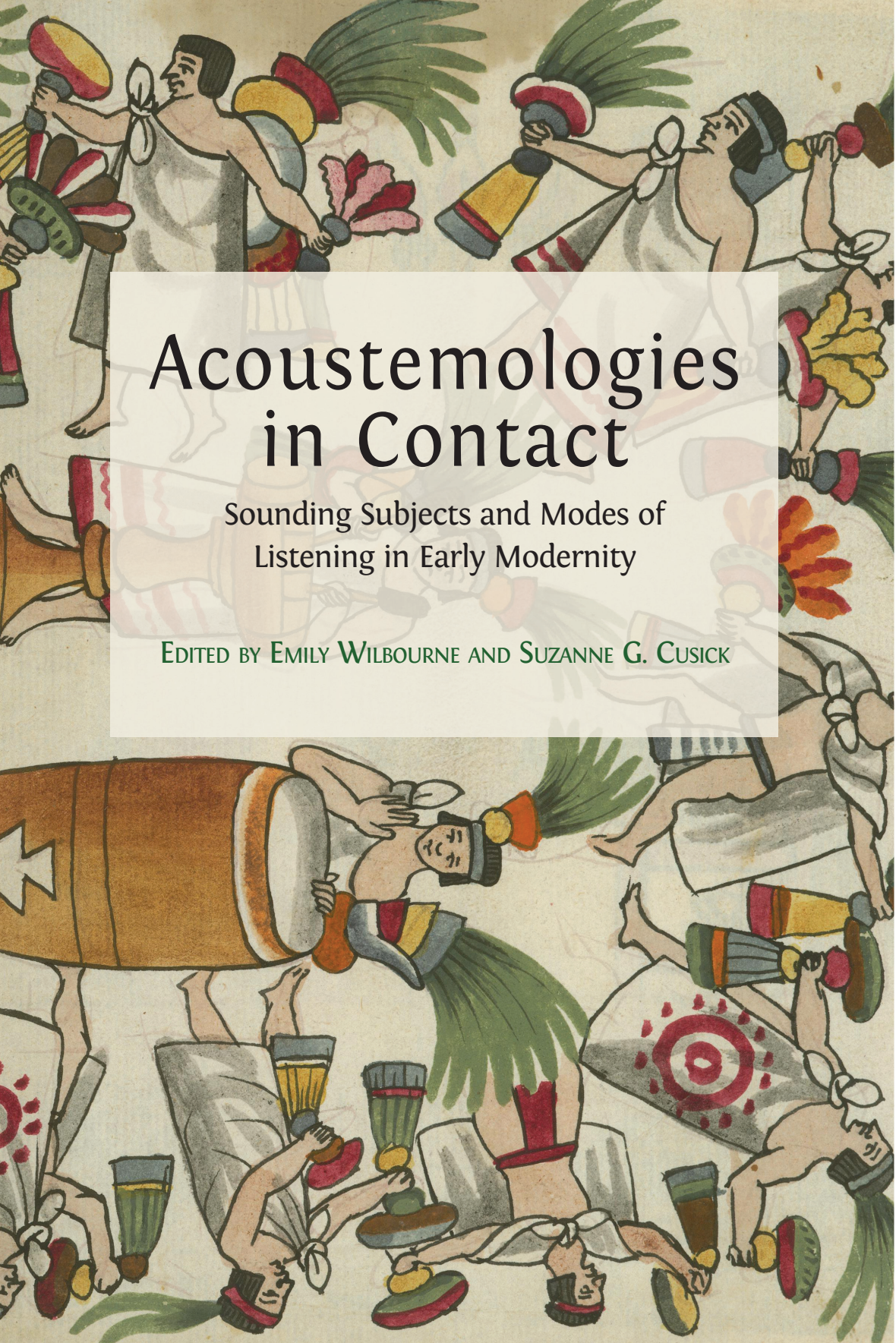

Acoustemologies in Contact

Sounding Subjects and Modes of Listening in Early Modernity

Edited by Emily Wilbourne and Suzanne G. Cusick

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7. A Global Phonographic Revolution

Trans-Eurasian Resonances of Writing in Early Modern France and China

Zhuqing (Lester) S. Hu

In 1758, Paris found itself in the middle of two literary quarrels. One erupted six years earlier, when a staging of Giovanni Battista Pergolesi's *La serva padrona* at the Académie de Musique ignited debates over the merits of Italian versus French operas. Though this 'Querelle des Bouffons' reached its peak in 1754, it reverberated throughout the decade on account of a fierce Italianist, Jean-Jacques Rousseau. In the aftermath, Rousseau penned his *Essay on the Origin of Languages* (dated to the late 1750s),[1] which — thanks to Claude Lévi-Strauss and Jacques Derrida — would become one of the most widely interpreted texts in Western philosophy.[2] Around the same time, a second quarrel broke out at the Académie des Inscriptions et Belles-Lettres where Joseph de

1 Jean-Jacques Rousseau, *Essay on the Origin of Languages and Writings Related to Music*, trans. and ed. by John T. Scott (Hanover, NH: University Press of New England, 1998), pp. 289–332. On dating the *Essay*, published posthumously in 1781, see Catherine Kintzler, 'Introduction', in Rousseau, *Essai sur l'origine des langues*, ed. by Catherine Kintzler (Paris: GF Flammarion, 1993), p. 9.

2 Derrida accords to Rousseau a 'privileged place […] in the history of logocentrism' and dedicates the entire Part II of his *Of Grammatology* to reading Lévi-Strauss reading Rousseau's *Essay*. See Jacques Derrida, *Of Grammatology*, trans. by Gayatri Chakravorty Spivak (Baltimore and London: The John Hopkins University Press, 1976), pp. 97–100.

 https://doi.org/10.11647/OBP.0226.07

Guignes, curator of Eastern manuscripts of the Bibliothèque du Roi, argued that China originated as an ancient Egyptian colony.[3] As popular as it was controversial, de Guignes's lecture amplified a century-long debate over the relationship between what Enlightenment Europe considered to be two of the world's oldest civilizations.[4] Largely inspired by the Jesuit polymath Athanasius Kircher, the debate raged among *philosophes*, colonial officers, and Jesuits, decades before the Rosetta Stone reinvented Egyptology in the early nineteenth century.

Though the two Parisian quarrels never substantially interacted, I argue in this chapter that their participants shared an agenda of mapping the universal history of writing and the voice in order to recuperate lost knowledge of and/or about the earliest humans. I argue not only that China served the two quarrels as the primary source for such grammatological and phonological histories, but that similar concerns about the relation between writing, song, and speech were simultaneously transforming eighteenth-century Chinese scholarship under the Qing Empire (1636–1912). While we cannot assume any direct exchange between the French quarrels and contemporary Chinese debates on philology, folksongs, and opera, I compare these two scholarly cultures in order to raise a question of historiographic and philosophical importance: is there a global connection between (early) modernity and theories of the relationship between writing and the voice?

My comparison shows that both places underwent what I call a Phonographic Revolution: a reconceptualization of writing (*graphē*) as the writing of the voice (*phōnē*), which was in turn enshrined as the more immediate conduit of meaning. I begin by analyzing the dialectical relationship between the two Parisian quarrels. Though the Egypt-China debate focused on writing and the 'Querelle des Bouffons' focused on the singing-speaking voice, both quarrels presumed a *longue durée* evolution of writing from pictographs representing things-in-themselves into phonographs representing human utterances, particularly alphabetic

3 Joseph de Guignes, *Mémoire dans lequel on prouve que les chinois sont une colonie Egyptienne* (Paris: Desaint & Saillant, 1759).

4 Don Cameron Allen, 'The Predecessor of Champollion', *Proceedings of the American Philosophical Society*, 104 (1960), 527–547; Alexander Rehding, 'Music-Historical Egyptomania, 1650–1950', *Journal of the History of Ideas*, 75 (2014), 545–580 (pp. 550–566), https://doi.org/10.1353/jhi.2014.0037

letters. Identifying the influx of Chinese writing into Europe as the primary source of this historiography allows me to pivot to China. Here, I show that studies on the Confucian *Canon of Songs*, folksongs, and opera gave rise to a new paradigm of historical phonology in the seventeenth and eighteenth centuries. These burgeoning singing cultures contributed to the overhaul of Chinese philology according to the notion that writing, despite the apparent pictography of Chinese characters, is fundamentally phonographic.

Graphocentric versus Phonocentric Restorations

During the early modern period, European scholars generally dated ancient Egypt to between the Flood and ancient Greece in their universal chronology. Thus, seventeenth- and eighteenth-century Egyptology promised to uncover a lost knowledge that predated even the revered Greeks, be it divine revelations or antiquarian facts.[5] Believed to have preserved this knowledge, hieroglyphs engrossed the study of Egypt. Humanist scholars uncovered Greco-Roman glosses of hieroglyphic texts,[6] and the influx of sources from the Ottoman Empire helped Western European scholars recognize Coptic as a descendent of the ancient Egyptian spoken language; Athanasius Kircher even compiled a Coptic dictionary (1636).[7]

In hindsight, identifying Coptic as a living Egyptian language was the crowning legacy of early modern Egyptology: it was Coptic that would allow Jean-François Champollion to decipher hieroglyphs in the 1820s. Yet what captured the early modern Egyptological imagination was not the Coptic language, but Chinese writing. Even Kircher, who attempted to decipher the hieroglyphs through esotericism in *Oedipus aegyptiacus* (1652), later proposed Chinese characters as an alternative route in *China illustrata* (1667).[8] That a system of writing practiced on the

5 Daniel Stolzenberg, *Egyptian Oedipus: Athanasius Kircher and the Secrets of Antiquity* (Chicago and London: The University of Chicago Press, 2013), pp. 36–70.

6 The most important source was Horapollo's *Hieroglyphica*, a dictionary of the purported symbolism of hieroglyphs. See Stolzenberg, *Egyptian Oedipus*, pp. 41–42.

7 Alastair Hamilton, *The Copts and the West, 1439–1822: The European Discovery of the Egyptian Church* (Oxford: Oxford University Press, 2006), pp. 195–228.

8 Athanasius Kircher, *China monumentis qua sacris qua profanis nec non variis naturae & artis spectaculis aliarumque rerum memorabilium Illustrata* (Amsterdam: Joannes Jansson, 1667), pp. 225–237.

other side of the globe was deemed more promising than an indigenous Egyptian language speaks volumes for the paradigm of Egyptology at the time: a graphocentric mapping of sound, writing, and meaning. European scholars singled out Chinese characters because they (mis) took Chinese and Egyptian to be distinctly non-phonographic writing systems that represent objects and ideas directly, unlike almost all other writing systems that represent the sounds of the voice with letters or syllabograms.[9]

Proponents of the Egyptian origin of China posited this resemblance between Egyptian and Chinese writings as their strongest evidence.[10] In return, the Egypt-China hypothesis also offered a concrete paradigm for Egyptology. If China did inherit its core institutions — including its non-phonographic writing — from Egypt, then modern Chinese writing could be considered an evolved or degenerate form of ancient Egyptian writing. Individual Chinese characters could be traced to individual hieroglyphs, and the specific pairings of characters and meanings in Chinese writing applied to reading Egyptian texts. Figure 7.1 shows an example of this paradigm at work in a three-way correspondence between the Royal Society in London, the Académie des Inscriptions in Paris, and the French Jesuits in Beijing.[11]

The history of writing was also an important topic for Rousseau, who concurred in his *Essay* that Egyptian and Chinese writings were uniquely non-phonographic. Yet unlike the graphocentrism of the Egypt-China hypothesis, Rousseau examined the history of writing not in itself but in relation to the history of the voice (*phōnē*). Rousseau begins Chapter Five, 'On Writing', with the degeneration of speech and song. The carefree clime of the south produced among the primitive savages a passionate melodious speech-song, yet this deteriorated into

9 The myth of Chinese as a purely ideographic or logographic script persists even today; see John DeFrancis, *The Chinese Language: Fact and Fantasy* (Honolulu: University of Hawai'i Press, 1984).

10 De Guignes, *Mémoire*, pp. 58–60.

11 Anon. [Pierre-Martial Cibot], *Lettre de Pekin sur le génie de la langue chinoise et de la nature de leur écriture symbolique comparée avec celle des anciens égyptiens, en réponse à celle de la Société Royale des Sciences de Londres, sur le même sujet* (Paris: J. L. de Boubers, 1773). See also Allen, 'Predecessors of Champollion', 540–542.

the cold monotonous modern languages as humans moved north.[12] Parallel to this Fall of voice is the perfection of writing:

> The cruder the writing, the more ancient the language. [...] The first manner of writing is not to depict sounds but the objects themselves, whether directly as the Mexicans did, or by allegorical figures as the Egyptians did of old. This state corresponds to passionate language [...].
>
> The second manner is to represent words and propositions by conventional characters, which can be done only when the language is completely formed and when an entire people is united by common Laws; for there is already here a double convention. Such is the writing of the Chinese: this is truly to depict sounds and to speak to the eyes.
>
> The third is to break down the speaking voice into a certain number of elementary parts, whether vowels or articulations, with which one could form all imaginable words and syllables. This manner of writing, which is our own, must have been devised by commercial peoples who, traveling in several countries and having to speak several languages, were forced to invent characters that could be common to all of them. This is not precisely to depict speech, it is to analyze it.[13]

For Rousseau, the history of writing is the rise of phonography: writing (*graphē*) gradually ceased to 'depict [...] the objects themselves' but began to intrude on the voice (*phōnē*) by 'depict[ing] [its] sounds'. As the voice lost its primitive power of immediately conveying passions, phonographic writing rose as a 'supplement' to recuperate such passionate communications. Yet by 'breaking down' the sounds of the voice into its letters, writing depletes the voice's melodious passions even further.[14] Indeed, Rousseau understands alphabetical writing as the epitome of man-made laws: like statutes and social mores, orthography substitutes artificial conventions for the natural community and passionate communications that once bound the primitives.

12 Rousseau, *Essay*, p. 296.
13 Ibid., p. 297.
14 Gary Tomlinson, *The Singing of the New World: Indigenous Voice in the Era of European Contact* (Cambridge, UK: Cambridge University Press, 2007), pp. 11–18; Edward Nye, *Mime, Music and Drama on the Eighteenth-Century Stage: The Ballet d'Action* (Cambridge and New York: Cambridge University Press, 2011), pp. 30–34, https://doi.org/10.1017/cbo9780511794223

Fig. 7.1 Anon. [Pierre-Martial Cibot], *Lettre de Pékin sur le génie de la langue chinoise* (1773), *Planche* 9. Image courtesy of the Bibliothèque nationale de France (BnF), Public Domain, https://gallica.bnf.fr/ark:/12148/bpt6k1054486p/f121.image. This publication was based on Cibot's letter from Beijing (now Paris, Bibliothèque de l'Institut de France, MS 1524 B) comparing Egyptian hieroglyphs to Chinese characters, in response to questions raised by the Royal Society of London. From the left of the Figure, the first and fourth columns feature 'modern' Chinese characters; the second and fifth 'ancient' Chinese characters; and the third and sixth Egyptian hieroglyphs. The visual juxtaposition implies a hypothetical common origin of the two systems of writing.

Besides reflecting the broader Enlightenment interests in the origin of language and society,[15] Rousseau's intertwined history of voice and writing was a targeted polemic against Jean-Philippe Rameau and French opera after the 'Querelle des Bouffons'. In the second half of *Essay*, Rousseau uses his critique of phonographic writing to attack *ramiste* harmony as an example of such writing. Rousseau argues that the primitive speech-song, being monophonic and unaccompanied, necessarily comprised 'multitudes of sounds and intervals' or microtonal variances. Just as alphabetic writing restricts speech to a paltry number of letters, harmony restricts songs to a few 'harmonic intervals' while eradicating any passionate inflection that 'does not belong to its system'.[16]

There is little doubt that the harmonic 'system' here refers to Rameau's theory of 'triple progressions', which sought to justify European harmony. Observing that the two lowest overtones of a string sound an octave and a perfect-fifth-plus-an-octave above its fundamental pitch and that their vibrating frequencies bear a 2:1 and 3:1 proportion, Rameau posits duple and triple ratios as the empirical basis of harmony. By repeating the 3:1 or triple proportion, Rameau shows that the resulting chain of perfect fifths — such as F-C-G-D-A-E-B — embeds the diatonic scale, major and minor triads, dominant-seventh chords, and the subdominant-tonic-dominant progressions fundamental to functional harmony. These conventions of European harmony are therefore not artificial but naturally derived from the physics of sound.[17]

Besides naturalizing European harmony, Rameau posited triple progressions as the universal foundation of all musical systems. Amid heated exchanges with Rousseau, Rameau pointed out that the same chain of perfect fifths produces the ancient Greek tetrachords and Chinese pentatonic scales.[18] Few Europeans ever heard Chinese music, and yet, as was the case for ancient Greek music, their lack of auditory experience was supplemented with translations and digests

15 Sophia Rosenfeld, *A Revolution in Language: The Problem of Signs in Late Eighteenth-Century France* (Stanford: Stanford University Press, 2001), pp. 13–56.

16 Rousseau, *Essay*, pp. 321–322.

17 Thomas Christensen, 'Eighteenth-Century Science and the "Corps Sonore": The Scientific Background to Rameau's "Principle of Harmony"', *Journal of Music Theory*, 31.1 (1987), 23–50 (pp. 23 and 41–42), https://doi.org/10.2307/843545

18 Thomas Christensen, *Rameau and Musical Thought in the Enlightenment* (Cambridge and New York: Cambridge University Press, 1993), pp. 236–238.

of Chinese music theory.[19] This influx of Chinese sources served Rameau and his followers in the same way Chinese writing served early modern Egyptologists: as a key to retracing the common origin of all civilizations. Rameau, Pierre-Joseph Roussier, and Benjamin de la Borde all used ancient Greek and Chinese scale systems to map out how music evolved from the original revelation Adam and Noah received from God to modern European harmony.[20]

Whereas Rameau portrayed harmony as a timeless universal, Rousseau dismisses it as a modern artifice, arguing in *Essay* that neither the ancient Greeks nor the 'American savages' used harmony. Besides the prevalent monophony in ancient Greek music (as described in Classical sources) and Amerindian songs (as told in colonial travelogues), Rousseau reiterates their use of microtonal intervals, or 'inflections which we [modern Europeans] call false because they do not enter into our system and because we cannot notate them'.[21] By conflating the modern 'system' of harmony with notation, Rousseau defines harmony as a form of writing and thus a futile attempt to recuperate the lost passions of the primitive speech-song. For Rousseau, such recuperation is possible only through reforming the voice itself. In the last chapter of *Essay*, 'Relationship of Languages to Governments', Rousseau argues that writing ousted not only the speech-song but also the freedom and democracy of the primitive societies, which relied on the immediate communication of passions.[22] 'Languages favorable to liberty [...] are sonorous, prosodic, harmonious languages, in which discourse can be made out from a distance', while '[modern speeches] are made from the murmuring in sultans' Council-chambers'.[23] This politicization of the voice as a victim of writing implies a phonocentric mode of

19 The French Jesuit Jean-Joseph Marie Amiot provided mid-eighteenth-century French *philosophes* with two manuscripts on Chinese music, of which only one appeared to have survived; see Jim Levy, 'Joseph Amiot and Enlightenment Speculation on the Origin of Pythagorean Tuning in China', *Theoria*, 4 (1989), 63–88 (pp. 64–65).

20 See Levy, 'Joseph Amiot and Enlightenment Speculation', 65–75; Rehding, 'Music-Historical Egyptomania', 563–566. See also Jean-Philippe Rameau, *Code de musique pratique* (Paris: Imprimerie royale, 1760); Pierre-Joseph Roussier, *Mémoire sur la musique des anciens* (Paris: Lacombe, 1770); Benjamin de la Borde, *Essai sur la musique ancienne et moderne* (Paris: Imprimerie royale: 1780).

21 Rousseau, *Essay*, pp. 321–322.

22 Ibid., p. 328.

23 Ibid., p. 332.

restorationism. Whereas the Egypt-China hypothesis uses the genealogy of writing to restore the lost knowledge of the earliest civilizations, Rousseau hopes to restore the natural liberty of the primitives by freeing the voice (*phōnē*) from writing's representational violence, be it writing *per se* or comparable conventions like harmony or notation.

The *Jouissance* of Chinese Scripts

The restorationist ambitions of the Egyptologists and Rousseau seem to embody a writing versus voice dichotomy: the former hoped to use modern Chinese characters to uncover the lost Egyptian writing and knowledge, whereas the latter sought to restore the primitive perfection of society by liberating the voice from writing and making it passionate and melodious again. Nonetheless, both agendas presumed a linear history of writing evolving towards phonography ('voice-writing'). Kircher and de Guignes could imagine deciphering the Egyptian hieroglyphs through Chinese characters only by recognizing the latter as the former's descendants on account of their shared non-phonography. Rousseau could portray the history of voice as the degeneration from the primitive speech-song only by observing the parallel evolution of writing from silent pictographs to voice-recording phonographs.

What convinced early modern European scholars of this evolution towards phonography? The answer, I argue, is found in Chinese sources on the history of Chinese writing.[24] Brought to Europe through various commercial and missionary networks, these sources gave the impression that Chinese characters originated as naturalistic pictographs that mimicked things in nature — comparable to Mesoamerican and Egyptian scripts — before evolving into their current shapes as schematic logographs that each bear a standardized meaning and pronunciation through the 'double convention' Rousseau mentions. It was only a small step for Europeans scholars to extend this evolution to include the

24 Mesoamerica was also a critical part of early modern European reflections on writing. See *Writing without Words: Alternative Literacies in Mesoamerica and the Andes*, ed. by Elizabeth Hill Boone and Walter Mignolo (Durham and London: Duke University Press, 1994), https://doi.org/10.2307/j.ctv1220k2d. Yet Chinese writing was unique in affording to European scholars an evolutionary historiography of writing.

alphabets as the final stage, whose purely phonographic letters are even more streamlined and conventionalized than logographs.

Two types of Chinese sources convinced early modern Europe of this evolution. First, Chinese chronicles detailing the deeds of the ancient kings — whom Jesuits identified as the Biblical patriarchs[25] — constantly laud these legendary rulers for inventing writing. Most chronicles quote the canonic dictionary *Explicating Glyphs and Analyzing Characters* (Shuowen jiezi 說文解字, 121 CE) by Xu Shen 許慎:

> During the Yellow Emperor's time, his scribe Cang Jie saw the footprints of birds' feet and beasts' hooves. He understood that he could distinguish between the various types of birds and beasts by differentiating between the patterns of their footprints. In so doing, he invented writings and inscriptions. [...] Through the later Five Sovereigns and then the Three Dynasties, the strokes of some characters were changed, and the shapes of some characters were altered. As a result, at Mount Tai, none of the inscriptions left by the seventy-two successive rulers who had performed rites there resembles another.[26]

Xu Shen's history of Chinese writing is a *longue durée* process of schematization: ancient pictographs imitating the footprints of birds' feet and beasts' hooves were gradually replaced with the simplified strokes and dots that make up the modern characters.

Second, since a major grammatological reform in the third century BCE, Chinese literati took great interest in ancient character forms, known as *zhuan* 篆 scripts, and a few exemplars of these scripts reached early modern Europe. In *China illustrata*, for example, Kircher incorporates sixteen woodcuts, each featuring a group of five characters first written in a supposedly ancient script and then written (rather clumsily) in the modern script (see Figure 7.2).[27] Each example describes the supposed origin of its own script. The five characters in the second woodcut ('II. Forma' in Figure 7.2) read, 'the wheat-ear script was created by [Emperor] Shennong' (穗書神農作), who legendarily invented agriculture;

25 Nicholas Standaert, *The Intercultural Weaving of Historical Texts: Chinese and European Stories about Emperor Ku and His Concubines* (Leiden and Boston: Brill, 2016), pp. 303–314, https://doi.org/10.1163/9789004316225

26 Xu Shen 許慎, *Shuowen jiezi* 說文解字 (121 CE), ed. by Xu Xuan 徐鉉 (986 CE), 15 vols. (*Wenyuange Sikuquanshu* 文淵閣四庫全書 [hereafter WYGSKQS], 1781), XV, part 1 of 2, ff. 1r–v.

27 Kircher, *China… Illustrata*, pp. 228–232.

accordingly, the strokes of this script resemble plants of wheats. The sixth woodcut ('VI Forma') reads, 'Cang Jie created [this script] based on the footprints of birds' (倉頡鳥跡製), a clear reference to Xu Shen's narrative quoted above; accordingly, the strokes of this script comprise footprints of birds. The seventh woodcut ('VII Forma') reads, '[King] Yao made [this script] because a tortoise emerged [from River Luo]' (堯因龜出作), an exceptionally auspicious omen in Chinese traditions; accordingly, the strokes of this script comprise lines of tortoises.

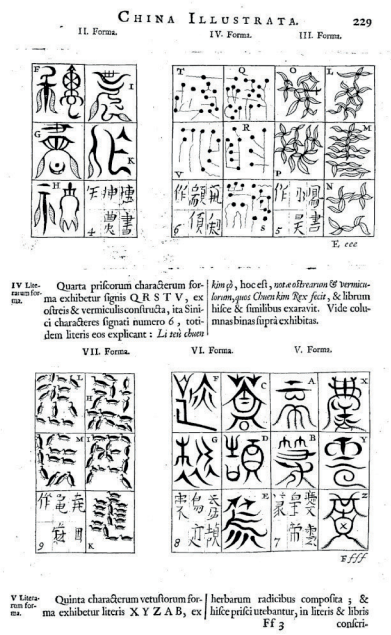
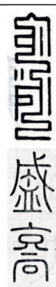
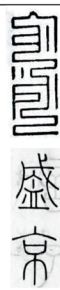
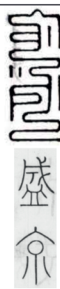
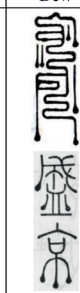


Fig. 7.2 From Kircher, *China… Illustrata* (1667), p. 229. Images courtesy of the BnF, Public Domain, https://gallica.bnf.fr/ark:/12148/bpt6k111090s/f259.image

(*Mukden* "the rising capital [name of the Qing's first capital]")

盛
京

(*Shengjing* "the rising capital [the Chinese name of Mukden]")

Jade Chopstick	Fantastic Glyph	Grand Seal	Small Seal	Square Seal	Tomb	Wheat Ear	Hanging Chives
							
Willow Leaves	Astrology	Sesame Buds	Green Jade	Dripping Dew	Dragon Claw	Low Clouds	Tadpole
							

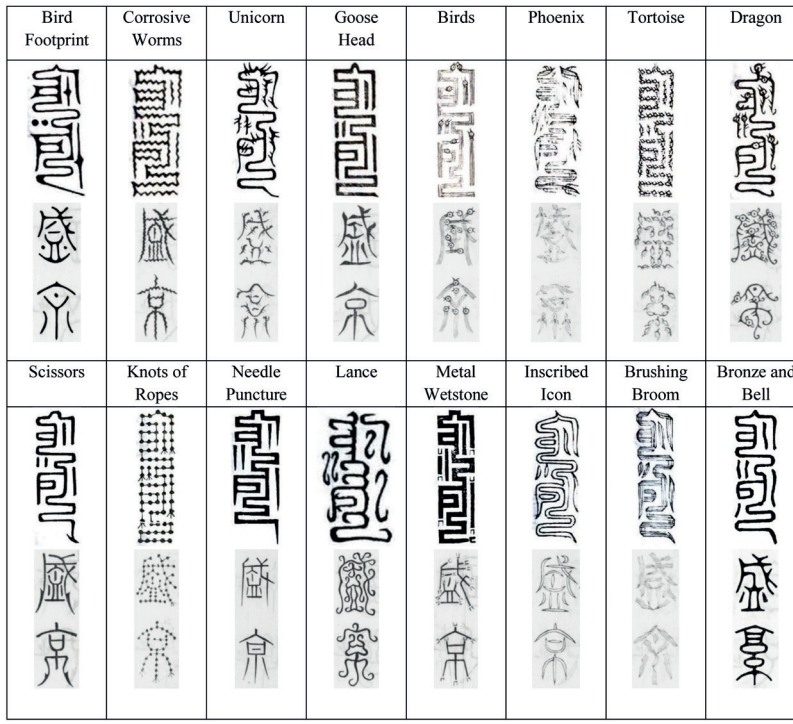


Fig. 7.3 Manchu and Chinese names of the city of Mukden/Shengjing (盛京, modern-day Shenyang) written in thirty-two 'ancient scripts' in BnF, *Mandchou* 110 'Han-i araha Mukden-i fujurun bithe' and BnF, Chinois 1578–1581 'Yu zhi sheng jing fu you xu 御製盛京賦有序', the Chinese and Manchu version of *Rhapsody of Mukden* (1748) sent by the French Jesuit Jean-Joseph Marie Amiot. Images of the Manchu words are taken from each of the thirty-two fascicles of *Mandchou* 110, photographed by the author; images of the Chinese words are taken from each of the thirty-two fascicles of *Chinois* 1578–1581, courtesy of the BnF, Public Domain, https://archivesetmanuscrits.bnf.fr/ark:/12148/cc26060d

Kircher's woodcuts proved influential over the following century.[28] Though the English theologian William Warburton ridiculed Kircher's interpretations of the Egyptian hieroglyphs, he borrowed Kircher's woodcuts to expand the evolution of Chinese writing from pictographs to logographs into a universal history of writing evolving from Mesoamerican pictographs to Egyptian hieroglyphs, to Chinese characters, and finally to phonographic alphabets.[29] Partly translated into French in 1744, Warburton's *Divine Legation of Moses* (1738 and 1741) became a canonic reference on the origin of language and writing for French *philosophes*, including Rousseau.[30]

The source of Kircher's sixteen ancient scripts was a sixteenth-century 'encyclopedia for everyday use' (*riyong leishu* 日用類書), a popular genre in early modern China where the expansion of literacies beyond the scholar-official class boosted the demand for 'how-to' guides.[31] Kircher received the encyclopedia from the Polish Jesuit in China, Michał Boym,[32] and the encyclopedia likely copied those scripts from an ancient scripts miscellany (*za zhuan* 雜篆), a type of calligraphic copybook (*tie* 帖) consumed and produced by the Chinese literati since at least the tenth century. Typically, these miscellanies copy or print a single text in scores of different ancient scripts.[33] While some of the most commonly used scripts in such compilations did come from ancient bronzes and monuments, most were later concoctions and are better referred to as fonts rather than scripts *per se*: they simply take an attested ancient script and replace its strokes and dots with idiosyncratic motifs

28 Kircher mistranslated the second woodcut as 'The *Book of Agriculture* that King Shennong wrote' (there is no reference to any *Book of Agriculture*), the sixth as 'Cang Jie wrote books with the small wings of birds' (as opposed to their footprints), and the seventh as 'King Yao wrote this script with turtle shells' (as opposed to in the form of tortoises).

29 Warburton, *The Divine Legation of Moses Demonstrated*, 10th ed., 3 vols. (London: Thomas Tegg, 1846), II, pp. 180–181, Plate 6, which contains a direct replica of a woodcut from Kircher's *China… Illustrata*, p. 227.

30 Rosenfeld, *Revolution in Language*, pp. 36–53; Tomlinson, *Singing of the New World*, pp. 18–20.

31 Haun Saussy, *Great Walls of Discourse and Other Adventures in Cultural China* (Cambridge, UK: Harvard University Asia Center, 2001), pp. 50–55. For the late-Ming publication boom see Kathryn A. Lowry, *The Tapestry of Popular Songs in 16th- and 17th-Century China* (Leiden and Boston: Brill, 2005), pp. 31–77.

32 Kircher, *China… Illustrata*, p. 225.

33 Yu Kuo-ching 遊國慶, 'Sanshi'er ti zhuanshu Jingang jing zhi yanjiu' 三十二體篆書金剛經之研究, *Tushu yishu xuekan* 圖書藝術學刊, 4 (2008), 77–142.

such as tortoises, wheat ears, or tadpoles that refer to the documented deeds of an ancient king.

Regardless of their (in)authenticity, copying and publishing these 'ancient scripts' constituted a material way of narrating a visual history of Chinese writing as the gradual schematization of once-naturalist characters. Yet it turns out that early modern Europeans put much more faith in these fonts than did their Chinese contemporaries. While Kircher, Warburton, and Rousseau took them as testaments to the evolutionary history of Chinese writing and writing writ large, in China, the eighteenth-century capstone of the 'ancient scripts' genre reflected a growing doubt — not only about the antiquity of these oft-copied scripts, but also about the entire endeavor of grammatology. In 1743, the Qianlong Emperor (r. 1736–1796) composed a *Rhapsody of Mukden* (Shengjing fu 盛京賦) commemorating his visit to Mukden, the former capital of the Qing Empire before it invaded China in the 1640s. He then ordered his work be printed in the manner of the ancient script miscellanies, and the ensuing thirty-two *juan* [volumes] publication prints the Emperor's five-thousand-character rhapsody in thirty-two different types of supposedly ancient scripts (see Figure 7.3).[34]

What distinguishes *Rhapsody* from all other ancient script miscellanies is that the Emperor commissioned a parallel thirty-two-script publication of the text in Manchu, the native tongue of the Qing's rulers.[35] This is an intriguing decision, because Manchu writing is phonographic through and through. Ancient scripts miscellanies hark back to the supposed pictographic origin of Chinese writing, yet there was no such origin for Manchu: its alphabet developed in 1599 from the Mongolian alphabet, which can be traced through Old Uyghur, Aramaic, and Syriac scripts all

34 Yu Kuo-ching, 'Gu hanzi yu zazhuan li — yi sanshi'er ti zhuanshu Shengjing fu weli' 古漢字與雜體篆 — 以三十二體篆書盛京賦為例, *Tushu yishu xuekan* 圖書藝術學刊, 2 (2006), 71–94.

35 Through Amiot, both the Chinese and the Manchu versions of *Rhapsody of Mukden in Thirty-Two Ancient Scripts* reached Paris, and a French translation was published. See Paris, Bibliothèque nationale de France (BnF), *Chinois* 1578–1581; BnF, *Mandchou* 110; and Jean-Joseph Marie Amiot, Éloge de la Ville de Moukden et de ses Environs; poème compose par Kien-Long, Empereur de la Chine & de la Tartarie, actuellement regnant (Paris: N. M. Tilliard, 1770). For the importance of Manchu in the Qing Empire, see Pamela Kyle Crossley and Evelyn S. Rawski, 'A Profile of the Manchu Language in Ch'ing History', *Harvard Journal of Asiatic* Studies, 53.1 (1993), 63–102, https://doi.org/10.2307/2719468

the way back to Phoenician, the fountainhead of all alphabets. The long-established history of Chinese writing portrays ancient kings mimicking visual phenomena in nature with pictures, yet the imperially canonized history of Manchu writing quotes Nurgaci (1559–1626), founder of the Qing's ruling clan, spelling out spoken words with letters: 'Put the [Mongolian] letter *a* and add a *ma* to it, isn't this *ama* "father"? Put the letter *e* and add a *me* to it, isn't it *eme* "mother"?'[36] Thousands of Manchu dictionaries and textbooks further attested to the consensus that Manchu letters, unlike Chinese characters, represent units of sound; studies on Chinese phonetics even borrowed Manchu letters to transcribe Chinese words in order to distinguish between minutely different consonants.[37]

So why did the Qianlong Emperor request 'ancient script' motifs of wheat ears, knots of strings, and bird footprints be added to Manchu letters, even though their allusions to the original Chinese pictography violate the established history of Manchu phonography? Clues can be found in the Emperor's preface to the multi-script publication:

> The sounds of the Manchu writing of our country accord to the *ur*-sound [*da jilgan*] of the cosmos, and its shapes were sagely created and established. Therefore, whether [the letters] are separate or conjoined, whether few strokes or many strokes are used, everything is naturally written to perfect precision [*ini cisui lak seme acanambi*]. Yet when it comes to the shapes of ancient scripts, although there had been a few created before, because they have never been thoroughly completed, imperial and official seals still use the original script [*da hergen*]. [...][38]

The reason for adapting Manchu writing to ancient Chinese scripts was rather mundane: updating the imperial seals. Following previous Chinese regimes, the Qing inscribed the Chinese characters in its bilingual seals in various ancient scripts. Because there was no comparable ancient script for Manchu, Manchu letters could only be inscribed in the regular font. By this multi-script publication, the Qianlong Emperor hoped to invent 'ancient Manchu scripts' to visually match the Chinese inscriptions.

36 *Manju yargiyan kooli* (1635), reprinted in *Manju i yargiyan kooli/Da Qing Manzhou shilu* 大清滿洲實錄 (Taipei: Huawen shuju, 1969), pp. 108–110.

37 Yang Yiming 杨亦鸣 and Wang Weimin 王为民, '*Yuanyin zhengkao* yu *Yinyun fengyuan* suoji jiantuanyin fenhe zhi bijiap yanjiu' 《圆音正考》与《音韵逢源》所记尖团音分合之比较研究, *Zhongguo yuwen* 中国语文, 293 (2003), 131–136.

38 BnF, *Mandchou* 110, I, *hese*, ff. 1r–2r.

Inscribing Manchu seal texts in the style of 'ancient Chinese scripts' might have served to legitimize the Qing's rule of China as a foreign conquest regime by situating its Manchu rulers within the lineage of Chinese emperors tracing back to the ancient kings. Yet the Qianlong Emperor and his officials seemed indifferent to such ideological potential. Instead, even as he ordered Manchu writing be adapted to Chinese fonts that bespeak a pictographic origin of writing, the Qianlong Emperor reiterated in his preface that Manchu letters are phonographs — ones that 'accord' not only to human utterances but also 'to the *ur*-sound of the cosmos'. In the Chinese version of the preface, this '*ur*-sound' (*da jilgan*) is translated as *yuansheng* 元聲, a term often used to describe the perfection of musical tuning; according to the Qing's official music theory treatise *Orthodox Meaning of Pitch Pipes* (Lülü Zhengyi 律呂正義, 1714), 'when the *Huangzhong* pipe is correctly tuned, the cosmic *ur*-sound will be harmonious'.[39] The pictorialist ancient Chinese scripts are trivialized into a mere matter of aesthetics, whereas the phonography of Manchu letters is given a cosmic significance.[40]

The postface to *Rhapsody*, written by officials in charge of the project, went farther still. Besides concurring that the new Manchu fonts served to make the imperial seals visually harmonious, the postface rejects the entire study of grammatology and ancient scripts as an invalid scholarly pursuit, criticizing that 'people who study ancient [writings]' eagerly hoard inscribed bronzes and stones but 'never endeavor to verify or investigate them' (*umai kimcime baicara be kicerakū*).[41] This is no small criticism: since the Manchu conquest of China, the *kaozheng* 考證 or evidential learning movement had dominated Chinese scholarship, emphasizing 'investigating' (*kao* 考) and 'verifying' (*zheng* 證) concrete evidence in reconstructing the language and institutions of the ancients.[42] To accuse scholars of not 'verifying or investigating' their sources was to

39 Yūn-c'y and others, *Lülü zhengyi* 律呂正義 (1714), 5 vols. (WYGSKQS, 1778), I, f. 2r.

40 The praise of Manchu writing as phonographic was a consistent narrative in Qing-imperial sponsorship. See Jiang Qiao 江桥, *Kangxi* Yuzhi Qing wen jian *yan jiu* 康熙《御制清文鉴》研究 (Beijing: Beijing Yanshan chubanshe, 2001), pp. 195–208.

41 BnF, *Mandchou* 110, XXXII, *tucibun*, ff. 1v–2r.

42 Benjamin Elman, 'Early Modern or Late Imperial Philology? The Crisis of Classical Learning in Eighteenth Century China', *Frontiers of History in China*, 6 (2011), 3–25, https://doi.org/10.1007/s11462-011-0118-z

dismiss the epistemic legitimacy of their research, and yet, during the long eighteenth century, it became commonplace for evidential scholars to dismiss studies and compilations of 'ancient scripts' in exactly such negative light. In 1815, Duan Yucai 段玉裁 (1735–1815) published *Annotations of Explicating Glyphs and Analyzing Characters* (Shuowen jiezi zhu 說文解字註), in which he glosses every entry of Xu Shen's aforementioned dictionary. In a preface, Wang Niansun 王念孫 (1744–1832) praised Duan by disparaging both the jouissance of compiling 'ancient scripts' and the entire pursuit of grammatology:

> For the seventeen centuries [since Xu Shen's *Explicating Glyphs*], there has never been a work like Duan's! As for those who esteem themselves for differentiating between standard and vulgar character forms through their strokes and dots and for observing the simplification process from the ancient script to the modern script, these people have never heard anything about those common instances of cognate derivatives [轉注] or phonographic rebuses [假借]. They only know about writing but nothing about sounds or glosses [知文字而不知有聲音訓詁]. What a great difference between the shallowness of their learning and the depth of that of [Duan's]![43]

Thus, while European scholars based their universal histories of writing on Chinese narratives of the gradual schematization of Chinese characters, Wang dismissed the 'shallowness' of such graphocentric narratives that address only the changes of visual shapes. As we will see, rather than zooming in on the minute details of 'strokes and dots', eighteenth-century Chinese scholars opened their eyes — in order to listen to the sounds on the page.

Folksong Mania

To recall, both the Egypt-China debate and Rousseau's speculation on the origin of languages strove to mitigate a perceived loss of knowledge of and about the earliest humans. Loss was likewise a recurrent theme in Confucianism. Confucian scholar-officials aspired to restore the ways of the ancient kings — including the Yellow Emperor and the so-called

43 Wang Niansun 王念孫, preface to Duan Yucai 段玉裁, *Shuowen jiezi zhu* 說文解字註, 30 vols. (Jiangiqng ershinian Jingyunlou keben 嘉慶二十年經蘊樓刻本 1815), *xu*, ff. 1v–2r.

Three Dynasties, i.e. Xia (c. 2070–1600 BCE), Shang (c. 1600–1046 BCE), and Former Zhou (c. 1046–771 BCE). Rulers of these eras reputedly wielded perfect laws, rites, and music that were later lost in civil wars and foreign invasions.[44]

This Confucian restorationism surged in the seventeenth century when China fell to the 'barbarian' Manchus. The foreign conquest compelled many Chinese literati to advocate a return to the ancients' textual heritages, blaming previous generations for neglecting the study of Confucian classics. One target of such criticism was the 'learning of the mind' (*xinxue* 心學), a school of Confucianism that had flourished in the fifteenth and sixteenth centuries.[45] Often characterized by modern scholars as a radical subjectivism, learning of the mind emphasized self-truthfulness: since the self is an integral part of the cosmos, one only needs to look inward to acquire the cosmic principles.[46]

As part of this authenticity discourse, many sixteenth-century Chinese writers collected and emulated what may be best characterized as 'folksongs': popular tunes from among the urban and rural commoners outside the scholar-official class. These collections and emulations always referenced the Confucian *Canon of Songs* (Shijing 詩經, eleventh to sixth century BCE). Tradition posited that Confucius himself edited this volume of some three hundred song lyrics comprising three genres: *feng* 風 'local songs', *ya* 雅 'courtly songs', and *song* 頌 'sacrificial songs'. Unlike the other two genres that came from ancient court music, *feng* 'local songs' were supposedly collected by the ancient kings from among their commoner subjects in order to observe the state of their realms. Literally meaning 'wind' and metonymically 'mores' and 'local songs', *feng* materializes the perceived correlations between the climate, cultural norms, and songs of any given region.[47]

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44 This loss was most famously articulated by the chapter 'Record of Music' (*Yueji* 樂記) in the Confucian canon on rites, *Records of Rites* (Liji 禮記, c. fifth to third century BCE).

45 Willard Peterson, 'Confucian Learning in Late Ming Thought', in *The Cambridge History of China*, VIII: *The Ming Dynasty 1368–1644*, Part 2, ed. by Denis C. Twitchett and Frederick W. Mote (Cambridge and New York: Cambridge University Press, 1998), pp. 708–788 (pp. 716–728).

46 Ibid., pp. 719–722.

47 For a general introduction to the *Canon of Songs* in English, see Joseph R. Allen, 'Postface: A Literary History of the *Shi Jing*', in *The Book of Songs: The Ancient Chinese*

The significance of these ancient 'local songs' in sixteenth- and seventeenth-century discourses on folksongs is articulated in the preface to *Mountain Songs* (Shan'ge 山歌, *c.* 1630s), a collection of folksongs and folksong-emulations published by Feng Menglong 馮夢龍 (1547–1646):

> Since the invention of writing and inscription, each ancient dynasty had its own songs and ditties. They were collected by the grand historians and were called 'local songs' [*feng*] and 'courtly songs' [*ya*]. Over the following millennia, emotive songs of the Chu style and highly regulated lyrics of the Tang era vied to show off their beauty, whereas the sounds of the temperaments and affections of the commoners were no longer admitted to the world of poetry but were separately called 'mountain songs' instead. [...] Although the present day finds itself at the declining end of an era, there is only inauthentic literary poetry and prose, but no such thing as an inauthentic mountain song. This is because mountain songs do not compete for renown against poetry or prose and thus disdain to feign. So, shouldn't I be permitted to seize upon them in order to preserve the authentic? Today, people want to behold those songs from ancient times that were collected by the grand historians, yet following are the more recent songs that have remained among the commoners, and perhaps the latter should also count among sources through which we gauge the ethos of an age.[48]

Notably, Feng compares these modern songs gathered from 'among the commoners' (*minjian* 民間) to the ancient *feng* 'local songs' collected from the commoners back then. This comparison is remarkable, because it puts the singing voices of the mostly illiterate masses on an equal footing with ancient texts, a corpus that defined the scholar-official class: both modern folksongs and ancient texts are residues of the ancient time — the former vocalized, the latter written — and can help restore the lost knowledge of/about the ancient kings, even though scholars had long looked down upon the commoners' songs.[49]

Li Mengyang 李夢陽 (1472–1529) went even farther. Never a collector or imitator of popular songs, Li championed the 'restoring the ancient'

Classic of Poetry, ed. with additional translation by Joseph R. Allen, trans. by Arthur Waley (New York: Grove Press, 1996), pp. 336–383.

48 Feng Menglong 馮夢龍, *Shan'ge* 山歌, 10 vols. (Ming Chongzhen keben 明崇禎刻本, c. 1630s), *xu*, ff. 1r–2r.

49 The rather defensive tone in Feng's preface suggests that he was speaking to a scholar-official or literati audience in defense of these 'vulgar' songs. See Lowry, *Tapestry of Popular Songs*, pp. 161–169.

(*fugu* 復古) movement in fifteenth-century poetry, dismissing modern poetry as decadent and emulating historical styles. Yet Li betrayed a crippling insecurity in regard to folksongs in the preface to his poetry anthology. The preface describes Li's conversation with a friend, who schools him on the futility of emulating historical poetry transmitted in textual sources and touts the value of folksongs instead:

> [The friend said:] Poetry is the natural sound of Heaven and Earth. Today, when someone roars on the side of a road or sings in an alley, when the belabored one groans or the happy one chants, when one sings and a crowd responds, it is an authentic song, and it is called a 'local song' [*feng*]. Confucius once said: 'when the proper rites are lost, go find them among the wild countryside!' Today, the authentic poetry exists among the people, whereas the literati and the learned often versify only for the sake of rhyming.[50]

Attributed to Confucius,[51] the quote 'When the proper rites are lost, go find them among the wild countryside' (禮失而求諸野) was used by sixteenth-century scholars to argue that the illiterate common folks possessed unique residues of ancient knowledge unbeknownst to the literate scholar-officials, particularly in the realm of sound. Zhu Zaiyu 朱載堉 (1536–1611), for example, used this quote to justify his invention of twelve-tone equal temperament: while music theory treatises had stipulated the 2:3 and 4:3 proportions for millennia, Zhu observed that professional musicians had been adjusting these proportions when tuning their instruments, a practice they learned through generations of oral transmission.[52] Li's friend uses this quote to argue that the only 'authentic poetry' in existence are the songs of the illiterate masses, which he again compares to the ancient 'local songs' in *Canon of Songs*. So ashamed did Li become of his own poems, the preface later suggests, that he held off publishing them for more than two decades. Whereas Feng's preface to *Mountain Songs* argues that the singing voices of the

50 Li Mengyang 李夢陽, 'Shiji zixu' 詩集自序, in *Ming wen yu* 明文鬻, ed. by Liu Shilin 劉士麟, 20 vols. (Ming Chongzhen keben 明崇禎刻本, between 1628 and 1644), I, ff. 13r–15r (f. 13r).

51 For the earliest documentatio of this phrase, already attributed to Confucius, see Ban Gu 班固, *Qianhan Shu* 前漢書 (111 CE), 120 vols. (WYGSKQS, 1789), XXX, f. 38r.

52 Zhu Zaiyu 朱載堉, *Yuelü quanshu* 樂律全書 (c. 1596), 42 vols. (WYGSKQS, c. 1787), XXI, f. 8v.

modern commoners are as good a route towards restoring an ancient poetic ethos as are ancient texts, Li's preface argues the former to be the only possible route.

Phonographic Revolution

The folksong mania appeared to have subsided after the mid-seventeenth century, as the rise of evidential learning steered scholars away from radical subjectivism towards a renewed commitment to ancient texts. This return to texts also challenged the 'learning of the principle' (*lixue* 理學), the orthodox school of Confucianism since the fourteenth century. Whereas learning of the principle emphasized philosophical meditations on cosmic principles, Qing-era evidential learning emphasized textual evidence for the reconstruction of ancient institutions.[53] As a result, philology or *xiaoxue* 小學 'lesser learning' was no longer just a subsidiary to the 'greater learning' of ethics and metaphysics but became the most important discipline. Evidential scholars believed that only a correct understanding of the ancients' language could herald the correct interpretation of their texts and the perfect restoration of their laws and mores.[54]

This philological turn ended up overhauling Chinese philology itself. Previous Chinese philologists resembled early modern European Egyptologists in presuming a largely graphocentric paradigm, deciphering ancient Chinese texts as sequences of pictographs, ideographs, or logographs that represent objects or ideas directly. Yet seventeenth- and eighteenth-century Chinese philology saw three dramatic changes: the discovery of language change, the rise of historical phonology, and a new invention myth whereby writing (*graphē*) arose not to mimic things in nature but to record the sounds of the voice (*phōnē*) — a 'Phonographic Revolution'.

The lack of orthographical changes had long obscured the fact that pronunciations of the same Chinese characters changed over time. What inspired the groundbreaking early-seventeenth-century theories of

53 Elman, 'Early Modern or Late Imperial Philology?', pp. 16–18.

54 Angela Zito, *Of Body and Brush: Grand Sacrifice as Text/Performance in Eighteenth-Century China* (Chicago and London: The University of Chicago Press, 1997), pp. 96–117.

pronunciation change was the same classic Confucian text that encouraged scholar-officials to hark the singing voices of the common folks, ancient and modern: the *Canon of Songs*. Since at least the tenth century, scholars had noticed irreconcilable rhyming anomalies in these ancient lyrics. For example, Figure 7.4 shows two stanzas of a local song from the *Canon* with an *ababb* rhyme scheme. In first stanza, the character 家 must rhyme with 角 *jiao*; in the second stanza, the same character 家 must paradoxically rhyme with 牙 *ya*. Similar rhyming anomalies abound when the *Canon* lyrics are recited in modern pronunciations.

誰謂雀無角	jiao	Who can say that the sparrow has no beak?
何以穿我屋	wu	How else could it have pierced by roof?
誰謂女無家	-?	Who can say that you have no family?
何以速我獄	yu	How else could you bring this [law] suit?
雖速我獄	yu	But though you bring a suit,
室家步足	zu	Not all your friends and family will suffice.
誰謂鼠無牙	ya	Who can say that the rat has no teeth?
何以穿我墉	yong	How else could it have pierced my wall?
誰謂女無家	-?	Who can say that you have no family?
何以速我訟	song	How else could you bring this plaint?
雖速我訟	song	But though you bring this plaint,
亦女不從	cong	All the same I will not marry you.

Fig. 7.4 The second and third stanzas of 'Paths with Dew' (行露), the sixth 'local song' from the 'South of Shao' (召南) region in *Canon of Songs;* English translations from *Book of Songs*, trans. Waley, pp. 16–17. The figure shows the apparent rhyming irregularities if one reads the lyrics in the currently received Mandarin pronunciations — though these irregularities would have also occurred when scholars after the tenth century read this poem in the received pronunciations of their time.

Over the centuries, different solutions were proposed. One, 'vowel harmonization' (*xieyun* 叶韻), posits that the ancients habitually altered their pronunciations for rhyming convenience: they would have pronounced the first 家 in the poem above as *jiao* rhyming with 角 *jiao* and the second 家 as *jia* rhyming with 牙 *ya*.[55] Another, 'assimilation and transference' (*tongzhuan* 通轉), posits that the ancients simply followed

55 An epitome of this theory is *Collective Commentaries on the canon of Songs* (Shi jizhuan 詩集傳, *c.* 1186) by Zhu Xi 朱熹 (1130–1200), a progenitor of the 'learning of the principle' school of Confucianism, also known as Neo-Confucianism.

more relaxed rules whereby different vowel endings like *-ia* and *-iao* still rhymed.[56]

A new explanation emerged during the seventeenth century: pronunciations had changed since the *Canon* lyrics were written down, when 家, 角 *jiao*, and 牙 *ya* were actually pronounced to the same vowel ending. This notion of 'language change' and a distinct ancient phonology is the foundation of modern linguistics, yet its canonization in early modern Chinese philology was not a straightforward process. Though Chen Di 陳第 (1541–1617)[57] and Gu Yanwu 顧炎武 (1613–1682)[58] conjectured systematic differences between ancient and modern pronunciations of the same characters, this 'correct' theory did not become consensus until the mid-eighteenth century. Early proponents of the theory used the *Canon* lyrics as their main evidence and data. They used the rhymes of these ancient songs to reconstruct various ancient vowel groups, each comprising characters that would have been read to the same vowel — and would have thus rhymed — regardless of their modern sounds. Yet despite accounting for many of the anomalies, these proposed ancient vowel groups created new irregularities, as characters from different groups could still rhyme, as in some of the *Canon* lyrics. These new irregularities pushed some scholars to find alternative theories that make sense of the *Canon* rhymes without hypothesizing any ancient-modern language change.[59] Still, because self-consistency was the only arbiter between them, one method of patterning the textually transmitted rhyming data in *Canon* could not invalidate another.

Jiang Yong 江永 (1681–1762) put a decisive end to this centuries-long debate in favor of the theory of pronunciation change. In *Standards of Ancient Rhymes* (Guyun biaozhun 古韻標準, 1771), Jiang laments that earlier attempts to distill a system of ancient phonology from the *Canon* rhymes failed to account for all the apparent rhyming anomalies because they relied only on 'investigating ancient things' (*kaogu* 考古)

56 First systematically proposed by Wu Yu 吳棫 (*c.* 1100–1154) in *Yunbu* 韻補 (1168), the theory remained popular until the mid-eighteenth-century. See Zhang Minquan 张民权, *Qingdai guyinxue yanjiu* 清代古音學研究, 2 vols. (Beijing: Beijing guangbo xueyuan chubanshe, 2002), I, pp. 42–88; II, pp. 135–153.

57 Chen Di 陳第, *Maoshi guyin kao* 毛詩古音攷 (1606), 4 vols. (WYGSKQS, 1777).

58 Gu Yanwu 顧炎武, *Shi benyin* 詩本音 (c. 1667), 6 vols. (WYGSKQS, 1780).

59 Zhang, *Qingdai guyinxue yanjiu*, I, pp. 42–88; II, pp. 135–153.

yet ignored 'examining the sounds' (*shenyin* 審音).[60] Instead of grouping written characters (*graphē*) according to their textually documented instances of rhyming, Jiang introduces the voice (*phōnē*) to the process, specifically through 'classified rhymes' (*dengyun* 等韻) or phonetics. Originating in the ninth century, the study of classified rhymes analyzes articulatory differences between phonetic sounds and uses them to 'classify' characters according to their pronunciation mechanisms.[61] Notably, classified rhymes functioned in relation to the scholarship of 'rhyme dictionaries' (*yunshu* 韻書), which grouped characters into various vowel groups specifically as applicable to rhyming in the Six Dynasties (220–589) and Tang (618–907) poetic traditions. Thus, the study of classified rhymes drew its sonic materials from what is now known as Middle Chinese, which Qing-era scholars unequivocally considered 'modern'. And yet, Jiang made the anachronistic move of borrowing the models of syllabic structures, tone shifts, and places of articulations developed from studying the modern language to examine the ancient vowel groups distilled from the *Canon of Songs* by earlier proponents of the pronunciation change theory. By thus 'examining the sounds', he showed that characters from different ancient vowel groups could rhyme in *Canon of Songs* only under specific conditions of tones, glides, and allophonic codas — conditions consistent with what scholars of classified rhymes had long observed in regard to the modern language. The apparent inconsistencies of the pronunciation change theory and its proposed ancient vowel groups were thus explained away.[62]

What allowed Jiang to remove this final hurdle was phonocentrism. Where previous scholars struggled to prove that pronunciations had changed, Jiang focused on what he considered unchanging: the sound-producing mechanisms of the voice. Indeed, only by assuming the phonetic principles derived from studying modern pronunciations to be timeless could Jiang apply them to studying the ancient vowel groups derived from the *Canon* lyrics. The sounds produced by the

60 Jiang Yong 江永, *Guyun biaozhun* 古韻標準 (1771), 4 vols. (WYGSKQS, 1781), *liyan*, f. 4v.

61 Wang Li 王力, *Zhongguo yuyanxue shi* 中國語言學史 (Beijing: Zhonghua shuju, 2013), pp. 85–86.

62 Ibid., pp. 148–152. See also Wang Li 王力, *Qingdai guyin xue* 清代古音學 (Beijing: Zhonghua shuju, 1990/2012), pp. 140–141.

voice reading a character (*graphē*) have changed, in other words, but the voice itself (*phōnē*) has not. The voice thus occupied a privileged, transcendent position from which to resurrect the lost ancient language and thereby lost ancient knowledge.

For philology, Jiang's insertion of a timeless voice into reconstructing the sounds of ancient texts was paradigm-shifting. Yet, as the previous section has shown, the same conceptualization of the perennial voice underpinned sixteenth-century folksong mania. Just as Jiang would use ahistorical sound-producing mechanisms of the voice to re-sound the ancient tongue embedded in the *Canon of Songs*, folksong aficionados such as Feng Menglong posited that the ancient *Canon of Songs* despite the loss of its proper melodies, pronunciations, and meanings had lived on through the singing voices of the modern commoners. And this veneration of the singing voice arguably enabled Jiang's phonocentric reinvention in philology. Although seventeenth-century critiques of radical subjectivism dampened literati enthusiasm for folksongs, Qing-era scholars simply transferred the fantasy of using the voice to 'restore the ancient' to another modern culture of popular singing: opera. Thanks to commercial prosperity and politically-minded patronage from the Qing's Manchu rulers, various traditions of Chinese opera flourished across different regions and social strata during the seventeenth and eighteenth centuries.[63] Though state ideology continued to disparage opera as morally suspect, scholars influenced by the evidential learning movement began to treat opera as a living thread along which to retrace and reverse the loss of musical perfection since the ancients.[64] Nowhere is this operatic optimism better exemplified than in one of the several prefaces to *Transmitting the Voice of Ancient Music* (Yuefu chuansheng 樂府傳聲, 1748), a treatise on how to sing opera arias by Xu Dachun 徐大椿 (1693–1771):

> What perished with ancient music was its melodies and its rhythms, yet the voice had never perished. By the Tang [618–907] era, people could no longer sing *yuefu* folksongs from the Han [206 BCE–220 CE] and Six Dynasties [220–589] eras, yet they sang metered poems. By the Song [960–1279] era, people could no longer sing metered poems from the

63 Andrea S. Goldman, *Opera and the City: The Politics of Culture in Beijing, 1779–1900* (Stanford: Stanford University Press, 2012), pp. 63–114.

64 Shi Fang 石芳, 'Qingdai kaojuxue yujing xia de xiqu lilun 清代考據學語境下的戲曲理論' (PhD thesis, Shanghai Theatre Academy, 2016), pp. 57–72.

> Tang era, yet they sang lyrical tunes. By the Yuan [1259–1368] era, people could no longer sing lyrical tunes from the Song era, yet they sang opera tunes. Yet the voice that sings opera tunes [today] is the same voice that once sang lyrical tunes, metered poems, and *yuefu* folksongs, and isn't it exactly the same voice that once sang the local songs, elegant songs, and hymns from [the most ancient] *Canon of Songs*? So how can one say that the voice had ever perished? [...] Xu Dachun says: 'The *ur*-sound [元聲] of Heaven and Earth has never ceased for even a single day'.[65]

Like almost every essay on music in the Confucian tradition, the preface narrates its history as one of loss — not just the loss of ancient songs but a series of losses up to the recent past. Yet the preface immediately qualifies these losses with a constant: singing. It quotes Xu Dachun comparing the unchanging singing voice to the cosmic *ur*-sound — the same *yuansheng* evoked by the Qianlong Emperor in praising the sound-recording precision of the Manchu alphabet in his preface to *Rhapsody* quoted above, published in the same year.

Xu Dachun's treatise shares not only Jiang Yong's understanding of the voice as timeless but also his methodology of studying it: applying 'classified rhymes' to model the sound-producing mechanisms of the voice, or what he calls 'methods of the mouth' (*koufa* 口法).[66] Xu acknowledges that his singing pedagogy borrowed the phonetic analysis of 'the four prenuclear glides' (*sihu* 四呼) and 'the five places of articulations' (*wuyin* 五音) from Pan Lei 潘耒 (1646–1708). The latter studied under Gu Yanwu, the aforementioned pioneer of reconstructing the ancient phonology through the *Canon of Songs*.[67]

Xu Dachun's foray into classified rhymes was but one example of the overlap between opera scholarship and philology. Since many Chinese opera traditions drew their melodic materials from a body of preexisting 'titled tunes' (*qupai* 曲牌), singing (and composing) arias

65 Xu Dachun 徐大椿, *Yuefu chuansheng* 樂府傳聲 (1748), in *Zhongguo gudian xiqu lunzhu jicheng* 中國古典戲曲論著集成, ed. by Zhongguo xiqu yanjiuyuan 中国戏曲研究院 (Beijing: Zhongguo xiju chubanshe, 1959), VII, pp. 145–188 (pp. 149–150). The author of this particular preface is a certain Hu Yanying 胡彥穎. See also Judith Zeitlin, 'From the Natural to the Instrumental: Chinese Theories of the Sounding Voice before the Modern Era', in *The Voice as Something More: Essays Toward Materiality*, ed. by Martha Feldman and Zeitlin (Chicago and London: The University of Chicago Press, 2019), pp. 54–74 (pp. 66–70), https://doi.org/10.7208/chicago/9780226656427.003.0002

66 Xu Dachun, *Yuefu chuansheng*, p. 153.

67 Shi, 'Qingdai kaojuxue yujing xia de xiqu lilun', p. 185.

entailed fitting new lyrics to a tune a singer already knew by heart. Because all Sinitic languages feature lexically significant tones, glides, and codas, to make the lyrics comprehensible, a singer must adjust the preexisting tune every time they sing it to a different set of words.[68] And because each opera tradition was associated with a particular region and dialect, a singer must adjust each tune to different linguistic features. Thus, studies of opera always identified pronunciation as a primary concern. And philologists reciprocated. Some of the most influential 'rhyme dictionaries' and treatises on classified rhymes named opera scholars and aficionados as their audience. Major partisans in the debate on pronunciation change and ancient phonology also wrote opera treatises.[69]

Thus, Jiang's philological breakthrough was predicated on the literati desire to refine opera (particularly K*unqu* 崑曲 opera) into a form of high entertainment, a desire that sustained classified rhymes as a vibrant field and put the phonocentric conceptualization of the perennial voice into embodied musical action. In turn, Jiang's phonetic reinterpretation of the rhyming data in the *Canon of Songs* cemented the concept of language change and steered the study of ancient texts in a resolutely phonocentric and phonographic direction. Phonology replaced grammatology as the methodological core of philology. This shift is evident in Wang Niansun's preface to Duan Yucai's *Annotations* partly quoted above. As Wang explains, interjecting historical phonology into interpreting ancient texts uncovers a new sonic dimension.

Indeed, many Chinese characters function not as pictographs or logographs representing objects, ideas, or words directly but as phonographs representing units of sound through the principle of 'homophonous rebus' (*jiajie* 假借). For example, the character 止 originated as a picture of the foot and meant 'foot' or 'toe'. Later on, the character was increasingly used as a rebus to represent a particular speech sound that, in addition to 'foot/toe', may also mean 'to halt', which lacked its own pictograph. Over time, the rebus or phonographic usage

68 Liang Mingyue, *Music of the Billion: An Introduction to Chinese Musical Culture* (New York: Heinrichshofen, 1985), pp. 234–243.

69 Shi, 'Qingdai kaojuxue yujing xia de xiqu lilun', pp. 177–187; Li Huei-Mian 李惠綿, 'Cong yinyun xue jiaodu lun Mingdai kunqiang duqulun zhi xingcheng yu goujian' 從音韻學角度論明代崑腔度曲論之形成與建構, *Zhongguo wenzhe yanjiu jikan* 中國文哲研究集刊, 31 (2007), 75–119.

of 止 meaning 'to halt' became its only received meaning, to the point that another homophonous character 趾 was used to fulfill the original pictographic 'foot/toe' meaning that 止 no longer signified. Thus, Wang argues, grammatologists confining themselves to the visual shapes and pictographic origins of characters only have a 'shallow' understanding of texts. In contrast, by applying historical phonology, scholars like Duan Yucai demonstrate that many characters in ancient texts actually function as phonographic rebuses representing a particular unit of sound, and their correct meanings are revealed not through the visual iconicity of their shapes but through the homophonous associations of their pronunciations. By reconceptualizing writing as the representation of speech and the latter as the more immediate bearers of meaning, Qing-era philologists made sense of many puzzling passages in the Confucian classics that became crystal clear once their sounds (*phōnē*) were included in the picture (*graphē*).

Therefore, what resulted from the philological turn in seventeenth- and eighteenth-century China was not only new exegeses of ancient texts but also new theories of the relations between language, voice, and writing. More than a century before modern grammatologists such as Ignace Gelb and John DeFrancis defined writing as 'visible speech',[70] scholars at the height of the evidential learning movement had come to understand writing as nothing else than phonography, or voice-writing. The triumph of this Phonographic Revolution was made plain in Duan's 1795 preface to Wang's *Commentaries and Proofs for Towards Elegance Extended* (Guangya shuzheng 廣雅疏證). Taking a *longue durée* perspective, Duan writes:

> When the sages created the characters, first there was meaning and then there was sound, and first there was sound and then there was shape. The historical investigation of characters by scholars employs their shape to acquire their sound, and employs their sound to acquire their meaning.[71]

70 I. J. Gelb, *A Study of Writing*, second edition (Chicago and London: The University of Chicago Press, 1963), pp. 11–20; John DeFrancis, *Visible Speech: The Diverse Oneness of Writing Systems* (Honolulu: Univerity of Hawai'i Press, 1989), pp. 42–56. As I will argue later, the convergence of Duan and Wang with Gelb and DeFrancis does not mean that a phonographic definition of writing is either correct or inevitable.

71 Duan Yucai 段玉裁, preface to Wang Niansun 王念孫, *Guangya shusheng* 廣雅疏証, 10 vols. (Jiaqing yuannian keben 嘉慶元年刻本, 1795), *xu* (No. 2), f. 1r.

Not only did Duan argue that philologists should treat shapes or written characters as stand-ins — or, to borrow Rousseau's term, supplements — for spoken words, but he also reversed the order of the invention of language as originally narrated in Xu Shen's postface to *Explicating Glyphs*, partly quoted before. According to Duan, writing was not invented to visually mimic things in nature independent of spoken language; instead, they were invented after spoken words specifically to record their sounds. The Phonographic Revolution elevating voice over writing and redefining the latter as the former's trace was thus complete.

Early Modern Phonographs

Nine years after Duan's *Annotations*, Champollion deciphered the Egyptian hieroglyphs in his *Précis du système hiéroglyphique des anciens égyptiens* (1824). He succeeded precisely by challenging the ingrained European perception of hieroglyphs as pictographs, ideographs, and logographs representing objects or ideas directly, arguing instead that the majority of signs in hieroglyphic texts function as phonographs, specifically rebuses representing speech sounds.[72]

As it turned out, it was Chinese philology that propelled Champollion towards this epiphany. Although he had already reconstructed the phonetic values of hieroglyphs by collating the bilingual proper names on the Rosetta Stone in his famed *Lettre à M. Dacier* (1822), Champollion remained unsure whether the hieroglyphs were ever used phonographically other than for names or foreign words.[73] Encouraged by the *Elémens de la grammaire chinoise* (1822) by Jean-Pierre Abel-Rémusat, the first chair of sinology at Collège de France, however, Champollion argues in 1824 that, just as Chinese characters are frequently used phonographically to represent units of sound, so were the Egyptian hieroglyphs.[74] The hieroglyph  , for example, most frequently functions not as a pictograph for 'goose' — or an ideograph for some metaphysical 'goose-ness' — but as a phonograph for the

72 John Ray, *The Rosetta Stone and the Rebirth of Ancient Egypt* (London: Profile Books, 2007), pp. 38–79, https://doi.org/10.2307/j.ctvjghx1v

73 Andrew Robinson, *Cracking the Egyptian Code: The Revolutionary Life of Jean-François Champollion* (Oxford and New York: Oxford University Press, 2012), pp. 148–150.

74 Jean-François Champollion, *Précis du système hiéroglyphique des anciens égyptiens* (Paris: Treuttel et Würtz, 1824), pp. 304–307.

sound *sa*, which means 'son or daughter' as well as 'goose'. Similarly, the Chinese character 又 most frequently functions not as a pictograph for 'right hand', but as a rebus for the sound *you*, which means 'again' in addition to 'right-hand side' in spoken language.[75] Discovering this shared phonographic principle allowed Champollion to treat hieroglyphic texts as recordings of spoken words, which in turn allowed him to harness his knowledge of the spoken Coptic language to decipher their meaning.

It appears that the seventeenth- and eighteenth-century dream of using Chinese to unlock the secret writing and knowledge of ancient Egypt did come true — except in exactly the opposite way than was expected. Chinese writing helped decipher Egyptian writing not because they differ from all alphabets and syllabaries of the world in representing ideas or things directly, but because scholars realized both of them to be phonographic after all.[76] Thus, towards the early nineteenth century, scholarly cultures in both China and France reached the not at all obvious or inevitable conclusion that all writing is a kind of phonograph whereby the voice is recorded and rendered visible.

That a Phonographic Revolution remapped the perceived relation between writing and the voice in both early modern France and China has reverberations beyond the history of linguistics. Since the onset of poststructuralism, critiques of Western phonocentrism have informed much of the scholarly frameworks of subjectivity, alterity, hegemony, and agency in both Eurocentric and postcolonial contexts. Studies on the voice posit that a form of phonocentrism treating writing as mere phonography has defined Western philosophy since Socrates.[77] A deep-seated alphabetism — maintaining alphabetic writing as superior to all

75 These two examples are mine, as the ones used by Champollion would be too intricate to unpack in just a few lines.

76 It appears that Abel-Rémusat arrived at the phonographic interpretation of Chinese writing more or less independently of Qing-era philologists. See Zhitang Drocourt, 'Abel-Rémusat et sa pensée linguistique sur le chinois', *Actes en ligne du V^e Congrès de la Société des études romantiques et dix-neuvièmistes*, 'Le XIXe siècle et ses langues', November 2013, http://etudes-romantiques.ish-lyon.cnrs.fr/wa_files/Langues-Drocourt.pdf).

77 See, for example, Adriana Cavarero, 'Appendix: Dedicated to Derrida', in *For More than One Voice: Toward a Philosophy of Vocal Expression*, trans. by Paul A. Kottman (Stanford: Stanford University Press, 2005), pp. 213–241 (p. 224); and Mladen Dolar, *A Voice and Nothing More* (Cambridge and London: The MIT Press, 2006), pp. 42–52.

other kinds — may even seem inevitable in Western philosophy, as its entire corpus has been transmitted through alphabetic writing (Arabic, Greek, Hebraic, Latin).[78]

Meanwhile, postcolonial studies have identified alphabetic writing as an instrument of Western colonialism, particularly in post-1492 Americas. Besides reorganizing Indigenous societies around a Eurocentric form of literacy, the narrative goes, European scholars and colonial officers denigrated indigenous cultures by narrating the history of writing as a phonographic evolution from pictographs to alphabets.[79] This phonographic teleology, first clearly stated by Warburton, necessarily deemed as primitive all forms of indigenous graphic communication. And while Rousseau could still use this teleology to justify his primitivist aspirations in his *Essay*, condescension towards non-alphabetic writings became increasingly unequivocal in the late eighteenth-century, especially in German Romanticism and idealism. Johann Gottfried Herder (1744–1803), who theorized folksongs and language as the singing-speaking embodiment of national character, pointed to the overabundance of signs in Chinese writing as proof for the nation's 'miserable refinement in the trifles' and 'want of invention in the great'.[80] Johann Nikolaus Forkel (1749–1818), a founding figure of modern musicology, anointed staff musical notation as the epitome of alphabets and interpreted the lack of alphabetic writing in ancient Egypt and China as a sign for the 'disorder and confusion' of their music, forever stuck at the 'stage of childhood'.[81] Finally, in what is often deemed the triumph of phonocentrism, Hegel valued alphabetic writing precisely for its proximity to spoken words, which he considered closest to the immediacy of thought. It is only fitting, he argued, in *Encyclopedia of the Philosophical Sciences* (1817), that a 'stationary spiritual culture like

78 See Walter D. Mignolo, 'Afterword: Writing and Recorded Knowledge in Colonial and Postcolonial Situations', in *Writing Without Words*, ed. by Boone and Mignolo, pp. 293–313, https://doi.org/10.1215/9780822379263-012

79 Gary Tomlinson, 'Musicology, Anthropology, History', *Il Saggiatore musicale*, 8 (2001), 21–37; and Tomlinson, *Singing of the New World*, pp. 18–27 and pp. 28–42.

80 Johann Gottfried Herder, *Outlines of a Philosophy of the History of Man*, trans. by T. Churchill, 2nd ed., 2 vols. (London: Luke Hanfard, 1803), II, p. 9.

81 Johann Nikolaus Forkel, 'From *A General History of Music* (1788–1801)', in *Strunks' Source Readings in Music History*, ed. by L. Treitler, rev. ed., V: *The Late Eighteenth Century*, ed. by W. J. Allanbrook (New York: Norton, 1998), pp. 1024–1029 (pp. 1028–1029). See also Tomlinson, 'Musicology, Anthropology, History', pp. 28–29.

the Chinese' should remedy their intellectual deficiency with thousands of written signs representing specific concepts, while streamlined alphabetic letters representing speech sounds should accompany Western philosophical progress.[82]

Yet the parallel Phonographic Revolutions I have identified render the purported phonocentrism of Western philosophynot so uniquely or perennially 'Western' at all. My point is not to use the rise of phonocentrism under the Qing Empire to absolve Eurocentric alphabetism; the latter has continued to marginalize cultures outside European and Euro-colonialist literacy by defining 'true writing' as 'visible speech'.[83] Nor is it to uphold Western Europe as the yardstick of 'modernity' by likening early modern Chinese philology and opera studies to contemporary European discourses. Rather, by showing that a phonographic theory of writing emerged in Chinese literary and song cultures over a century before any serious proposals of 'modernizing' Chinese writing with a European-style alphabet, I argue that neither a deep-seated 'Western metaphysics' overdetermined by the use of alphabets nor the 'shock' of encountering non-alphabetic writing can explain the rise of phonocentrism or alphabetism in European thought at the intersection of (early) modernity and colonialism.[84] Instead, the parallel Phonographic Revolutions beg the *historical* question of why the so-called early modern period saw a potentially global shift towards a phonographic theory of writing. This question cannot be explained by a timeless, structuralist-essentialist contrast between 'oral' versus 'visual' or 'pictographic' versus 'alphabetic' cultures, or by a teleology from orality to literacy or from pictures to letters,[85] or by a 'Big History'

82 G. W. F. Hegel, *Philosophy of Mind*, trans. by W. Wallace and A. V. Miller, rev. by Michael Inwood (Oxford: Clarendon Press, 2010), 194–198. See also Derrida, *Of Grammatology*, pp. 24–26.

83 For a critique of DeFrancis's Eurocentric definition of writing as 'visible speech', see Elizabeth Hill Boone, 'Introduction: Writing and Recording Knowledge', in *Writing Without Words*, ed. by Boone and Mignolo, 3–26 (pp. 13–17), https://doi.org/10.2307/j.ctv1220k2d.4

84 The seductive narrative that encounters with 'Others' thoroughly 'shocked' early modern Europe and triggered a dramatic reinvention of scholarly paradigms and worldviews has been refuted in Michael T. Ryan, 'Assimilating New Worlds in the Sixteenth and Seventeenth Centuries', *Comparative Studies in Society and History*, 23 (1981), 519–538, https://doi.org/10.1017/s0010417500013542

85 The dichotomies between 'oral' versus 'visual' cultures have been thoroughly refuted in Jonathan Sterne, *The Audible Past: Cultural Origins of Sound Reproduction*

of increasing globalization or interconnectivity.[86] Instead, the question asks how contingent interstices of power, techne, and identities effected transregional convergences towards theorizing writing as phonography whilst foreclosing on divergent trends pointing otherwise.

In this way, I argue, the question of whether there was something globally (early) modern about phonography offers a new heuristic for studying and critiquing modernity. Probing the phonographic turn of modernity opens a global yet radically relativistic perspective for examining how varying phonographic experiences with the traces of speech and song had been transforming the world, centuries before Thomas Edison's 1878 patent made the phonograph a tangible machine. Indeed, in both the Parisian quarrels and Chinese philology, debates on the relation between writing and the voice implicated not just language but also — and often primarily — songs, be they operas, folk tunes, or ethnographic soundscapes, in both scholarly imaginations and performative practices. Studying these globally dispersed phonographic praxes allows a new dimension for examining the still poorly defined 'early modern era', a sonorous dimension that is not along, not against, yet oblique to the teleology of Western industrial, scientific, and, indeed, phonographic progress.

(Durham and London: Duke University Press, 2003), pp. 10–19, https://doi.org/10.1215/9780822384250. I suggest Sterne's critique should be extended to dichotomies between 'pictographic' versus 'phonographic' cultures.

86 Kenneth Pomeranz, 'Teleology, Discontinuity and World History: Periodization and Some Creation Myths of Modernity', *Asian Review of World Historians*, 1.2 (2013), 189–226 (pp. 206–209 and pp. 213–226), https://doi.org/10.12773/arwh.2013.1.2.189