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ARTICLE

In Search of the 'Oriental Origin': Rameau, Rousseau and Chinese Music in Eighteenth-Century France

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Abstract

This article offers a fresh perspective on the study of the eighteenth-century musical dialogue between China and France, not as an episode of exotic encounter but as an intellectual movement that profoundly shaped how scholars conceived of music and the study of its theories within an increasingly integrated world. Taking Jean-Philippe Rameau's and Jean-Jacques Rousseau's explorations into the origins of music as an example, I foreground the importance of Chinese music in the formation of their influential concepts of the *corps sonore* and of the unity of music and language respectively. While these two thinkers made two opposing claims about the origins of music, both used Chinese music as key evidence to support their arguments. Moreover, certain Jesuit missionaries, particularly Jean-Joseph-Marie Amiot, played a crucial role in the global transmission of musical knowledge that enabled French thinkers like Rameau and Rousseau to incorporate music beyond Western Europe. Ultimately, this article reverses the Eurocentric narrative that tends to trace the influence of 'Western music' on other parts of the world by showing how Chinese music exerted a major impact on musical debates in France. Situating the study of eighteenth-century music in a global context, I demonstrate what we commonly recognize as 'Western music theory' was shaped by knowledge from the East.

Keywords: Jean-Joseph-Marie Amiot; Jean-Jacques Rousseau; Jean-Philippe Rameau; Chinese music; global music history

One of the most important sources on Chinese music for scholars in late eighteenth-century France was the *Mémoire sur la musique des Chinois tant anciens que modernes* written by Jean-Joseph-Marie Amiot (1718–1793), a French Jesuit who arrived in Beijing in 1751 and served at the Chinese court of Emperor Qianlong 乾隆 (1711–1799; reigned 1735–1796). Amiot completed the draft of the *Mémoire* in 1776 and sent two copies to France.[1] This text was subsequently edited by Pierre-Joseph Roussier (1716/1717–1792) – who deleted a number of passages and added annotations and his own observations – and published as a free-standing treatise in 1779.[2] The bulk of

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[1] One copy was sent to Jérome Frédéric Bignon (1747–1784), a Librarian of the King, and the other to Henri-Leonard-Jean-Baptiste Bertin (1720–1792), Minister and Secretary of State. These manuscripts are both held at the Bibliothèque nationale de France, Paris (F-Pn). Their details are, respectively, Jean-Joseph-Marie Amiot, 'Mémoire sur la musique des Chinois tant anciens que modernes' (1776), in 'Mélanges sur la Chine et les Chinois', Bréquigny 13, fols 1–349, and Jean-Joseph-Marie Amiot, 'Mémoire sur la musique des Chinois tant anciens que modernes' (1776), Français 9089. In this article I refer to and cite the latter manuscript.

[2] Roussier referred to both manuscript versions. The treatise was published as Jean-Joseph-Marie Amiot, *Mémoire sur la musique des Chinois tant anciens que modernes* (Paris: Nyon l'aîné, 1779). In 1780 it was reprinted in the *Mémoires concernant l'histoire, les sciences, les arts, les mœurs, les usages, etc. des Chinois, par les Missionnaires de Pékin*, seventeen volumes (Paris: Nyon l'ainé, 1776–1791 (volumes 1–15); Paris and Strasbourg: Treuttel & Wurtz, 1814 (volumes 16–17)), as volume

the *Mémoire* consisted of translations of passages concerning music from Chinese classics as well as the writings of Zhu Zaiyu 朱載堉 (1536–1611), a well-known music theorist of the Ming dynasty. Although these translations might not seem extraordinary in themselves, the way that Amiot used them to establish a connection between Chinese and Western music reveals the importance of China and its music in eighteenth-century intellectual debates over musical origins in France. Indeed, in explaining how the ancient Chinese had invented a method of generating a series of fifths based on the hexagram (a figure made of six broken and unbroken lines), Amiot pointed out a direct link between this method and the theory of the fundamental bass proposed by Jean-Philippe Rameau (1683–1764):

> Par l'application des sons aux lignes des hexagrammes, les initiés dans la musique conclurront que les lignes ne sont que les expressions de la génération des fondamentaux dans le système diatonique, puisqu'ils trouveront une suite de quintes prenant la place l'une de l'autre jusqu'au terme posé par la nature elle même; et les Musiciens Philosophes y découvriront peut-être tout le système de la basse fondamentale du célebre Rameau.[3]

> By applying sound to the lines of the hexagrams, those who know music will conclude that these lines are precisely the expression of the generation of the fundamentals in the diatonic system, because they will find a series of fifths taking the place of one another until the point limited by nature itself. And the Musician-Philosophers will perhaps discover there the entire system of the fundamental bass of the famous Rameau.

Here Amiot compared two very different concepts. On the one hand, the hexagrams were believed to have been created by Fuxi 伏羲, the legendary founder of the Chinese civilization, more than 3,400 years before the common era.[4] On the other hand, Rameau's theory of the fundamental bass was a novel theoretical concept devised in the eighteenth century.[5] Amiot joined these two disparate concepts and boldly asserted that the ancient Chinese and Rameau used the same method to generate a series of fifths. Not unexpectedly, this assertion was attacked by Roussier, a student of Rameau. He argued that the Chinese and Rameau proposed two different systems: whereas according to the Chinese, each fundamental note was taken in isolation, in Rameau's system, it contained the fifth and the third derived from it.[6]

Despite the glaring difference, Amiot associated Chinese music with Rameau's theory in an attempt to validate the principles of Chinese music from the European point of view and, more importantly, to demonstrate that the Chinese, long before the Europeans, had unlocked the secrets of musical science. In fact, what Amiot ultimately tried to prove in his *Mémoire* was not merely the resemblance between the hexagrams and the fundamental bass but the Chinese origin of Western music. According to Amiot, 'les Chinois sont cette nation ancienne, chez laquelle, je ne dis pas seulement les Grecs, mais la nation Egyptienne elle-même, ont puisé les élémens des Sciences et des Arts, qui ont été transmis ensuite aux peuples barbares de l'Occident' (the Chinese are this ancient nation from whom, I say, not only the Greeks but even the Egyptian nation obtained the elements of

6. For a discussion of Roussier's role as an editor see Stewart Carter, 'The Editor from Hell: Information and Misinformation on Chinese Music in Late Eighteenth-Century France', in *Music in Eighteenth-Century Culture*, ed. Mary Sue Morrow (Ann Arbor: Steglein, 2016), 23–47. In this article I refer to the Bertin manuscript and the first published version of Amiot's treatise respectively as Amiot, 'Mémoire' (1776) and Amiot, *Mémoire* (1779).

[3] Amiot, 'Mémoire' (1776), 107–108. All translations in this article are mine unless otherwise indicated.

[4] Amiot dated Fuxi's founding of China to 3462 BCE. Jean-Joseph-Marie Amiot, 'Abrégé chronologique de l'histoire universelle de l'empire chinois', in *Mémoires concernant l'histoire, les sciences, les arts, les mœurs, les usages, &c. des Chinois*, volume 13 (1788), 78.

[5] See Jean-Philippe Rameau, *Nouveau système de musique théorique* (Paris: Jean-Baptiste-Christophe Ballard, 1726), 24, and Cynthia Verba, *Music and the French Enlightenment: Rameau and the Philosophes in Dialogue*, second edition (New York: Oxford University Press, 2016), 59.

[6] Amiot, *Mémoire* (1779), 130–131, note (*ff*) by Roussier.

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the sciences and the arts which were subsequently transmitted to the barbarous peoples of the West).[7] Amiot believed that music, along with other branches of knowledge, originated in China and was later transmitted to Egypt, Greece and Europe.

If the belief of Amiot – based in Beijing – in the Chinese origin of Western music seems striking, what is more surprising is that a number of Enlightenment thinkers in Europe, particularly Rameau and Jean-Jacques Rousseau (1712–1778), embraced the basic idea of Amiot's claim. They, too, believed in the unquestionable connection between Chinese music and the music theories developed in the West; and they, too, considered China central to understanding the origins of the arts and sciences and human history at large. In this article I aim to demonstrate three main points by examining dialogues on the origins of music between the Jesuit missionaries in China and music theorists in France. First, I will trace how the knowledge of Chinese music made its way into France by focusing on the life and work of Amiot, particularly the context that surrounded his claims regarding the Chinese origins of Western music. Second, I will show how missionaries like Amiot and European scholars created a theory of the 'Oriental origin' in response to their discovery of the antiquity of the East. In this process, China was made into an embodiment of the ancient and the undeveloped state of human existence, in contrast to the 'modern' and 'civilized' Europe. Third, I will demonstrate how Rameau and Rousseau were deeply influenced by the Oriental-origin theory in their investigations into the origins of music. Specifically, I will highlight how they took advantage of new knowledge of Chinese music and used it to support their respective views. While Rameau relied on Chinese music to prove that harmony was the source of melody, Rousseau argued to the contrary, that melody preceded harmony. Despite their different arguments, both thinkers used Chinese and other musics from beyond Europe to construct key concepts in their theories, challenging the notion of a 'pure' 'Western music theory'.

The search for the origins of music was not simply a story about how ideas travelled from the East to the West or how Western music theorists borrowed some exotic elements from the East. Faced with a foreign system of music, Jesuit missionaries and music scholars in Europe were eager to expand their knowledge beyond Europe; at the same time, some misrepresented China and the East in an attempt to assert the 'superiority' of European culture in an increasingly interconnected world. The idea of an Oriental origin of European music most vividly captures these two seemingly contradictory efforts: identifying the East, particularly China, as music's originating place was simultaneously an acknowledgment of an ancient civilization that existed apart from Europe and a refusal to view this ancient civilization as being just as advanced as modern European nations. Simply put, in the musical dialogue between China and France, globalist spirit – the impulse to look beyond the confines of one's own culture – was always accompanied by a nationalist and religious agenda, and the two did not have to cancel each other out. Misrepresentations of China notwithstanding, what made this musical dialogue remarkable was the seriousness with which French music theorists examined and incorporated the Chinese musical system into their search for Europe's musical origins. Instead of ignoring music from China, they were compelled to understand it and to reposition Europe's own musical culture in light of it. In what follows, by showing how the knowledge of China fundamentally changed the way European thinkers conceived of important ideas such as origin, antiquity and history, I argue that China and Europe in the eighteenth century did not inhabit isolated epistemological spheres. Rather, what are perceived as quintessentially 'European' music theories were actually shaped by knowledge from the other end of Eurasia.

Amiot: Religious Missionary to China, Musical Missionary to Europe

Amiot played a crucial role in creating and mediating the musical dialogue between China and France in the eighteenth century: it was through his writings, many of which were published in

[7] Amiot, 'Mémoire' (1776), xiii.

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France, that European scholars began to study Chinese music seriously. In addition to translating Chinese music books, Amiot introduced his own ideas about China and its music in his writings. These ideas changed dramatically over his forty-two-year stay in Beijing, as he became more and more accustomed to Chinese culture.

Amiot belonged to the last generation of French Jesuit missionaries in China before the worldwide suppression of the Society of Jesus in 1773.[8] By the time he arrived in Beijing in 1751, these missionaries had already served the Chinese Imperial Court for more than a century. They made clocks, tuned harpsichords, built cannons, conducted land surveys and performed many other technical services to a succession of emperors in the Ming and Qing dynasties.[9] To Emperor Qianlong, who had ascended the throne in 1735 and had long been accustomed to the Jesuit presence at the court, the arrival of Amiot was of little significance. As was customary, Amiot and several of his missionary colleagues were summoned to Beijing as 'men of skills', a designation given to those who came from the West with training in mathematics, astronomy, architecture, music, art or language that would be useful to the Imperial Court. While in Beijing, Amiot helped with imperial translation projects on an ad hoc basis. Although Amiot's musical ability was noted in a court document, it is unlikely that he ever performed or discussed music with Qianlong.[10] In fact, Amiot might not have had much personal contact with the Emperor: most of his accounts of Qianlong came from public edicts and stories he heard from other missionaries serving at the court.[11]

Without much in the way of duties required by the court, Amiot devoted his time to the study of Chinese history and culture. It was in this context that much of Amiot's work on Chinese music was written. Curiously, Amiot had little appreciation for it when he first arrived in the country. In 'De la musique moderne des Chinois', completed only three years after his arrival, Amiot made disparaging comments on Chinese music.[12] Moreover, as Amiot later recalled, he once played harpsichord pieces by Rameau and works for flute by Michel Blavet (1700–1768) in front of a group of Chinese elites, hoping to convince them of the beauty of European music, only to be disappointed by their apparent indifference.[13] However, as he became more fluent in the language and delved deeper into the study of local history, literature and the arts, Amiot grew more sympathetic to Chinese music and started to view it in a more positive light. By the 1760s, Amiot had transformed himself from a missionary to China intending to show the 'superiority' of European religion and music into a kind of cultural missionary to Europe aiming to convert Europeans to the Chinese way of thinking. In fact, he eventually identified himself as both a French missionary and a Chinese mandarin.[14]

[8] For information on Amiot's life and work see Michel Hermans, 'Joseph-Marie Amiot: une figure de la rencontre de "l'autre" au temps des Lumières', in *Les danses rituelles chinoises d'après Joseph-Marie Amiot*, ed. Yves Lenoir and Nicolas Standaert (Brussels: Lessius, 2005), 11–77; Lam Ching Wah, 'Jean-Joseph-Marie Amiot's Writings on Chinese Music', *CHIME: Journal of the European Foundation for Chinese Music Research* 16–17 (2005), 127–147; Jim Levy, 'Joseph Amiot and Enlightenment Speculation on the Origin of Pythagorean Tuning in China', *Theoria: Historical Aspects of Music Theory* 4 (1989), 63–88; and François Picard, 'Joseph-Marie Amiot, jésuite française à Pékin, et le cabinet de curiosités de Bertin', *Musique, images, instruments: revue française d'organologie et d'iconographie musicale* 8 (2006), 68–85.

[9] For an overview of the Jesuit missionaries in late imperial China see Liam Matthew Brockey, *Journey to the East: The Jesuit Mission to China, 1579–1724* (Cambridge, MA: Belknap Press of Harvard University Press, 2007); Nicholas Standaert, ed., *Handbook of Christianity in China* (Leiden: Brill, 2001); and Catherine Jami, *The Emperor's New Mathematics: Western Learning and Imperial Authority during the Kangxi Reign (1662–1722)* (Oxford: Oxford University Press, 2011).

[10] See Zou Ailian 鄒愛蓮 and Wu Xiaoxin 吳小新, eds, *Qing zhongqianqi Tianzhujiao zai hua huodong dang'an* 清中前期天主教在華活動檔案 [Archival Sources on Catholic Missionary Activities in China in Early to Mid-Qing] (Beijing: Zhonghua shuju, 2003), no. 558.

[11] See Amiot's correspondence at the Bibliothèque de l'Institut de France, Paris (F-Pi), MS 1515–1526.

[12] Jean-Joseph-Marie Amiot, 'De la musique moderne des Chinois' (*c*1754), F-Pn, Rés. Vmb. MS 14, 146. I thank François Picard for sharing his transcription of this work with me.

[13] Amiot, *Mémoire* (1779), 'Discours préliminaire'.

[14] See Amiot's letter dated 20 September 1792, F-Pi, MS 1517.

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This transformation was accelerated by the dissolution of the Society of Jesus in 1773 ordered by Pope Clement XIV (1705–1774; reigned from 1769). When the news reached Beijing in 1774, Amiot was devastated: institutionally, he could no longer rely on his Jesuit superiors and, financially, he had to seek a patron who would be willing to support his living in Beijing. Luckily for Amiot, he found one such patron: Henri-Leonard-Jean-Baptiste Bertin (1720–1792), who served Louis XV (1710–1774; reigned from 1715) as the controller-general of finance and subsequently as secretary of state. As one of the most powerful and well-connected politicians in France as well as an avid collector of curiosities, especially those from China, Bertin played a major role in supporting the French missionaries in China and sponsoring China-related publications in Europe. It was Bertin who provided Amiot with a generous stipend and fulfilled his annual wish lists of European goods, including quality wine from France. Moreover, Bertin secured jobs for Amiot's nephews, took care of his other family members and introduced him to a group of French intellectuals.[15]

In return for Bertin's patronage, Amiot sent a variety of objects from China, including musical instruments, to furnish Bertin's private collection of exotica. More importantly, Amiot was enlisted as a major contributor to the *Mémoires concernant l'histoire, les sciences, les arts, les mœurs, les usages, &c. des Chinois: par les Missionnaires de Pékin*, a multivolume compendium based mostly on missionaries' letters to Bertin.[16] Through this work and other publications, Amiot fulfilled his duty as a cultural 'missionary' to Europe, offering the most up-to-date and comprehensive report on various aspects of China. By the end of the eighteenth century, Amiot had become an authority on all Chinese matters, frequently quoted and referred to by European authors, particularly in the area of music. Amiot made the first systematic account of Chinese music that allowed European music theorists to study and compare different musics of the world.

Amiot's Writings on the Chinese Origins of Western Music

Like many contributions he wrote for the *Mémoires concernant l'histoire, les sciences, les arts, les mœurs, les usages, &c. des Chinois*, Amiot's *Mémoire sur la musique des Chinois tant anciens que modernes* foregrounded China's antiquity and firmly placed the origins of Western civilization in China. According to Amiot, China was the oldest nation in the world, surpassing two other contenders, Egypt and Babylon. In his 'Abrégé chronologique de l'histoire universelle de l'empire chinois' (1788) Amiot calculated the age of these three nations following the Biblical chronology compiled by Isaac Vossius (1618–1689). He concluded that Egypt was founded in 3058 BCE, Babylon in 3175 BCE, and China, the oldest of them, in 3462 BCE.[17] Thus, chronologically speaking, the first human civilization sprouted from Chinese soil.

Moreover, Amiot showed that China was not only chronologically the oldest nation, but, as such, it also preserved the vestiges of the Creation:

> Quelle est donc cette race d'hommes à laquelle les premiers elémens des connoissances dont nous nous enorgueillissons doivent se rapporter? . . . je dis que c'est à cette nation qui n'a précédé que de quelques siecles l'etablissement de Fou-hi et de ses compagnons en Chine, que nous sommes redevables des premieres notions que nous avons acquises sur les Sciences et sur les Arts. J'ajoute que c'est en Chine que les débris des anciennes connoissances sont en plus grand nombre, et mieux conservés. Il ne s'agit que de les reconnoître, de les rapprocher, et de mettre chaque piece à sa place, pour en construire, sinon un edifice complet, du

[15] '80 lettres du P. Amiot à Bertin', F-Pi, MS 1515–1517.

[16] As stated in note 2, volumes 1–15 were published in Paris from 1776 to 1791, and volumes 16–17 in Paris and Strasbourg in 1814.

[17] Amiot, 'Abrégé chronologique', 78.

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> moins quelques appartemens isolés qui pourront donner quelque idée du tout, dans son etat primitif.[18]
>
> What is, then, the race of men to whom the first elements of knowledge in which we take pride must relate? . . . I say that it is to this nation, which preceded only by a few centuries the establishment of Fuxi and his companions in China, that we are indebted for the first notions we acquired in the sciences and the arts. I add that it is in China that the remains of ancient knowledge are the most numerous, and the best conserved. It is only a question of recognizing them, bringing them together and putting each piece in its place, to construct from them, if not a complete building, at least some isolated apartments, which will be able to give some ideas of the whole in its primitive state.

This 'whole in its primitive state' was nothing other than the world originally created by God. In *L'Antiquité des Chinois prouvée par les monumens* (1777), Amiot claimed that the Chinese were direct offspring of Noah's grandchildren, and because of this lineage, the Chinese possessed a divine revelation as authentic and important as the revelation given to Moses.[19] Here, Amiot crowned China with an unparalleled significance: to know Chinese arts and sciences was to know all arts and sciences in their purest and most natural form; to study Chinese music was to study the very origins of music.

In his *Mémoire*, Amiot demonstrated in detail how music had originated in China and was subsequently transmitted to the West, in particular to Ancient Greece. Amiot made three points: first, the Chinese and the Greeks had in essence the same system of music; second, the Chinese knew this system long before the Greeks; and third, there was some form of communication between China and Greece in antiquity that had enabled this system to be transmitted. Influenced by the contemporary discussion of Ancient Greek music in France, Amiot learned that Pythagorean proportions formed the foundation of that system, and these proportions could be demonstrated by the first twelve terms of the triple progression. Mathematically, triple progression is a series of numbers in which the ratio between any two consecutive numbers is three (1, 3, 9, 27 and so on). Applying triple progression to music, this series of numbers signifies a sequence of fifths (*ut*, *sol*, *re*, *la* and so on).[20] The Ancient Greeks knew the first twelve terms of the triple progression, which means musically a series of fifths up to and including the twelfth term (*ut*, *sol*, *re*, *la*, *mi*, *si*, *fa*♯, *ut*♯, *sol*♯, *re*♯, *la*♯, *mi*♯) (see Table 1).

Building on this basis, Amiot argued that the triple progression was also used by ancient Chinese musicians to generate the twelve pitchpipes that represented the twelve notes of an octave, as this passage in the Chinese classic *Huainanzi* 淮南子 (The Masters of Huainan (second century BCE)) shows:

> 淮南子曰：道者規始於一，一而不生，故分而為陰陽。陰陽合和而萬物生，故曰：一生二，二生三，三生萬物。. . . 以三參物，三三如九。故黃鍾之律九寸而宮音調。因而九之，九九八十一，故黃鍾之數立焉。. . . 其數八十一，主十一月，下生林鍾。林鍾之數五十四，主六月.
>
> Thus it is said, 'The Way begins with one'. One [alone], however, does not give birth. Therefore it divided into Yin and Yang. From the harmonious union of Yin and Yang, the myriad things were produced. Thus it is said, 'One produced two, two produced three, three produced the

[18] Jean-Joseph-Marie Amiot, 'Extrait d'une lettre de M. Amiot, écrite de Pé-king le 2 Octobre 1784', in *Mémoires concernant l'histoire, les sciences, les arts, les mœurs, les usages, &c. des Chinois*, volume 11 (1786), 527.

[19] Jean-Joseph-Marie Amiot, 'L'Antiquité des Chinois prouvée par les monumens', in *Mémoires concernant l'histoire, les sciences, les arts, les mœurs, les usages, &c. des Chinois*, volume 2 (1777), 6 and 9.

[20] For more information on the triple progression see Rameau, *Nouveau système*, 10–15.

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Table 1. The twelve semitones and their corresponding triple progression, from Jean-Philippe Rameau, *Nouveau système de musique théorique* (Paris: Jean-Baptiste-Christophe Ballard, 1726), 'Table des progressions'

Triple progression	1	3	9	27	81	243	729	2187	6561	19683	59049	177147
Semitones	*ut*	*sol*	*re*	*la*	*mi*	*si*	*fa*♯	*ut*♯	*sol*♯	*re*♯	*la*♯	*mi*♯

> myriad things'. . . . Using three to examine matters: 3 × 3 = 9. Thus the Huangzhong pitchpipe is nine inches long and harmonizes with the note Gong. Furthermore, 9 × 9 = 81. Thus the number of the Huangzhong is established therein . . . Its number is 81, and it governs the eleventh month. Descending, Huangzhong produces Linzhong. The number of Linzhong is 54 [81 × 2/3]; it governs the sixth month.[21]

What *Huainanzi* described here was the theory of subtracting and adding thirds, one of the fundamental concepts in Chinese music. This theory explained the process of generating the twelve semitones of an octave represented by the twelve pitchpipes. The length of each pitchpipe was determined by adding or subtracting a third from its previous pitchpipe, hence the name. Huangzhong 黃鐘, *fa*, the first pitchpipe, was given the number 81.[22] Linzhong 林鐘, *ut*, the second pitchpipe, had the number 54 as a result of subtracting a third from 81. Taicu 太簇, *sol*, the third pitchpipe, had the number 72 as a result of adding a third to 54. The rest of the pitchpipes were generated in the same way, yielding a sequence of fifths. Moreover, Chinese music theorists believed that these twelve pitchpipes were associated with the twelve months of a year. Huangzhong, for example, was connected to the eleventh month (see Table 2).

Because the theory of subtracting and adding thirds produced a series of fifths, just like the triple progression, Amiot equated Pythagorean proportions with this Chinese theory, ignoring the different cultural contexts from which they had emerged. In Amiot's own words, 'Ce passage est très important en ce qu'il prouve premièrement que les anciens Chinois avaient fondé tout le système de la génération de sons sur une série de quintes, et en second lieu qu'ils avaient obtenu cette série en faisant usage de la progression triple' (This passage is very important in that it proves first that the ancient Chinese based the entire system of the generation of notes on a series of fifths, and in the second place, that they obtained this series by using the triple progression).[23]

Having established that the Chinese, like the Greeks, used the triple progression in their music, Amiot showed next that the Chinese had known the triple progression long before the Greeks. To demonstrate that the method of deriving fifths had already existed in the time of Fuxi, the dawn of Chinese civilization (3462 BCE), Amiot borrowed the theory that linked the twelve pitchpipes with the hexagrams thought to have been invented by Fuxi. This theory was not Amiot's invention but was first advocated by the music theorist Jing Fang 京房 (77–37 BCE) and later elaborated upon by Zhu Zaiyu in his *Yuexue xinshuo* 樂學新說 (New Theory of the Study of Music (*c*1596)). Amiot copied the illustration of this theory from Zhu's treatise and translated Zhu's explanation into French (compare Figure 1 and Figure 2).

[21] *Huainanzi* 淮南子 [The Masters of Huainan], volume 3, no pagination; translation in *The Huainanzi: A Guide to the Theory and Practice of Government in Early Han China*, trans. and ed. John S. Major and others (New York: Columbia University Press, 2010), 133–134. Amiot found this passage of *Huainanzi* in Zhu Zaiyu's *New Theory of the Study of Music* (*c*1596) and quoted it in his *Mémoire* (1779), 118–120. It also appears in Jean-Joseph-Marie Amiot, 'Le "Supplément au Mémoire sur la musique des Chinois" du Père Amiot: édition commentée', ed. Michel Brix and Yves Lenoir, *Revue des archéologues et historiens d'art de Louvain* 30 (1997), 87.

[22] The length of Huangzhong as described in *Huainanzi* was nine inches. The number 81, a multiple of 9, was used here in order to notate the lengths of the subsequent pitchpipes as integers instead of fractions. Here I follow Amiot, who associated Huangzhong with *fa*; there were a number of Chinese and European theorists who associated Huangzhong with *ut*.

[23] Amiot, 'Le "Supplément"', 102.

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Table 2. Subtracting and adding thirds: the twelve pitchpipes and their corresponding semitones, lengths and months, from Jean-Joseph-Marie Amiot, *Mémoire sur la musique des Chinois, tant anciens que modernes* (Paris: Nyon l'aîné, 1779), 118–120

Pitchpipes (Amiot's orthography)	Hoang-tchoung	Lin-tchoung	Tay-tsou	Nan-lu	Kou-si	Yng-tchoung	Joui-pin	Ta-lu	Y-tsê	Kia-tchoung	Ou-y	Tchoung-lu
Pitchpipes (Chinese characters and modern pinyin)	黃鐘 Huangzhong	林鐘 Linzhong	太簇 Taicu	南呂 Nanlü	姑洗 Guxian	應鍾 Yingzhong	蕤賓 Ruibin	大呂 Dalü	夷則 Yize	夾鍾 Jiazhong	無射 Wuyi	仲呂 Zhonglü
Semitones	*fa*	*ut*	*sol*	*re*	*la*	*mi*	*si*	*fa♯*	*ut♯*	*sol♯*	*re♯*	*la♯*
Lengths	81	54	72	48	64	43	57	76	51	68	45	60
Months	11th	6th	1st	8th	3rd	10th	5th	12th	7th	2nd	9th	4th

According to Zhu, the twelve pitchpipes were generated by the two hexagrams: Kun, which represented the earth, and Qian, which represented the heaven. Kun was composed of six broken or Yin 陰 lines, whereas Qian was made of six unbroken or Yang 陽 lines. The order in which one read the hexagrams was from bottom to top and from right to left. As both illustrations show, the Huangzhong pitchpipe (*fa*), which belonged to the Yang category, was associated with the first unbroken or Yang line of the Qian hexagram in the bottom right corner. Moving upward by a fifth, Huangzhong generated Linzhong (*ut*), which belonged to the Yin category and was associated with the first broken or Yin line of the Kun hexagram in the bottom left corner. Moving up again by a fifth, the Linzhong pitchpipe produced Taicu (*sol*), which belonged to the Yang group and was associated with the second unbroken or Yang line of the Qian hexagram. Following this pattern, all twelve pitchpipes were mapped onto the twelve lines of the Kun and Qian hexagrams.

While the link between the pitchpipes and the hexagrams had long been recognized in China, it was Amiot who first proposed that the generation of pitchpipes following the pattern of the hexagrams adhered to the operation of the triple progression. Because the hexagrams had reputedly been invented by Fuxi, the triple progression must also have been known to the Chinese since Fuxi's time, which is to say the beginning of the Chinese nation. According to Amiot, 'On ne saurait douter raisonnablement que le système de musique, tel à peu près que je viens de l'exposer, ne soit aussi ancien chez les Chinois que l'établissement même de leur propre monarchie' (There can be no reasonable doubt that the system of music, more or less as I just explained, is as old among the Chinese as the very establishment of their own monarchy).[24] Consequently, the Chinese, rather than the Greeks, were the true inventors of the musical system based on the triple progression.

To explain how this musical system was transmitted from China to Greece, Amiot offered a hypothesis that Pythagoras travelled to China and learned this system from the Chinese:

> Qu'il pourroit bien être que le fameux Pythagore, qui voyageoit chez les nations pour s'instruire, et qu'on fait sûrement avoir voyagé dans les Indes, fût venu jusqu'à la Chine, où les Savans et les Lettrés, en le mettant au fait des Sciences et des Arts en honneur dans le pays, n'auront pas manqué de lui parler de musique; et que Pythagore, de retour en Grèce, aura médité sur ce qu'il avoit appris en Chine et rangé en suite le tout suivant sa méthode et à sa maniere, d'où sera venu ce qu'on appelle vulgairement le systême de Pythagore.[25]
>
> It may well be that the famous Pythagoras, who travelled through the nations to learn and who surely travelled in the Indies, had come to China, where the scholars and literati would not have failed to speak to him about music, while making him acquainted with the sciences and the arts honoured in the country; and that Pythagoras, back in Greece, would have reflected on what he had learned in China, and then arranged everything according to his method and manner. From this came what we commonly call the system of Pythagoras.

Without the support of solid historical evidence, Amiot's hypothesis about Pythagoras' travel to China was at best an imaginative conjecture. Interestingly, Amiot reversed the presumed role of the 'civilized' and the 'barbarous': here he implies that the Europeans (who, as discussed above, he describes as being part of 'the barbarous peoples of the West') needed to be taught by the Chinese. Even Pythagoras had had to travel to China to bring back the system of musical proportions that bore his name. It is true that this reversal did not show a complete openness toward extra-European cultures, nor did Amiot suggest that Western music was inferior to Chinese music.[26] The real significance of the story of

[24] Amiot, 'Le "Supplément"', 105.

[25] Amiot, *Mémoire* (1779), 173.

[26] As Matthew Head points out in his analysis of Mozart's *Die Entführung aus dem Serail*, the celebration of the 'uncivilized' was often an appropriation of the other rendered in a Western context. Matthew Head, *Orientalism, Masquerade and Mozart's Turkish Music* (London: Royal Music Association, 2000), 14.

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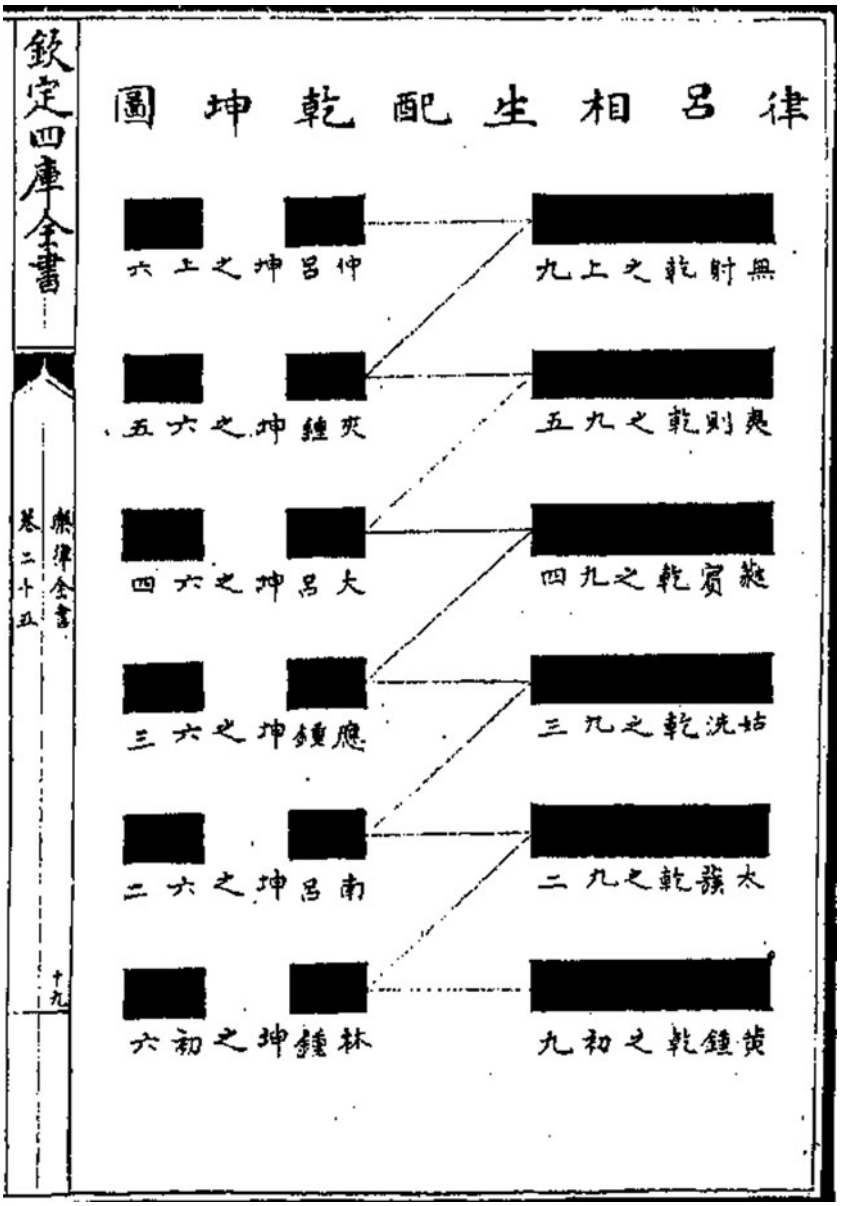

Figure 1. Kun 坤 and Qian 乾 hexagrams and the generation of twelve pitchpipes, from Zhu Zaiyu, *Yuexue xinshuo*; facsimile edition in *Siku quanshu* 四庫全書 (Complete Library of the Four Treasuries). Reproduced from Kanripo.org

Pythagoras's travel lies in its revolutionary attempt to weave the East and the West into a single historical narrative. Indeed, Amiot envisioned a world in which China constituted a part that was equally as important as Europe. Moreover, 'civilization' did not develop in isolation in these two places. Rather, the flourishing of the musical culture in one place could be directly traced back to its origin in the other. Although Amiot most concretely demonstrated how music had originated in China and was later disseminated to Ancient Greece and subsequently to other parts of Europe, he was not the only one who located the source of knowledge in the East. In fact, Amiot's claim was influenced by a

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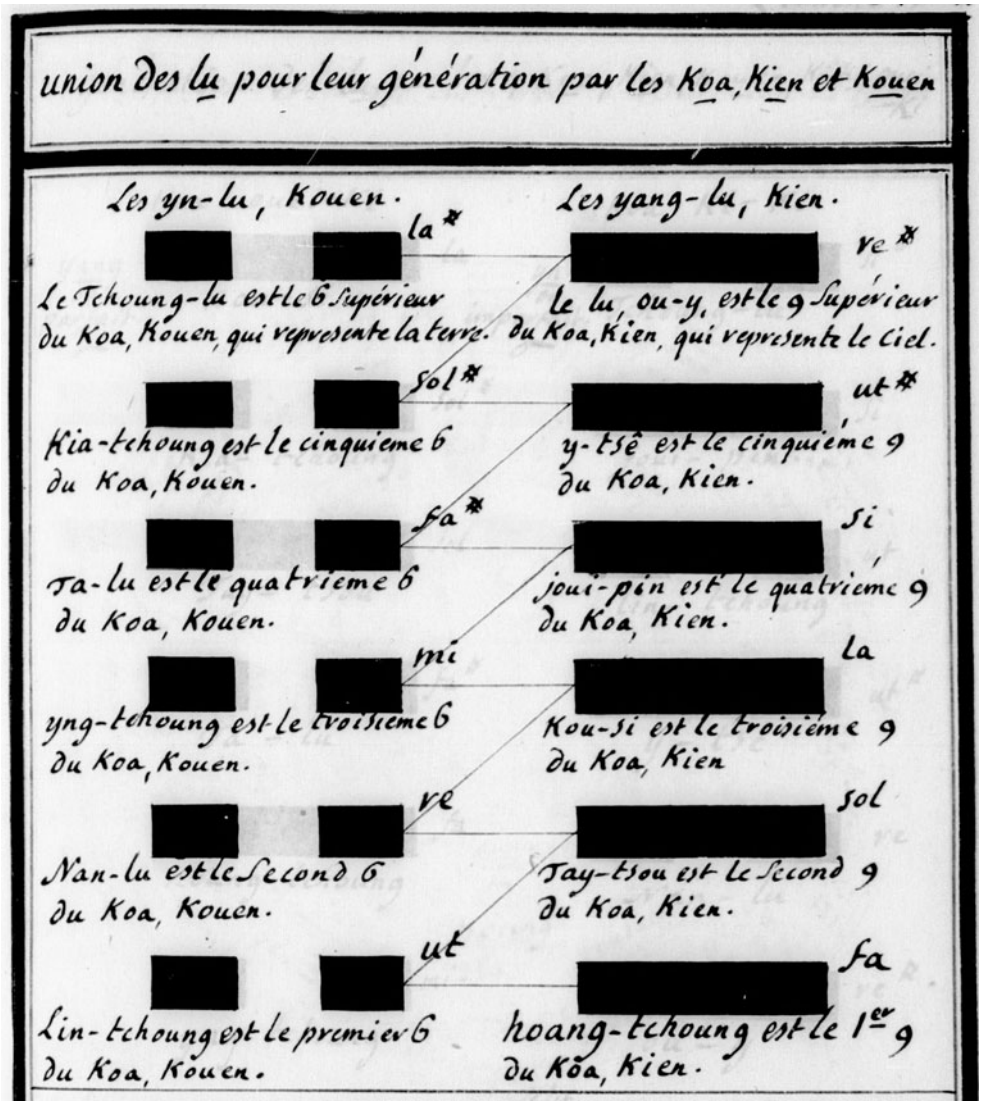

Figure 2. Kun and Qian hexagrams and the generation of twelve pitchpipes, from Jean-Joseph-Marie Amiot, *Mémoire sur la musique des Chinois* (1776), Bibliothèque nationale de France, Paris (F-Pn), Français 9089, Planche 15a. Reproduced from gallica.bnf.fr

problematic representation of the East that began to emerge in eighteenth-century Europe: the idea of the Oriental origin.

The Oriental-Origin Theory

The two foundational ideas that support Amiot's claim of the Chinese origin of Western music – that the East and the West together formed a coherent history and that the roots of Western civilization were to be found in the East – were shared by a number of French thinkers in the eighteenth century. For example, Roussier, the editor of Amiot's *Mémoire*, suggested a similar story in which the Greeks had learned the musical system based on the triple progression from the Egyptians.[27] Amiot knew

[27] Pierre-Joseph Roussier, *Mémoire sur la musique des anciens* (Paris: Lacombe, 1770).

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Roussier's argument when he was composing his *Mémoire*, but he rejected the possibility that the Egyptians could have invented the musical art before the Chinese.[28] While the dispute was never quite settled between those who argued for the Egyptian origin and those for the Chinese origin, both groups agreed on one thing: the Greeks were not the inventors of music. In 1715 Jacques Bonnet (1644–1724) asserted that 'les grecs ne sont point les Inventeurs de la Musique, comme ils le prétendent' (the Greeks are definitely not the inventors of music, as they claim to be), because, as he learned from a lieutenant who had travelled to the East and West Indies, people in these places also knew the tetrachord that was thought to be unique to Greek music.[29] Jean-Benjamin de La Borde (1734–1794), a French composer and writer who served Louis XV, also questioned the notion of Pythagorean proportions as a Greek invention. While he acknowledged that, according to tradition, the invention of song was ascribed to the Biblical figure Jubal and the invention of music theory to Pythagoras, La Borde included lengthy discussions on Egyptian and Chinese music, drawing from Roussier's and Amiot's works, which hinted at other possible origins of music not in the West but in the Oriental world.[30] The originality of the Greeks was also seriously challenged in fields other than music. In his book *Les Fables égyptiennes et grecques* (1758) Antoine-Joseph Pernety (1716–1801) argued that the Greeks had invented nothing new, but had borrowed both religion and fables from the Egyptians.[31] Apart from their common scepticism about the Greek foundations of Western culture, what united these authors was a surprisingly firm belief that the East, represented most vividly by China and Egypt, was the source of all knowledge. By the last decades of the eighteenth century, many Enlightenment thinkers took this Oriental origin for granted. Voltaire (1694–1778) most famously opened his *Essai sur les mœurs et l'esprit des nations* (1756), also known by its contemporary English title, *An Essay on Universal History*, with a chapter on China, signalling that the world's history had begun not in the West but in the pagan East.[32]

To understand the rise of the Oriental-origin theory in the eighteenth century, we need to explore two interrelated issues: the multifaceted meanings of the word 'origin' and its exclusive association with the East. On the most basic level, the emergence of the Oriental-origin theory was triggered by the West's discovery of the great antiquity of the East, particularly of Egypt and China, in the seventeenth and eighteenth centuries. That is not to say that Egypt and China's long history was unknown to Europe previously, but it was during this time that an unprecedented volume of information about the East flooded the European book market and, at the same time, a considerable number of European scholars began to study the history of the East in comparison to their own. In the case of China, the Jesuit missionaries not only made knowledge about the empire available to European scholars but also transformed the way Europeans understood Chinese and world chronology. Before the publication of *Sinicae historiae decas prima* (1659) by Italian Jesuit Martino Martini (1614–1661), Europeans might have heard of China's antiquity only vaguely through travelogues and made-up tales. Martini's book offered, for the first time, detailed accounts of every Chinese emperor from Fuxi (2952 BCE) to Emperor Ai of Han 漢哀帝 (1 BCE).[33] This

[28] Amiot, *Mémoire* (1779), 172–173. Amiot received a copy of Roussier's *Mémoire* (1770) in 1774, two years before the completion of his own *Mémoire*.

[29] Jacques Bonnet, *Histoire de la musique et de ses effets* (Paris: Jean Cochart, Etienne Ganeau, Jacque Quiliau, 1715), 156; see David R. M. Irving, 'Ancient Greeks, World Music, and Early Modern Constructions of Western European Identity', in *Studies on a Global History of Music: A Balzan Musicology Project*, ed. Reinhard Strohm (London: Routledge, 2018), 28.

[30] Jean-Benjamin de La Borde, *Essai sur la musique ancienne et moderne*, four volumes (Paris: Ph.-D Pierre, 1780), volume 1, chapters 9 and 15.

[31] Antoine-Joseph Pernety, *Les Fables égyptiennes et grecques, dévoilées et réduites au même principe, avec une explication des hiéroglyphes, et de la guerre de Troye*, two volumes (Paris: Bouche, 1758), volume 2, 2.

[32] Chapter 1 is entitled 'De la Chine, de son antiquité, de ses forces, de ses lois, de ses usages, et de ses sciences'. Voltaire, *Essai sur les mœurs et l'esprit des nations*, new edition, eight volumes (Neuchatel, 1773), volume 1, 341–364.

[33] For more information on Martini's *Sinicae historiae decas prima* see Franco Demarchi and Riccardo Scartezzini, eds, *Martino Martini: A Humanist and Scientist in Seventeenth[-]Century China* (Trento: Università di Trento, 1996). Martini wrote two other popular works on China, *De Bello Tartarico Historia* (1654) and *Novus atlas Sinensis* (1663).

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uninterrupted history created a problem for European chronologers: China's first emperor, Fuxi, was said to have reigned before the date attributed to the biblical flood, which, according to James Ussher's chronology, happened in 2348 BCE.[34] This means that either the Bible's chronology as calculated by Ussher was incorrect, or the Chinese historical records that Martini had used were falsified. To complicate the matter further, the Chinese records were backed up by astronomical proofs, making it difficult to dismiss China's ancient history as fictional.

This issue quickly sparked heated debates among chronologers, astronomers and Jesuit missionaries in China. Jean-Dominique Cassini (1625–1712), a leading scientist of his day and the director of the Paris Observatory, was one of these astronomers.[35] Upon reading Martini's *Sinicae historiae decas prima*, Cassini, like many other Europeans at that time, found it hard to believe that the establishment of the Chinese nation had preceded the biblical flood by several centuries. In his article 'Reflexions sur la chronologie chinoise' of 1691 Cassini examined several eclipses and planetary conjunctions in the Chinese records and concluded that China's history was not nearly as long as the records made it seem.[36] Cassini's conclusion was then refuted by Antoine Gaubil (1689–1759), a missionary-astronomer in Beijing. Based on his re-examination of the eclipses and conjunctions, Gaubil asserted that Cassini's calculation was filled with errors and that the Chinese historical records should be trusted.[37] Although this debate did not reach a definitive conclusion, the antiquity of China became widely recognized by European chronologers and historians. From around this time, China began to be included and sometimes featured prominently in universal histories published in Europe. As Edwin J. Van Kley observed, 'probably fewer than half of the universal histories written during the last half of the seventeenth century included China, but the great majority of eighteenth-century universal histories did so'.[38]

In addition to educating Europeans about China's ancient history, the Jesuits also helped to propagate the idea that the country had not changed since antiquity. For example, one of the most widely read books on China published in eighteenth-century France – *Description géographique, historique, chronologique, politique, et physique de l'empire de la Chine et de la Tartarie chinoise* (1735), compiled by the Jesuit Jean-Baptiste Du Halde (1674–1743) – opens its discussion on Chinese history with this very idea:

> La Chine a cet avantage sur toutes les autres Nations du Monde, que durant plus de 4000 ans elle a été gouvernée presque toûjours par les Princes naturels du pays, avec la même forme d'habit, de mœurs, de loix, de coûtumes et de manieres, sans avoir jamais rien changé à ce que ses anciens Legislateurs avoient sagement établi dès la naissance de l'Empire.[39]

[34] James Ussher, *Annales veteris testamenti, a prima mundi orinine deducti: una cum rerum Asiaticarum et Aegyptiacarum chronico, a temporis historici principio usque ad Maccabaicorum initia producto* (London: Ex officina J. Flesher, et prostant apud J. Crook & J. Baker, 1650), 4.

[35] For more information on Jean-Dominique Cassini (né Giovanni Domenico Cassini) see Gabriella Bernadi, *Giovanni Domenico Cassini: A Modern Astronomer in the 17th Century* (Cham: Springer, 2017).

[36] Cassini's article was included in Simon de La Loubère, *Du Royaume de Siam* (Paris: la veuve de Jean Baptiste Coignard, Jean Baptiste Coignard, 1691), 379–400. An English translation was made two years later; see Simon de La Loubère, *A New Historical Relation of the Kingdom of Siam*, two volumes, trans. A. P. Gen. R. S. S. (London: T. Horne, T. Bennet, 1693), volume 2, 252–259.

[37] Antoine Gaubil, *Traité de la chronologie chinoise divisé en trois parties, composé par le Père Gaubil, missionnaire à la Chine, et publié pour servir de suite aux mémoires concernant les Chinois, par M. Silvestre de Sacy* (Paris: Treuttel and Würtz, 1814), 242–246. The *Traité* was written in 1749. For more information on Gaubil see Renée Simon, ed., *Le P. Antoine Gaubil S. J., Correspondance de Pékin, 1722–1759* (Geneva: Droz, 1970).

[38] Edwin J. Van Kley, 'Europe's "Discovery" of China and the Writing of World History', *American Historical Review* 76/2 (1971), 380.

[39] Jean-Baptiste Du Halde, *Description géographique, historique, chronologique, politique, et physique de l'empire de la Chine et de la Tartarie chinoise*, four volumes (Paris: P. G. Le Mercier, 1735), volume 2, 1.

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> China has this advantage above all other nations of the world, that for more than four thousand years it has almost always been governed by the native sovereigns of the country, with the same form of dress, traditions, laws, customs and manners, without ever having changed anything that its ancient legislators had wisely established at the birth of the empire.

Such a characterization of China, although unfair, was not without basis. Indeed, reverence for the way of the ancients was deeply rooted in the Chinese consciousness. Throughout Chinese history, numerous scholars and rulers had attempted to bring back the golden age of the ancient sage-kings by imitating the literary and musical styles of the past. Emperors Kangxi 康熙 (1654–1722; reigned from 1661) and Qianlong in the eighteenth century were among these avid proponents for the revival of ancient music. Yet to say that China lacked historical progress was a misconception. The very effort on the part of the Chinese to revive the past serves as a clear indication that whatever tradition they were trying to revitalize had already been lost, otherwise it would not have been necessary to recover what still existed. Yet some of the missionaries took the idealistic goal of preserving the way of the ancients as a reality.

Amiot was one of the missionaries plagued by this misconception. It is no coincidence that in his *Mémoire*, Amiot bypassed the notion of historical progress altogether. In 1754 Amiot sent two manuscripts to Europe – his translation of the *Gu Yuejing zhuan* 古樂經傳 (Commentary on the Ancient 'Classic of Music') by the Chinese scholar-official Li Guangdi 李光地 (1642–1718) and 'De la musique moderne des Chinois', an account of modern Chinese music practised in the Qing dynasty – in order for his compatriots to compare and contrast ancient and modern Chinese musics. However, in 1776, when Amiot sent the manuscript of his *Mémoire* to Paris, he no longer distinguished China's ancient music from its modern music. Rather, he entitled his work *Mémoire sur la musique des Chinois tant anciens que modernes* (Dissertation on the Music of the Chinese, Ancient and Modern). Amiot conflated the musics of ancient and modern Chinese societies not because they were exactly the same, but because the merit of the modern music consisted solely of its ability to retain and imitate ancient music as it had been practised centuries earlier. In the 'Discours préliminaire', Amiot acknowledged that much of the *Mémoire* was based on the works of two Chinese music scholars, Zhu Zaiyu and Li Guangdi.[40] Yet, despite the fact that both Chinese authors advocated innovation and condemned slavish imitation of the past, Amiot focused only on what pertained to ancient music in their writings, in an effort to show that Chinese music had not changed after it had been first invented in antiquity. Thanks to such an effort, China gradually became synonymous with antiquity itself in the eyes of the Europeans. Enlightenment thinkers in particular followed these missionaries and turned this assumption into a distinctive characteristic attributed to China and to the East as a whole.

Besides the identification of the East with antiquity itself, there was one more layer of meaning added to the Oriental-origin theory. For the Jesuits and Enlightenment thinkers alike, China during the course of the eighteenth century had gained the reputation not only as the oldest nation but also as the one closest to nature. Consequently, it was assumed that the Chinese must have cultivated the most natural form of music, unadulterated by the sophistication of culture.

This affinity with nature assigned to the Chinese and their music is best illustrated by the discussion between Amiot and Roussier about the ancient Chinese instrument the yue 籥. In his *Mémoire* Amiot described the yue as a flute dating from the time of Huangdi 黃帝 (2637 BCE).[41] Originally, it had three holes, but later generations of musicians increased the number to six. In the manuscript version of the *Mémoire*, Amiot explained how a three-holed yue produced sound: 'Le premier Yo [yue] fut dans le Yo de Hoang-tchoung, son ton fondamental, c'est-à-dire, le ton qu'il rendit tous les trous étant bouchés, fut Koung (*fa*); en soufflant plus fort,

[40] Amiot, *Mémoire* (1779), 33.

[41] Amiot gave the date of 2637 BCE as the sixty-second year of the reign of Huangdi; Amiot, 'Abrégé chronologique', 74.

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au lieu du Koung, il rendit le tché (*ut*) celui apparemment qui est la douzième du Koung' (The first [type of] yue was the yue of Huangzhong. Its fundamental note, which is to say, the note that it produces when all the holes are blocked, is Gong (*fa*). When one blows it harder, it produces Zhi (*ut*) instead of Gong. This Zhi is apparently the twelfth above Gong).[42] In the printed version edited by Roussier, however, Roussier changed 'the twelfth above Gong' to 'the fifth above *fa*', because Roussier believed that the note produced in this case should be a fifth above the fundamental note Gong (*fa*), not a twelfth above, as Amiot had described.[43] To show how he had arrived at this 'correction', Roussier explained in a lengthy footnote that he found the 'Flutet', another name for the galoubet, an instrument known in Provence, to be very similar to the yue. Like the yue, a galoubet has three holes. The lowest note it produces is *re*. When one blows it a little harder, it produces *la*, a fifth above *re*.[44] Based on his own experiment, Roussier believed that the yue must function in the same way as a galoubet. Thus, with increased airflow, the yue should produce a fifth, not a twelfth, above the original note. When Amiot received the printed copy, he did not question Roussier's 'correction'. Rather, in a letter to Bertin, he admitted the similarity between the yue and the galoubet: 'ce fameux yo inventé du tems de Hoang-ty . . . Celui-ci n'avoit que trois trous, et présentoit les mêmes phénomenes acoustiques que le galoubet provençal, comme l'a découvert M. l'Abbé Roussier' (the famous yue invented during the time of Huangdi . . . had only three holes, and displayed the same acoustical properties as the Provençal galoubet, as l'Abbé Roussier discovered).[45]

What is at stake is not whether the ancient three-holed yue, when played with additional air pressure, produced a fifth or a twelfth above the fundamental note, but what the ontological framework was within which Roussier and Amiot compared the two very different instruments. With regard to the place of origin, the galoubet was invented in France, the yue in China; with regard to history, Roussier experimented on a galoubet manufactured in the eighteenth century, whereas the yue was created in antiquity. Despite the geographical and temporal differences, Amiot and Roussier considered the yue and the galoubet essentially the same, based on an important attribute of both instruments: primitiveness. While the primitive nature of the galoubet derived from its connection with Provence, that of the yue stemmed not from a place but a time, antiquity. Both Amiot and Roussier assumed that the trajectory from the state of nature to a cultured society could be perfectly mapped onto the diachronic progression from ancient to modern times. For them, antiquity and primitiveness were two inseparable notions: an instrument made in ancient times must be primitive, unrefined and not affected by civilizing influences. (Of course, it must be noted that in the eighteenth century the adjective 'primitif/primitive' in French – and 'primitive' in English – simply implied 'the first or most ancient example' of something, and it seems to be used in that sense in Amiot's writing.[46] The term later acquired derogatory meanings, based on comparisons between cultures that suggested that other peoples retained antiquated practices and were therefore less 'modern'.)

For Amiot, to assert the Chinese origin of Western music was to recognize China as the source of all musical knowledge. Yet this recognition was not to be equated with praise for the sophistication of Chinese culture. On the contrary, it cast China as an embodiment of the crude beginnings of human civilization, to be surpassed by later, more advanced forms of culture. In other words, the Oriental-origin theory was much more than just an acknowledgement of the long history of

[42] Amiot, 'Mémoire' (1776), 48.
[43] Amiot, *Mémoire* (1779), 69.
[44] Amiot, *Mémoire* (1779), 69–70.
[45] Amiot, 'Extrait d'une lettre de M. Amiot', 522.
[46] The various editions spanning from 1694 to 1798 of *Le Dictionnaire de l'Académie française* gives the following definition for 'primitif': 'Qui est le premier, qui est le plus ancien' (that which is the first, that which is the oldest). (After 1694 the second 'qui' is omitted.) See *The ARTFL Project: Dictionnaires d'autrefois* (https://artfl-project.uchicago.edu/content/dictionnaires-dautrefois).

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the East. It was the Europeans' attempt to contain the East in a past that it could never escape. As such, the East signified not only a place but also a time: as a living example of how early humans had lived in antiquity, the East allowed the Europeans to catch a glimpse of their own past, to see how they had come a long way from the not-so-glamorous beginnings. Indeed, the Oriental-origin theory served as the basis for much of the research advanced by European scholars in the eighteenth century that focused on the notion of origin, from the origins of music, language and the arts to the origins of humanity at large. As we shall see below, both Rameau and Rousseau embraced the idea of the Oriental origin and used the example of China to support their two contrasting claims about the origins of music.

Origins of Music: Rameau

Rameau and Rousseau were perhaps one of the most notorious pairs of rivals in the history of music. Not only did they hold different opinions on major musical debates – in the wake of the *querelle des bouffons* in 1752, for instance, Rameau sided with the partisans of French music while Rousseau with those of Italian music – but each penned many of his writings with the specific aim of attacking the points raised by the other. One of the most important points concerned whether melody or harmony was the source of all music. While Rousseau claimed in his *Lettre sur la musique françoise* (1753) that melody took precedence over harmony, Rameau, in his *Observations sur notre instinct pour la musique* (1754), argued instead: 'C'est à l'Harmonie seulement qu'il appartient de remuer les passions, la Mélodie ne tire sa force que de cette source, dont elle émane directement' (It is harmony alone that moves the passions. Melody derives all its force from this source, from which it emanates directly).[47] In fact, almost all of Rameau's theoretical output centred on the issue of harmony, from the *Traité de l'harmonie* (Paris: Jean-Baptiste-Christophe Ballard, 1722), in which he proposed the famous theory of the fundamental bass, to the *Origine des sciences: suivie d'une controverse sur le même titre* ([Paris: Sébastien Jorry, 1761]), which aimed to construct a genealogy of harmonic language.[48] In order to demonstrate that harmony, rather than melody, was the basis of music, Rameau created an important concept: the *corps sonore* (sonorous body). In essence, Rameau wanted to use the *corps sonore* to show that the fundamental note of any sounding body generated the twelfth and the seventeenth above it as the two initial and most important harmonic partials. Reducing the twelfth to a fifth and seventeenth to a major third, a major triad was formed, which Rameau referred to as the 'perfect chord'. For Rameau, his theory of the *corps sonore* applied equally well to a proficient and a novice musician. In other words, experience of music did little to affect the outcome: everyone naturally followed the principle of the *corps sonore*. In fact, in some of his experiments, an inexperienced person was preferred to an experienced one, because the former seemed to understand Rameau's theory better:

> Si l'on entonne ordinairement la Tierce la premiere dans l'accord parfait, en montant, quoique le Corps sonore ne la donne qu'à la double Octave qui est le 17^{e}, et cela au-dessus de l'Octave de la Quinte qui est la 12^{e}; c'est que nous réduisons naturellement tous les intervalles à leurs moindres degrés, parce que l'oreille les apprécie plus promptement, et que la voix y arrive plus aisément; mais il n'en sera pas de même d'un homme sans expérience, qui n'aura jamais

[47] Jean-Philippe Rameau, *Observations sur notre instinct pour la musique, et sur son principe* (Paris: Prault Fils, Lambert, Duchesne, 1754), vi.

[48] There is abundant literature on Rameau's theoretical concept the *corps sonore*. See Thomas Christensen, *Rameau and Musical Thought in the Enlightenment* (Cambridge: Cambridge University Press, 2004); Geoffrey Burgess, 'Enlightening Harmonies: Rameau's *corps sonore* and the Representation of the Divine in the *tragédie en musique*', *Journal of the American Musicological Society* 65/2 (2012), 383–462; Abigail D. Shupe, 'Rameau's Experiments in *Génération harmonique* and His Material Mangle', *Indiana Theory Review* 35/1–2 (2018), 26–57; and Alexander Rehding, 'Rousseau, Rameau, and Enharmonic Furies in the French Enlightenment', *Journal of Music Theory* 49/1 (2005), 141–180.

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> entendu de Musique, ou qui ne l'aura point écoutée; car il y a différence entre entendre et écouter. Si cet homme entonne un Son un peu grave, bien net et bien distinct, et qu'il laisse aller ensuite sa voix avec promptitude, sans être préoccupé d'aucun objet, pas même de l'intervalle qu'il voudra franchir, l'opération devant être purement machinale, il entonnera certainement la Quinte la premiére, préférablement à tout autre intervalle; selon l'expérience que nous en avons faite plus d'une fois.
>
> If we ordinarily play a third first in a perfect chord, in ascending order, even though the *corps sonore* only produces that interval two octaves higher – making it the interval of a seventeenth, and that is above the octave of the fifth, which is the twelfth – that is because the ear appreciates intervals more promptly, and the voice produces them more readily, when we naturally reduce them to their smallest degrees. This would not be true, however, for someone without experience, who would never have heard music, or who would never have listened to it, for there is a difference between hearing and listening. If such a person hears a low pitch which is clear and distinct, and then promptly lets his voice go where it wishes – purely mechanically, without any premeditated destination – he would certainly sound the fifth first, in preference to all other intervals. This is according to an experiment which we have made several times.[49]

Here the experienced musician would first play the third in a 'perfect chord', whereas someone inexperienced would first play the fifth. Rameau favoured the latter result because the inexperienced individual, without the corruption of culture, would more directly follow his natural instinct. And because this result was deemed more natural, it could more strongly validate the principle of the *corps sonore*. For Rameau, nature alone should judge all theories, because ideas of truth could only be known through nature; and music, born of nature, was known to us through pure instinct.[50]

In order to further validate his theory of the *corps sonore*, Rameau turned to ancient peoples. Like Amiot and Roussier, he believed that the ancients had a greater affinity with nature:

> Vous vous rappellez, sans doute, que l'Histoire nous apprend que la passion de la Musique a été plus forte & plus vive dans ces siécles reculés, où les hommes étoient restés plus près de la Nature. Pour moi, je seroit assez tenté de croire que le charme de l'harmonie dût avoir encore plus d'attraits lorsque l'homme cédoit à des impressions plus vives et plus vraies, lorsqu'il étoit dans ces premiers tems comme enivré des sentimens, des spectacles & des plaisirs qui s'offroient naturellement à lui.[51]
>
> You remember, without doubt, that history teaches us that the passion for music was stronger and more vivid in remote times, when men stayed closer to nature. For me, I would be quite tempted to believe that the charm of harmony must have had still greater attraction when men yielded to the most vivid and true impressions, as they were intoxicated with feelings, spectacles and pleasures naturally offered to them in those ancient times.

Harmony, according to Rameau, had a greater power over the ancients because they were more disposed toward nature than the moderns. Accordingly, the Greeks, as one of the ancient peoples, must have known harmony very well. This was contrary to what most music theorists and historians in the eighteenth century believed. For them, the Greeks had no knowledge of music in parts. Rameau,

[49] Rameau, *Observations*, 4–5. Translation in Verba, *Music and French Enlightenment*, 145.
[50] Rameau, *Observations*, 1.
[51] Jean-Philippe Rameau, *Origine des sciences, suivie d'une controverse sur le sur le même sujet* ([Paris: Sébastien Jorry, 1761]), 'Lettre de M.*** à M.***', 6.

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however, argued that harmony was inherent in melody, because when a note resonated, its harmonic partials would have resonated with it.[52] Another ancient people Rameau explored were the Egyptians, who were one of the first to cultivate music, arithmetic and geometry, among other things, and transmitted their knowledge to the Greeks.[53] The Egyptians, Rameau claimed, knew and used the *corps sonore*, though they understood it only through sense perception, not through abstract reasoning.[54] Moreover, like his student Roussier, Rameau believed that the triple progression, as a fruit of the *corps sonore* because it was based on a series of twelfths (fifths), was passed down from the Egyptians to the Greeks.[55]

In 1760 Rameau happened upon a manuscript that enabled him to test his theory against the music of China, a nation reputedly even more ancient than Egypt. This manuscript was Amiot's translation of Li Guangdi's *Commentary on the Ancient 'Classic of Music'* sent to Paris in 1754.[56] Rameau learned from Amiot's translation that the Chinese, like the Egyptians and the Greeks, had based their musical system on the triple progression.[57] Moreover, from this triple progression, the Chinese developed two types of scales: one is composed of *sol* (3), *la* (27), *si* (243), *ut*♯ (2187), *re*♯ (19683), and *mi*♯ (177147), while the other comprises *sol*♯ (6561), *la*♯ (59049), *ut*♯ (2187), *re*♯ (19683), and *mi*♯ (177147).[58] Rameau found that the second scale, transposed to *sol*, *la*, *ut*, *re*, *mi*, corresponded exactly to the scale produced by an instrument brought to Europe from the Cape of Good Hope, known as the 'orgue de Barbarie'. After playing on this 'orgue de Barbarie' all five 'airs Chinois' included in the *Description géographique . . . de la Chine et de la Tartarie chinoise* (1735), Rameau concluded that 'ce qui prouve assez que ce dernier Lu règne depuis long temps dans la Chine' (this sufficiently proves the second scale has reigned in China for a long time).[59] The reference to the 'orgue de Barbarie' and the *Description* is important. Just as Roussier used the Provençal galoubet to examine China's ancient flute, the yue, so Rameau played Chinese melodies on an instrument that had originated in southern Africa. Both believed in the same origin of the diverse musics across the globe and saw no essential difference among musical cultures of the non-West. In addition, while Du Halde, the Jesuit who compiled the *Description*, intended to use the 'airs Chinois' to demonstrate how 'elle est maintenant si imparfaite, qu'à peine en mérite-t-elle le

[52] Rameau, *Observations*, 44.

[53] Rameau, *Origine des sciences*, 'Origine des sciences', 2.

[54] Burgess, 'Enlightening Harmonies', 445.

[55] Rameau, *Origine des sciences*, 'Origine des sciences', 4.

[56] Rameau wrote: 'Il m'est tombé depuis quelques jours une traduction de tout ce qu'a pû ramasser sur la Musique chinoise le R. P. Amiot, de la Compagnie de Jésus, Missionnaire à Pékin, depuis environ seize ans. L'Auteur dont il tire la plus grande parties de ses lumières, vivoit, à ce qu'il dit, 2277 ans avant J. C. et cet Auteur, qui ne donne que ce qu'il a pû ramasser des débris des Recueils de son père, échappés d'un incendie, cite d'abord, conjointement avec d'autres, la progression triple jusqu'à son 13.e terme' (A few days ago, I happened upon a translation by the Reverend Father Amiot of the Society of Jesus, a missionary to Beijing for about sixteen years, of all that he was able to collect on Chinese music. According to Amiot, the author from whom he draws most of his knowledge lived 2,277 years before Jesus Christ. This author gives only the information based on what he was able to pick up from the remains of his father's collections that escaped from a fire. He cites firstly, along with others, the triple progression until its thirteenth term). Jean-Philippe Rameau, *Code de musique pratique* (Paris: l'imprimerie royale, 1760), 189. Rameau made a number of mistakes here: 1. Amiot arrived in Macau in 1750, which means there should be ten years, not sixteen years, between Amiot's arrival in China and the date of Rameau's *Code*; 2. Li Guangdi, author of the *Commentary on the Ancient 'Classic of Music'* translated by Amiot, lived under the reign of Kangxi in the Qing dynasty, not in 2277 BCE; 3. Li Qingzhi, who compiled Li Guangdi's original manuscripts, was the latter's grandson, not son; 4. The fire that destroyed the first draft of the *Commentary on the Ancient 'Classic of Music'* occurred in 1705, not in antiquity. Some of these mistakes were pointed out by Amiot in his *Mémoire* (1779), 11. The original manuscript of Amiot's translation has yet to be discovered. Yet from contemporary sources we know that it was sent to France and was circulated among a group of music scholars; see François Arnaud, 'Traduction manuscrite d'un Livre sur l'ancienne Musique Chinoise, composé par *Ly-Koang-ty*, Docteur et Membre du premier Tribunal des Lettrés de l'Empire, Ministre, etc.', *Journal étranger* (July 1761), 5–49.

[57] Rameau, *Code*, 191.

[58] Rameau, *Code*, 191–192. The numbers in the parentheses refer to the terms of the triple progression.

[59] Rameau, *Code*, 192.

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nom' ([Chinese music] is at present so imperfect that it hardly merits the name), Rameau affirmed the value of Chinese music and used the 'airs Chinois' to show how the second scale had been known in China since antiquity.[60] Not unlike Amiot, Rameau presumed that China's ancient music did not differ from its modern music, because China and the East as a whole had made virtually no progress in the arts and sciences.

Far from studying Chinese music for its own sake, Rameau used it to support his central claim that harmony was the source of melody. As Rameau explained:

> Je dois ajouter aux faits précédens, que les Chinois proposent la progression de quintes, dite triple, jusqu'à son treizième terme, dont ils suivent l'ordre dans leur système de Musique, bien plus régulièrement que ne l'a fait Pythagore; ils prennent date même avant l'établissement des Egyptiens. Voilà une quinte bien célébrée de toutes parts, même avant qu'il fût question de Géométrie; aussi constitue-t-elle, comme on le verra, l'harmonie & sa marche la plus naturelle, d'où suit la Mélodie.[61]
>
> I must add to the aforementioned facts that the Chinese propose the progression of fifths, called the triple [progression], until its thirteenth term, which they follow in their system of music still more regularly than Pythagoras did, and the Chinese date back to even before the establishment of the Egyptians. Here is a fifth that is well celebrated everywhere, even before any question of geometry was raised. We will also see that this fifth constitutes harmony and its most natural progress, from which melody follows.

Because of China's antiquity, which surpasses even that of Egypt, the Chinese cultivation of the triple progression shows that harmony, rather than melody, was first known among the ancients. Like many of his contemporaries, Rameau took the notion of origin in both logical and temporal senses: acoustically, harmony, composed of the fundamental note and its partials resonating simultaneously, gives rise to melody, a succession of notes; historically, harmony preceded melody as the first musical principle known to the ancients, as exemplified by the Chinese.

In addition, Rameau used the case of China to elevate the status of music as a discipline above all other arts and sciences:

> Eh! combien de Nations capables de sentir les charmes de l'harmonie, ont été presque insensibles pendant des milliers de siécles à l'aimable puissance des autres Arts! Y a-t-il bien long tems que l'on connoît en France les belles proportions de l'Architecture? & l'Art de la Peinture & du Dessein n'est-il point encore dans son enfance chez les Chinois, ce peuple si philosophe, si éclairé, qui a cependant poussé la science ou du moins la théorie de la Musique plus loin qu'aucun autre peuple?[62]
>
> Alas, how many nations capable of feeling the charms of harmony were almost insensible to the pleasant power of other arts for thousands of centuries? Have we in France actually known the beautiful proportions of architecture for long? And as for the art of painting and of drawing, isn't it still in its infancy among the Chinese, a people so philosophical, so enlightened, who nevertheless advanced science, or at least the theory of music, further than any other people?

In this passage, Rameau wanted to show that music was the science of the sciences, whose proportions set the foundation for other disciplines like architecture. Moreover, music was the first to be

[60] Du Halde, *Description*, volume 3, 265.
[61] Rameau, *Origine des sciences*, 'Préface', 4.
[62] Rameau, *Origine des sciences*, 'Lettre de M.*** à M.***', 7.

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developed: the Chinese, for example, cultivated music long before they had any notion of painting and drawing.[63]

Whether to demonstrate harmony's precedence over melody or music's primacy over other sciences, Rameau considered China an indispensable piece of his argument. In Rameau's search for origins, China played the role of a witness, attesting to what music sounded like in its original and thus most natural form: because the Chinese pentatonic scale was based on the triple progression, a product of the *corps sonore*, harmony and not melody must be the source of music; because the Chinese developed music before all other sciences, music must have been the foundation of all knowledge.

Origins of Music: Rousseau

Contrary to Rameau, Rousseau believed that the invention of melody dated much earlier than that of harmony. He argued in his *Essai sur l'origine des langues* (published posthumously in 1781) that melody was a product of nature, whereas harmony was a product of culture. Indeed, Rousseau asserted that speech and song had the same origin in nature.[64] The first speech/song, engendered by the human passions, had few articulations but many accents.[65] As passions gave way to ideas, accents also yielded to articulations. As a result, song separated from speech; and harmony, born out of a civilized society, accelerated this separation and made music an isolated art apart from language.[66]

To chart this process from the unity of speech and song to their separation, Rousseau analysed the writing systems of a variety of languages. In this analysis, he used the East to represent the ancient and the primitive peoples, in contrast to the modern and civilized nations of Europe. Believing that 'Plus l'écriture est grossière, plus la langue est antique' (The cruder the writing, the more ancient the language is), Rousseau identified three groups corresponding to the three successive stages of human history.[67] The Egyptians, who represent the first stage, had a 'passionate language' of hieroglyphs which they used to represent objects through allegorical imagery; the Chinese, epitomizing the second stage, developed a 'conventional language' in which words were represented by conventional characters; the Europeans, who exemplify the third and final stage, created an 'analytical language' whereby speech was broken down into elements, which then became the alphabet. As Rousseau summarized:

> Ces trois manières d'écrire répondent assez exactement aux trois divers états sous lesquels on peut considérer les hommes rassemblés en nation. La peinture des objets convient aux peuples sauvages; les signes des mots et des propositions, aux peuples barbares; et l'alphabet, aux peuples policés.
> These three ways of writing correspond quite exactly to three different stages according to which one can consider men gathered into a nation. The depicting of objects is appropriate

[63] Rameau's friend the French architect Charles-Étienne Briseux (1660–1754) claimed that Greek and Roman buildings were founded on the same proportions as music. Charles-Étienne Briseux, *Traité du beau essentiel dans les arts appliqué particulièrement à l'architecture* (Paris: author, 1752).

[64] There are many studies on Rousseau's *Essai sur l'origine des langues*, though few point out the connection between Rousseau's *Essai* and his exploration of Chinese music. See Michael Davis, 'The Music of Reason in Rousseau's *Essay on the Origin of Languages*', *Review of Politics* 74/3 (2012), 389–402; Downing A. Thomas, *Music and the Origins of Languages* (Cambridge: Cambridge University Press, 1995), chapter 4 (82–142); John T. Scott, 'The Harmony between Rousseau's Musical Theory and His Philosophy', *Journal of the History of Ideas* 59/2 (1998), 287–308; and Jacqueline Waeber, 'Jean-Jacques Rousseau's "unité de mélodie"', *Journal of the American Musicological Society* 62/1 (2009), 79–143.

[65] Jean-Jacques Rousseau, 'Essai sur l'origine des langues', in Jean-Jacques Rousseau, *Œuvres de Jean-Jacques Rousseau*, eighteen volumes (Paris: Deterville, 1817), volume 9, 164–167.

[66] Rousseau, *Essai*, 220.

[67] Rousseau, *Essai*, 168.

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> to a savage people; signs of words and propositions, to a barbarous people, and the alphabet to civilized peoples.[68]

In Rousseau's analysis, the East and the West represented not only two different places but also two different times: whereas the East, especially Egypt and China, were characterized as 'savage' and 'barbarous' in the remote past, the West was described as 'civilized' after people were 'gathered into a nation'. In other words, like Amiot, Roussier and Rameau, Rousseau considered the East synonymous with antiquity. Moreover, because of this identification with antiquity, the East was also closer to the natural state of human existence than the West. Following this logic, harmony as a product of a fully civilized society was not known among the ancients, especially among the Chinese, whose history surpassed that of other nations. In fact, Rousseau's hypothesis was confirmed by the *Description*, one of the most important sources from which he learned about Chinese music. Du Halde stated: 'Aussi la beauté de leurs Concerts ne dépend-t-elle point de la varieté des tons, ni de la différence des parties. Ils chantent tous le même air, comme il se pratique dans toute l'Asie' (Also, the beauty of [Chinese] concerts does not depend on the variety of notes, nor on the difference between parts. They all sing the same melody, as is practised in all of Asia).[69]

For Rousseau, the lack of harmony naturally implied a lack of notation, because both were products of culture and not of nature. In his *Dictionnaire de musique* (1768), Rousseau asserted that the Europeans alone had notation while the Arabs and the Chinese had no knowledge of it:

> Il n'y a que les Nations de l'Europe qui sachent écrire leur Musique. Quoique dans les autres parties du Monde chaque Peuple ait aussi la sienne, il ne paroît pas qu'aucun d'eux ait poussé ses recherches jusqu'à des Caractères pour la noter. Au moins est-il sûr que les Arabes ni les Chinois, les deux Peuples étrangers qui ont le plus cultivé les Lettres, n'ont, ni l'un ni l'autre, de pareils Caractères.[70]
>
> Only the European nations know how to notate their music. Although in other parts of the world each people has their own way to write music, it seems none of them has delved deep enough to develop the signs to notate music. At least, it is certain that neither the Arabs nor the Chinese, the two foreign peoples who are the most cultivated in letters, have similar signs of notation.

In order to show that the Chinese did not know how to notate music, Rousseau cited an incident mentioned in Du Halde's *Description* in which the earliest known Chinese reaction to European staff notation is discussed.[71] This story centred on Thomas Pereira (1646–1708), a Jesuit missionary from Portugal who became a court music tutor to Kangxi. As reported by Pereira's senior colleague Ferdinand Verbiest (1623–1688) – whose story of this incident was published in Europe in 1687 (though I have not yet found any Chinese sources that corroborate it) and was probably the source Du Halde used – Pereira was summoned to the Imperial Palace in 1679 along with Verbiest and another Jesuit father, Claudio Filippo Grimaldi (1638–1712). At Kangxi's order, the Chinese musicians performed a song (*cantilenam*), during which Pereira took out his pen and paper and, in the words of Verbiest, 'wrote their whole song directly down in our musical notes or European

[68] Rousseau, *Essai*, 168–169. Translation in Jean-Jacques Rousseau, Johann Gottfried Herder, *On the Origin of Language*, trans. John H. Moran and Alexander Gode (Chicago: University of Chicago Press, 1986), 16–17.

[69] Du Halde, *Description*, volume 3, 265–266.

[70] Jean-Jacques Rousseau, *Dictionnaire de musique* (Paris: Duchesne, 1768), 74.

[71] 'Quant aux Chinois, on trouve dans le P. du Halde, qu'ils furent étrangement surpris de voir les Jésuites noter & lire sur cette même Note tous les Airs Chinois qu'on leur faisoit entendre' (As for the Chinese, one finds in the [work of] Fr du Halde that they were strangely surprised to see the Jesuits notate and read from the same notation all the Chinese airs that had [just] been performed for them). Rousseau, *Dictionnaire*, 74.

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characters, and put it before our eyes on a small piece of paper: it was in complete accordance with the musical harmony, with the proportionate intervals, long, short, and so on'.[72] With the help of European notation, Pereira reproduced the entire song without a single mistake, which astounded all who were present, especially Kangxi, who 'could hardly believe his ears, and ever since that occasion extolled the European art and science of music in words of praise and full of admiration'.[73] In an attempt to draw more attention to the contrast between China and Europe, Du Halde remarked: 'Ils n'ont point comme nous des Notes de Musique, ni aucun signe qui marque la diversité des tons, les élévations ou les abaissemens de la voix, et toutes ces variations qui font l'harmonie' (Unlike us, [the Chinese] do not have musical notation, nor any sign that indicates differences of pitch, the rising and falling of the voice, and all the variations that constitute harmony).[74]

It is true that the Chinese did not write music in the same way as the Europeans, yet they did have systems of musical notation. In his 'De la musique moderne des Chinois' sent to Paris in 1754, Amiot not only explained in detail the gongche 工尺譜 notation used by Chinese musicians but also reproduced several Chinese airs in both European and gongche systems. Moreover, Amiot in 1779 sent another set of Chinese airs, the *Divertissements chinois*, noted in gongche. These manuscripts had some impact in France. In the *Essai sur la musique ancienne et moderne* (1780), La Borde directly challenged Du Halde and Rousseau's claim that the Chinese had no musical notation by juxtaposing the Chinese air *Liuye jin* 柳葉錦 (Willow-Leaf Silk) recorded in the *Description*, and cited in Rousseau's *Dictionnaire*, with Amiot's gongche notation of the same air.[75]

Rousseau's claim that the Chinese had no notation may not seem so unjust if we take a closer look at his article in the *Dictionnaire*. In analysing the Ancient Greek way of notating music, Rousseau stated that they used the letters of the Greek alphabet: 'mais au lieu de leur donner, dans la Musique, une valeur numéraire qui marquât les Intervalles, ils se contentoient de les employer comme Signes, les combinant en diverses manières, les mutilant, les accouplant, les couchant, les retournant différemment' ('but instead of giving them in music a numerous power, which might mark the intervals, they were contented with using them as signs, combining them in different ways, clipping them, coupling, rendering them silent, and changing them differently').[76] The use of the alphabet, however, did not qualify as musical notation proper in Rousseau's eyes. For him, it was not until the time of Guido of Arezzo (*c*991/992–after 1033) that notation was created in Europe, in the early eleventh century.[77] The reason had to do with the relationship between music and language. As mentioned earlier, music and language had the same origin; as they separated from each other, notation as well as harmony were born. This meant that a notation based on an alphabet – a system derived from language – would not have qualified as musical notation proper because it was tied to language and thus implied the unity of language and music. Only a musical notation that was devoid of any association with language could be called notation, according to Rousseau's definition. Based on this definition, the Chinese indeed did not have a notation because the gongche system was derived from Chinese characters.

[72] Ferdinand Verbiest, *The 'Astronomia Europaea' of Ferdinand Verbiest, S. J. (Dillingen, 1687): Text, Translation, Notes and Commentaries*, trans. Noël Golvers (Nettetal: Steyler, 1993), 125.

[73] Verbiest, *The 'Astronomia Europaea'*, 125.

[74] Du Halde, *Description*, volume 3, 266.

[75] La Borde, *Essai sur la musique*, volume 1, 143. The air *Liuye jin* became the foundation for the discussion of Scottish folk music in the eighteenth century; Charles Burney, for example, argued for the resemblance between Chinese music and Scottish folk music. See Matthew Gelbart, *The Invention of 'Folk Music' and 'Art Music': Emerging Categories from Ossian to Wagner* (Cambridge: Cambridge University Press, 2007), 112 and 126. For discussion on Rousseau and the 'airs chinois' recorded in Du Halde's *Description* see Nathan Martin, 'Rousseau's *Air Chinois*', *Eighteenth-Century Music* 18/1 (2021), 41–64.

[76] Rousseau, *Dictionnaire*, 75. Translation in Jean-Jacques Rousseau, *A Dictionary of Music*, trans. William Waring (London: for J. French, 1779), 59.

[77] Rousseau, *Dictionnaire*, 75.

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Another reason why Rousseau denied the possibility that the Chinese had a notation was that music of the Ancient Greeks was bound to have many inflections, and yet there was no simple way to notate these inflections in the European notational system. In describing the inflections in Greek music, Rousseau argued:

> On sait que notre harmonie est une invention gothique. Ceux qui prétendent trouver le système des Grecs dans le nôtre se moquent de nous . . . Tous les peuples qui ont des instruments à cordes sont forcés de les accorder par des consonnances; mais ceux qui n'en ont pas ont dans leurs chants des inflexions que nous nommons fausses parcequ'elles n'entrent pas dans notre système et que nous ne pouvons les noter. C'est ce qu'on a remarqué sur les chants des sauvages de l'Amérique, et c'est ce qu'on auroit dû remarquer aussi sur divers intervalles de la musique des Grecs, si l'on eût étudié cette musique avec moins de prévention pour la nôtre.
>
> It is known that our harmony is a Gothic invention. Those who claim to find the system of the Greeks in ours are ridiculous . . . Stringed instruments always have to be tuned in consonance. But people who do not use stringed instruments have inflections in their singing which we consider false [out of tune] because they do not fit into our system and we do not care to note them. This can be observed in the singing of American savages, and is bound to be observable in various periods of Greek music too, if it is studied without a prejudice in favor of our own.[78]

According to Rousseau, the Chinese, as one of the ancient peoples, must have had inflections in their music that could not have been notated, just like the music of the Greeks and the Indigenous Americans. In fact, Rousseau doubted that any melody outside modern Europe could be accurately notated in the European system. In his article 'Musique' in the *Encyclopédie* edited by Denis Diderot (1713–1784) and Jean le Rond d'Alembert (1717–1783), Rousseau included two Greek airs, one Chinese air, one Persian air and two Indigenous American airs.[79] Seeing that all these airs are notated in the European system, Rousseau raised doubts about the European transcribers' faithfulness to the original: there must have been some inflections that the transcribers neglected to observe or to notate, because European notation, an invention of culture, was fundamentally incompatible with the ancient and primitive melodies, an invention of nature.[80]

In the end, Rousseau did not explore the question of notation in order to obtain more insights into Chinese music. Rather, he took Du Halde's claim that the Chinese had no musical notation as a piece of evidence to support his own theory of the origin of music, in opposition to Rameau's. Because Chinese music had inflections that could not be rendered in European notation, Chinese music must have been melody-driven, which meant that melody, instead of harmony, was the source of music. Moreover, because Chinese music was different from modern European music – in that one was based on melody and the other on harmony – there must have been more than one principle governing the diversity of musical expressions across history and around the globe, which went against Rameau's claim of a universally valid musical system.

[78] Rousseau, *Essai*, 230–231. Translation in Rousseau, *Origin of Language*, 66.

[79] See Nathan Martin, 'Les planches de musique de l'Encyclopédie: un manuscrit méconnu de Rousseau et ses enjeux ethnographiques', *Recherches sur Diderot et sur l'Encyclopédie* 48 (2013), 169–190.

[80] 'On trouvera dans tous ces morceaux une conformité de modulation avec notre musique, qui pourra faire admirer aux uns la bonté et l'universalité de nos regles, et peut-être rendre suspecte à d'autres la fidélité ou l'intelligence de ceux qui ont transmis ces airs' (One will find in these pieces that their modulation conforms with that of our music, which could make some admire the excellence and universality of our rules, and perhaps render suspicious to others the faithfulness or intelligence of those who transcribed these airs). Jean-Jacques Rousseau, 'Musique', in *Encyclopédie, ou dictionnaire raisonné des sciences, des arts et des métiers, etc.*, ed. Denis Diderot and Jean le Rond d'Alembert (University of Chicago: ARTFL *Encyclopédie* Project, ed. Robert Morrissey), https://artflsrv03.uchicago.edu/philologic4/encyclopedie1117/navigate/10/3792/.

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Conclusion

Despite the contrary claims made by Rameau and Rousseau with respect to the origins of music, these two Enlightenment thinkers had a lot in common. First, neither Rameau nor Rousseau studied Chinese music as an isolated subject, but rather linked it to their own theory of music. In their debate over the primacy of harmony or of melody, Rameau and Rousseau used the knowledge they gained from Amiot and other Jesuits about Chinese music as evidence supporting their views. While recognizing the differences between Chinese and Western music, neither thinker dismissed Chinese music as irrelevant, but both instead considered it a key to understanding the origins of music. Second, both Rameau and Rousseau celebrated the purity of nature and saw culture as a corrupting force. Rameau believed that his theory of the *corps sonore* was best demonstrated by someone inexperienced, whether this meant a person with no prior musical knowledge, or an ancient and primitive people who supposedly had the purest instinct. Rousseau regarded the emergence of harmony and notation as a result of the separation between speech and song, and he lamented the impossibility of bringing back music as it was originally created. Third, regardless of whether melody or harmony constituted the source of music and whether music was built on one or multiple principles, both Rameau and Rousseau believed in a single origin for all music. For Rameau, this origin was his theory of the *corps sonore* that underpinned musics of all cultures from the past to the present; for Rousseau, although each culture had its own musical expression, they could all be traced back to a single origin in which song did not differ from speech before the formation of civil society.

What made Rameau and Rousseau's search for the origins of music possible was, in large part, the global network that the Jesuits had created through their worldwide missions. Particularly in the case of China, it was the Jesuits who, from the early seventeenth century, had tirelessly sent back translations of Chinese books and detailed reports on all aspects of Chinese society, from its government, customs, language, history and geography to its arts and sciences. This abundant new knowledge allowed European scholars to have a much more complete and vivid picture of China and made their comparative studies on a global scale possible. More importantly, the Jesuits made the first attempts at connecting and reconciling the various cultures of the world. Amiot's claim of the Chinese origin of Western music was one example. Connecting the ancient Chinese practice of the hexagrams with Rameau's recent invention of the concept of the fundamental bass, Amiot traced the development of music from China, its originating site, to Ancient Greece and finally to modern European nations. This Chinese origin of Western music was a manifestation of a larger, more problematic notion of the Oriental-origin theory, which casts the East in a perpetual primitive state deprived of any historical development.[81]

From a postcolonial perspective, this Oriental-origin theory and European music scholars' study of Chinese music could be seen to have amounted to nothing more than an expression of Eurocentrism. Yet there are two things we need to consider that would help us understand the Sino-Western encounter in a less negative light. China in the eighteenth century was not a European colony, and the Chinese who were in dialogue with the missionaries and the European scholars cannot easily be identified as subalterns.[82] There need to be alternative ways of analysing the special case of China beyond the framework proposed by Gayatri C. Spivak and other postcolonial scholars, which focuses on South Asia and Latin America. In the absence of overt military conflict and an unbalanced struggle between a conqueror and a conquered people, Enlightenment

[81] Edward Said pointed out that Europe viewed the Orient 'as being always the same, unchanging, uniform, and radically peculiar object'. Edward W. Said, *Orientalism* (New Delhi: Penguin, 1979), 98.

[82] The Chinese Imperial Court and the literati who were communicating with the missionaries and European thinkers had a very different social standing from the Indian widows analysed by Gayatri C. Spivak. See Gayatri C. Spivak, 'Can the Subaltern Speak?', in *Marxism and the Interpretation of Culture*, ed. Cary Nelson and Lawrence Grossberg (Urbana: University of Illinois Press, 1988), 271–313.

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philosophes' interest in Chinese music was motivated more by a genuine curiosity than by an aggressive attempt to bring China under European domination. Moreover, as scholars in the twenty-first century, we may at times unjustly project our anachronistic views onto people living in the past. From the perspective of these eighteenth-century thinkers in France, they tried their best to cope with the overwhelming volume of information about the diverse cultures around the globe that challenged their old worldview that was centred on Europe alone. Using what they knew, they strove to understand the gradually expanding and increasingly chaotic world by creating a new world order that was predicated on a distorted image of the East. This distorted image of the East notwithstanding, Sino-Western dialogue signified an important and courageous step forward. For the first time, China not only represented an imaginary land featured in orientalist operas, but also a group of people who truly existed and whose music had to be taken into consideration in constructing a universally valid theory of music.

Ultimately, the search for the origins of music in the eighteenth century was a manifestation of the epistemological crisis brought about by the Jesuits and the European scholars' creative response to it. Facing the increasingly expansive world built on the Jesuits' global transmission of knowledge, European scholars laboured to make sense of the larger world by searching for a common origin of all humanity. Étienne Bonnot de Condillac (1714–1780) investigated the origins of epistemology; Jean-Dominique Cassini (1625–1712) charted the origins and development of astronomy; Jean-Étienne Montucla (1725–1799) gave an account of mathematics from its earliest days to the present; Antoine-Yves Goguet (1716–1758) explored the ancient beginnings of law, the arts and the sciences; Rameau traced the origin of the sciences back to music; and Rousseau probed the origins of music and languages.[83] While these scholars hardly agreed on what this common origin was, they all tried to understand the world from a new global perspective: in terms of breadth, they strove to study many different cultures around the world; in terms of depth, they endeavoured to connect all these cultures along a single thread of history. It is true that this global perspective was based neither on a comprehensive view of every culture in the world nor an extensive analysis of non-Western cultures. It frequently suffered from layers of misinterpretation and prejudice. The Oriental-origin theory was just one example. Yet just like the ambitious *Encyclopédie* edited by Diderot, what defined the value of these eighteenth-century projects in search of origin was less the completeness of the projects than the ambition itself. No matter how difficult it was to reconcile the cultural differences between the East and the West, these scholars began to realize the importance of taking China and other parts of Asia on their own terms. They could no longer rely on worldviews inherited from European scholars writing in antiquity, the Middle Ages and the Renaissance. Rather, driven by the ambition to look beyond their own home, they created these origin stories in an attempt to reposition themselves as part of a larger world and to unify the multiplicity of the world's cultures into a single history of humanity.

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[83] Etienne Bonnot de Condillac, *Essay on the Origin of Human Knowledge*, trans. and ed. Hans Aarsleff (Cambridge: Cambridge University Press, 2001); Jean-Dominique Cassini, *De l'Origine et du progrès de l'astronomie et de son usage dans la géographie et dans la navigation* (Paris: Imprimerie Royale, 1693); Jean-Étienne Montucla, *Histoire des mathématiques, dans laquelle on rend compte de leurs progrès depuis leurs origines jusqu'à nos jours* (Paris: A. Jombert, 1758); and Antoine-Yves Goguet, *De l'Origine des loix, des arts, et des sciences et de leurs progrès chez les anciens peuples* (Paris: Desaint et Saillant, 1758).

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