.
Yanwu, who later was upheld as the originator of the evidentiary learning movement in the Qing. However, although they considered themselves to be attempting similar goals, they generally did not agree with his methods. As I will discuss in the final section of this chapter, Gu Yanwu, despite his later fame and popularity, was a major target of criticism in his own time. This criticism emerged from a scholarly tradition with vastly different values and methods from Gu’s own, rather than the skeptical nature of a budding evidentiary learning community.

Although Mao Xianshu did not write opera, he nevertheless found kunqu opera to be a useful arena for talking about Chinese phonology. As with scholars discussed above from the late Ming, such as Wang Jide and Shen Jing, Mao wrote a dictionary (also no longer extant in full) for this particular literary context, titled Nanqu zhengyun [南曲正韻 Correct rhymes for southern arias]. The continued production of lexicographical works for specific literary genres speaks to the persistent influence of the literary on the philological in this period. After the 1680s, such works of literary phonology would largely disappear, with some important exceptions during the flourishing operatic culture of the Qianlong period.

In his “Nanqu rusheng ke wen” [“南曲入聲客問” “Dialogue on the Entering Tone in Southern Arias”], Mao discussed both the practical issues of composing arias with an entering tone rhyme, and more abstractly the nature of the entering tone. Mao proposed a system that still recognized entering tone rhymes as distinct from the other three tones (as opposed to Zhongyuan yinyun which eliminated the entering tone as a viable rhyming category), but allowed singers to

86 Li Yu, as well, printed two dictionaries for specific genres. He also documented a Nanci yinyun [南詞音韻 Rhymes of southern lyrics], nearly completed but never printed by his contemporary Cisheng 陳次升. Li Yu, Xianqing ouji, p. 40.

87 For example Yunxue lizhu 韻學麗珠 and Yuefu chuansheng 樂府傳聲.
change the tone in practice.\(^{88}\) In the prefatory inscription to the text, Zhang Chao 張潮 (b. 1650) attempted to explain Mao’s concern with entering tone from a historical perspective:

The empire of antiquity was focused in the northwest. Hence its tones were level, rising, and departing, with no entering. In the empire of later times, because it contained the southeast, in order to fill the completeness of the universe, so it was also necessary to add the entering tone to supplement them. Ever since, the primordial tones of the empire had the flaw of lacking nothing, yet being incomplete.

His argument seems to be that discussion of the entering tone had gotten short shrift because it was a later accretion to the language of antiquity. Zhang’s explanation is historically dubious, as northern topolects only lost the entering tone in later periods.\(^ {90}\) Wang Shizhen claimed just the opposite in the preface to his own work of opera criticism, Quzao [曲藻]: “North of the Yangzi

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\(^{88}\) Mao claimed that in the composition of arias, entering tone could only by rhymed with other entering tones (單押). However, because the nature of the entering tone was “choppy and halting” (謎然以止), it could not be sung at sufficient length in slow arias. Therefore, in practice singers could sing the character according to a different tone, depending on the musical-prosodic formulary (譜). Mao claimed there was a subtle but important difference between this and what Zhou Deqing advocated in Zhongyuan yinyun. Mao believed that Zhou had fundamentally ‘changed the sound’ (變音) of entering tone characters, for example glossing zhī 吉 as zhèng + dī (繩知) and vù 物 as vū 務. In Mao’s system, liouc 綠 could be pronounced as such, rather than as liū 愕, and liuc 六 rather than liú 溜, only slightly modifying the pronunciation to fit the melody. See Mao Xianshu 毛先舒, Nanqu rusheng kewen 南曲入聲客問, in Zhongguo gudian xiqu lunzhu jicheng 中國古典戲曲論著集成 (Beijing: Zhongguo xiju chubanshe, 1959), Vol. 7, pp. 129–130.

\(^{89}\) Mao Xianshu, Nanqu rusheng kewen, p. 127.

\(^{90}\) The issue of tones in antiquity is contentious, even today. Certainly we cannot judge Zhang Chao too harshly. Even great linguists of the evidentiary learning period, like Duan Yucai, Kong Guangsen, and Jiang Yong debated the presence of all four tones in antiquity. William Baxter, A Handbook of Old Chinese Phonology (Berlin: Mouton de Gruyter, 1992), p. 304.
river, [the language] was gradually contaminated by northern tribal tongues, continuously adopting from it, and consequently one was lost from the four tones of Shen Yue” (但大江以北，漸染胡語，時時採入，而沈約四聲遂闕其一). Regardless of the accuracy of these assessments, it is clear that there was a perception that the nature of the entering tone was a problem of historical stages of the Chinese language, not just literary endeavors. This further allowed scholars to argue on the basis of a precedent in antiquity either for or against the preservation of the entering tone in a standard literary language.

Mao Xianshu himself took great issue with the contention that the study of ancient Chinese phonology was the study of northern Chinese. Mao’s contemporary Gu Yanwu had contended that the sages of antiquity were all originally from the north China plain, and therefore northern varieties of Chinese in fact had a closer relationship with the language of antiquity. He further, much to Mao’s consternation, explained some apparent discrepancies in ancient rhyming practices as the result of dialect pronunciations. To Mao and his cohort, dialect represented linguistic impurity and was not something the sages in antiquity would have engaged with. In a letter to Gu Yanwu, Mao wrote:

The ancients said, ‘if one’s words lack wen, they will not travel far.’ Wen is said in contradistinction to the vulgar. Hence I claim that the wen of the writers of antiquity, which expresses intent, must be based on the shared wen/language, harmonizing its sounds and pitches. That it does not mix with the local, vulgar sounds is very clear. Only the novels and operas of later generations contain them in order to procure laughter. Why would the noble man intentionally imitate this in writing literary compositions? For example, today we have dialects, and also have the official koiné. Those traveling the four directions in pursuit of office, trade, or travel avoid dialect and become proficient in the official koiné. How much more so was it when the ancients composed writing. As for the ancient literary men [Sima] Xiangru and Yang Xiong, they both had stutters, but became the forefathers for composing poetic works. Reading their compositions now,

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91 Wang Shizhen 王世貞, Qu zao 曲藻, in Zhongguo gudian xiqu lunzhu jicheng 中國古典戲曲論著集成 (Beijing: Zhongguo xiju chubanshe, 1959), Vol. 4, p. 25.
their works never contain st-stuttering or st-stammering. Thus between speaking and writing, hand and mouth differ greatly. How could one claim that the study of phonology is found in dialect, and further seek an understanding of phonology by means of dialects?

This striking statement, quite at odds with the modern field of phonology, was representative of a common perception among late Ming scholars that dialect and local languages were degenerate forms of a more perfect, original Chinese language. As in the case of the study of rhyming in the Yijing, it is clear that these scholars saw the sages of antiquity not only as founding moral and ethical thinkers, but also as literary figures.

Mao’s letter evokes parallels with the literary culture of the Tang dynasty. Peter Bol has discussed how the phrase ‘if one’s words lack wen, they will not travel far,’ attributed to Confucius in Zuozhuan, served as a rallying cry among early Tang court scholars describing the importance of literary activity as a moral-cultural endeavor. Confucius is also reported to have said many other, seemingly contradictory, things about literary composition, as Su Shi 蘇軾 (1037–1101) pointed out in his famous letter to Xie Minshi (答謝民師書), such as “Verbal

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92 According to Sima Xiangru’s biography in Shiji and Yang Xiong’s in Hanshu, both writers had stutters.

93 Mao Xianshu 毛先舒, Xunshu 蠻書 (Shanghai: Shanghai guji chubanshe, 2009), j. 6, p. 5b.

elaborations simply get the point across” (辭達而已). In this same letter, Su went on to criticize the Han dynasty thinker Yang Xiong as shallow, more concerned with stylized language than making a substantial point. In the letter above by Mao Xianshu, Yang Xiong is instead the model precisely because he clearly did not base his literary composition on speech. ‘If one’s words lack wen, they will not travel far’ was not something that needed to be qualified for Mao. In this sense it is reminiscent of Tang dynasty usage. The citation is all the more pointed, however, after centuries of scholars arguing for the qualified application of this statement. In this instance it is used in a more historical sense than in the Tang. Mao admitted that dialect was a feature of contemporary literature, albeit a lowly one. However, the ancients, according to Mao, believed it had no place in composition. Mao imbued his phonology with assumptions about both the literary nature of classical texts, and the sociolinguistic conditions of society in antiquity. Based on these assumptions, he argued that aberration was tantamount to criticism of the sages’ intelligence.

95 Peter K. Bol, “This Culture of Ours”: Intellectual Transitions in T’ang and Sung China, p. 294.

96 Yuan Zongdao, for instance, appealed to the phrase “Verbal elaborations simply get the point across” to support the notion that spoken language should form the basis of a literary language. See Chou Chih-ping, Yüan Hung-tao and the Kung-an School, p. 29. Gu Yanwu, on the other hand, observed the resurgence of Yang Xiong as a model in the late Ming, considering this separation of spoken and written language to be positive. See Gu Yanwu, Rizhi lu, Vol. 19, p. 749: “Did Confucius not say, “Their scope reaches far, and their explanations are elegant”? Did he not say, “If one’s words lack wen, they will not travel far”? Yang Shen has said, “Wen is the Way. Poetry is words/yan. When ‘recorded sayings’ emerged [as a genre], wen and the Way were separated. When ‘comments on poetry’ emerged [as a genre], poetry and words parted ways. Ever since the Jiajing period, people have understood that ‘recorded sayings’ are not wen. Thus Wang Shizhen’s Zhaji and Fan Shouji’s Fuyu are modeled above on Yang Xiong and below on Wang Tong. Although the level of depth they achieved differs, they can be said to have understood words.” 然則夫子不曰：「其旨遠，其辭文」乎？不曰：「言之無文，行而不遠」乎？...楊用修曰：「文，道也。詩，言也，語錄出而文與道判矣，詩話出而詩與言離矣。」自嘉靖以後，人知語錄之不文，於是王元美之《札記》、范介儒之《牘語》，上規子雲，下法文中，雖所得有淺深之不同，然可謂知言者矣。
As Mao stated in another work, “In the Six Classics, 天 tien [hlin] and 年 nien [nin] belong to the 真 jen/文 wen [tsrjin/mjun] rhyme group and 下 heah [gra?] and 马 maa [mra?] both belong to the 語 qiuu/虞 qiu [ngja?/ng“ja] rhyme group. Could it be that [because these no longer rhyme in today’s Mandarin we can infer that] Confucius, in editing the Classics, was also ignorant of the principles of rhyme and mired in dialect?” (六經，天年俱屬真文，下馬俱屬語虞，豈孔子刪述亦昧韻理而泥土音耶). In his view, one shared by the vanguard of phonology of the time, claiming that the ancients employed dialect was a facile way of avoiding the complexities of ancient phonology. His proof was that the use of dialect would have violated the norms of literary convention in the past. Hence, once again, philology as a field was perceived to be inherently tied to the literary quality of texts. Further, classical texts which we now consider outside of the realm of literature were considered to be a part of the literary canon of antiquity by many in the 17th century.

Mao’s scholarship was also deeply steeped in that of the late Ming. His citations of philological scholars selected from both literary philologists and others without a sense of contradiction. In another phonological work, Mao revealed the influence of Shen Chongsui, the late Ming theorist of opera pronunciation: “If one wishes to be clear on the principles of rhyme, one must first understand the tripartite explanation of the initial (sheng), tone (yin), and final (yun). It must be that the completeness of one character necessarily has a head, belly, and tail”

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97 Transcriptions in brackets adapted from William Baxter, *Handbook of Old Chinese Phonology*. These transcriptions highlight the fact that the characters Mao raises do indeed belong to a shared rhyme group.

Mao here employs Shen Chongsui’s three-part categorization of the elements of a syllable before making an argument for the fundamental importance of the rhyme or final. A later section of this work contains a “Disputation of Mr. Shen’s Duqu xuzhi” [沈氏度曲須知辨], which further demonstrates his familiarity with Shen’s methods.\(^{100}\) Shen’s *Duqu xuzhi* was reprinted in 1649 (after its original 1639 printing) in an edition that combined this text with another work of his devoted to pronunciation in operatic works.\(^{101}\) The text seems to have been widely read at this time, both in operatic and philological circles. Shen’s tripartite division of the Chinese character is commonly acknowledged to have had a lasting influence on discussions of pronunciation within operatic circles. The above example is important in its demonstration of the fact that it also influenced early Qing conceptions of phonology outside of the strictly operatic. As Mao himself averred, “[Shen’s *Duqu xuzhi*] clearly distinguished the subtleties of the principles of sound. It is not only something one should study in composing arias, but is also a meritorious servant for phonology” (其于聲音之理，清辯入微，不第度曲獶當審，亦是韻學之功臣也).\(^{102}\)

For the application of Shen’s theory to a phonological rather than operatic argument, we

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\(^{100}\) Mao Xianshu, *Yunxue tongzhi*, pp. 49b–53a.

\(^{101}\) This is the *Xiansuo bian’e* [弦索辨訥], which is concerned with setting the correct pronunciations for singing northern arias, as opposed to the *Duqu xuzhi* which addresses issues in both southern and northern opera. The 1649 edition also contains the preface by Shen’s son, Shen Biao, discussed above.

\(^{102}\) Mao Xianshu, *Yunxue tongzhi*, p. 51a. Mao proceeds to severely criticize some aspects of Shen’s study in this “Disputation,” including a number of his *fanqie* spellings, and most importantly his adherence to *Zhongyuan yinyun*. 
can turn to an important epistolary debate on the bipartite *fanqie* spellings of Chinese syllables between Mao and Chai Shaobing over the pronunciation of the character *bhin* 頻. Mao asserted that it should be spelled *bhi* 皮+ *qin* 銀, pronounced *bhin* 竄, as opposed to Chai’s spelling of *fvu* 符+ *jen* 真, which in Mao’s view would lead to a pronunciation closer to *fven* 墩. To prove his point, Mao claimed that “if you just read this character out loud slowly, it will naturally contain the characters *bhi* and *qin*, and I think there will no trace of the characters *fvu* and *jen*” (但將此字慢聲讀之，天然自有皮銀二字，意實未嘗有符真二字矣). Chai replied that this was aping Shen Chongsui’s method of “head, belly, and tail”, which was only applicable to singing. Mao returned, “That in *fanqie* two sounds combine into one, and further one sound can be separated into two is an axiomatic principle of phonology. When a child drops onto the earth from heaven it utters a spoken sound, and this spoken sound contains the two sounds of *u* and *huh*. How would it know about the so-called head, belly and tail? Thus we know that this matter did not originate in singing, nor did it begin with Mr. Shen” (翻切合二音為一音，又可分一音為二音，此是韻學定理，由先天來嬰兒墮地作一話聲，此話聲即呂吾「103」二聲，彼豈知所謂頭腹尾者。故知此事非嘗唱歌，亦不始于沈氏).104 Both phonologists were clearly familiar with Shen Chongsui’s theories, and again Mao made a case for its superiority as a method of thinking about the sounds of Chinese outside of the literary tradition.

Mao framed his work within a tradition of Ming scholarship, frequently citing a number of late Ming scholars with approval, including Fang Risheng 方日升 and Ye Bingjing 葉秉敬, as well as Yuan Zirang, discussed in Chapter 1 as a proponent of Shao Yong’s approach to

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103 Indistinct, but clearly sharing the phonetic component of words like *huh* 揪 and *huh* 護 (there are other possible pronunciations, all with medial –*u*).

phonology. At the same time, he did not endorse all Ming phonological scholarship. Despite his view of the literary nature of the Classics, Mao roundly criticized Zhang Xianyi’s study of rhymes in the Yi Jing, claiming that “although [Zhang] read many books, he was not an expert on the principles of sound” (閲書雖多而未精音理). Similarly to other scholars from this period, he was much more lenient with Zhu Xi, whom he considered a “great Confucian scholar” (大儒), whose deep classical insights excused his lack of phonological specialization. In another work, after correcting some errors in Zhu’s commentary, he proceeded to point out areas in which Chen Di’s attempts to improve on Zhu Xi occasionally overcorrected things that Zhu had gotten right in his view.

His letters to contemporary scholars alternate between discussions of how to use rhymes in aria or poetic composition and analyses of middle Chinese or ancient rhymes. In the Ming, we saw how literary figures themselves would arbitrate philological debates in theoretical works, and would at least claim to embody their positions in literary composition. For Mao, however, it was ultimately the phonologist who bore the greatest responsibility. As he stated in his criticism of one Ming philological work, “Among errors in phonology, the harm in sloppy literary composition is little, while the harm in baselessly creating a rhyme table is great” (韻學之失，操觚濫通之害少，妄撰成譜之害多). According to Mao, literary scholars paid attention to

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105 Mao Xianshu, Yunxue tongzhi, p. 31a; Yunbai, pp. 27b–28a.
106 Mao Xianshu, Yunbai, p. 24a.
107 Mao Xianshu, Yunbai, p. 25b. Contemporaries who shared this view include Xiong Shibo 熊士伯, Jiang Guoxiang 蔣國祥 and Cai Yong 蔡泳.
108 Mao Xianshu, Yunxue tongzhi, p. 49a–b.
109 For example, Mao Xianshu, Yunbai, pp. 11b–12a, 20a–21b; Xunshu, j. 6, p. 5b.
110 Mao Xianshu, Yunxue tongzhi, p. 53b.
phonological scholarship, and mistakes they might make could be directly traced to the phonologists. Although often involved in theoretical analyses of phonology, Mao had an eye toward literary application. In this way, too, Mao maintained the status of phonology within literary learning wenxue in addition to classical jingxue.

Mao Xianshu was not alone in his approach to phonological scholarship. He was rather the most prolific of a group of scholars based primarily in Renhe 仁和 and Qiantang 錢塘 counties in Hangzhou 杭州. Some of these scholars pointedly refused serving the Qing government, with Chai Shaobing even reportedly rejecting the Zhejiang Provincial Governor Fan Chengmo’s 范承謨 (1624–1676) recommendation during the Kangxi Emperor’s 1669 search for promising “recluse scholars” (山林隱逸之士). Others achieved notable positions in the Hanlin Academy and central government agencies. Despite active court efforts to bring the highest level of scholarship to the capital, the most prolific of these philological thinkers remained in Hangzhou acting as local teachers and scholars. Largely adherents of xinxue, rather than the orthodox Cheng-Zhu Neo-Confucian values taking shape at the court, scholars such as Mao Xianshu saw themselves as inheriting the mantle of late Ming thinkers like Liu Zongzhou 劉宗周 (1578–1645).

As Chai pointed out in the Editorial Principles fanli to his Guyun tong [古韻通 Comprehending ancient rhymes], Mao Xianshu was a particularly active member of a substantial

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111 Mao isolated Yang Shen 楊慎 (1488–1559), in particular, whose widespread phonological publications he believed had a deleterious effect on the quality of literary production in the Ming. Mao bemoaned this influence, exclaiming, “if only we could raise [Yang] Shen from beyond the grave and continuously dispute his opinions” (安得起慎于地下而連抦其口哉). Mao Xianshu, Yunxue tongzhi, p. 31a.

112 Qian Lin 錢林, Wenxian zhengcun lu 文獻徵存錄, XX SKQS, j.1, p. 32a.
community of likeminded phonological scholars including: Wu Baipeng 吳百朋 (1614–1670), Sun Zhi 孫治 (1619–1683), Zhang Jingguang 張兢光, Shi Guizhang 施閑章 (1618~1683), Huang Yanbo 黃彥博 (1664), Wu Renchen 吳任臣 (1628~1689), Lu Fanchao 陸繁弨 (d. 1684 or 1670?), and Xu Fen 徐汾, among others. Members of the group prefaced each other’s works and referenced one another’s scholarship. They include scholars both primarily known for philology, like Wu Renchen, and for poetry, like Wu Baipeng, as well as a few located somewhere in between, like Sun Zhi and Xu Fen.

Some produced lexicographical works aimed specifically at composition within a particular genre, similar to those mentioned earlier by Li Yu, Wang Jide, and Shen Jing. Zhong Heng 仲恆, for instance, another native of Qiantang, published a Ciyun 詞韻 Ci rhymes, which cited the discussions of many other local poets with regard to phonology, and also appended a short text by Chai Shaobing, edited by Mao Xianshu. Others, like Wu Renchen published general lexicographical studies, such as the Zihui 字彙 A supplement to the

113 Chai Shaobing 柴紹炳, Chaishi Guyun tong 柴氏古韻通, SKQS CMCS (1668 edition), fanli, p. 4a–b.

114 Shen Qian’s Ciyun 詞韻 and Xu Fen’s Saofu tongyun 騷賦通韻, for example. For a discussion of Shen’s scholarship, see Jiang Heyou 江合友, “Shen Qian ‘Ciyun lue’ de yunbu xingzhi ji qi ciyun shi yiyi” 沈謙《詞韻略》的詞性形制及其詞韻史意義, Hebei shifan daxue xuebao 32.3 (2009): 72–77. On Saofu tongyun, see Sun Zhi’s preface, which notes, “[this work] can also supplement what the Arts and Elegantiae [of the Shijing] did not reach, and is not merely a guide for fu composition. The completion of this book surely does no disservice to the rhymes of antiquity” (此又以補風雅之不及而又非徒為騷賦先驅也是書之成其于古韻殆無憾矣乎). Once again, the study of ancient rhymes and the rhyming structure of the Shijing is considered compatible with poetic application. See Sun Zhi 孫治, Sun Yutai ji 孫宇台集 (Beijing: Beijing chubanshe, 1997), j. 7, p. 11b.

115 See Zhong Heng 仲恆, Ciyun 詞韻, SKQS CMCS (1679 edition), lunlüe, pp. 1a–10b. Their membership in the community is occasionally corroborated with other sources, as in the case of Zhao Qianmen 趙千門, with whom Mao preserved correspondence on phonological matters in his wenji. See Mao Xianshu, Xunshu, j. 6, pp. 17b–20b.
Assemblage of Characters] which makes additions to and corrects Zihui, the crowning achievement of Ming lexicography discussed in the Chapter 1.\textsuperscript{116} Hong Sheng 洪昇 (1645–1704), as well, one the most famous kunqu opera masters of the period composed a dictionary entitled Shi Sao yunzhu [詩騷韻注 Commentary on the rhymes of the Shijing and Lisao]. Mao Xianshu wrote a preface to this dictionary, claiming that Hong was “by nature partial to phonology” (性近韻學), and intended to improve on the tradition of commentaries on the rhymes of antiquity by Zhu Xi and Chen Di.\textsuperscript{117} One juan of this work remains extant in a late Qing manuscript copy at the National Library of China. Based on this volume, the content appears to actually be a general dictionary of poetic phrases arranged by the rhyme of the final character in the phrase. Citations range from texts as early as the Shijing and Lisao, to as late as Song poets, and even Tao Zongyi 陶宗儀 (1329–1410). Here we see the persistence of the tradition beginning in the Song with Wu Yu and reaching a highpoint in the late Ming among scholars such as Zhang Xianyi of conflating the rhymes of antiquity with later poets. As in the late Ming, scholars of phonology and literature intermingled and contributed to each other’s projects. Both Wu Renchen and Chai Shaobing also worked closely with Chen Jinmo, one of the most abstract cosmological phonologists.\textsuperscript{118}

Interestingly, Chai also included Gu Yanwu on the list of people he discussed phonology

\textsuperscript{116} Wu Renchen’s place in early Qing script studies is relatively well known, but less understood is his interest in phonology or connection with this circle. As revealed in the Introductory Notes [例言 liyan] to Zihui bu, Wu also wrote a study of rhymes called Yunyuan [韻原 Origin of rhymes], which he claimed “matches inside and out the Guyun tong by Mr. Chai [Shaobing] of Qiantang and the Yunxue tongzhi by Mr. Mao [Xianshu]” (與錢塘柴氏《古韻通》，毛氏《韻學通指》相為表裏). Wu Renchen 吳任臣, Zihui bu 字彙補, XX SKQS, liyan, p. 4b.

\textsuperscript{117} Mao Xianshu, Xunshu, j. 2, pp. 5b–6a.

\textsuperscript{118} Wu Renchen helped edit Chen’s Yuanyin tongyun [元音統韻], and Chai discussed Chen’s methods in his own scholarship. See Chai Shaobing, Chaishi Guyun tong, zashuo, pp. 23a–25b, 42a–44a.
with, as one of the few scholars not located in Zhejiang. However, as with Mao, his references to
Gu throughout his works are generally critical.  Gu Yanwu clearly respected them as
phonologists and cited them throughout *Yinxue wushu*. Zhang Minquan has argued that Chai’s
criticism of Gu’s earlier work appears to have influenced Gu’s later theories. Indeed, Li
Guangdi (1642–1718) commented that Mao’s writings and those of Gu “mutually expounded
each other” (互相發). For Li Guangdi, Mao provided an understanding of phonology based in
that of Shen Chongsui’s *Duqu xuzhi*, which made it usable in musical contexts. At the same
time, it seems that Chai and Mao did not fully accept even Gu’s later work.

**Conclusion: Gu Yanwu and 17th Century Intellectual Trends**

Much attention has been paid to the 17th century as a period of transition where leading
scholars turned toward statecraft and practical learning. However, the evidence in this chapter
demonstrates how alternative models of scholarship flourished during this period and posed a
considerable challenge to the methods that would eventually come to be seen as evidentiary. As

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119 For example Chai Shaobing, *Chaishi Guyun tong, zashuo*, pp. 34b–36b (which does not
mention Gu by name, but clearly cites Gu’s arguments).

120 Gu Yanwu, *Yinxue wushu*, p. 131, 386, 513, and elsewhere.

121 Zhang Minquan 张民权, *Qingdai qianqi guyinxue yanjiu* 清代前期古音学研究 (Beijing:

122 Li Guangdi 李光地, *Rongcun xu yulu* 榧村續語錄, ed. Chen Zuwu 陳祖武 (Beijing:

123 See for example, Mao Xianshu, *Yunbai*, p. 217-457.

124 Benjamin Elman, *From Philosophy to Philology: Intellectual and Social Aspects of Change in
Late Imperial China*, pp. 49–50; Nathan Sivin, “Wang Hsi-shan (1628–1682),” in *Dictionary of
“Minmatsu Shinsho shisō ni tusite no ichi kōsatsu” 明末清初思想についての一考察, *Tōkyō
discussed in Chapter 1, Fang Yizhi 方以智 (1611–1671), often seen as a representative of new trends that would take hold in Qing scholarship was in fact basing much of his phonological theory on that of the late Ming cosmologists. Mao Qiling 毛奇齡 (1623–1716) is another such example. Mao was an argumentative man, who ferociously criticized scholars from the past alongside his contemporaries. Despite his blustering, he was frequently misguided according to present day standards, as in the famous case of his dispute over the forged sections of the *Shangshu* with Yan Ruoqu 閻若璩 (1636–1704).\(^{125}\) An equally important example in fact comes in the form of an expansive rhyme dictionary he published with the aid of the imperial court. Printed in 1684, the *Kangxi jiazi shiguan xinkan gujin tongyun* [康熙甲子史館新刊古今通韻] Newly published History Office comprehensive rhymes from past and present from the Kangxi *jiazi* year], was a massive twelve volume text, replete with numerous prefaces from high ministers. It would be unfair to claim the work did not innovate. Mao created a new terminology and attempted to group modern and ancient rhymes in ways that had not been done before. However, as has been discussed elsewhere, his method was ultimately derived from and perhaps the pinnacle of the forced rhymes (葉韻) theory devised by the Song dynasty phonologist, Wu Yu, which influenced the methods of Ming literary scholars like Zhang Xianyi.\(^{126}\) It may be hard to imagine why so many scholars wrote in praise of Mao’s work. Perhaps, as Zhang Minquan suggests, they were toadying to the Kangxi emperor.\(^{127}\) However, literary approaches to phonology marked the era in ways that indicate to me that the praise may not have been entirely

\(^{125}\) Benjamin Elman, *From Philosophy to Philology: Intellectual and Social Aspects of Change in Late Imperial China*, pp. 200–202.


While scholars like Gu Yanwu achieved considerable later fame and admiration, his theories were ignored, criticized, and repudiated by many of his contemporaries, despite a shared political allegiance to the fallen Ming. Gu did have one faithful colleague-in-arms in philology, Li Yindu 李因篤 (b. 1631), who reportedly punched Mao Qiling in a dispute over Gu’s phonological theories.128 This kind of argumentative spirit has been identified as part of the essence of kaozheng evidentiary learning.129 However, disputation was nothing new to the Chinese intellectual tradition. Mao Qiling may have positioned himself as an idiosyncratic and innovative thinker, but in some sense he was representing a mainstream approach shared with many of his colleagues. Rather than seeing such debates as emerging from a new concern with language in a context of budding evidentiary learning, we can see this as the clash between different methodological priorities: one seeing history as the key to unlocking the meaning and pronunciation of texts, the other based in literary values.

A mid-17th century phonological work by Chen Jinmo illustrates nicely the changes occurring over the course of the 17th century. This work, titled *Huangji tongyun* [皇極統韻 Systematized rhymes of the imperial august] (published 1661), was published between his *Huangji tuyun* [皇極圖韻 Diagrammed rhymes of the imperial august] (prefaced 1632) and *Yuanyin tongyun* [元音統韻 Systematized rhymes of the primordial sounds] (published posthumously in 1714). *Huangji tongyun* included two juan on the rhymes of arias (曲韻), which

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128 Quan Zuwang 全祖望, *Jieqiting ji waibian*, 魯培亭集外編, XX SKQS, j. 12, p. 29a; Ruan Kuisheng 阮葵生, *Chayu kehua*, 茶餘客話, XX SKQS, j. 8, p. 8a.

are unfortunately no longer extant. In his final work, the *Yuanyin tongyun*, published in the early 18th century, these *juan* on aria were no longer included. The role of cosmology, although present, was also downplayed in the final work.

The literary was increasingly divorced from the field of serious philology. However, in some sense the goals of the literary phonologists of the 16th and 17th century did not differ so greatly from those of the 18th century evidentiary scholars. From an 18th century perspective, such scholars were caught up in the decadent literary culture of the late Ming. However, returned to their original context, it becomes apparent that these scholars in fact saw themselves as involved in the field of philology. A different set of disciplinary boundaries applied which allowed the literary, classical, and philological to cross-fertilize each other without a sense of contradiction.

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130 The only known copy of *Huangji tongyun* is preserved in the Henan Provincial Library. The rare books collection was under renovation during the summer of 2015. For the moment, I rely on the description in Urayama Ayumi 浦山 あゆみ, “Chin Shinmo ‘Genon tōin’ wo megutte: ‘Hōkyoku tōin’ to no hikaku wo chūshin ni” 陳箴謙『元音統韻』をめぐって：『皇極統韻』との比較を中心に, *Bungei ronsō* 83 (2014): 96–110.
CONCLUSION: DIAGRAMS IN MING KNOWLEDGE

This dissertation has explored philology as it engaged with several seemingly unrelated fields in late Ming China. 16th and 17th-century scholars established correlations between cosmology and music in order to create comprehensive systems of phonetic description, validated by their basis in perceived universal and mathematical constants. This search for comprehensiveness encouraged some to study phonetic scripts, especially Sanskrit. While the value of phonetic writing was apparent to scholars of phonology, others decried the usage of such scripts as inferior to the Chinese writing system. Neo-Confucian xinxue thinkers in particular saw the script itself as the key to the moral values of antiquity. Finally, literary and operatic scholars embraced the methods of cosmologists, musical scholars, and Neo-Confucians, as they attempted to establish new literary language standards, as well as innovative ways to describe pronunciation in performance contexts.

Beyond the specific discipline of philology, the relationships between various fields and philology tell us something important about the nature of intellectual culture in the 16th and 17th centuries. Scholars in this period generally sought meaning based on a sense of universal coherence, although the basis of this coherence was debated. Disciplinary knowledge could be verified on the basis of its congruence with a greater system. Although neglected in most accounts of intellectual history, philology was a central intellectual enterprise for Ming scholars, and one which was particularly well-suited for cross-disciplinary thinking. As this dissertation has argued, the differences between intellectual culture in the 16th and the 18th centuries can be better understood as a change in scholarly methodologies and the borders surrounding the discipline of philology than a shift toward its study.
Perhaps no feature of Ming scholarship better captures the intellectual ethos of the time than the proliferation of diagrams, which establish correlations between various spheres of knowledge. These diagrams frequently comprise a set of concentric circles, each layer of which contains elements from a particular field. Diagrammatic schemes for classical exegesis flourished in China during the 12th and 13th centuries.¹ For the most part, these focused on a single text or field of knowledge. Diagrams in the late Ming, however, incorporated disparate subjects, making an argument for an underlying unity across disciplines. Such diagrams were often modeled after a tradition of Yijing interpretation, associated with Shao Yong, and often based on the idea of “number” (shu 數) as a unifying principle. As a result, they were also considered a validation of the inartificial or natural basis of categorizations. In this sense, they embody the fundamental characteristic of philological scholarship identified in this dissertation: that is, namely, the use of methods from outside disciplines in order to create a more comprehensive form of linguistic description.

The diagrammatic impulse of the period in fact went beyond the xiangshu (‘image and number’ 象數) tradition of diagrams which typified Yijing interpretation. In their diverse forms, these diagrams exemplify the search for unity among Ming scholars. Diagrams offered a direct schematic representation of complex arguments for coherence across disciplines. One late Ming scholar wrote that the meaning of diagrams, as opposed to verbal description, “can be understood at first glance” (一見而可知).² Conceptually, however, the geometric diagrams of


late Ming scholars were more than simplified visual aids. As Wang Bo 王柏 (1197–1274) argued in the preface to a famous set of 13th century Neo-Confucian diagrams, “it must be that the meaning of one diagram could not be exhausted in a hundred million words” (蓋有一圖之義，極千萬言而不能盡者). Late Ming diagrams embodied a mode of thinking unique to the era, which upheld the value of recognizing coherence across disciplines. Geometrically composed, typically in the form of a circle, and divided into equal sections, these diagrams highlighted the numerical, and therefore putatively natural, basis of correlations across discipline. A mainstay of Ming philological scholarship, geometric cross-disciplinary diagrams can be found in other fields as well, such as medicine and astronomy.4

The second edition of Wu Jishi’s Yinsheng jiyuan 音聲紀元, held at the National Central Library in Taipei, opens with an impressive geometric diagram with a full fourteen levels ranging from calendrical and musical terminology to phonological attributes and rhyming patterns. The terse note appended by the author claims, “Five years after completing Jiyuan I further created this diagram in order to explicate the meaning of Jiyuan [recording the origin]” (紀元成後五年復立此圖以釋紀元義). The “meaning” appears to be that these seemingly unrelated fields ultimately comprise one system and share the same qi-based origin. Therefore, his study necessarily discusses music, calendrics, and language together in order to “record the origins” of sound.

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4 See examples in Zhang Huang 章潢, Tushu bian 圖書編, SKQS, j. 68–73.

5 Wu Jishi 吳繼仕, Yinsheng jiyuan (ca. 1616 edition), j. 1, p. 1b.
Fang Yizhi explains his use of a geometric diagram for phonological study (Figure 1) as follows:

Cyclic historical generations, exhalation and inhalation, music and calendrics, and linguistic sounds are all part of one and the same nexus of cyclical interaction. The nexus of linguistic sound is extremely subtle. Meaning arises from sound, and sound responds to the sequence of seasons. The sequence of seasons contains number. Thus the ancients explained characters by means of rhyme, while prognosticators understand the trigrams by means of sound… I have therefore diagrammed it. It is fundamentally something not possible through contemplation.

For Fang Yizhi, the circular diagram illustrates inartificiality (非思議) and unity (一在二中). It is a visual representation of how all the pieces go together. The outer three circles of his diagram contain rhyme groupings of his own and other scholars’ creation, indicating fundamental unity across different categorizations. The inner two circles contain arrangements of *Yijing* trigrams. Based on Shao Yong’s theorizations of the relationship between linguistic categories and cosmology, Fang Yizhi employs the trigrams as a guide to the presence and nature of a medial vowel in his rhyme categories. While Fang argued that his own rhyme system was simpler than others, it could be verified he felt by its correspondence to the work of contemporaries, as well as its basis in a natural progression.

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7 Fang Yizhi, *Tongya*, j. 50, p. 25a. See also the description in Shi Jianguo 時建國, “‘Qieyun shengyuan’ yanjiu” 《切韻聲源》研究, in *Yinyun luncong* 音韻論叢 (Jinan: Qi Lu shushe, 2004), pp. 474–75.
A geometric diagram at the beginning of Qiao Zhonghe’s *Yuanyun pu* 元韻譜 (Figure 2) similarly aligns each of his 12 rhyme groups with a note in the musical scale and one of the twelve earthly branches. As Qiao explains, “the twelve rhyme groups corresponding to the twelve pitches is the natural order of sound-based *qi*. But in the successive alternation of *yin* and *yang* there are endlessly cycling conditions therein” (十二詟應十二律，乃聲氣之自然，而陰

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8 Recreation of the diagram in Fang Yizhi, *Tongya*, j. 50, p. 22b. I have reconstructed the diagram faithfully according to the original text—there appear to be some errors in the original. Only 33 out of 36 of Chen Jinmo’s initials are listed in the outer circle.
The correlations between rhyme and musical pitch may appear arbitrary. But as Qiao elucidates in another section, each of the 12 rhyme groups has an intrinsic character. For example, “the ben [rhyme group] is the taicu (pitch), [among the 12 earthly branches it is] yin, [among the notes of the pentatonic scale it is] jue. Its sound is even, its qi harmonious in equilibrium. Its sentiment is mild and pure, refined and graceful” (奔，太簇，寍，角，其聲平，其氣中和，其情報雅麗). These particular associations between the pitches and earthly branches go back at least to the Han dynasty. The inclusion of rhyme categories into such formulations, however, is primarily a Ming phenomenon, as demonstrated in Chapter 4. The intent of the circular diagram in this case, as in many Yijing-based diagrams, is to model the motion of yin and yang, which in Qiao’s view affects the natural qualities of these sounds. By highlighting the correspondence between musical pitch, rhyme, and calendrical concepts in the diagram, Qiao has attempted to demonstrate that his linguistic categories follow a natural pattern.

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10 Qiao Zhonghe, *Yuanyun pu, shimu*, p. 33a.

11 See, for example, the *Yueling* 月令 in *Liji* and *Baihu tong* 白虎通.

12 For other examples, see Geng Zhensheng, *Ming Qing dengyunxue tonglun*, pp. 104–5.
Variations on this form of geometric diagram abound in 17th century philological texts.

For example, Ma Ziyuan 马自援 validates his five tone rhyme system via a diagram correlating

Qiao Zhonghe, *Yuanyun pu, juanshou*, p. 1a. I have attempted to reproduce the diagram here, due to poor quality of the original. (程) = *Huangzhong* (黄钟) = 子, 
| Bu 接 = Dalǐ (太吕) = chou 丑 |
| Ben 奔 = Taicu (太簇) = yin 寅 |
| Ban (般) = Jiazhong (夹钟) = mao 卯 |
| Bao (裹) = Guxi (姑洗) = chen 辰 |
| Bang (帮) = Zhonglū (中吕) = si 巳 |
| Bo (博) = Ruibin (蕤宾) = wu 午 |
| Bei (北) = Linzhong (林钟) = wei 未 |
| Bai (百) = Yize (夷则) = shen 申 |
| Ba (八) = Nanlū (南吕) = you 酉 |
| Bo (博) = Wushe (無射) = xu 戌 |
| Bu (卜) = Yingzhong (应锺) = hai 亥 |

The black dots indicate entering tone rhymes. The pattern of empty and filled dots is also reminiscent of similar diagrams based on *Yijing* cosmology, and the *Heluo* diagrams.
it to other important cosmological “fives”: tones, phases, colors, virtues, affairs, viscera, flavors, directions, smells, and animals (Figure 3). A diagram by Cheng Yuanchu 程元初 similarly correlates his 75 syllable-initial system with the five pitches and their associated numerical and geomantic properties (Figure 4).

Figure Conc. 3: Wuyin fenshu zhi tu (五音分屬之圖 Categorization of the five tones)\(^\text{14}\)

Other geometric diagrams illustrate the relative importance or cosmological significance of concepts. For example, the diagram below (Figure 5), included in a compilation of *Yijing*-related diagrams by Lai Zhide 來知德 (1525–1604), attempts to explain the progression of the

numbers one through ten. Tracing the circle produces the sequential progression (1, 2, 3, 4…), while the relative positions of the numbers in the diagram reflect cosmological properties of the numbers, in terms of their associations with cardinal directions and yin and yang.

Figure Conc. 5: *Hetu shu qi yì liú* (河圖數起一六 The numbers of the River diagram emerge from 1 and 6)\(^\text{16}\)

A similar diagram by the cosmological phonologist Ge Zhongxuan 葛中選 correlates the entries in his rhyme tables with musical pitches (Figure 6). The sequence of pitches/syllables in the

diagram progresses toward a central pitch/syllable (in the middle circle). Ge refers to this pitch/syllable as the *heyin* 和音, containing a vowel which “governs” 轉 or underlies the other sounds in the diagram, therefore occupying the central position.

Figure Conc. 6: *Heyin tu* (和音圖 Harmonizing pitch)\(^\text{17}\)

Other diagrams aimed to reflect coherence within the Chinese writing system. For instance, the following diagram in Zhao Huiqian’s *Liushu benyi* 六書本義 attempts to show how the six methods of character construction (discussed at greater length in Chapter 2) are interrelated (Figure 7). Proceeding from the top of the diagram to the bottom, one sees how simpler characters become the building blocks of more complicated characters. The argument

\(^\text{17}\) Ge Zhongxuan, *Tailü* 泰律, j. 4, p. 4b.
seems to be that because complicated characters are composed of smaller component characters, all characters are fundamentally related. As the explanation at the bottom of the diagram claims, by examining this diagram one can understand “the subtleties of the six principles of character formation in their natural self-generation” (六義自然相生之妙). As with the other examples, one of the primary values of a diagram in the eyes of Ming scholars was its ability to expose something “natural.” As a visual representation of coherence, diagrams provided Ming thinkers with a powerful way to express relationships between fields and concepts.
Figure Conc. 7: *Liuyi xiangguan tu* (六義相關圖 The six principles of character formation are interrelated)\(^\text{18}\)

\(^{18}\) Zhao Huiqian, *Liushu benyi* 六書本義 (1520 edition, held at Harvard-Yenching Library), j.1, p. 4a.
Figure Conc. 7: (Continued)
Perhaps under the influence of contemporary phonological diagrams, even the famed 1624 phonological text by Jesuit missionaries Xiru ermu zi 西儒耳目資 opens with the following diagram, glossing Chinese characters with Latin letters (Figure 8). As a “moving diagram” (huotu 活圖), each layer is intended to rotate, providing a model for spelling thousands of syllables. There are western models for such diagrams.\textsuperscript{19} One can imagine, however, that Nicolas Trigault’s Chinese collaborators would have been accustomed to such visual representations of linguistic information, and may have imputed an additional layer of meaning to it.

\begin{figure}
\centering
\includegraphics[width=\textwidth]{figure.png}
\caption{Wanguo yinyun huotu (萬國音韻活圖 Revolving diagram of initials and rhymes of all countries)\textsuperscript{20}}
\end{figure}

\textsuperscript{19} Tan Huiying 譚慧颖, Xiru ermu zi yuanliu bianxi《西儒耳目资》源流辨析 (Beijing: Waiyu jiaoxue yu yanjiu chubanshe, 2008) pp. 48–70.

\textsuperscript{20} Nicolas Trigault, Xiru ermuzi 西儒耳目資, SKQS CMCS, shoupu, p. 2a.
Correlative thinking and its visual representation in diagrams were not unique to China in the 16th and 17th century world. Nor was the centrality of philology as a discipline that drew on and gave birth to other fields. Yet the cultural and intellectual life of late imperial China was especially conducive to philological study: linguistic diversity coupled with the lack of standardized spoken language across its immense territory generated lively discussion of pronunciation; myriad forms and variants of a complicated script instigated debate over correct writing; a cultural emphasis on the ability to compose fine poetry and prose, both in professional and social settings, required establishing norms. Scholars in the 16th and 17th centuries approached these issues with different priorities. Some wanted to establish standards for spoken and written language. Others, however, sought to comprehensively account for diversity. Connecting philology to fields outside of language could satisfy both aims. For those seeking a standard, correlations allowed scholars to claim a natural basis for their proposals. For those interested in comprehensive description, correlations provided a way to analogize across fields and fully document unobservable linguistic phenomena.

These methods did not disappear entirely in the centuries to come. For instance, even in late 19th century, Zhou Yun 周濬 produced cosmological diagrams linking various fields with phonology (Figure 9). Nevertheless, the prevailing discourse of 18th century scholars eschewed the methods of the 16th and 17th centuries. The great bibliographical catalogue of the Siku

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quanshu, which has served as an entry point to premodern texts to the present day, targeted the late Ming as a period of scholarly decay. While philology continued to occupy a central place in Chinese intellectual life into the 20th century, the discipline as practiced by literati from the 18th century onward had shifted in the direction of an isolated field, the determiner of validity for which was historical linguistic evidence. To this day, the field of historical Chinese linguistics, as practiced both in China and the west, regularly traces its roots and important methodological breakthroughs to the work of 18th-century scholars.23

One could highlight the ways in which Ming scholars, even those who seem misguided by today’s standards, paved the way for these breakthroughs: the goal of comprehensiveness led to the acceptance of non-Chinese scripts; the search for moral meaning in ancient character forms prompted a desire to recover the earliest possible script; and operatic proposals instigated debates about the nature of a unified spoken language. At the same time, Ming scholars did not foresee later advances, nor would they necessarily have approved of them. Philology in the 16th and 17th centuries was not inching its way toward evidentiary learning. An alternative mode of knowledge production flourished and outweighed the results of evidence-based scholarship in the eyes of many contemporaries. Future research may explain why scholars in the 18th century isolated Gu Yanwu, and his historical method, as superior. At the core of this transition must be a loss of the notion that there can be a coherent principle or numerical calculation unifying everything. As this dissertation has shown, however, the presence of this notion was not anathema to scholarly innovation and productivity. Instead, it fueled a dynamic moment in the history of Chinese scholarship, and one which we see returning to a certain degree in today’s

academy, in which thinking across disciplinary boundaries provides new avenues of knowledge production.
Figure Conc. 9: Sanshi yun fen liuqi tu shuo (Diagrammatic explanation of the division of 30 rhymes into 6 qi categories)²⁴

²⁴ Zhou Yun, Shanmen xinyu (China: Liusheng caotang, 1893), j. 2, p. 15b. This diagram illustrates the basis of qi in different organs as a classificatory scheme for syllable finals.
Figure Conc. 9: (continued)
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