UNIVERSITY OF CAMBRIDGE

Musical knowledge, material practices and the body politic
in eighteenth-century France

Amparo Fontaine

Faculty of History

Lucy Cavendish College

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This dissertation is submitted for the degree of Doctor of Philosophy

DECLARATION

This dissertation is the result of my own work and includes nothing which is the outcome of work done in collaboration.

It is not substantially the same as any that I have submitted, or, is being concurrently submitted for a degree or diploma or other qualification at the University of Cambridge or any other University or similar institution except as declared in the Preface and specified in the text. I further state that no substantial part of my dissertation has already been submitted, or, is being concurrently submitted for any such degree, diploma or other qualification at the University of Cambridge or any other University or similar institution except as declared in the Preface and specified in the text

This dissertation does not exceed the regulation length of 80,000 words.

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ABSTRACT

In eighteenth-century France, music was everywhere. Musical criticism and scores filled journals and newspapers, new concert houses and music shops spread across Paris, most authors addressed music in their writings, and pre-revolutionary speeches provided musical metaphors to conjure social and political ideals. Why did music arouse such a widespread interest in this significant period of French history? This dissertation engages with this question using a large body of sources, including print, patents, paintings and engravings, and surviving instruments. Interweaving manifold cultural practices and social actors, it enquires how people defined and experienced what music *was*, what it *did*, and *who* was entitled to practice and appreciate it in eighteenth-century France. I argue that music was conceived as an Enlightened and collective project throughout the century, especially through the changing appropriations of notions of musical harmony. The narrative of this dissertation moves from the exploration of musical harmony as an Enlightened science in the first half of the century, to the appropriation of Rameau's system of harmony as the summit of French genius and national character in mid-century. It also moves from the negotiation and dissemination of ideas of music through corporeal and material practices, to the uses of harmony as a model for envisaging an ideal socio-political order during the French Revolution. Accordingly, this dissertation features a wide array of social actors who navigated and claimed taste and expertise in this changing musical culture, including musical amateurs, savants, performers, teachers, inventors, and listeners.

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I dedicate my first substantial piece of historical work to my grandparents
Valentina, María Inés, Arturo, and Gregorio
with whom I first experienced my love for the past.

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Introduction

Unlike our understanding of music nowadays, music in eighteenth-century France was not chiefly deemed an art form. Music was everywhere in the bustling urban, social, intellectual, and political life of Paris. Concert houses and music shops were spread across the city, music criticism and scores filled journals and newspapers, many natural philosophers and men of letters addressed the subject of music in their experiments and writings, a vast array of people collected and performed on musical instruments, and pre-revolutionary speeches invoked music to conjure social and political ideals. Why did music attract such attention in this significant period of French history? What drew people to practise, research, learn, consume, and associate themselves with music? Interweaving manifold cultural practices and social actors, this dissertation enquires how people defined and experienced what music *was*, what it *did*, and *who* was entitled to practice and appreciate it in eighteenth-century France. It engages with these questions from different vantage points, as provided by recent developments in cultural history, the history of science, material culture studies, the history of the body, the history of emotions, and intellectual history. The complex ways in which music was signified, appropriated, and used in eighteenth-century France shatters traditional canons of study for the historian. In moving away from a view of music as an art form to the contemporary appropriations of music as a form of Enlightened knowledge, a source of national identity, a material and corporeal experience, and a socio-political model, this dissertation approaches music as a dynamic cultural practice, whose meanings and purposes were articulated and experienced by a variety of social actors throughout the century.

This dissertation's broad chronological scope comprises the late seventeenth and eighteenth centuries. Within this framework, this dissertation argues that music helped to shape key phenomena that historians have identified in this period, namely the rationalising project of the Enlightenment, the increasing culture of consumption and public opinion, the building of a sense of French national identity, the emergence of a new sensibility in mid-century, and the unfolding of the French Revolution. Musical concerns, practices, and actors cut across all these phenomena. I shall argue that music was deemed an Enlightened science, by merging knowledge and taste, and hence defined the knowledgeable and tasteful person. In the 1750s, music became a determinant feature of French character and genius, and bound the individual to different social communities through practices such as criticising and consuming music.

Music was embodied, involving the material and visual as well as the aural, and encapsulated the values pursued in the new sensibility as a privileged language for expressing feeling and sensorial experience. Later, in revolutionary times, music offered a model for agreement and proportionate order based on musical harmony. Thus, music played a crucial role in bridging changing models of knowledge, taste, expertise, sociability, communality, corporality, and socio-political order throughout the century.

One of the most striking findings of this dissertation is the omnipresence of notions of musical harmony in public opinion and cultural life, with regards to different musical and non-musical affairs. Musical harmony was invented, defended, contested, discarded, translated, embodied, and used all throughout the century. Consequently, the narrative of this dissertation moves from the exploration of 'harmony' as the epitome of the scientific pursuit of music in the first half of the century, to the appropriation of Rameau's system of harmony as the summit of French culture and national character in mid-century. It also moves from the negotiation and dissemination of ideas of harmony and sound through corporeal and material practices, to the uses of harmony as a model for an ideal form of social organisation during the French Revolution. Overall, the itinerary of harmony presented in this dissertation shows that music retained its connection with ideas of nature and the cosmos, which were the source of its alleged powerful effects, thereby allowing music to be appropriated for an Enlightened and collective political project. Additionally, this dissertation tells a story of taste. Music was understood as a truth of taste and a source for the self-fashioning of the tasteful person. Thus, the possession, formulation, and expression of taste are subjects found in all chapters of this dissertation. Broadly speaking, all of the themes addressed in this dissertation are interwoven with taste: the formulation of music as a tasteful science, the construction of Frenchness as a tasteful nation, the ownership of musical instruments as tasteful possessions, the forging of tasteful expertise, the cultivation of the tasteful body of the performer, and the envisioning of a tasteful republic in revolutionary times.

Accordingly, this dissertation features a wide array of social actors who navigated, self-fashioned, and claimed expertise in this changing musical culture. It explores the emergence in this period of specific musical agents scarcely documented in existing literature, including musical amateurs, 'savant' musicians, musical teachers, different types of performers, and 'sensible' listeners. These social actors converged in the city of Paris. Although this dissertation addresses issues of French national identity and culture, it mainly focuses on the city of Paris. Nevertheless, it considers Paris as a permeable and heterogeneous spatial frame, which was not only the capital of France, but also played an increasing central role in the

cultural life of Europe, being a popular destination among travellers. During the eighteenth century, the metropolitan identity of Paris transformed considerably.[1] The idea of a city reviewing its identity and new cultural weight, on the one hand, and particularly keen on absorbing, hosting and transforming foreign visitors and influences, on the other, is central to this dissertation.

The first section of this introduction traces the trajectory of the dissertation, summing up its main themes and findings, while explaining the chronological development of its narrative. The second part, in turn, discusses my methodological approach to the subject conversing with different bodies of secondary literature, and analyses some critical issues addressed in the dissertation. The third section introduces the cast of musical actors that feature in this dissertation and their social world, discussing what it meant to be a 'musician' in this period, and what a musical 'amateur' was. The last section of this introduction outlines the purpose of each of the four chapters that make up this dissertation.

1. Main themes of the dissertation

1.1 Tasteful science. Enlightenment, Rameau and taste

During the first half of the century, music was considered to be a science. Members of the Académie Royale des Sciences in Paris assessed a great number of proposals about music theory and practice, sound, hearing, and musical instruments.[2] These scientific enquiries into music drew upon a long tradition of mathematical study of music. Since Pythagoras, the mathematical proportions between musical notes were thought to mirror cosmological order, being mathematically organised. The 'harmony of the spheres' or *musica mundana* was then a dominant worldview in early modern neo-Platonic sciences and philosophy.[3] It was not only central to the research of astronomers and mathematicians, but was at the basis of early modern

[1] Stéphane Van Damme, *Métropoles de papier. Naissance de l'archéologie urbaine à Paris et à Londres* (Paris: Les Belles Lettres, 2012).

[2] See Albert Cohen, *Music in the French Royal Academy of Science* (Princeton: Princeton University Press, 1981).

[3] For the 'harmony of the spheres' see e.g Jocelyn Godwin, *The Harmony of the Spheres: The Pythagorean Tradition in Music* (Rochester, Vermont: Inner Traditions, 1992); Jamie James, *The Music of the Spheres: Music, Science, and the Natural Order of the Universe* (New York: Springer, 1993); Paolo Gozza (ed.), *Number to Sound. The Musical Way to the Scientific Revolution* (Dordrecht: Kluwer, 2000); Jacomien Prins, *Echoes of an Invisible World: Marsilio Ficino and Francesco Patrizi on Cosmic Order and Music Theory* (Leiden: Brill, 2015).

medicine, which aimed at balancing the humours of the body and aligning the organs with the celestial harmony.[4]

Scholarship has placed the decline of the 'harmony of the spheres' in the seventeenth century.[5] Jacomien Prins argues that the increasing rationalisation of music and sound brought the 'disenchantment and consequently an end to the age-old link between cosmic order and music theory'.[6] This ending was attributed to the effects of the scientific revolution, which, for Suzannah Clark and Alexander Rehding, produced a shift in the consideration of music, from divine or cosmological order to physical phenomenon, epitomised by the emergence of studies whose declared subject was 'sound'.[7] That shift has been called by Paolo Gozza the 'passage from number to sound', a transition from the stress on numerological explanations of harmony, towards empirically based research on the nature of 'sounding number'.[8] Indeed, the seventeenth century saw great developments in research into the physics of sound. According to Penelope Gouk, Francis Bacon was explicitly opposed to Pythagorean understandings of the universe in terms of mathematical ratios but considered music instead a 'sonorous phenomenon of nature perceived by the senses, rather than as a branch of mathematical speculation'.[9] Bacon defended an empirical approach to music, which he pursued through the experimentation and invention of musical instruments.[10] In this dissertation, I shall argue that, in the case of eighteenth-century France, the 'scientific revolution' did not eclipse the 'harmony of the spheres'; rather, associating musical harmony with a broad notion of the natural order legitimised the wide appropriation of music as a scientific subject of enquiry. Moreover, notions of cosmic harmony permeated different layers of French culture right up to the Revolution. Harmony worked at both a macrocosmic and microcosmic level: from cosmological order to the physical body. This dissertation will demonstrate that the reasons for

4 Noga Arikha, *Passions and Tempers: A History of the Humours* (New York: HarperCollins, 2007), pp.113-172.
5 See e.g. Floris Cohen, *Quantifying Music: The Science of Music at the First Stage of the Scientific Revolution, 1580-1650* (Dordrecht: Reidel 1984); Penelope Gouk, *Music, Science, and Natural Magic in Seventeenth-Century England* (New Haven, CT: Yale University Press, 1999); Victor Coelho (ed.), *Music and Science in the Age of Galileo* (Dordrecht: Kluwer, 1992); Gozza (ed.), *Number to Sound*; Prins, *Echoes of an Invisible World*; James Kennaway, *Bad Vibrations. The History of the Idea of Music as a Cause of Disease* (Aldershot: Ashgate, 2012).
6 Prins, *Echoes of an Invisible World*, p.19.
7 Suzannah Clark and Alexander Rehding, 'Introduction', in *Music Theory and Natural Order from the Renaissance to the Early Twentieth Century*, eds. Suzannah Clark and Alexander Rehding (Cambridge: Cambridge University Press, 2010), p.6.
8 Gozza (ed.), *Number to Sound*, pp.62-3.
9 Penelope Gouk, 'Music in Francis Bacon's Natural Philosophy', in *Number to Sound*, ed. Gozza, p.136.
10 Penelope Gouk, 'On the Role of Musical Instruments in the Creation of Francis Bacon's Experimental Study of Sound', paper presentation at the conference 'Music and Material Culture', University of Cambridge, Faculty of Music, 7 December 2016.

the persistence of the 'harmony of the spheres' in the eighteenth century were twofold: it legitimised notions of music as a model of both *order* and *influence*. By means of its privileged relationship with the cosmos or the divine, music both revealed natural order—geometrically organised, proportioned, tasteful, and moral—and had powerful effects on individual and collective bodies—from stirring passions and healing to unifying politically discordant crowds.

In 1722, the hitherto little-known composer and organist from Dijon, Jean-Philippe Rameau, published his *Traité de l'harmonie réduite à ses principes naturels*, in which he proposed a 'scientific system' for music.[11] Here he systematised the treatment of musical chords, and identified a 'single principle' for musical theory and composition, the 'fundamental bass', which ruled both the structure of chords and their progression.[12] Recent studies have shown that Rameau's theories fitted dominant concerns among *philosophes* in the Enlightenment, joining mathematics with physical studies of resonance.[13] The enormous impact of Rameau's theories on the standardisation of musical composition and pedagogy has also been largely documented.[14] In this dissertation, Rameau's writings on musical harmony are considered in relation to the legacy of the harmony of the spheres, the growing culture of public opinion and musical consumption, and the fashion for classifying, making 'systems', and geometry in the so-called 'geometrical spirit' or 'quantifying spirit' of the Enlightenment.[15] Rameau called musical harmony a 'science' at a time when scientific enquiries into music were gaining momentum. This dissertation argues that music received a great deal of scholarly attention during the early decades of the eighteenth century, as part of the Enlightenment project of reforming and organising knowledge. There were considerable efforts to understand

[11] Jean-Philippe Rameau, *Traité de l'harmonie réduite à ses principes naturels* (Paris: 1722).

[12] See e.g. Thomas Christensen, *Rameau and Musical Thought in the Enlightenment* (Cambridge: Cambridge University Press, 1993), p.5.

[13] See e.g. Cynthia Verba, *Music and the French Enlightenment. Reconstruction of a Dialogue 1750-1764* (New York: Clarendon Press, 1993); Christensen, *Rameau and Musical Thought*; André Charrak, *Raison et perception. Fonder l'harmonie au XVIIIe siècle* (Paris: J. Vrin, 2001); Abigail Shupe, 'Aspects of Newtonianism in Rameau's *Génération harmonique*', unpublished PhD Thesis, University of Western Ontario (2014).

[14] For studies on Rameau's life and musical works see Cuthbert Girdlestone, *Jean-Philippe Rameau: His Life and Work* (New York: Dover, 1970); Charles William Dill, *Monstrous Opera: Rameau and the Tragic Tradition*, (Princeton: Princeton University Pres, 1998); Jean-Paul Dous, *Rameau: un musicien philosophe au siècle des Lumières* (Paris: L'Harmattan, 2011); Cynthia Verba, *Dramatic Expression in Rameau's Tragédie in Musique* (Cambridge: Cambridge University Press, 2013).

[15] For the 'geometrical spirit' or 'quantifying spirit' see Blaise Pascal, *De l'esprit géométrique et de l'art de persuader* (Paris: 1658). Also Tore Frängsmyr, J. L. Heilbron, and Robin E. Rider (eds.), *The Quantifying Spirit in the 18th Century* (Berkeley: University of California Press, 1990); Richard Wellington Burkhardt, *The Spirit of System: Lamarck and Evolutionary Biology* (Cambridge, MA: Harvard University Press, 1995); Roy Porter, 'Introduction', in *The Cambridge History of Science*: *Volume 4, Eighteenth-Century Science*, ed. Roy Porter (Cambridge: Cambridge University Press, 2017), 1-20.

and systematise music theory, practice, and taste. These efforts were expressed in epistemological practices throughout the century: music was studied as a science in the Académie Royale des Sciences, and was the subject of theorising, experimenting, quantifying, classifying, historiographies, dictionaries, collecting, and intensive investigation, both inside and outside the academies. The vast number of publications on musical subjects, and the great attention paid to music within the largest Enlightenment ventures, such as the *Descriptions des arts et métiers*, the *Encyclopédie*, and the *Encyclopédie méthodique*, reveals that music was at the foreground of the French Enlightenment, and was largely understood as a matter of reason.[16]

As a subject of scientific study, music effectively coupled reason with taste. Eighteenth-century dictionaries throughout the century defined music as a 'science of sounds', adding 'that [these sounds] are pleasant to the ear'.[17] One might think that the consideration of music as a science would exclude musical pleasure. However, as I shall demonstrate, the fact that music 'pleased' was arguably central to scientific practices in music. The 'science of music' followed the belief that beauty and taste were grounded in a notion of nature as geometrically organised. Therefore, the system of harmony put forward by Rameau aimed at explaining the pleasure of music through mathematics, at the same time that it also enshrined the relationship between science, taste, beauty and sociability. Indeed, historians have demonstrated that, in the early eighteenth century, notions of science were intrinsically linked to notions of beauty, morality, amusement, and sociability. In this sense, our modern divisions between 'science' and 'art' are not applicable in this period, given that both shared common ground in notions of geometry, beauty, and morality.[18] I contend that musical harmony was deemed a 'tasteful' science:

[16] Denis Diderot and Jean le Rond d'Alembert (eds.), *L'Encyclopédie, ou dictionnaire raisonné des sciences, des arts et des métiers* (Paris: 1751-1772); Académie Royale des Sciences, *Descriptions des Arts et Métiers, faites ou approuvées par messieurs de l'Académie royale des sciences* (Paris: 1761-1788); Jacques Lacombe, *Encyclopédie méthodique. Arts et métiers mécaniques* (Paris: Panckoucke, 1782-1791).

[17] See e.g. 'La Musique a pour objet le son en tant qu'il est agréable à l'organe de l'ouïe' in Jacques Ozanam, *Récréations mathématiques et physiques, qui contiennent plusieurs problèmes d'arithmétique, de géométrie, de musique, d'optique, de gnomonique, de cosmographie, de mécanique, de pyrotechnie, et de physique* (Paris: 1694), p.331. In this dissertation, I draw upon multiple definitions by eighteenth-century dictionaries and encyclopaedias, not without caution. I am aware that copying and imitation was a common practice among early modern dictionary makers (which raises questions about the originality, date and authorship of any of their definitions) and that dictionary definitions do not account for the whole semantic range of a word, nor they reveal their multiple appropriations and uses.

[18] See Geoffrey Sutton, *Science for a Polite Society: Gender, Culture, and the Demonstration of Enlightenment* (Boulder, CO: Westview Press, 1995); William Clark, Jan Golinski and Simon Schaffer (eds.), *The Sciences in Enlightened Europe* (University of Chicago Press, 1999); Emma Spary, 'Scientific Symmetries', *History of Science* 62 (2004), 1-46; Charlotte Guichard, *Les Amateurs d'art à Paris au XVIIIe siècle* (Seyssel: Champ Vallon,

harmonic proportions revealed the geometrical laws of the universe at the same time that they legitimised and 'naturalised' musical taste. Similarly, the tasteful science of music presented practices of knowledge-making and learning as an amusing, aesthetic, moralising, spectacular, collective social practice—just like musical performances.[19]

Additionally, this dissertation expands recent studies of hearing and sound, by illustrating that eighteenth-century approaches to sound and acoustics also embraced notions of knowledge and taste. Unlike the treatment of sound in the secondary literature just mentioned on music during the scientific revolution, this dissertation demonstrates that sound was not an isolated subject of scientific study. Sound and hearing have also been the objects of study of a recent flurry of scholarship under the umbrella of 'sound studies', which argue that the perception and production of sound are historically and culturally shaped, intermingling varied social, political, material, environmental, and economic issues.[20] Whereas these studies often take sound as a distinct and independent category from music, this dissertation argues that enquiries into sound and hearing in this period were imbricated with notions of music, and thus with criteria of taste and musical pleasure. Notions of musical harmony continued to permeate even 'empirical' studies on sound, drawing upon the interrelation between music and natural order. Sound was largely approached as a matter of taste, and as a sensorial and empirical demonstration of the geometrical organisation of the world. I shall show that surgeons and physicists in this period aimed to explain why music could please the way it did by exploring physical phenomena such as the form of waves, the agitation of particles, and specific parts of the structure of the ear. They compared human and animal audition, and drew

2008); Bernadette Bensaude-Vincent and Christine Blondel (eds.), *Science and Spectacle in the European Enlightenment* (Aldershot: Ashgate, 2008).

[19] Sutton, *Science for a Polite Society*.

[20] The literature on sound and hearing has expanded considerably in recent years. For general references, see e.g. R. Murray Schafer, *Soundscape: Our Sonic Environment and The Tuning of the World* (1977; New York: Destiny Books, 1994); Alain Corbin, *Village Bells: Sound and Meaning in the 19th- Century French Countryside* (New York: Columbia University Press, 1998); Michael Bull and Les Back (eds.), *The Auditory Culture Reader* (Oxford: Berg Publishers, 2003); Jonathan Sterne, *The Audible Past: Cultural Origins of Sound Reproduction* (Durham, NC: Duke University Press, 2003); Mark M. Smith (ed.), *Hearing History: A Reader* (Athens, GA: University of Georgia Press, 2004); Veit Erlmann, *Hearing Cultures: Essays on Sound, Listening and Modernity* (Oxford: Berg Publishers, 2004); Jonathan Sterne (ed.), *The Sound Studies Reader* (London: Routledge, 2013); Trevor Pinch and Karin Bijsterveld (eds.), *The Oxford Handbook of Sound Studies* (Oxford: Oxford University Press, 2013); Ian D. Biddle and Kirsten Gibson (eds.), *Cultural Histories of Noise, Sound and Listening in Europe, 1300-1918* (London: Routledge, 2016). For 18th-century France, see Penelope Gouk and Ingrid Sykes, 'Hearing Science in the Eighteenth Century', *Journal of the History of Medicine and Allied Sciences* 66:4 (2011), 507-545; Veit Erlmann, *Reason and Resonance: A History of Modern Aurality* (New York: Zone Books, 2010); Sophia Rosenfeld, 'On Being Heard: A Case for Paying Attention to the Historical Ear', *The American Historical Review* 116:2 (2011), 316-334.

boundaries between sound and noise. All of these actions and claims were highly charged with notions of taste.[21]

Taste (*goût*) has received considerable attention in recent scholarship. Historians have shown that taste was a crucial category in eighteenth-century French culture, encompassing a series of social, physical, moral and aesthetic assumptions, and was unevenly distributed in society.[22] This dissertation is indebted to sociological approaches of taste by sociologists like Pierre Bourdieu, who, through shifting attention from aesthetics to social contexts, argued that taste was a source of social distinction and provided 'symbolic capital' to its possessors.[23] Indeed, taste was a requisite of membership to elite and polite social circles in eighteenth-century France. Yet cultural historians have presented a complex interweaving of taste with eighteenth-century cultural practices, showing that taste was indeed not merely an abstract aesthetic principle, but was physically embodied, entwined with knowledge, morality and expertise, and increasingly negotiated in commercial practices.[24] Taste governed social performance and demeanour, from manners and physical appearance to the use of spoken and body language.[25] Therefore, this dissertation does not adopt the understanding of 'taste' as the expression of musical preferences or aesthetic ideal. Indeed, the social dynamics behind this

[21] See e.g. Claude-Nicolas Le Cat, *La théorie de l'ouie, suite du traité des sensations & des passions en général, & des sens en particulier* (Paris: 1757); Jean-Antoine Nollet, 'Mémoire sur l'ouïe des poissons, et sur la transmission des sons dans l'eau', *Histoire de l'Académie royale des sciences* (Paris: 1743), 199-224.

[22] Rémy Gilbert Saisselin, *Taste in Eighteenth Century France. Critical Reflections on the Origins of Aesthetics; or, an Apology for Amateurs* (Syracuse, NY: Syracuse University Press, 1965); Krzysztof Pomian, *Collectors and Curiosities: Paris and Venice* 1500–1800, trans. Elizabeth Wiles-Portier (Cambridge: Polity Press; Cambridge, MA: Basil Blackwell, 1990); Dena Goodman, *The Republic of Letters: A Cultural History of the French Enlightenment* (Ithaca, NY: Cornell University Press, 1996); Elena Russo, *Styles of Enlightenment: Taste, Politics, and Authorship in Eighteenth-Century France* (Baltimore: The Johns Hopkins Univiversity Press, 2007).

[23] Pierre Bourdieu, *Distinction: A Social Critique of the Judgement of Taste*, trans. Richard Nice (Cambridge, MA: Harvard University Press, 1984).

[24] See John Brewer, *The Pleasures of the Imagination: English Culture in the Eighteenth Century* (New York: Farrar Straus Giroux, 1997); John Brewer and Roy Porter (eds.), *Consumption and the World of Goods* (London: Routledge, 1993); Charlotte Guichard, 'Taste Communities: The Rise of the Amateur in Eighteenth-Century Paris', *Eighteenth-Century Studies* 45:4 (2012), 519-547; Goodman, *The Republic of Letters*; Dena Goodman, *Becoming a Woman in the Age of Letters* (Ithaca, NY: Cornell University Press, 2009); Spary, 'Scientific Symmetries'; Emma Spary, *Eating the Enlightenment: Food and the Sciences in Paris, 1670-1760* (Chicago: The University of Chicago Press, 2012); Carolyn Sargentson, *Merchants and Luxury Markets: The Marchands Merciers of Eighteenth-Century Paris* (London and Malibu: V&A Publications, 1996); Daniel Roche, *A History of Everyday Things: The Birth of Consumption in France, 1600–1800*, trans. Brian Pearce (Cambridge: Cambridge University Press, 2000); Dena Goodman, 'Furnishing Discourses: Readings of a Writing Desk in Eighteenth-Century France', in *Luxury in the Eighteenth Century*, eds. Maxine Berg and Elizabeth Eger (London: Palgrave Macmillan, 2003), 71-88.

[25] See e.g. Sarah R. Cohen, *Art, Dance, and the Body in French Culture of the Ancien Régime* (Cambridge: Cambridge University Press, 2000).

latter understanding of 'musical taste'—expressed in the making of canons, the agenda of musical institutions, concert commentaries, programming, and reception of musical works, among others—have received increasing scholarly attention, most notably in the work of William Weber.[26] Yet the ways in which music was involved in broader, all-encompassing practices of the eighteenth-century notion of taste has received no significant attention from scholars. This dissertation presents a considerably new picture of the relationship between music and taste.

1.2 Tasteful personae. Salon sociability and the 'public sphere'

Taste was an essential feature of polite sociability. Historians have viewed the crucial role of sociability and different forms of association during the Enlightenment as being of key political relevance in the making of the French Revolutionary public. Marc Fumaroli, Dena Goodman, Daniel Gordon, Steven Kale, and Antoine Lilti have explored salons as a new site for sociability, stressing the ways they forged either literary and political engagement or worldly sociability.[27] Possessing taste was a prerequisite for those who participated in the salons, while taste more generally was also a recurrent subject of discussion, conversation, and socialising. Since the earliest historical studies on salons, such as Georges Cucuel's study on the salon of Alexandre Le Riche de La Poupelinière, published in 1913, historians have stressed the crucial role of music in polite sociability.[28] A rich tax farmer, La Pouplinière was the patron of Jean-Philippe Rameau, and patronised an orchestra that was central to musical innovations of the

[26] William Weber, 'Learned and General Musical Taste in Eighteenth-Century France', *Past and Present* 89:1 (1980), 58-85; William Weber, *The Great Transformation of Musical Taste: Concert Programming from Haydn to Brahms* (Cambridge: Cambridge University Press, 2008); William Weber, 'The Intellectual Origins of Musical Canon in Eighteenth-Century England', *Journal of the American Musicological Society* 47:3 (1994), 488-520; William Weber, *The Rise of Musical Classics in Eighteenth-Century England: A Study in Canon, Ritual and Ideology* (Oxford: Clarendon Press, 1992). See also Louis Striffling, *Esquisse d'une histoire du goût musical en France au XVIIIe siècle* (Paris: Librairie Ch. Delagrave, 1912).

[27] Steven Kale, *French Salons: High Society and Political Sociability from the Old Regime to the Revolution of 1848* (Baltimore: Johns Hopkins University Press, 2006); Goodman, *The Republic of Letters;* Antoine Lilti, *The World of the Salons: Sociability and Worldliness in Eighteenth-century Paris*, trans. Lydia G. Cochrane (Oxford: Oxford University Press, 2015); Daniel Gordon, *Citizens without Sovereignty: Equality and Sociability in French Thought, 1670-1789* (Princeton: Princeton University Press, 1994)*;* Jacqueline Hellegouarc'h and Marc Fumaroli, *L'Esprit de société: cercles et salons parisiens au XVIIIe siècle* (Paris: Garnier, 2000).

[28] Georges Cucuel, *La Pouplinière et la musique de chambre au XVIIIe siècle*, (Paris: Libraire Fischbacher, 1913).

time.[29] More recently, Antoine Lilti emphasised the role of music in salon sociability for the leisured elite more widely, and has shown its links with other amusements, such as gaming and theatre.[30] Dena Goodman and Mark Darlow, in turn, have stressed the importance of musical debates in polite conversation within the salons.[31] In this historiography, music figures as a backdrop of salon sociability, either in the form of amusement or subject of conversation, conferring taste upon its beholders and participants.

This dissertation both complements and complicates the picture of music's embeddedness in sociability and taste. Building upon Goodman's insights that ideas of musical harmony permeated the management of salon sociability orchestrated by the *salonnière*, I shall argue that salon sociability worked as a laboratory for the exploration of musical harmony as a model of public order in revolutionary times, for the purposes of managing dissent and orchestrating different political voices into a tasteful harmonious whole.[32] Additionally, as a tasteful science, music intertwined knowledge, technical expertise, amusement, wit, wonder, and curiosity in social gatherings. Whether in the form of concert attendance, possession of musical commodities, collecting, or reading musical writings, I shall argue, consumers of music subscribed to different communities of taste, social status, and knowledge. The ownership, collection, and display of musical instruments in the household further strengthened the participation of the individual in a wider community of taste; possessing musical instruments and inventions was a quite literal way of possessing taste.[33]

The ties created by individuals with social associations and taste communities had the power to raise the social status of the individual while forging communal identity. Shared pleasure in music served to consolidate communities of taste beyond the court, both inside and outside musical institutions.[34] Hence knowledge-making and learning were amongst the features that defined the tasteful person. Consequently, I shall argue that scientific studies of music and sound aimed to explain and legitimise the taste for music, as well as the status of the

[29] See Michel Brenet, *Les concerts en France sous l'Ancien Régime* (Paris: Libraire Fischbacher, 1900); Georges Cucuel, *Études sur un orchestre au xviiie siècle* (Paris: Libraire Fischbacher, 1913); John Spitzer and Neal Zaslaw, *The Birth of the Orchestra: History of an Institution, 1650-1815* (Oxford: Oxford University Press, 2004).

[30] Lilti, *The World of the Salons*. See especially the chapter 'Les plaisirs du salon' in the French edition: Antoine Lilti, 'Les monde des salons: Sociabilité et mondanité à Paris au XVIIIe siècle', *Annales historiques de la Révolution française* 348 (2005), 225-72.

[31] Goodman, *The Republic of Letters*; Mark Darlow, *Dissonance in the Republic of Letters: The Querelle des Gluckistes et de Piccinnistes* (London: Routledge, 2013).

[32] Goodman, *The Republic of Letters*.

[33] See my forthcoming article 'Tasteful Possessions. Collecting and Displaying Musical Instruments in pre-Revolutionary France'.

[34] Guichard, 'Taste Communities'.

tasteful person. In the tasteful science of harmony, taste held scientific authority; academicians listened to musical performances and drew upon the judgement of their 'ears' to assess and approve musical inventions, from new musical theories to musical instruments. Musical taste was also considered to be located physiologically, in the figure of the ear. In fact, in eighteenth-century France, possessing 'good ears' meant quite literally possessing taste: the privileged taste for hearing music and grasping the proportionate science of harmonics was allegedly grounded in the very structure of the ears, which in turn mirrored the delicacy and complexity of natural order.[35] I shall demonstrate that displaying musical taste and knowledge of musical matters became a defining feature of the self-fashioning of a wide range of 'musical experts', 'tasteful' and 'savant' individuals. Additionally, musical practice was a skill worth acquiring for moral disciplining and self-cultivation of the pious, rational, and sensible individual. Learning music provided taste or sensibility, as well as moral, intellectual and physical uplift.

Thus, Rameau's system of musical harmony was received and appropriated far beyond its mathematical and physical elements. His theories were successfully disseminated through an increasing public of interlocutors who contested, praised, and further developed them. Rameau's readers appropriated a broad notion of musical harmony as natural order—cosmic, divine, or geometrical—and as a rational science, which both legitimised and conveyed taste, morality, and beauty. Music thus contributed to the translation of courtly standards of taste into a new public realm, and to a broader portion of society, as historians have documented for this period.[36] I shall argue that music was essential to forging notions of collectivity and public beyond the court. For Jürgen Habermas, the rise of a bourgeois culture in France entailed the emergence of a public virtual space, in which printed and oral opinions, commerce, and civic practices were exchanged.[37] This was the 'public sphere' which cultural historians have taken in a wider sense to understand changing social and cultural practices in eighteenth-century France.[38] In this dissertation, the notion of 'public sphere' is useful to understand two major

[35] See Erlmann, *Reason and Resonance*; Ingrid Sykes, *Society, Culture and the Auditory Imagination in Modern France: The Humanity of Hearing* (London: Palgrave Mcmillan 2014).

[36] See e.g. Leora Auslander, *Taste and Power: Furnishing Modern France* (Berkeley: University of California Press, 1996).

[37] Jürgen Habermas, *The Structural Transformation of the Public Sphere. An Inquiry into a Category of Bourgeois Society*, trans. Thomas Burger and Frederick Lawrence (Cambridge, MA: MIT Press,1989).

[38] For the interpretation by cultural historians, see Dena Goodman, 'Public Sphere and Private Life: Towards a Synthesis of Current Historiographical Approaches to the Old Regime', *History and Theory* 31:1 (1992), 1-20. For recent debates about the use of notions of 'public sphere' by historians, see Stéphane Van Damme, 'Farewell Habermas: Deux décennies d'études sur l'espace public', in *L'espace public des historiens*, eds. Patrick Boucheron and Nicolas Offenstadt (Paris: Presses Universitaires de France, 2011), 43–61.

phenomena that intersected in music, namely the growth of public opinion and the new culture of consumption. Commentaries and publications on music theory and performances, and a variety of practices of consumption—owning and collecting musical instruments, scores, specialist journals or books, subscribing to musical theatres and attending musical performances—were new means for negotiating and acquiring musical taste and forging collective bonds. Historians have stressed the enormous impact that the expansion of printed press had in the constitution of the public sphere.[39] Fostered by myriads of newspapers, journals, and other forms of publication, music was placed at the forefront of public debate in the 1750s.

In this context, Rameau's publications helped to forge a new community of discussants on musical topics. Rameau became a 'celebrity', a social persona which, as Antoine Lilti has documented, emerged in the newly-fashioned public sphere.[40] Since Rameau declared that his aim was to find a 'single principle for music', he was termed the 'Newton of France', referring to the spread of Newtonianism and the principle of gravity.[41] According to J. B. Shank, the figure of Newton was appropriated and used as a synonym for 'genius'.[42] Rameau's approach to Newtonianism must be understood in light of his self-fashioning as an Enlightened and radical reformer of musical knowledge, within an increasing public of writers and commenters.

1.3 Tasteful nation. National character and musical debates

Arising from a new public form of music, the 'genius' of Rameau was applied to the consideration of musical harmony, his masterpiece, as an emblem of French 'national genius'. Rameau's system of harmony was placed at the summit of French culture and national character, especially in the musical quarrel that juxtaposed French and Italian music in 1752. The *Querelle des Bouffons*, widely discussed in secondary literature, erupted after a series of successful performances of Giovanni Battista Pergolesi's short intermezzo *La serva padrona* at the Opéra by an Italian troupe. After seeing it, Jean-Jacques Rousseau published his

[39] See e.g. Uwe Hohendal, *The Institution of Criticism* (Ithaca, NY: Cornell University Press, 1982); Robert Darnton, *The Great Cat Massacre: And Other Episodes in French Cultural History* (New York: Basic Books, 2009); Robert Darnton, *The Business of Enlightenment: Publishing History of the Encyclopédie, 1775-1800* (Cambridge, MA: Belknap Press 1979).

[40] Antoine Lilti, *Figures publiques. L'invention de la célébrité, 1750-1850* (Paris: Fayard, 2014).

[41] Christensen, *Rameau and Musical Thought*.

[42] J. B. Shank *The Newton Wars and the Beginning of the French Enlightenment* (Chicago: The University of Chicago Press, 2008).

controversial *Lettre sur la musique française*, which denied the suitability of French language for musical production. This triggered several responses in the press, and two antagonistic parties formed: on the one side was French harmony, represented by Rameau, and on the other was Italian melody, headed by Rousseau. Unlike musical harmony, which relied on mathematical proportions, Rousseau's notion of 'melody' referred to Italian language and folk songs, which he considered to reflect a more spontaneous, 'primitive' or 'transparent' expression of feeling. This debate has been repeatedly studied; recent scholarship has nuanced it by stressing the complex reality of musical practice and of cultural transfer between French and Italian music.[43] Yet almost no attention has been paid to the ways in which musical harmony became intertwined with notions of French national character. The debate has been read as an eminently political affair.[44] This dissertation will further argue that the *querelle* crystallised a notion of music as a political and national matter for the French, specifically juxtaposed against Italian music and character. In this way, stereotypes and debates over Italian musicality became central to forging a notion of French national character. Music was involved in a broader process of defining and fashioning national character and the building of a sense of French 'nation' which historians have situated in this period.[45] In this context, musical harmony became a symbol of a tasteful nation, whose character was defined by the same features attributed to musical harmony, namely taste, ingenuity, rationality, naturalness, and morality.

Rousseau's pursuit of a 'primitive' state of music placed Italian and French music at opposite extremes of history. A number of authors undertook the task of writing histories of music, on the basis of which some scholars have situated the birth of music historiography in

[43] See e.g. David Charlton, 'New Light on the Buffons in Paris (1752-1754)', *Eighteenth Century Music* 11:1 (2014), 31-54; David Charlton, *Opera in the Age of Rousseau: Music, Confrontation, Realism* (Cambridge: Cambridge University Press, 2012); Alessandro Di Profio, *La révolution des Bouffons. L'opéra italien au Théâtre de Monsieur 1789-1792* (Paris: CNRS Éditions, 2003); Andrea Fabiano, *Histoire de l'opéra italien en France (1752-1815). Héros et héroînes d'un roman théâtral* (Paris: CNRS Editions, 2006); Michael Fend, 'An Instinct for Parody and a Spirit for Revolution: Parisian Opera, 1752-1800', in *The Cambridge History of Eighteenth-Century Music*, ed. Simon P. Keefe (Cambridge: Cambridge University Press, 2009), 295-330; Michel Noiray, 'L'opera italiana in Francia', in *Storia dell'opera italiana,* eds. Lorenzo Bianconi and Giorgio Pestelli (Torino: EDT, 1988).

[44] See e.g. T.C.W. Blanning, *The Culture of Power and the Power of Culture: Old Regime Europe 1660-1789* (Oxford: Oxford University Press, 2002); Elisabeth Cook, 'Challenging the Ancien Régime: The Hidden Politics of the ''Querelle des Bouffons''', in *La 'Querelle des Bouffons' dans la vie culturelle française du XVIIIe siècle*, eds. Andrea Fabiano and Sylvie Bouissou (Paris: CNRS éditions, 2005), 141–160; Mark Darlow, *Dissonance in the Republic of Letters*.

[45] David Avrom Bell, *The Cult of the Nation in France: Inventing Nationalism, 1680-1800* (Cambridge, MA: Harvard University Press, 2001).

this period.[46] Most of these music histories, I shall show, depicted history in ascending order, as a progression that inevitably led to Rameau's musical harmony. Therefore, in these narratives, the 'genius' of Rameau, French national character, and modern civilisation were intextricably linked to one another.

1.4 Tasteful bodies. New sensibility, emotions, and corporeal practices

These historical narratives which juxtaposed Italianness and Frenchness were associated with two competing notions of nature, encapsulated in the dichotomy between 'harmony' and 'melody'.[47] While harmony revealed a geometrically organised, rational system in relation to the 'geometrical spirit' that spread in the first half of the century, melody was associated with the new sensibility which emerged mid-century, heavily influenced by Rousseau. The 'new sensibility' refers to a range of phenomena and values that emerged in this period, for which the second half of the century has often been labelled the 'Age of Sensibility'.[48] Historians have argued that this new sensibility embraced notions of naturalness, feeling, authenticity, absorption, transparency, and interiority. It stressed the physical body as a feeling body, and described a new notion of the self, while also creating a new political programme that stood in opposition to courtly culture.[49] Music has been notably absent from studies on the new

[46] Philippe Vendrix, *Aux origines d'une discipline historique: la musique et son histoire en France aux XVIIè et XVIIIè siècles* (Paris: Librairie Droz, 1993); Warren D. Allen, *Philosophies of Music History. A Study of General Histories of Music* (New York: Dover, 1962).

[47] See Enrico Fubini, *Gli enciclopedisti e la musica* (Torino: Einaudi, 1991).

[48] For the term 'Age of Sensibility' see Northrop Frye, 'Towards Defining an Age of Sensibility', *ELH* 23:2 (1956), 144-52; and the discussion by Jessica Riskin in *Science in the Age of Sensibility: The Sentimental Empiricists of the French Enlightenment* (Chicago: The University of Chicago Press, 2002), pp. 5-8.

[49] See e.g. Jean Starobinski, *Jean-Jacques Rousseau: la transparence et l'obstacle* (Paris: Gallimard, 1976); Jean Starobinski, *Le remède dans le mal. Critique et légitimation de l'artifice à l'âge des Lumières* (Paris: Gallimard, 1989); Jean Ehrard, *L'idée de la nature dans la première moitié du XVIIIe siècle* (Paris: Bibliothèque Générale de l'École Pratique des Hautes Études, 1963); Anne Vincent-Buffault, *The History of Tears* (London: Macmillan, 1991); Robert Chartier, *The Cultural Origins of the French Revolution* (Durham, NC: Duke University Press, 1991); Dorinda Outram, *The Body and the French Revolution. Sex, Class, and Political Culture* (New Haven, CT: Yale University Press, 1989); Michael Fried, *Absorption and Theatricality: Painting and Beholder in the Age of Diderot* (Chicago: The University of Chicago Press, 1981); Geoffroy Atkinson, *Le sentiment de la nature et le retour à la vie simple*: *1699-1740* (Paris: Libraire Droz, 1960); Daniel Mornet, *Le sentiment de la nature en France de J.-J. Rousseau à Bernardin de Saint-Pierre. Essai sur les rapports de la littérature et des moeurs* (New York: Burt Franklin, 1907); Stephen Gaukroger, *The Collapse of Mechanism and the Rise of Sensibility. Science and the Shaping of Modernity 1680-1760* (Oxford: Oxford University Press, 2010); Emma Spary, *Utopia's Garden. French Natural History from Old Regime to Revolution* (Chicago: The University of Chicago Press, 2000); Anne C. Vila, *Enlightenment and Pathology. Sensibility in the Literature and Medicine of Eighteenth-Century France* (Baltimore: Johns Hopkins University Press, 1998); Anne C. Vila, *Suffering Scholars.*

sensibility, with the exception of work on the production and reception of opera and musical theatre under the rubric of 'sentimentality'. But this term, as claimed by Cecilia Feilla, has been used to refer to crafted literary or artistic forms, rather than the broader phenomena implied by contemporary use of the term 'sensibility'.[50] This dissertation will shed new light on the role of music in the new sensibility, arguing that music enacted the *law* of sensibility: it illustrated how sensibility operated in the individual body and the body politic, epitomised the powers of feeling and sensation, the imbrication of physicality and morality, and the articulation of the individual in the collective through intersubjective sympathetic feeling. Music was deemed a privileged language for the expression of feeling, as fruitfully discussed by Downing A. Thomas. As such, music was identified with the origins of language itself, and offered the most natural, transparent, and authentic means of communication, from the interior to the exterior of the individual.[51] Listening to music was thus both an interior and collective experience. Historians of reading have discussed the emergence within the new sensibility of a notion of selfhood associated with interiority, as illustrated by the intimate experience of reading novels. This notion of interiority, however, was a shared experience amongst an increasing community of readers, and one which relied upon the physical body.[52] By looking at how eighteenth-century scholars crafted their identity through their bodies, Anne C. Vila follows 'a corporeal approach to the image and identity of *gens de lettres*'.[53] In a similar way, this dissertation will argue that practices of listening and performing music relied upon and expressed themselves through the physical body, which allowed 'sensible' men and women to recognise one other. Feeling musical pleasure was both the most intimate and 'authentic' experience, in relation to an emerging notion of the inner 'self', and an effective way to forge social and political bonds.

Pathologies of the Intellectual in Enlightment France (Philadelphia, PA: University of Pennsylvania Press, 2018); G. J. Baker-Benfield, *Culture of Sensibility. Sex and Society in Eighteenth-Century Britain* (Chicago: The University of Chicago Press, 1992); Riskin, *Science in the Age of Sensibility*.

[50] Cecilia Feilla, *The Sentimental Theater of the French Revolution* (Aldershot: Ashgate, 2013), p.12. See also Ann Lewis, *Sensibility, Reading and Illustration: Spectacles and Signs in Graffigny, Marivaux, and Rousseau* (London: Routledge, 2008); Stefano Castelvecchi, *Sentimental Opera: Questions of Genre in the Age of Bourgeois Drama* (Cambridge: Cambridge University Press, 2018); Emmet Kennedy et al., *Theatre, Opera, and Audiences in Revolutionary Paris* (Westport: Greenwood, 1996).

[51] Downing A. Thomas, *Music and the Origins of Language: Theories from the French Enlightement* (Cambridge: Cambridge University Press, 1995).

[52] See Darnton, *The Great Cat Massacre*; Vincent-Buffault, *The History of Tears;* Goodman, 'Public Sphere and Private Life'; David J. Denby, *Sentimental Narrative and the Social Order in France, 1760-1820* (Cambridge: Cambridge University Press, 2006); Fernand Vidal, 'Brain, Bodies, Selves, and Science: Anthropologies of Identity and the Resurrection of the Body', *Critical Inquiry* 28:4 (2002), 930-74.

[53] Vila, *Suffering Scholars*.

Music was thus physically and materially embodied in the new sensibility. Historical studies of the body have demonstrated that the history of the senses, emotions, medicine, and social performance were mutually interconnected.[54] Anne Vincent-Buffault and Colin Jones, for instance, have shown that the new sensibility expressed itself in a changing language of physiognomy, as demonstrated by increasing references to tears and smiles.[55] Similarly, through the physical demonstration of tears, I shall argue, listeners both internalised and displayed their sensitivities to music. Musicians were instructed in teaching manuals to pay great attention to their bodies, from manners to clothing. The survey of 'musical bodies' in this dissertation demonstrates that music was, to a great extent, concerned with visual and social performance, and was crucial to crafting the tasteful body. The musical training of the body was seen as a means of physical and moral improvement, and of self-fashioning in polite sociability. In this sense, this dissertation draws upon Bryan Turner's notion of the body as the site of enormous symbolic work.[56]

This dissertation's contribution to the understanding of the new sensibility is twofold: it documents, as I have mentioned, the key role that music played in the formulation and expression of sensibility, yet it also expands considerably the scope of the new sensibility, as it included hitherto unknown or unaddressed phenomena such as musical instruments and sound. One of the arguments of this dissertation is that the stress on vibration and sensoriality, and changing notions of the human passions associated to the new sensibility, expressed themselves in the search of new sonorities and emotional effects in music. Similarly, I argue that a new range of musical 'characters' were introduced with the new sensibility and the penetration of Italian musicality in France, offering a new emotional and sonic palette for local music. This range of sounds and emotions was negotiated and embodied through the cultivation of the body of the performer, as well as the invention of new instrumental techniques and musical instruments. Certain musical instruments became more fashionable, new ones were

[54] Vila, *Suffering Scholars*; Anne C. Vila (ed.), *A Cultural History of the Senses in the Age of Enlightenment* (London: Bloomsbury, 2016); Riskin, *Science in the Age of Sensibility*; Adelheid Voskuhl, *Androids in the Enlightenment: Mechanics, Artisans, and Cultures of the Self* (Chicago: The University of Chicago Press, 2013); Elizabeth A. Williams, *A Cultural History of Medical Vitalism in Enlightenment Montpellier* (London: Routledge, 2003); George Rousseau, 'Nerves, Spirits, and Fibres: Towards Defining the Origins of Sensibility', *Studies in Eighteenth-Century Culture* 3 (1976), 137-57; George Rousseau, 'Discourses of the Nerve', in *Literature and Science as Modes of Expression*, ed. Frederick Amrine (Boston: Boston Studies in the Philosophy of Science Book Series, 1989), 29-60.

[55] Vincent-Buffault, *The History of Tears*; Colin Jones, *The Smile Revolution in Eighteenth Century Paris* (Oxford: Oxford University Press, 2017). See also Melissa Percival, *The Appearance of Character: Physiognomy and Facial Expression in Eighteenth Century France* (Leeds: W.S.Maney & Son LTD, 1999).

[56] Bryan S. Turner, *The Body and Society: Explorations in Social Theory* (New York: Sage Publishing, 1984).

invented, and old ones were improved: via their resonant bodies, musical instruments were at once bearers and triggers of musical emotion. I shall argue that the resonant musical instrument, endowed with character and the capacity to 'move', mirrored the body of the performer, who was itself a 'moving body' and a key material vehicle for the transmission of emotion to the listener. Additionally, musical instruments—and metaphors of them—were used to explain how sensibility operated in the body. References to the strings, vibration, machinery and material 'bodies' of musical instruments cut across different models of the body and nervous action in the early modern period.[57] Thus, this dissertation insists that the history of music in this period must be examined not just in relation to composers and works, but also with close attention to material practices, the history of medicine and physiology.[58]

The fact that sensibility doubled as a moral and physical attribute is epitomised in two entries on 'Musique' in Diderot and d'Alembert's *Encyclopédie*.[59] While the first was written by Rousseau—who located the effects of music and feeling in the interiority of the listener—the second one was written by the vitalist physician Jean-Joseph Menuret de Chambaud, who described sensibility as a physical property.[60] For Menuret de Chambaud, given that the human body was constituted of fibres, music moved through the body sympathetically just like the strings of musical instruments; one should conceive, he claimed, 'que la Musique doit faire le même effet sur les fibres qu'elle fait sur les cordes des instrumens voisins; que toutes les fibres du corps humain seront mises en mouvement'.[61] I shall show that music had enormous effects upon physical bodies, while at the same time the physical bodies of performers were embodiments of musical and medical ideals, and were carefully trained to trigger musical effects upon their listeners' bodies. This dissertation explores two models of the body

[57] See e.g. Julien Offray de La Mettrie, *L'Homme-machine* (Leyden: Elie Luzac, 1748).

[58] For previous remarks on the need of relating the history of music with the history of medicine and physiology in this period see Thomas, *Music and the Origins of Language*; Penelope Gouk and Helen Hills (eds.), *Representing Emotions: New Connections in the History of Art, Music, and Medicine* (London: Routledge, 2005); Maria Semi, *Music as a Science of Mankind in Eighteenth-Century Britain*, trans. Timothy Keates (Farnham: Ashgate, 2012); Gouk and Sykes, 'Hearing Science in the Eighteenth Century'; James Kennaway, 'From Sensibility to Pathology: The Origins of the Idea of Nervous Music around 1800', *Journal of the History of Medicine and Allied Sciences* 65:3 (2010), 396–426.

[59] 'Musique' in *Encyclopédie*, eds. Diderot and d'Alembert, v.10, 898-902 (by Rousseau) and 903-909 (by Menuret de Chambaud).

[60] For a comparison of both entries, see Christopher Gärtner, 'Remuer l'Âme or Plaire à l'Oreille? Music, Emotions and the Mind-Body Problem in French Writings of the later Eighteenth Century', in *Representing Emotions*, eds. Gouk and Hills, pp. 173-88.

[61] 'That music must have the same effect on the fibres it has on the strings of neighbouring instruments; that all the fibres of the human body will be put in motion' Jean-Joseph Menuret de Chambaud, 'Musique, effets de la' in Diderot and d'Alembert, *Encyclopédie*, v.10, p.907.

cultivated by musical performers during the second half of the century, which I term the 'mechanical' and 'sensible' bodies. These two notions of the body stemmed from the 'courtly' body, which stressed discipline, manners, grace, naturalness, and taste as cultivated in the court. Yet which of these two represented the 'tasteful body' was contested in the second half of the century. Mechanical and sensible bodies were respectively associated with the geometrical spirit and the new sensibility, and were embodied in two distinct social figures of the performer: the 'virtuoso' and the 'amateur'.

1.5 Tasteful republic. French Revolution and the body politic

These competing bodies were linked to competing political programmes. This dissertation portrays the 'musical body' of the performer as a site of political conflict, drawing upon the wide reception of the work of Norbert Elias and Michel Foucault, amongst other historians of the body. Both authors have shown that bodies are historically constructed, disciplined, controlled, and signified through political structures and power relationships.[62] Dorinda Outram has further illuminated the implication of the body in political affairs in her study on shifting models of the body in the French Revolution.[63] Similarly, metaphors of the 'body politic' abounded during this period, which portrayed the state as a composite organism functioning towards a common end, which could also be perfectible, just as a body can be cured from illness.[64] This dissertation sheds new light on the history of the body, showing on the one hand that the body—of musicians and listeners—was a site of contestation, adherence, and formulation of both political and musical models. Therefore, cultivating a musical body was a course of action involving both individual self-fashioning and subscription to wider political and emotional communities.[65] On the other hand, this dissertation argues that musical harmony

[62] Norbert Elias, *The Civilising Process*, trans. Edmunf Jephcott (1939; Oxford: Blackwell Publishing, 2000); Michel Foucault, *Surveiller et punir: Naissance de la prison* (Paris: Gallimard, 1975) and *Histoire de la Sexualité* (Paris: Galimard, 1976-1984).

[63] Outram, *The Body and the French Revolution*.

[64] Outram, *The Body and the French Revolution*; Antoine de Baecque, *The Body Politic: Corporeal Metaphor in Revolutionary France, 1770-1800* (Redwood, CA: Stanford University Press, 1997); Sara E. Melzer and Kathryn Norberg (eds.), *From the Royal to the Republican Body: Incorporating the Political in Seventeenth- and Eighteenth-Century France* (Berkeley: University of California Press, 1998).

[65] The concept of 'emotional communities' was proposed by Barbara H. Rosenwein in 'Worrying about Emotions in History', *The American Historical Review* 107:3 (2002), 821-34, at p.842. Also useful here is William Reddy's concept of 'emotional regime' discussed in his *The Navigation of Feeling: A Framework for the History of Emotions* (Cambridge: Cambridge University Press, 2001), p.124

was erected as a model for a new social and political order, closely related to notions of the body politic; musical harmony represented the unity of distinct parts of society, as well as moral improvement and healing. Given its cosmological origins, as previously mentioned, musical harmony was held to have great powers over both animate and inanimate bodies, humans and non-humans. Music could stir emotions, heal, move, transform, and mesmerise bodies. The proliferation of orchestras during the second half of the century, moreover, proved that music could move and discipline collective action on the large scale.[66] A critical argument of this dissertation is that the capacity of music to affect and discipline the body was crucial for the translation of musical harmony from the physical body to the body politic. I shall argue that this powerful influence of musical harmony over individual and collective bodies came to be treated as an efficient means of political control. While these uses of harmony were deployed during the entire century, they became especially prevalent during the French Revolution.

Broadly speaking, between 1787 and 1794, references to musical harmony circulated in political pamphlets and essays, spanning legal, economic, social, and political debates. Yet musical harmony has been largely overlooked by scholarship on the French Revolution. Although the modern reader might expect that the widespread appropriation of 'harmony' had shed its musical connections by this date, my research demonstrates that dictionaries throughout the eighteenth century still defined 'harmony' as a *primarily* musical concept. Musical harmony was used as a model to portray a new tasteful public order, drawing upon the widespread appropriation of musical harmony throughout the century: from cosmic order to an emblem of the rationalising project of the Enlightenment, French national character and genius, corporeal discipline and sensibility, and a communal, tasteful, and knowledgeable practice. In the late 1780s, although there were divergent opinions on how precisely this model of musical harmony was supposed to operate in the new republic, the majority coincided in portraying harmony as a model of agreement. This model was established in the twofold meaning of the word 'accord' in French, meaning both agreement and a musical chord. The dual meaning of *accord* was no coincidence; it represented agreement as the tasteful sum of different parts, such as a consonant musical chord. In order to reach agreement, differences should not be abolished: just as dissonances were an essential element in the system of musical harmony designed by

[66] See Kate van Orden, *Music, Discipline, and Arms in Early Modern France* (Chicago: The University of Chicago Press, 2005); Alison Winter, *Mesmerized: Powers of Mind in Victorian Britain* (Chicago: The University of Chicago Press, 2000); Emily I. Dolan, *The Orchestral Revolution: Haydn and the Technologies of Timbre* (Cambridge: Cambridge University Press, 2013).

Rameau, political dissent could be conciliated and recombined into a single harmonious society.

Musical *accords* were specifically invoked after the call for the Estates General in the spring of 1789. Whereas the musical chord was defined in musical terms as the union of three notes, in the new political regime it was portrayed as the union of the three estates into a harmonious whole. Drawing upon Plato's *Republic*, this new 'harmonic government' required the specificity as well as the reciprocity between the three social groups. Although the three orders were performing together in the General Estates, they performed different functions, and their individual degrees and forms of participation were largely disputed. Therefore, given that musical harmony presupposed a society of individuals defined in terms of discrete spheres of interest, it failed to account for a regime that no longer admitted segmented functions, nor dissonance. As such, with growing emphasis on the need for unanimity and equality under the Republic, the political utility of harmony declined.

2. Methodology

This dissertation tackles a variety of sources with a thoroughly interdisciplinary approach. It approaches a wide array of primary sources, including printed sources—essays, treatises, teaching manuals, poems, novels, travel literature, journals and newspapers, and political pamphlets—in addition to academic reports, patents, medical records, paintings and engravings, and surviving musical instruments. The diversity of these sources has demanded a methodology which departs from traditional histories not just of the Enlightenment, but also of traditional histories of music and musical aesthetics. Instead, this dissertation draws upon recent insights from cultural history, material culture studies, cultural or social history of science, intellectual history, and musicology. It examines music from different vantage points, including scientific practice, the emotions, material culture, the physical body, consumption, sociability, self-fashioning, stereotypes, and politics. As a result, it departs from a traditional focus in history and the history of music on 'great men'—whether philosophers, politicians, scientists, or famous composers and performers—and broadens considerably the social constituencies involved in musical practices.

By virtue of treating music in eighteenth-century terms, as both art *and* science, this dissertation breaks significantly from a historiographical tradition which presents music as being in conflict with Enlightenment rationalism. The 'Enlightenment', itself a visual

metaphor, has been portrayed as the 'age of reason' to the detriment of both sentiment and non-visual expression. Consequently, the stress placed on music during this period often falls into the 'shadows' of the Enlightenment or into the teleological category of the 'pre-Romantic'.[67] A number of studies have emphasised this ostensibly problematic position of music when addressing eighteenth-century attempts to attribute both philosophical and artistic status to music. It has been argued that, in order to be included among the *beaux arts*, music faced two main constraints. On the one hand, music was problematic in light of the principle of 'mimesis' which, inherited from Aristotle's *Poetics*, prescribed that the aim of art was to imitate nature.[68] On the other hand, music struggled given its 'subjugation' to words, that is to say, poetry, librettos, and dramaturgical and liturgical texts which music had historically been composed to accompany. This struggle with both the principle of imitation and the primacy of words allegedly reached its most critical point in the significant developments of instrumental music over the century, and led to the privileged artistic and philosophical status of instrumental music during nineteenth-century Romanticism.[69] This picture of eighteenth-century instrumental music and musical aesthetics has been nuanced by recent scholarship.[70] Similar

[67] See Theodor Adorno and Max Horkheimer, *Dialectic of Enlightenment*, trans. Edmunf Jephcott (1947; London: Verso Books, 2016). For the association of 'darkness' with the spiritual, esoteric, and occult see: Paul Kleber Monord, *Solomon's Secret Arts: The Occult in the Age of Enlightenment* (New Haven, CT: Yale University Press, 2013); Joshua Landy and Michael Saler (eds.), *The Re-enchantment of the World: Secular Magic in a Rational Age* (Redwood, CA: Stanford University Press, 2008). For the re-evaluation of the 'rationalist' prerrogative, see Paul Hazard, *La crise de la conscience européenne* (1935; Paris: Fayard, 2014); Antoni Marí, *Entusiasmo y quietud. Antología del romanticismo alemán* (Barcelona: Tusquets Editores, 1998); Paul Metzner, *Crescendo of the Virtuoso* (Berkeley: University of California Press, 1998). For pre-Romanticism, see Jean Mongrédien, *French Music from the Enlightenment to Romanticism, 1789–1830*, trans. Sylvain Frémaux (Milwaukee, WI: Amadeus Press, 1996).

[68] For the ideal of 'mimesis' in 18th-century France see Charles Batteux, *Les Beaux Arts reduits à un même principe* (Paris: 1746).

[69] Carl Dahlhaus, *The Idea of Absolute Music* (Chicago: The University of Chicago Press, 1989); Eduard Hanslick, *On the Musically Beautiful*, trans. Lee Rothfarb and Christoph Landerer (1854; New York: Oxford University Press, 2018); Daniel Chua, *Absolute Music and the Construction of Meaning* (Cambridge: Cambridge University Press, 1999); Peter Kivy, *Antithetical Arts. On the Ancient Quarrel Between Literature and Music* (Oxford: Oxford University Press, 2009). See also James H. Donelan, *Poetry and the Romantic Musical Aesthetic* (Cambridge: Cambridge University Press, 2008); Enrico Fubini, *The History of Music Aesthetics*, trans. Michael Hatwell (London: Macmillan, 1990); John Neubauer, *The Emancipation of Music from Language: Departure from Mimesis in Eighteenth-Century Aesthetics* (New Haven, CT: Yale University Press, 1986); Alan Lessem, 'Imitation and Expression: Opposing French and British Views in the 18th Century', *Journal of the American Musicological Society* 27:2 (1974), 25-30.

[70] Marie Sue Morrow, *German Music Criticism in the Late Eighteenth Century: Aesthetic Issues in Instrumental Music* (Cambridge: Cambridge University Press, 1997) and 'Italian Perspectives on Instrumental Music in the Late Eighteenth-Century', in *Florilegium Musicae: Studi in onore di Carolyn Gianturco*, II, eds. Patrizia Radicchi and Michael Burden (Pisa: Edizioni ETS, 2004); Ora Frishberg Saloman, *Listening Well. On Berlioz, and Other Music Criticism in Paris, Boston, and New York, 1764-1890* (New York: Peter Lang, 2009) and 'La Cépède's *La*

to these recent endeavours, this dissertation avoids a teleology of aesthetic standards and does not show linear progression towards our contemporary understanding of music. Fundamentally, this dissertation offers new perspectives in that it does not examine the significance of music in relation to its changing aesthetic status. This dissertation distances itself considerably from the historic, aesthetic and philosophic studies which have all investigated music's artistic 'autonomy', comparing music with other arts and uncovering a certain notion of 'music in itself', which, as a result, have often framed 'music' as an ahistorical category.[71] I shall demonstrate that the status and relevance of music were not confined to establishing hierarchies amongst the arts, but were a social agreement, with regulative power amongst specific communities and negotiated by a wider variety of actors, social interactions, and cultural practices. Rather than standards of aesthetic value, this dissertation places emphasis on contemporary categories of beauty and knowledge as formulated and used by its actors.

In approaching music as cultural practice rather than an art form, this dissertation advances the methodological insights developed by scholars in history, musicology, and the history of science working on the 'cultural turn' during the last few decades. This cultural emphasis has involved closer attention being paid towards practices, stressing human agency, social relationships and strategies, and the multiple interactions of human beings in particular historical contexts.[72] Similarly, in the last decades, historical musicologists have considerably expanded their research scope and argued that music is inextricably linked to culture.[73] These

Poétique de la musique and Le Sueur', *Acta Musicologica* 47:1 (1975), 144-54; Claire Chevrolet, 'L'esthétique musicale de Lacépède', in *L'Esprit de la musique: Essais d'esthétique et de philoophie*, eds. Hugues Dufourt, Joël-Marie Fauquet and François Hurard (Paris: Klincksieck, 1992); Robert James Macdonald, *François-Joseph Gossec and French Instrumental Music in the Second Half of the Eighteenth Century* (Ann Arbor, MI: University of Michigan University Press, 1968).

70 Thomas, *Music and the Origins of Language*; Phyllis Weliver and Katherine Ellis (eds.), *Words and Notes in the Long Nineteenth Century* (Woodbridge: Boydell Press, 2013).

71 See e.g. Lydia Goehr, '"All Art Constantly Aspires to the Condition of Music"—Except the Art of Music: Reviewing the Contest of the Sister Arts', in *The Insistence of Art: Aesthetic Philosophy After Early Modernity*, ed. Paul A. Kottman (New York: Fordham University Press, 2017), 140-169.

72 See e.g. Roger Chartier, *Cultural History: Between Practices and Representation* (Cambridge: Polity, 1989); Peter Burke, *What is Cultural History?* (Cambridge: Polity, 2016); Lynn Hunt (ed.), *The New Cultural History* (Berkeley: University of California Press, 1989).

73 For the links between the history of music and cultural history, see Jane F. Fulcher, 'Introduction: Defining the New Cultural History of Music, Its Origins, Methodologies, and Lines of Inquiry', in *The Oxford Handbook of the New Cultural History of Music*, ed. Jane F. Fulcher (Oxford: Oxford University Press, 2011), 3-14; Martin Clayton, Trevor Herbert, and Richard Middleton (eds.), *The Cultural Study of Music* (London: Routledge, 2012); Richard Leppert, *The Sight of Sound. Music, Representation and History of the Body* (Berkeley: University of California Press, 1995).

musical studies have addressed a new range of musical practices and protagonists beyond composers and their works. Not only have non-canonical figures been considered, but aspects of performance, reception, institutions, territoriality, materiality, consumption, and social networks have also become the new, now indispensable objects of musical study. In the case of eighteenth-century France, scholars have recently expanded our knowledge enormously regarding the social, political, and commercial interests that were embedded in musical institutions, audiences, programming, technologies, particular musical genres and activities of individual composers, and the relationship between forms of artistic production.[74] Social and cultural practices have been examined, chiefly for the case of listeners, their choices, and behaviour. Since James H. Johnson studied the social dimensions of listening in *Listening in Paris*, a number of studies have concentrated on the ways audiences behaved and consumed music in this period.[75] A great deal of scholarly attention has also been paid to opera performers and performances. By contrast, instrumental music has received considerably less attention as a cultural and social practice, with the exception of biographical studies on specific performers or composers.[76] This dissertation sheds considerably new light on the world surrounding instrumental music, examining musical instruments as important and symbolic material objects, as well as the changing roles and transformations of teachers and performers of musical instruments during this period. While this dissertation references some specific musical works, genres, and institutions, it eschews extensive analysis of any musical work or composer. Rather than examining composers, audiences, and musical genres separately, this dissertation aims to portray the collective culture of musical practice that flourished in this period. It is only by considering the interrelations of different musical actors, instruments, and the varied social and

[74] See e.g. Weber, *The Rise of Musical Classics*; James H. Johnson, *Listening in Paris. A Cultural History* (Berkeley: University of California Press, 1995); Charlton, *Opera in the Age of Rousseau*; Mark Darlow, *Staging the French Revolution: Cultural Politics and the Paris Opera, 1789-1794* (Oxford: Oxford University Press, 2012); Darlow, *Dissonance in the Republic of Letters*; Di Profio, *La révolution des Bouffons*; Jane F. Fulcher, *The Nation's Image: French Grand Opera as Politics and Politicized Art* (New York: Cambridge University Press, 1987).

[75] Johnson, *Listening in Paris*, p.1. For a discussion of Johnson's work and listening practices of the period see e.g. William Weber, 'Did People Listen in the 18th Century?', *Early Music* 25:4 (1997), p.35; Cormac Newark, 'Not Listening in Paris: Critical and Fictional Lapses of Attention at the Opera', in *Words and Notes*, eds. Weliver and Ellis, 34-53; Tim Carter, 'The Sound of Silence: Models for an Urban Musicology', *Urban History* 29 (2002), 8-18.

[76] Elisabeth Le Guin, *Boccherini's Body. An Essay in Carnal Musicology* (Berkeley: University of California Press, 2006); Macdonald, *François-Joseph Gossec*; Claude Role, *François-Joseph Gossec (1734-1829): Un musicien à Paris, de l'Ancien Régime au roi Charles X* (Paris: L'Harmattan, 2015); Walter E. Smith, *The Black Mozart. Le Chevalier De Saint-Georges* (Bloomington, IN: AuthorHouse, 2005); Warwick Lister, *Amico: The Life of Giovanni Battista Viotti* (Oxford: Oxford University Press USA, 2009).

cultural issues that were at stake in their interaction that one can grasp the complex and interrelated dimensions of music as a cultural practice.

One of the central arguments of this dissertation is that music was experienced and signified through its physical embodiment, either in the form of material objects or the human body. A number of musicological studies have identified the rise and development of a rich musical culture in France during this period, stressing both the surprisingly varied literature about music and the prominent place of music in society and urban life.[77] However, the great levels of manufacturing, ownership, circulation, and invention of musical material objects during this period has yet to be sufficiently addressed by scholars of any discipline.[78] I shall argue that the rich culture of music in eighteenth-century France flourished within this growing culture of consumption and taste for material objects. The eighteenth century is often portrayed as the moment in which a society of consumption was born.[79] New goods were produced and exchanged as a result of encounters with other cultures and territories, of the development of inventions and manufacturing techniques, and of consumption practices motivated by fashion, luxury and social status, among other things. Historians have recently approached the history of consumption through the study of material culture. The increasing presence of objects in the early modern world generated new ways for people to relate to materiality, and changed practices surrounding the possession, use, and display of objects.[80] Yet musical objects have scarcely been addressed by this literature. In eighteenth-century France, a wide range of

[77] See e.g. Boris Schwarz, *French Instrumental Music Between the Revolutions, 1789-1839* (Boston, MA: Da Capo Press, 1987); Brenet, *Les concerts en France*; Bruno Brévan, *Les changements de la vie musicale parisienne de 1774 à 1799* (Paris: Presses Universitaires de France, 1980).

[78] For studies focused on instrument making in 18th-century France, see Florence Gétreau (ed.), *Instrumentistes et luthiers parisiens, XVII-XIXe siècles* (Paris: Délégation à l'Action Artistique de la Ville de Paris, 1988); Sylvette Milliot, *Documents inédits sur les luthiers Parisiens du XVIIIe siècle* (Paris: Société Française de Musicologie, 1970); Constant Pierre, *Les facteurs d'instruments de musique. Les luthiers et la facture instrumentale. Précis historique* (Paris: Sagot, 1893); Paul Loubet de Sceaury, *Musiciens et facteurs d'instruments de musique sous l'Ancien Régime. Statuts Corporatifs* (Paris: Éditions A. Pedone, 1949).

[79] Neil McKendrick, John Brewer, J. H. Plumb (eds.), *The Birth of a Consumer Society* (Plymouth: Edward Everett Root Publishers, 1982). Nevertheless, some historians situate a 'consumer revolution' in the Renaissance, see e.g. John Brewer and Roy Porter, 'Introduction', in *Consumption and the World of Goods*, 1-15.

[80] Maxine Berg, *Luxury and Pleasure in Eighteenth Century Britain* (Oxford: Oxford University Press USA, 2005); Maxine Berg, *The Age of Manufacturers, 1700-1820: Industry, Innovation, and Work in Britain* (London: Routledge, 1994); Anne Gerritsen and Giorgio Riello (eds.), *The Global Lives of Things: The Material Culture of Connections in the Early Modern World* (London: Routledge, 2015); Victoria Avery, Melissa Calaresu, and Mary Laven (eds.), *Treasured Possessions: From the Renaissance to the Enlightenment* (London: Philip Wilson, 2015); Berg and Eger (eds.), *Luxury in the Eighteenth Century*; Michael Kwass, 'Big Hair: A Wig History of Consumption in Eighteenth-Century France', *The American Historical Review* 111:3 (2006), 631-659; William Reddy, *The Rise of Market Culture: The Textile Trade and French Society, 1750-1790* (Cambridge: Cambridge University Press, 1984); Roche, *A History of Everyday Things*; Chartier, *Cultural History*, p.41.

musical instruments were invented, manufactured, owned, and displayed for different purposes.[81] This dissertation draws upon recent developments in material culture studies which have addressed material objects as bearers of cultural meaning, articulated through their different appropriations, circulation, and mutability.[82] I shall argue that musical instruments and physical bodies were bearers and mediums for articulating notions of music and musical agency. In this way, music was to a great extent not only an aural but also a material and visual practice. Thus, I examine the interrelationship of musical instruments with human bodies, and instruments as material embodiments of sound and music. Musical instruments mirrored the physiology, emotions, and appearance of their performers or listeners, while also informing social, ethnic, and gendered performativities.

The centrality of 'practice' is essential to this dissertation's approach to music as a cultural, material, and intellectual experience, concern, and knowledge. Cultural historians and historians of science have shifted their attention away from the study of disembodied ideas towards an examination of the role of human agency in the production of knowledge. Rather than the acquisition of ideas or thoughts, it has been argued, knowledge was a constructed, contested thing, embodied by people in their daily lives.[83] Therefore, this dissertation endorses the critiques that have been made of 'the' Enlightenment as a singular and centralised intellectual programme, led by 'great men'—mostly white male philosophers—in recent

[81] See my forthcoming article 'Tasteful Possessions. Collecting and Displaying Musical Instruments in pre-Revolutionary France'. The intersection of music and material culture was the subject of a conference I organised with Vera Wolkowicz in the University of Cambridge, Faculty of Music, in 2016 (https://musicandmaterialculture.wordpress.com).

[82] Scholarship on material culture has increased notably in the last decade. See e.g. Nicholas Thomas, *Entangled Objects: Exchange, Material Culture and Colonialism in the Pacific* (Cambridge, MA: Harvard University Press, 1991); Adriana Cracium and Simon Schaffer, 'Introduction', in *Material Cultures of Enlightenment Arts and Sciences* (London: Palgrave Macmillan, 2016), 1-11; Arjun Appadurai, 'Introduction' in *The Social Life of Things: Commodities in Cultural Perspective*, ed. Arjun Appadurai (Cambridge: Cambridge University Press, 1988), 3-63; Leora Auslander et al., 'AHR Conversation: Historians and the Study of Material Culture', *American Historical Review* (2009), 1355-1404; Paula Findlen (ed.), *Early Modern Things: Objects and their Histories, 1500-1800* (London: Routledge, 2012); Anne Gerritsen and Giorgio Riello (eds.), *Writing Material Culture History* (London: Bloomsbury, 2014); Catherine Richardson, Tara Hamling, and David Gaimster (eds.), *The Routledge Handbook of Material Culture in Early Modern Europe* (London: Routledge, 2016); Werner Sombart, *Luxury and Capitalism* (Ann Arbor, MI: University of Michigan Press, 1967); Lorraine Daston (ed.), *Things that Talk: Object Lessons from Art and Science* (New York: Zone Books, 2007).

[83] See e.g. Steven Shapin and Simon Schaffer, *Leviathan and the Air-Pump: Hobbes, Boyle, and the Experimental Life* (Princeton: Princeton University Press, 1986); Daniel Roche, *Les Républicains des lettres. Gens de culture et Lumières au XVIIIe siècle* (Paris: A. Fayard, 1988); Charles Withers, *Placing the Enlightenment. Thinking Geographically about the Age of Reason* (Chicago: The University of Chicago Press, 2007); Roger Chartier, *The Cultural Uses of Print in Early Modern France* (Princeton: Princeton University Press, 1987); Stéphane Van Damme (ed.), *Histoire des sciences et des savoirs*, vol. 1 (Paris: Edition du Seuil, 2015).

scholarship.[84] Whereas the category of Enlightenment once embraced a group of ideas linked to an elitist social group, recent studies have preferred a wider notion of knowledge, understood in terms of human practices, interaction, appropriation, and linked to social and political concerns. Moreover, as Simon Schaffer argues, these practices of knowledge-making were inextricably linked to political participation.[85] As a central matter of Enlightenment debate, scientific enquiry, and sociability, musical knowledge forged political programmes that developed over the century.

This dissertation is the first attempt to study music under the methodological framework offered by the cultural history of science in eighteenth-century France.[86] Penelope Gouk's book *Music, Science and Natural Magic in Seventeenth-century England* provided a ground-breaking approach to the history of musical knowledge in England for an earlier period. Asking 'how musical models played a pivotal role in the construction of scientific knowledge', Gouk argued that music was instrumental to the acquisition of scientific knowledge.[87] During the last decade, scholarship discussing the relationship between music, sound, hearing, and science during the eighteenth century has flourished.[88] This dissertation also examines the intertwining of music and scientific knowledge, yet focuses on how music constituted a scientific practice and a form of scientific knowledge in itself, which was produced and appropriated by individuals seeking different goals, and expressed in manifold cultural practices. Musical knowledge—and the status of the knowledgeable person—was negotiated and experienced through a wide range of practices involving material culture, social performance, political debate, and music as a craft. Therefore, throughout this dissertation, I shall refer to 'musical

[84] See e.g. Richard Butterwick, Simon Davies, and Gabriel Sánchez Espinosa (eds.), *Peripheries of the Enlightenment* (Liverpool: Voltaire Foundation/Liverpool University Press, 2008); J.G.A. Pocock, 'Enthusiasm: The Antiself of Enlightenment', *Huntington Library Quaterly* 60:1/2 (1997), 7-28; Sankar Manthu, *Enlightenment against Empire* (Princeton: Princeton University Press, 2003); Robert Darnton, 'The High Enlightenment and the Low-life of Literature in Pre-Revolutionary France', *Past and Present* 51:1 (1971), 81-115; Robert Darnton, *The Literary Underground of the Old Regime* (Cambridge, MA: Harvard University Press, 1982); Roche, *A History of Everyday Things*; Chartier, *Cultural History*.

[85] Simon Schaffer, 'Self Evidence', *Critical Inquiry* 18:2 (1992), 327-62.

[86] For a discussion on the 'cultural history of science' see Peter Dear, 'Cultural History of Science: An Overview with Reflections', *Science, Technology, & Human Values* 20:2 (1995), 150-170. The intersection of cultural history and history of science was the object of a workshop I organised with Lavinia Maddaluno in 2016 at CRASSH, University of Cambridge.

[87] Gouk, *Music, Science and Natural Magic.*

[88] See e.g. Erlman, *Reason and Resonance*; Semi, *Music as a Science of Mankind*; Sykes, *Society, Culture, and the Auditory Imagination*; Sykes and Gouk, 'Hearing Science in the Eighteenth Century'; Viktoria Tkaczyk, 'The Making of Acoustics around 1800, or How to do Science with Words', in *Performing Knowledge, 1750-1850*, eds. Mary Helen Dupree and Sean B. Franzel (Berlin: DeGruyter, 2015), 27-56.

practices' in the plural to denote the varied cultural practices of music—performing and composing, listening, writing, researching, collecting, debating, illustrating, socialising, owning musical instruments. In this view, 'musical practices' comprise practices beyond our contemporary binary opposition between 'practice' and 'theory', which is often misleading when applied to what was at the time viewed as an interconnected field. Not only was 'theory' dependent on the affordance of the available means—instruments, materials, genres, bodies, etc—but the composition, performance, and teaching of music were also subject to constant theoretical reformulation during the *siècle philosophe.* Thus, 'musical practices' encompassed a variety of 'scientific practices', ranging from enquiries into music and sound carried out by natural philosophers to the appropriation of musical instruments as scientific instruments.

One might argue that music should not be treated in the same way in which historians of science treat science, since nowadays science draws upon truth-claims and empirical certainty that music lacks. This distinction, however, was not evident in the early eighteenth century, when music was discussed alongside other sciences at the Académie Royale des Sciences, as both a scientific subject and a gateway for acquiring knowledge of the natural world, for instance, for learning about its mathematical laws. By drawing upon recent re-evaluations of the roles of artisanal knowledge, material practices, and commerce in the making and negotiation of knowledge, this dissertation will contribute significantly to the understanding of how scholarly, technical, commercial, manual, and corporeal knowledge were intertwined in eighteenth-century France.[89] I shall argue that musical knowledge was intrinsically hybrid; it involved minds, as well as souls, ears, bodies, eyes, and hands.[90]

[89] Paola Bertucci, *Artisanal Enlightenment: Science and Mechanical Arts in Old Regime France* (New Haven, CT: Yale University Press, 2018); Pamela H. Smith, *The Body of the Artisan: Art and Experience in the Scientific Revolution* (Chicago: The University of Chicago Press, 2004); Otto Mayr, 'The Science-Technology Relationship', *Technology and Culture* 17:4 (1976), 621–742; Lisa Roberts, Simon Schaffer, and Peter Dear (eds.), *The Mindful Hand: Inquiry and Invention from Late Reinassance to Industrialisation* (Baltimore: The Johns Hopkins Univiversity Press, 2007); Liliane Hilaire-Pérez, 'Technology as a Public Culture in the Eighteenth-Century: The Artisan's Legacy', *History of Science* 45 (2007), 135-153; Pamela O. Long, *Artisan/Practitioners and the Rise of the New Sciences, 1400-1600* (Corvallis, OR: Oregon University Press, 2012); Mi Gyung Kim, 'Invention as a Social Drama: From an Ascending Machine to the Aerostatic Globe', *Technology and Culture* 54:4 (2013), 853–87; Mi Gyung Kim, *The Imagined Empire: Balloon Enlightenments in Revolutionary Europe* (Pittsburgh, PA: University of Pittsburgh University Press, 2017); Ken Alder, *Engineering the Revolution: Arts and Enlightment in Eighteenth-Century France, 1763-1815* (Chicago: The University of Chicago Press, 2012); Ursula Klein and Emma Spary (eds.), *Materials and Expertise in Early Modern Europe: Between Market and Laboratory* (Chicago: The University of Chicago Press, 2010).

[90] See Ursula Klein 'Technoscience *Avant la Lettre*', *Perspectives on Science* 13:2 (2005), 226-266; Ursula Klein, 'Hybrid Experts', in *The Structures of Practical Knowledge*, ed. Matteo Valleriani (New York: Springer, 2017), 287-306; Roberts, Dear, and Schaffer (eds.), *The Mindful Hand.*

Moreover, musical knowledge was embodied: the manufacture and ownership of musical instruments, visual representations, and the performer's body, among other things, were ways of appropriating and instructing on what music *was*, what it *did*, and to or by *whom*.

3. Musical actors, institutions and expertise

Accompanying the variety of musical practices and hybrid knowledge that characterised music in eighteenth-century France, new social figures emerged. In looking to the culture of music rather than merely at great composers and audiences, this dissertation features diverse social actors who engaged in an array of musical activities. As previously mentioned for the case of 'amateur' and 'virtuoso' performers, these actors belonged to different social and political constituencies, which were also linked to opposing ideals of the body. I shall examine the social actors involved in musical practices through studying their relationship with musical knowledge, material practices, and political standings. Although this dissertation documents the increasing appropriation of music as a communal practice rooted in the new public sphere, its concern is mainly with learned individuals who wrote, consumed, and performed music, and eventually became learned revolutionaries. Despite the fact that many unnamed people participated in the practices examined here, the core of this dissertation excludes street musicians and constituencies often associated with the 'popular'. The majority of musicians, performers, and teachers which I investigate belonged to the lower bourgeoisie, artisanal and commercial sectors, in line with the expansion of the music trade. Yet this dissertation also includes many elite performers, listeners, and consumers of music. Musical expertise, I argue, was pursued by learned men and women as well as by these noble or wealthy amateurs. Musical amateurs, theorists, inventors, teachers, performers, composers, and listeners fashioned themselves by laying claim to different degrees of technical expertise, taste, training, feeling, and genius. These values changed throughout the century, and, hence, the map of musical actors was an elastic one.

These musical actors moved across different musical and non-musical institutions. Rather than focusing in a single institution, the focus of this dissertation ranges across academies, concert halls, salons, societies, churches, schools and guilds. Some individuals featured in this dissertation simultaneously participated in more than one of these institutions. Among Parisian institutions, this dissertation primarily explores the Académie Royale des Sciences, where, I shall argue, musicians and men of letters mingled to fashion themselves as

‘savant’ and ‘tasteful’ individuals. Music was a favourite topic of research for applicants to the Académie, showing the extent to which music enhanced the status of academicians. By means of signing membership with one of these institutions, the musical actors legitimised their expertise in musical matters.

Recent scholarship has shed considerable new light upon the vital role played by eighteenth-century musical institutions in shaping and negotiating musical taste as well as broader social, cultural and political issues.[91] Since the late seventeenth century, musical spectacles in Paris were regulated by the Académie Royale de Musique, which, founded by Louis XIV in 1669, channelled royal authority through controlling the foundation of new musical institutions and their repertoires. Similarly, the manufacture and sale of musical instruments were regulated through the guild of ‘facteurs d’instruments de musique’, and during the eighteenth century, the invention of new musical instruments was especially encouraged within the royal project of ‘arts et métiers’ as a matter of public utility.[92] Nevertheless, music scholars have shown that, during the eighteenth century, the absolutist politics imposed on the development of musical practices became increasingly looser and gave room for new forms of association.[93] From the foundation of the Académie Royal de Musique to the abolition of privileges and the proclamation of the ‘liberté des théâtres’ in 1791, a number of new musical institutions emerged. Musicians progressively moved away from traditional patronage towards paid concert performances across newly founded concert halls and salons. This dissertation shows that the Concert Spirituel, which was founded in 1725 by Anne Danican Philidor and had a combined aristocratic and bourgeois audience, became a crucial stage for testing musical innovations and the development of virtuoso performance.[94] The process of appropriating Italian musicality and musicians explored in this dissertation crystallised in the reorganisation of the map of musical institutions. The small theatres Opéra-Comique and Théatre-Italien merged in 1762, arguably fostering Italian musical culture in Paris.[95] Yet Italian music also settled within the Académie Royale de Musique, where the newly appointed entrepreneur Jacques de Vismes du Valgay organised the performance of a

[91] See e.g. Nicole Wild and David Charlton, *Théâtre de l’Opéra-Comique Paris. Répertoire 1762-1972* (Paris: Mardaga, 2005); Darlow, *Staging the French Revolution*.

[92] Pierre, *Les facteurs d’instruments de musique;* Loubet de Sceaury, *Musiciens et facteurs d’instruments de musique*; Liliane Hilaire-Pérez, *L’invention technique au siècle des Lumières* (Paris: Albin Michel, 2000).

[93] See e.g. Brenet, *Les concerts en France*; Brévan, *Les changements de la vie musicale parisienne*; Francis Claudon, *Dictionnaire de l’Opéra-Comique français* (Bern: Peter Lang, 1995).

[94] Sylvette Milliot, ‘Le virtuose international: une création du 18e siècle’, *Dix-huitième siècle* 25 (1993), 55-64.

[95] Wild and Charlton, *Théâtre de l’Opéra-Comique*; Fabiano, *Histoire de l’opéra italien en France.*

number of Italian operas in the late 1770s.[96] At the same time, the manufacture and sale of musical instruments also adapted to a larger and more complex market. As a result, the guild of instrument makers was supressed in 1776 by means of the edict issued by Anne Robert Jacques Turgot, France's 'Controlleur-Général des Finances', to respond to the tensions and increasing weakness of the whole guild system in France.[97]

Accompanying this new map of musical institutions, there was an increased mobility of musical actors, both within and outside Paris and France. William Weber shows that, whereas early in the century musicians were normally employed by a single patron or institution, by the 1770s 'musicians were moving freely from one patron's household to another, either in residence or simply support'.[98] Similarly, mobility also increased between musical and non-musical institutions. A number of musical amateurs performed music in the newly founded orchestras, while at the same time they were members of literary academies and salons. For instance, Michel Paul Guy de Chabanon counted among the members of the Académie des Inscriptions et Belles Lettres and the Académie Française, at the same time he was a regular performer at the Concert des Amateurs, founded in 1769. These institutions performed different functions, yet they all structured musical life as well as individual participation in the public sphere.

Consequently, this dissertation documents two apparently contradictory movements that occurred throughout the century. On the one hand, musical practices of all sorts expanded considerably during the century, reaching a wider public. As discussed above, this process was favoured by the development of an increasing public for music, fostered by the culture of consumption and a new range of institutions in which music was pracised or discussed. There was a significant effort towards simplifying and standardising musical practice, pedagogy, notation, tempo, and tuning, which was a condition for the development of larger-scale musical performing culture. On the other hand, there was an increasing elitism in musical knowledge and practice delimited by a new notion of expertise. Although musical taste had defined elite groups since the beginning of the century, there was a steady growth and diversification of 'experts' and realms of expertise, which crystallised in very different social personae during the second half of the century. Therefore, the expansion and rising importance of music was

[96] See Chapter 2 of this dissertation.
[97] See e.g. Hilton L. Root, *The Fountain of Privilege: Political Foundations of Markets in Old Regime France and England* (Berkeley: University of California Press, 1994), p.133.
[98] Weber, 'Learned and General Musical Taste', p.78.

accompanied by an increasing specialisation of activities and institutions, and the emergence of new categories of actors specifically associated with them.

Consequently, during the eighteenth century, the belief that a musician should master multiple and varied skills coexisted with the progressive dismembering of these skills into specific categories of person. When discussing the process of 'professionalisation' of musicians during the eighteenth and nineteenth centuries, much scholarship refers to musical composition, and only secondarily to questions of performance.[99] The claim that the history of music has been written by non-musicians, and often in spite of them, has recently led to a 'performative turn' in historical musicology, hence incorporating the study of musical performers.[100] Nevertheless, these studies often understand the category of 'musician' in today's terms, referring to those who either play or compose music, and ignore what a 'musician' actually meant in the eighteenth century. I shall argue that being a musician in eighteenth-century France involved a vast range of activities and abilities, from composing and performing to teaching, writing treatises and didactic manuals, theorising, experimenting, and selling and making musical instruments. This multifaceted character dated back to earlier times. Given that music could explain cosmological order, authors from Boethius onwards believed that the ideal musician needed to master different skills and fields of knowledge, for musical practice was intertwined with intellectual matters.[101] Indeed, Zarlino, Galileo, Kepler, Kircher, Mersenne, and Descartes, among other writers, illustrate the association between the 'musician' and the early-modern natural philosopher or polymath.[102] The idea of the 'complete musician' as someone who mastered different sciences was fundamental to the inclusion of music as one of the fields addressed by the Académie Royale des Sciences in Paris, and by its English counterpart the Royal Society in London. Analysing the figure of the early modern musician, Paolo Gozza quotes a passage from William Brounker's preface to Descartes's *Compendium of Musick* of 1653, which brilliantly illustrates the different knowledges that a

[99] See T.C.W. Blanning, *The Triumph of Music: The Rise of Composers, Musicians and Their Art* (Cambridge: Belknap Press of Harvard University Press, 2008); Rebecca Dowd Geoffroy-Schwinden, *Politics, the French Revolution, and Performance: Parisian Musicians as an Emergent Professional Class, 1749–1802,* unpublished PhD Thesis, Duke University (2015).

[100] Lydia Goehr, *The Imaginary Museum of Musical Works: An Essay in the Philosophy of Music* (Oxford: Oxford University Press, 1992); Christopher Small, *Musicking: The Meanings of Performing and Listening* (Middletown, CT: Wesleyan University Press,1998); Mine Doğantan-Dack (ed.), *Artistic Practice as Research in Music: Theory, Criticism, Practice* (London and New York: Routledge, 2016).

[101] Gouk, *Music, Science and Natural Magic*, p.82; Gozza (ed.), *Number to Sound*, p.17.

[102] See e.g. Peter Dear, 'Marin Mersenne: Mechanics, Music and Harmony', in *Number to Sound*, ed. Gozza, p.268.

‘musician’ should master. Brounker defined a ‘complete musician’ as the one who ‘swalowed the whole theory of music i.e. haveing (*sic.*) profoundly speculated the Pythagorean Scheme of the various Sounds arising from the Various Hammers’, and, at the same time, was a ‘Physiologist’, ‘Philologer’, ‘Arithmetician’, ‘Geometrician’, a ‘Poet’, a ‘Mecanique’, ‘Metallist’, ‘Anatomist’, a ‘Melothetick’, ‘And lastly, He must be so far a Magician, as to excite Wonder, with reducing into Practice the Thaumaturgical, or admirable Secrets of Musick: I meane, the Sympathies and Antipathies betwixt Consounds and Dissounds; the Medico-magical Virtues of Harmonious Notes (instanced in the Cure of Sauls Melancholy fitts, and the prodigious Venome of the Tarantula, &c.)’.[103]

This description, which for Gozza ‘reads as an ideal manifesto for the supposed musical aims of the Royal Society’, also defines the broad scope of this dissertation.[104] Gozza ends his excellent survey of the early modern musician by claiming that ‘the dismembered parts of the ‘perfect musician’ were recomposed one last time in the first half of the 18th century in Jean-Philippe Rameau’.[105] Indeed, this dissertation shows that Rameau was praised for contributing to both musical theory and practice, and mastering different realms of scientific knowledge. Yet, I shall argue, Rameau was not the only one pursuing this hybrid musical expertise. During the eighteenth century, the figure of the ‘musician’ was still associated with the mastery of medical, magical, mathematical, poetic, and philosophical knowledge, and referred to persons engaged with various materials and objects, albeit hardly embodied in a single person. I shall argue that musicians were actively involved in practices of knowledge-making, disseminating, and learning. Nevertheless, by Rameau’s time, music had already become a widespread cultural practice within a growing public of consumers. And within this culture, while the ‘man of parts’ was still an important person, music was becoming a set of skills and a market *sui generis*, rather than just as part of mixed mathematics. The rise of a community of producers of musical goods, in particular, involved an increasing diversification of actors. Music teachers, performers, collectors of musical instruments and books, inventors, instrument merchants, copyists of musical scores, writers of sale catalogues, entrepreneurs of spectacles, and theatre subscribers are amongst the social personae which arose within the increasing public culture of music. Although being a ‘musician’ remained bound up with practices of knowledge-making

[103] Gozza (ed.), *Number to Sound*, pp. 20-21, quoting William Brounker’s preface to *Renatus Des-Cartes Excellent Compendium of Musick: With Necessary and Judicious Animadversions thereupon, by a Person of Honour* (London, 1653).
[104] Gozza (ed.), *Number to Sound*, p. 21.
[105] Gozza (ed.), *Number to Sound*, p. 21.

throughout the century, musical expertise was now a shared domain among different specialised social figures.

Considering that music coupled knowledge and taste, who was the *knowledgeable* and *tasteful* person in the new culture of music? How were technical expertise and musical taste related to each other? Who could acquire the status of 'expert', and how? The growing public of musical performances, which developed distinct musical preferences and conveyed musical criticism in the public sphere, had 'primacy in musical taste' according to William Weber. This authority belonged to the public, Weber argues, because music was not within the purview of a single institutional authority that dictated the standards of musical taste, in the way that the Académie Royale de Peinture et de Sculpture did for the visual arts.[106] This lack of institutional authority on which to fall back, Mark Darlow suggests, explains the 'vociferous and long-lasting' nature of the music *querelles* throughout the century.[107] Given that the 'public' explored in this dissertation includes a wide range of actors and institutions, I shall argue that different forms of musical expertise, combining taste and knowledge, co-existed and were essential to changing the hierarchies among musical actors throughout the century. Questions of expertise could be found across different musical practices, from musical theory and scientific speculation to examining musical inventions, assessing sound, performing the musical body, listening and commenting upon musical performances, and 'feeling' music. Consequently, this dissertation travels across spaces such as the academy, concert hall, household, and musical lesson, to explore how the status of music and the authority of its agents were negotiated through changing expectations and models of legitimisation. The fact that a growing number and variety of personae claimed musical expertise corresponded to the increasing movement of taste from courtly privilege to commerce and new public settings.

Thus, who possessed musical expertise did not remain stable through the century. A number of social actors who practised or associated themselves with music were labelled 'savants', ranging from composers and music theorists to amateurs. Indeed, several musicians wrote musical treatises. This phenomenon accounts for the importance among new musical actors of laying claim to knowledge. This dissertation shows, for instance, that music teachers crafted a particular domain of expertise during the eighteenth century, which they advertised and commercialised within the growing culture of consumption. The appearance of new categories of music teachers—as well as performers—is widely documented in the vast number

[106] Weber, 'Learned and General Musical Taste', p.66.
[107] Darlow, *Dissonance in the Republic of Letters*, p.154.

of didactic music manuals published during the eighteenth century, yet these personae have been insufficiently explored by scholars. Philippe Lescat's work on music teachers provides extremely helpful information on their activities and social backgrounds, and argues that most authors of these treatises taught privately, outside musical institutions, and self-funded their works.[108] This dissertation demonstrates that music teachers were central to the dissemination of musical knowledge and the translation of taste from elite circles to the broader public. I shall argue that teachers were crucial intermediaries between knowledge, commerce, taste, and practice. They embodied the hybrid knowledge that was crucial to the expansion of music in the Enlightenment. Consequently, music teachers as a new social figure exemplify the appropriation and transformation of musical knowledge through practices beyond treatise writing, and settings other than teaching institutions and academies.

During the second half of the century, the label '*musicien de profession*' became increasingly common, referring to the emergence of paid musicians, composers, and teachers, as part of a commercial culture of music similar to what has been studied for fine arts and sciences.[109] Over this time, the figure of the performer as musical agent diverged from that of the composer, and an increasing gap formed between professional and amateur performers. Nevertheless, being called a 'musician'—and even more, a 'savant musician'—was deemed a more complimentary name than simply 'teacher', 'composer', or 'performer'. This alludes to a tension between the 'mind' and 'hand' that scholars have demonstrated for this period, in which intellectual matters were valued more highly than manual ones.[110] Despite the increasing specialisation of social actors involved in musical practices, the historical ideal of a 'musician' aspiring to master different realms of knowledge, and somehow having privileged access to an understanding of nature, persisted in different forms throughout the eighteenth century. Indeed, when the Conservatoire de Paris was founded in 1795, besides the teaching of musical practice, it also put together a library, a cabinet of musical instruments, and undertook the task of

[108] Philippe Lescat, *Méthodes et traités musicaux en France 1660-1800, réflexions sur l'écriture de la pédagogie musicale en France, suivies de catalogues systématique et chronologique, de repères biographiques et bibliographiques* (Paris: Institut de pédagogie musicale et chorégraphique-la Villette, 1991); Philippe Lescat, *L'enseignement musical en France de 529 à 1972* (Courlay: J. M. Fuzeau , 2001).

[109] See e.g. Thomas Crow, *Painters and Public Life in Eighteenth-Century Paris* (New Haven, CT: Yale University Press, 1985); Nathalie Heinich, *Du peintre à l'artiste. Artisans et académiciens à l'âge classique* (Paris: Éditions de Minuit, 1993).

[110] Paola Bertucci has made a similar claim for the use of the name 'artistes' by artisans. See Bertucci, *Artisanal Enligthenment.* See also Roberts, Schaffer, and Dear (eds.), *The Mindful Hand*; Liliane Hilaire-Pérez, 'Diderot's Views on Artists and Inventors', *Britsih Journal for the History of the Philosophy of Science* 35:2 (2002); Crow, *Painters and Public Life*; Le Guin, *Boccherini's Body*, p.134.

producing and publishing teaching methods.[111] The interest in these 'learned' activities suggests that practices of knowledge-making remained central to defining the status of the musician until the end of the century. Moreover, the Conservatoire opened a studio where students learned techniques and technologies of instrument building, demonstrating that material practices were still regarded as key to making and acquiring musical knowledge, as well as the value of musical instruments as objects of science and ingenuity. Musicians, teachers, and instrument makers were thus equally supposed to possess scientific, technical, and material skills.

3.1 The musical amateur

The polymath character of the early modern 'musician' was better exemplified in the eighteenth century by a new social figure: the musical 'amateur'. The topic of musical amateurs runs through all sections of this dissertation. The existence of the eighteenth-century musical amateur was confined to the period of French history addressed in this dissertation: it emerged at the dawn of the eighteenth century, and slowly faded away by its end. It might be tempting to distinguish 'amateurs' involved in music making on the basis of their financial expectations or social background, and consequently to establish a binary division for eighteenth-century musical practitioners, separating self-funded amateurs from salary-earning *musiciens de profession* or *maîtres*.[112] However, as I shall show, being an 'amateur' was not opposed to, and often overlapped with, being a 'musician'. Moreover, although most amateurs belonged to the social elite and did not earn a living from music, being an amateur in the eighteenth century entailed a more complex combination of social and cultural phenomena.

The musical amateur resembles, to a great extent, the amateur in the visual arts, particularly as described by Charlotte Guichard: 'A social and political figure within the art

[111] Catherine Massip, 'La bibliothèque du Conservatoire (1795–1819): une utopie réalisée?', in *Le Conservatoire de Paris, 1795–1995, Des Menus-Plaisirs à la Cité de la musique*, eds. Anne Bongrain and Yves Gérard (Paris: Éditions Buchet/Chastel, 1996), 117-131; Rebecca Down Geoffroy-Schwinden, 'The Revolution of Jommelli's *objets d'art*: Bernard Sarrette's Requests for the Bibliothèque du Conservatoire', in *Moving Scenes. The Circulation of Music and Theatre in Europe, 1700-1815*, eds. Pierre-Yves Beaurepaire, Philippe Bourdin, and Charlotta Wolff (Liverpool: Voltaire Foundation/Liverpool University Press, 2018); Constant Pierre, *Bernard Sarrette et les origines du Conservatoire national de musique et de déclamation* (Paris: Delalain Frères, 1895).
[112] See David Hennebelle, *De Lully à Mozart. Aristocratie, musique et musiciens à Paris (XVIIe-XVIIIe siècles)* (Seyssel: Champ Vallon, 2009).

world, legitimated by new forms of artistic patronage and sociability'.[113] For Guichard, art amateurs were key in the passage from the monarchical system to the new art market. They were Parisian elites in a broad sense, including nobility and financial and military elites. Since 1747, the Académie Royale de Peinture et de Sculpture had conferred the title of 'honorary amateur' on elite men to recognise their 'good taste' and knowledge of the fine arts. The amateur of art, then, was recognised as an official authority in matters of taste, and had political credibility.[114] Musical amateurs did not possess the official academic recognition of their peers in the visual arts. The use of the term 'amateur' in the sphere of music was much more complex. The cast of musical amateurs in this dissertation includes performers, composers, listeners, patrons, inventors and consumers of instruments, collectors, concert critics, essay writers, and researchers on music. While some amateurs were devoted to all of these practices, some focused only on one.

Over the century, the number of musical 'amateurs' increased considerably. Whereas amateurs were traditionally limited to playing in domestic spaces, new musical institutions emerged in the 1760s in relationship to the increasing amateur culture.[115] Among these new institutions, one of the most emblematic was the Concert des Amateurs, which took place in the Hotel de Soubise between 1769 and 1781, and was funded by a system of donors and subscriptions.[116] In fact, this dissertation points out that among the growing number of performers beyond the court and noble households throughout the century, many were identified as 'amateurs'. This increase in performers was accompanied by the publication of several didactic music manuals, some of which were explicitly addressed to amateurs, and even recommended specific instruments, such as the mandolin and the guitar.[117] Likewise, some music manuals were exclusively devoted to ladies. Many women were recognised 'patrons' of music, singers, and performers of musical instruments.[118] However, the term 'amatrice' was

113 Guichard, 'Taste Communities', p.522. For amateurs in other cultural domains, see the forthcoming volume of the series Oxford University Studies in the Enlightenment: Bénédicte Peralez Peslier and Justine de Reyniès (eds.), *Amateurs et hommes de métier dans l'Europe des Lumières* (Liverpool: Voltaire Foundation/Liverpool University Press).

114 Guichard, 'Taste Communities'; Guichard, *Les amateurs d'art à Paris*.

115 See Hennebelle, *De Lully à Mozart*; Georges Escoffier, 'Formes institutionnelles et enjeux sociaux des pratiques musicales au XVIIIe siècle: L'exemple du Concert de Grenoble', *Revue de Musicologie*, 87:1 (2001), 5-32.

116 Robert-Henri Tissot and Camille Bellissant (eds.), *Le Concert des Amateurs à l'Hôtel de Soubise (1769-1781). Une institution musicale parisienne en marge de la Cour* (Grenoble: MSH-Alpes, 2000).

117 Lescat, *Méthodes et traités musicaux*.

118 See e.g. Lenard R. Berlanstein, *Daughters of Eve: A Cultural History of French Theater Women from the Old Regime to the Fin de Siècle* (Cambridge, MA: Harvard University Press, 2001), chapters 1-3; Huub Van Der

documented as the feminine equivalent of 'amateur' only in the final decade of the century.[119] This dissertation demonstrates that gender was also associated with notions of harmony and character in music, and determined the choice of musical instrument and desired sonorities.

Musical amateurs articulated and displayed their tasteful knowledge most conspicuously in the public sphere. Indeed, the expansion in musical culture was both a cause and a result of the expansion in the number of musical amateurs. Amateurs were the consumers of new musical goods, and the target audience of musical instruments and artefacts.[120] Furthermore, amateurs brought music to the front of public debate around the middle of the century, especially in the famous *querelles* that spanned the century.[121] They wrote for existing newspapers and journals, but also obtained privileges to found their own journals. Some writers were widely recognised. Others wrote anonymously, signing their articles or publications only as 'an amateur'.[122] The bare signature of 'amateur' was a gateway to the writing about music; it was, in itself, a mark of authority and credibility. Additionally, amateurs formed the readership of specialist musical newspapers and the ideal audience of musical performances. Sometimes the term 'amateur' was simply used to identify the group of people assembled in the activity of listening, meaning that the terms 'public' and 'amateurs' were often used interchangeably in newspapers. Yet much of the time, 'amateurs' constituted a highly regarded public. As target audience for both newspapers and concert performances, they embodied a new form of learned listening.

Linden, 'Medals and Chamber Pots for Faustina Bordoni: Celebrity and Material Culture in Early Eighteenth-Century Italy', *Journal for Eighteenth-Century Studies* 40:1 (2017), 23-47. For amateur female performers, see 'The Music Lesson: A Window of Opportunity', in *Dangerous Liaisons: Fashion and Furniture in the Eighteenth Century*, eds. Harold Koda and Andrew Bolton (New Haven, CT: Metropolitan Museum of Art New York/Yale University Press, 2006), 45-58; Julie Anne Sadie, '"Musiciennes" of the Ancien Régime', in *Women Making Music: The Western Art Tradition, 1150-1950*, eds. Jane M. Bowers and Judith Tick (Champaign, IL: University of Illinois Press, 1987), 191-223; Ursula M. Rempel, 'Women and Music: Ornament of the Profession?', in *French Women And The Age Of Enlightenment*, ed. Samia I. Spencer (Bloomington: Indiana University Press, 1984).

119 'Quelques Écrivains ont dit au féminin, *Amatrice*. Ce mot est encore nouveau'. *Dictionnaire de l'Académie française*, 5th Edition, 1798. Jean-François Féraud had previously criticised the use of the term in his *Dictionnaire critique de la langue française*, T. 1 (A-D) (Marseille, 1787-88). The ARTFL Project, University of Chicago: http://artfl-project.uchicago.edu.

120 See my forthcoming article 'Tasteful Possessions. Collecting and Displaying Musical Instruments in pre-Revolutionary France'.

121 See Darlow, *Dissonance in the Republic of Letters*.

122 See e.g. the 'Amateur François' in *Abrégé du Journal de Paris* (Paris: 1789), p.1062; and the 'Amateur du Vaudeville' in *Le censeur dramatique ou journal des principaux theâtres de Paris et des départaments, par una société de gens de lettres* (Paris: 1797). For a discussion of anonymous music criticism in the 1770s, see Darlow, *Dissonance in the Republic of Letters*, 149-152.

Unlike our contemporary association of the amateur with the dabbler or inexpert practitioner, in the eighteenth century the title of 'amateur' was a recognition that people sought after, crafted, and appropriated, in order to fashion themselves at times of great social and cultural change.[123] The dictionary published by Richelet in 1680 defined the word 'amateur' simply as 'celui qui aime'—one who loves.[124] This bare definition is highly significant, as it declared the main value that a musical 'amateur' should pursue and embody throughout the whole century: the *love* for music. This dissertation shows that the musical 'amateur' was deemed an authority in musical practice and theory by virtue of combining knowledge with taste. Some amateurs carried out mathematical, physical, and physiological research on music and sound, and wrote lengthy treatises, while also socialising and entertaining themselves in musical ways. Furthermore, the community of learned amateurs was crucial to the wide reception and appropriation of Rameau's theories at mid-century. Merging notions of science, taste, sociability, and amusement, the musical amateur was related to the figures of the 'connoisseur' and 'curieux' in other realms of knowledge.[125] Yet unlike these categories, 'amateurs' often also practised music.[126] Whereas David Hennebelle has distinguished 'connoisseurs', 'amateurs', and 'dilletantes' amongst non-professionals critics of music, I shall insist that the boundaries between these categories were fluid and that they were often interchangeable with the broader term 'amateur'.[127] Moreover, in musical practices beyond music criticism, the term 'amateur' was preferred, and encapsulated different combinations of musical practice, technical knowledge and taste. Furthermore, during the second half of the century, musical amateurs represented the 'sensible person', whose love of music found expression in their physical bodies.

Despite this status, amateurs increasingly became the target of criticism. In the last three decades of the century, it is possible to notice early signs of the rather dubious reputation that amateurs enjoyed in the nineteenth century. A number of journals of the time criticised 'pretended' amateurs, who were deemed harmful to artists. This criticism was in accordance

[123] For a similar reflection on the Italian 'dilettante' see Michael Talbot, 'Albinoni: The Professional Dilettante', *The Musical Times*, 112:1540 (1971), 538-541.

[124] César-Pierre Richelet, *Dictionnaire françois: contenant les mots et les choses, plusieurs nouvelles remarques sur la langue françoise* (Geneva:1680).

[125] Guichard, 'Taste Communities'; Pomian, *Collectors and Curiosities*; Spary, 'Scientific Symmetries'; Louis A. Olivier, *Curieux, Amateurs and Connoisseurs; Laymen and the Fine Arts in the Ancien Régime* (Baltimore: The Johns Hopkins Univiversity Press, 1976).

[126] See Weber, 'Learned and General Musical Taste'.

[127] Hennebelle, *De Lully à Mozart.*

with the critique of amateurs in the visual arts, articulated for example in Diderot's *Salons*.[128] In opposition to the so-called 'false amateurs', references to the 'true amateur' spread to defend the learned and sensible amateur.[129] Yet critics soon addressed the expertise and prestige of musical amateurs, as well as the foundations and authority of their 'love'.[130] Thus, as this dissertation will show, musical amateurs came to be criticised both as musical experts and practitioners. Although amateurs fashioned themselves as 'savants', their knowledge of technical matters was increasingly challenged. Similarly, their self-fashioning as the possessors of sensibility, I shall argue, ultimately relegated them to the role of listeners rather than performers. By the end of the century, Paris hosted famous performers and composers on an unprecedented scale, as well as a number of 'virtuoso' performers who exhibited physical expertise in spectacular ways, which ultimately overshadowed the appraisal of amateurs as practitioners.[131] Whereas the expertise of virtuoso musical performers was associated with their physical skill, musical amateurs, in their turn, retained the privilege of taste and 'feeling' as sensible listeners. During the French Revolution, however, 'taste' was attacked as a perpetuator of courtly privilege, and this contributed to the discredit of many eighteenth-century amateurs in the nineteenth. Composers now became the new locus of 'genius', a category which was increasingly becoming a mental attribute by this time, associated with notions of creativity and the 'intention' of the composer.[132] Yet composers were no longer associated with the polymath and men of sciences, nor did they seek the status of the musical amateur.

128 See e.g. Liliane Hilaire-Pérez, 'Diderot's Views on Artists and Inventors', *British Journal for the History of the Philosophy of Science* 35:2 (2002); Pomian, *Collectors and Curiosities*, pp.195–211.

129 See Pierre-Louis Guinguené, 'Amateur', in *Encyclopedie méthodique: Musique*, eds. N. E. Framery and P. L. Guinguené, vol. 1 (Paris: 1791), 77-78; Laurent Grimod de la Reybière, *Le censeur dramatique ou journal des principaux théâtres de Paris et des départements. 1797-1798*, v.1, (Paris: 1797), p.71.

130 My M.Phil. dissertation explores this through the case of the musical amateur Michel Paul Guy de Chabanon, a Creole academician, violinist, and writer on musical subjects who defined himself as a 'lover'. 'Michel Paul Guy de Chabanon and the culture of music in pre-revolutionary France', unpublished Mphil Thesis, University of Cambridge (2013).

131 See e.g. Metzner, *Crescendo of the Virtuoso*.

132 For notions of genius in 18h-century France see Ann Jefferson, *Genius in France: An Idea and Its Uses*, (Princeton: Princeton University Press, 2014); Jean-Alexandre Perras, 'Genius as Commonplace in Early Modern France', *L'Esprit Créateur* 55:2 (2015), 20-33; Darrin McMahon, *Divine Fury: A History of Genius* (New York: Basic Books, 2013); Simon Schaffer, 'Fontenelle's Newton and the Uses of Genius', *L'Esprit Créateur*, 55:2 (2015), 48-61. For genius in music see Peter Kivy, *The Possessor and the Possessed: Handel, Mozart, Beethoven, and the Idea of Musical Genius* (New Heaven, CT: Yale University Press, 2001); Markus Rathey, *Defining the Self: Carl Philipp Emanuel Bach's Autobiography as an Attempt at Self-Fashioning in the Middle of the Eighteenth Century* (Ann Arbor: Steglein Publishing, , 2016), pp.170-190.

4. Chapters outline

The first chapter of this dissertation (‘The science of music’), explores music as a subject of scientific enquiry and experimentation during the first half of the century. Drawing upon discussions of music theory and sound at the Royal Academy of Sciences, as well as the wider communities of writers and commenters on scientific topics, it argues that music was successfully appropriated as a field of scientific inquiry through the merging of science with notions of taste and pleasure, the legacy of the harmony of the spheres, the Enlightened *esprit géométrique*, and the reception of Rameau as the ‘Newton of music’. In addition, this chapter examines how the ‘science of music’ became a fashionable subject for sociability and entertaining in elite social gatherings, as much as it conferred a new expertise to musicians. Following the scientific pursuit of music, Chapter 2 (‘Italian vs French: music and national character’) argues that the comparison between French and Italian models of musicality served as a language for forging and legitimising an ideal French national character. This chapter departs from the well-known *Querelles des Bouffons* to engage with a broader study of stereotypes about Italian character, showing that, during the second half of the century, the emergence of the new sensibility saw the reappraisal of Italian stereotypes, putting forward a new model of musicality which stressed feeling and comprised a new range of emotions and desired sounds in music. This shift was possible through a broad category of ‘character’ in this period, in which music, language, passions, nation, and morality were closely connected.

While discussions about the scientific status of music and national character in Chapters 1 and 2 portray a new community of writers and interlocutors of music who were engaged in public debate, Chapters 3 and 4 illuminate this new public in relation to musical performance and political debates. Chapter 3 (‘Performing the musical body’) addresses the growing number of musical performers in Paris. It argues that the fashion for playing musical instruments followed the emphasis in polite culture of training and displaying the body. This chapter discusses competing notions of the body, as represented by the courtly body, the mechanised body, and the stress placed on movement and expression in accordance with the new sensibility. At the end of the century, amateur and virtuoso players epitomised different models of nature and political agendas. The chapter moves from the examination of the ‘body’ of the musical instrument to the body of the musical performer, to culminate in the last chapter with an examination of the ‘body politic’. Chapter 4 (‘The harmonic republic’) examines the various uses of musical harmony to envisage and discuss a new ideal public order during the early

years of the French Revolution. It argues that, by means of music's power to affect the body and bring people into concert, music proved to be a powerful political tool. Musical harmony offered a model of agreement and proportioned order. Drawing upon the reception of harmony throughout the century as natural order, Enlightened science, emblem of national genius, and model of corporeal discipline and taste, harmony was praised by different factions to defend an ideal form of social and political organisation.

Chapter 1

The science of music

In eighteenth-century France, music had a privileged relationship with nature. Music revealed a 'natural order'—whether celestial, divine, mechanical, mathematical, physical and physiological—composed by a number of laws underlying the universe. Moreover, music exerted great 'natural' powers on its auditors, such as healing, educating, amusing, gathering socially, and moving the listener's hearts, souls, or *esprit.* In all these ways, the 'natural' grounds of music made it a topic well suited to research by natural philosophers. Music did not drop out of Enlightenment agendas of reforming learning. Rather, music became a fresh field of knowledge and the object of painstaking scientific scrutiny. Therefore, music was the object of numerous studies and experiments, combining mathematics, physics, and physiology. As such, the 'science of music' enabled the self-fashioning of the Enlightened person, as well as sociability and amusement in polite circles.

What did it mean for music to be a science? Like other fields of knowledge, music in the Enlightenment was subjected to systematising, quantifying, classifying, and defining endeavours. Writers and researchers sought to establish a proper musical 'system', which could both explain the nature of music and be useful for performers and composers. Therefore, music became a frequent subject of discussion and evaluation in the sessions of the Académie Royale des Sciences, at the same time a number of treatises were published addressing mathematical, physical, or physiological issues associated with music and sound.[133] Moreover, the Académie's[*] interest in music was consistent with the growing concern with the arts and crafts. Since 1699, the Académie undertook the project of describing all different arts and crafts currently being practised in Paris, which enabled the collaboration between academicians and craftsmen.[134] Furthermore, music occupied a prominent place in Diderot and d'Alembert's *Encyclopédie,* which further stressed the role of music as a field of Enlightenment enquiry.[135]

[133] Cohen, *Music in the French Royal Academy*, p.41.

[*]In this chapter, all mentions to the 'Académie' refer to the Académie Royale des Sciences in Paris.

[134] See the special issue edited by Ursula Klein on 'Artisanal-Scientific Experts in Eighteenth-Century France and Germany', *Annals of Science* 69:3 (2012); Liliane Hilaire-Pérez, *L'invention technique* and 'Technology as a Public Culture'; Bertucci, *Artisanal Enlightenment*.

[135] See Edmond Van der Straeten, *Voltaire musicien* (Paris: AMS Press, 1878); Alfred Richard Oliver, *The Encyclopedists as Critics of Music* (New York: AMS Press, 1966); Fubini, *Gli enciclopedisti*; Verba, *Music and*

That music was considered a science in all these varied efforts did not mean placing it in opposition to music as an art—in fact, many writers on music used both terms (science and art) alternatively to refer to music, and the concepts of science and art were often used indistinctively in this period.[136] Additionally, the science of music was not opposed to its practice; on the contrary, the scientific agendas relating to music were intrinsically tied to the aims of establishing and standardising criteria of musical performance and composition, in order to facilitate musical learning and collective playing in the context of an increasing expansion of musical practice. The belief that science could both explain musical taste and facilitate musical practice were crucial driving forces in the pursuit of a science of music.

Nevertheless, scientific approaches to music were not always straightforward. The scientific enquiry required establishing immutable rules and principles for music, in which avoiding the arbitrary was paramount. Furthermore, the establishment of laws of taste and pleasure was fundamental to Enlightenment programmes of self-fashioning in polite culture. Yet, how could the pleasure of music—those great effects of music in the body, spirit, heart, or soul—be explained and reduced to a fixed set of principles? Understanding and legitimising the pleasure of music was a driving force in the pursuit of scientific research, and sometimes it was its main obstacle. This chapter first examines the early efforts at finding a scientific method and establishing fixed principles for music, principally as discussed in the Académie Royale des Sciences, and the consolidation of these efforts in the system of harmony proposed by Jean-Philippe Rameau. Rather than examining Rameau's specific proposals, this chapter focuses on the reception of Rameau's theories among a growing community of writers, commentators, and researchers on music that spanned across the new public sphere, some of whom associated Rameau with Newton and embraced Rameau as a public 'celebrity'. However, this new community, which expressed itself conspicuously since mid-century, was neither homogeneous nor appropriated Rameau's theories without hesitation. The science of music, as popularised by Rameau's interlocutors, presented continuous challenges, especially when coming to terms with defining who possessed the ultimate authority in musical judgements. The last section of this chapter examines two social figures who self-fashioned themselves

the French Enlightenment; Béatrice Didier, *La Musique des Lumiéres: Diderot-L'Encyclopédie-Rousseau* (Paris: Presses Universitaires de France, 1985); Michael O'Dea, *Jean-Jacques Rousseau: Music, Illusion and Desire* (London: Macmillan, 1995); Claude Jamain, *L'imaginaire de la musique au siècle des Lumières* (Paris: Champion, 2003).

136 Martin Kemp, *The Science of Art* (New Haven, CT: Yale University Press, 1990); Pomian, *Collectors and Curiosities*; Semi, *Music as a Science of Mankind*.

according to Rameau's science, the 'savant' musician and the amateur, both of which, nonetheless, were discredited in the last decades of the century.

This chapter broadly argues that music was successfully appropriated as a field of scientific inquiry through the combination of the legacy of the music of the spheres, the fashion for mathematics under the *esprit géométrique*, new research on sound and hearing, and the belief that beauty and taste were grounded in a certain notion of nature as geometrically organised. Therefore, Rameau's system, revealing a mathematical natural order, consolidated the association of music with broader values such as beauty, taste, morality, and nature. Moreover, Rameau's system of harmony coupled reason and pleasure. Musical harmony became the emblem of a project of rationalisation which legitimised notions of moral, social, and political order. Consequently, I shall argue that Rameau's system was largely received and appropriated far beyond its mathematical and physical elements. Rather, musical harmony was deemed a tasteful science. As such, music fits the image depicted by Geoffrey Sutton of the natural sciences in polite culture of the early eighteenth century. For Sutton, natural sciences emerged in French salons as a literary pursuit of nature. Therefore, the sciences followed a particular literary style, expressed both orally and in written form, and were popularised by paying great attention to amusement. Additionally, natural sciences provided a fertile field for the use of political metaphors.[137] In this context, music was a most suitable topic of research for natural scientists. Writers and researchers of music sought to claim a scientific status for music, for which they carried out reseach on the mathematical proportions of harmonics, the physics of sound, the anatomy of the ear, and attempted to organise music into a coherent system.

Yet the scientific status of music was also based on the notion of taste, with the entanglement of ideas of amusement, beauty, morality and politics. Therefore, the process of assessing and discussing the new proposals about music reveals the complex nature of knowledge-making in the eighteenth century. This chapter shows that musical harmony epitomised the combination of reason and pleasure that underpinned the discussions on both scientific knowledge and music during the early eighteenth century. In a geometrical natural order, scientific knowledge, beauty, and discipline were interwined. Therefore, musical harmony, as both the science of music and a window onto the natural order, justified the embracing of taste (*goût*) by the elites.[138] That music was a science not only legitimised musical

[137] Sutton, *Science for a Polite Society*.
[138] For the relationship between taste and social status, see Bourdieu, *Distinction.*

pleasure, but more fundamentally, it reveals the ways in which taste enhanced the social status of its possessors by merging notions of morality, beauty, discipline, and natural order. Consequently, the scientific pursuit of music attempted to construct a knowledge of music that could contribute to the understanding of musical taste and musical practice, as well as to the making of tasteful and polite people. Nevertheless, I shall demonstrate that the interplay of taste and expertise was the subject of controversy throughout the century. On the one hand, there were changing models of the legitimisation of taste. In the 1750s, Jean-Jacques Rousseau spearheaded a critique of Rameau's harmony by arguing that musical pleasure was grounded in a different model of nature, no longer geometrical and thus moving the attention from mathematics to sensibility. On the other hand, new categories of social actors claiming authority in musical matters emerged throughout the century, and challenged the traditional privilege of musical taste by the social elite. Therefore, establishing what counted as musical expertise, and who could possess it, proved to be continuously challenging. In addressing the scientific pursuit of music, this chapter lays the groundwork for discussions of the relationship between taste, pleasure, expertise, nature and order, threads which run throughout this dissertation.

1. Music as a subject of scientific study

During the first decades of the eighteenth century, there was a substantial effort to investigate, systematise, and explain music as a scientific subject. Writers lamented the lack of scientific studies on music, which they typically contrasted with the advancements in optics. Consequently, music was subjected to a thorough process of evaluation, writing, and experimenting, through a combination of mathematics, physics, and physiology. This project was motivated by the belief that science could effectively explain musical pleasure, while at the same time it could standardise and facilitate musical performance and composition. Moreover, this scientific pursuit of music was possible, as I shall demonstrate in this section, because music had already enjoyed a firm and longstanding place amongst the mathematical and physical disciplines, and was associated with the tradition of *musica mundana* or harmony of the spheres.

Music and sound were frequent subjects of discussion and evaluation in the sessions of the Académie Royale des Sciences throughout the eighteenth century. Albert Cohen has demonstrated that music, sound, and hearing were key topics in the Académie from its

foundation. However, Cohen points out that from the beginnings of the administration of l'Abbé Jean-Paul Bignon and his perpetual secretary Bernard Le Bovier de Fontenelle at the turn of the eighteenth century, there was a renewal of interest in musical subjects.[139] Indeed, during the first two decades of the eighteenth century, music was firmly established as one of the scientific subjects discussed in the Académie. The members of the Académie read dissertations about a variety of topics concerning sound, music theory, and musical practice, and some members carried out musical and acoustic experiments themselves. Additionally, they were in charge of assessing proposals for new inventions of, or improvements to, musical instruments and sound artefacts, many of which were demonstrated by means of musical performance during the Académie's sessions. Between 1700 and 1720, academicians such as Philippe de la Hire, Denis Dodart, Nicolas Malebranche, Louis Carré, Jean-Jacques Dortous de Mairan, and Joseph Sauveur read memoirs on the nature, production, and transmission of sound, analogies of sound and light, acoustic artefacts, phonation, musical systems, the healing powers of music, and the physiology of the ear.[140]

For many of these academicians, music was a highly regarded topic of discussion and aided their entrance into the intertwined worlds of letters and polite sociability. Many renowned academicians chose a musical topic for their first publication or presentation, such as René Descartes's first publication, *Compendium Musicae* in 1618. The first public assembly paper of Pierre Louis Moreau de Maupertuis in 1724, for instance, was on acoustics and musical instruments, which according to J.B. Shank, was 'a topic tailor-made for the academy's public assembly audience'.[141] This reveals that music was not only an acceptable subject for scientific study in the Académie, but also a preferred topic for scientific discussion and self-presentation. Therefore, music was more than mere entertainment or a pastime for academicians; making and discussing music as savant and expert as possible, was crucial to fashioning their privileged role as literate elite.

The fact that natural philosophers addressed music did not surprise contemporaries. The scientific pursuit of music in eighteenth-century France was heir to the tradition of early modern theorising and experimenting with music and sound. Since the time of Pythagoras, musical harmonic proportions—that is, that consonant intervals followed fixed mathematical

[139] Cohen, *Music in the French Royal Academy*, p.18.

[140] For the complete list of proposals see Albert Cohen and Leta E. Miller, *Music in the Paris Academy of Science 1666-1793: A Source Archive* (Detroit: Detroit Studies in Music Bibliography, 1979).

[141] Pierre-Louis Moreau de Maupertuis, 'Sur la forme des instrumens de musique', *Mémoires de l'Académie royale des sciences 1724* (Paris, 1724), 215-226. See Shank, *The Newton Wars*, p.250.

ratios—were thought to correspond to the mathematical relations between the Earth and the surrounding planets. This was the so-called *musica mundana* or harmony of the spheres, in which musical harmony revealed a superior order, one governed by 'numbers' and mathematical proportions.[142] Music was therefore married to mathematics, becoming an integral part of the *quadrivium*. During the Renaissance, numerous musical theorists and thinkers tackled the study of music based on the Pythagorean model of musical proportions. Given that musical proportions revealed a cosmological order, they became a model on which other arts were modelled, such as the studies of perspective and architecture in the Renaissance.[143] Later, the 'scientific revolution' in the seventeenth century bequeathed to the eighteenth the belief that music and sound were scientific fields of inquiry, subjected to theorisation and experimentation through mathematics, physics, and physiology, as well as the notion of the musician as a natural philosopher. However, this legacy did not overshadow the still persistent notion of music as mirror of the natural order. The eighteenth century's connection of music and nature, both as natural order and powerful influence over morality and the body, drew heavily on the tradition of *musica mundana*. Indeed, the association of musical harmony with a broader natural order legitimised the wide appropriation of music as a scientific subject.

Therefore, the scientific study of music was grounded in the belief that the cosmos and the divine were mediated through an intelligible set of mathematical relationships, which learned men could grasp through the study of musical proportions. While the relationship between musical harmony and mathematics had been well established since ancient times and solidified through neo-Platonic interpretations, the Enlightenment favoured a specific momentum for the mathematical approach to musical harmony and sound. Mathematics occupied a central place in the Enlightenment, and experienced remarkable developments in this period.[144] Moreover, mathematics was the basis on which different sciences were unified; more than a discipline, it soon became a method.[145] This *esprit géométrique* or 'quantifying spirit' spread to different realms of knowledge and even pervaded everyday life; by mid-

[142] Godwin, *The Harmony of the Spheres*; James, *The Music of the Spheres*; Gozza (ed.), *Number to Sound.*; Prins, *Echoes of an Invisible World.*

[143] See e.g. Martin Kemp, 'Perspective and Meaning: Illusion, Allusion and Collusion', in *Philosophy and the Visual Arts: Seeing and Abstracting*, ed. Andrew Harrison (Boston: Riedel, 1987).

[144] See Frängsmyr et al., *The Quantifying Spirit*; Porter, 'Introduction', in *The Cambridge History of Science*, ed. Porter, and in the same volume see Craig Fraser, 'History of Mathematics in the Eighteenth Century', 305-327.

[145] Frängsmyr et al., *The Quantifying Spirit*, p.1; Cohen, *Music in the French Royal Academy*, p.86.

eighteenth century, it had become a fashion.[146] The increase of mathematical approaches to music in the first half of the eighteenth century, therefore, should be understood in relation to the 'quantifying spirit' that characterised this period. Just as people of all sorts were counting and measuring, so too were musicians and musical writers. In 1663, the royal historiographer Charles Sorel, declared in *Le nouveau Parnasse, ou les muses galantes* that music and dance were a mathematical affair:

> Music and dancing not only give great pleasure but have the honour of depending upon Mathematics, for they consist in number and in measure. And to this must be added Painting and Perspective and the use of very elaborate Machines, all of which are necessary for the ornament of Theatres at Ballets and Comedies. Therefore, whatever the old doctors may say, to employ oneself at all this is to be a Philosopher and a Mathematician.[147]

In fact, until mid-century, music was generally classified within the 'mixed mathematics'. In Renaissance Italy, the music composer and writer Gioseffo Zarlino defined music as a 'mathematical speculative science' which, following Aristotle's classification of 'scientia media', was midway between mathematics and natural philosophy.[148] The same intermediary position is evident in Francis Bacon's inclusion of music within his category of 'mixed mathematics'. According to Bacon, the disciplines grouped under this category addressed subjects or axioms from natural philosophy and employed mathematics to explain or demonstrate them, whereas 'pure mathematics', such as geometry and arithmetic, 'handle Quantity entirely severed from matter and from the axioms of the natural philosophy'.[149] Music was classified as 'mixed mathematics' together with astronomy, perspective, cosmography, architecture, and engineering, as in all of them one had to 'apply' mathematics to study subjects which at least partly relied in physical phenomena. Later in the century, the French mathematics teacher and writer Jacques Ozanam also classified music as 'mixed mathematics' in his *Dictionnaire mathématique* in 1691. For Ozanam, 'mixed mathematics' were opposed to 'simple mathematics' and comprised 'la Cosmographie, l'Astronomie, la Geographie, la Theorie des Planetes, l'Optique, la Mechanique, l'Architecture tant civile que Militaire, & la

[146] Porter, 'Introduction', in *The Cambridge History of Science*, ed. Porter, pp.4-5.
[147] Quoted and translated in Cohen, *Music in the French Royal Academy*, p.85.
[148] Gozza (ed.), *Number to Sound*, p.13; Richard Yeo, 'Classifying the Sciences', *The Cambridge History of Science*, ed. Porter, 239-66, at p.254.
[149] Quoted in Gary I. Brown, 'The Evolution of the Term "Mixed Mathematics"', *Journal of the History of Ideas* 52:1 (1991), 81-102, at p.83.

Musique'. He considered that mathematics was the science par excellence, as its principles were 'tres-clairs & tres-évidens'.[150]

As 'mixed mathematics', music was both number and sound — 'sounding number', in Gozza's terms.[151] Sound was the physical ground and thus the source of experimental approaches to music. Descartes's definition of sound as the object of music in his *Compendium musicae* was not unique. In late seventeenth-century and eighteenth-century French treatises, music was often defined as the 'science of sound', or the science whose object was sound.[152] Yet it was not isolated sound. Ozanam defined music in his *Dictionnaire mathématique*:

> La Musique est une Science, qui recherche, & explique les proprietez des Sons, en tant qu'ils sont capables de produire quelque Melodie, ou quelque Harmonie (...) Le Son, ou Voix est un frappement de l'air, qui touche le sens de l'Oüie (...) Le Son est l'objet de la Musique, en tant qu'il est comparé avec un autre Son. Car un Son tout seul ne peut pas être l'objet de la Musique, qui considere la difference des Sons, & leurs proportions (...) L'Harmonie, est une convenance agréable de deux ou plusieurs sons, qui se font entendre à même tems.[153]

Ozanam's claims would remain crucial throughout the scientific enquiries into music until the 1760s. Music was a science whose main concern was not sound in itself—'son tout seul'—but the the relationship between sounds, namely, their mathematical relations. Moreover, sound was defined in relation to the sense of hearing, as a striking of the air perceived by a listener. However, at the beginning of the eighteenth century, the academician Joseph Sauveur coined the term 'acoustics' to address sound specifically:

150 'The clearest and most evident'. Jacques Ozanam, *Dictionnaire mathématique ou idée générale des mathématiques* (Paris: 1691), Preface.

151 Gozza (ed.), *Number to Sound*, p.12

152 See e.g. René Descartes, *Traité de la méchanique. Abrégé de musique* (Paris: 1668). Claude- François Menestrier, *Des représentations en musique anciennes et modernes* (Paris: 1681), p.117; Guillaume Gabriel Nivers, *Traité de la composition de musique* (Paris: 1667), p.8; Charles Masson, *Traité des règles pour la composition de la musique* (Paris: 1667); Sébastien de Brossard, *Dictionnaire de musique, contenant une explication des termes grecs, latins, italiens et françois les plus usitez dans la musique* (Paris: 1703), articles 'Musica' and 'Suono', n.p.; Rameau, *Traité de l'harmonie*, p.1.

153 'Music is a Science, which studies and explains the properties of Sounds, insofar as they are capable of creating a Melody, or a Harmony. (…) Sound, or Voice, is a shock running through the air, which touches the sense of Hearing (…) Sound is the object of Music, insofar as one Sound is compared with another. For a Sound alone cannot be the object of Music, which envisages the difference between Sounds, and their proportions. (…) Harmony is an agreeable convenience of two or more sounds, which are heard at the same time'. Ozanam, *Dictionnaire*, pp.640-641.

> J'ai donc crû qu'il avoit une science supérieure à la Musique, que j'ai appelée Acoustique, qui a pour objet le Son en général, au lieu que la Musique a pour objet le Son en tant qu'il est agréable à l'ouïe.[154]

Sauveur read a series of memoirs to the Académie between 1700 and 1713. He devised a 'système de musique' which relied heavily on the idea of sound as a physical phenomenon. He also designed a new musical 'system' which established new intervals within the range of an octave, as explored on vibrating strings. In this sense, Sauveur's work has been considered the basis for the further study of harmony, applying the Pythagorean proportions to the problem of harmonics arising from one vibrating string.[155] Despite advocating for the 'superior science' of acoustics, Sauveur remained closely tied to musical concepts and purposes. While he made significant contributions to the science of acoustics, Sauveur clearly specified that the results of his research be intended for application to the practice of music. Therefore, accompanying his proposal was a new system of musical notation which facilitated practical performance.

Sauveur's 'acoustics' resembled, for Fontenelle, the new optics: 'Il a trouvé cette Science plus vaste, à mesure qu'il y faisoit plus de progrès, il a cru qu'elle méritoit, aussi-bien que l'Optique, un nom particulier, & l'a appelée Acoustique. C'est au nombre & à l'importance des nouvelles découvertes à justifier ce nouveau nom'.[156] Fontenelle claimed that, despite facing many problems due to the lack of research on music and appropriate instruments, 'M. Sauveur a fait pour les Sons une espéce de langue philosophique' as well as having simplified the practice of music.[157] One year after commenting on Sauveur's 'acoustics', Fontenelle highlighted the practical aspects of Sauveur's new 'system': 'ici il embrasse une plus grande étendue, & propose un Systême de Musique tout nouveau, avec de nouveaux caractéres, & de nouvelles Régles, qui changeroient entiérement la pratique ordinaire des Musiciens'.[158] Therefore, Sauveur's discoveries were tied to the simplification of musical practice: 'Il reste

[154] 'I therefore came to believe that there was a science superior to Music, which I called Acoustics, whose object is Sound in general, whereas Music's object is Sound only insofar as it is agreeable to the ear'. Joseph Sauveur, 'Principes d'acoustique et de musique, ou système général des intervalles des sons', *Mémoires de l'Académie royale des sciences* (Paris: 1701), p.299.

[155] Cohen, *Music in the French Royal Academy*, p.27.

[156] 'The more progress he made, the more expansive he found this Science to be, and thought it deserved, as well as Optics, its own name, and called it Acoustics. It now belongs to the number and importance of new discoveries to justify this new name'. Bernard Le Bovier de Fontenelle, 'Sur la détermination d'un son fixe', *Histoire de l'Académie royale des sciences 1700*, 2nd edn. (Paris: 1761), p.134.

[157] 'M. Sauveur has created for Sounds a sort of philosophical language'. Fontenelle, *Histoire 1700*, p.139.

[158] 'Here he embraces a larger field, and offers a whole new System of Music, with new characters and new Rules, which were to change the ordinary practice of Musicians entirely'. Fontenelle, *Histoire 1701* (Paris: 1704), p.121.

que les Musiciens puissent se resoudre [*sic*] à une pratique beaucoup plus aisée; ce n'est pas une petite difficulté'.[159]

In sum, scientific inquiries into music in the first decades of the eighteenth century intertwined the study of mathematical proportions, the physics of sound, and the physiology of hearing, with an emphasis on the simplification of musical practice. Sauveur dominated musical research in the Académie until Rameau.[160] Sauveur demonstrated for his readers both inside and outside the Académie that a science of sound was possible, and that a scientific approach to music could both facilitate musical practice and serve to explain the effects of music on the listener. Indeed, Sauveur viewed music as forming a comprehensive system, the end product of which was performance and the listener's enjoyment. Therefore, Sauveur embarked on a new study of sound which, nevertheless, was inextricably linked to notions of taste. There was an indisputable relationship between the nature of sound, musical intervals, and the pleasure they could create in the listener.

1.1 Reason and Pleasure

The developments of scientific studies on music and sound were parallelled by calls for cautiousness over using scientific language in excess. The goal and most relevant feature of music, writers had to be reminded, was the pleasure it created. Nevertheless, pleasure was at one and the same time the original motivation for scientific endeavour and its ultimate limit. Fontenelle complained that mathematical studies of music tended to overshadow the main question of interest, that was, why music pleased. He claimed in 1701:

> C'est une chose qui peut paroître étonnante, que de voir toute la Musique réduite en Tables de Nombres, & en Logarithmes, comme les Sinus ou les Tangentes & Secantes d'un Cercle. Quel rapport de ces sons qui ne cherchent qu'à flatter l'oreille, avec ces Nombres qui ne sont que le triste fruit d'une longue & épineuse recherche de Mathematique? Pour découvrir ce rapport, il faut établir pourquoi certaines choses plaisent ou déplaisent à l'Ame, & remonter jusqu'à la Métaphysique des Agrémens[161]

[159] 'There remains the necessity for Musicians to resolve to a much easier practice; this is by no means a small difficulty'. Fontenelle, *Histoire 1701* (Paris: 1704), p.137.

[160] Cohen, *Music in the French Royal Academy*, p.27.

[161] 'It may seem surprising to see the whole of Music reduced to Tables of Numbers, and to Logarithms, as the Sinuses, or Tangents and Secants, of a Circle. What is the link between these sounds that seek only to please the

What was the relation between mathematics and pleasure? How could the 'sad fruits of a long and thorny study into mathematics' explain what the ear perceived and pleased immediately, and perhaps, instinctively? Scholarship has documented that mathematics, and specifically geometry, was largely seen as the basis for beauty in this period.[162] Authors who published treatises on the 'beautiful' (*beau*), such as Jean-Pierre Crouzat in 1715 and Yves de l'Isle André in 1741, claimed that geometrical notions such as unity, proportion, rapport, and symmetry were the main components of beauty.[163] Therefore, beauty was intextricably linked to the geometrical organisation of the world. Furthermore, geometry was in itself beautiful and both a model and a cause of pleasure. Consequently, the close links between geometry and beauty formed the basis of research on various fields, including collecting, astronomy, cuisine, architecture, botany, and, most certainly, music.

Given that the the 'beautiful' and pleasurable in music relied upon the principles of geometry and mathematical proportions, music was necessarily linked to reason. At the beginning of the century, Fontenelle suggested that the goal of mathematics, and ultimately of the whole science of music, was to reveal the 'natural' causes of musical pleasure and the judgements of the 'ear'.[164] The problem of reconciling rational knowledge and pleasure was posed often in musical writings throughout the century, and was not exclusive to music.[165]

Yet reconciling rational knowledge and pleasure was less problematic for contemporaries than the technical language and expertise which often accompanied these scientific approaches to music. The interplay between knowledge, pleasure, and aesthetics in Enlightenment sciences implied a reaction against pedantry and the 'obscurity' of scientific language. Although scientific knowledge was deemed crucial to understanding musical pleasure, there was a wide reaction against the 'excess' of erudition. As previously mentioned, Fontenelle condemned those 'thorny researches' carried out in music that dismissed the subject of musical pleasure; later, in 1711, he used the same terms to criticise the musical research of

ear, and these Numbers, which are but the sad fruit of a long and thorny Mathematical research? In order to discover this link, one must establish why some things please or displease the Soul, and go back to its origins in the Metaphysics of Agreements'. Fontenelle, *Histoire 1701* (Paris: 1704), pp.121-2.

162 See e.g. Spary, 'Scientific Symmetries'; Frängsmyr et al., *The Quantifying Spirit*.

163 Jean-Pierre Crouzat, *Traité du beau* (Paris: 1715)"; Yves de l'Isle André, *Essai sur la Beau, ou l'on examine en quoi consiste précicement le beau dans le physique, dans le moral, dans les ouvrages d'esprit, et dans la musique* (Paris: 1741). See Charles William Dill, 'French Theories on Beauty and the Aesthetics of Music, 1700 to 1750', unpublished Master Thesis, North Texas State University (1982). Online at https://digital.library.unt.edu/ark%3A/67531/metadc504357/.

164 Fontenelle, *Histoire 1701* (Paris: 1704), p.143.

165 Sutton, *Science for a Polite Society*.

Louis Carré, who read memoirs on the 'principles' of music and sound in the Académie and was charged with surveying all musical instruments in France.[166] Almost contemporary to this critique, the reception of Jean-Pierre Crousaz's *Traité du beau* revealed both the appeal and the limits that science had to musical reasearch. Music had a prominent place in Crousaz's work, occupying a section of 131 words from the total length of 302 words.[167] Crousaz justified this length by arguing that the understanding of music's beauty necessarily required an explication of mathematics and the physics of sound.[168] The second edition of the work in 1724, however, omitted the section on music. Crousaz explained that the section on music had not been approved by the public; 'a subject that appeared to them so obscure and fatiguing, this entire chapter was withdrawn'.[169] Whereas Charles Dill has found in this rejection a sign that music was at odds with rationalism, I insist on placing this reaction within the context of a broader rejection of technical language, erudition, and pedantry in this period. Reason and science were not excluded from music, 'obscurity' was. Moreover, this negative reception to Crousaz's technical explanation of music was a reminder that music ought to be a tasteful science, written for a tasteful reader. The fact that music pleased and was a pastime in polite culture thus had to be highlighted in any scientific inquiry into music.

Later, Jean-Philippe Rameau, whose writings encapsulated what was expected from a science of music (as I shall discuss below), insisted that taste and mathematics be married for the purpose of 'eriger la Musique en Science'.[170] Rameau referred to Lully, who was considered the epitome of 'good taste' and the pinnacle of French music but did not engage in mathematics, 'Lulli n'étoit point Mathematicien; je ne nie point les faits'.[171] Instead, Rameau advocated for music as a 'mathematical science' which, in line with the *esprit géométrique*, could disclose, quantify, and explain how and why music could please. Lamenting the lack of scientific development concerning music, Rameau claimed:

166 Fontenelle, 'Éloge de M. Carré', *Histoire de l'Académie royale des sciences* (Paris: 1711), pp. 102-107. Some of Carré's memoirs are 'Nombre et noms des instruments de musique' (Paris: 1702) and 'Observation sur ce qui produit le son' (Paris: 1704).

167 Charles William Dill, 'Music, Beauty, and the Paradox of Rationalism', in *French Musical Thought, 1600-1800*, ed. Georgia Cowart (University Rochester Press, 1989), p.204; Dill, *Monstrous Opera*, p.36.

168 Jean-Pierre Crousaz, 'Avertissement' to *Traité du beau* (Paris: 1715).

169 Dill, 'Music, Beauty, and the Paradox of Rationalism', p.205.

170 'To raise music as a science'. Jean-Philippe Rameau, 'Traité de l'harmonie réduite à ses principes naturels' in *Mémoires pour l'histoire des sciences* (*Journal de Trévoux*) (Paris: 1722), p.1715.

171 'Lulli was not a Mathematician; I do not deny the facts'. 'Traité de l'harmonie', in *Journal de Trévoux* (1722), p.1714.

> C'est tout au plus l'Art de la Musique qui s'est ainsi perfectionné, & la science en est toûjours fort imparfaite: n'est-ce point parce que les objets de nos plus vifs sentimens deviennent d'autant plus difficilement le sujet de nos reflexions?
>
> Peut-être doutera-t-on qu'il y ait une Science de la Musique: Ce seroit douter qu'il y en ait un Art: Tout Art suppose des principes; le vrai & le beau ne sçauroient dépendre du hazard, & ce n'est pas chez le vulgaire que les agrémens doivent passer pour un je ne sçai quoi qu'on ne sçauroit définir: dans la Musique en particulier tout est compté, pesé, mesuré avec une précision invariable; telle corde, tel tuyau a de tout tems rendu tel son; de tout tems la quinte a été une consonance; & tout dérangement d'organe, tout goût de caprice mis à part, Pythagore & Platon n'ont senti & gouté dans ce genre que ce que nous sentons & ce que nous goûtons tous les jours; enfin pour tout dire, en un mot, la Musique est incontestablement une Science toute Mathematique.[172]

For Rameau in this formulation, everything in music was mathematical, even our tastes. Rameau paired 'le vrai et le beau', which, following Boileau's seventeenth-century precept 'rien n'est beau que le vrai', was commonplace in Rameau's time and served as a justification of music as both science and art.[173] Although Rameau distinguished between 'art' and 'science', he believed that the latter should prevail over the former. Music as an 'art' combined feeling and pleasure with musical practice, yet it should not evade definition and quantification. Therefore, Rameau's 'Science toute Mathématique' was not opposed to taste and beauty but their explanation and justification.[174]

172 'At best it is the Art of Music that was thus perfected, when the science of music is still most imperfect: might that not be because the objects that give us the keenest sentiments are also the ones that are the most difficult for us to turn into the subject of our inquiries?
One will perhaps doubt that a Science of Music exists: It would be doubting the existence of an Art of Music: Any Art implies principles; truth and beauty cannot be expected to depend upon chance, and it's not as among the layman that the pleasures [agréments: also, 'agreements'] have to be taken as an indefinable "je-ne-sais-quoi"; in Music in particular, everything is counted, weighed, and measured with an invariable precision; such string and such pipe have always rendered such sounds; a fifth has always been a consonance; and putting aside any disturbance in organs, any capricious taste, Pythagoras and Plato have not felt and enjoyed anything other in these matters than what we enjoy every day; and well, in a word, Music is indisputably an entirely Mathematical Science'. 'Traité de l'harmonie', *Journal de Trévoux*, pp.1713-1714.

173 See Hazard, *La crise de la conscience européenne*.

174 Rameau, 'Preface' to *Traité de l'harmonie*.

Two years later, the mathematician Maupertuis followed the same line of argumentation in his first presentation to the Académie. Rather than distinguishing between 'art' and 'science', Maupertuis stressed that music was divided in two 'parts': knowledge and agreeableness.[175] Although much attention had been paid to the latter, he declared that the former remained understudied. For Maupertuis, the reason why music remained under-researched was because it had usually been considered a matter of 'gens d'imagination et de sentiment' which, however, lacked 'l'esprit de recherche, et d'exactitude'. However, Maupertuis claimed that nothing could evade this spirit, and that even the agreeableness of music was subject to fixed laws: 'Cependant comme rien ne se fait sans raison, que l'agrement même en sujet à certaines Loix qui tous inconnuës qu'elle sont, n'en sont pas moins des Loix'.[176]

Both Maupertuis and Rameau's assumptions, made in 1722 and 1724, aligned with Fontenelle's desire to bring science to bear on polite culture and to appeal to a wider public.[177] Mathematical studies on music had to be instrumental to understanding and shaping musical taste and to address a wider public of amateurs and men of letters who were not necessarily versed in mathematical language. Accordingly, musical presentations often followed the style of presentation of curiosities, which stimulated scientific interest, aesthetic pleasure, and amusement at once. The richly illustrated treatise on seashells, published by Filippo Bonanni in 1681, whose title announced a 'recreation' for both the 'eye' and the 'mind,' epitomised the combined pursuit of knowledge and amusement in this period's treatises which were destined for audiences of tasteful collectors.[178] Later, Bonanni published a richly illustrated compendium of musical instruments that followed the same logic: musical instruments, he claimed, pleased both the 'ear' and the 'mind', which enjoyed learning about harmonic proportions.[179]

It is no wonder, then, that the mathematician Jacques Ozanam included music in his book of scientific curiosities. Ozanam's *Recreations Mathematiques et Physiques* exemplifies

175 Maupertuis, 'Sur la forme des instrumens de musique', *Mémoires de l'Académie royale des sciences* (Paris: 1724), 215-226.

176 'However, as nothing is done without reason, even pleasure is subjected to certain laws, which, as unknown as they are, are nonetheless laws'. Maupertuis, 'Sur la forme des instrumens', p.216.

177 Sutton, *Science for a Polite Society*.

178 Filippo Bonanni, *Ricreatione dell'occhio e della mente, nell' osservation' delle chiocciole, proposta a' curiosi delle opere della natura* (Rome: per il Varase, 1681). See Paula Findlen, *Possessing Nature: Museums, Collecting, and Scientific Culture in Early Modern Italy* (Berkeley: University of California Press, 1994), pp. 34, 56.

179 Filippo Bonanni, *Gabinetto armonico pieno d'istromenti sonori* (Rome: Nella stamperia di G. Placho, 1722).

the coupling of science with amusement in the late seventeenth century. Furthermore, its successful reception in the eighteenth century, as expressed in several editions that followed, shows that music was increasingly incorporated within a broad notion of scientific amusement. In its first edition in 1694, musical themes appeared within the 'problemes de physique'. However, in the edition of 1725, music was brought forward and foregrounded: music was mentioned in the very title of the work and had its own and prominent section, showing not only that music had gained a central place within the body of scientific fields of study, but also that the study of music had indeed advanced greatly since the first edition of Ozanam's treatise.[180] The section on music was far more technical than the previous 'problèmes de physique'; it described musical 'harmony' and explained Sauveur's system in detail, but doing so in an accessible language. This accessibility and emphasis on amusement and curiosity—precisely what Crousaz lacked in his own section on music—made Ozanam's work widely successful.

Ozanam explicitly claimed that the aim of his *Récréations mathématiques et physiques* was to provide general training in polite conversation.[181] According to Albert Cohen, Ozanam became well acquainted with this polite audience during his successful teaching career.[182] The position of music as a central subject for scientific inquiry was closely tied to music's place as a consistent topic in polite conversation. Moreover, by the eighteenth century, appreciating music became inextricably linked to Enlightened ideas of scientific knowledge. In order to engage in polite conversation, learning the latest scientific advancements in music and sound was paramount. Additionally, the works of Bonanni and Ozanam, which appealed to tasteful collectors and readers, show that music was increasingly commodified as an entertaining and sociable science. As a result, the science of music reached an audience far beyond the confines of the academies.

In conclusion, like other sciences in the early eighteenth century, music was considered a science inasmuch as it combined the study of mathematics and physics with notions of taste, pleasure, morality, and beauty. Moreover, it was an enjoyable science at a time when science was embedded in polite sociability, spectacles and public demonstrations.[183] In his 'physical

[180] Jacques Ozanam, *Récréations mathématiques et physiques, qui contiennent plusieurs problèmes d'arithmétique, de géométrie, de musique, d'optique, de gnomonique, de cosmographie, de mécanique, de pyrotechnie et de physique. Avec un traité des horloges élémentaires* (Paris: 1725).
[181] Ozanam, 'Preface', *Récréations mathématiques et physiques*.
[182] Cohen, *Music in the French Royal Academy*, p.49.
[183] Sutton, *Science for a Polite Society*. See also Bensaude-Vincent and Blondel (eds.), *Science and Spectacle*.

exercises', Ozanam described a series of musical and sonic facts that were objects of wonder, including echo, sound propagation, and sympathetic resonance. Wonder, pleasure, and entertainment did not stand in opposition to the scrutiny of reason. Through music, hidden mathematical laws and physical phenomena not only became evident—or audible—but, what is more, they became enjoyable. The pleasure of music was undeniable; at the same time, it revealed truth about nature and the universe.

2. Harmony and natural order

Efforts for scientific understanding and the systematisation of music during the first decades of the eighteenth century crystallised in the system of harmony postulated by Jean-Philippe Rameau. An organist and composer from Dijon, Rameau was almost unknown in Paris when he published his *Traité de l'harmonie réduite à ses principes naturels* in 1722 at the age of forty. Thereafter, and for the next forty years, Rameau embarked on a prolific career as a writer of music treatises. In total, he published around 12 treatises on music, in addition to shorter letters and responses to his interlocutors. As a composer, performer, and conductor, he worked under the patronage of the *fermier général* Alexandre Le Riche de La Poupelinière, and became the most distinguished opera composer in France.[184] The impact of his theoretical work, therefore, grew in tandem with his social persona, as I will discuss below. Of greatest relevance here is that Rameau's theory of harmony offered a successful model for the pairing of pleasure and reason, as tested by academicians in the first decades of the century. Rameau elaborated a system which synthethised the mathematical, experimental, and physiological approaches to the study of music and sound. Thus understood, Rameau's system of harmony perfectly suited the *esprit géométrique*, while integrating mathematics with empirical evidence.[185] Moreover, 'harmony' entailed a close connection of music with the natural order, which followed cosmological and celestial notions of music previously represented as *musica mundana*. Therefore, amongst his readers and commenters, Rameau's theories enshrined three premises that were embedded in the notion of music as a science: the coupling of reason and pleasure, the incorporation of both mathematics and physics, and the persistence of a broad understanding of music as revealing the natural order.

[184] For Rameau, see Girdlestone, *Jean-Philippe Rameau*; Verba, *Dramatic Expression in Rameau*; Dill, *Monstrous Opera*; Dous, *Rameau: un musicien philosophe*.
[185] Charrak, *Raison et perception*.

Rameau's theory of harmony was formulated for the first time in 1722, although it was successively revised in accordance with other contemporary theories, his interlocutor's responses, and the changing sensibilities of his times. Like Sauveur before him, Rameau's scientific enterprise was aimed at finding a single principle for music.[186] His system of harmony assigned arithmetic values to musical intervals and systematised intervals into chords, all of which were sequenced in accordance with the law of the 'fundamental bass'.[187] The fundamental bass, Rameau's most celebrated 'discovery', established that the lowest note of a chord determined the nature of the chord and its succession.[188] In this way, the whole system of harmony—the succession of chords—was grounded in the single principle of the fundamental bass. Additionally, Rameau systematised the treatment of dissonances, claiming that they were a desirable element in musical composition. In unifying the criteria that defined both consonances and dissonances, Rameau's 'system' limited the range of sounds that were acceptable in music; it distinguished sounds from noise, and pleasant from unpleasant music. In this way, harmony became a model of disciplined sound.

Rameau's arithmetic proportions of intervals—the systematisation of the physical phenomenon of harmonics—relied on the experience of the 'corps sonore' or resounding body, especially from the publication of his *Génération harmonique* in 1737 onwards.[189] André Charrak has pointed out that Rameau's emphasis on resonance was crucial to foregrounding music as both a mathematical and physical phenomenon; resonance provided the fundamental physical evidence for music's mathematical proportions.[190] Based on the empirical evidence of resonance, harmony was considered the most natural and basic system in music. The journal *L'Année litteraire* commented in line with this: 'M. Rameau nous apprend ensuite que l'harmonie est la base unique de la musique, et le principe de ses plus grands effets'.[191]

The phenomenon of harmonics, deduced from resonance, could be emprically proven by the experience of an attentive listener. In this way, harmony brought together mathematics

186 Christensen, *Rameau and Musical Thought.*

187 Charrak, *Raison et perception*, p.23.

188 Christensen describes Rameau's theory of the 'fundamental bass': 'Rameau argued that all music is foundationally harmonic in structure. Every harmony (or chord) is generated from a single fundamental (or what we call today a chord "root") in some consistent way. In the *Traité*, this way was monochord (string) divisions, while in later writings it was the acoustical phenomenon of harmonic upper partials generated by many vibrating systems (the *corps sonore*)', Christensen, *Rameau and Musical Thought*, p.5.

189 Jean-Philippe Rameau, *Génération harmonique, ou Traité de musique théorique et pratique* (Paris: 1737).

190 Charrak, *Raison et perception*, p.8.

191 'M. Rameau then informs us that harmony is the sole basis of music, and the principle of music's greatest effects'. 'Lettre XV. Observations sur nôtre instinct pour la musique', *L'Année litteraire* (Paris: 1754). pp.341-2.

and physics with physiological approaches to the sense of hearing. Indeed, in his efforts to construct a scientific music theory, Rameau engaged with the scientific trends of this period. Thomas Christensen has identified as 'influences' on Rameau's consecutive writings: Cartesianism, Mersenne's neo-Platonism, materialist mechanism, experimental physics, Newton's theory of gravity, Locke's sensationalist epistemology, and 'Pantheistic and occasionalist doctrines'.[192] André Charrak summarised Rameau's influences as being a Cartesian inheritance received under the influence of empiricist doctrines.[193] As Abigail Shupe has recently argued, Rameau was influenced by the dissemination of Newton's ideas in France in the 1730s, which, however, became less prominent in his later publications.[194] The trajectory of Rameau's works indeed show that his initial theory of harmony was heavily grounded in mathematical and geometrical models, whereas later it privileged physical and mechanical responses of the body. Moreover, in his final writings, he further stressed the relationship between harmony and the natural order, and established harmony as a common principle for all sciences.[195]

It was this inextricable link with the natural order, in fact, that made Rameau's theories successful for the wider public of learned men and women. Many of Rameau's readers understood 'harmony' in a broad sense as referring to natural order, as I shall demonstrate below. Furthermore, the central principles proposed by Rameau—such as the fundamental bass, the treatment of consonances and dissonances, minor and major thirds—were declared to be laws of taste and beauty. Since the Renaissance, the mathematical proportions of musical intervals had become models of beauty for architecture and an aesthetics that privileged balance and symmetry.[196] Later, many readers and commentators of Rameau interpreted the 'natural' system of harmony as the aesthetic ideal in other fields of knowledge, as well as applying Rameau's 'discoveries' to sensory experiences other than hearing. For instance, after reading Rameau, the Jesuit priest Louis-Bertrand Castel extended the comparison between sound and optics, as discussed by earlier academicians, proposing a new system of harmony of

192 Christensen, *Rameau and Musical Thought.*

193 Charrak, *Raison et perception,* p.16.

194 Shupe, 'Aspects of Newtonianism in Rameau'.

195 Jean-Philippe Rameau, *Nouvelles réflexions sur le principe sonore* (Paris: 1758–9) and *Origine des sciences, suivie d'un controverse sur le même sujet* (Paris: 1762).

196 For architecture, see e.g. Claude Perrault's translation of Vitruvius: *Les dix livres d'architecture de Vitruve. Corrigez et traduitz nouvellement en françois avec des notes et des figures (Paris: Jean Baptiste Coignard, 1673*. Also René Ouvrand, *Architecture harmonique* (Paris: 1679); François Blondel, *Cours d'architecture* (Paris: 1675-1783).

colours which followed Rameau's theory of harmony. Castel invented an 'ocular harpsichord' in 1725, which consisted of seven colours corresponding to the seven musical tones and organised in accordance with harmonic proportions. Blue was the 'fundamental' colour, corresponding to music's 'fundamental bass'. Castel claimed that the effect was aimed to be as pleasant for the eyes as musical harmony was for the ears.[197] Similarly, musical harmony became a model for taste and cuisine. Polycarpe Poncelet proposed the use of musical harmony as a model for the production of liqueurs. He described seven 'primitive' flavours in concordance with the seven musical tones, and defined their mixtures as consonant or dissonant. Additionally, the delicate ears of musicians were collated with the delicate palate in Étienne Lauréault De Foncemagne's proposal for a 'harmony of flavours'.[198] Musical harmony, grounded in the experience of the listener's ear, had penetrated physiological discourses of taste.

For such authors, harmony represented the ideal of natural proportion that all arts and sciences should follow. Harmony elevated the status of music to a science, but also positioned itself as a common principle for other sciences, according to Rameau. The *Journal de Trévoux* praised harmony as the primary source of beauty and common principle among the arts and sciences: 'Convenons aussi que le grand Maître qui nous dévoile le vrai principe de l'harmonie, nous met en même tems à la source de tous les Arts; qu'il nous découvre même, dans les Sciences, tout ce qui peut en faire le prix & l'agrément'.[199] Thus, Rameau's system of harmony not only coupled reason and pleasure, but also provided a system which suited other forms of reasoning.

The notion of musical harmony was appropriated in a broader sense as cosmological order, following the worldview of harmony hitherto encapsulated by *musica mundana*, or harmony of the spheres. Throughout the century, musical harmony was understood to reveal the laws of nature. Harmony was a cohesive force that unified different elements of the natural world, just as a musical piece did with different instruments or sounds. The notion of harmony

[197] Louis Bertrand Castel, 'Clavecin pour les yeux, avec l'art de peindre les sons et toutes sortes de pièces de musique. Lettre écrite de Paris le 20 Février 1725', *Mercure de France*, November 1725, pp. 2552-2577 and 'Nouvelles expériences d'optique et d'acoustique', *Journal de Trévoux*, August-September 1735. See Thomas L. Hankins, Robert J. Silverman (eds.), *Instruments and the Imagination* (Princeton: Princeton University Press, 1995), 72-85.

[198] See Spary, *Eating the Enlightenment.*

[199] 'Let us also agree that the great Master who reveals to us the true principle of harmony, at the same time takes us to the source of all the Arts; that he even uncovers for us, in the Sciences, all that constitutes their value and pleasure'. 'Rameau. Nouvelles réflexions sur sa démonstration du principe de l'harmonie', *Journal de Trévoux*, August 1752, p.1870.

as natural order, justified on the basis of the mathematics of musical proportions, expanded from the 'spheres' of the universe to all elements of the natural world. Rameau published *Le Nouveau système de musique théorique* in 1726, further developing the priniciples he proposed four years earlier in his *Traité*, and insisting in the physical grounds of his theory of chords.[200] One year later, the new edition of the *Dictionnaire universel* of Antoine Furetière associated the 'beauty' of the world with the succession of chords in its article 'Musique':

> On prend aussi ce terme en general pour tout ce qui fait harmonie, c'est-à-dire, pour l'ordre, le bel arrangement, la bonne disposition, en un mot l'accord du tout avec ses parties, ou des parties entr'elles. C'est en ce sens que ceux qui veulent que tout soit musique dans l'Univers, nous disent qu'il y a une musique divine, angelique, mondaine, humaine, élementaire, &c. On doit considerer tout ce qui fait dans le monde, pendant toute la suite des âges, & la vicissitude continuelle de ce qui se détruit & se produit dans l'univers, comme une excellente piece de Musique, dont la beauté consiste dans les accords qui se succedent les uns aux autres[201]

As this article reflects, Rameau's language of harmony and chords was widely appropriated even by authors who did not refer to music at all. While Rameau's system epitomised the 'scientisation' of music—combining mathematics, the physics of sound, and hearing—its reception associate it to the broad notion of music enshrined in *musica mundana,* in which music was both natural and celestial order, and had a powerful influence upon the body. By means of this broad understanding of harmony, Rameau contributed to elevating the 'science of music' to a fashionable subject of speculation, conversation, research, writing, invention, consumption, practice, and debate in the new public sphere.

[200] Jean-Philippe Rameau, *Le Nouveau système de musique théorique* (Paris: 1726).

[201] 'The term (music) is also used in general for anything that makes harmony, that is to say, for order, fine arrangement, right composition, in a word the agreement of the whole with its parts, and between the parts themselves. It is in that sense that those who maintain that everything in the Universe is music tell us that there is a divine music, an angelic music, a cosmic music, a human music, a music of elements, &c. One must consider everything in the world, in the whole sequence of ages, and the continuous vicissitude of what is destroyed and created in the universe, as an excellent piece of Music, whose beauty consists in the chords that follow one another'. Antoine Furetière, 'Musique', *Dictionnaire universel. Nouvelle édition revue et augmentée par Henri Basnage de Beauval & Jean-Baptiste Brutel de La Rivière*, vol. 3 (The Hague: 1727).

3. The Newton of Music

Rameau and his formulations of musical harmony had a great impact on eighteenth-century Parisian society. After the publication of Rameau's first theoretical work in 1722, his theory of harmony precipitated the publication of several writings on the subject, ranging from pamphlets to mathematical demonstrations, particularly around the middle of the century. Rameau's publications sparked discussion over musical theory on an unprecedented scale. His proposals were discussed widely by a new community of interlocutors, who expressed themselves through a variety of activities: commenting, researching, inventing, learning and teaching music in the public sphere. Elevated to the status of a tasteful science, music became far more appealing than before to a broader public which, even if not members of the academies or recognised *philosophes*, was aspiring to attain the status of men of letters.[202]

Within this increasing community of interlocutors, Rameau became a 'celebrity'. As discussed by Antoine Lilti, a 'celebrity' was a public figure that emerged in eighteenth-century France in relation to a growing public of readers and commenters in the public sphere.[203] Rameau was deemed a celebrity because his theories were widely disseminated—successfully adopted by some, made the object of heated debates by others—and because of the success of his compositions. Moreover, Rameau became closely attached to the court: in 1745, he was commissioned to compose two pieces for the wedding of the Dauphin, was granted a royal pension, and was named 'Compositeur du Cabinet du Roi'.[204] Therefore, talking and writing about Rameau became commonplace in the Parisian press. In 1754, the journal *L'Année litteraire* justified the great popularity of Rameau's publication *Observations sur notre instinct pour la musique* by virtue of the fact that the author was a celebrity (*celebrité*).[205] The *Querelle des Bouffons* had exploded two years earlier, placing music at the forefront of public debate. This controversy, triggered by the performance of an Italian troupe in Paris, was in the hands of Jean-Jacques Rousseau articulated against Rameau's 'harmony', as I will discuss below. Both through the writings of partisans and detractors, however, the public *querelles* evinced the visibility of Rameau in the public sphere.

202 See Darnton, 'The High Enlightenment', n. 51.
203 Lilti, *Figures publiques*.
204 Girdlestone, *Jean-Philippe Rameau*, p.483.
205 Rameau, 'Observations sur notre instinct pour la musique et sur son principe', *L'Année litteraire* III (Paris: 1754), pp.340-348.

Furthermore, because of his system of harmony, Rameau was often called the 'Newton of music'. Rameau was compared to Newton for a variety of reasons. Rameau had established fixed and immutable principles for music, as well as provided a method that favoured the increasing fashion for musical composition, teaching, and performance.[206] In both method and structure, his work was frequently compared to Newton's systematisation of celestial mechanics and optics. Like Newton, Rameau had 'found' a single principle that governed the whole practice and understanding of music. This 'reduction' to a single principle was celebrated by a variety of people throughout the century as an example of the *esprit systématique*.[207]

Additionally, his theory played a part in the increasing appropriation of Newtonianism in France. According to J. B. Shank, the image of Newton as founder of the 'true physics of nature' was used to celebrate achievements in other fields of knowledge.[208] Newtonianism exemplified the wider acceptance of scientific methods in all areas: 'There were Newtonian poems galore, Newtonian theories of government, corpuscularian models of society, of political economy, of the mind and the passions, all disseminated by magazines and spread through provincial assemblies from Newcastle to Naples'.[209] Consequently, the association of Rameau with Newton solidified the status of music as a science in the Enlightenment, endowed with a scientific method based on nature. Yet, simultaneously, the association with Newton connected Rameau with cosmologers, which had traditionally made 'universal harmony' one of their main objects of scientific study.[210]

Furthermore, the cult of Newton in France helped to spread the reception of Rameau among a broader range of readers. Newton became an iconic presence in France in the 1750s, and was inextricably linked to narratives of the Enlightenment and the advancement of French national progress.[211] Therefore, Rameau was associated to Newton to bolster his role as both an 'enlightener' and reformer of musical science, and the epitome of French culture. In France, his system of harmony came to represent the summit of national character, as will be discussed

206 *Journal de Trévoux 1722*, p.1724.
207 Christensen, *Rameau and Musical Thought*, pp.6-7.
208 Shank, *The Newton Wars*.
209 Porter, *The Cambridge History of Science*, p.10.
210 See e.g. Johannes Kepler, *Harmonices Mundi* (Linz: 1614); Robert Fludd, *Utriusque Cosmi. Maioris scilicet et minoris metaphysica, physica atque technica historia* (Oppenheim and Frankfort: 1617-1618); Athanasius Kircher, *Musurgia Universalis, sive ars magna consoni et dissoni* (Rome, 1650).
211 Shank, *The Newton Wars*, pp.9-11. See also: Patricia Fara, *Newton: The Making of a Genius* (New York: Picador, 2002).

in Chapter 2. Rameau enjoyed the support of different sectors of society, both associated to the *parti dévot* and the *parti philosophique*. Rameau's early writings were enthusiastically promoted in the *Journal de Trévoux*, championed above all by Jesuit authors. Yet Rameau was also appointed as figurehead of Newtonianism by the *philosophes,* most notably in the *Encyclopédie.* Indeed, the leading *philosophes* took Rameau's theories as an example of how Newtonianism could transform knowledge. D'Alembert commented in his 'Discours préliminaire' to the *Encyclopédie* about Rameau: 'By this method he has reduced to more certain and simple laws a science which was formerly given over to arbitrary rules, or rules dictated by blind experiment'.[212] Moreover, combining arithmetic calculations with the physical evidence of resonance, Rameau's harmony achieved the desired merging of mathematics with physics, which for d'Alembert was also achieved by Newton, who had merged Bacon's empiricism with Descartes's mathematicing.[213] D'Alembert became the official 'translator' of Rameau.[214]

Additionally, Rameau was widely praised as the one who has finally 'dispelled the chaos' and brought clarity to music.[215] Even his main public detractors like Rousseau praised his systematising endeavour. The wide appropriation of Rameau in the public sphere drew heavily on the pedagogical aspects of his system. Many of Rameau's commentors praised his simplification of musical learning and composition through the fundamental bass. Therefore, Rameau's systematising efforts were key to the broader expansion of musical practice in the eighteenth century, as seen in the consistent and steady growth of the publication of music teaching methods, as I will demonstrate in Chapter 3. Laurent Gervais, a music teacher who published *Méthode pour l'accompagnement du clavecin* in 1733, commented: 'It was left for someone to simplify practice by reducing the large number of chords to a few that are easy and familiar from the first lessons. This is what M. Rameau did in his learned *Traité de l'harmonie with the basse fondamentale*'.[216]

Moreover, this systematisation of music favoured the increasing democratisation of the practice of music, with music education reaching a higher number of people across the social spectrum. The *Journal de Trévoux* commented on Rameau's system of harmony in 1728: 'De

[212] Quoted in Christensen, *Rameau and Musical Thought,* p.7.
[213] See Shank, *The Newton Wars,* p.17; Shupe, 'Aspects of Newtonianism in Rameau'.
[214] Françoise Escal, 'Musique et science: d'Alembert contre Rameau', *International Review of the Aesthetics and Sociology of Music,* 14:2 (1983), p. 180.
[215] Jean Benjamin de Laborde, *Essai sur la musique ancienne et moderne,* vol. 3 (Paris: 1780), pp.466-67; Christensen, *Rameau and Musical Thought,* p.7.
[216] Quoted in Christensen, *Rameau and Musical Thought,* p.6.

sorte que la composition de la Musique, qui étoit jusqu'ici un grand mystere réservé aux Maîtres de l'Art, n'est plus maintenant qu'un jeu pour toutes sortes de curieux'.[217] Later, in 1732, it claimed that 'all of Paris' learnt through Rameau's methods; 'Tout Paris voit depuis quelques années l'expérience, que plusieurs personnes ont faite de l'extrême facilité de cette méthode'.[218] Therefore, the 'science of music' was not the domain of a few erudites. Rameau's success was rooted in the 'facility' of his method, which made it accessible to a wider range of readers and practitioners. Unlike his predecessors, however, Rameau's readership had not only expanded, but was also considerably more articulated, fuelled by developments in the press and public opinion.

Consequently, the reception of Rameau in the wider public resulted to a great extent from the fact that his mathematics were left to the side. Geoffrey Sutton described an anecdote of Locke not understanding the maths in Newton's *Principia*, despite its being crucial to the circulation of Newton's model of natural philosophy.[219] Likewise, many of Rameau's readers—and the readers of his readers—embraced the system of harmony either for its broad connotations as a model for understanding natural order and aesthetic pleasure, or as a means for facilitating and disseminating musical practice. Harmony was a successful system precisely because of the connotations it carried as perpetuator of celestial order, model of beauty and taste, as well as the mathematical and physical system.

4. Which 'nature'?

Nevertheless, the systematisation of music into harmony involved a set of assumptions of what music was, how it acted, and who it was for. Even as Rameau became a celebrity and symbol of genius, he was also the target of criticism. Criticism increased in the 1750s, when musical harmony was made a public concern in the *Querelle des Bouffons*.[220] On that occassion, the most prominent and outspoken contender was Jean Jacques Rousseau, who framed his critique

[217] 'So musical composition, which was until now a great mystery reserved for a few masters of the art, is now nothing else than a game for all sorts of curious people', *Journal de Trévoux,* III (1728) pp.474-5.
[218] 'All of Paris [*the Parisian public*] has for some years witnessed the use that several people have made of the extreme easiness of this method'. 'Rameau, Dissertation sur les différentes méthodes d'accompagnement pour le clavecin ou pour l'orgue', *Journal de Trévoux,* III (1732), p.448.
[219] Sutton, *Science for a Polite Society*, p.191.
[220] See chapter 2 of this dissertation.

in terms of harmony against melody, as secondary literature has discussed.[221] Different kinds of discourse were generated around the emblematic *Querelle*. A number of Rameau's commentators undertook the task of further 'explaining', developing, or 'amending' some of Rameau's proposals. Most often, this took the shape of a technical discussion centred on one aspect of Rameau's theory. However, on many occasions, the debate was taken to a philosophical, moral, or political level. At the heart of this questioning was the relationship between mathematics and pleasure, a relationship which was increasingly viewed as problematic throughout the century. Emphasising the mathematical and physical dimensions of music no longer appealled to the general public during the second half of the century.[222] Charles Batteux complained about mathematical approaches, alluding to Castel's ocular harpsichord:

> Concluons donc que la Musique la mieux calculée dans tous ses tons, la plus géométrique dans ses accords, s'il arrivoit, qu'avec ces qualités, elle n'eût aucune signification; on ne pourrait la comparer qu'à un Prisme, qui présente le plus beau coloris, & ne fait point de tableau. Ce seroit une espèce de clavecin chromatique, qui offriroit des couleurs & des passages, pour amuser peut-être les yeux, et ennuyer sûrement l'esprit.[223]

The most vehement discussions on harmony were those based on conflicting ideas of nature. Whereas viewing the relationship between music and nature as inextricable was widely held, there were disagreements in what was understood as 'nature' and 'natural'. Rousseau argued against Rameau for a new model of nature.[224] Although Rousseau did not question the fact that music could be a science in terms of a system of knowledge, he did attack the model of nature behind Rameau's harmony: the mathematical, physical, and physiological grounds of music that tied it to the natural order. Rousseau undermined the very tenet of Rameau's theory of musical harmony that made it so generally appealing: namely that musical harmony epitomised an immanent natural order, one which was physical and geometrical. Thus, Rousseau's position

[221] See e.g. Charlton, 'New Light on the Bouffons'; Di Profio, *La révolution des Bouffons*; Michael O'Dea, *Jean-Jacques Rousseau: Music, Illusion and Desire* (Paris: Macmillan, 1995).
[222] Charrak, *Raison et perception*, p.11.
[223] 'Let us therefore conclude that if Music were to be perfectly calculated in its tones, perfectly geometrical in its chords, should it, possessing all these qualities, bear no meaning; (it) could be compared to nothing better than to a Prism, displaying the most beautiful colours, and building no picture. It would be a sort of chromatic harpsichord, which would offer colours and transitions, entertaining for the eyes perhaps, but no doubt tiresome for the mind'. Batteux, *Les Beaux Arts*, p.269.
[224] See Fubini, *Gli enciclopedisti*; O'Dea, *Jean-Jacques Rousseau.*

was closely related to the decay of the explanatory power of the *esprit géométrique* in the second half of the century, and conversely, the growing relevance of notions of sensibility.[225] Geometry in itself could no longer explain the pleasure of music; new explanatory models had to be found.

Rousseau's attack on Rameau's harmony was essential to Rousseau developing his own musical and political ideas. Rousseau claimed that the followers of Rameau's harmony had overestimated the power of the physics of sound. Therefore, Rousseau drew a clear distinction between sound and music.[226] Rousseau claimed that sound could affect the body, yet the great effects caused by music did not emanate from the physical impact of sounds. There were great effects of music beyond the 'natural beauty of sound', since although everyone could feel an agreeable sensation as a result of the *corps sonore*, the pleasure would not be as strong and delightful without the presence of melodies.[227] Indeed, for Rousseau, music acted upon listeners through moral association. Like every vivid sensation, music was perceived as a sign that triggered moral effects, so its agency could not be separated from morality:

> Tant qu'on ne voudra considérer les sons que par l'ébranlement qu'ils excitent dans nos nerfs, on n'aura point de vrais principes de la Musique & de son pouvoir sur les cœurs. Les sons dans la mélodie, n'agissent pas seulement sur nous comme sons, mais comme signes de nos affections, de nos sentimens; c'est ainsi qu'ils excitent en nous les mouvemens qu'ils expriment, & dont nous y reconnoissons l'image.[228]

It was through melody that music could bring about 'des effets moraux qui passent l'empire immédiat des sens'.[229] Melody, unlike harmony, was imitative, thus it met the required condition to become one of the *Beaux Arts*, as articulated by Batteux.[230]. Through the action of melody, music could exert its great power, such as 'affecter l'esprit de diverses images,

[225] See e.g. Gaukroger, *The Collapse of Mechanism*; Williams, *A Cultural History of Medical Vitalism*.
[226] Jean-Jacques Rousseau, 'Son', *Dictionnaire de musique* (Paris, 1768), p.620.
[227] Jean-Jacques Rousseau, *Essai sur l'origine des langues, ou il est parlé de la mélodie et de l'imitation musicale*, published posthumously in *Collection complète des oeuvres de J.J. Rousseau, citoyen de Geneve*, eds. Pierre Alexandre du Peyrou and Paul Moultou, vol. 8 (Geneva: 1781), 357-434, at pp.413-14.
[228] 'So long as one will accept to consider sounds solely through the shock that they excite in our nerves, one will not reach the true principles of Music, nor those of its influence on our hearts. Sounds, in melody, do not affect us merely as sounds, but as signs of our affections, of our feelings; that is how they excite in us the emotions that they express, and whose image we recognise in them'. Rousseau, *Essai sur l'origine des langues*, p.417.
[229] 'The moral effects that go beyond the immediate realm of the senses'. Rousseau, 'Melodie', *Dictionnaire*, p.388.
[230] Rousseau, 'Melodie', *Dictionnaire*, p.388; Batteux, *Les Beaux Arts*.

émouvoir le coeur de divers sentimens, exciter & calmer les passions'.[231] Essentially, the aim of music was to produce these effects on the listeners.

Therefore, although Rousseau endorsed the notion of music as a science, he claimed that the study of music should be orientated towards the understanding of the effects of music on the listener. In his *Dictionnaire*, he defined 'Music' as the 'Art de combiner les Sons d'une maniere agréable à l'oreille. Cet Art devient une science & mêmes très-profonde, quand on veut trouver les principes de ces combinaisons & les raisons des affections qu'elles nous causent'.[232] The fact that music should be 'agréable' was not a secondary attribute, he insisted, but an intrinsic element of music. In Rousseau's writings, the terms agreeable and pleasurable, as well as 'émouvoir', are used with different nuances in order to refer that music's broad scope was to please, to affect, to move, to touch, and trigger feelings in the listener. Whereas for Rameau the pleasure and beauty of music were guaranteed by the accomplishment of the harmonic structure and its 'natural' provenance, Rousseau reversed the explanatory order: the pursuit of agreeable music was the basis on which any structure should be built, including the structure of harmony.

Rousseau considered that modern music, following the rules of harmony and highly valuing physical experience, had drifted away from its original goal:

> Voyez comment tout nous ramene sans cesse aux effets moraux dont j'ai parle, & combien les Musiciens qui ne considèrent la puissance des sons que par l'action de l'air & l'ébranlement des fibres, sont loin de connoître en quoi réside la force de cet art. Plus ils le rapprochent des impressions purement physiques, plus ils l'éloignent de son origine, & plus ils lui ôtent aussi de sa primitive énergie. En quittant l'accent oral & s'attachant aux seules institutions harmoniques, la Musique devient plus bruyante à l'oreille, & moins douce au coeur. Elle a déjà cessé de parler, bientôt elle ne chantera plus, & alors avec tous ses accords & toute son harmonie elle ne sera plus aucun effet sur nous.[233]

[231] 'Affect the mind [*esprit*] with various images, move the heart with various sentiments, excite and pacify passions'. Rousseau, 'Melodie', *Dictionnaire*, p.388.

[232] '(Music). The art of combining Sounds in a way agreeable to the ear. This Art becomes a science, and a very profound one, when one sets out to find the principles of these combinations and the causes for the affections they provoke in us'. Rousseau, 'Musique', *Dictionnaire*, p.431.

[233] 'See how everything continually bring us back to the moral effects of which I have spoken, and how far the Musicians that only consider the power of sounds in terms of the action of the air and the shaking of the fibers are from knowing where the force of this art resides. The closer they take music to physical impressions, the further

Like certain authors before him, Rousseau often described Rameau's harmony as obscure and confusing. Rousseau claimed: 'Il est bien difficile de ne pas soupçonner que toute notre Harmonie n'est qu'une invention gothique & barbare'.[234] Instead, he proposed the elevation of melody and unison, which epitomised naturalness and clarity. This dichotomy was distinctive in the emergence of new musical taste in the period referred as *stile galante*, which emphasised melody with light accompaniment.[235] This style, which also found expression in other art forms, explicitly opposed the 'baroque' style seen as confused and overloaded, and appealled instead to notions of clarity and simplicity. Rousseau's criticism of harmony was thus consistent with his critiques of the 'baroque' style, which he defined in this way:

> Une Musique Baroque est celle dont l'Harmonie est confuse, chargée de Modulations & Dissonances, le Chant dur & peu naturel, l'Intonation difficile, le Mouvement contraint[236]

Therefore, Rousseau too held the view that music and nature were closely related but based on different principles. Whereas for Rameau nature was a physical and mathematical order, Rousseau's model of nature was closer to morality and human affections, even predating any order. This sense of nature and naturalness, historians have documented, was essential in the emergence of a new sensibility in the second half of the century, which, as I shall discuss in the next chapter, both explained and was explained through music.[237]

5. The ear's trial: tasteful and savant ears

Rousseau's criticism of harmony as an overstimation of the physics of sound went even further. He criticised the cornerstone experience by which Rameau had elaborated his theory: the 'savant ear,' which is the exclusive ability to hear harmonics from resonant bodies and to 'naturally' deduce harmony from it. Rameau's theory of harmony postulated a continuity between the physical phenomenon of resonance and musical chords, established via the

they distance it from its origin, and the more they deprive it from its primitive energy'. Rousseau, *Essai sur l'origine des langues*, p.422.

234 'It would be difficult not to suspect that all our Harmony is but a gothic and barbaric invention'. Rousseau, 'Harmonie', *Dictionnaire*, p.339.

235 See Daniel Heartz and Bruce Alan Brown, 'Galant' and 'Galanter stil', in *The Oxford Companion to Music*, ed. Alison Latham (Oxford: Oxford University Press, 2011).

236 '(Baroque) Baroque Music is a type of Music whose Harmony is muddled, laden with Modulations and Dissonances, whose Singing is harsh and artificial, whose Intonation is laboured, whose Movement is contrived'. Rousseau, 'Baroque', *Dictionnaire de musique*, p.56.

237 See Ehrard, *L'idée de la nature*; Starobinski, *Jean-Jacques Rousseau*.

experience of the listener. The ear of the listener, therefore, was responsible for 'filling the gap' between the data given by resonance—the physical harmonics—and the mathematical system of harmony.[238] One commentator of Rameau, Pierre Estève, explained the fundamental role played by the senses, 'mais l'existence de ces harmoniques est une affaire dont l'oreille, l'œil & le tact doivent être juges. C'est d'ailleurs le fondement de la proportion Arithmétique, si belle et si nécessaire dans l'art du Musicien'.[239] However, not everyone was able to hear the multiple resounding harmonics; instead, only some people were endowed with the 'oreille savante' or 'savant ear' which allowed them to perceive and grasp the subtleties of harmonics that constituted Rameau's fundamental physical evidence. Consequently, musicians and cultivated auditors were in a privileged position for practising and corroborating the science of music.

As previously mentioned, the early attempts at studying music as a science often claimed to be pursuing the clarification of the 'hidden mechanisms' of the ear. For early physiologists, the complexity of the structure of the ear embodied the complexity and 'obscurity' of music as a whole. In their descriptions of the mechanism of hearing, surgeons from Joseph-Guichard Duverney to Claude-Nicolas Le Cat admired the 'delicacy' and 'complexity' of the structure of the ear, often calling it a 'masterpiece of nature'.[240] This was accompanied by a fascination in the shape of the ear itself, evident in a wax ear model which circulated through Parisian polite circles, as documented by the Académie and contemporary journals.[241] However, the *Encylopédie* indicated that the mechanism of hearing was so well composed as it is hidden to our eyes, that no matter the new discoveries carried out by surgeons, they had only augmented the uncertainty.[242]

Therefore, the complex systematisation of music was equivalent to the elucidations of the complexities of the ear and the mechanism of hearing. The philosopher and miniaturist Jean-Adam Serre—who was also a prolific critic and writer on music—published in 1753 a treatise in which he elaborated a theory in order to 'indiquer encore les routes que l'oreille suit

238 Charrak, *Raison et Perception.*

239 'But the existence of these harmonics is a matter of which the ear, the eye and the touch must be the judge. This, incidentally, is the foundation for Arithmetic proportion, which is very beautiful and absolutely necessary to the art of the Musician'. Pierre Estève, 'Nouvelle découverte du principe de l'harmonie', *Journal de Trévoux,* VI (Paris: 1751), 1368-1384.

240 See e.g. Joseph Duverney, *Traité de l'ouïe* (Paris: 1683), pp.78-9; Claude-Nicolas Le Cat, *Traité des sens* (Rouen: 1740).

241 See e.g. report of Mastiani, 'Organe de l'ouïe', in *Histoire de l'Académie royale des sciences* (Paris: 1743), p.85.

242 'Oüie', in *L'Encyclopédie*, eds. Diderot and d'Alembert, vol. 11, p.167.

comme par instinct', and claimed that the 'suggestions' of the ear determined the principles of music and the foundations of harmony.[243] The ear, as the locus of musical 'instinct', was the touchstone of any musical inquiry. In 1752 the *Journal de Trévoux* commented that, in order to establish the principle of harmony, 'M. Rameau a cherché le principe de l'harmonie dans l'expérience; Il a consulté ce que la nature disoit à ses oreilles; il en a tiré les conséquences en Musicien Géômètre, en Praticien très-instruit des règles de sont Art, & très-attentif à s'y borner'.[244] Indeed, two years later, Rameau published his *Observations sur notre instinct pour la musique et sur son principe*, establishing 'instinct,' governed by the ear, as the touchstone of his theory.[245] 'Consulting the ear' was, for Rameau, the premise of any attempt at finding a musical system.[246]

Yet it was not one's own authority, but that of nature, which operated through our instinct. In this treatise, Rameau contested Rousseau's defense of melody and the idea of nature as primitive 'interiority'. For Rameau, the only valid authority was that of nature, which expressed itself through the ear. The ear was thus inextricably bonded with nature: 'L'oreille, en Musique, n'obéit qu'à la Nature, nous le répétons encore'.[247] For Rameau, by paying attention to nature, one could observe that the principle of musical instinct was attached to the phenomenon of the resonant body. Therefore, the naturalness of harmony was justified by the ear. This was the source of the empirical force of Rameau's claims:

> Pour donner à ces préceptes toute la force nécessaire, il m'a fallu prouver l'Instinct par son Principe, & ce Principe par le même Instinct: ils sont, l'un & l'autre, l'ouvrage de la Nature: ne l'abandonnons donc plus, cette mère des Sciences & des Arts, éxaminons-la bien, & tâchons désormais de ne plus nous lais-conduire [*sic*] que par elle[248]

[243] 'Further indicate the paths that the ear follows as though *instinctively*'. Jean-Adam Serre, *Essais sur les principes de l'harmonie, où l'on traite de la théorie de l'harmonie en général, des droits respectives de l'harmonie et de la melodie, de la basse fondamentale, et de l'origine du mode mineur* (Paris: 1753), p.2.

[244] 'M. Rameau looked for the principle of harmony in experience; He heeded what nature told his ears; he drew the consequences acting as a Mathematical Musician, as a Practitioner well read in the rules of his Art, and most careful to keep within the boundaries of these rules'. 'Rameau. Nouvelles réflexions sur sa démonstration du principe de l'harmonie', *Journal de Trévoux* X (Paris: 1752), pp.1859-60.

[245] Jean-Philippe Rameau, *Observations sur notre instinct pour la musique et sur son principe* (Paris, 1754).

[246] Rameau, *Observations*, iii-iv.

[247] 'In music, the ear obeys only to Nature, we repeat it once again'. Rameau, *Observations*, p.21.

[248] 'In order to give these instructions all the strength necessary, I have had to prove Instinct by its Principle, & this Principle by Instinct as well: both the former and the latter are the work of Nature: let us therefore no longer neglect Nature, for she is the mother of Sciences & Arts, let us examine her well, and strive henceforth to make her our only guide'. Rameau, *Observations*, xiv-xv.

Because of its privileged relationship with nature, the ear was authoritative for verifying scientific evidence of musical systems, as well as for assessing the achievements of musical compositions. The ear was not only the foundation of scientific research on music, but ultimately its goal: 'Puisqu'il s'agit de plaire à l'oreille, on doit la consulter; après cela il y a une Mathematique naturelle de goût & de génie; la raison la donne, l'usage la developpe'.[249] Consequently, through the ear, any questioning of the relationship between science and taste could be pursued and resolved. Studies by anatomists approached music as a physiological event while at the same time considering that hearing was involved in notions of morality, and taste. They sought to elucidate how and where in the organ of the ear the perception of sound had originated, and to determine why some sounds pleased and others did not, drawing a clear line between sound and noise.[250] Just as music theorists relied on the ear and physics to explain musical pleasure, anatomists and sound physicists relied on musical theory to explain the pleasure of sound. Their persistent recourse to the ear revealed that taste had become a physiological matter.[251] The ear was the arbiter of taste; it should be 'consulted' and 'followed' for everything done and said about music. The ear's authority was legitimated by instinct and nature itself, and hence it could not be questioned.

Yet, taste, as secondary literature has discussed, was not evenly distributed in society.[252] Therefore, who possessed these authoritative ears which 'naturally' grasped and judged music? When commenting Pierre Estève's response to the perception of harmonics posulated by Rameau, the *Journal de Trévoux* asked:

> Et lors même qu'on aura des sons composés, lorsqu'il sera possible de saisir les harmoniques, toute oreille se prêtera-t-elle à cette délicate expérience? Combien d'hommes, pour qui la plus belle Musique n'est que du bruit; pour qui tous les harmoniques sont perdus?[253]

At the beginning of the century, Fontenelle had established a distinction between two kinds of ear with regards to musical pleasure: those who were trained ('exercées') and those who were

[249] 'Since it is a matter of pleasing the ear, one must consult it; after that, there is a natural Mathematics of taste and genius; reason gives it, usage develops it'. 'Rameau, Traité de l'harmonie réduite à ses principes naturels', *Journal de Trévoux*, IX (Paris: 1722), p.1715.

[250] See Erlmann, *Reason and Resonance*.

[251] For the physiological nature of taste, see Spary, *Eating the Enlightenment.*

[252] Goodman, *The Republic of Letters*; Brewer and Porter (eds.), *Consumption and the World of Goods*.

[253] 'And even once we have built complex sounds, once we can perceive the harmonics, will all ears lend themselves to this delicate experience? How many men are there for whom the most beautiful piece of music is but noise, for whom all the harmonics are lost?'. Pierre Estève, 'Nouvelle découverte du principe de l'harmonie', *Journal de Trévoux* (Paris: 1751), p.1372.

not. While the latter could feel pleasure, 'delicacy' was reserved to the former. Fontenelle suggested that taste, at a higher level than pleasure, was not pure instinct, but a mixture between 'quelque chose de naturel' with education and habit.[254] The tension between training and 'innate' qualities required in the appreciation of music was key to defining musical expertise across the eighteenth century. Nevertheless, the grounds that legitimated musical expertise, and thus, who could possess it, changed considerably with the arrival of new social actors and authors in musical writing and the emergence of the new sensibility during the 1750s.

Rousseau evoked this change when attacking Rameau's 'savant ear', which according to Rameau were endowed with the ability to hear harmonics. For Rousseau, these authoritative ears became the target of a critique that embedded his views on music in a broader social critique of court society. In his *Dictionnaire de musique*, Rousseau claimed that the beauty of musical harmony endorsed by Rameau was exclusive for educated people: 'Les beautés purement harmoniques sont des beautés savantes, qui ne transportent que des gens versés dans l'art, au lieu que les véritables beautés de la musique étant de la nature, sont & doivent être également sensibles à tous les hommes savans & ignorans'.[255] Rousseau declared that he himself was unable to hear harmonics well. That harmony was 'naturally suggested' when hearing harmonics or chordal basses was, for Rousseau, a 'musician's prejudice', coming from one who possessed savant ears.[256] For harmony could not be deduced from nature, and neither could dissonances. To be able to appreciate them, one needed to be appropriately trained. For Rousseau, therefore, the effects produced by harmony were a domain restricted to a few. He declared in the *Essai sur l'origine des langues* that harmony,

> N'ayant que des beautés de convention, […] ne flatte à nul égard les oreilles qui n'y sont pas exercées; il faut en avoir une longue habitude pour la sentir & pour la goûter. Les oreilles rustiques n'entendent que du bruit dans nos consonnances. Quand les proportions naturelles sont altérées, il n'est pas étonnant que le plaisir naturel n'existe plus.[257]

[254] Fontenelle, *Histoire* (Paris: 1701), pp.123-124.

[255] 'Purely harmonic beauties are learned beauties, ones which only transport people who are well versed in the art, whereas the true beauties of music, having their origin in nature, are and must be equally perceptible to anyone, learned or ignorant'. Rousseau, 'Harmonie', *Dictionnaire,* p.340.

[256] Rousseau, 'Harmonie', *Dictionnaire,* 338- 339. A similar quote can be found in Rousseau, *Essai sur l'origine des langues,* p.414.

[257] 'Its beauties being only conventional, [harmony] does not in any way please the ears that are not accustomed to it; one must have practised it for a long time in order to be able to feel and appreciate it. Rustic ears only hear noise in our consonances. When natural proportions are altered, it is no surprise that natural pleasure should be obliterated'. Rousseau, *Essai sur l'origine des langues,* p.414.

These ‘beautés de convention’, which he would anticipate in his polemic *Dissertation sur la musique moderne,* were the recourse of French modern composers to overcoming their lack of melodies and inventiveness:

> L’impossibilité d’inventer des chants agréables obligeroit les Compositeurs à tourner tous leurs soins du côté de l’harmonie, & faute de beautés réelles, ils y introduiroient des beautés de convention, qui n’auroient presque d’autre mérite que la difficulté vaincue: au lieu d’une bonne Musique, ils imagineroient une Musique savante (...) Pour ôter l’insipidité, ils augmenteroient la confusion; ils croiroient faire de la Musique, & ils ne feroient que du bruit.[258]

For Rousseau, the ‘savant music’ of harmony was neither natural nor beautiful, and presented a version of music that was emotionally impoverished. Given that harmony distanced music from its original purpose of pleasing, it epitomised the degeneration of modern music. Furthermore, harmony was designed for an exclusive circle of learned ears. It was a French invention, endorsed by France’s elite institutions, and thus it represented the corruption of French society often denounced by Rousseau. Hence, Rousseau’s defence of melody was political.[259] Unlike harmony, melody could provide pleasure to most people regardless of their musical and social background. Therefore, Rousseau’s endorsement of melody was consistent with his critique of the artificiality of courtly life and its emotional economy. In his criticism of the ‘savant ear’, Rousseau disagreed with the physically and mathematically orientated conception of music; at the same time, he shaped his political agenda and set the tone for the new sensibility in the second half of the century, as I shall discuss in the next chapter.

Nevertheless, irrespective of Rousseau’s critiques, mathematics—and especially ‘savant ears’—were at the basis of the construction of a new realm of musical expertise. The fact that not all ‘ears’ could perceive harmonics accounted for the special condition of musicians. This faculty was often associated with the ‘obscurity’ or ‘mysterious’ character of

[258] ‘The impossibility of inventing agreeable songs would force composers to direct all their efforts towards harmony, and for lack of true beauties, they would introduce conventional ones, which would have close to no other merit than that of overcome difficulty: instead of a good Music, they would invent a learned Music (…) In order to avoid insipidity, they would increase confusion; they would believe they were making Music, when they would only be making noise’. Rousseau, *Lettre sur la musique française* (Paris: 1753), pp. 6-7.

[259] On the relationship between Rousseau's political and musical philosophies see Julia Simon, ‘Singing Democracy: Music and Politics in Jean-Jacques Rousseau's Thought, *Journal of the History of Ideas* 65:3 (2004), 433-454; Julia Simon, *Rousseau Among the Moderns: Music, Aesthetics, Politics* (University Park, PA: Pennsylvania State University Press, 2013); Tracy B. Strong, ‘Theatricality, Public Space, and Music in Rousseau’, *SubStance* 25:2 (1996), 110–127; O’Dea, *Jean-Jacques Rousseau.*

music, recalling ancient associations between music and magic, in which physically superior ears could grasp something that was hidden to others.[260] Moreover, this special condition was expressed in the increasing use of technical language. For instance, although Rameau's theory (or versions of it) circulated widely in society, Rameau's language was often labelled as 'obscure'. This issue was not insignificant, if one recalls the concern with pedantry and obscurity that had been crucial to earlier attempts at describing a science of music. Indeed, the 'obscurity' of Rameau's theories was the cornerstone of multiple critiques that were addressed to him throughout the century. Conversely, the translations and 'explanations' of Rameau's works created by other authors, such as d'Alembert, were key to their wide and successful dissemination.[261] Nevertheless, in Rameau's time, the 'obscurity' of his language revealed something else. I consider Rameau's use of mathematics and technical language, which was deemed less accessible by the general public, as the expression of a new realm of musical expertise. While some lamented that they could not understand Rameau's proposals, others displayed their proficiency in the newly fashioned language of musical harmony through the translation, explanation, commentary, and further development of Rameau's theories. The reception of Rameau's harmony helped to forge a new version of the figure of the expert in music.

In this context, the savant ear was no longer aligned with the tasteful persona, as a prerogative of social privilege, but with the new expert, often a musician. The idea that musicians had better ears was therefore pursued by physiologists who studied the ears and hearing of musicians, in order to understand where in the structure of the ear this special hearing ability was located. In the same way, some believed that the better the shape of the ears, the better the hearing.[262] Therefore, having a 'good ear' was more than a metaphor. Practices of knowledge-making were central to defining the status of the musician in the eighteenth century, drawing upon the polymath character of the early modern 'musician'. In that sense, the eighteenth-century 'musician' was not very far from the 'amateur'. Yet the different skills,

[260] Gouk, *Music, Science and Natural Magic*, p.109.

[261] Jean le Rond d'Alembert, *Élémens de musique théorique et pratique, suivant les principes de M. Rameau* (Paris: 1752; edited and reissued in 1762; reissued in 1766, 1772 et 1779); Jean Laurent de Béthizy, *Exposition de la théorie et de la pratique de la musique, suivant les nouvelles découvertes* (Paris: 1754); François-Henry Le Bœuf, *Traité d'harmonie et règles d'accompagnement servans à la composition, suivant le sisteme de M. Rameau* (Paris: 1766). See Jean-Claire Vançon, 'Après Rameau, avec lui et contre lui: théoriser la musique en France entre 1764 et 1809', *Revue de la BNF*, 46:1 (2014), pp. 33-40.

[262] See e.g. Louis (chevalier de) Jaucourt, 'Oreille', in *Encyclopédie*, eds. Diderot and d'Alembert, vol. 11 (Paris: 1765), p.614.

products, and realms of knowledge mastered by the musician became increasingly narrow. Among these, music theory gradually became the special proficiency of trained music theorists, as new musical experts.

Nevertheless, new musical expertise posed problems of authority within a community which legitimised and based knowledge claims on criteria of taste. 'Savant musicians' were established as musical experts—even scientific authorities—on the basis of their ability to grasp and master the knowledge of musical harmony as a mathematical and physical science. Yet, as previously mentioned, Rousseau severely criticised both the 'savant' character of music and its mathematical grounds. In addition to Rousseau's arguments, criticising 'savant beauty' and 'savant music' became commonplace in concert critiques and musical essays during the second half of the century, mirroring and contributing to the declining enthusiasm for the *esprit géométrique.* Given that theories of harmony relied heavily upon mathematics, how could the musician's expertise prevail in the face of such persuasive challenges? How was musical expertise reinvented in the second half of the century, in accordance with the new sensibility? Musical expertise was to a great extent a social division. Although Rousseau's critique of 'savant ears' was integrated within his broader critique to courtly life, it ultimately perpetuated the notion that the authority to judge musical taste was a privilege of the social elites. In place of the 'tasteful' aristocrat, Rousseau endorsed the new 'sensible' amateur. The next two sections explore two categories of writers about music—'savant musicians' and 'savant amateurs'—who aspired to gain musical expertise in the second half of the century by appealing to the authority of scientific knowledge, taste, and sensibility, and represented different social constituencies.

5.1 A savant musician in the academy

Equipped with a new technical language and expertise, and in some cases with special ears, many musicians undertook the task of writing theoretical treatises about music in general, and harmony in particular. Musicians became active agents in the articulation and negotiation of musical knowledge through their theoretical or pedagogical writings and their participation in public debates. Familiarity with harmony endowed musicians with precious knowledge and a new tool: to speak about what they practised. This was especially relevant at a time when practising musicians were often portrayed as craftsmen and undeducated, according to Père Castel: 'Car les Musiciens, je dis les Musiciens de profession, n'ont jamais été de grands

écrivains, ni de sçavans discoureurs. Anciens & modernes, on les trouve secs, obscurs, mal digerés, inarticulés, inintelligibles'.[263] Similarly, Rameau declared that Lully, the most famous composer in the period before Rameau, 'n'est qu'un habile artisan' who did not possess the science of music'.[264] Rameau himself epitomised the reformed musician; he was celebrated as one who could speak 'as' a mathematician, philosopher, musical master, and practitioner, and he called himself a 'savant musician'.[265] The project of creating a scientific system of music enabled musicians to fashion themselves as savants. This new category of musician—as savant—was essential to negotiate the status of musicians in the public sphere, and to seek new forms of patronage beyond the court.[266]

The *Journal de Trévoux* announced the new voice of musicians, that is, as writers, with a condemnatory tone. The subject of the journal's article was Charles-Henri de Blainville, a composer of music, cellist, and music teacher, who published theoretical writings on music. Born near Tours in 1711, Blainville settled in Paris, where he lived until his death in 1769. The *Journal de Trévoux* criticised Blainville's first publication, the *Harmonie théorico-pratique* (1746), in which the author engaged directly with Rameau's theory. According to the journal, endeavouring to write about music theory, as Blainville did, was a novelty for practising musicians. However, writing was not a task that music practitioners succeeded in doing:

> C'est à quoi Messieurs les Musiciens devroient viser tout de bon & sans entêtement, à moins qu'il n'y faille un Homme de Lettres, plus Physicien Géometre que Musicien praticien. Car en toutes choses ce ne sont pas les Artistes qui écrivent le mieux sur les Arts. L'Artiste a droit de dicter ses regles à l'Ecrivain, mais c'est à l'Ecrivain, écrivain, [*sic*] de les dicter au Public.[267]

[263] 'For musicians, I say, musicians of profession, have never been great writers, nor savant speakers. Ancients and moderns, one finds them dry, obscure, undigested, not articulate, unintelligible'. Louis Bertrand Castel, 'Castel. Nouvelles expériences d'optique et d'acoustique', *Journal de Trévoux,* VIII (Paris: 1735), p.1449.

[264] 'Rameau, Traité de l'harmonie', *Joural de Trévoux,* p.1715.

[265] See e.g. 'Rameau, Traité de l'harmonie', p.1720; 'Lettre de M. Rameau à M. Houdart de La Motte, de l'Académie française, pour lui demander des paroles d'Opéra. A Paris, 25 octobre 1727', *Mercure de France,* March (Paris: 1765), 36-40.

[266] For musical expertise and the changing dynamics of musical patronage, see Hennebelle, *De Lully à Mozart.*

[267] 'This is what our Gentlemen Musicians should aim for, diligently and without obstinacy, unless it requires a Man of Letters, more of a Physicist and Mathematician than a practising Musician. For in all matters Artists are not the best judges when it comes to righting about Art. The Artist has a right to dictate his rules to the Writer, but it belongs to the Writer to dictate those to the Public'. 'Charles de Blainville, Harmonie théorico-pratique divisée en 6 parties', *Journal de Trévoux,* VII (Paris: 1747), p.1447.

The journal was referencing here the ongoing project of the 'arts et métiers', in which craftsmen were effectively 'dictating' the rules of their *métiers* to commissioned writers.[268] Therefore, the fact that practising musicians were taking over the task of writing about their own occupation, must surely be related to the desire they felt to overcome their status as craftsmen and to fashion themselves instead as polite men of science, similar to the ideal of polymath 'musicians' in early modern times.[269] For the *Journal de Trévoux* a 'practical musician' who was not a 'physicist geometer' was a bad writer of music; regardless what Blainville had written about music theory, he was, in the end, a practising musician: 'Car M, Blainville est un fort habile homme, qui raisonne en grand Praticien, mais Praticien'.[270] However, the journal approved in principle of the fact that musicians were starting to write about music, something which was attributed to the influence of Rameau:

> C'est déja avoir gagné quelque chose que d'avoir engagé d'habiles maîtres comme M. Blainville d'en parler, même en le rejettant. Les meilleurs estomacs peuvent ne pas digérer un bon aliment, mais d'un goût singulier, la premiere fois qu'ils y goutent avec répugnance.[271]

Like the 'obscure' writings of Rameau, the theoretical writings of musicians were often deemed difficult to read. In this passage, the difficult reception of Blainville's new theoretical invention—discussed below—was explained in terms of its novelty, compared to new food entering stomachs unaccustomed to it. The early 1750s were years of agitated musical debates on several fronts, in which Blainville was an active participant as both a musical writer and composer. In 1751, Blainville published his *Essai sur un troisième mode*, in which he proposed a 'third mode' beyond the minor and major modes, which he called 'mixed'. This mode was in his words an 'intermediary' mode, which consisted of a scale of notes in which semitones were established between the first and second note, and between the fifth and the sixth.[272] His proposition was presented to the Académie Royale des Sciences for discussion on June and

[268] See e.g. Hilaire-Pérez, *L'invention technique*.

[269] See Gozza, 'Introduction', in Gozza (ed.), *Number to Sound*.

[270] 'For M. Blainville is a most skilful man, who reasons as a great Practitioner, but as a Practitioner all the same'. *Journal de Trévoux*, VII (Paris: 1747), pp.1452-1453.

[271] 'It is already a victory to have encouraged skilful masters like M. Blainville to talk about it, albeit to reject it. The best stomachs sometimes cannot process a good dish if its taste is unusual, when they for the first time reluctantly taste it' *Journal de Trévoux*, VII (Paris: 1747), pp.1455 – 1456.

[272] For instance, in a scale departing from E—conformed by E, F, G, A, B, C, D, E—the semitones are from E and F, and from B to C. This distribution of semitones in the scale could be applied to scales departing in any note.

July 1751. The academicians identified Blainville's 'third mode' as the 'phrygian' ecclesiastical mode and the 'plagal' cadence, both of which were rooted in classical tradition.[273]

Blainville's invention did not immediately meet with approval.[274] Therefore, academicians stated that Blainville should 'prove' his invention empirically. They required Blainville to compose a symphony using his 'third' mode, suggesting that he might prove using music what he had not proven convincingly using words.[275] This requirement not only exposed the fact that Blainville was regarded primarily as a composer of music, but also revealed fundamental aspects of how music could be proven scientifically. Although musical inventions were discussed in the Académie's sessions along with other scientific inventions, music as a scientific subject required different forms of demonstration and evaluation. As with other cases of natural philosophy, taste and science were intertwined when assessing musical inventions, and spectacles and demonstrations were traditionally part of the way in which science and inventions were negotiated in the Académie.[276] Yet music presented further challenges for scientific discernment, as underlying the academicians' evaluation was the indisputable authority of the ear. Taste was the ultimate authority to judge whether a musical invention worked or not.

Consequently, Blainville was asked to 'perform' his invention. The astronomer Jean-Paul Grandjean de Fouchy, at that time *secrétaire perpétuel* of the Académie, reported Blainville's memoir on the 'third mode'. In his description, the request to perform fragments of Blainville's symphony at the Académie resembled scientific method in other fields:

> Non contents de ces Recherches nous avons engagé M. B… à faire éxécuter devant nous un morceau de Symphonie de sa composition dans lequel le nouveau mode qu'il nomme mixte est principalement employé. De plusieurs Personnes qui assistoient à cette Expérience, les unes étoient averties, et les autres ne l'étoient point: on n'a rien trouvé de desagréable ni de dur dans cette Musique, et l'harmonie de cette gamme aparu très bonne: Nous avons fait joüer ensuite une autre Symphonie dans laquelle on n'avoit employé que les

[273] For the associations of the mode with the plagal cadence, see: Caleb Mutch, 'Blainville's New Mode or How the Plagal Cadence Came to be "Plagal'", *Eighteenth-Century Music* 12:1 (2015), 69–90; Brenno Boccadoro, 'Jean-Adam Serre: un juste milieu entre Rameau et Tartini?', *Revue de Musicologie* 79:1 (1993): 31-62.
[274] See Cohen, *Music in the French Royal Academy*, pp.95-97.
[275] Charles de Blainville, 'Essay sur un troisième mode', in *Pochette de séance du 16 juin 1751*, Archives of the Académie des Sciences; 'Mémoire sur un troisième mode en musique. Rapport: de Mairan et de Fouchy. 17 juillet 1751' *Registre de procès-verbaux des séances*, T. 70 (1751), fols.441-443.
[276] Sutton, *Science for a Polite Society*.

> modes ordinaires, puis on a repris la premiere, et toûjours avec le même succès.[277]

Blainville's symphony was performed publicly on 31 May 1751 in the Concert Spirituel, one of the leading musical institutions of the period, well known for the performance of innovative repertoire. Blainville stated that, just as his symphony had been well received, he expected the 'reasons' expressed in his writings to have the same positive reception.[278] However, Blainville's 'third mode' was viewed as controversial. Both his symphony and the publication of his *Essai* triggered a debate in the *Mercure de France,* engaging Jean-Jacques Rousseau, Jean-Adam Serre, and Blainville.[279] In a letter published in June 1751, Rousseau commented on Blainville's proposal.[280] For Rousseau, Blainville had failed both as an inventor of the 'third mode' and a composer of the symphony: 'Mais quoiqu'il fasse, il faudra toujours qu'il ait tort, par deux raisons sans réplique, l'une, qu'il est inventeur, l'autre qu'il a affaire à des Musiciens'.[281] Rousseau was possibly suggesting that Blainville's connections to the artisan and practising worlds of musicians made him unable to succeed. Nonetheless, Rousseau later called Blainville a 'savant musicien', who regardless of the objections one could have to his system, was a 'homme d'esprit' and a 'musicien très-versé dans les principes de son art'.[282] Yet in light of Rousseau's earlier comments about Blainville, and about 'savant music' more generally, this apparently positive comment must be regarded with suspicion.

Blainville's proposal had considerable repercussions in journals and other publications, documenting the wide breadth of musical debate in the public sphere which had now spread to a new category of historical actors. Jean-Adam Serre criticised Blainville's theory by writing

[277] 'Not contenting ourselves with these Investigations, we encouraged M. B… to have a symphonic piece of his, in which this new mode he calls mixed is dominant, performed for us. Among the people attending this Experiment, some were informed, and others were not: nothing was found disagreeable or harsh in that Music, and the harmony of the scale seemed to all to be the finest: We then had another Symphony played, in which only the ordinary modes were used, after which the first symphony was played again, gathering the same success as before'. 'Mémoire sur un troisième mode en musique', *Registre,* f.442.

[278] Blainville, 'Essay sur un troisième mode'.

[279] See Cohen, *Music in the French Royal Academy,* p.96.

[280] Jean-Jacques Rousseau, 'Lettre de M. Rousseau de Genève, à M. l'Abbé Raynal, au sujet d'un nouveau mode de musique, inventé par M. Blainville, Paris, le 30 Mai 1754, au sortir du Concert', *Mercure de France,* II (June 1751), pp.174-178.

[281] 'But whatever he does, he will always necessarily be wrong, for two reasons, neither of which admits discussion: the first one being that he is an inventor, the second, that he deals with Musicians'. Rousseau, 'Lettre de M. Rousseau de Genève', p.178.

[282] 'A musician well versed in the principles of his art'. Rousseau, *Dictionnaire,* pp.226-27.

in the *Mercure de France* and publishing his own *Essais sur les principes de l'harmonie.*[283] Serre had moved to Paris the same year of Blainville's publication. At that time, he also engaged in musical debates with Rameau and Euler, and, later, with d'Alembert, Tartini and Geminiani.[284] His debate with Blainville was later referred to by the *fermier général*, writer, and musical amateur Jean Benjamin de Laborde, again in an unfavourable light for Blainville. Laborde, in his usual critical tone, comdemned Blainville as both a musician and theoretician, as Rousseau had previously written. Moreover, Laborde argued that Blainville had become a music inventor after having failed as a music practitioner (a view which does not seem, however, to match the facts).[285] The scientific aspiration of Blainville's works, moreover, was reduced to the rank of 'chimères'. At the end of his critique, Laborde quoted M. d'Aquin, 'the son of a famous organist', who described Blainville's mode among other 'chimères' in his *Lettres sur les hommes célebres dans les Sciences*: 'Faut-il donc que toutes les sciences aient leurs chimères! La quadrature du cercle, la transmutation des métaux, le mouvement perpétuel, le nouveau mode: voilà les écarts de la Géométrie, de la Chymie, de la Mécanique et de la Musique'.[286]

Blainville's later work *L'esprit de l'art musical ou réflexions sur la musique et ses différents parties*, published in 1754, was also called into question. The *Année litteraire* began its article on this treatise by commenting on the ubiquitous presence of music in journals at the time: 'Encore de la Musique, Monsieur! Cette question ne finira-t-elle jamais?'.[287] The article then sarcastically quoted the 'avertissement' of Blainville, mocking his statement that the treatise was the result of twelve to fifteen years of work and in the end produced only 120 pages, which were, moreover, not 'definitive'; and stated, 'Que d'in-folio un Sçavantasse

[283] Jean-Adam Serre, 'Réflexions sur la supposition d'un troisième mode en musique', *Mercure de France* (Jan 1752), pp.160–7; Serre, *Essais sur les principes de l'harmonie*.

[284] For Serre's critiques to Blainville, Rameau and Euler, see Serre, *Essais sur les principes de l'harmonie*, and for his critiques to d'Alembert, Tartini and Geminiani, see Serre *Observations sur les principes de l'harmonie, occasionnées par quelques écrits modernes sur ce sujet* (Geneva: 1763).

[285] Blainville did publish musical compositions after writing theoretical works, especially vocal music, e.g. *Le dépit amoureux. Cantatille à voix seule et accompagnement compose* (Paris: 1757); *Les plaintes inutiles. Cantatille à voix seule et accompagnement* (Paris: 1757); *Les secondes leçons ténèbres, de chaque jour de la Semaine Sainte* (Paris: 1759).

[286] 'All sciences must have their chimeras! The quadrature of the circle, the transmutation of metals, perpetual motion, the new mode: these are the gaps of Geometry, Chemistry, Mechanics and Music'. De Laborde, *Essai sur la musique*, pp.577-585.

[287] 'Music again, Sir! Will we never be done with the topic?', 'Lettre XII. L'esprit de l'art musical', *L'Année litteraire*, VI (Paris: 1754), p.265.

n'auroit-il pas faits pendant tout ce temps là!'.[288] The *Année litteraire* was making the point that Blainville was, above all, a musician; he was not a 'savant', not even a '*sçavantasse*'.

Yet Blainville's inventions did not end there. He proposed a new 'enharmonic system' to the Académie Royale des Sciences, which academicians there assessed and approved in 1765, once again under the authority of the ear: 'Il nous paroît donc que l'oreille pourroit être trop distraite par le nouvel accord de l'Auteur (...) Mais jusqu'à ce que l'expérience attestée par les oreilles les plus délicates, et confirmée par le suffrage des plus grands Maitres ait attesté la douceur de cet accord, nous ne croyons pas que la Théorie doive [crossed out: puisse] y apposer le sceau de son approbation'.[289] This system advocated the use of the quarter-tone in musical compositions, which Blainville lamented had been left aside despite being the softest.[290] These assumptions were assessed by the 'great masters'—this time, positively—who testified to the 'sweetness' of the chord. Those who possessed 'delicate' ears, thus, were the most competent writers and commentators on music. However, as Blainville's case exemplifies, these ears did not necessary belong to musicians, even in cases where musicians were called 'savants'. The experience of Blainville attested to the difficulties that musicians encountered when entering to the world of letters and sciences in mid and late eighteenth century. Although some granted Blainville merit and approved his inventions, the fact that he was a practising musician was repeatedly an obstacle to his aspirations. The science of music defined restricted spaces of credibility and authority. Now, authority became even less attainable and more exclusive when musical trials had the ear as judge—the embodiment of taste, indisputable legitimator and discriminator of both music and musicians. In the case of academicians, moreover, their authority was regarded by inventors, the crown, and the public as representing royal authority.[291] Although Blainville was called a 'savant' musician,

[288] 'Think how many in-folios a *sçavantesse* [pejorative of savant, a tedious scholar] would have written in all this time!'. 'Lettre XII', *L'Année litteraire*, p.265.

[289] 'It would seem to us, therefore, that the ear could be too distracted by the new chord the Author invented. (…) But until the most delicate ears testify to the sweetness of this chord, and that experience is confirmed by the vote of the greatest masters, we do not believe that Theory should (crossed out: can) approve of it'. 'Une mémoire sur le système enharmonique. Rapport: de Mairan et Pingré. 4 sept 1765', *Registre de procès-verbaux des séances*, T. 84, fols. 371-375.

[290] In the eighteenth-century, the pursuit for equal temperament recognised only tones and semitones as valid intervals between notes.

[291] See e.g. Liliane Hilaire-Pérez and Anne-Françoise Garçon (eds.), *Les chemins de la nouveauté. Innover, inventer, au regard de l'histoire*, Comité des travaux historiques et scientifiques (Paris: Éditions du CTHS, 2003); Liliane Hilaire-Pérez, 'Invention and the State in 18th-Century France', *Technology and Culture* 32:4, Special Issue: Patents and Invention (1991), 911-931.

academicians had greater authoritative power to judge musical inventions, given that their privileged social and official position bestowed them with 'tasteful' ears.

5.2 A savant amateur in salon sociability

Conversely, during the second half of the century, the science of music gained greater relevance as a subject of learned conversation and amusement in salon sociability. Musical amateurs engaged actively in scientific discussions of musical problems. Taking part in public musical debates, and referring to Rameau and his discoveries, became fashionable for the elite person. Therefore, some of the most prolific commentators on musical harmony were not practising musicians, but musical amateurs. Nevertheless, like savant musicians, the scientific expertise and authority of these amateurs was not beyond criticism. The balance between taste and expertise became increasingly fragile in the figure of elite musical amateurs.

Such was the case with Pierre-Joseph Roussier, a canon of the village of Écouis in Normandy who published three theoretical texts on music. According to the the nineteenth-century *Biographie Universelle*, the abbé Roussier became interested in music late in his life —being older than thirty years old—after he read Rameau's work, and became an enthusiastic 'apostle' of Rameau:

> Né sans aucune disposition pour la musique, il n'en connaissait pas encore une seule note à l'âge de trente ans, quand le Traité d'harmonie de Rameau lui tomba sous la main. Il devint aussitôt enthousiaste de la basse fondamentale, au point de s'en faire l'apôtre, comme s'il se fût agi d'un mystère nouvellement révélé aux hommes.[292]

Rameau had appeared to him as 'revealing a mystery', thus motivating Roussier's further dedication to theorising the fundamental bass. With a condemnatory tone, Jean-Jacques Rousseau associated Roussier with the work of Rameau when Rousseau wrote to him in the

[292] 'Having born with no flair for music, he still did not know a single note even at thirty years of age. That is when he stumbled upon Rameau's Traité d'harmonie. He immediately grew to be a lover of the fundamental bass, to the point of becoming its apostle, as though it were a mystery recently revealed to mankind'. Charles-Louis de Sevelinges, 'Roussier', in *Biographie universelle, ancienne et moderne, ou histoire, en ordre alphabétique, de la vie publique et privée de tous les hommes qui se sont fait remarquer par leurs écrits, leur actions, leurs talents, leurs vertus ou leurs crimes*, eds. Joseph Fr. Michaud and Louis Gabriel Michaud, vol. 39 (Paris: Chez L.G. Michaud, 1825).

1780s: 'J'avois ouï dire que vous étiez partisan fanatique de la basse fondamentale'.[293] In fact, Roussier was an active propagator of Rameau's theories. In his *Observations sur l'harmonie*, Roussier declared that his work had a double objective: on the one hand, it served as a key to the understanding of Rameau's writings, and on the other hand, it aimed to protect Rameau's works from the errors and prejudices against him.[294] Roussier praised Rameau's 'discovery' of a single principle, facilitation of musical practice, and guidance on the 'instinct', which as previously mentioned, were all key aspects to the wide reception of Rameau. Moreover, Roussier equated Rameau's discoveries with those of Newton and Descartes, and treated them as worth of national pride.[295] By associating the advancement of science with French national development, Roussier was using a common trope in the French appropriation of Newtonianism, as previously mentioned, which would be crucial in the use of harmony to define French national genius in the 1750s.[296] Like Rameau, Roussier conceived of musical harmony as a science, based on clear and 'natural' principles. Moreover, it was a science that was beneficial for the practice of composers.[297] Therefore, Roussier's main goals were the clarification and, in some cases, further development of Rameau's work. He developed his ideas of harmony based on Rameau's theories and Pythagorean tuning, as well as on the comparison between modern harmony and 'exotic' foreign or ancient music. In his *Traité des accords*, published in 1764, Roussier attempted a systematisation of all chords and laws.[298] The acceptance of Roussier's work was not uniform. Roussier's proposals in the *Mémoire sur la Musique des Anciens* were criticised by Rousseau but found a follower in Denis Diderot.[299] Nevetherless, although Roussier contributed to Amiot's *Mémoire sur la musique des Chinois*, which served as the basis of articles about Chinese music in Diderot and d'Alembert's *Encyclopédie*, he was not the author of any on the *Encyclopédie*'s entries.[300] Jean-Benjamin de

[293] 'I had heard that you were an enthusiast partisan of the fundamental bass'. Rousseau, 'Lettre à M. l'Abbé Roussier', in Paul Moultou and Pierre-Alexandre Du Peyrou, *Supplément à la collection des oeuvres de J. J. Rousseau, citoyen de Genève*, Tome VI (Geneva: 1782), p.369.

[294] Pierre-Joseph Roussier, *Observations sur l'harmonie* (Geneva, 1755).

[295] Pierre-Joseph Roussier, *Traité des accords et de leur succession selon le système de la basse-fondamentale* (Paris: 1764), xxvii-xxviii.

[296] See Chapter 2 of this dissertation.

[297] Pierre-Joseph Roussier, *L'Harmonie pratique, ou Exemples pour le Traité des accords* (Paris: 1775); Roussier, *Traité des accords* .

[298] Roussier, *Traité des accords*.

[299] Denis Diderot, 'Sur les systèmes de musique des anciens peuples grecs, chinois et egyptiens par M. l'abbé Roussier' (1770), in *Oeuvres complètes*, eds. J. Assézat and M. Tourneux, vol. IX (Paris: 1875-77), 443-450.

[300] Jean Joseph Marie Amiot, *Mémoire sur la musique des Chinois, tant anciens que modernes. Avec des notes, des observations, et une table des matières par M. l'abbé Roussier* (Paris: 1779).

Laborde lamented Roussier's absence from the *Encyclopédie*, enthusiastically praising his work:

> Tous les musiciens un peu instruits connoissent les excellents ouvrages de théorie de cet habile chanoine, que l'on peut appeller avec vérité le Newton de la musique. Jamais auteur sur la théorie n'a pu lui être compare, et j'ai bien peur qu'il ne se passe un grand nombre d'années avant que la nature produise son semblable.[301]

The 'Newton of music', a term often used to describe Rameau, here linked Roussier and Rameau. Moreover, this term represented the new domain of musical expertise forged in the eighteenth century. For Roussier, more generally, was constantly labelled as an 'amateur'. In 1785, the *Tablette des Renommée* labelled Roussier an 'Amateur et savant Compositeur' who composed 'plusieurs Symphonies et superbes Motets', and whose writings, including his *Dissertation* and his *Traité*, 'suffisent pour justifier de la sublimité & de la profondeur de ses connoissances'.[302] Roussier instantiated what it meant to be an amateur in eighteenth-century France. He was a well-to-do autodidact who became authoritative in the subject by means of his research and writing about music, and who attempted musical practice, in this case, composition of symphonies and motets. The fact that the term 'amateur' was used to designate one who had devoted himself to both the writing and practice of music, as Rameau had previously done, reveals how in the second half of the century the science of music was successfully embraced by a growing community of 'savant' amateurs as new musical agents.

Moreover, Roussier's commitment to the science of music was consistent with other musical amateurs of the period. At the time of Roussier, the way in which amateurs understood the science of music was, to a great extent, heir of the literary and entertaining character it had in the Académie Royale des Sciences in the years of Fontenelle. Moreover, in the second half of the century, music became increasingly commodified, and amateurs were active consumers of music as the means of both amusement and knowledge. Among a wide range of musical commodities, amateurs acquired musical instruments and all sorts of musical 'curiosities',

301 'Any musician who has studied even a little knows the excellent theoretical works of this skilful canon, who could in truth be called the Newton of music. No author who wrote on the theory of music can bear the comparison with him, and I fear a great number of years might pass before nature gives us his equal'. De Laborde, *Essai sur la musique*, p.351.

302 'Suffice it to justify the sublimity and depth of his knowledge'. Mathurin Roze de Chantoiseau, *Tablettes de renommée des musiciens, auteurs, compositeurs, virtuoses, amateurs et maîtres de musique (...) Pour servir à l'Almanach-Dauphin* (Paris: 1785), n.p.

which they displayed in their homes.[303] The science of music had further penetrated the core of domestic life and salon sociability.[304]

Roussier's household hosted a group of amateurs who met once in 1781 to discuss the science of music. At the beginning of this chapter, I indicated that music was central to polite sociability, both as a practice and a subject of learned conversation. Musical gatherings that were both playful and learned were a common feature in elite sociability under music patrons or hosts such as La Pouplinière.[305] The meeting *chez* Roussier exemplified this practice and the mingling of science, amusement, and sociability that characterised the reception of the science of music by amateurs. Yet, occurring later in the century, the meeting also reveals how the musical amateur appropriated musical expertise. According to the *Mémoires Secrets*, the group of amateurs, including the Portuguese Benedictine monk Père Vito, the academician Alexandre-Théophile Vandermonde, two individuals identified as Benault and de Launay, and 'un professeur Français' met in Roussier's residence on 16 July. The gathering took the form of a challenge given by the French teacher to Vito. It was Vito, however, who planned the gathering, and so it was probably Vito who came up with the idea of the challenge. The French teacher gave Vito a melody with only the bass line—the fundamental bass, as developed by Rameau—and asked him to fill out the chords by adding the top, alto, and bass-baritone voices ('*taille*'). Vito completed the task in ten minutes. The quartet of voice parts that resulted was performed by the attendees. It proved to be a successful performance, as the auditors—a plural that suggests the public character of the challenge in the salon—asked them to repeat it many times. Conversely, Vito challenged the teacher to complete the same task and presented him with a bass line. However, the teacher gave up after fifteen minutes. Vito, then, who 'quoique sachant très-peu la langue Françoise', shared his knowledge of harmony and composition with

[303] See my forthcoming article, 'Tasteful Possessions. Collecting and Displaying Musical Instruments in pre-Revolutionary France'.

[304] For music and domesticity before the eighteenth century, see e.g. Flora Dennis, 'Sound and Domestic Space in Fifteenth- and Sixteenth-Century Italy', *West 86th: A Journal of Decorative Arts, Design History, and Material Culture* 16:1 (2008), 7-19; Flora Dennis, 'Scattered Knives and Dismembered Song: Cutlery, Music and the Rituals of Dining', *Renaissance Studies* 24:1 (2010), 156-184; Flora Dennis, 'Music', in *At Home in Renaissance Italy*, eds. Marta Ajmar-Wollheim and Flora Dennis (Victoria and Albert Museum, London: 2006); Deborah Howard and Laura Moretti (eds.), *The Music Room in Early Modern France and Italy: Sound, Space, and Object* (Oxford: Oxford University Press, 2012); Bláithín Hurley, *Music and Domesticity in Sixteenth-Century Venice*, unpublished PhD Thesis, University of Cambridge (2015).

[305] Cucuel, *La Pouplinière et la musique de chambre.*

the audience ‘d’une maniere trés-satisfaisante’. He was declared to be knowledgeable, talented, and ‘aussi profond dans la théorie que dans la pratique’.[306]

This anecdote demonstrates the wide degree to which Rameau’s harmony disseminated in the second half of the century, as it penetrated domesticity. Rameau’s harmony took root among amateurs who enjoyed completing harmonic exercises and discussing the ‘science’ of music, as well as performing and listening to music. Musical amateurs such as Vito, Vandermonde, and Roussier, were not just performers but also writers of theoretical works about musical harmony. Their expertise on the science of music was such, that it was plausible for an amateur like Vito to win a contest against a ‘professor’ of music.

Nevertheless, the musical authority of amateurs was also subjected to criticism in the last quarter of the century. Pére Vito, the winner in the harmonic challenge at Roussier’s house, premiered his own musical composition *Stabat* in the Concert Spirituel in 1781, the same year as Haydn’s own *Stabat*. An anonymous *Lettre sur les nouveaux Stabat donnés cette année au Concert Spirituel* contrasted the enthusiastic reception of Haydn’s work with the poor reception of Vito’s composition, at which the auditors appeared nearly to have booed. The author of the letter attributed the bad reception of Vito’s work primarily to Vito’s physical features: his short stature, small round face, a prominent jaw, and ‘une espece de nez sur lequel sont à demeure des lunettes attachées avec un fil aux deux oreilles’.[307] After this digression judging Vito’s appearance, the author explained Vito’s lack of success by commenting on the celebrity of Haydn. Whereas Haydn was ‘cet homme si celebre et si réveré, que tout Allemand entreprendroit sa defense au peril même de sa vie’, Vito lacked celebrity and was given only a single rehearsal, one performance, and was the object of severe criticism.[308] Vito’s unsuccessful performance on the famous public stage of the Concert Spirituel contrasted significantly with his acclaimed performance as a learned amateur of music in the domestic setting of Roussier’s household a few months later. This contrast reveals the limits of what it meant to be an amateur in the 1780s, when new ‘celebrities’ spectacularly burst onto the public stage. Science did not secure Vito a place among the acclaimed musicians of the public sphere.

[306] ‘Although he knew very little French’; ‘in the most satisfactory fashion’; ‘as profound when it came to theory as he was when it came to practice’. Louis Petit de Bachaumont, *Mémoires secrets pour servir à l'histoire de la république des lettres en France depuis 1762 jusqu'à nos jours, ou Journal d'un observateur*, Tome 17 (London: 1782), p.311.

[307] ‘A kind of nose on which permanently sit spectacles attached to both his ears with a thread’. Anon., *Lettre sur les nouveaux Stabat donnés cette année au Concert spirituel* (Paris: 13 April 1781), p.1.

[308] ‘This man so famous and revered that any German would take his defence even at the risk of his own life’, Anon., *Lettre sur les nouveaux Stabat*, p.5.

Roussier's memory in the nineteenth century also testified this transition in the appraisal of amateurs. As was often the case with amateurs, Roussier's prestige did not survive into the nineteenth century. In 1808, Alexandre-Étienne Choron—the mathematician, music teacher, and later director of the Paris Opera—severely criticised Roussier's work in his treatise on acoustics.[309] In 1825, Roussier's writings and expertise were also discredited by the journalist and translator Charles-Louis de Sevelinges, who satirised Roussier's attempts to speak as equals with authoritative figures such as Gluck:

> Hors d'état de lire une phrase de musique et de chiffrer une basse, il ne craignit pas d'appeler au combat les plus grands maîtres de l'art, tels que les Gluck et les Sacchini. Il n'en obtint que le silence du mépris. Désespéré, il alla trouver un jour l'abbé Arnaud, excellent musicien, et ami particulier de Gluck. Il le conjura de déterminer l'auteur d'Iphigénie et d'Armide à entendre une Dissertation nouvelle, qu'il venait d'achever. "Eh quoi! lui répondit brusquement l'abbé Arnaud, est-ce que vous n'auriez jamais lu le trait de ce rhéteur qui osa disserter sur l'art de la guerre en présence d'Annibal?"[310]

Whether a true anecdote or a nineteenth-century construct motivated by the discredit of musical amateurs, the critiques of Roussier and Vito documented the interface of contrasting models of musical knowledge: the theoretical writings of the musical amateur on the one hand, and on the other the musical compositions of a well-known composer, a new 'professional' musician. The comparisons between Vito and Haydn, and between Roussier and Gluck, reveal that the authority of the musical amateur declined in contrast to the new personae of musicians, either 'celebrities', 'virtuosi', 'geniuses', or rather, 'professsionals'.[311]

[309] Alexandre-Étienne Choron, 'Appendix. Notions élémentaires d'acoustique', *Principes de composition des écoles d'Italie*, T. 3 (Paris: Le Duc, 1808), p.163.

[310] 'Incapable of reading a musical phrase or doing a figured bass, he did not hesitate to appeal to the greatest masters of the art, such as Gluck and Sacchini, to join his battle. The only thing he received in exchange was a silence of contempt. He was in despair, and one day went to find the abbé Arnaud, who was an excellent musician, and an intimate friend of Gluck's. He besought Arnaud to convince the author of Iphigénie and Armide to listen to a new Discourse he had just finished. 'Well now! the abbé replied brusquely. Have you not read the story of this rhetorician who dared to discourse on the art of war in the presence of Hannibal?'. Charles-Louis de Sevelinges, 'Roussier', *Biographie universelle,* p.166.

[311] For the new figure of celebrity, see Lilti, *Figures publiques.* For the virtuoso, see Metzner, *Crescendo of the Virtuoso*; For genius: Simon Schaffer, 'Genius in Romantic Natural Philosophy', in *Romanticism and the Sciences*, eds. Andrew Cunningham and Nicholas Jardine (Cambridge: Cambridge University Press, 1990); Jefferson, *Genius in France*; Kivy, *The Possessor and the Possessed*; McMahon, *Divine Fury*.

Conclusion

Rameau's system of harmony epitomised the scientific pursuit of music by means of merging mathematics, physics, and physiology with notions of taste grounded in the natural order. Through reconciling reason and taste and simplifying musical practice, Rameau became a public figure and was repeatedly compared to Newton. The broad reception of Rameau's theories served to forge a new public community of commentators on musical subjects. Specifically, Rameau's reception favoured the emergence of two types of writer and researcher of music: 'savant' musicians and amateurs. The newly fashioned science of music brought scientific knowledge closer to practising musicians, at the same time it provided musical knowledge to men of letters. Nevertheless, the science of music stood in a fragile equilibrium between reason and pleasure, expertise and taste, education and instinct, and nature and invention. Therefore, the questions of how to explain the pleasure of music scientifically, and who could lay claim to scientific authority in music, were continuously contentious. By the end of the century, science no longer served to define what it meant to be a good musician, nor enhanced the authority of musical amateurs on musical subjects. Furthermore, the stress Rousseau placed on sensibility would be much more successful in accounting for the pleasure of music than the geometrical grounds of harmony. Nevertheless, as the next chapter will discuss, during the 1750s Rameau's harmony was 'nationalised' and appropriated as an emblem of French national character beyond its scientific aims.

Chapter 2

Italian vs French: music and national character

During the eighteenth century, Italian music and musicians held a prominent place in European culture. Italian states shared features which contributed to making them a leading musical power beyond their borders. On the one hand, Italian states were the main destination of the Grand Tour, with music being one of its main attractions. On the other hand, Italian opera was exported all over Europe. Italian musicians built international networks that allowed them to move from one state to another. Furthermore, Italian was established as the universal language of music.[312] Scholars have argued that Italian opera provided cultural unity across Europe during the eighteenth century. [313] Conversely, music contributed to shaping a sense of Italian national identity before its unification.[314] It was indeed commonplace among eighteenth-century writers to refer to 'Italy' as a cultural entity and an imagined space, even though there was no political union between the states at this time.

France was not immune to this predominance of Italian music. Among all of the European states to which Italian music spread, it was in neighbouring France that it faced the greatest resistance.[315] One can view this uneasiness with Italian musical culture as part of a process of negotiation of cultural superiority within Europe. France was increasingly becoming a leading authority in the world of letters, with the French language gradually assuming the cultural role that Latin had possessed.[316] Foreigners frequently commented on French

[312] Gianfranco Folena, *L'italiano in Europa*. *Esperienze linguistiche del Settecento* (Turin: Einaudi, 1983).

[313] See e.g. Folena, *L'italiano in Europa*; Alessandro di Profio, 'Introduction', in *D'une scène à l'autre, L'opéra italien en Europe. Vol 1: Les pérégrinations d'un genre*, eds. Damien Colas and Alessandro di Profio (Wagre: Mardaga, 2009), pp. 5-6.

[314] See Giulio Bollati, *L'Italiano: il carattere nazionale come storia e come invenzione* (Turin: Einaudi, 1983); Silvana Patriarca, 'Italian Neopatriotism: Debating National Identity in the 1990s', *Modern Italy* 6:1 (2001), 21-34; Silvana Patriarca 'National Identity or National Character? New vocabularies and old paradigms', in *Making and Remaking Italy: The Cultivation of National Identity around the Risorgimento*, eds. Albert Russell Ascoli and Krystyna von Henneberg (Oxford: Berg Publishers, 2001), 299-320.

[315] For the reception of Italian music in other European states, see Reinhard Strohm (ed.), *The Eighteenth-Century Diaspora of Italian Music and Musicians* (Turnhout: Brepols, 2001); Colas and di Profio (eds.), *D'une scène à l'autre*; William Weber, 'Domestic versus Foreign Composers at the Opéra and the King's Theatre in the Eighteenth-Century', in *Moving Scenes*, eds. Beaurepaire, Bourdin, and Wolff.

[316] See e.g. Marie-Christine Kok Escalle and Madeleine van Strien-Chardonneau (eds.), *French as Language of Intimacy in the Modern Age: Le français, langue de l'intime à l'époque moderne et contemporaine* (Amsterdam: Amsterdam University Press, 2016).

literature, manners, food, fashion, and theatre. Conversely, Rahul Markovits has demonstrated that France successfully exported its theatre throughout Europe, through the successful reception of theatre troupes performing in the French language beyond France's boundaries.[317] French music, however, did not enjoy the same prestige amongst foreigners. In response, Louis XIV founded the Académie Royale de Musique in 1669 (the Opéra) to boost French music, in explicit opposition to the Italian predominance in musical life.[318] The academy ran a specific nationalistic agenda that aimed to counterbalance the success of Italian opera in the world. Throughout the eighteenth century, the academy had a monopoly on all theatres in Paris, and restricted the presence of both Italian musicians and Italian repertoire. Until the 1770s, with the exception of two short periods (1729–1730 and 1752–1754), Italian music was excluded from the leading stages of Paris.[319] Furthermore, Italian music became the target of criticism and the focus of impassioned debate throughout the eighteenth century in France. These debates crystallised in the musical *querelles* that exploded conspicuously into the public sphere at different moments across the century, which were roughly devised around the opposition between French and Italian models of musicality.[320]

However, historians of music have recently nuanced this picture of resistance to Italian music by documenting the existence of a rich musical exchange between France and Italy, despite the centralised structure of French institutions.[321] Similarly, some music scholars have questioned the emphasis that scholarship has placed on the *querelles*, which for a long time have dominated studies of musical reception and culture in eighteenth-century France. It has been argued that the *querelles* were a rhetorical product that only existed discursively. Andrea Fabiano pointed out that the quarrels 'have placed a screen in front of Paris' reception', which

[317] Rahul Markovits, *Civiliser l'Europe. Politiques du théâtre français au XVIIIe siècle* (Paris: Fayard, 2014).

[318] The original name was 'Académie d'Opéra' and was changed two years later by 'Académie Royale de Musique'. However, it was usually just called 'Opéra'.

[319] See William Weber, 'Cosmopolitan, National, and Regional Identities in Eighteenth-Century European Musical Life', in *The Oxford Handbook of the New Cultural History of Music,* ed. Fulcher, 209-227; Di Profio, *La révolution des Bouffons.*

[320] Literature on the querelles is abundant. For a recent revision and analysis of this scholarship up to 2014, see Charlton, 'New Light on the Bouffons'.

[321] See e.g. David J. Buch, *Magic Flutes & Enchanted Forests. The Supernatural in Eighteenth-Century Musical Theatre* (Chicago: The University of Chicago Press 2008); Charlton, *Opera in the Age of Rousseau*; Claudon, *Dictionnaire de l'Opéra-Comique*; Di Profio, *La révolution des Bouffons*; Fabiano, *Histoire de l'opéra italien en France*; Fend, 'An Instinct for Parody'; Michel Noiray, 'L'opera italiana in Francia', in *Storia dell'opera italiana,* eds. Bianconi and Pestelli; Damien Colas, 'Perspectives', in *D'une scène à l'autre*, eds. Colas and di Profio, vol. 2, 5-44.

overshadows the reality of musical practice.[322] Nevertheless, that discursive 'screen' is the point of departure of this study. I shall address public debates on music precisely for the reasons they have been criticised: as an unparalleled explosion of musical criticism and stereotype.

This chapter explores the ways music became a public and political affair in France, in specific contrast to Italian music and character. It argues that music was appropriated for the purpose of crafting national identity in mid-century France by means of combining an ongoing uneasiness towards the 'Italian' with praise for the newly-fashioned French system of harmony. Music became a public matter: enabled by the development of the press, impassioned musical criticism and opinion was disseminated via countless newspaper articles, pamphlets and treatises. Therefore, the new community of writers and researchers on music in France explored in the previous chapter expanded considerably and became more vocal, bringing music to the forefront of public debate in the 1750s. Consequently, musical debates provided a field for collective discussion and writing among the elite, while also fostering the development of public opinion which historians have deemed essential to the formation of the new 'public sphere' in this period.[323] Additionally, music became a contentious political matter. According to David Bell, it was during this period that the French 'nation' was 'invented'. Although a sense of the nation had already existed, the eighteenth century played host to a self-conscious programme of building a new idea of the nation, boosted by the Seven Years' War, which involved searching for values and features that defined French criteria of unity.[324] Exploring 'national character'—a term used by contemporaries—allows me to address the many issues that intertwined to form French identity, which consisted of a series of idealisations. In Harold Mah's words, in the eighteenth century 'identities always involved to some extent an idealisation of character, which meant that they were always to some extent phantasies'.[325] Music, I shall argue, played a central role in this complex process of defining and fashioning national identity. I contend that music was appropriated in nationalistic terms to describe and embody French national character and extol certain notions of French genius, drawn from a collection of stereotypes and a historical narrative of invention.

[322] Fabiano, *Histoire de l'opéra italien en France*, p. 36. Also quoted in Charlton, 'New Light on the Bouffons', p.32.

[323] See e.g. Chartier, *The Cultural Origins of the French Revolution*; Hohendal, *The Institution of Criticism*; Darnton, The *Business of Enlightenment.*

[324] Bell, *The Cult of the Nation in France*; Jay Smith, *Nobility Reimagined: The Patriotic Nation in Eighteenth-Century France* (Ithaca, NY: Cornell University Press, 2005).

[325] Harold Mah, *Enlightenment Phantasies: Cultural Identity in France and Germany, 1750-1914* (Ithaca, NY: Cornell University Press, 2003), p.3.

The spark that ignited musical debate along national lines was the appropriation of musical harmony as a matter of national pride. After being *naturalised* in the first half of the century, Rameau's model of harmony was *nationalised* by the middle of the century. Therefore, this chapter explores how harmony became intertwined with ideas of French national character, and encompassed notions of taste, civilisation, and invention. Following the scientific pursuit of music explored in the previous chapter, Rameau's system of harmony was married to the Enlightenment project and notions of modern civilisation in specific opposition to Italian 'melodic' music and 'uncivilised' character. Therefore, the appropriation of Rameau's system of harmony resulted in a national project which was placed in competition with both Italian music and what were seen as Italian characteristics. This chapter demonstrates that discussions over *Italian* musicality and character were central in forging a certain notion of *French* national character. The 'Frenchness' of music was assessed and valued in relation to its others: Italian music, a certain notion of 'Italianness', the past, and the exotic.

This chapter discusses an array of stereotypes from throughout the century that the French had of Italian music, and exploits a range of pamphlets and articles related to the musical *querelles*, travel literature, novels, concert criticism, memoirs, encyclopaedias and dictionaries, and philosophical writings. Furthermore, this chapter explores the emergence of a new genre of music history, which positioned French music around binary concepts including origins and progress, exotic and familiar, and natural and artificial.[326] These histories of music placed harmony at the summit of the civilising process: through a teleological narrative, they presented ideas of national advancement and validated the invention and 'triumph' of harmony in France. Conversely, the search for the origins of music in a primitive stage of humanity both enhanced the status of music as a 'universal' language and legitimated projects of political and social order.[327]

Therefore, this chapter also argues that the juxtaposition of French music and Italian music enabled the French not only to shape a national character, but also to articulate in greater detail their understanding of music and to negotiate criteria of musical taste. In discussing Italian character and music, the French queried what music was, what models of musicality should be preferred, and who could enjoy and comprehend music. I shall demonstrate that music was intrinsically bound up with national character, language, and the passions through

[326] For histories of music in this period see Vendrix, *Aux origines d'une discipline historique*; Semi, *Music as a Science of Mankind*; Allen, *Philosophies of Music History*.
[327] See Thomas, *Music and the Origins of Language*.

a broad notion of ‘character’. Discussions about ‘character’ spanned the eighteenth century, in musical and non-musical arenas, to conceptualise identity and the passions. Each national ‘character’ was associated with a specific language and a set of predominant passions. This chapter demonstrates that the association of music with national character brought music in line with specific categorisations and repertoires of the passions. Hence to embrace Italian or French music meant the privileging of some passions over others. To a great extent, to embrace national character via music was tantamount to making a moral statement.

Therefore, this chapter builds upon existing scholarship on musical thought in eighteenth-century France, such as the study of the *querelles*, the relationship between music and language, and the debates over music’s capability to ‘express’ feeling. However, this chapter will revisit this body of scholarship in a new way. The study of ‘character’ offers a new gateway into understanding the ways in which eighteenth-century people understood music as deeply embedded in politics, national and geographic identity, historicity, the passions, sound, and language. In this way, this chapter will shed considerably new light on the seamless connections in this period between these different domains, which were continuously the subject of debate. Furthermore, the study of national character in musical writings and practices diverts attention away from philosophical speculation and places focus on a wide array of agents who dealt with character as an ordinary and practical affair. While sources such as travel narratives allow us to read the debates over Italian music against practices of stereotyping and describing national character more broadly, the examination of teaching methods of music and the invention of musical instruments will situate the debate over musical ‘character’ within the domain of the practical needs of composers and performers.

Ultimately, this chapter discusses the ways in which negative stereotypes of Italian character and musicality were re-evaluated in the second half of the century in light of the new culture of sensibility. Following Rousseau’s critique of the system of harmony, stereotypes which had hitherto referred to the Italians in a derogatory way now provided an arsenal of positive values in accordance with a new notion of embodied feeling. The stress placed on sensibility in the second half of the century appropriated the features that were attributed to Italian character as the ultimate goals for music. This shift expressed a new appraisal of music, shaped by changing notions of the passions and the senses, and a new model of language, while at the same time constituting a site for political opposition and an alternative ideal of social organisation.

1. Defining character: passions, language, and national identity

Eighteenth-century writers conceptualised the relationship between music and both national identity and the passions through a broad notion of 'character'. The uses of 'character' in writings about music reveal that music was mutually imbricated with morality, the passions, language, and national identity. Yet, in order to understand how music intermingled with character, it is necessary to examine the extensive efforts exerted in the eighteenth century towards conceptualising and classifying both individual and national characters. A deep concern for the nature and different types of character spanned the century and was pursued through a variety of practices. In France, this concern can be traced back to the last decades of the seventeenth century. Jean de La Bruyère published *Les caractères de Théophraste traduits du grec avec Les caractères ou les moeurs de ce siècle* in 1688, providing a translation of Theophrastus's moral characters followed by a satirical and moralistic description of the characters of his own contemporaries.[328] During the same period, Charles le Brun, the painter named 'Premier Peintre du Roi' by Louis XIV, categorised physiognomic expressions of the passions for teaching students in the visual arts. His lecture *Conférence sur l'expression générale et particulière* established a number of fixed characters in close relationship to visible facial traits, and remained highly influential until at least the mid-eighteenth century.[329] Both La Bruyère's and le Brun's publications proved very successful, and ran to several editions.[330] Equally successful were the publications and translations of the *Physiognomische Fragmente* by the Swiss Johann Kaspar Lavater, the first of which appeared in 1775, which attest to the way in which the subject of categorising and describing character remained pressing until the end of the century.[331] In these works, 'characters' were fixed morals attributes and passions, and were expressed visually in the physical body or face, and hence they were the object of study for visual artists.[332] This intertwining of moral, physical, and affective attributes remained important for the appropriation of 'character' in a variety of practices throughout the

[328] Jean de La Bruyère, *Les caractères de Théophraste traduits du grec avec Les caractères ou les moeurs de ce siècle* (Paris: 1688).

[329] Charles le Brun, *Conférence sur l'expression générale et particulière* (Paris: 1698); see also Jennifer Montagu, *The Expression of the Passions. The Origin and Influence of Charles Le Brun's 'Conférence sur l'expression générale et particulière'* (New Haven, CT: Yale University Press, 1994).

[330] See Percival, *The Appearance of Character*.

[331] Johann Caspar Lavater, *Physiognomische Fragmente zur Beförderung der Menschenkenntnis und Menschenliebe* (Leipzig and Winterthur: 1775-78).

[332] Mary Cowling, *The Artist as Anthropologist: The Representation of Type and Character in Victorian Art*, (Cambridge: Cambridge University Press, 1989).

century, such as in painting and drawing, literary writing, acting, dance, oratory, natural history, medicine, travel writing, and also, I shall argue, music.

According to eighteenth-century dictionaries, 'caractère' was a writing or printing mark, graphic sign, font, or type. As such, it was extensively discussed by Diderot in the *Encyclopédie*.[333] Yet the same *Encyclopédie* documented a variety of uses of the term, such as national character, moral character, and fictional characters. In all these uses, character was a form of generalisation and distinction. During the eighteenth century, characters pertained to animate and inanimate entities, including botanical specimens and places, but characters most often described distinctive features of an individual, society, or nation.[334] When describing these, characters acted both as 'categories' and 'stereotypes', according to Gordon W. Allport's distinction between the two, in which stereotype 'is not a category, but often exists as a fixed mark upon the category'.[335] Characters, thus, were forms of generalising, categorising and typifying, while at the same time they were judgements *upon* those categories.

Thus, characters were, to a great extent, moral categories. 'Caractère' was broadly defined as a 'disposition' or 'inclination' of the soul. The first edition of the *Dictionnaire de l'Académie Française* remarked that character was not only a textual mark, but 'ce qui distingue une personne des autres à l'égard des moeurs ou de l'esprit'.[336] Later, the *Encyclopédie*'s article described the 'disposition of the soul' in terms of prevalent passions: 'Les *caracteres* en général sont les inclinations des hommes considérés par rapport à leurs passions'.[337] In this way, individuals and fictional characters could be distinguished and identified in accordance with their most salient passions.[338] As such, characters described 'types' of men, who were categorised and classified in contemporary publications. Moreover, characters identified and classified entire nations. D'Alembert also defined character as a 'disposition of the soul' in his entry on 'national character' in the *Encyclopèdie*: 'Le *caractere* d'une nation consiste dans une certaine disposition habituelle de l'ame, qui est

[333] Denis Diderot, 'Caractères d'Imprimerie', in *Encyclopédie*, eds. Diderot and d'Alembert, vol. 2 (Paris: 1751), 650-666.

[334] The Chevalier de Jaucourt described 'character' as a recently introduced category for distinguishing plants in Botanics, and the novelty of this use was confirmed by the introduction of botanical examples in the *Dictionnaire de l'Académie française* since 1762. Chevalier de Jaucourt, 'Caractère, terme moderne de Botanique', in *Encyclopédie*, eds. Diderot and d'Alembert, vol. 2, p.668. See Montagu, *The Expression of the Passions.*

[335] Gordon W. Allport, *The Nature of Prejudice* (Boston, MA: Addison-Wesley, 1954), p.192.

[336] 'What distinguishes a person from others with regards to *moeurs* [customs, moral attitudes] or *esprit*'. *Dictionnaire de l'Académie française* (Paris: 1694). ARTFL project.

[337] 'Characters, in general, are the inclinations of men when regarded in relation to their passions'. 'Caractère, dans les personnages', in *Encyclopédie*, eds. Diderot and d'Alembert, vol. 2, p.667.

[338] 'Caractère, dans les personnages', in *Encyclopédie*, eds. Diderot and d'Alembert, vol. 2, p.667.

plus commune chez une nation que chez une autre, quoique cette disposition ne se rencontre pas dans tous les membres qui composent la nation'.[339] Like individual characters, national characters were composed of a complex set of features, a decisive one being the specific climate of a place.[340] For Johann Georg Sulzer, despite being composed of complex and varied factors, character caught a certain sense of totality of the individual.[341] Thus, it very closely resembled the earlier definition of 'génie', which at the beginning of the seventeenth century was defined by Jean Nicot as 'Le naturel et inclination d'un chacun'.[342] Indeed, character and genius were often used as synonyms, although their meanings became increasingly distinct throughout the eighteenth century.[343] Like genius, character was used to frame the understanding of individual, national, and territorial identity.

Although they were an 'inclination of the soul', characters expressed themselves through identifiable signs. Characters were crucial to communicating interior dispositions, feelings, or the inner 'essence' to exterior spectators. For instance, according to the *Encyclopédie*, characters were associated with a specific 'genre' of actions. Consequently, by knowing an individual's character, one could predict their actions.[344] Additionally, characters were expressed physically and visually. As such, portraying characters was the main objective for the *beaux arts*, according to Sulzer.[345] After Le Brun, the expression of characters was mainly achieved through the face.[346] Paul-Joseph Vallet asserted that one could determine the character and genius of ancient Roman emperors through the ways their facial features were represented on Roman coins.[347] However, throughout the century, dance, theatre, and music theorists would later utilise a broader sense of the 'expressive' body.[348]

339 'The character of a nation consists in a certain customary disposition of the soul, which is more common in one nation than in another, although the said disposition is not found in every member of the nation'. Jean le Rond d'Alembert, 'Caractère des nations', in *Encyclopédie*, eds. Diderot and d'Alembert, vol. 2, p.666.

340 'Caractère, des nations', in *Encyclopédie*, eds. Diderot and d'Alembert, vol. 2, p.666.

341 'Caractère (Beaux-Arts)', in *Supplément à l'Encyclopédie*, v.2 (Paris: Panckoucke, 1776), pp.230-33. The article states at the bottom: 'Cet article est tiré de la Théorie générale des Beaux-Arts, par M. Sulzer'.

342 'The natural and each one's inclination'. *Thresor de la langue françoyse, tant ancienne que moderne* (1606). ARTFL project.

343 See e.g. Jefferson, *Genius in France*.

344 'Caractère, en Morale', in *Encyclopédie*, eds. Diderot and d'Alembert, vol. 2, p.666.

345 'Caractère (Beaux-Arts)', in *Supplément à l'Encyclopédie*, p.230.

346 Charles Le Brun, *Méthode pour apprendre à dessiner les passions: proposée dans une conférence sur l'expression générale et particulière* (edn. engraved by Jean Audran), Amsterdam, 1702, p.40

347 Paul-Joseph Vallet, 'Caractère (peinture)', in *Supplément à l'Encyclopédie*, v.2, p.229

348 See Percival, *The Appearance of Character*; Edward Nye, *Mime, Music and Drama on the Eighteenth-Century Stage: The Ballet d'Action* (Cambridge: Cambridge University Press, 2011), p.115.

Therefore, 'characters' were external signs of internal dispositions. Like textual characters, these facial, corporeal, and visual traits were recognisable marks of identity.[349] Characters could be read and interpreted, serving as instructive signs of different moral, national, and affective conceptualisations. Given their 'expressive' nature, characters encapsulated notions of language, the passions, and identity.

1.1 Writing and sounding the passions

Because music was intrinsically linked with language, the passions, and national and regional styles, music was not only an important element of character but also helped in their conceptualisation and categorisation. However, what were the types of sign that music could provide for the expression of internal dispositions of an individual, thing, or nation? Were there recognisable and fixed sets of sonic features to express character, in the way that facial traits operated for physiognomy? This section will argue that music was intertwined with character. Moreover, insofar as it was deemed a language, music offered a means for categorising and giving voice to the passions, and expressing them sonically.

Music was inherently bound up with language.[350] Just like language, music was seen to have its own vocabulary and consisted of a collection of signs which required a proper notational system. Throughout the century, how musical characters were supposed to be written and printed was an extensively debated issue.[351] In this sense, musical 'characters' were music's own signs and textual marks, which, when written or printed into the score, had to be 'read' by the performer. Nevertheless, the notion of 'character' is also found in musical manuals from the beginning of the eighteenth century as means of expressing specific passions. In this literature, the terms 'character', 'affect', and 'passion' were mostly interchangeable.[352] Terms such as *allegro, amoroso, appassionato,* among many others, were 'characters' which indicated the predominant passion of a piece of music in the score. The connection between musical characters and the passions was self-evident insofar as many characters were called by the same names used in other contexts to express passions, such as 'Gai', 'Calme', 'Tendre', and 'Vive'. A piece could have one or several characters, which the composer specified in the

[349] Jean François Féraud, *Dictionaire critique de la langue française,* T. 1 (Paris: 1787), p.359. ARTFL project.
[350] See e.g. Thomas, *Music and the Origins of Language*.
[351] For a survey of the debates and proposals to reform musical notation and printing, see Cohen, *Music in the French Royal Academy,* pp. 70-78.
[352] See Morrow, *German Music Criticism,* p.77.

score. Each character required a different manner of execution from the performer. They were expressed by means of musical tempo or speed, rhythm variations, dynamic and volume marks as well as all sorts of bowings, fingering, and tonguing, depending on the instrument. Likewise, different tonalities and scales were associated to particular characters.[353] Therefore, characters were a way of categorising both the passions and their signs, being a crucial peformative tool.[354]

The authors of teaching manuals did not speculate as to what characters were, where they came from, or how many there were. Instead, authors frequently included a basic dictionary at the end, identifying the variety of characters that one could find in a musical score and how best they could be played on a specific instrument. The music manual written by J.C. Bach and F-P. Ricci in 1786, for instance, identified 53 'characters' in music and explained each of them in alphabetical order.[355] There was a belief that music could express the human passions via musical characters, even if authors did not question the nature of that expression. Since Antiquity, music had been deemed capable of arousing the emotions of a listener and affecting their moral behaviour, and some specific features of music—such as mode, rhythm, interval, and speed—were associated to specific passions. The belief that certain kinds of music were intrinsically associated with specific affects was defended by Protestants and Catholics, and was foundational to the performance of Baroque music. In the seventeenth and early eighteenth centuries, a number of writers in Europe studied and attempted to articulate the correlations between music and the passions.[356] While most scholarship has identified a transition from 'imitation' to 'expression' in musical aesthetics during the eighteenth century, the role of characters as persistent marks of emotionality in music has yet to be fully

[353] Michel Noiray, *Vocabulaire de la musique de l'époque Classique* (Paris: Minerve, 2005). See e.g. description of the enharmonic scale by Charles de Lusse: 'Genre qu'on pourroit particuliérement employer pour rendre a ces Expressions fortes, pittoresques, qui pénétrent l'ame et la mettent hors d'elle même'. Charles de Lusse, *L'art de la flute traversiere* (Paris: 1761), p.39.

[354] For a study on musical 'characters' in France, see Jane R. Stevens, 'The Meanings and Uses of *Caractère* in Eighteenth-Century France' in *French Musical Thought: 1600-1800*, ed. Georgia Cowart (Ann Arbor, MI: University of Michigan Press, 1989), 23-52.

[355] Jean Chrétien Bach, Francesco-Pasquale Ricci, *Méthode ou recueil des connaissances élémentaires pour le forte-fiano ou clavecin. Oeuvre melé de theorie et de pratique. Divisé en deux parties. Composé pour le Conservatoire de Naple par J.C. Bach et F.P.Ricci* (Paris: 1786), reissued in Jeanne Roudet (ed.), *Piano forte: Méthodes et leçons pour piano-forte ou clavecin*, vol. 1 (Courlay: J.M.Fuzeau, 2000), p.3.

[356] See e.g. Rene Descartes, *Les passions de l'âme* (Paris: 1649) and Johann Mattheson, *Der vollkommene Capellmeister* (Hamburg: Herold, 1739). See Gouk and Hills, (eds.), *Representing Emotions*; George J. Buelow and Hans Joachim Marx (eds.), *New Mattheson Studies* (Ann Arbor, MI: University of Michigan Press, 1983). For conceptualising the passions more generally, see: Arikha, *Passions and Tempers*; Gail Kern Paster, Katherine Rowe, and Mary Floyd-Wilson, *Reading the Early Modern Passions: Essays in the Cultural History of Emotion* (Philadelphia, PA: University of Pennsylvania Press, 2004); Thomas Dixon, *From Passions to Emotions: The Creation of a Secular Psychological Category* (Cambridge: Cambridge University Press, 2003).

addressed.[357] Characters, as vague categories, were unchallenged and outlived the doctrine of 'imitation' that governed earlier theories. For Richard Will, characters occupied a place somewhere between the doctrine of mimesis and the embrace of 'semantic indefiniteness', because 'they tend to endorse both perspectives at once, identifying meanings but leaving room for ambiguity'.[358] Will points out that this coexistence was favoured by the 'brevity' of characters, often a single word or sentence written on the score, leaving room for interpretations and associations, and was expressed in the taste for 'characteristic' music in the period.[359] For instance, Michal Paul Guy de Chabanon, who has been described in secondary literature as a leading figure in the distancing of music from referentiality, himself defends the use of characters in music.[360] The persistence of a notion of 'character' among those who denied the capacity of music to express definite meaning or imitate nature indeed indicates that the links between certain types of music and specific passions remained unchallenged. Moreover, musical characters reveal the persistent intertwining of music and language, in which 'expression' was the goal of the musician—either through written, sonic or body language—and characters were used as communicatory signs.[361]

Furthermore, 'characters' in music were a means of binding passions to specific types of sound. A range of characters helped to classify both possible and desirable sounds in music. This relationship was evident in descriptions of the sonorities of musical instruments at the time. Just as individual and dramatic characters were defined by a predominant passion, musical instruments were also associated with specific passions. Thus, each instrument was endowed with a specific 'character' determined by its materiality, tonal and volume range, timbre, as well as by performance traditions and musical genres. Referring to a musical instrument's 'character' was a way of categorising its desired sonority. Character could be modelled by the 'génie' of the instrument maker as well as enhanced by the performer, yet each type of instrument had a particular sonic spectrum and thereby was endowed with a specific character.[362] Therefore, the character of a musical instrument referred to its sonic identity, as

[357] Maria Rika Maniates, 'Sonate, que me veux-tu?: The Enigma of French Musical Aesthetics in the 18th Century', *Current Musicology* 9 (1969), 117-40; Lessem, 'Imitation and Expression'; Saloman, *Listening Well*, pp.3-38; Neubauer, *The Emancipation of Music*;

[358] Richard Will, *The Characteristic Symphony in the Age of Haydn and Beethoven* (Cambridge: Cambridge University Press, 2012), p.14.

[359] Will, *The Characteristic Symphony*, p14

[360] Saloman, *Listening Well*, p.27.

[361] See Chapter 3 of this dissertation.

[362] See my forthcoming article 'Tasteful Possessions. Collecting and Displaying Musical Instruments in pre-Revolutionary France'.

characters ‘sont les voix différentes par lesquelles il parle à nos oreilles’.[363] Rousseau pointed out the expressive relevance of ‘character’ in his *Dictionnaire de musique,* and claimed that the timbre of specific instruments was no less expressive than the combination of sounds in musical composition, for musical instruments were themselves expressive.[364]

The sound of some instruments was considered more suitable for certain passions than others. For instance, the *Encyclopédie* remarked with respect to horns: ‘Les sons bas & lugubres des cors annonceront d'une maniere effrayante l'arrivée des spectres & des ombres’. Hence specific ‘passions’ and ‘sentimens dans le coeur de l'homme’ were attributed to the sounds of specific instruments.[365] In the case of harpsichord making, the *Encyclopédie Méthodique* explained that ‘l’habileté d'un bon facteur de clavecin, consiste à donner a son instrument un son mâle, en même temps argentin, moelleux, égal dans tous les tons’, the qualities named depending on the types of wood and precision of each of its pieces.[366] The word *moelleux*—described as ‘marrow-like’, velvety, and full-bodied—commonly defined the sonic character of harpsichords in the eighteenth century.[367]

Therefore, sound was categorised and understood as a remarkable conveyer of character. In this sense, writers on music followed a process similar to what theorists of the Académie Royale de Peinture et de Sculpture had done for the visual arts which was later pursued in relation to performative arts such as theatre, pantomime, and dance. Just as facial traits and bodily movements were visible signs of inner character and the passions, specific sounds acted as their audible signs. In the same way that, for Le Brun, the face moved in response to inner passions, composers, music teachers, and instrument makers believed that sounds were in indissoluble union with the passions. The concern with character, involving both the language of the body and sounds, was incorporated into performed music through the portrayal of characters in opera and ‘characteristic’ instrumental music.[368] Yet, fundamentally,

[363] ‘[Characters] consists in the various voices through which it [the musical instrument] speaks to our ears’. ‘Instrumens (de Musique)’, in *Encyclopédie*, eds. Diderot and d’Alembert, vol. 8, p. 804.

[364] Rousseau, *Dictionnaire de musique* (1768), pp.210-11.

[365] ‘The deep and lugubrious sounds of horns will announce in a frightening fashion the coming of spectres and shadows’; ‘sentiments within the heart of man’. ‘Instrumens (de Musique)’, in *Encyclopédie,* eds. Diderot and d’Alembert, vol. 8, p. 804.

[366] ‘The skill of a good harpsichord maker consists in giving to his instrument a male sound, at the same time a *argentin* [clear, as evoking silver], *moelleux* [smooth, mellow, velvety, marrow-like], equal in every tone’. Jacques Lacombe, *Encyclopédie méthodique,* vol. 4, p. 5.

[367] Margaret Van Dijk, ‘Moëlleux’, in *The Harpsichord and Clavichord: An Encyclopedia,* ed. Igor Kipnis (London: Routledge, 2007), p.336.

[368] See Will, *The Characteristic Symphony*; Stevens, ‘The Meanings and Uses of *Caractère*’; Charlton, *Opera in the Age of Rousseau,* pp.251-271.

the attribution of characters to musical instruments reveals also that *sounds* were interpreted as distinctive marks of character, intrinsically associated with its predominant passion. In this way, sounds were categorised, hierarchised, moralised, gendered and nationalised.

2. National character

Intertwining and encompassing language, the passions, and sound, music became a defining feature of 'national character'. As a language, music was attached to a specific regional and national identity. In his *Lettre sur la musique française*, Rousseau claimed that 'J 'ai dit que toute musique nationale tire son principal caractère de la langue qui lui est propre'.[369] Therefore, discussions about national music often became a discussion of national language, following the considerable interest in language during this period.[370] In most comparative studies across nations, language, orality, and characters were fundamental to defining national identity. The efforts to categorise and describe characters, discussed above, were also expressed in ongoing debates about national and territorial identities. During the eighteenth century, Europeans debated the existence and nature of 'national character' in relation to different literary genres, such as novels, travel accounts, essays, literary and linguistic debates, as well as theatre and opera, where comical representations of national character became fashionable. Travel accounts were an especially prolific source for describing and comparing countries, which were often affected by the formation and application of stereotypes. Italy, as the main destination of the Grand Tour, was the subject of many discussions and descriptions of national character. For this reason, Robert Castillo has referred to Italy as an 'empire of stereotypes', arguing that 'there is no European country that has been written about so extensively over so long and continuous a period, and around which such a wealth of clichés and commonplaces, often contradictory and hyperbolic, have come to accumulate'.[371]

There were few travellers who did not refer to music in their accounts of Italy. Travelling to Italy was a necessary step for young aristocrats aiming to become musicians and

[369] 'Every nation's music draws its main character from that nations' language'. English translation from Thomas, *Music and the Origins of Language*, p.98. Rousseau, *Lettre sur la musique française*, p.9.
[370] Thomas, *Music and the Origins of Language.*
[371] Robert Castillo, *The Empire of Stereotypes. Germaine de Staël and the Idea of Italy* (Lonond: Palgrave Macmillan, 2006), p. 83.

was desirable for interested musical amateurs.[372] Travellers primarily visited Venice, Rome, and Naples, which were considered to be the hotbed of musical creativity and capitals of musical life.[373] Most of the travellers described musical performances of several different kinds—sacred music, opera, chamber music, concertos. Travellers were often able to identify different styles of music between different states. Whereas Venice impressed visitors with instrumental music and 'concertos' for solo instruments, Rome was home foremost to sacred music, and Naples was the capital of opera.[374] They also described soundscapes and individual musicians, all of which together portrayed music at the heart of Italian cultural life. Listening to music became such a crucial part of travellers' agendas that Charles de Brosses claimed that, when he was in Milan in 1740, 'Je ne passe quasi point de jours sans entendre de la musique peu ou beaucoup'.[375] Although some travellers developed negative perceptions of Italian music or musicians, they frequently agreed that music was as natural for Italian people as language, thus being one of the most remarkable features of Italian culture. Nevertheless, travelling often carried and perpetuated stereotypes grounded in their locality of origins. These sets of stereotypes were fundamental to portraying French music as in opposition to Italian music through notions of national character.

2.1 Italian vs French: a war of stereotypes

It was a traveller who, on his return to France, triggered the first public quarrel concerning Italian music. This traveller, the abbé Raguenet, published the pamphlet *Parallèle des Italiens et des Français en ce qui regarde la musique et les opéras* in 1702 in which he compared and contrasted French and Italian character with regards to music and language. In a highly polemical statement, Raguenet praised Italian music over the music of the French. While advocating the literary superiority of French opera librettos, Raguenet claimed that, where the musical aspects of opera were concerned, Italy was far more advanced, and the Italian language

[372] Francis Claudon, 'Quelques voyages de musiciens à Venise', in *Présences françaises dans la Vénétie. Avec des inédits de Gabriele D'Annunzio*, ed. Annarosa Poli, vol. 1 (Geneva: Slatkine, 1981).
[373] Marina Spadaro, 'Venezia paradigma della creazione musicale', in *Viaggiatori stranieri a Venezia. Itinerari tematici e iconografia, Biblioteca del viaggio in Italia*, eds. Emanuele Kanceff and Gaudenzio Boccazzi (Geneva: Slatkine, 1981).
[374] See e.g. Charles de Brosses, *Lettres familières écrites d'Italie en 1739 et 1740. Deuxième édition revue sur les manuscrits, par Romain Colomb* (Paris: Didier, 1858), p.347.
[375] De Brosses, *Lettres familières*, p.154.

was far more sensitive to music than French.[376] This triggered a fervent response from Jean-Laurent Le Cerf de la Viéville, who claimed that French music was, in fact, superior.[377] In this response, Le Cerf de la Viéville introduced the notion of a French 'génie national' in music which was shaped by the principle of 'bon goût'.[378]

This quarrel laid the foundation for many other musical controversies of the eighteenth century which followed the rhetoric of the literary *Querelle des anciens et des modernes*, previously led by Boileau and Perrault.[379] Conducted by amateurs, the *querelles* took music as a subject of public debate, motivated by the increasing cultures of public opinion and print. Amateurs, as previously discussed, were a specific social group crucial to the dissemination of musical practice and knowledge during the eighteenth century, and often combined practices of theorising, criticising, listening, experimenting, collecting, and practising music. Raguenet defined himself as a musical 'amateur' whose judgments were motivated by his 'love' to music.[380] Musical amateurs, thus, were essential to the expanding practices of musical criticism. Using the development of the press as a mouthpiece for criticism, amateurs brought the discussion of musical taste into the public sphere, and throughout the century they expressed themselves visibly and publicly through engaging in the musical *querelles*.[381]

The musical *querelles* were wars of stereotypes. Musical amateurs juxtaposed Italian music and French music by drawing upon a series of stereotypes that were already in circulation in French culture. Le Cerf de La Viéville, whose experience of Italian music was restricted to the limited space given to Italian music in France (he never travelled to Italy), closely interpreted musical values through the lens of contemporary stereotypes of Italy. Some of these stereotypes were Italians' 'excesses', 'spontaneity', and their 'sensual' and 'indomitable' character. Similarly, when Raguenet claimed that the Italian language was intrinsically musical and thus more suitable for music making than French, Le Cerf de la Viéville drew on contemporary discussions about the capacity of Italian to express deep ideas. In these

[376] François Raguenet, *Parallèle des Italiens et des Français en ce qui regarde la musique et les opéras* (Paris: 1702).

[377] Jean-Laurent Le Cerf de la Viéville, *Comparaison de la musique italienne et de la musique française* (1704) and *Traté du bon goût en musique* (1705). Both essays were later enlarged and published in Pierre Bourdelot and Jacques Bonnet, *Historie de la musique* (Amsterdam: 1725).

[378] See Benjamin C. Young, *Eloquence and Music: the 'Querelle des Bouffons' in Rhetorical Context*, unpublished PhD Thesis, Columbia University (2013), p.14.

[379] Young, *Eloquence and Music*.

[380] Raguenet, *Parallèle des Italiens*, p.x.

[381] See e.g. Young, *Eloquence and Music*; Fabiano, *Histoire de l'opéra italien en France*; Hohendal, *The Institution of Criticism*; Weber, 'Learned and General Musical Taste'.

discussions, the Italian language was often associated with superficiality. Italians supposedly succeeded in portraying their emotions, yet they could only experience them superficially, a practice which was associated with effeminacy. These assumptions were crucial to critiques of Italian art and literature. For instance, this was a central argument of some French men of letters regarding the literary quality of Dante's work. The controversy surrounding Dante's literature in the first half of the century intertwined concerns over language—and the Italian language in particular—with the Italian national character, while at the same time contributing to the development of notions of French literary poetics.[382] Voltaire, who led the Dante controversy, believed that no good poets in Italy existed after the sixteenth-century poets Gian Giorgio Trissino and Torquator Tasso. One of the reasons of this scarcity of good poets was the 'effeminacy' of Italian literature, and specifically Dante's works.[383] Furthermore, French men of letters challenged the capability of the Italian language as an appropriate language for philosophical discourse, as it was considered intrinsically sensual and insufficiently intellectual. Although Italian was a fruitful language for providing musicality and attractiveness to text, it was deemed unsuitable for philosophy. For Madame de Staël at the beginning of the nineteenth century, Italian prose and poetry were unsuccessful for exploring the depths of human passions, due both to the intrinsic limitations of the Italian language, such as being too melodic, and the excessive exaggeration that had been introduced in Italian literature by Petrarch.[384]

By means of this same condition, Italy was considered to have excellent improvisers, mainly women who recited poetry in a histrionic manner. This art was widely disseminated in Italy and was admired by many travellers, such as Charles de Brosses and Madame de Staël.[385] Nevertheless, French travellers found in such improvisers a target for the perception of Italian poetry as nonsense. Charles Dupaty illustrated the contrast between musicality and a 'luxuriance of words' intrinsic to Italian language, on the one hand, and Italian poverty of ideas, on the other, when he listened for the first time to a Florentine improviser named Corilla:

> Delà ce luxe de mots, et cette misère d'idées qu'on rémarque dans tous leurs discours (...) Rien n'est plus facile que d'improviser, en italien; dans une langue

[382] On the controversy about Dante, see Eugène Bouvy, *La critìque dantesque au XVIII siècle. Voltaire et les polémiques italiennes sur Dante* (Bordeaux: Féret, 1895); Guido Zacchetti, *La fama di Dante in Italia nel sec. XVIII* (Roma: Società Editrice Dante Alighieri, 1900); Arturo Farinelli, *Dante e la Francia dall'età medievale al secolo di Voltaire*, vol. 2 (Milano: Ulrico Hoepli, 1908).
[383] Voltaire, *Essai sur la poésie épique* (Paris: 1726); Castillo, *The Empire of Stereotypes*, p.130.
[384] Castillo, *The Empire of Stereotypes*, pp.18-19.
[385] De Brosses, *Lettres Familières*, p. 332. For Madame de Staël, see Castillo, *The Empire of Stereotypes*, 36-37.

où chaque phrase peut être un vers, chaque mot peut être une rime, dans une langue qui a tant d'échos. On n'exige pas d'ailleurs d'un improvisateur, qu'il pense, ni qu'il fasse penser.[386]

This same critique applied to Italian song, which was considered to privilege musicality over words, sensuality over deepness, and theatricality over poetry. Although many travellers recognised a musical achievement in Italian singing, there was a common critique: namely, the lack of ideas behind the musical expression of the singer.[387] A language that failed in poetry and the expression of philosophical ideas was, nonetheless, an extremely musical language. In French allusions to Italy, the musicality of the Italian language was correlated with the prolific musical activity of Italians. Therefore, the critique of Italian music that was central in the musical *querelles* was preceded and complemented by a set of stereotypes of Italian national character on the one hand, and the acknowledgment of Italians' rich musical culture on the other.

Additionally, negative stereotypes of Italy at this time stressed excesses of all kinds: voluptuousness, sensuality, affectation, and theatricality. French travellers such as Simond, de Brosses, Caylus, Audin, Barthélemy, Duclos, and Creuzé de Lesser agreed upon the characterisation of Italians as excessively demonstrative of passions and emotions.[388] These excesses were often related to the stress placed on appearance and Baroque display, and were observable in a wide range of cultural expressions, from carnivals to religious rituals. Likewise, French travellers remarked upon the sensuality and eroticism of Italians, often invoking gender stereotypes. As Robert Castillo has pointed out, travellers considered that Italian males' eroticism rendered them subservient to women.[389] This judgement was primarily fed by the institution of *cicisbeismo*, which allowed married women to have lovers with the consent of

[386] 'Hence the abundance of words, and the deficiency of ideas that one finds in all their discourses. (…) Improvising is the easiest thing to do in Italian, for in this language any sentence can be a poetic line, any word can be a rime, the language being so filled with echoes. No one asks an improviser to be a thinker, or to make one think'. Charles-Marguerite-Jean-Baptiste Mercier Dupaty, *Lettres sur l'Italie en 1785* (Paris: 1788), p.141; See Castillo, *The Empire of Stereotypes*, p.130.

[387] See e.g. Claudon, 'Quelques voyages de musiciens à Venise', pp.101-102.

[388] Louis Simond, *A Tour in Italy and Sicily* (London: 1828), pp.104-105; Jean Marie Audin, *Guide du voyageur en Italie, ou Itinéraire complet de cette terre classique composé sur la dernière édition de l'itinéraire de Florence, et surtout du manuel de Giégler* (Paris: 1840); Jean-Jacques Barthélemy, *Voyage en Italie de M. l'abbé Barthélemy, de l'Académie française imprimé sur ses lettres originales écrites au comte de Caylus* (Paris: 1801); Anne Claude (comte de) Caylus, *Voyage d'Italie, 1714-1715. Première édition du code autographe annotée et précédée d'un essai sur le comte de Caylus par Amilda-A.* Pons (Paris: Fischbacher, 1914); Augustin-François Creuzé de Lesser, *Voyage en Italie et en Sicilie, fait en 1801 et 1802* (Paris: 1806); Charles Pinot Duclos, *Voyage en Italie, ou Consideration sur l'Italie* (Paris: 1791).

[389] Castillo, *The Empire of Stereotypes*, p.28.

the husband. French travellers considered this practice either an excess of women's voluptuousness, or an expression of men's weakness. In either case, Italy was a 'feminine' country that contrasted with the 'masculine' England and France.[390] This feminine condition was associated with unruly emotions and hypersensitivity, to the detriment of self moderation.

This lack of discipline and masculinity resonated deeply in Enlightenment France, where passions were married to morality and reason, and where there was no place for unruly passions. For Montesquieu, the 'chaotic' natural landscape of Italy enhanced the more primitive and even 'villainous' character of Italians, and thus was related to their moral decadence.[391] As Elio Mosele points out, Montesquieu's ideas about a chaotic Italy must be understood in reference to his *Essai sur le goût*, where he defended classical values such as symmetry, discipline, and order.[392] With these assumptions, Montesquieu endorsed an idea of taste that was highly significant in the construction of French national identity. As mentioned in the previous chapter, taste was a crucial category in French polite sociability, which encompassed a series of social, physical, and aesthetic assumptions.[393] Moreover, taste was considered the ultimate French quality, in contrast to Italian character.

When Le Cerf de la Viéville defended French taste, he understood it also as order, moderation, and 'simplicity'. In the case of opera, this meant the ability of music to accompany and not to interfere with text.[394] This 'simplicity' was deemed a prerogative of reason, as mentioned in the previous chapter, which was expressed in the pursuit of abridged and clear principles in scientific endeavours during the Enlightenment. Thus, French music was aligned most closely with reason and Enlightenment. Similarly, French music also epitomised tasteful sounds. Order and simplicity served to define and discipline sound, in opposition to noise. In contrast with the tasteful sounds of the French, the chaotic, excessive, and unruly character of Italians was associated with noise. This view was reinforced by the constant references made by French travellers to the cries of Italian cities.[395]

390 Castillo, *The Empire of Stereotypes*, p.78.

391 Montesquieu, *De l'esprit des lois* (Paris: 1748) and *Voyage en Italie* (Paris: 1738), in André Masson (ed.), *Oeuvres complètes de Montesquieu* (Paris: Nagel, 1950). See Melissa Calaresu, 'Looking for Virgil's Tomb: The End of the Grand Tour and the Cosmopolitan Ideal in Europe', in *Voyages and Visions. Towards a Cultural History of Travel*, eds. Jás Elsner and Joan-Pau Rubiés (London: Reaktion books, 1999), 138-161.

392 Montesquieu, *Essai sur le goût* (Paris: 1757). See Elio Mosele, 'Montesquieu et Verone', in *Présences françaises dans la Vénétie*, p.98.

393 See e.g., Striffling, *Esquisse d'une histoire du goût*; Goodman, *The Republic of Letters*.

394 See Le Cerf de la Viéville, *Comparaison de la musique* and *Traté du bon goût*.

395 See e.g. Melissa Calaresu, 'From the Street to Stereotype: Urban Space, Travel and the Picturesque in Late Eighteenth-Century Naples', *Italian Studies* 62:2 (2007), 189-203; Iain Fenlon, 'Piazza San Marco: Theatre of the Senses, Marketplace of the World', in *Religion and the Senses in Early Modern Europe*, eds. Wietse de Boer

2.2 The burst of the Querelle des Bouffons

Consequently, the French constructed their national identity based on principles of taste, order, and rationality, in explicit opposition to perceived Italian character. These values coalesced around the reception of Jean-Philippe Rameau's system of musical harmony. From mid-century, the 'Newton' of music was placed in competition with Italian music and character. The legend on the engraving in Figure 1 reveals how Rameau was portrayed as a *célèbre* figure by means of his innovative discovery of the 'Loix de l'Harmonie'. Yet at the same time this engraving demonstrates that, by the 1750s, this celebrated figure was also portrayed as a 'Rival de l'Italie'. Rameau's system of harmony thus became an emblem of Frenchness, especially in the musical quarrel in 1752 that juxtaposed French with Italian music: the *Querelle des Bouffons*.

and Christine Göttler (Leiden: Brill, 2012), 329-61; Iain Fenlon, *Piazza San Marco* (Cambridge, MA: Harvard University Press, 2009).

Figure 1. '*On voit dans ce Portrait le Célébre Rameau, /Fils cheri d'Apollon, Rival de l'Italie: /Et qui par un chemin nouveau /A sçu nous découvrir les Loix de l'Harmonie*'.[396] J.B. Fayet, engraving, ca. 1750. Bibliothèque Nationale de France, département Musique, Est.RameauJ.P.033.

Despite the centralist politics of French theatres over which the Opéra enjoyed a monopoly, several attempts to perform Italian music or host Italian troupes were carried out in small theatres. Numerous scholars have recently stressed the significance of secondary theatres and troupes in Paris which had hitherto been dismissed by secondary literature. They have

[396] 'This Portrait shows the Famous Rameau/ The cherished son of Apollo, the Rival of Italy:/ Who by treading untrodden paths,/ Has unveiled before us the Laws of Harmony'.

demonstrated that—prior to the foundation of a theatre dedicated to providing a stable space for the performance of Italian opera, as well as the abolition of royal privileges for theatres—an increasing number of individual Italian musicians and troupes made a living in Paris.[397] These studies force us to question the extent to which royal institutions actually dominated theatrical and musical life in Paris, and instead to consider a wider array of actors and practices. Furthermore, there was a lively musical exchange between Italian and French music beyond the physical mobility of musicians, as transmitted through more subtle practices of appropriation and adaptation of Italian music. For example, the regular presence in Parisian repertoires of Italian operas arranged and translated into French ('parodies') illustrates how Parisian culture absorbed Italian music despite restrictions and the privilege of the Opéra.[398]

Furthermore, it was at the heart of the Opéra where Italian music found its first considerable presence. This presence, however, resulted in the fierce *Querelle des Bouffons.* In 1752, the directors of the Opéra hired a small Italian troupe under the direction of Eustachio Bambini to perform three 'intermezzi'—a new comic genre based on situations from real life. Scholars have pointed out that this decision was motivated primarily by the financial need of the Opéra which was experiencing financial troubles.[399] One of the intermezzi which was performed was 'La Serva Padrona', by the Neapolitan composer Giovanni Battista Pergolesi. This intermezzo was performed about thirty times and was followed by a number of written celebratory articles, before the troupe was then asked to leave France.[400] This rapid development, from extreme success to expulsion, resulted from the vehemence of the musical controversy. Jean-Jacques Rousseau triggered the greatest controversy. After attending the performance of 'La Serva Padrona', Rousseau published his *Lettre sur la musique française* in 1753, in which he denied the suitability of the French language for any musical purpose, magnifying Raguenet's critique from the beginning of the century.[401] This triggered several responses in the press, and even led musicians of the Opéra to burn an effigy of him.[402] Rousseau, however, did not relent and attacked Rameau directly, an act which drew Rameau into the controversy.

397 See e.g. Fabiano, *Histoire de l'opéra italien en France*; Di Profio, *La révolution des Bouffons*; Weber, 'Learned and General Musical Taste'.

398 For literature documenting parodies, see e.g. Emile Campardon, *Les spectacles de la foire* (Paris: Berger-Levrault, 1877); Di Profio, *La révolution des Bouffons*, pp.24-25.

399 Martine de Rougemont, *La vie théâtrale en France au XVIIIe siècle* (Paris/Geneva: Slatkine, 1988), p.255.

400 Charlton, 'New Light on the Bouffons'; Fend, 'An Instinct for Parody', p.302.

401 Rousseau, *Lettre sur la musique française*.

402 Fend, 'An Instinct for Parody', p. 300.

It is possible to detect in this controversy a struggle between tradition and innovation in musical genres—French lyric tragedy versus Italian *opera buffa*—when one reads this musical criticism. Nevertheless, there is a stronger argument present in all these criticisms: the opposition of French and Italian characters, as expressed through their music. Two antagonistic parties thus formed: one side was French music with Rameau as its figurehead, and the other side was Italian music with Rousseau as its figurehead. Italian music was associated with 'melody' in explicit opposition to Rameau's system of harmony. Unlike musical harmony, which relied on mathematical proportions and required a cultivated ear, Rousseau's notion of 'melody' supported folk songs and espoused a more spontaneous expression of feeling. For Rousseau, Italian music represented the most popular and original expression of feeling. Rousseau composed his own 'Le Devin du Village' drawing on new appraisals of simplicity associated with bucolic life and the 'pastoral'.[403] With this musical work, Rousseau placed 'primitive' music and folk melody at the heart of elite sociability.

Rousseau defended 'melody' in relationship to Italian language. Rousseau built upon associations of the Italian language with musicality and spontaneity, as mentioned above. For Rousseau, the fact that the Italian language was pronounced in the same way that it was written, which Couperin contrasted with the intricacy of French pronunciation at the beginning of the century, indicated a more straightforward relationship between signs and meaning, in relation to the current debates over language.[404] By means of this condition, Italian characters were preferred, and Italian music represented a more 'transparent' and 'authentic' music form, as I will discuss below.

The debates over the *Querelle des Bouffons* therefore interwove many of the ongoing discussions about character, language, national identity, morality, the passions, and desired sonorities. Moreover, the *querelle* epitomised the appropriation of music as a public and political affair. The *querelle* was so widespread that, in addition to hundreds of newspaper articles, around sixty dissertations on the subject were written in a single year.[405] Rousseau himself later wrote that the controversy engaged all Parisians to such an extent that it diverted people's attention away from politics, and prevented a revolution that might have occurred at

[403] See Charlton, *Opera in the Age of Rousseau*.
[404] François Couperin, *L'art de toucher le clavecin* (Paris: 1716), pp.39-40.
[405] Fend, 'An Instinct for Parody', p. 296.

that time.[406] Indeed, as Elisabeth Cook pointed out, the *querelle* was to a great extent a debate about politics.[407]

3. French genius and the summit of history

Rousseau's pursuit of a 'primitive' state of music placed Italian and French music at opposite extremes of history. Significant here is the emergence in this period of a new literary genre of the history of music. The first history of music published in French was a compilation of writings by the physician Pierre Michon Bourdelot published in 1715 by his nephew Jacques Bonnet, followed two years later by a history of music written by the musician, physician, and classicist Pierre-Jean Burette.[408] These early efforts coincide in time and purpose with the scientific inquiries into music explored in the previous chapter. As William Weber pointed out, eighteenth-century writers often challenged the artistic status of music because it could not be legitimated in classical culture: there were no surviving scores from ancient times.[409] Finding the ancient roots of contemporary artistic practices was paramount for their status as *beaux arts*. Therefore, a number of French writers undertook the writing of musical histories in order to validate its status as an art form as well as discipline of knowledge. History was incorporated as a means of keeping music from becoming arbitrary and of grounding its practice in rationality. Moreover, these histories were constructed according to specific political agendas. Infused with historicity, music was more intimately connected with developments in national identity, language, and genius, and was more susceptible to political change and ideals of social organisation.

The histories of music published throughout the century had an all-encompassing purpose. They aimed to address music in all cultures and historical periods, and attempted to shoehorn them into a single coherent narrative. Therefore, histories of music described different 'stages' of musical composition which unfolded in a teleological order, in which each

[406] Jean-Jacques Rousseau, *Confessions*, Book V (Paris: 1782).
[407] See Cook, 'Challenging the Ancien Régime'.
[408] Pierre Michon Bourdelot, Pierre Bonnet-Bourdelot, and Jacques Bonnet, *Histoire de la musique et de ses effets, depuis son origine jusqu'à présent* (Paris: 1715); Pierre-Jean Burette, 'Dissertation, ou l'on fait voir que les merveilleux effets, attribués à la musique des anciens, ne prouvent pas qu'elle fût aussi parfaite que la nôtre. Lue le 26 juillet 1718', *Mémoires de littérature de l'Académie des Inscriptions et Belles Lettres*, V (Paris: 1729), 133-151. Burette read several memoires on Greek music in the Académie Royale des Sciences, from 1717 to 1743. See Philippe Vendrix, 'Pierre-Jean Burette, archéologue de la musique grecque', *Recherches sur la musique française* 27 (Paris: A. et J. Picard, 1991-1992).
[409] Weber, 'Learned and General Musical Taste'.

of the examples given proved a certain development in the consummation of music's purpose. Thus, these accounts are arguably philosophies of music history.[410] In so doing, histories of music followed a broader interest among contemporary French authors in writing histories to trace human advancement.[411]

Most histories of music published after Rameau's first proposals on 1722 had the agenda of elevating the status of musical harmony—taken in the broad sense in which contemporaries appropriated Rameau's propositions—and defending its superiority over other musical forms. Through these histories, the reception of Rameau contributed to creating a community of interlocutors and writers on musical subjects, as suggested in Chapter 1. These histories discussed a 'world' history of music in ascending order, depicting composers and events of the past as the many steps of a ladder which reached its peak in modern France. The history of music was, in this way, a progression that inevitably led to Rameau's musical harmony. Harmony was at the summit of music history, identified with modern civilisation and French culture. The historicist approach to musical harmony was related to contemporary practices of collecting and the fascination with 'exotic' musical cultures.[412] Harmony was frequently compared with these foreign or antique forms of music and organised into an historical structure, as these comparisons were often used to affirm harmony's superiority over them. Such philosophies of history elevated music above other forms of artistic experience, and legitimised cultural hegemonies: Western music over non-Western, and French music over Italian. More specifically, through comparing different types of music, the authors of these music histories praised the supremacy of French culture, felt to be under threat from the success of Italian music in Europe.

In order to argue for the superiority of musical harmony, authors situated the 'origins' of harmony in ancient times. The antiquity of harmony was therefore proof of its 'nobility' in many historical reflections, from the earliest responses to Rameau.[413] Pierre-Joseph Roussier—the musical amateur mentioned in the previous chapter—wrote a history of music that justified

[410] Allen, *Philosophies of Music History*; Semi, *Music as a Science of Mankind*; Vendrix, *Aux origines d'une discipline historique*.

[411] See e.g. Gabriel Daniel, *Histoire de France: depuis l'établissement de la monarchie françoise dans les Gaules* (Paris: 1713); Etienne Bonnot De Condillac, *Essai sur l'origine des connaissances humaines* (Paris: 1746), *Histoire ancienne* and *Histoire moderne* (Paris: 1758–1767); Marie-Jean-Antoine-Nicolas de Condorcet, *Esquisse d'un tableau historique des progres de l'esprit humain* (Paris: 1795).

[412] See my forthcoming article 'Tasteful Possessions. Collecting and Displaying Musical Instruments in pre-Revolutionary France'.

[413] See e.g. Jean-Baptiste-Louis Gresset, *Discours sur l'Harmonie* (Paris: 1737).

the authority of harmony on the basis of its antiquity. In his *Mémoire sur la Musique des Anciens* of 1770, Roussier advocated for the universal and 'natural' character of harmony in comparison to other musical cultures. Roussier described the musical systems of other cultures and historical periods as a means of demonstrating the common 'natural' origin of all systems. While this work admitted the possibility of different systems, it also described them historically as evolving towards 'our' system; 'Notre Systême fondé sur ce que nous appellons l'Harmonie'.[414] Roussier compared different systems, focusing especially on similarities between the Egyptian system and modern French harmony. Mirroring a contemporary tendency to equate the seven tones of the diatonic scale with natural phenomena, Roussier described at length the Egyptian association between planets, days of the week, and musical notes. Roussier both praised the 'natural origin' of this system, and offered it as a model of musical pedagogy, as people would easily understand musical notes given that they already knew the order of the planets and zodiac signs. In this way, he aimed not only to prove the antiquity of musical harmony, but also to endorse two of the main foundations of Rameau's system of musical harmony: its astronomical origins and its didactic function, which facilitated the simplification of musical practice.[415] Rameau himself also located the origins of harmony in Eastern cultures of the past; indeed, his *Code de musique pratique* of 1760 sited the origins of the 'fundamental bass' in Chinese musical scales.[416] Roussier also had expertise in Chinese music and hence contributed to Amiot's *Mémoire sur la Musique des Chinois*.[417]

In this way, musical harmony was simultaneously a French novelty and a discovery of an ancient and universal principle. These two beliefs converged to create a new narrative of invention. The first edition of the *Dictionnaire de l'Académie française* defined 'inventer' as 'trouver quelque chose de nouveau par la force de son esprit, de son imagination'.[418] Yet, in Jean-François Féraud's *Dictionnaire* of 1787, 'esprit' and 'imagination' were replaced by

[414] 'Our system founded upon what we call Harmony'. Pierre-Joseph Roussier, *Mémoire historique et pratique sur la musique des anciens, où l'on expose le principe des proportions authentiques, dites de Pythagore, & de divers systêmes de musique chez les Grecs, les Chinois & les Egyptiens. Avec un parallèle entre le systême des Egyptiens & celui des modernes*, 2nd edn. (Paris: 1774), p.84.

[415] Roussier, *Mémoire historique et pratique*. Roussier provides an 'instructive' engraving of the analogy between planets, days of the week, and musical notes in p.76.

[416] Jean-Philippe Rameau, *Code de musique pratique; ou, Méthodes pour apprendre la musique, même à des aveugles, pour former la voix & l'oreille* (Paris: 1760). See Nathan Martin, 'La Découverte de la Basse Fondamentale', paper presentation for the 20th Congress of the International Musicological Society (Tokyo: 2017).

[417] Amiot, *Mémoire sur la Musique des Chinois*.

[418] '[To invent is] to find something new by the power of one's esprit, one's imagination'. *Dictionnaire de l'Académie française* (Paris: 1694). ARFL project.

‘génie’.[419] This alteration evokes the growing popularity throughout the century of the notion of ‘génie’, which became increasingly associated with ideas of inventiveness. However, this change also reveals the extent to which genius was still a matter of ‘finding’ rather than ‘creating’; the verb ‘trouver’ would be replaced by ‘créer’ only in the nineteenth century.[420] Consequently, in the eighteenth century, invention was often associated with discovery. Accordingly, histories of music placed harmony both at the very beginnings of history and at its apex, as harmony was both retrieved from antiquity and invented in modern France. In this way, the beginning and the end of the history of harmony ultimately coincided.

Therefore, numerous histories of music also framed harmony as the culmination of genius in modern civilisation. As Bell has pointed out, the notion of ‘civilisation’ was foundational to the construction of a sense of ‘nation’ in France.[421] Moreover, the precise momentum of harmony in modern times encapsulated a new notion of French genius which combined a previous notion of genius as national character (one rooted in a specific place and collectivity) with an endorsement of inventiveness and the association of Rameau to the genius of Newton. In his prize-winning *Discours* presented at the Académie de Marseille in 1767, Sébastien-Roch-Nicolas Chamfort asked ‘combien le génie des grands écrivains influe sur l'esprit de leur siècle?’[422] He claimed that genius exerted a powerful influence over national spirit and politics. Chamfort opened his *Discours* by placing genius at one of the ‘two extremes’ of human nature: ‘Il n’est point d’espèce dans l’univers dont les deux extrêmes soient séparés par un aussi grand intervale que celui qu’a jeté la nature entre les deux extrémités de l’espèce humaine. Quelle distance immense entre un sauvage grossier qui peut à peine combiner deux ou trois idées, et un génie tel que Descartes et Newton!’ He compared one extreme (the ‘sauvage’) to a ‘bloc informe et brut,’ and the other (the ‘génie’), to a ‘statue colossale qu’un Phidias a fait respirer et vivre’.[423] The distance between these two extremes was understood by many writers of music histories as a temporal distance. Genius, allocated to one of the two

[419] Jean-François Feraud, *Dictionnaire critique de la langue française* T. 2 (Paris: 1787). ARTFL project.
[420] Émile Littré, *Dictionnaire de la langue française,* T. 3 (Paris: 1873).
[421] Bell, *The Cult of the Nation,* p.41.
[422] ‘To what extent does the genius of great writers influence the esprit of their time?’ Sébastien-Roch-Nicolas Chamfort, ‘Discours sur l’influence des grands écrivains’, *Oeuvres complètes* (Paris: Madran, 1812).
[423] ‘For no species in the world is the interval between the two ends so big, as for the human species, in which nature threw a tremendous gap separating one extreme from the other. What a huge distance there is between a coarse savage who is barely able to combine two or three ideas, and geniuses such as Descartes or Newton!’; A ‘shapeless crude block of stone’ and a ‘colossal statue to which one of the likes of Phidias would have given spirit and life’. Chamfort, *Discours,* p.69. See Gilles Siouffi, *Le génie de la langue française: Études sur les structures imaginaires de la description linguistique àl’Âge classique* (Paris: Champion, 2010).

extremes, corresponded to contemporary times, whereas raw and shapeless matter was associated with the dawn of history.

Musical harmony with its new 'scientific' status was thus placed at the summit of a long upward path of reasoning, experimentation, and musical composition. Calling Rameau the 'Newton of music' contributed to this, as Newton had become an emblem of genius and Enlightenment in France.[424] For Condillac, genius was located at 'the zenith of civilisations', the moment at which a nation fulfilled the character of their language.[425] Given that music was inextricably linked with a nation's language, the fact that musical harmony expressed the fulfilment of French civilisation and a particular understanding of French genius should not be surprising. The figurehead of harmony, Jean-Philippe Rameau, was considered a genius at a time when, according to Jean-Alexandre Perras, the increased prestige of the figure of genius was becoming a national and political issue. Perras argued that the notion of genius experienced a semantic shift, to one in which genius was no longer considered a particular characteristic but became 'an attribute qualifying the individual as a whole ("this person is a genius")'.[426] This transition, Perras explains, moved from a regime of 'having' to one of 'being'.[427] Rameau, therefore, fit Perras's picture of a new individualised form of genius which was 'exemplary' for the nation.[428] Rameau's exemplarity was possible because his individual genius represented the genius of the nation. When addressing Montesquieu, Chamfort represented genius as a powerful political influence, surpassing even that of the king.[429]

Therefore, Rameau—representing an individualised and political version of genius—also epitomised a national narrative of inventiveness which was attached to French national character. Inventing was encouraged as a matter of public utility and national pride in eighteenth-century France.[430] In his history of music, Charles-Henri de Blainville—a musician discussed in the previous chapter whose writings were widely debated—made invention a driving force for historical progress. Blainville, who was an active promoter of novelties,

424 Shank, *The Newton Wars*.
425 Perras, 'Genius as Commonplace', p.29.
426 Perras, 'Genius as Commonplace', p.20.
427 Perras, 'Genius as Commonplace', p.25.
428 Jean-Alexandre Perras, *L'exception exemplaire: Inventions et usages du génie, XVIe–XVIIIe siècle* (Paris: Classiques Garnier, 2015).
429 Chamfort, 'Discours', p.86; See Perras, 'Genius as Commonplace', p.29.
430 See Liliane Hilaire-Pérez, 'Invention, politique et société en France dans la deuxième moitié du XVIIIe siècle', *Revue d'histoire moderne et contemporaine* 37:1 (1990), 36-63.

envisaged inventiveness as the motor of musical advancement. Like Chamfort, he proposed that the genius of French inventors lay in their ability to manipulate and polish raw matter:

> Le premier homme en France qui tira la Musique de la masse informe du contrepoint, qui forma des chants agréables, fut Lambert: ses brunettes furent les premiers rayons de goût (…) Lully vient ensuite (…) Cet homme vaste dans ses idées, fut toujours grand, même dans les sujets les plus rians; & cet art qu'il reçut comme brut des mains de la nature, il le polit, à mesure que, par la force de son génie, il le forca [*sic.*] de découvrir ses trésors les plus caches.[431]

For Blainville, therefore, music theory as systematised by both musicians and philosophers was a matter of national pride: 'c'est une gloire qu'aucune Nation de L'Europe ne peut se vanter de partager avec nous'.[432] French systems of harmony were explicitly in opposition to Italian music. Blainville reviewed a list of contemporary French writers on music theory and concluded that their discoveries differed radically from the 'désordres de l'imagination' of Italians.[433]

In a clearly derogatory way, Italian music was often linked with ideas of 'decadence' in opposition to French models of progress. Historians have documented the spread of a stereotype of Italian decadence in this period, measured by reference not only to the past splendour of the Roman Empire, but also to the considerable influence Italian humanism had formerly possessed in Europe.[434] Although the notion of Italian decadence has been questioned in secondary literature, it did play an important role in European stereotypes of Italians and the construction of musical histories.[435] As Andrew Canepa has pointed out with regard to English

431 'The first man who saved music from the shapeless mass of counterpoint in France, who for the first time wrote agreeable songs, was Lambert: his brunettes were the first sunbeams of taste (…) Then Lully came (…) This man, who had broad ideas, was always great, even in the lighter subjects; and the art nature gave him crude and unrefined he polished it, as by forcing it through the power of his genius, to reveal its most hidden treasures'. Charles de Blainville, *L'esprit de l'art musical ou réflexions sur la musique et ses différents parties* (Geneva: 1754), pp.32-34.

432 'Such a glory cannot be claimed by any Nation in Europe but ours'. Blainville, *L'esprit de l'art musical*, p.39.

433 Blainville highlighted the following French writers of music theory: 'Voyez la génération harm. De M. Rameau; la nouvelle découverte du principe de l'harmonie, de M. Esteve de la Société des Sciences de Montpellier, l'Ouvrage de M. Deserre; nouvelle manière d'écrire la Musique, par M. Rousseau; les Elémens de l'harmonie, selon le systême de M. Rameau, par M. d'Alembert, des Académies, &c.' Blainville, *L'esprit de l'art musical*, p. 39 (footnote).

434 See e.g. Carlo M. Cipolla, 'The Decline of Italy: The Case of a Fully Matured Economy', *The Economic History Review* 5:2 (1952), 178-87; Franco Venturi, *L'Italia fuori d'Italia* (Torino: Einaudi, 1973); Dino Carpanetto and Giussepe Ricuperati, *Italy in the Age of Reason, 1685-1789* (London: Longman, 1987).

435 See e.g. Castillo, *The Empire of Stereotypes*, p.7.

stereotypes, the economic relationship between England and Italy during the seventeenth century was inverted. The economy of Italy—which had until then been a major power—declined during the century, whereas England experienced economic growth. For Canepa, this favoured the increasingly negative stereotypes that British writers attached to Italy, considering Italians in general to be 'unindustrious' and 'indolent', and their nobles full of 'material ostentation and intellectual pretentiousness'.[436] By contrast, England—with its northern character and increasing wealth—was seen by some French authors as a counter-model to Italy. For instance Voltaire, and later Madame de Staël, contrasted Italian's economic and religious 'decadence' with the philosophic, moral, and economic superiority of England.[437] The model of Italian decadence was coupled with an increasing fashion for English culture in France; this 'Anglomania' was expressed in various cultural practices and an overall favourable appraisal of English 'character'.[438]

The stress placed on the contrast between the ancient Roman empire and the eighteenth-century 'uncivilised' Italy resonated with France's own fashioning of a national identity as an imperial metropolis. As Jancourt claimed in his article on 'travel' in the *Encyclopédie*, Italy offered the traveller 'merely the ruins of the splendid Italy of the past', although these ruins, he remarked, were 'marbles' worth visiting.[439] The primary reason for this contrast was that eighteenth-century Italy lacked the centralised structure of the empire, and even any political unity. French travellers considered this to be applicable to their own search for unity, drawing on the splendour of Louis XIV's governance and absolutist programme. Likewise, the French national ideal was appropriated from the classical culture, where the Roman Empire offered a major example.

The 'uncivilised' character of Italians was the cornerstone of Rousseau's defence of Italian music. Rousseau took his own philosophy of musical history in the opposite direction to that of his contemporaries who also wrote musical histories: his *Dissertation sur la musique moderne* portrayed modern music as decadence rather than the summit of music. Harmony,

[436] Andrew Canepa, 'From Degenerate Scoundrel to Noble Savage: The Italian Stereotype in 18th-Century British Travel Literature', in *English Miscellany. A Symposium of History Literature and the Arts*, eds. Mario Praz and Giorgio Melchiori (Roma: Edizioni di Storia e Letteratura, 1971), p.125.

[437] See Castillo, *The Empire of Stereotypes*, p.15.

[438] On 'Anglomanie' see Josephine Grieder, *Anglomania in France 1740-1789: Fact, Fiction and Political Discourse* (Geneva and Paris: Librarie Droz, 1985); Ian Buruma, *Voltaire's Coconuts, Or Anglomania in Europe* (London: Weidenfeld & Nicolson, 1999); Robert and Isabelle Tombs, *That Sweet Enemy. The French and the British from the Sun King to the Present* (New York: Random House, 2010).

[439] Chevalier Louis de Jaucourt, 'Voyage', in *Encyclopédie*, eds. Diderot and d'Alembert, vol. 17 (Paris: 1765) pp.476-477.

representing modern civilisation, was portrayed as corrupting primitive music.[440] In the *Essai sur l'origine des langues,* Rousseau described a similar philosophical model, locating the origins of music in a period before the invention of language.[441] Pre-civilised music was portrayed as a sort of golden age after which music had subsequently declined. The question of the *origins* of music, pursued in numerous French musical histories in an attempt to legitimate the 'invention' or 'discovery' of harmony, was now conflated with the history of language, and music was imbricated in a broader discussion about the origins and development of language. As described by Downing A. Thomas, 'music serves as the anthropological "missing link" in the eighteenth-century attempt to trace semiosis to its origin, to pinpoint the semiotic moment which separates culture from nature, and human beings from animals'.[442] This historical narrative, which framed music as the start rather than the apogee of civilisation, distanced music from contemporary views of history as a linear progress particularly displayed through developments in the arts and sciences. Once separated from the deterioration of French taste that pervaded other arts and sciences, music was for Rousseau both a privileged art form and a primitive form of communication.

Both types of philosophies of musical history were grounded in notions of nature. However, different models of nature and the natural were central to the debate between Rousseau and Rameau, as I discussed in the previous chapter. While Rameau alluded to a geometrical model of natural order, Rousseau addressed values such as 'authenticity' and 'transparency', situating nature within the interiority of feeling. Corresponding to these two notions of nature, philosophies of musical history espoused two models of genius. While French genius in music followed a narrative of inventiveness, the genius of Italian music, for Rousseau, was the 'spontaneous' and 'authentic' expression of innate feelings. Blainville claimed that, whereas French genius was associated with invention and the intellect, the genius of Italians was the 'fire' of their passions: 'Les Italiens ont un feu, un enthousiasme qu'il nous sera toujours difficile d'égaler'.[443] Rather than the polished system of harmony, which epitomised French ingenuity, Blainville linked Italian music to ingenuity. These two models of genius would interact in eighteenth-century notions of musical creativity.[444]

[440] Jean-Jacques Rousseau, *Dissertation sur la musique moderne* (Paris: 1743).
[441] Rousseau, *Essai sur l'origine des langues.*
[442] Thomas, *Music and the Origins of Language*, p.9.
[443] 'Italians have a fire, an enthusiasm that we will always find difficult to equal'. Blainville, *L'esprit de l'art musical*, p.40.
[444] For contrasting models of musical genius in the German lands, see Kivy, *The Possessor and the Possessed.*

In sum, the consideration of music as a science served to justify national and regional supremacies. Harmony was considered the ultimate form of music—not just the only scientific form, but also the best. The 'philosophies of musical history' attempted to prove the supremacy of harmony, either by portraying an evolutionary trajectory towards French harmony, or by showing that the ancients had a similar system, which thereby proved the antiquity—and thus the legitimacy—of modern harmony. However, Rousseau, a detractor of French harmony, portrayed history as following the opposite course, in which modern harmony was not the accomplishment but a sign of the deterioration of modern taste. The arrow of the history of music was inverted.

4. The new sensibility and the reappraisal of Italian character

Rousseau's association of the origins of history with Italian national character generated a discourse about 'authenticity' and 'naturalness' that was crucial to the cult of sensibility in the second half of the century. Rousseau and his interlocutors displayed many of the stereotypes previously mentioned, but they inverted their value. Andrew Canepa has argued that, around the middle of the century, there was a radical shift in the way British travellers perceived the Italians. Canepa suggests that this shift was triggered primarily by the publication of Giuseppe Baretti's defence of Italian character and the spread of Rousseau's writings around Europe.[445] Baretti was an Italian man of letters living in London, who mounted a defence of Italy against the predominantly negative stereotypes held by the British. He first contested Voltaire's criticism of Dante—whom he considered to be a poetic genius—and the view of the Italian language as less capable of literary achievements.[446] Later, in his *Account of the Manners and Customs of Italy* (1768), Baretti specifically tackled stereotypes of Italian character, arguing against and later engaging in a controversy with the British traveller Samuel Sharp. In this work, Baretti criticised the tendency of 'travel-writers' of making unfounded generalisations and 'premature and, rash judgments, upon every thing they see', without being well informed.[447] Instead, Baretti emphasised the diversity of the Italian character, and attempted to

[445] Canepa, 'From Degenerate Scoundrel to Noble Savage', p.140.

[446] See, from Giuseppe Baretti, *Pier Cornelio* (Venice: 1747-1748), *A Dissertation upon the Italian Poetry* (London: 1753), *A History of the Italian Tongue* (London: 1757), and *Discours sur Shakespeare et sur Monsieur de Voltaire* (London: 1777).

[447] Giuseppe Baretti, *An Account of the Manners and Customs of Italy*, vol. 1 (London: 1768), pp. iv-x. David Hume previously condemned the use of generalisations in his *Of National Characters* (1748).

counter the leading negative stereotypes—literary and scholarly standards, cicisbeism, and effeminacy—one by one.

In response to Sharp's critiques, Baretti devoted a chapter to music in his vindication of Italian character, as he deemed music characteristic of Italy's cultural vitality.[448] Sharp criticised Italian audiences of opera as being noisy, distracted, restless, and uncultivated. Moreover, he claimed that only a few gentlemen 'played the fiddle' and that women did not receive musical education at all.[449] While Baretti did not entirely disprove these assertions—audiences were indeed restless, musicians were not well regarded amongst gentlemen, and women seldom learnt to perform an instrument—he did stress that Italians had an unequalled 'sensibility' for music. This 'sensibility' was a product of the climate of Italy: 'Our climate quickens our sensibility in such a manner, that music affects us infinitely more than it does other nations'.[450] Women's sensibilities were even more acute, due to 'the cleanness and warmth of our atmosphere, which gives to the generality of our women not only sweeter throats than to those of other countries, but makes them likewise feel with more sensibility the charms of music'.[451] Given this extreme sensibility, music was deemed dangerous for the education of ladies: 'music, though guiltless in itself, would certainly discompose their little hearts'.[452] This danger was not felt in England, where music did not propagate as 'naturally': 'Like an exotic plant, it will never spread so as to prove hurtful by its luxuriancy; but we must rigidly lop it in Italy, where it grows naturally so fast, as to make us tremble at the balefulness of its influence'.[453]

Despite these comments about the potential harm of music, the characterisation of the unequalled 'sensibility' of Italians, often linked to femininity and their 'natural' susceptibility to music, was the cornerstone of new conceptions of both Italian character and music. Rousseau's defence of Italian music, with his polemic engagement in the *Querelle des Bouffons* and his particular philosophy of history, were essential to this conceptual change. Like Baretti, Rousseau too denounced the harmfulness of stereotypes. He mentioned in his *Confessions* that, when he arrived to Venice in 1743, he brought with him prejudices which he could mitigate due to his own personal sensibility: 'J'avais apporté de Paris le préjugé qu'on a dans ce pays

448 Baretti, *An Account*, chapter XVII: 'The present state of music in Italy'.
449 Samuel Sharp, *Letters from Italy* (London: 1765-66), p.79.
450 Baretti, *An Account*, p.295.
451 Baretti, *An Account*, p.296.
452 Baretti, *An Account*, p.298.
453 Baretti, *An Account*, p.297.

là contre la musique italienne, mais j'avais aussi reçu de la nature cette sensibilité de tact'.[454] Rousseau claimed that he was then able to perceive what Italy 'really' was, beyond stereotypes. Nevertheless, in his comments on Italian character and music, Rousseau largely drew upon existing repertoires of stereotypes. However, he took them in the opposite sense: he referred to the most common stereotypes used to denigrate Italians, such as 'lack of rationality', 'simplicity', 'sensuality', and 'emotionality', as positive attributes. Thus, in his defence of 'melody,' Rousseau associated the stereotype of the Italian 'uncivilised' character with the idea of the 'noble savage' and the previously mentioned alternative model of naturalness, located in a theoretical original stage of history. For Rousseau, moreover, what had previously been described as 'exaggerated' demonstrations of emotion was a positive attribute which demonstrated Italian 'spontaneity' and 'authenticity'.[455] Therefore, Rousseau led a new appreciation of Italians which was triggered not so much by new stereotypes but rather by the re-interpretation of existing ones. This new embrace of Italian national character and musicality, imbued with claims about nature, language, feeling, and morality, was found in various authors throughout the second half of the century, and even penetrated French travel accounts.[456]

I contend that the changing view about the Italians and the Italianate at the heart of Rousseau's arguments in the *Querelle des Bouffons* were representative of a new sensibility that emerged in France at that time, as mentioned in Chapter 1. Many of the values that came to be embraced have been discussed in secondary literature in relation to the new sensibility, which spread during the second half of the century. Expressed in various different practices, this new sensibility comprised values such as intimacy, authenticity, feeling and new ideas of nature.[457] It has been argued that the cult of sensibility rejected the geometrical spirit, as well as the artificiality of court life. It was manifested in a wide range of practices, such as the writing of novels and reading, sociability, gardening, and medicine. Jean Starobinski

[454] 'I had brought back from Paris the prejudice, common in France, against Italian music, but I had also received from nature this sensitivity [*sensibilité*] of tact'. Rousseau, *Confessions*, Book VII (Paris: 1789).

[455] Rousseau's writings on music include: *Dissertation sur la musique moderne* (Paris: 1743), *Lettre sur la musique française* (Paris: 1753), *Dictionnaire de musique* (Paris: 1768), *Essai sur l'origine des langues, ou il est parlé de la mélodie et de l'imitation musicale* (Geneva: 1781). For his ideas associated to the myth of the 'noble savage' see Jean-Jacques Rousseau, *Discours sur l'origine et les fondements de l'inégalité parmi les hommes* (Geneva: 1755).

[456] See e.g. Creuzé de Lesser, *Voyage en Italie*, p. 138, 142.

[457] See e.g. Ehrard, *L'idée de la nature*; Vincent-Buffault, *The History of Tears*; Chartier, *The Cultural Origins of the French Revolution*; Fried, *Absorption and Theatricality*.

highlighted the influence of Rousseau's musical ideas on the new sensibility.[458] With an instrumental use of history, Rousseau established music as the most natural and original form of language and feeling. In the primitive stage of history which he described, music—specifically the melodic voice—was the first and most natural expression of feeling and form of communication. Music was thus the most potent means of engaging transparently with one's own feelings and those of others. Therefore, music held a privileged status: unlike other languages and art forms, music could reach the universal, original, natural, and primitive. This privileged status of music was not only nourished by the new sensibility, but was essential to the articulation of the new sensibility itself.

For the natural philosopher and amateur musician Comte de Lacépède, music was given a privileged status as a signifier of the passions because of its ability to affect the body and communicate with listeners through sensations.[459] Indeed, historians such as William Reddy, Anne C. Vila, and Dorinda Outram have demonstrated that the new sensibility had a dual emphasis on feeling and physical sensation.[460] In effect, the new sensibility during the second half of the century included an understanding of feeling as physically embodied: passions were experienced, regulated, and communicated by means of the body. Therefore, the 'sensuality' of Italians made them more capable of feeling pleasure from music, which was achieved through a form of listening which engaged the whole body. The stereotype of 'exaggerated' demonstrations of emotion among Italians was now reframed as a sign of transparency and authenticity in the expression and communication of intimate feelings. In his defence of the moral sympathy of Italians, Baretti stated that 'the Italians are so tender-hearted, that they will shed tears at any mournful story'.[461] His emphasis on tears as a meaningful sign of feelings is consistent with a general stress on tears in this period which, as Anne Vincent-Buffault pointed out, reveals both a new notion of intimacy, related to the dissemination of sentimental novels, and a public engagement in sociability around a form of shared sensibility.[462] Furthermore, tears became a specific expression of musical sensibility. When Rousseau described the first performance of his *Devin du Village*, he considered the tears shed by the audience to be a measure of the musical achievement.[463] References to tears abounded in accounts of listening

458 Starobinski, *Jean-Jacques Rousseau*; Starobinski, *Le remède dans le mal.*
459 Thomas, *Music and the Origins of Language*.
460 Reddy, *The Navigation of Feeling*; Vila, *Enlightenment and Pathology*; Outram, *The Body and the French Revolution*.
461 Baretti, *An Account*, vol. 1, p.59.
462 Vincent-Buffault, *The History of Tears*.
463 Rousseau, *Confessions*, Book VIII, p.102.

which marked a new type of sensible listener whose 'authenticity' of feeling was communicated through their bodies.

A new appraisal of the senses was to be found, which manifested itself in new practices of listening, as well as the pursuit of a new range of sounds and characters. As mentioned above, the notion of a 'national character' communicated through music was associated with a particular repertoire of musical 'characters' and, consequently, conditioned a specific spectrum of sounds and musical passions. Therefore, the reappraisal of Italian character and the emergence of the new sensibility involved a shift in the range of desirable sounds and characters in music. The adoption of passions associated with Italian music and the Italianate imbued French music with a new sonic spectrum.

This expansion of sounds is partly explained by an increasing openness towards Italian music, which involved not only the incorporation of Italian repertoire but also Italian performers, composers, and teachers working in France. The process of negotiating and accommodating Italian music can be seen in the reorganisation of the map of French musical institutions during the 1770s. Some have argued that the introduction of Italian music was strengthened by the merging of the small theatres Opéra-Comique and Théatre-Italien in 1762, the latter of which had previously been forced to close for eleven years.[464] Beyond the Opéra-Comique, Marie-Antoinette also appointed two musical entrepreneurs who favoured the introduction of Italian troupes: Demoiselle Montansier in the theatre of the court in 1775, and Jacques de Vismes du Valgay in the Académie Royale de Musique. The latter hosted an Italian troupe under the direction of Gioacchino Caribaldi which performed fifteen operas between 1778 and 1780.[465] Besides this institutional reorganisation, there was a wider and more general cultural transfer of Italian repertoire and musicians. Playing and listening to Italian music, or simply music created according to Italian styles, became increasingly common across France over the course of the eighteenth century.

The increasing and significant presence of Italian music was visible in the growing frequency with which Italian musical characters appeared on French musical scores and treatises. As mentioned above, music teaching manuals often included a 'vocabulary' of musical characters at the end of their works. While musical characters had been portrayed as a defining feature of French music by composers and writers such as Couperin, by the second half of the eighteenth century these vocabularies increasingly included primarily Italian

[464] See e.g. Claudon, *Dictionnaire de l'Opéra-Comique*; Wild and Charlton, *Théâtre de l'Opéra-Comique*.
[465] Di Profio, *La révolution des Bouffons*, p.22.

characters, which were translated into French.[466] This incorporation of Italian characters in pedagogical literature is highly significant, as it reveals an acknowledgement that Italian had become the predominant language for music, even though French was established as the main language of European cultural life. It also shows that students of music were being trained in an increasing cosmopolitan and multi-lingual musical world.[467]

Furthermore, the use of Italian characters in France fitted with a broader expansion in the repertoire of musical characters and passions. In music composition, composers of both opera and instrumental music increased the number and use of characters during the second half of the century. Developments in genres and techniques of instrumental music were crucial, as they combined effects, sound volumes, and timbres—and, therefore, expanded considerably the number and diversity of musical characters.[468] Moreover, new musical instruments were invented, improved, and distributed in response to increasing tastes and desires for both instrumental music and a wider range of characters.[469] Other artistic practices and medical accounts of the period also saw the expansion of characters and passions. According to Melissa Percival, this was related to a new emphasis on human diversity and variability in physiology, which was distanced from previous frameworks like the four traditional temperaments.[470]

Therefore, the ubiquity of Italian characters reveals a process of appropriation of a new emotional language for music, one which involved the expansion of desirable sonorities. For instance, the embrace of Italian character—which, as previously mentioned, was gendered—brought with it the adoption of sounds and instruments that were associated with the feminine. In the expansion of sonorities during this period, sonic values associated with women, such as softness, nuance, and delicacy, occupied a notorious place. Indeed, music historians have documented that, in the decades preceding the French Revolution, music often embodied a certain 'feminine' character, which was associated with polite values of tasteful demeanours, yet also involved a new appraisal of the senses and emotions. This appraisal did not necessarily refer to women performers, but to a certain feminine character that was sought in music.[471] The

[466] See e.g. Michel Corrette, *Le maître de clavecin pour l'accompagnement, méthode theorique et pratique* (Paris: 1753); Bach and Ricci, *Méthode ou recueil des connaissances élémentaires.*

[467] Weber, 'Cosmopolitan, National, and Regional Identities'.

[468] Dolan, *The Orchestral Revolution*; Schwarz, *French Instrumental Music*; Brenet, *Les concerts en France*; Macdonald, *François-Joseph Gossec*.

[469] See e.g. Will, *The Characteristic Symphony*; Macdonald, *François-Joseph Gossec*.

[470] Percival, *The Appearance of Character*, p.35.

[471] See Matthew Head, *Sovereign Feminine: Music and Gender in Eighteenth-Century Germany* (Berkeley: University of California Press, 2013).

association of the new appraisal of music with the feminine was strengthened by the fact that Rousseau's camp in the *Querelle des bouffons* was called 'the queen's corner', and by the fact that Marie-Antoinette assisted in the reintroduction of Italian music. Earlier negative stereotypes of Italians as sensual and effeminate were now re-evaluated positively in relation to the cult of sensibility.

The new sensibility and the appraisal of feminine character was expressed in the fashion for certain musical instruments, some of which were newly created, while others were rediscovered after having fallen into disuse. The *Encyclopédie Méthodique* reveals a renewed interest in guitars in this period, which authors associated with a preference for the pastoral and for musical forms associated with the folk, as had been praised by Rousseau: 'Quelques amateurs ont fait renaître un peu la guittare [*sic*], & ont en même-temps réveillé notre goût pour les vaudevilles, pastorales & brûnettes, qui en acquièrent un nouvel agrément'.[472] Maisoncelle, in his account of instruments and performers, held women responsible for the fashion for guitars: 'La Guitarre despuis quelques années est devenue très-à la mode, les Dames, comme le remarque très bien mon Auteur, n'ont pas peu contribué à lui donner la vogue, il n'y a point d'Instrumens en effet, où elles puissent mieux faire voir la beauté de leurs mains que sur celui là'.[473] In Maisoncelle's view, guitars were not associated so much with feminine sound as with the display of women's hands, showing how women's performance was to a great extent embedded in practices of courtship.

In the same period, the fashion for harps also increased with the new emphasis on feeling, the feminine, and amateur sociability. Both the sound and image of the harp were associated with seduction and were therefore signs of refined femininity on the part of the performer.[474] Diderot and d'Alembert's *Encyclopédie,* in its section devoted to engravings of 'lutherie', described the recent success of harps in 1767: 'Cet instrument auquel nul autre n'est comparable, est le seul aujourd'hui qui triomphe à juste titre, et qui devient l'objet de l'amusement d'un sexe né sensible, qui, loin de se refuser aux émotions que la harpe fait exciter

472 'Some amateurs have given the guitar a new life, and this also reawakened our taste for vaudevilles, pastorals and brunettes, which have thus become more pleasurable'. Lacombe, *Encyclopédie méthodique,* vol. 4, p.43.

473 'In the last few years the Guitar has become very fashionable, and Ladies in particular (as our Author rightly suggests) have no little responsibility for bringing this trend back; indeed there is no Instrument with which they can better show the beauty of their hands than this one'. M. de Maisoncelle, *Réponse aux Observations sur la musique, les musiciens & les instrumens* (Avignon: 1758), pp.32-33.

474 Mimi Hellman, 'Interior Motives: Seduction by Decoration in Eighteenth-Century France', in *Dangerous Liaisons: Fashion, Furniture in Eighteenth-Century France,* eds. Harold Koda and Andrew Bolton (New York and New Haven, CT: Yale University Press, 2006), 15-24.

dans nos ames par la douceur de son harmonie et la suavité de ses sons, lui prête encore des secours favorables, afin d'en augmenter le charme'.[475] As this note suggests, the musical sensibility of French women was encouraged, a fact which stands in sharp contrast with Baretti's comments on these lines, as mentioned above. Moreover, not only was the sound of the harp translated into an emotional language, but it also enhanced feminine features. Harps, often richly decorated, were highly prized commodities amongst women. The proliferation of harps in the last third of the century was due, to a great extent, to Marie Antoinette's liking of this instrument, and extended to many well-to-do women also.[476] The sonic 'character' of harps was described with words such as 'sweetness' and 'softness'. Among all the emotions, the character of harps was considered to be 'plus propre à exprimer la tendresse & la douleur, que les autres affections de l'ame'.[477]

Harps, lutes, and guitars produced primarily subtle and soft sounds. Indeed, the stress placed on sensibility encouraged the use of delicate sounds and the appraisal of low-volume instruments under the rubric of intimate feeling. This phenomenon was expressed in German lands through the fashion for clavichords, which produced a rich range of low-volume sounds and nuances. Taste for the clavichord has been explained in terms of the stress placed on feeling within contemporary musical styles (like the *Galant* and *Empfindsamer*) and by composers such as Carl Philipp Emanuel Bach.[478] Although the clavichord was not as fashionable in France, a similar pursuit of low-volume sounds was found in relation to the new sensibility's stress on values such as intimacy and refined sensation. The *Encyclopédie méthodique* stated that guitars, like lutes, were not suitable for 'concerts' due to their soft and low-volume sound. Guitars had an especially delicate character and thus required an attentive, silent, listener: 'Le son de cet instrument est si doux, qu'il faut le plus grand silence pour sentir toutes les délicatesses d'un beau toucher. Dans un lieu bruyant, on n'entend souvent que le tac des doigts;

[475] 'This instrument, to which no other can be compared, is the only one that is rightly triumphant today, and it is becoming an object of pleasure for the sensitive sex who far from rejecting the emotions that the harp arises in our souls through the softness of its harmony and the sweetness of its sounds, lends its aid in order to increase its charm still further'. Denis Diderot and Jean le Rond d'Alembert, *Recueil de planches, sur les sciences, les arts libéraux et les arts mechaniques: avec leur explication. Lutherie* (Paris: 1767), p.5.

[476] See Sylvette Milliot, 'La harpe au XVIIIe siècle à travers les documents iconographiques', in *Instruments et musique instrumentale*, ed. Hélène Charnassé (Paris: CNRS, 1986), 141-160; Florence Gétreau, *Histoire des instruments et représentations de la musique en France. Thèse d'Habilitation à diriger des recherches*, Université François-Rabelais de Tours (2006).

[477] 'More suitable for expressing tenderness and pain, than the other affections of the soul'. Lacombe, *Encyclopédie méthodique*, vol. 4, p. 38.

[478] Bernard Brauchli, *The Clavichord* (Cambridge: Cambridge University Press, 1998), p.137; Robert Marshall, *Eighteenth-Century Keyboard Music* (London: Routledge, 2004), pp.12-14.

le charme est totalement perdu'.[479] Silence and intimacy were intertwined in the emergence of a new form of listening. This does not necessarily implicate that Parisian audiences 'grew silent' in the way suggested by James H. Johnson.[480] But instead, it reveals that silence was made meaningful within musical practice, and was central to the new appraisal of music, as related specifically to the emergence of the new sensibility. A taste for the pastoral meant that folk instruments such as musettes and hurdy-gurdies had already become fashionable amongst elites. These loud instruments, which were incorporated not without controversy, were catalogued as 'bruyantes' and epitomised a re-signification of noise in courtly and well-to-do environments.[481] Although also inspired by the pastoral and folk music, the renewed taste for guitars in the second half of the century captured the pastoral in a different way: as an emotional regime that privileged spontaneous and delicate feelings. At court, this approach to the pastoral found expression in music as well as other practices, such as amateur theatre, portraits and fashion.[482] Far from noise, the sound of guitars mingled with silence. As such, guitars were more suitable for expressing intimate feelings and cultivating a taste for the feminine. Therefore, the growth of instrumental music, characters, and the taste for certain instruments was led by the new sensibility and thus established a new musical language which conveyed a different range of emotions and sonorities.

5. Musical politics

The embrace of the new sensibility and Italian music carried profound political implications. Jean Starobinski and Dorinda Outram, among other historians, have rightly stressed the political significance of the new sensibility.[483] Similarly, Rousseau's opposition to harmony was a political stance in several ways. As previously mentioned, his confrontation of harmony was shaped by his embrace of Italian character, the concept of melody, and a historical narrative

[479] 'The sound made by this instrument is so soft, that the deepest of silences is required if one is to feel all the subtleties of a fine touch. In a noisy location, often only the ticking sound of the fingers is heard; the charm is completely lost'. Lacombe, *Encyclopédie méthodique*, vol. 4, p.43.

[480] Johnson, *Listening in Paris*.

[481] See Brenet *Les concerts en France*, p.211; Robert A. Green, *The Hurdy-Gurdy in Eighteenth-Century France*, 2nd edn., (Bloomington: Indiana University Press, 2016).

[482] See e.g. the fashion for shepherdess outfits and muslin as wore by Marie Antoinette. Caroline Weber, *Queen of Fashion: What Marie Antoinette Wore to the Revolution* (New York: Henry Holt and Company, 2007), pp.131-163; Adam Geczy, *Fashion and Orientalism: Dress, Textiles and Culture from the 17th to the 21st Century* (London and New York: Bloomsbury, 2013), pp.73-78.

[483] See Starobinski, *Jean-Jacques Rousseau*; Outram, *The Body and the French Revolution*.

that placed music in a pre-civilised stage of humanity.[484] Music had been at the heart of the national agenda of eighteenth-century France since the centralist politics of Louis XIV, and Rameau, as mentioned in the last chapter, was given support by the court. Therefore, harmony was viewed as being broadly associated with monarchical endorsement of music. Harmony, as I discussed in the previous chapter, also served as a political ideal of unity, based on the widely held conception of a natural order underlying all phenomena. Likewise, harmony was the main principle of taste–which, as discussed above, was politicised by proponents of French national character. Therefore, Rousseau's defence of melody, implying disruption, disorder, and spontaneity, was part of his declared opposition to absolutism and the model of French nation offered by Versailles.[485]

As referred above, Rousseau's philosophy of history matched the 'primitive' with Italian music. This was possible due to the 'naturalness' of Italian language and national character. Yet, above all, this matching was possible since they were jointly opposed to French national character and *status quo.* By juxtaposing Italian and French, natural and artificial, past and present, and primitivism and civilisation, Rousseau created a new form of musical politics. Italian music became the site of political contestation and dissent. Moreover, the most primitive stage of human history, which the Italian 'naturalness' supposedly mirrored, was also seen as an ideal future, a model of a new social order.[486] Rousseau's history of music, therefore, was also a political programme.

Yet things became more complicated in the second half of the century. The associations of harmony and the monarchic regime, and of Italian character and opposition, became increasingly mixed. In the last of the musical quarrels of the century, which saw in the 1770s the confrontation between the followers of the composer Christoph Willibald Gluck and those of Niccolò Piccini, attributes hitherto associated with Italian and French music were now considerably more entangled.[487] Moreover, as previously mentioned, Marie-Antoinette contributed to the reintroduction of Italian music—hence Italian music and character penetrated the very heart of the court. Ultimately, the queen and the feminine would become

[484] On the relationship between Rousseau's political and musical philosophies see Julia Simon, *Rousseau Among the Moderns: Music, Aesthetics, Politics* (University Park, PA: Pennsylvania State University Press, 2013); Strong, 'Theatricality, Public Space, and Music in Rousseau'.

[485] See Cook, 'Challenging the Ancien Régime'; Geoffrey Higgins, 'Old Sluts and Dangerous Minuets: or, the Underlying Musical Tensions of the "Querelle des Bouffons"', *Eighteenth-Century Studies*, 45:4 (2012), 549-563.

[486] Thomas, *Music and the Origins of Language*.

[487] For the *Querelle des Gluckistes et Piccinistes* see Darlow, *Dissonance in the Republic of Letters*.

demonised in the French Revolution, and despite Rousseau's influence in spreading Italian music and sensibility, he would come to symbolise neoclassic masculine austerity and strength.[488]

Through the reformulation of Italian stereotypes, the new sensibility accounts for the rise of a new model of national identity prior to the Revolution. Nevertheless, in the decades that preceded the French Revolution, it was no longer possible to affirm either that music was exclusive to one nation or another, or that Italian music stood in opposition to French music. The location of music within a primitive stage of humanity, above all at the origins of language, made it widely universal. While the values associated with the new sensibility must be viewed together with the agenda of defining the French nation that spanned the century, a new discourse of cosmopolitanism sought in music a universal language. Music was incorporated into eighteenth-century pursuits of recovering a universal language, a pursuit found also in the sciences, philosophy, and writing systems.[489] In music, this pursuit involved understanding music *as* a universal language, in addition to finding a universal language *for* music. The latter was pursued through persistent attempts to standardise musical notation and practice, as well as to incorporate Italian characters, as previously discussed. Italian language would indeed be adopted as a 'universal' language for music, with the Italian model of musicality embraced as a political ideal that crossed national boundaries.

However, together with the new sensibility, new versions of music *as* universal language emerged in relation to the defence of musical practice as a cosmopolitan matter. Michel-Paul-Guy de Chabanon grounded his view of music as a universal language in the pleasure that it produced; since everyone could feel pleasure from music, from 'savages' to animals, music was 'universal'.[490] Additionally, Chabanon depicted Europe as 'a mother where all arts are citizens', a view which allowed the coexistence of different 'indigenous' music within Europe as a unity.[491] William Weber, based primarily on concert programmes, has documented the increasing embrace of cosmopolitanism in the last decades of the century,

[488] See Outram, *The Body and the French Revolution*; Lynn Hunt, 'Pourquoi la République est-elle une femme? La symbolique républicaine et l'opposition des genres, 1792-99', in *Révolution et République. L'exception française*, ed. Michel Vovelle (Paris: Kimé, 1994); Robert L. Herbert, *David, Voltaire, 'Brutus', and the French Revolution: An Essay in Art and Politics* (New York: Viking, 1972).

[489] See e.g. Knowlson, *Universal Language Schemes*.

[490] See Volaine Anger, 'La musique est une langue à part entière: la réflection inaugurale de M.P.G de Chabanon', *Musicorum* 17 (2016), 73-100.

[491] Weber, 'Cosmopolitan, National, and Regional Identities', p.210.

which was manifested in the requirement to include foreign repertoire.[492] Yet both nationalistic and universalistic claims were interwoven in late eighteenth-century politics of music. As I will show in the last chapter, this combination was essential to making 'harmony' into a model for the new *Republique*. Musical harmony would satisfy the pursuit of a 'universal' language based both on the 'primitive' natural order and the triumph of French civilisation over other cultures and historical times.

In sum, despite the different appropriations of the 'Italian' in the second half of the century, and despite changing political allegiances, the relationship between music and politics became an undisputed issue. Music was appropriated as a new language for politics. Moreover, through its association with national character, music was a means for describing national identity as well as forging new political models.

Conclusion

This chapter has shown that changing attitudes towards Italian character and music in France expose an understanding of music as inextricably linked to nationality, genius, history, and politics. These links were understood under a broad notion of 'character', in which national identity, language (and notation), passions, and sounds were interconnected. Therefore, the embrace of the new sensibility during the second half of the century involved re-evaluating Italian character and all the different aspects entailed in the understanding of character. Music was associated with a primitive and 'natural' form of language and, then, a universal language. Music's own repertoire of 'characters' grew considerably, bringing with it a new array of desired musical sounds and passions hitherto associated negatively with the Italianate, such as primitiveness and peasantry, spontaneity and the feminine, among others. This shift was triggered by Rousseau's defence of Italian music, which he formulated in explicit opposition to absolutism and the model of the French nation offered by the court. Therefore, the defence of Italian music and the Italianate shaped an alternative political view and challenged what was thought to constitute French character.

In this chapter I have argued that debates over the status of Italian music and character during the course of the eighteenth century were key to the forging of France's own music and character. I have shown that the historical study of debates about music is crucial to

[492] Weber, 'Cosmopolitan, National, and Regional Identities', p.214.

understanding the complex process of defining French identity in the eighteenth century. In these musical debates, French writers made explicit their views about French national character—what it was, what it was not, and what it should be—and what role music should play in forming and expressing it. The stereotypes and debates over Italian character aided in the emergence of a sense of French character whose axis was music—and for most of the century, specifically, musical harmony. While the previous chapter demonstrated that musical harmony was established as a science on the basis of its privileged relationship with the natural order, this chapter has shown that musical harmony was then identified with French national identity, epitomising and merging reason, taste, and inventiveness. Harmony became a source of national pride as an achievement of French modern civilisation, which histories of music placed in opposition to both an uncivilised past and Italian culture. During the last decades of the century, however, this nationalised version of music incorporated numerous Italian stereotypes as mediated by the appropriation of Rousseau's ideas and the new sensibility, the result of which crystallised into a new idealised public order based on musical harmony that served as an alternative to absolutism, yet was eminently French. (This will be the subject of the last chapter of this dissertation.)

At its core, this chapter has shown that attitudes towards Italian character and music established music as a crucial public and political matter. The liveliness of the music *querelles* reveals the extent to which a growing community of writers and commenters embraced music as a subject of debate, which, as I discussed in the last chapter, elevated the status both of music and its spokespersons. This widening community expressed itself through public opinion, revealing the ubiquity and importance of music in the growing public sphere. Chapter 3 will build upon this centrality of music in the public sphere, in which musical amateurs played a significant role, in order to explore the growing fashion for performing on musical instruments. The changing views about national character and musicality which I have explored in this chapter—including assumptions about identity, language, the passions, desirable sonorities, gender, history, genius, and politics—will be discussed at the level of material practices and conflicting notions of the body. From musical instruments to musical performers, Chapter 3 will explore discussions about notions of nature and genius, courtliness, French taste, the new sensibility and the changing political and social arena, as embodied and negotiated through the physical body.

Chapter 3

Performing the musical body

Children, women, and men of the eighteenth century often sought to learn to play musical instruments. Although taking music lessons was a regular practice among French aristocratic families, eighteenth-century Paris saw a growing number of performers drawn from a range of different social backgrounds. Previous chapters of this dissertation have explored the expansion of musical life and taste in Paris, focusing on the increasing practice of writing, theorising, and debating about music. In accordance with these practices, new social actors emerged, such as musical amateurs and 'savant' musicians. This chapter addresses another actor who figured significantly in the Parisian musical environment during the second half of the century: the musical performer. The increasing fashion for learning to play music coincides with an avalanche in the number and types of musical instruments that were produced, invented, and commercialised in this period. Musical instruments gained increasing prestige as symbolic and tasteful visual and material objects, which, in turn, helped to bestow taste and social status upon their performers.[493] This chapter argues that performers of music expressed and mobilised different understandings of music through the cultivation and display of their physical bodies. The structure of this chapter moves from examining the appreciation of musical instruments *as* human bodies, to the consideration of the performer's body as instrumental to changing notions of musical practice and pleasure, politics, gender, feeling, sociability, spectacles, language, and physiology. Building on recent work on the history of the body, I explore afresh the ways in which the body in early modern France was shaped and manipulated by both collective and individual forces.[494] In particular, I demonstrate how the body of the eighteenth-century musical performer intertwined notions of materiality, visuality, and sound, and how it appropriated social, physiological and linguistic understandings of the body.

Why were French women and men in eighteenth-century France so eager to learn to play musical instruments? What did they envision themselves gaining and accomplishing through learning to perform on musical instruments? This chapter draws heavily on published

[493] See my forthcoming article, 'Tasteful Possessions. Collecting and Displaying Musical Instruments in pre-Revolutionary France'.
[494] Outram, *The Body and the French Revolution*.

didactic music manuals designed to teach how to play musical instruments. The number of these published manuals rose considerably over the century, a clear demonstration of the growing demand for these skills.[495] Music manuals are examined in tandem with other prescriptive literature, including deportment manuals and fencing, dancing, and acting methods, which taken together shed new light on the place of the musical body alongside other languages of the body and politeness. Additionally, representations of the body in non-prescriptive literary sources reveal how these notions of the body were appropriated and contested. The visual and material representation of performers in engravings in teaching manuals and encyclopaedias, portraits of elite members of society, concert-themed paintings, physiological treatises, and automata all speak to the existence of different constituencies of performance and types of bodies. They also demonstrate that, to the eighteenth-century French mind, musical performance was a highly visual phenomenon. Similarly, the different ways in which musical instruments were represented throughout the century, I argue, provide many new social, emotional, and physiological insights into musical performers and performance situations in the eighteenth century.

In this period, the musical performer emerged as a musical agent categorically different from composers. Moreover, various types of performer, such as the amateur, professional, and virtuoso, were increasingly differentiated. The foundation of new orchestras and the spread of concert performances requiring paid admission certainly served to boost professional musicians who wished to make a living from performing music.[496] Yet these new institutions and practices favoured both professional and amateur performers, who often played together in newly-founded orchestras.[497] Indeed, in the final decades of the century, the categories of professional and amateur performer were still malleable and often overlapped: some professional performers could have wished to be called ‘amateurs’, and well-to-do amateurs may have devoted themselves entirely to the practice of music. This chapter therefore explores these categories as they were constructed and negotiated through changing expectations of what musical performance should do, how, and by whom. I shall argue that these expectations found expression in different views of what constituted the musical body and what counted as an adequate means of achieving it.

495 Lescat, *Méthodes et traités musicaux.*

496 Brévan, *Les changements de la vie musicale*; Geoffroy-Schwinden, *Politics, the French Revolution, and Performance.*

497 See e.g. Tissot and Bellissant (eds.), *Le Concert des Amateurs*.

In addition, this chapter will examine the musical performer in relation to the objects and actors with which the performer interacted. Firstly, I will sketch the role of musical teachers who authored teaching manuals, and will argue that they became crucial agents in the dissemination of musical knowledge through their coupling of theory and practice, and their unique position as intermediaries between performers, composers, and the growing world of musical commodities and inventions. The chapter then moves on to discuss musical instruments which, mirroring the physical body of the performer, embodied changing understandings of musical taste, physiology, emotions, gender, and sociability. As material objects, musical instruments were also imbued with agency over the bodies of performers and listeners, demanding specific postures, movements, character, and discipline, among other things. Therefore, this chapter focuses on performers who played musical instruments, although this period also witnessed an increase in the number and celebrity of singers. Following this, I demonstrate how the musical performer emerged as a specific musical agent inasmuch as his or her place lay at the intersection between the composer, the musical instrument, and the listener. This new understanding of musical performers ran parallel to correlative transformations to the figure of the musical composer—changes which increasingly framed composers as the possessors of genius and the origins of feeling, and saw listeners as the ultimate target of musical performance, as the possessors of sensibility and eager consumers of public spectacles.

The recent 'performative turn' in musicological studies has stressed the crucial role played by musical performers, hitherto relegated to second place in the history of music.[498] However, scholarly interest has focused almost exclusively on performers of the present day who seek to accomplish well-informed musical performances using instruments and techniques from historical periods. Thus far, strikingly little scholarly attention has been paid to the study of what musical performance meant for men and women of the eighteenth century, based on considerations of their own historical, cultural, social, and political concerns. Conversely, cultural historians have recently stressed the role of social performance in history, and have addressed the crucial role of sociability, the body, physiognomy, and clothing, among other

[498] For an analysis of the 'performative turn' and recent scholarly attention to performative perspectives in both sociology and musicology see Lisa McCormick, 'Performance Perspectives', in *The Routledge Reader on the Sociology of Music,* eds. John Shepherd and Kyle Devine (London: Routledge, 2015), 117-26; Peter Le Huray, *Authenticity in Performance. Eighteenth-Century Case Studies* (Cambridge: Cambridge University Press, 1990); The concept of 'performativity' in music practising: Margaret Kartomi, 'Concepts, Terminology and Methodology in Music Performativity Research', *Musicology Australia* 36:2 (2014), 189-208; Jane W. Davidson, 'Introducing the Issue of Performativity in Music', *Musicology Australia* 36:2 (2014), 179-188.

practices of self-fashioning. However, scholars have yet to address musical performance to the same degree.[499] The English word 'performance' has a twofold sense, meaning both the exercise of the performing arts on the one hand, and behaviour and display in social life in a broader sense on the other.[500] By considering these different uses of the word together, I shall argue that eighteenth-century musical performance in France was a specific type of social performance. The teaching and learning of musical performance made visible the development of music as an art form, while at the same time following codes and conventions aligned with the great cultural and social changes of the period.

This chapter establishes three models of the musical body adopted by musical performers, which I label the 'courtly body', 'mechanical body', and 'sensible body'. While the courtly body traverses most of the century, the mechanical and sensible bodies emerged around mid-century and co-existed until the end of the century, representing two competing deviations of the courtly body. A section in this chapter on the courtly body will demonstrate that the fashion for playing musical instruments followed on from emphases on training and displaying the body which fitted with court culture and polite sociability. Florence Gétreau has pointed out that body language has been received scholarly attention in relation to singers, dancers and theatre actors, but no studies have yet taken into account instrument playing 'en ces décennies durant lesquelles les méthodes instrumentales se multiplient'.[501] I shall demonstrate that musical learning involved a process of regulating body language, including movements of the head and hands, gendered posture, visual appearance, gesture, and physiognomy. Furthermore, musical performance was ruled by the notion of taste (*goût*), which, as discussed in previous chapters, regulated musical life and encompassed social, moral, national, artistic, and physiological assumptions.[502] The cultivation of the tasteful body and physiognomy was transferred to salon culture from the court, where it had long been a central

[499] The relationship between the corporeal performance, courtly behaviour and manners has been largely studied for France and early modern Europe. See Elias, *The Civilising Process*; Jan Bremmer and Herman Roodenburg (eds.), *A Cultural History of Gesture* (Ithaca NY: Cornell University Pres, 1992); Outram, *The Body and the French Revolution*; Jacques Revel, 'The Uses of Civility', in *A History of Private Life*, eds. Philippe Ariès and Georges Duby, vol. III, (Cambridge, MA: Belknapp Press, 1993),165-205; Jean-Claude Schmitt, 'The Ethics of Gesture', in *Fragments for a History of the Human Body*, eds. Michel Feher, Ramona Naddaff and Nadia Tazi, vol. 2 (New York: Zone Books, 1989), 129-47 and in the same volume, Georges Vigarello, 'The Upward Training of the Body from the Age of Chivalry to Courtly Civility', 149-99.

[500] 'Performance', *The Oxford English Dictionary* (Oxford: Clarendon Press, 1989).

[501] Florence Gétreau, 'Corps, mains et visages de musiciens sous les crayons de Watteau', in *Antoine Watteau (1684-1721). La leçon de musique*, ed. Florence Raymond (Bruxelles: Bozar Books/Hannibal, 2013), 39-43, at p.40; Lescat, *Méthodes et traités musicaux.*

[502] Goodman, *The Republic of Letters*; Saisselin, *Taste in Eighteenth-Century France.*

feature in sociability and in the training of young aristocrats in physical skills. Therefore, I shall argue, musical performance closely followed codes of behaviour that originated at court and were disseminated through courtly conduct manuals. Thus, musical performance became one way in which courtliness was disseminated into the public sphere. The persistence of courtly codes of behaviour in musical performances in salons and public settings throughout the century is particularly significant with regard to the debate among historians as to whether salons contested or perpetuated courtly traditions, and how independent from the court the new 'public sphere' was.[503]

In addition, training the body became a way of disciplining the self, and preparing young people for social life. I suggest that learning how to play music was a form of moral, social, and political discipline, sustained by methodical and repeated practice. Although performers aimed to achieve 'naturalness', the training and disciplining of the body was the result of painstaking work. In a section on the mechanical body, this chapter shows that hard training was further encouraged in relation to the increasing demand for musical performers in the public sphere and the emergence of the new 'virtuoso' performer on musical instruments.[504] This stress on repeated practice and the training of the body was grounded in mechanistic views of the body in mid-century, also expressed in the proliferation of musical automata. Nevertheless, I contend that this mechanistic model of performance was sharply challenged. A competing notion of nature, which I discussed in the previous chapters as developed in relation to the new sensibility, emphasised feeling and an expressive body. Therefore, the focus on body posture and practice triggered discussions that echoed larger debates in the period, including the degree of mechanisation of the body versus the expression of feeling, as well as the artificiality of courtly life versus the values of naturalness and authenticity.

By the end of the century, the new 'amateur' and 'virtuoso' players would perform in accordance with competing yet coexistent rubrics of the body, grounded in contemporary medical views. On the one hand, the notion of the body as a machine underpinned the association of instruments and performers and justified mechanistic views of practice, which climaxed in the celebrated figure of the virtuoso performer. The proliferation of android musical automata in this period not only showed that music could result from machines, but also that performers functioned like machines. On the other hand, the notion of the body as the

503 For a discussion of this debate, see Brian Cowan, 'Public Spaces, Knowledge, and Sociability', in *The Oxford Handbook of the History of Consumption*, ed. Frank Trentmann (Oxford: Oxford University Press, 2012), 251-66.

504 See e.g. Metzner, *Crescendo of the Virtuoso*; Lister, *Amico: The Life of Giovanni Battista Viotti*, 37-38.

object of sensibility was based on new ideas of the body as flux, movement, and vibration, and resulted in an emphasis on the expressive 'sensible' performer. I shall argue that the sensible model of the body was paired with the development of new 'expressive' instruments at the time, which allowed a broader spectrum of sounds and nuances, and emphasised feeling as transmission and movement towards the listener. Rather than minimising the role of the visual and corporeal, the body of the performer was re-signified as embodied feeling. Therefore, while the body of the virtuoso was highly cultivated, it no longer represented the tasteful body. Conversely, the sensible body of the musical performer was less impressive, yet it established a more immediate communication of feeling, which responded to the intertwining of music and language referred to in the previous chapter: if music was a privileged language for the transmission of innate feeling, the body of the performer ought to be a 'natural' bearer of feeling. However, as I shall discuss, performers were also subject to the famous 'paradox' of acting discussed by Diderot, whereby feeling did not originate in the performers themselves but was only transmitted by them by virtue of their sympathetic bodies. Therefore, in the last decades of the century, even as the 'courtly', 'mechanical' and 'sensible' bodies coexisted, they were supported by different views of human physiology, feeling, and politics. Furthermore, these bodies were attributed to different social actors and musical genres: whereas mechanistic views were associated with 'virtuoso' performers who made a life from playing music in an increasing culture of spectacles and in genres such as 'concertos' for soloist instruments, the 'sensible' body was associated with the amateur performer.

1. Teaching and learning to play musical instruments

In Chapter 1, I argued that expertise in music was forged through a combination of knowledge and taste, and often placed emphasis on the 'mind' above manual faculties. Similarly, performers and teachers of music also advertised their expertise and fashioned themselves as knowledgeable and conversant with different intellectual domains. This phenomenon is visible in the large number of instructional music manuals which published throughout the eighteenth century, in which music education was conceived as a process involving theory and method. Instructional music manuals mirrored encyclopaedias and dictionaries in their aim to systematise knowledge, which ostensibly increased music's accessibility for a broader public. The publication of music manuals increased considerably throughout the century. Those devoted solely to the teaching of musical instruments surpassed theoretical and singing

methods from the 1750s onwards.[505] These music manuals are evidence of the growing practice of and desire for musical performance, and were crucial in the shift from an oral to a written basis of music instruction.[506] Moreover, the spread of teaching manuals devoted to musical instruction attests not just to a general increase in the composition of instrumental music, but also to the ongoing creation of new musical instruments.

Most didactic music manuals were authored by teachers, who carved out a particular domain of expertise for themselves, which was then advertised and commercialised through the growing culture of consumption. Through the new practice of writing and reading musical methods, music teachers functioned as intermediaries who communicated and re-signified musical knowledge for practical purposes. They stood at the intersection between composers and performers of music, as well as makers and traders of musical instruments. Teachers were essential in disseminating musical novelties—from information about the invention of musical instruments, instrument accessories and machines, to scientific discoveries, musical theories and tuning systems. Furthermore, music manuals enabled teachers to fashion themselves as at once *authors* of the manuals, and *composers* of the exercises and short pieces accompanying them.[507] In this sense, music teachers resembled artisans and artists, who, from the mid-eighteenth century, embraced the figure of the 'artist', increasingly placed in opposition to the mechanical and manual work associated with artisans.[508] Musicians who authored music methods, therefore, can be classified not only as teachers but also as agents of musical knowledge. They were 'hybrid experts', to use a phrase coined by Ursula Klein, who connected the worlds of scientific discovery and invention with that of artisanal practice.[509] This combination of theory and practice, scientific and artisanal knowledge, resulted from understanding music as a legitimate field of scientific inquiry, as discussed in Chapter 1. Didactic music manuals not only served their authors to promote themselves in an increasingly competitive world, but also reveal the extent to which eighteenth-century music was embedded in commercial networks and concerns.

[505] Lescat, *Méthodes et traités musicaux.*

[506] For musical books and literacy from the sixteenth century, see Kate van Orden (ed.), *Music and the Cultures of Print* (Oxford-New York: Routledge, 2017); Kate van Orden, *Materialities: Books, Readers, and the Chanson in Sixteenth-Century Europe* (Oxford: Oxford University Press, 2015).

[507] Lescat, *Méthodes et traités musicaux.*

[508] Crow, *Painters and Public Life*; Heinich, *Du peintre à l'artiste*; Bertucci, *Artisanal Enlightenment*.

[509] Klein, 'Hybrid Experts'; Ursula Klein, 'Artisanal-scientific Experts in Eighteenth-century France and Germany', *Annals of Science*, 69:3 (2012), 303-306; Klein, 'Technoscience *Avant la Lettre*'.

Despite well-known cases such as François Couperin, Francesco Geminiani (an Italian whose methods were popular in France), and Jean-Philippe Rameau—all of whom were renowned composers as well as authors of didactic manuals—the majority of these instructional texts were written by authors about whom we know very little.[510] The few biographical references we possess reveal that such authors often taught privately and belonged to a small, literate bourgeoisie—often related to small-scale trade and craftsmanship. Only a few came from musical families, and they most likely self-funded their own publications.[511] Some authors were particularly prolific. Between 1737 and 1784, the musical teacher, organist, and composer Michel Corrette wrote instructional texts for a striking variety of instruments, including organ, violin, cello, transverse flute, viol, harpsichord, guitar, mandolin, double bass, viola, harp, oboe, bassoon, and hurdy-gurdy, as well as singing. Given that Corrette sometimes devoted more than one method to a single instrument, and given that some manuals were re-issued multiple times during the century, Corrette's music manuals attest both to an established taste and desire for instrumental music during this period and to the changing fashion for certain instruments over others.

This pedagogical literature signalled the development of musical performance in two directions, which were significant to the ways in which music was understood and practised in the period. On the one hand, these manuals reveal that playing musical instruments was an expanding practice over the course of the century. Manuals were designed to reach the broader public and make music accessible. Their authors claimed that their aim was to explain music using simple language and a didactic 'method'. In this sense, didactic manuals illustrate contemporary efforts by writers and thinkers to describe music as a 'system'. On the other hand, music manuals document the increasingly technical sophistication of musical performance, which, by means of the appreciation of individual practice and skill, shaped the performer's own realm of expertise. This sophistication took the form of an increasing demand for cultivated skill, alongside a growing insistence on repeated practice and hard work, as I shall discuss below.

In both of these two directions, music manuals emerged alongside the rise and consolidation of two kinds of performers: the 'amateur' performer on the one hand, and the 'virtuoso' musician on the other. Many music manuals addressed both types of performer at

[510] Couperin, *L'art de toucher le clavecin*; Francesco Geminiani, *L'art de jouer le violon: contenant les règles nécessaires à la perfection de cet instrument* (Paris: 1752).
[511] Lescat, *Méthodes et traités musicaux*, pp. 17-20.

the same time by offering a range of pieces written at different levels of difficulty. However, some authors wrote manuals specifically orientated to one of these two types of performer, based on the instrument being taught and the amount of practice required. For instance, didactic manuals for learning the mandolin and guitar sometimes labelled these instruments as 'easy' and therefore suitable for amateur players, whereas the violin or the transverse flute were intended for more technically advanced performers.[512] The stratification of musical instruments was thus mirrored in the stratification of performers.

2. Moving bodies (1): from the musical instrument to the performer

Going hand in hand with the taste for performing music was the increasing consumption of musical instruments, which were highly symbolical visual and material objects. Since the Renaissance, musical instruments had largely been associated with the visual appearance and physiology of human bodies.[513] This association was entrenched in the instruments' form and materiality. Instruments like viols, lutes, violins, guitars, and hurdy-gurdies often carved scrolls with busts of men and women, angels, demons, and animals. This decorative motif spread all throughout Europe.[514] In France, such carvings helped to distinguish the style of a particular instrument maker, for they were largely made by specialist artisans.[515] The majority of eighteenth-century French instruments with heads represented women. For instance, of the 101 French-made, eighteenth-century instruments grouped as 'viols' and 'vielles' held in the collections of the Musée de la Musique de Paris, 49 have decorative carved heads. Of these 49, only 5 are men, 1 angel, 1 monster, and 1 'turc'; the remaining 41 represent women.[516] The preponderance of female heads was reflected in the several types of viols with carved heads that have survived—like the 'quinton de viole' made by Louis Guersan (Figure 2), who was one of the most successful makers of string instruments of the time. This preference can be

512 Ancelet, *Observations sur la musique, les musiciens, et les instrumens* (Amsterdam [i.e. Paris]: 1757), p.28. See Lescat, *Méthodes et traités musicaux*, p.96.

513 Gouk, *Music, Science, and Natural Magic*; Gouk and Sykes, 'Hearing Science in the Eighteenth Century'.

514 See Jeremy Montagu, *The World of Baroque and Classical Musical Instruments* (Woodstock, NY: Overlook Press, 1979).

515 See Mary Cyr, 'Guersan, Louis (1700 - 1770), Violin and Violin Maker', in *Grove Music Online*, Published online January 2001.https://doi.org/10.1093/gmo/9781561592630.article.46672.

516 Five of the one hundred and one instruments do not specify decoration. Florence Gétreau, *Aux origines du Musée de la Musique: les collections instrumentales du Conservatoire de Paris. 1793-1993* (Paris: Klincksieck, 1996).

associated with the fashion for female singers in this period; yet, significantly, it relates to the overarching understanding of music and musical instruments as eminently 'feminine'.[517]

Figure 2. Louis Guersan, 'Quinton de Viole' ca. 1760. Collections du Musée de la Musique de Paris E.2041 (Photo: Jean-Claude Billing).

Carved female busts have frequently been associated with musical instruments as an object of seduction. The curved body of the viols was especially suggestive of the shape of women's bodies, upon which men demonstrated their skilful touch. The body of the performer nestled against the body of the viol, in intimate contact with the bust. Yet, when carvings represented men, these heads also participated in intimate settings. The 'musical lesson' or 'duet' depicted by Jean-Marc Nattier in 1710, represented a viol with a bearded male head (see Figure 3). While the viol represented a masculine ideal of the body, it participated in a scene of gallant courtship, in which a man and a woman are shown singing Nicolas Bernier's air 'On ne peut s'empêcher d'aimer' from a music sheet.[518] In this image, the musical instrument acts as a third person, witnessing the complicity between the musicians. Nattier's detailed and

517 Head, *Sovereign Feminine.*
518 'We cannot help falling in love'.

reliable depiction of the viol and hands of the performer frames the image as if to show *three* equally relevant bodies. The delicate skills demonstrated by the viol player mirrored the manoeuvres he was making towards the woman. The picture thus represents a sequence of touch: from the lady touching the score, to the bodies of the musicians close to the point of almost overlapping, and the violist touching the humanised body of the musical instrument.

Figure 3. Jean-Marc Nattier, 'La Leçon de Musique' (1710). Collections du Musée de la Musique de Paris (Photo: Jean-Marc Anglès).

That musical instruments were built as human bodies is not surprising, given that instruments were endowed with 'character'. As discussed in Chapter 2, the notion of 'character' interwove the passions, the physical body, and music. The use of this notion of character to refer to the specific sound of an instrument envisaged the musical instrument as similar to a human whose emotions were embodied. Similarly, the pursuit of 'temperament' in this period, though also meaning a specific tuning system for musical instruments, was used in non-musical contexts as a synonym of 'character', referring to the predominant passions and moral features intrinsically related to the human body. Both character and temperament, which are today embedded in our understanding of 'personality', helped to portray musical instruments as a person, whose traits were inherent to their materiality and physical qualities, and were malleable and governable.[519] Therefore, adjusting the 'character' of and 'tempering' musical instruments were acts of moral moderation and discipline. In this way, morally disciplined musical instruments translated into disciplined performers who, as I discuss below, learned to play musical instruments as an act of self-discipline and shaping their own character.

Musical instruments were metaphors for the body, as well as tools to explain how music affected the body. They were thus connected to changing conceptions of human anatomy and the functioning of the body. Since the Renaissance, musical instruments had been models of 'resonance' and were identified as metaphors of the 'vibrating strings' that composed the body.[520] Moreover, after Descartes instruments epitomised mechanistic understandings of the human body, which was increasingly portrayed as a machine, most notably by Julien Offray de La Mettrie in the middle of the eighteenth century.[521] This view echoed the wider conceptualisation of musical instruments as 'machines' in contemporary dictionaries, compendia of musical instruments, and academic reports.[522] Metaphors of the body-machine became prominent in the second half of the century. In the case of the musical instrument, the body-machine metaphor was straightforward through defining musical instruments as machines, even as they also represented human bodies. Taken together, human organisms,

[519] For temperament and character in psychology see e.g. Jan Strelau, *Temperament: A Psychological Perspective* (Dordrecht/New York: Kluwer, 2006); Marcel Zentner and Rebecca L. Shiner (eds.), *Handbook of Temperament* (New York: Guilford Publications, 2015).

[520] Gouk and Sykes, 'Hearing Science in the Eighteenth Century', pp.532-533; Erlmann, *Reason and Resonance*, pp.117-118.

[521] La Mettrie, *L'Homme-machine*.

[522] See e.g. 'Instrumens, (*Musiq. & Luth.*)' in *Encyclopédie*, eds. Diderot and d'Alembert, vol. 8, pp.803-804; Musical instruments were also categorised as 'machines' in the Académie's series *Machines et inventions approuvées par l'Académie royale des sciences* (Paris: 1735-1777).

musical instruments, and machines served to explain how music affected the listener and, more broadly, how sensation worked in the body. Not only were instruments described as machines and metaphors of the body whose mechanisms mirrored that of the performer or listener, but human bodies were also often imagined as stringed instruments or harpsichords. Through his metaphor of the 'homme-clavecin', Diderot associated various anatomic models with bodies and instruments throughout the eighteenth century; he represented the body as a resonant body whose fibres equated to the strings of musical instruments, and viewed it as a machine, like La Mettrie.[523] Furthermore, during the second half of the century, there was a renewed stress on the phenomena of vibration, sympathy, and the nerves, particularly in relation to the new sensibility and vitalist physiology. In eighteenth-century France, the musical instrument now came to be conceived as a moving body which triggered emotions and sensations through the action of vibrating.[524] As sensation and feeling became more important, so musical instruments were regarded as embodiments of feeling. Their resonant bodies hyperbolised feeling, which were transmitted through sympathy.

The bodies of musical instruments thus mirrored those of their performers and listeners. This corporeal interrelation was not only created by gender, moral, and anatomical correspondences, but also by the social, ethnic, and historical associations of instruments which tied them to specific types of performer. The fact that the heads of females carved onto the scrolls of instruments were often richly ornamented suggests these instrument were frequently displayed before well-to-do audiences. Ornamented musical instruments were owned by wealthy amateurs as tasteful possessions.[525] Similarly, ornamented busts conformed to the fashion and taste of the same niche of consumers. Many busts included carved hats, jewellery, and fashionable clothing.[526] Some viols from the first decades of the century, like the *pardessus de viole* made by Jean Voboam in 1719 (see Figure 4), bore heads wearing diadems, signs of sovereignty and distinction which probably alluded to the noble origins of the instruments'

[523] Diderot refers to the 'homme-clavecin' analogy in his *Principes d'acoustique* (Paris: 1745), the article 'Affection' in the *Encyclopédie* (Paris: 1751), *Rêve d'Alembert* (Paris: 1769), *Entretien d'Alembert et Diderot* (Paris: 1769). See Philippe Sarrasin Robichaud, *L'Homme-clavecin, une analogie diderotienne* (Paris: Classiques Garnier, 2017); Erlmann, *Reason and Resonance*.

[524] See e.g. Kennaway, *Bad Vibrations*; Erlmann, *Reason and Resonance*.

[525] See my forthcoming article, 'Tasteful Possessions. Collecting and Displaying Musical Instruments in pre-Revolutionary France'.

[526] See e.g. the 'quinton' with a women bust wearing a 'chapeau à plume' by Nicolas Des Rousseaux, 1762 (E.979.2.48) and the neck of the dress Jean-Baptiste Salomon's 'viole d'amour', n.d. (E.69) in the collections of the Musée de la Musique, Paris.

patrons, owners, or hearers.[527] Moreover, some carvings displayed 'exotic' fashions and contained precious materials, as with many musical instruments deemed as curiosities.[528]

Figure 4. *Pardessus de viole* with diadem, Jean Baptiste Voboam 1719, Collections du Musée de la Musique, Paris. E.998.11.1

Musical instruments, then, could powerfully link different owners and the spatial and social settings in which music was performed. Filippo Bonanni's compendium of musical instruments, published in Rome in 1722, proposed that musical instruments provided knowledge of different types of performer. Musical instruments, thus, bore an 'ethnographic' dimension: Bonanni claimed that each instrument entailed a 'proportionate performer', and so was represented through performers and settings that were 'proportionate' to the social, cultural, historical, spatial and labour-related situations in which the instrument would have

527 Valerie Cumming, C. W. Cunnington, and P. E. Cunnington, *The Dictionary of Fashion History* (Oxford, New York: Berg, 2010), p.65. For Voboam and his family of instrument makers, see Florence Gétreau, 'René, Alexandre et Jean Voboam: des facteurs pour La Guitarre Royalle', in *Instrumentistes et luthiers parisiens*, 51-73.

528 See my forthcoming article, 'Tasteful Possessions. Collecting and Displaying Musical Instruments in pre-Revolutionary France'.

been performed.[529] Bonanni's illustrations, which have been attributed to the painter Arnold van Westerhout, provide detailed information about the clothing, accessories, bodily gestures, spaces, and activities associated with each instrument, thus seeing the shape of the instrument, the attire and hairstyle of the performer, and the decoration of the room as all inherently interwoven.[530] For instance, the 'calascione turchesco' was represented as being performed by a Turkish woman, whose 'Turkish' nature was intensified by the position of the performer's body, clothing, and the fabric accompanying the scene (see Figure 2). The viola, by contrast, was performed by a man in an indoor space, whose wig and attire suggest a European court musician (see Figure 3). This manner of representing musical instruments probably followed the illustrations of musical instruments made by Giovanni Battista Bracelli in seventeenth-century Rome.[531] Furthermore, Bonanni's 'proportionate' settings evoke illustrations found in contemporary fashion books.[532] Therefore, they account for a readership of tasteful collectors, connoisseurs, and consumers of musical instruments.[533]

[529] Bonanni, *Gabinetto armonico*.

[530] Although his name was only declared in the edition of 1776. See Cristina Ghirardini, 'Il Gabinetto armonico di Filippo Bonanni e le sue fonti', *Acta Musicologica* 79:2 (2007), 359-405.

[531] Giovanni Battista Bracelli, *Figure con instrumenti musicali e boscarecci* (Roma: 1625-1630). A similar style was also employed in Johann Christoph Weigel, *Musicalisches Theatrum* (Nuremberg: ca. 1715–25).

[532] Jon Banks, 'Una povera fanciulla Tedesca: the dulcimer player in Filippo Bonanni's Gabinetto armonico', *Early Music* 43:3 (2015), 493-501.

[533] See my forthcoming article, 'Tasteful Possessions. Collecting and Displaying Musical Instruments in pre-Revolutionary France'.

Figure 5. Arnold van Westerhout, ‘Calascione Turchesco’. Filippo Bonanni, *Gabinetto armonico pieno d'istromenti sonori* (Rome: Nella stamperia di G. Placho, 1722).

Figure 6. Arnold van Westerhout, ‘Viola’. Filippo Bonanni, *Gabinetto armonico pieno d'istromenti sonori* (Rome: Nella stamperia di G. Placho, 1722).

A similar endeavour was later undertaken in France by Jean-Benjamin de Laborde.[534] The large number of engravings included in Laborde's compendium *Essai sur la musique ancienne et moderne* were made by two engravers, identified as Bouland and Chenu.[535] The majority of these illustrations represented musical instruments being played by performers whose attire, attitudes, and settings were represented in great detail. Interestingly, these images were placed in a contemporary French setting and fashion.[536] The representation of a 'violon vu en face' and a 'violin vu de profil' illustrates an appropriation of the custom among encyclopaedias of representing a musical instrument from different perspectives, yet is now translated to the body of the musician (see Figure 7).[537] In these illustrations, the musical instrument metonymically refers to the body of the performer, which, in turn, refers to a specific social and spatial setting. Thus, these representations of musical instruments were instructive about the specific performativities and social settings that were bound up with certain musical instruments. Consequently, throughout the century musical instruments were classified and represented not just according to strict musical categories, but according to social status, gender, age, degrees of difficulty, and nationality.

534 For Jean-Benjamin de Laborde, see Yves Durand, *Les Fermiers Généraux au XVIII siècle* (Paris: Presses Universitaires de France, 1971); Mathieu Couty, *Jean-Benjamin de Laborde ou Le bonheur d'être fermier-général* (Paris: Michel de Maule, 2001).

535 De Laborde, *Essai sur la musique*.

536 Gétreau, *Histoire des instruments et représentations de la musique*. *Thèse d'Habilitation à diriger des recherches*, Université François-Rabelais de Tours (2006), p.56.

537 'Violin seen in front view' and 'violin seen from the side'. For scientific images in the early-modern period, see e.g. Lorraine Daston, 'Epistemic Images', in *Vision and Its Instruments: Art, Science, and Technology in Early Modern Europe*, ed. Alina Alexandra Payne (University Park, PA: Pennsylvania State University Press, 2015).

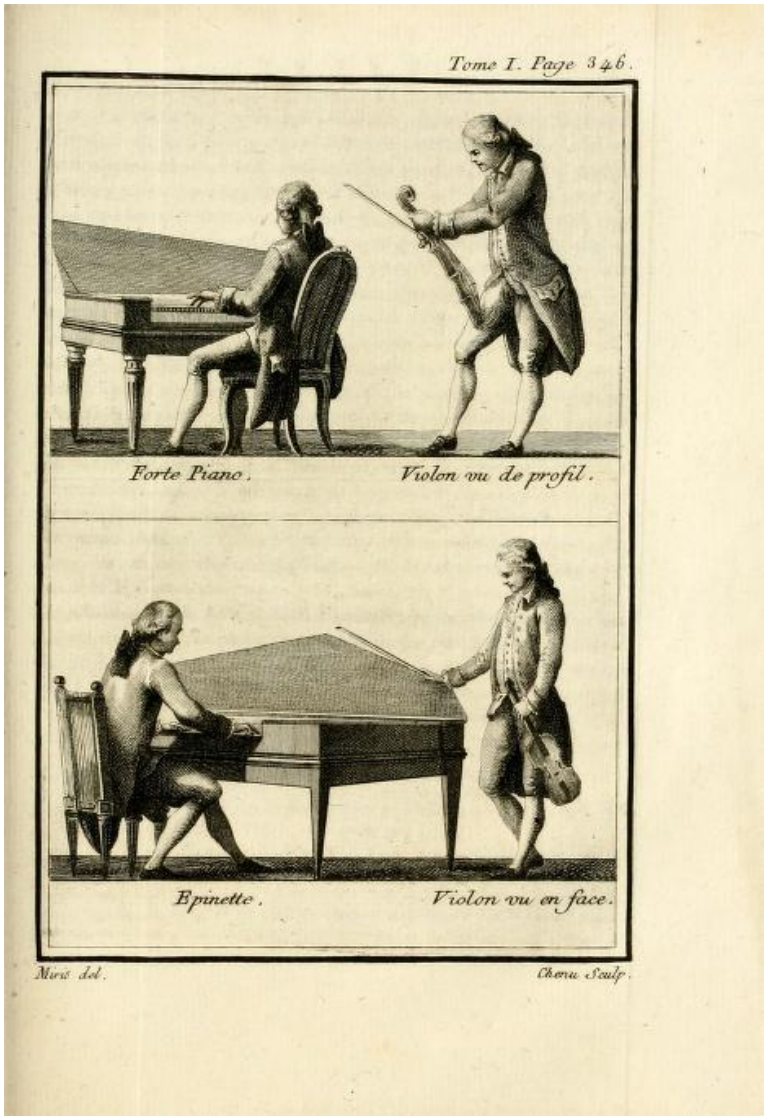

Figure 7. Engraving by Chenu. Jean-Benjamin de Laborde, *Essai sur la musique ancienne et moderne* (Paris: 1780).

These humanised and socialised musical instruments were not mere means for musical performance, but were feeling objects which produced and experienced music in themselves. Musical instruments with heads were instruments that sang, incarnating a striking blend between vocal and instrumental music. Moreover, they were feeling bodies, which in turn, made bodies feel. The expressive body of the musical instrument—visually ornamented, endowed with gender, character, morality, anatomy, and social status—was translated into the expressive requirements to the performer, which, I shall argue, relied on the performer's physical body.

3. Courtly bodies

The taste for music among the elite was greatly influenced by the fact that music was conceived as a phenomenon that was not confined to aurality. Music's visual element became a prominent motivation for possessing musical instruments among the elites.[538] Hence the visual and material dimensions of musical instruments were echoed in the bodies of musical performers. Performing on musical instruments was largely thought of as a visual experience, profoundly connected to the body of the performer. Since the publication of didactic manuals at the beginning of the century, it is striking to notice the great emphasis placed on the visual appearance of the musical performer. Numerous manuals published throughout the century were devoted to explaining the postures and gestures of the performer, and how performers should move and control their bodies. Sometimes these physical gestures related to the ways sound and instruments were to be handled; often, however, this emphasis treated the body of the performer as meaningful in itself. The musical body was a social product, which further illustrates music's embeddedness in material and visual practice, sociability, physiology and politics.

The strong emphasis placed on the posture, facial gestures, bodily movements, and physical appearance of performers did not rely exclusively on the practical elements of musical performance. Rather, emphasis on posture integrated a broader tradition of cultivating the body in courtly life. The advice given by the authors of teaching manuals regarding the physicality of musical performance, therefore, echoed the values pursued in courtly etiquette. As Baldassare Castiglione had expressed it in 1528, the courtier had to follow strict standards of behaviour, which included paying great attention to bodily movements, gestures, and appearance, under rubrics such as grace or naturalness.[539] In seventeenth-century France, numerous treatises addressed social performance and manners under the headings of *honnêteté* and *politesse*.[540] These terms referred to moral and aesthetic ideals while at the same time

538 See my forthcoming article, 'Tasteful Possessions. Collecting and Displaying Musical Instruments in pre-Revolutionary France'.

539 Baldassare Castiglione, *Il cortegiano* (Venice: 1528). See Peter Burke, *The Fortunes of the Courtier: The European Reception of Castiglione's Cortegiano* (University Park, PA: Pennsylvania State University Press, 1995).

540 See e.g. Antoine de Courtin, *Nouveau traité de la civilité qui se pratique en France parmi les honnestes gens* (Amsterdam: 1708); Antoine de Courtin, *Suite de la civilité françoise* (Paris: 1717); Jean-Baptiste Morvan, *Réflexions sur le ridicule* (Paris: 1696) and *Réflexions sur la politesse des mœurs* (Paris: 1698).

prescribing social deportment.[541] Therefore, they were intertwined in the pursue of taste, which, as previously mentioned, was a mark of privilege, associated with courtliness, polite sociability and regulated social behaviour. Notions of taste and politeness emphasised body language and visual appearance. Louis XIV, with his celebrated posture and sober facial expression, cultivated his physical appearance carefully, and established a protocol that regulated physiognomy and body language throughout the century.[542] The king exemplified the tasteful body, and his physical model was replicated throughout the eighteenth century in different practices and social settings, such as physiognomy, dance, theatre, oratory, salon conversation—and, I shall argue, music.[543]

It is striking to notice the resemblances between the prescriptive literature on those varied forms of physical training and manuals instructing readers in musical performance. This similarity suggests, on the one hand, that musical performance was considered to belong with other physical activities central to the education of young aristocrats. Indeed, the education of the French nobility integrated music alongside dancing, fencing, and horse-riding—a combination that persisted throughout the eighteenth century.[544] On the other hand, this similarity between music and physical training reveals the extent to which ideals of courtliness were extended and pursued beyond the court. The cultivation of the body was a means by which musical performers bound themselves to a broader ideal of courtliness. The popularity of both the figure of Louis XIV and the seventeenth-century deportment treatises—as expressed in their many editions throughout the eighteenth century—suggests that ordinary literate people were eager to cultivate courtly standards and body language outside the court. Historians have pointed out that treatises on *civilité* or politeness not only described court etiquette, but served as an instrument for social advancement outside the court.[545] To Jean-Baptiste Morvan de Bellegarde, a prolific Jesuit priest known for his moralistic writings on salon conversation, those who lacked noble origins could become *honnêtes hommes* by cultivating 'good

[541] For the difference between the terms 'politesse' and 'honnêteté' see Peter France, 'Honnêteté' in *The New Oxford Companion to Literature in French* (Oxford: Oxford University Press, 1995).

[542] See Peter Burke, *The Fabrication of Louis XIV* (New Heaven, CT: Yale University Press, 1992); Jones, *The Smile Revolution.*

[543] See e.g. Cohen, *Art, Dance, and the Body*; Percival, *The Appearance of Character.*

[544] Mark Motley, *Becoming a French Aristocrat. The Education of the Court Nobility, 1580-1715* (Princeton: Princeton University Press, 1990).

[545] See e.g Gordon, *Citizens without Sovereignty*.

manners'.[546] Hence courtliness was also an ideal to attain through the cultivation of the body, which could enable social movement.

This motivation was explicitly mentioned by Pierre Rameau, author of a dance treatise published in 1725. Rameau prescribed bodily movements based on court etiquette, something which, he claimed, was not only useful for young pupils to learn, 'mais encore aux personnes honnêtes & polies, & qui leur donne des regles pour bien marcher, saluer & faire les reverences convenables dans toutes sortes de compagnies'.[547] Therefore, Pierre Rameau's method was simultaneously a dancing method and a deportment treatise for court etiquette. Music manuals, in turn, portrayed the ideal musician as a person of taste, with appropriate displays of manners and social etiquette. These criteria were also highlighted in music criticism of performers. The *Almanach Musical* referred to the self-styled 'amateur', Jean-Baptiste Davaux, as 'cet Amateur plein de goût [qui] seduit sans doute autant par ses manieres et son charme naturel que par sa musique'.[548] Mentions of the physical appearance of musicians also abounded. For instance, the lack of success of a piece composed by Père Vito, discussed in Chapter 1, was connected to the poor appearance of the composer, whereas Michel-Paul-Guy de Chabanon and Joseph Boulogne (Chevalier de) Saint-Georges were portrayed as good-looking performers. The son of a wealthy planter and African slave from Guadeloupe, the Chevalier de Saint-Georges perhaps epitomises the combined cultivation of physical skill as a gateway to polite sociability, being introduced to the Paris elites as both a fencer and a violinist.[549]

Activities such as fencing, dancing, and music shared a common vocabulary of gestures and physical appearance that was grounded in politeness and courtly behaviour. In the 1770s, Nicolas Demeuse declared in his method on fencing that politeness was paramount: 'La politesse qui tient quelque chose du corps et de l'esprit, est encore une qualité essentielle'.[550] For Demeuse, pleasure, morality, and sociability were combined in the perfect fencer, and expressed in his or her bodily posture and movements (see Figure 8). He described in detail the

546 J-B. Morvan de Bellegarde, *Réflexions sur le ridicule et sur les moyens de l'éviter* (Paris: 1696).

547 'But to all those respectable and polite people, providing them with rules on how to walk respectably, greet and bow in a suitable way, in any sort of company'. Pierre Rameau, *Le maître a danser* (Paris: Jean Villette, 1725).

548 'No doubt the capacity of seduction of this Amateur, whose taste is of the finest, is due as much to his manners and natural charm as it is to his music'. Quoted in Robert Henri Tissot, 'Jean-Baptiste Davaux: un amateur-compositeur', in *Le Concert des Amateurs*, ed. Tissot and Bellissant, p.27.

549 For Saint-Georges, see Smith, *The Black Mozart.* For the visual appearance of Chabanon, see Susanna Caviglia, 'Michel-Paul-Guy de Chabanon et Joseph-Siffred Duplessis. Un idéal de vérité', *Musicorum* 6 (2007-2008), 9-12.

550 'Politeness, which pertains to the body as well as to the mind, is also an essential quality'. Nicolas Demeuse, *Le maître d'escrime, ou L'art des armes (*Paris: Chez Delarue, ca.1778), p.126.

posture of the fencer, who was required to stand with one foot in front of the other. Earlier in the century, this posture had also been emphasised by Pierre Rameau, who claimed that the dancer should stand with one foot in front of the other, just as deportment treatises had advised for standing in courtly contexts (see Figure 9). This custom, closely associated with the figure of Louis XIV, also related to the fashion for showing off the possession of luxurious shoes, some of which were ornamented with jewellery on the buckles.[551]

Figure 8. Engraving in Nicolas Demeuse, *Le maître d'escrime, ou L'art des armes* (1778).

[551] Carol Lee, *Ballet in Western Culture: A History of Its Origins and Evolution* (London-New York: Routledge, 2002), p.81.

Figure 9. 'De la Position du Corps' and 'Première attitude de la Reverence. En avant veu de Profile'. Engravings by Pierre Rameau for his *Le maître a danser* (1725).

3.1 Grace

Dance, fencing, and music manuals explained how to cultivate the ideal tasteful body by teaching to attain 'grace'. Grace was central in treatises on demeanour, and was stressed by Pierre Rameau as a feature of Louis XIV that students of dancing should imitate.[552] 'Grace' denoted the status of a nobleperson, and even though it entailed a spiritual dimension—associated with divine grace—it existed in reality through the performance of the body.[553] According to the article 'Grâce' by Voltaire in Diderot's and d'Alembert's *Encyclopèdie*, grace in a work of art was more than accomplishment: it meant a special attraction, which in the case of human beings, was linked with the command of the body and manners.[554] In order to attract

552 Rameau, *Le maître a danser*, p.x.
553 See Sabine Mainberger, 'Lässig—subtil—lakonisch: Zur Ästhetik der Grazie', *Arcadia* 47: 2 (2012), 251-271; Cohen, *Art, Dance, and the Body*.
554 François-Marie Arouet de Voltaire, 'Grâce', in *Encyclopédie*, eds. Diderot and d'Alembert, vol. 7 (Paris: 1752), p.805.

their audiences, performers of music were taught to stand and play 'gracefully'. Likewise, 'gracefulness' encompassed all body movements and physical gestures in order to make the performance visually appealing to the public.

Unlike a dancer or general courtier, the posture of the musical performer was constrained by contact with material objects, such as musical instruments, seats, and music stands. Some didactic music manuals referred to the fact that the materiality of the instrument demanded that the performer positioned their body in specific ways, such as the postures required to hold an instrument or to pluck a string. In the case of the harpsichord or pianoforte, posture was discussed in relation to the performer's distance from the keyboard, and sometimes with regard to adjacent objects such as the seat and music stand. Posture was also gendered. As mentioned in the previous chapter, certain instruments (such as the guitar) were associated with femininity through their sound and the ways in which they displayed the physical attributes of female performers. A dictionary, created by the historian and lawyer Philippe Macquer, indicated that women playing the guitar allowed them to display the 'graces' with which they were naturally endowed.[555] The posture and 'attitude' required by certain musical instruments was especially emphasised in women of marriageable age. François-Alexandre-Pierre de Garsault—who wrote about musical instruments, amongst other subjects—claimed concerning the harpsichord: 'On le joue assis, les mains sur les claviers: c'est l'instrument des Demoiselles à marier & des Dames.'[556] The fact that many women learned musical instruments such as the harpsichord for the purposes of increasing their attractiveness was widely acknowledged. Thus, authors of teaching manuals such as Michel Corrette encouraged women to continue performing even after marriage.[557]

When explaining the posture of the musical performer, it is striking to note that most of the physical prescriptions found in performance manuals described the movement and position of the head and the face, which, except in the case of wind instruments, are generally not involved in the production of sound. Recent studies of the history of physiognomy have documented an elaborated language of facial expression during the eighteenth century. The emphasis on the head and the face was consistent with physiognomic assumptions in the visual arts and theatre, which until the middle of the century were mainly focused on the study of the

[555] Philippe Macquer, *Dictionnaire raisonné universel des arts et métiers*, vol. 2 (Paris: 1773), p.621.
[556] François-Alexandre-Pierre de Garsault, *Notionnaire ou Memorial raisonné de ce qu'il y a d'utile et d'interessant dans les connoissances acquises depuis la création du monde jusqu'à présent* (Paris: 1761), p.54.
[557] Corrette, *Le maître de clavecin*.

face and the head in order to attribute character, as discussed in the previous chapter.[558] As Colin Jones has recently pointed out, smiling was a rather scarce practice in the first half of the eighteenth century, due to a restricted economy of facial expression in the court, epitomised—once again—by Louis XIV.[559] The comments on facial expressions of performers, therefore, further stress the fact that musical performance was significative beyond sound, as an expression of social demeanour.

With such recommendations, musical performers all throughout the century were advised to train their facial expressions and posture. Practising in front of a mirror was often recommended. In 1707, Jacques-Martin Hotteterre, the most celebrated member of a dynasty of woodwind instrument makers, composers, and performers, published a flute manual which stressed the posture of the performer. He listed a number of body gestures and postures necessary to achieving a tasteful and graceful body, claiming: 'Cette attitude étant bien prise, est fort gracieuse, & ne prévient pas moins les yeux, que le son de l'Instrument flâte agréablement l'oreille'.[560] Since it was pleasurable for the eyes, Hotteterre advised students to follow all of his 'rules' of posture by practising in front of a mirror.[561] He included an engraving of a flute performer, and advised readers and students to follow the posture modelled in his engraving, as if they were facing a mirror (see Figure 10). This engraving was deemed by Hotteterre the model of a 'graceful' attitude in transverse flute performance. Authors of music manuals suggested using a mirror for practising both different musical instruments and singing.[562] By the 1780s, grace was still carefully observed. Louis-Charles Ragué—who was called an 'amateur distingué dans plus d'un genre' and was an active composer of pieces for harp, symphonies, and chamber music during this decade—also wrote two pedagogical works for harps.[563] In his *Principes de harpe,* Ragué advised students of the harp to play in front of a mirror: 'Une personne de goût et le beau sexe en général à qui il manque rarement, pourra consulter sa glace pour avoir le plus de grâces possibles sur un instrument qui les fait si bien

558 See Cowling, *The Artist as Anthropologist;* Percival, *The Appearance of Character*; Feilla, *The Sentimental Theater*; Cohen, *Art, Dance and the Body*.

559 Colin, *The Smile Revolution.*

560 'This posture, when it is well adopted, is very gracious, and delights the eyes, just as much as the sound of the Instrument agreeably satisfies the ear'. Jacques-Martin Hotteterre, *Principes de la flute traversiere ou de la flute a bec* (Paris: 1707), p.2.

561 Hotteterre, *Principes de la flute*, p.3.

562 See e.g. Couperin, *L'art de toucher le clavecin*. Lescat, *Méthodes et traités musicaux*, p.128.

563 'Amateur distinguished in more than one domain'. *Mercure de France* (Paris: October 1784), p.239.

valoir'.[564] Ragué's advice suggested that the musical instrument enhanced the 'gracefulness' of both women and men of taste. In sum, taste and grace were inexorably intertwined with musical instruments as material and visual attributes.

Figure 10. Picart, 1707. Engraving in Jacques-Martin Hotteterre, *Principes de la flute traversiere ou de la flute a bec* (Paris: 1707).

3.2 Naturalness

Playing in front of a mirror was also a means of learning how to avoid 'grimaces'. In his method for singing, Lécuyer claimed 'Il faut toujours chanter devant un miroir pour éviter les grimaces et contorsions de la bouche'.[565] Grimaces, or any kind of contortion of either the body

564 Louis-Charles Ragué, *Principes de harpe suivis de 18 airs* (Paris: 1786), p.2. See Lescat, *Méthodes et traités musicaux*, p.129.

565 'One should always practise singing in front of a mirror, in order to avoid making grimaces and contorting one's mouth'. François-Joseph Lécuyer, *Principes de l'art du chant, suivant les règles de la langue et de la prosodie Françoise* (Paris: 1769), p.24.

or face, were widely condemned in music manuals, as they were considered to be contrary to grace. Grimaces or contortions denoted effort, difficulty, awkwardness, and discomfiture. The pursuit of 'grace' was thus inherently related to the pursuit of 'naturalness' in playing. Grace defined a certain ideal of nature and the natural in musical performance, which necessitated concealing any difficulty in playing. In this sense, the pursuit of naturalness followed Castiglione's stress on *sprezzatura* as a 'universal law' of courtier behaviour.[566] This ideal, widely discussed in modern scholarship, was omnipresent in different social, artistic, and literary arenas in the eighteenth century.[567]

Therefore, although musical performance was acknowledged to be difficult, the performer had to appear effortless. Music methods often stressed that the performer should show an 'air of ease'. The expression 'air aisé' had been linked to notions of nature and grace since the early treatises on deportment, as a requirement in conversation, manners, and the arts.[568] In his method for harpsichord playing, François Couperin claimed, 'Il faut avoir un air aisé à son clavecin: sans fixer la vuë sur quelque objet, ny l'avoir trop vague: enfin regarder la compagnie, s'il s'en trouve, comme sy on n'etoit point occupé d'ailleurs'.[569] This advice is mirrored in the myriad portraits of performers from this period, showing them with a face turned towards the spectator, or looking beyond the instrument.[570]

The notions of grace and naturalness implied a restricted economy of body movements. The performer was expected to make the fewest possible movements: in particular, neither head, body, nor feet should move. Music manuals warned that all 'awkward' movements were to be avoided, including stooping, placing the hands too close to, or too far from, the body, and any sort of contraction of the face or body. The flute teacher Antoine Mahaut claimed that 'tous mouvemens, soit du Corps, soit de la Tête, sont des mauvaises habitudes qu'il faut tacher de ne point contracter. Je souhaiterois même tres fort que l'on ne fit aucun mouvement du Pied, puis qu'il est certain que l'on peut jouer très bien en mesure sans la battre'.[571] The practice of

566 Castiglione, *Il cortegiano*; Burke, *The Fortunes of the Courtier*.

567 See e.g. Russo, *Styles of Enlightenment*.

568 See e.g. Antoine François Prévost d'Exiles (abbé), *Elemens de politesse et de bienséance, ou, La civilité qui se pratique parmi les honnêtes gens. Avec un nouveau Traité sur l'art de plaire dans la conversation* (Paris: 1767).

569 '[When one sits at the harpsichord] one should have an air of easiness: one's eyes should not be fixed on a particular object, nor should they be staring into space: in a word, one should be looking at the guests, if there are any, as though one weren't busy with another activity'. Couperin, *L'art de toucher le clavecin*, p.11.

570 For portraits, see e.g. Florence Gétreau, *Voir la musique* (Paris: Citadelles & Mazenod, 2017).

571 'All movements, either of the body or the head, are bad habits that one should attempt to avoid contracting. I would even very strongly ask that the feet did not to make any movements, since it is true that one can play very well in tempo without marking it'. Antoine Mahaut, *Méthode pour apprendre en peu de tems à jouer de la flûte traversière* (Amsterdam and Paris: 1759), p.3.

marking the beat with the body or the foot was repeatedly condemned in didactic manuals, which is striking given the concern with French musical conductors who developed the habit of marking the beat on stage.[572] Michel Corrette claimed that placing more than one finger upon the same key of the harpsichord looked awkward and, therefore, was ungraceful and unnatural.[573] Jean-Philippe Rameau later explained that 'la souplesse recommandée doit s'étendre sur toutes les parties du corps: une jambe roide, déplacée, des coudes serrés sur les côtés, qui s'en écartent, s'avancent ou se reculent, lorsqu'ils doivent y tomber nonchalamment, une grimace, enfin la moindre contrainte, tout empêche le succès des soins qu'on se donne pour la perfection qu'on cherche'.[574] The 'natural' musical body permitted a limited number of movements and gestures which had to be carefully cultivated. Naturalness, paradoxically, was the result of hard work obtained through practice. Rameau specified that 'quelques jours d'exercice avec un peu de patience rendent enfin cette position comme naturelle'.[575] Therefore, graceful performers were those who tightly controlled their body at the same time that they fashioned this control as natural.

3.3 Self-discipline

Naturalness was thus carefully crafted in accordance with courtly codes of behaviour, where the disciplining of the body conveyed visual and moral values. In a similar way, the disciplined courtly body entailed a restricted repertoire of sounds. Disciplining sound and avoiding 'noise' had been essential to the display of social etiquette since the Renaissance.[576] As discussed in Chapter 1, Rameau's system of harmony, which subjected music to fixed rules, was viewed as a disciplinary force compared to earlier practice, which involved drawing a clear distinction between consonance and dissonance, and desirable and undesirable sounds. Moreover, I have

572 Spitzer and Zaslaw, *The Birth of the Orchestra*, p.187.

573 Corrette, *Le maître de clavecin*, p.10.

574 'The flexibility I recommend should extend to each and every part of the body: let one leg be too stiff, or in the wrong position, let the elbows be pressed onto the ribs, or wander too far away from them, go forwards or backwards, when they should rest leisurely near them, let the face wince, and in a word let any constrained posture overcome you, and the success of those efforts towards perfection will be compromised' Rameau, *Code de musique pratique, ou méthode pour apprendre la Musique, même à des aveugles, pour former la voix & l'oreille, pour la position de la main avec une méchanique des doigts sur le clavecin & l'orgue, pour l'accompagnement sur tous les instrumens qui en sont susceptibles, & pour le prelude*, (Paris: 1760), p.12.

575 'A few days of practice and a little patience will suffice to make this posture almost natural'. Rameau, *Code de musique pratique*, p.12.

576 See e.g. Dennis, 'Sound and Domestic Space'; Van Orden, *Music, Discipline, and Arms*; Richard Sennett, *The Fall of Public Man* (1974; New York: W.W. Northon & Company, 1992), pp.214-16.

argued that harmony was deemed a tasteful and moral system which represented French 'civilised' character. The disciplined body of the musical performer domesticated noise at the same time that it represented moral rectitude and civility. Here contortions and grimaces were associated with noise and the uncivilised. Edited by the Abbé Prévost, the *Histoire générale des voyages* indicated with regard to African performers of a percussion instrument known as '*jobson'*: 'Le Négre accompagne le son de cet instrument de celui de sa voix, ou plûtot de ses hurlemens. La figure du Musicien, relevée par quantité de grimaces, & le bruit d'une si étrange Musique, forment ensemble un horrible amusement'.[577] Beauty, morality, and disciplined sound were presented as the prerogative of the civilised European musical body, as opposed to the noisy and grimacing savage body.[578]

Consistent with the disciplined system of musical harmony, musical performers were to subject themselves to thorough and methodical practice. Michel Corrette claimed in his first violin method that, in order to experience the 'power' of the 'the marvellous effects' of harmony, the performer had first to submit himself or herself to thorough practice (see Figure 11.). This practice, moreover, followed a 'learned' (*docte*) and 'simple' method whose 'secrets' Corrette endeavoured to elucidate.[579] Practising music was not merely a manual or repetitive activity, but was rationalised and systematised in accordance with the Enlightenment's emphasis on reforming knowledge in general. Musical harmony coupled the pleasure of music with geometry and natural order, and made that pleasure attainable only by following a 'docte' process of methodical learning and disciplined practice.

577 'The Negro accompanies the sound of this instrument with that of his voice, or rather of his howls. The appearance of the Musician, enhanced by the numerous faces he makes, and the noise of such strange Music, all put together make for a horrible and entertaining spectacle'. Antoine François Prévost d'Exiles (abbé), *Histoire générale des voyages, ou, nouvelle collection de toutes les relations de voyages par mer et par terre*, T. 3 (Paris: 1747), p.174. This passage is copied later in De Laborde, *Essai sur la musique*, p.217.

578 For the growing interest in foreign and vernacular musics in this period, see Vanessa Agnew, *Enlightenment Orpheus: The Power of Music in Other Worlds* (New York: Oxford University Press, 2008).

579 Michel Corrette, *L'école d'Orphée, méthode pour apprendre facilement à jouer du violon* (Paris: Mme Boivin, 1738).

Figure 11. Toy qui du pouvoir harmonique/ Veux faire un jour sentir les merveilleux éffets,/ D'une docte et simple practique/ Puise icy les premiers secrets'.[580] Michel Corrette, L'école d'Orphée, méthode pour apprendre facilement à jouer du violon (1738).

[580] 'Oh You, who wish to reveal, one day,
The wonderful effects of harmonic power,
Do draw from here the most fundamental secrets
Of a learned yet simple practice'.

Practising music was also a school for self-discipline, contributing to both the physical and moral education of the performer. Physical movements in musical performance had moral connotations. For instance, the requirement to maintain an upright posture gave a physical representation of moral rectitude. Conversely, stooped postures, contortions and grimaces were considered immoral and unsociable. The cautious movements and restrained gestures of the performer were thus the physical expressions of a certain policy and morality of sound. Musical performance was an extreme form of body control; when performing a musical instrument, any undesired movement could result in noise, and thus incivility. The musical performer represented a radical form of sound disciplining that was required by social etiquette. The cultivation of the body at court was seen foremost as a moral affair, since the morality of individuals was inseparable from their manners and physical appearance. Training the bodies of young aristocrats was a form of moral education essential to courtly behaviour and sociability. In music, the cultivation of the body bore an even stronger moral charge, given that music had been deemed since ancient times to possess the power to heal individuals, both physically and morally.[581] In eighteenth-century France, musical performance was thought to trigger these effects not only in listeners, but also in performers through repeated and methodical practising. Furthermore, the musical performer stood at the intersection between the 'character' of a musical instrument and the 'character' of a musical piece, as previously discussed. In facing both the morally-charged musical instrument and the repertoire of moral characters inscribed onto the musical score, the musical performer was learning and shaping his or her own moral character.[582]

The moral aspects of learning music were epitomised in the discipline required when practising in solitude. Solitary practice was infused with the consciousness of sociability. Michel Corrette, 44 years after publishing his violin manual mentioned above, published another violin manual with an annotated engraving on its frontispiece (see Figure 12).[583] Here he represented hard practice as the precursor to sociability: the 'solitude' of the performer was charged with the illusion of the public performance.

[581] See Chapter 4 of this dissertation.
[582] See e.g. Maisoncelle, *Réponse aux Observations sur la musique*, p.16.
[583] Michel Corrette, *L'art de se perfectionner dans le violon* (Paris: 1782).

Figure 12. ‘J’exerce dans ma solitude, / Différens traits de Concerto;/ Qu’on est charmé de son étude,/ Quand le public nous dit Bravo./ Par une illusion nouvelle, / Non, comme Icare audacieux, / Sur la Brillante chanterelle, / Je vôle jusque dans les cieux’[584] Corrette, Michel. *L’art de se perfectionner dans le violon* (1782).

Corrette’s engraving represented the performer’s practice as paradoxical on several fronts. Practice was the locus of both solitude and social consciousness. Additionally, despite claiming to represent joyful solitary practice and embody principles of naturalness, Corrette’s engraving depicts a performer in a posture and attire that would doubtless hamper his playing. The natural posture proposed by Corrette did not necessarily reflect a comfortable position for playing. The graceful body of the performer, once again, followed a notion of nature that was carefully crafted.

584 ‘Alone with my solitude,/ I practise various concerto phrases;/ How pleased one is with one’s hard study,/ When one is granted the applause of an audience./ Carried by a fresh illusion,/ Or rather, like a new Icarus, and just as bold,/ I will fly up to the heavens /On the superb high string of the violin’.

Furthermore, for Corrette, practice meant effort and study even as it generated individual pleasure. Indeed, the engraving at Figure 12, which was published in 1782, suggests a re-signification of practising music as the proper occasion for self-cultivation, in accordance with the new sensibility. Historians of reading have shown that the new sensibility which emerged during the second half of the century entailed a new notion of individuality, situated in a sense of interiority and intimacy.[585] The solitary performer thus embodied a new understanding of feeling, experienced both internally and individually. Nevertheless, the location of feeling in the performer was rather problematic. As I shall discuss below, these demands for feeling and expression coexisted with the simultaneous dissemination of another model of the body, one rooted in mechanistic views.

4. Mechanical bodies

As the taste for instrumental music grew significantly in the second half of the century, so too did the demands placed upon instrumental performers. Musicians were increasingly moving away from courtly patronage and searching for new opportunities beyond the court. These new forms of support—in addition to contemporary claims about the need for an institution for music education coming from mouthpieces of instrumental music such as François-Joseph Gossec—have led historians to identify an increasing 'professionalisation' of musicians in this period.[586] This process was paralleled by an intensification of the practice and study required of instrumental performers.

The amount and intensity of practice was key to distinguishing amateur from professional performers. While some performance methods were fashioned as easy and fast for amateur learning, others insisted on the need for sustained repetition and methodical practice.[587] Rameau tested amateur players by asking them whether they would be willing to commit to the hard practice that was demanded by the standards of good performance: 'le tems, et l'application peuvent beaucoup, à la vérité: mais êtes-vous bien résigné à travailler

585 See e.g. Darnton, *The Great Cat Massacre*; Vincent-Buffault, *The History of Tears*; Denby, *Sentimental Narrative.*

586 Geoffroy-Schwinden, *Politics, the French Revolution, and Performance*; Weber, 'Learned and General Musical Taste'; Hennebelle, *De Lully à Mozart.*

587 Lescat, *Méthodes et traités musicaux,* p.99.

assiduëment pendant dix ou douze années, comme ont été obligez de le faire jusqu'ici tous ceux qui réussissent un peu dans l'art dont il s'agit?'[588]

As previously discussed, the authors of didactic music manuals believed that practice could be reasoned and systematised, and that the body could be subjected to methodical treatment. This belief was rooted in mechanistic views of the body, as articulated by contemporary anatomists. The words 'mechanic' and 'mechanically' were constantly repeated in prescriptive literature concerning corporeal performance. For example, Rameau, in the method just quoted, designed a 'nouvelle Méthode, établie sur une Méchanique des Doigts'.[589] The ability of fingers to learn and 'remember' music, as well as the methodical discipline of the senses required in music, were both regarded as mechanical. Fingers, moreover, were parts of a larger, interconnected machinery which included the whole body of the performer. Teaching methods laid stress on the weight of the performer's body, the tension of the strings, and the ways air entered wind instruments, all of which reveal that their authors were appropriating concerns being expressed at this time in the domain of the physics of sound. As 'hybrid experts', the authors of performance methods integrated scientific approaches to the body with recent developments on physics.[590]

Conversely, musical performers featured in physiological studies of hearing and human anatomy. One interesting example of the 1770s was the anatomical treatise of the artist Jacques Gamelin, which offered osteological and muscular structures of the body, often 'animating' them by making them perform in different situations (see Figure 13). Unlike the richly dressed and 'social' depiction of instrument performers of Gamelin's contemporary, Jean-Benjamin de Laborde, Gamelin presented instrumental performers as skeletons. This representation might have served to display the movement of the bones, which was the object of that section of the treatise; but it might also have been an ironic portrait of the mechanical quality of the performers, or a representation of the ephemeral, often vain, experience of music, which was also represented via the inclusion of musical instruments in 'vanitas' still-life paintings, and

588 'It is true that time, and diligence, are capable of great things: but are you really ready to practise industriously for ten or twelve years, as all those who have succeeded even a little in this art have had to do until now?'. Jean-Philippe Rameau, *Dissertations sur les différentes méthodes d'accompagnement* (Paris: 1733), p.9.

589 Rameau, *Dissertation.* Also in his *Piéces de clavessin avec une méthode pour la mécanique des doigts* (Paris: Hochereau, Boivin, L'Auteur, 1724; 1731)

590 See Klein, 'Hybrid Experts'.

suggested by the phrase at the bottom of the image in question, ‘O quanto ci deve dare pensiere’.[591]

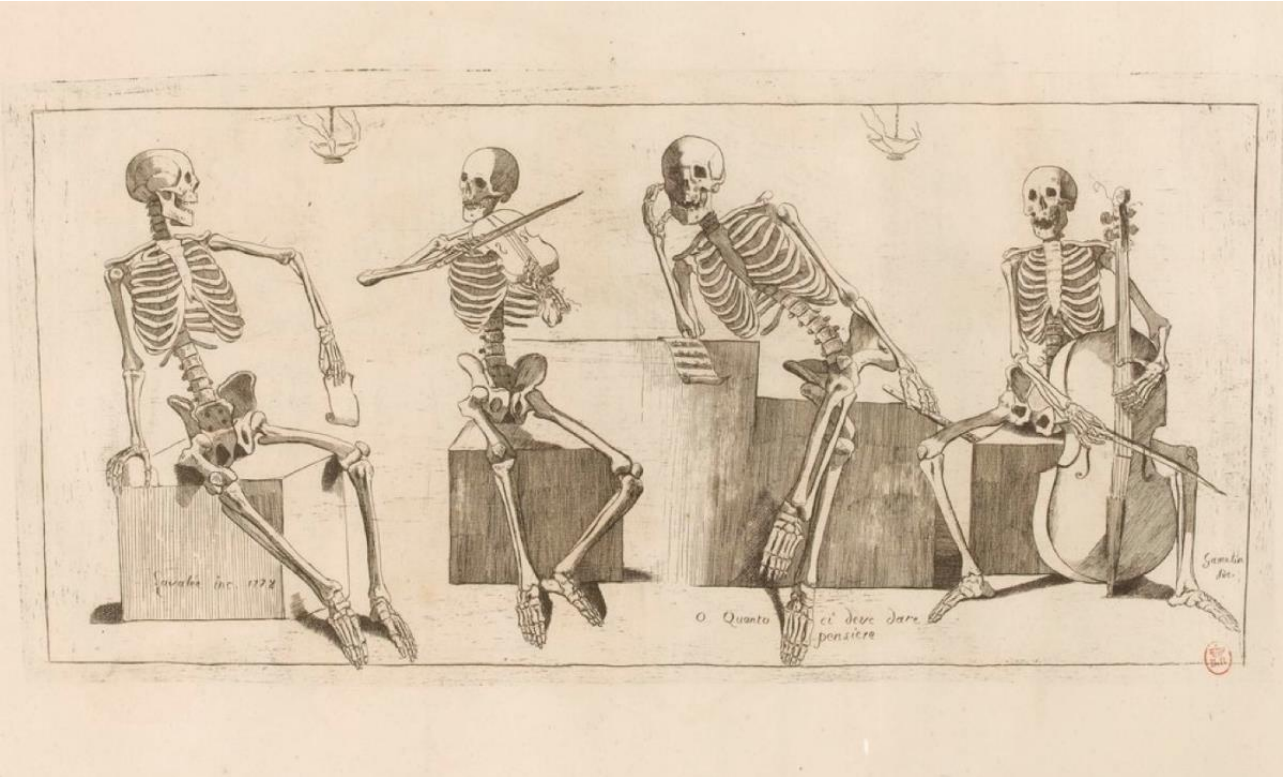

Figure 13. Jacques Lavalée (1778). In Jacques Gamelin, *Nouveau recueil d'ostéologie et de myologie dessiné d'après nature* (1779).

As Simon Schaffer points out, the spread of mechanistic theories about the animal economy was intrinsically connected to the spread of handbooks on physical discipline.[592] Consequently, the role of physical discipline in musical performance increasingly moved away from being the occasion for moral discipline and preparation for social life, to becoming the occasion for cultivating agility through mechanical processes such as repetition. Teaching

591 ‘Oh, how it should give us thought’. Jacques Gamelin, *Nouveau recueil d'ostéologie et de myologie dessiné d'après nature* (Toulouse: 1779). For representations of music in ‘vanitas’, see e.g. Nicole Lallement, ‘La musique dans les vanités de Simon Renard de Saint-André (1614-1677). Simon Renard, peintre de vanités’, *Musique-Images-Instruments* 5 (2003), 167-76.

592 Simon Schaffer, ‘Enlightened Automata’, in *The Sciences in Enlightened Europe*, eds. Clark, Golinski and Schaffer, 126-67, at p.141.

manuals prescribed that it was only through daily, mechanical exercise that performers could achieve the high degree of skill expected of the virtuoso performer.

The rise of images of machinery in musical performance was directly related to the rise of virtuoso performers over the same period. From this mechanistic point of view, the body of the virtuoso was an optimal performer: the skilful body-machine working at its best. In the eighteenth century, the term 'virtuose' was defined as 'un homme ou une femme qui a des talens pour les beaux Arts'.[593] In this sense, it was used for distinguished musicians, either singers or instrumentalists. However, the figure of the 'virtuoso' increasingly referred to soloists who excelled at performance on a single instrument. Since the foundation of the Concert Spirituel in 1725 by Anne Danican Philidor, an institution which featured all sorts of musical innovations, this culture of virtuoso performance had been considerably encouraged.[594] In the second half of the century, virtuoso performers proliferated significantly in relation to the culture of leisure and public spectacles, and became public 'celebrities'.[595] For Paul Metzner, the figure of the 'virtuoso' emerged in different realms of Parisian culture, thanks to widespread interest in skilled performance, as well as increasing technical intensification.[596] The blend of spectacle and technical innovation was conspicuous in new instrumental forms that staged the virtuoso, such as the *concerto*, which featured one or a group of soloists accompanied by an orchestra.[597] In these forms, the soloist epitomised the performer *par excellence*. Antoine Dauvergne, a composer, violinist, and director of the Opéra, was deemed a 'grand Musicien' by M. de Maisoncelle, who complained, however, that Dauvergne's talent for the violin allowed him to play as an orchestra performer only. Less skilled than the soloist, the orchestra performer—sometimes an amateur—was placed below the virtuoso.[598] With this remark, M. de Maisoncelle was also alluding to the notion that a *musicien* did more than merely play an instrument, as discussed above. However, it also evidenced an increasing gap that separated the virtuoso from amateur performers.

593 'A man or woman who has talent for the fine Arts'. 'Virtuose', *Dictionnaire de l'Académie française* (Paris: 1762). ARTFL project.
594 Milliot, 'Le virtuose international', p.59.
595 See Lilti, *Figures Publiques.*
596 Metzner, *Crescendo of the Virtuoso.*
597 Milliot, 'Le virtuose international', p.61; Florence Gétreau, 'Une harpiste au Concert Spirituel: Mademoiselle Schencker en 1765', *Musique-Images-Instruments* 1 (1995), 178-181; Simon P. Keefe (ed.), *The Cambridge Companion to the Concerto* (Cambridge: Cambridge University Press, 2005).
598 Maisoncelle, *Réponse aux Observations sur la musique*, p.11.

4.1 Musical automata

The proliferation of the musical virtuoso as public celebrity and embodiment of the mechanical body was mirrored in the proliferation of musical automata over the same period. The taste for musical automata was intermingled with that for virtuoso performances: both invoked a mechanistic physiology in the context of an emerging culture of spectacle and public display of technique.[599] The proliferation of automata during the eighteenth century has been the subject of a flurry of scholarship over the last two decades. Cultural and social historians of science have shown that automata served to explain the body, emotions, and politics, while embodying the conjuncture between research on physics and mechanics on the one hand, and the cultures of luxury and consumption on the other.[600] However, the fact that these automata mostly represented musicians, or produced sounds of various kinds, has scarcely been addressed in this literature. The extent to which eighteenth-century musical automata embodied notions of music and sound, related to other musical instruments and inventions of the time, and expressed practices of musical performance and listening, are crucial issues that need further study.[601]

Throughout the eighteenth century, different types of mechanical instruments were invented and traded. Musical automata became fashionable commodities within a broader phenomenon of ownership and display of musical instruments as tasteful possessions by elites.[602] The taste for android automata, musical boxes, and mechanical organs, among other sonic objects, was embedded in the increasing consumption of luxury and leisure commodities,

599 Metzner, *Crescendo of the Virtuoso*; Voskuhl, *Androids in the Enlightenment*.

600 Voskuhl, *Androids in the Enlightenment*; Jessica Riskin, *The Restless Clock: A History of the Centuries-Long Argument Over What Makes Living Things Tick* (Chicago: The University of Chicago Press, 2016); Metzner, *Crescendo of the Virtuoso*; Schaffer, 'Enlightened Automata'; Alexander Marr, '*Gentille Curiosité:* Wonderworking and the Culture of Automata', in *Curiosity and Wonder from the Renaissance to the Enlightenment*, eds. R.J.W. Evans and Alexander Marr (London-New York: Routledge, 2017); Robert M. Isherwood, *Farce and Fantasy: Popular Entertainment in Eighteenth-Century Paris* (Oxford: Oxford University Press, 1989).

601 Some recent attempts include Rebecca Cypess, '"It Would Be without Error": Automated Technology and the Pursuit of Correct Performance in the French Enlightenment', *Journal of the Royal Musical Association* 142:1 (2017), 1-29; Steven Kemper and Rebecca Cypess, 'Can musical machines be expressive? Views from the Enlightenment and today', *Leonardo Music Journal* 6 (2017). Music scholars have mostly approached musical automata from the points of view of well-informed musical performance and compositional genres: see e.g. Emily Baines, 'Mechanical musical instruments and historical performance', *Eighteenth Century Music* 11 (2014), 160-2; Hyatt King, 'Mozart's Works for Mechanical Organ: Their Background and Significance', *The Musical Times* 88:1247 (1947), 11-14.

602 See my forthcoming article, 'Tasteful Possessions. Collecting and Displaying Musical Instruments in pre-Revolutionary France'.

and attests to the growing taste for music. An especially fashionable mechanical instrument was the *serinette*, a small cylinder organ that was used to make canaries (*serins*) sing.[603] Some mechanical instruments doubled as playing, notating, and listening artefacts, and flourished within a demand for accessible enjoyment of music among amateurs. The music resulting from these objects could be reproduced as many times as desired. As such, one might say that musical automata were listening devices that could reproduce music before the age of recording. Possessing a musical automaton not only meant owning a cunning, curious, scientific, and tasteful material object: it also meant owning a potential performance, possessing sound, which could be shared with an audience of guests. Therefore, the great inventiveness in mechanical objects and innovative sound artefacts in this period commodified sound beyond musical practice.

Musical automata lay at the intersection between notions of the body, research into music and sound, and material practices of instrument making. The flute player created by Vaucanson, which was successfully received among Parisian spectators, combined research on the physics of sound, the anatomy of hearing, the mechanics of the flute, and the performance techniques of flute players. Vaucanson presented his invention to the Académie Royale des Sciences in 1738, and published a description of his invention that explained the mechanism of sound production at length. Vaucanson defined sound as 'vibrations of the air', described which parts of the body were involved in sound production—the structure of the tongue and mouth movements, in particular—and carefully measured the proportions between the speed of the breath and the note produced, claiming: 'C'est sur ces causes Physiques que j'ai essayé d'appuyer mes recherches'.[604] His automaton not only aimed at verisimilitude in the eyes of spectators, but it was also a material expression of the latest scientific discoveries. It was an object for learning about the physics of sound and anatomy of the performer in the same way that his defecating duck was an object for learning about the mechanism of food digestion.[605]

Musical automata incarnated scientific inventiveness and were instruments for learning. Marie Antoinette donated her 'Joueuse de Tympanon', made by the clock-maker Peter Kintzing and the ebonist David Roentgen, for study and preservation at the Académie

[603] See description of 'serinettes' in Dom François Bedos de Celles, *L'art du facteur d'orgues*, vol. 4 (Paris: 1778), p. 571.

[604] 'It is on these Physical causes that I have attempted to base my research'. Jacques Vaucanson, *Le mécanisme du fluteur automate, présenté à messieurs de l'Académie royale des sciences* (Paris: 1738), p.10.

[605] Jessica Riskin, 'The Defecating Duck, or, the Ambiguous Origins of Artificial Life', *Critical Inquiry* 29:4 (2003), 599-633 and *The Restless Clock*, pp.132-45; Spary, *Eating the Enlightenment*, pp. 43-46.

Royale des Sciences.[606] In a letter that communicated the Queen's bequest to the academicians, Lassone—the Royal physician, acting as the Queen's representative—referred to the automata as an object worthy of examination in the academy, and stressed its 'pleasing' physical attributes: 'cette figure, dont les traits, les proportions et les ajustements sont fort élégants'.[607] This automaton performer represented a well-to-do woman, whose physical appearance resembles the courtly body of the performer discussed above (see Figure 14). She embodied the enactment of grace in its highest degree. In this sense, the 'Joueuse' was both a scientific model of the mechanical body *and* a model of courtly demeanour—I shall return to this blend between mechanical and courtly bodies below.

Figure 14. 'Joueuse de Tympanon' (1784). Musée des arts et métiers, Paris.
Photo by Philippe Hurlin.

606 See e.g. Voskuhl, *Androids in the Enlightenment*; Metzner, *Crescendo of the Virtuoso*.
607 'That figure, whose traits, proportions and adjustments are very elegant'. Letter by Lassone (signed Versailles, 4 March 1785) in *Pochette de séance 5 mars 1785*; Report by the academicians in *Registre de procès-verbaux des séances*, T.104, f.46.

Like musical performers, android automata such as the 'Joueuse' gathered an audience of listeners. The instrument maker Robert Richard, who was *juré-comptable* of the guild of instrument makers between 1757 and 1758, invented a variety of mechanical devices, some of which had android attributes. The *Almanach Dauphin* for 1772 referred to Richard as a follower of Vaucanson:

> Richard, au vieux Louvre, digne émule du célèbre Vaucanson, et un des plus habiles artistes de l'Europe pour l'orgue, les serinettes et les vielles organisées, vient de faire exécuter en cette capitale, avec le plus grand succès, dans la salle de la bibliothèque du roi, un concert mécanique par quatre figures automates, dont l'une joue du violon, l'autre de la flûte, et la troisième touche le clavecin, tandis qu'un petit amour bat la mesure et tourne le feuillet. On ne saurait donner assez d'éloges à cet artiste aussi modeste que savant, et dont les productions font tant d'honneur au génie inventif de la nation.[608]

Richard's machines exemplify the way in which crowds gathered around automata simultaneously to appreciate them as cunning objects and to listen to them perform. These gatherings resemble concert practices of the time. As this review indicates, the audience was gathered to listen to a 'concert' performed by four musicians in a room in the royal library, very much like chamber music of the time. Before Richard, the automata made by Vaucanson also performed in front of an audience. Like other performances, automata performances were advertised through the press, were scheduled at specific times, and required paid entries.[609] The mechanical concert, thus, was deemed verisimilar by an audience which already had a model of concert performances in their memories. Moreover, the increasing popularity of mechanical musical instruments was nurtured by the audience's increasing thirst for spectacle and public

[608] 'At the old Louvre, Richard, a worthy disciple of the celebrated Vaucanson, and one of the most skilful craftsmen of Europe when it comes to the organ, the serinette and the organ hurdy-gurdy, has recently conducted a concert in Paris with the greatest success, in the Royal library room, performed by four automated figures, one of which played the violin, another the flute and the third the harpsichord, while a small Cupid beat time and turned the pages. This artist, who is as modest as he is knowledgeable, cannot be praised too highly; his works are a great honour to the inventive genius of our nation'. Quoted in Pierre, *Les facteurs d'instruments de musique*, p 98.

[609] An engraving held at the Betteman Archive, New York, indicates the tickets' prices and performance times of Vaucanson's three automata.

demonstration of skill. It is in this sense that Paul Metzner links the fashion for automata to the widespread interest in the performance of skill by the 'virtuoso'.[610]

Yet it was not only the audience for musical performances that was mirrored in the audience gathered around a musical automaton. The android automaton itself was a reproduction of the musical performer, understood as a mechanical body and the provider of an amusing spectacle of skill. The intermingling of human organisms, musical instruments, and machines discussed above was most radically embodied in musical automata. I have already suggested that the representation of a musical instrument as a 'person' challenged the boundaries between the agent and the means of sound—the performer and the material object. Both the humanised musical instruments and android automata were not mere means of musical performance, but feeling objects which produced and experienced music in themselves. They were artificial devices which, however, were also capable of being acted upon by feeling and working upon the feelings. In android music automata, this blend of bodies and feeling was even more radical; the bodies of the musical instrument and that of the performer were interwoven in the same mechanical fabric, composing a single object. Thus, automata representing musical performers pushed the boundaries between the musical instrument and the musical agent even further. They replaced the performer by situating the production of sound within the material instrument. Where, in all this, was the place of the (human) musical performer? What was the performer's specific agency and feeling in this chain of mechanical sound production?

Android musical automata epitomised the disciplined body of the musical performer. The mechanical linkage of automata was subjected to scientific laws and methodical reasoning in the same way that musical performers were taught to practise and train their bodies. This relationship between human bodies and machines fostered, on a broader level, the political potential of music for modelling public order, which I will discuss in Chapter 4. In an essay on Enlightened automata, Simon Schaffer has addressed 'the relation that some Enlightenment savants developed between machinery viewed as human and humans managed as machines'. This relationship, he suggested, was translated to the political arena—automata were metaphors of how subjection and governance worked.[611] Similarly, the disciplined body of the performer, mechanically constituted, was the epicentre of a debate which combined notions of music and musical agency, with political claims over present and future social orders.

[610] Metzner, *Crescendo of the Virtuoso.*
[611] Schaffer, 'Enlightened Automata', p.127.

4.2. The body of the performer contested

The highly disciplined body of the musical performer was not uncontested. In the previous chapter, I argued that the emergence of a new sensibility in the second half of the century brought with it a new emphasis on both feeling and physical sensation, which integrated 'characters' associated with the Italianate. Moreover, the new sensibility was grounded in a new model of nature which distanced itself from both the *esprit géométrique* and the 'artificiality' of the court. When confronted with the disciplined body of the performer, the new sensibility triggered a critique of the musical performer on different fronts, advocating instead for a new model of the body. This criticism associated excessive practice and the figure of the virtuoso, with the musical automaton and courtly excesses. In this section, I will discuss how these critiques raised crucial social, political and aesthetic issues. Underlying these issues was a concern over the ways in which music drew boundaries between the individual and collective, and between nature and artifice. Android automata built upon polite postures and manners; therefore, they were used to articulate a broader critique of aristocratic bodies.[612] The mechanical body of the virtuoso, the aristocracy, and automata were aligned in a critique of the 'artificial' and lack of feeling at the end of the Ancien Régime. In all these different realms, there was a reaction against the mechanisation and excessive disciplining of the body.

As I have previously discussed, courtly manners followed a notion of 'naturalness' that engendered a restricted economy of body movements and gestures, whose archetype was the figure of Louis XIV. In order to achieve courtly grace and naturalness, performers were subjected to hard practice, understood as a methodical and routine process by which performers not only improved their musical playing but also their character. However, this 'excessive' training of the body was soon labelled as artificial. Mechanical practice was associated with a broader critique of aristocratic bodies and the 'artificiality' of courtly behaviour. The Chevalier J. J. O. de Meude-Monpas, a composer of music who published a musical dictionary in the model of Rousseau's, illustrated this association between excessive training and aristocratic bodies well when he wrote: 'C'est que la Musique étant un Art d'imagination, tout air de préparation et de fini me semble contraire aux *élans* imprévus du sentiment. Une toilette trop apprêttée vaut moins que le négligé d'une belle femme'.[613] Alluding to the 'toilette' of well-

[612] Voskuhl, *Androids in the Enlightenment*; Outram, *The Body and the French Revolution.*

[613] 'This is due to the fact that, Music being an Art of imagination, any appearance of being too prepared or too polished when it comes to this art seems to me to go against the unexpected *élans* [surges] of emotion. Too affected

to-do women, which became a target for criticism of courtly excesses during the revolutionary period, Meude-Monpas opposed a notion of sentiment which was disentangled from preparation or training.[614] This uncultivated nature is echoed in the debates over gardens in the same period, in which the model of the English 'wilderness' would be imposed upon the disciplined French.[615] The association between constraint and despotism triggered a general reaction against excessive rules and discipline across different cultural areas. This attitude was related to a new notion of nature which, as I argued in Chapter 2, moved away from discipline and geometry. Constraints placed upon the body which were based on courtly deportment were associated with the subjugation of the individual by the absolute monarchy. Opposition to artificiality and courtly constraint targeted the very concept of naturalness long cultivated by the musical performer. Although the principles of taste and grace were deemed positive throughout the century, excessive stress on the corporeal and manners came to be seen as affectation, mannerism, and posturing rather than posture. Diderot developed this criticism in many of his writings, which conceived manner as a sign of moral corruption and the decadence of a nation—and, in the realm of art, as mere artifice.[616]

Consequently, authors of instructional music manuals published in the last decades of the century sometimes relaxed their predecessors' restrictions on the body. In his method for the transverse flute, Antoine Mahaut described the posture and grace required for holding the flute by quoting Hottetterre's method, written fifty years earlier. However, Mahaut added, 'Il est certain que cette attitude est tres gracieuse mais elle ne doit pas-être generale, chacun peut, jouant debout prendre l'attitude qui lui est la plus naturelle, et qui lui paroit la plus noble'.[617] For the first time, the 'natural' in posture became associated with the individuality of the performer. Moreover, the requirement to avoid contortions and grimaces was re-signified as a

a *toilette* will never be worth the calculated unkemptness of a pretty lady'. Chevalier J. J. O de Meude-Monpas, *Dictionnaire de musique* (Paris: Knapen et fils, 1787), p.211.

614 For criticism to the *toilette* see e.g. Louis-Antoine Caraccioli, *La critique des dames et des hommes à leur toilette* (Paris: 1770); Kimberly Chrisman-Campbell, 'Dressing to Impress: The Morning Toilette and the Fabrication of Femininity', in *Paris: Life & Luxury in the Eighteenth Century*, ed. Charissa Bremer-David (Los Angeles, CA: Getty Publications, 2011), 53-74.

615 See e.g. Dora Wiebenson, *The Picturesque Garden in France* (Princeton: Princeton University Press, 1978); Rémy Gilbert Saisselin, 'The French Garden in the Eighteenth Century: From Belle Nature to the Landscape of Time', in *The Journal of Garden History* 5:3 (1985), 284-297; William Howard Adams, *The French Garden, 1500-1800* (New York: Braziller, 1979); Ehrard, *L'idée de la nature*; Spary, *Utopia's Garden*.

616 See Fried, *Absorption and Theatricality*, p.99.

617 'Though this posture is very gracious, it must not be made a general rule; each player, standing, can adopt the posture that he/she will find the most natural, and seems to him/her to be the noblest'. Mahaut, *Méthode pour apprendre en peu de tems*, p.2.

sign of comfort. The performer was supposed to display comfort and grace, 'évitant tout air géné afin de joindre la bonne grace à la commodité'.[618]

Similarly, some claimed that mechanical and highly disciplined practice was no longer paramount. In the mid-eighteenth century, there was a common view that music was too difficult, laden with far too many rules. Diderot described this situation at the beginning of an instructional manual he wrote in form of a fictional dialogue, under the name of Anton Bemetzrieder, a music teacher and writer of methods himself who gave harpsichord lessons to Diderot's daughter. In the first scene, the student complains that learning to play an instrument will be difficult for her. She is concerned not only with the difficulty of learning music, but also with the time and practice needed to learn to play the harpsichord. A friend joins the conversation, and 'Le Maître' (representing Bemetzrieder) asks: 'Seriez-vous aussi tenté d'entrer dans mon école?', to which the friend replies, 'Dieu m'en préserve! Moi, je me clouerois des journées entières sur un tabouret, devant un clavier?'[619] Diderot, impersonating the teacher Bemetzrieder in the 1770s, challenged the notion of hard study, considering it detrimental to natural and pleasurable playing. When the student states that pulling off a good performance would mean being 'nailed' to the instrument, the teacher responds omitting mechanical practice. Practice was here seen as departing from, rather than leading to, naturalness.

Extended practice was criticised during the second half of the century in relation to the 'mechanisation' of musical performers, epitomised by the success of virtuoso performers. The virtuosi were criticised for displaying skill and speed at the expense of 'expression'. Jean-Georges Noverre, the dancer and ballet master who led a reforming movement of dance which advanced similar critiques of the courtly and 'artificial' body, depicted the appearance of an Italian virtuoso violinist in a Parisian stage:

> Un grand *violon* d'Italie arrive-t-il à Paris, tout le monde le court et personne ne l'entend; cependant on crie au miracle. Les oreilles n'ont point été flattées de son jeu, ses sons n'ont point touché, mais les yeux se sont amusés; il a démanché avec adresse, ses doigts ont parcouru le manche avec légéreté; Que dis-je? il a été jusqu'au chevalet; il a accompagné ces difficultés de plusieurs

618 'Avoiding any air of awkwardness in order to appear both gracious and at ease'. Friedrich Wilhelm Marpurg, *Art de toucher le clavecin selon la manière des modernes* (Paris: 1797), p.1.

619 'Would you also be tempted to attend my school?';'God forbid! I am not about to sign up to be nailed down to a stool in front of a keyboard for days on end!'. Antoine Bemetzrieder (and Denis Diderot), *Leçons de clavecin et principes d'harmonie* (Paris: 1771), p.5.

> contortions qui étoient autant d'invitations, et qui vouloient dire: *Messieurs, regardez-moi, mais ne m'écoutez pas; ce passage est diabolique; il ne flattera pas votre oreille, quoqu'il fasse grand bruit; mais il y a vingt ans que je l'étudie.* L'applaudissement part; les bras et les doigts méritent des éloges; et on accorde à l'homme-machine et sans tête, ce que l'on refusera constamment de donner à un *violon* françois qui réunira au brillant de la main l'expression, l'esprit, le génie et les graces de son art.[620]

Noverre's passage addressed many of the issues raised in the critiques of musical virtuosi. It documents the fascination many had for Parisian virtuosi, who as new public figures staged impressive spectacles of physical skill. Yet for Noverre, these spectacles were visual rather than musical, derogatively associated with the Italian, noisy, diabolical, manual, automatic, and therefore lacking expression, *esprit*, genius, or grace. He implied a form of concerted deception by the performer, which led the public to accept what they did not like or understand. This acceptance of fakeness was the foundation of a critique of authenticity in musical performance.

Virtuosi were associated with Italian musicians and musical genres. The word 'virtuoso' is amongst many words which entered musical language from the Italian, as shown in Chapter 2.[621] Many individuals labelled as 'virtuosi' were in fact Italian musicians. Criticism of Italian virtuosi was built upon the stereotypes of Italians which I discussed in the previous chapter, but addressed virtuosic music rather than Italian musicians *per se*. Italians had often been associated with 'excess'. However, in the last decades of the century, this was no longer the exclusive prerogative of Italian character, but had been appropriated by the broader taste for spectacles and public demonstrations of skill.[622]

Objections to 'excess' are evident in music manuals from the beginnings of the century. In the preface to his *Pièces de clavecin* of 1713, Couperin explicitly attacked excessive speed

[620] 'A great Italian violinist comes to Paris, all the world runs after him and no one understands him; however he is celebrated as a miracle. The ears have enjoyed no satisfaction in his performance, nor have his sounds touched anyone, but the eyes have been amused; he has handled the bow with much address, and his fingers have run with celerity through the neck: What am I saying? they stretch to the bridge of the instrument; he accompanies all these dexterities with many contortions that are also invitations, which seemed to want to say: *Gentlemen, look at me, but do no listen to me; this passage is diabolical; it will not flatter your ear, but it will make a great noise; but I have been studying this for twenty years*. Applause arises; his arms and fingers deserve eulogies; and one grants to this man-machine without a head, the approbation one would steadfastly refuse to give a French violinist who combined manual brilliance with expression, *esprit, génie* and the graces of his art'. Jean-Georges Noverre, *Lettres sur la danse, et sur les ballets* (Lyon: Aimé Delaroche, 1760), pp.273-4.

[621] The article 'Virtuose' appears for the first time in *Dictionnaire de l'Académie française* in 1762: 'Mot emprunté de l' Italien, pour signifier Un homme ou une femme qui a des talens pour les beaux Arts'. ARTFL project.

[622] Metzner, *Crescendo of the Virtuoso.*

in performance as well as excessive displays of dexterity. He declared that, when listening to music, he preferred to be 'moved' rather than 'astonished'.[623] Such excesses were associated with the reluctance for physical contortions and grimaces already mentioned. Geminiani, deemed a talented performer himself, aligned the critique of contortions with a condemnation of physical 'tricks' like manual skills, as well as 'posture':

> And also sudden Shifts of the Hand from one Extremity of the Finger-board to the other, accompanied with Contortions of the Head and Body, and all other such Tricks rather belong to the Professors of Legerdemain and Posture-masters than to the Art of Musick, the Lovers of that Art are not to expect to find any thing of that Sort in this Book. But I flatter myself they will find in it whatever is Necessary for the Institution of a just and regular Performer on the Violin.[624]

For Geminiani, the 'Art of Musick' corresponded to the 'just and regular performer', rather than to those performers who had mastered physical skills. He aimed his treatise at musical amateurs, broadly understood as 'Lovers of the Art'. In this rejection of physical virtuosity, Geminiani alluded to a rejection of boulevard artists such as acrobats and illusionists, who staged skilful performances yet were not deemed worthy of the 'Art of Musick'.[625] This was a social critique that favoured musical amateurs, who, as previously discussed, sought social legitimacy through the embrace of taste.

The association of virtuosity and street entertainment, and its consequent displacement from taste, also took place through the association of virtuosi with the 'diabolical'. Meude-Monpas addressed 'nos virtuoses' of the time: '*Ferrari, Lolli, Pugnani, Géminiani, Cramer, Lamotte, Lahoussaie,* prémier violon de la Comédie Italienne, *Jarnovick,* et enfin le fameux *Viotti.* Tous ces Artistes célèbres ont mérité des Nations, les applaudissements qu'ils en ont obtenus; mais tous aussi ont mérité le reproche que j'ai fait à *Gaviniés*, de n'avoir pas été sans cet amour *diabolique* pour les difficultés'.[626] Like Noverre, Meude-Monpas labelled the taste

[623] Le Huray, *Authenticity in Performance*, p. 45.

[624] Francesco Geminiani (English edition), *The Art of Playing on The Violin. Containing All the Rules Necessary to Attain to a Perfection on that Instrument, with Great Variety of Compositions, Which will Also be Very Usefull to Those Who Study the Violoncello, Harpsichord & c. Opera IX.* (London: 1751).

[625] For boulevard artists, see Isherwood, *Farce and Fantasy*; Michèle Root-Bernstein, *Boulevard Theatre and Revolution in Eighteenth-Century Paris* (Ann Arbor, MI: University of Michigan Press, 1981).

[626] 'All these celebrated Artists deserve the applause they gathered from the nations of the world; they also, however, deserve the criticism I levelled at *Gaviniés*: they have a *diabolical* love for difficulties'. Meude-Monpas, *Dictionnaire de musique*, p.213.

for difficult passages as 'diabolical'. The association between virtuosi and the devil or the diabolical was exemplified in Giuseppe Tartini's violin sonata in G minor, known as the 'Devil's Trill'. Tartini enjoyed a great reputation in France as both a musician and a writer on music theory, who corresponded with encyclopaedists of the mid-eighteenth century. The astronomer Jerome Lalande wrote, upon returning from a trip to Italy in 1769, that Tartini had composed the 'Devil's Trill' after being inspired by a dream in which he had made a pact with the devil, a stunning violin player.[627] Being linked to the devil, virtuosi had little to do with 'grace', which, as previously mentioned, connected the courtly body with the divine, and embodied moral rectitude. The 'diabolical', while spectacular, was far from the model of tasteful order sought by French amateurs. In the neo-classical aesthetics of the second half of the century, the 'diabolical' was rejected as part of a broader reaction against the 'gothic'.[628] The fashionable pleasure arising from virtuosi, therefore, was relegated to the street fairs, boulevard entertainment, and masquerades, where the 'grotesque', according to elites, had a well-established place.[629]

Additionally, virtuosi were criticised within a more general perception of manual labour as being inferior to intellectual capacity, evident in the above-quoted passage from Geminiani.[630] In musical performance, reactions against manual labour found expression in critiques aimed at virtuosic performers who stressed the process of learning and practice—given that routine and mechanical work were associated with craftsmanship—and the demonstration of physical skill and agility. Meude-Monpas stressed this 'manual' character of virtuosi performers, calling them 'ouvriers des notes'. He claimed that a musician who subjected himself to mechanical and repetitive practising could neither be called an artist nor a genius: 'au bout de vingt ans de travail d'un crocheteur je serais un artiste machinal, mais non pas un homme de génie'.[631] Here the notion of genius was placed in opposition to mechanical practice. In his article '*musicien*', Meude-Monpas attributed 'genius' to the composer rather than the performer. In so doing, he illustrates a broader phenomenon in the late eighteenth

627 Joseph Jérôme de Lalande, *Voyage d'un Français en Italie fait dans les années 1765 et 1766* (Venice: 1769).
628 See e.g. Marc-Antoine Laugier, *Essai sur l'architecture* (Paris: 1753). See also Louis Bertrand, *La fin du classicisme et le retour à l'antique dans la seconde moitié du XVIIIe siècle et les premières années du XIXe siècle, en France* (Paris: Hachette, 1897).
629 For the association between the grotesque, boulevard entertainment, and virtuosic music see Le Guin, *Boccherini's Body*, p.138.
630 See e.g. Roberts, Schaffer, and Dear (eds.), *The Mindful Hand.*
631 'After twenty years of working as a picklock I would have acquired an automatic skill, but I would not be a man of genius'. Meude-Monpas, *Dictionnaire de musique*, p.212.

century, in which musical genius became increasingly confined to the figure of the composer and the realms of the 'mind'.[632]

Critics of virtuoso performers viewed the taste for physical prowess and the mastery of technical difficulty as vain, nonsensical, and empty of feeling. Meude-Monpas drew a contrast between the 'hands' and 'bow' of a violinist called Capron and his lack of soul: 'Le froid *Capron,* d'ailleurs très-grand violon, si toutefois on peut mériter cette épithète, quand on n'a que des doigts et un archet, et que l'ame est muette'.[633] Similarly, Diderot's *Le neveu de Rameau* depicted musical performance as the utmost form of physical spectacle. Diderot described a long and risible scene in which the protagonist attempted to make complex contortions with his face and body, in imitation of performers of instrumental music.[634] In his mimicry, the character associated himself with actors, prostitutes, singers, and instrumentalists, thus crystallising the critique of virtuoso performers as embodiments of moral decadence, laying excessive emphasis on physical appearance and mechanical skill, and void of both intellect and feeling. Diderot's work also channelled a broader criticism of 'mannerism', which linked the culture of virtuoso performances with the artificiality of courtly and aristocratic life.

5. Sensible bodies

The demand for feeling in musical performance, as opposed to the 'artificial' bodily performances of the virtuoso, entailed a new model of the 'natural' body. The new sensibility, laying stress on both feeling and sensorial experience, expressed itself physically: individuals experienced feeling with their bodies, thereby aligning the inner and the outer.[635] Furthermore, as I discussed in Chapter 2, the new sensibility emphasised primitiveness and authenticity, and situated music in a privileged position for the expression of unmediated interior feelings.[636] Yet the experience of music was necessarily mediated by the corporeal. What, then, was the agency of the intervening body of the performer? Could the performer embody sensibility, or more generally, could any body be *sensible* and *performative* at once?

632 See e.g. Schaffer, 'Genius in Romantic Natural Philosophy'; Jefferson, *Genius in France*; Kivy, *The Possessor and the Possessed*.
633 'The cold *Capron*, incidentally a great violinist, if one deserves the epithet of 'great' when one possesses fingers and a bow, but a mute soul'. Meude-Monpas, *Dictionnaire de musique*, p.211.
634 Diderot, *La neveu de Rameau.*
635 Riskin, *Science in the Age of Sensibility*; Vila, *Enlightenment and Pathology*.
636 Thomas, *Music and the Origins of Language.*

Historians of dance, theatre, and body language more generally have claimed that the new sensibility witnessed the pursuit of expressive bodies which could communicate feeling beyond words.[637] Dancers and actors were the target of critiques similar to those aimed at musical performers: the 'excesses' of the body were deemed vain, affected, and meaningless. In response to these critiques, writers on both dance and theatre carried out processes of reform. These reforms, rather than excluding the corporeal from the artistic aim, placed the body at the centre, as a highly meaningful signifier of the passions. In dance, this reform was led by Noverre, whose *Lettres sur la danse, et sur les ballets* (1760) stressed dancers' dramatic expression through their bodies, supporting what has been called the *ballet d'action,* which has been described by Edward Nye as a 'a curious hybrid of dance, mime and music'.[638] As with the critique of virtuoso musicians, Noverre criticised virtuoso dancing both at court and the *Opéra,* and explicitly moved away from the *esprit géométrique,* which in dance involved emphasising symmetrical choreography, geometric patterns, measure, and exactitude.[639] Like his contemporaries in music, Noverre sought a form of primitive expression of the passions which did not obey geometrical laws but was attributable to an inner state and feeling. His ideal body language was pantomime, which, he explained, 'consiste dans la bonne grace et dans l'expression naïve des affections de l'ame; elle est au-dessus des regles et ne se peut enseigner; la nature seule la donne'.[640] Akin to Rousseau's notion of melody, pantomime constituted a privileged expression of the passions by virtue of its association to primitive nature. The 'bonne grace' of pantomime, unlike the notion of grace cultivated at court, was not supposed to adhere to rules and discipline, but was concerned with commanding the passions.

[637] Feilla, *The Sentimental Theater*; Percival, *The Appearance of Character*; Nye, *Mime, Music and Drama*; Susan McClary, 'Unruly Passions and Courtly Dances. Technologies of the Body in Baroque Music', in *From the Royal to the Republican Body,* eds. Melzer and Norberg (Berkeley: University of California Press, 1998), 85-112 ; Jean-Noël Laurenti, 'De l'entrée de ballet à la pantomime et au ballet d'action: une nouvelle représentation de l'homme et de la nature', in *Musique et geste en France de Lully à la Révolution. Études sur la musique, le théâtre et la danse*, ed. Jacqueline Waeber (Bern: Peter Lang, 2009), 11-28.

[638] Nye, *Mime, Music and Drama*.

[639] For the geometrical approach to dance, see e.g. Raoul Auger Feuillet, *Chorégraphie, ou l'art de décrire la danse* (Paris: 1700). See Jennifer Homans, *Apollo's Angels: A History of Ballet* (London: Granta Books, 2010).

[640] '(Pantomime) consists in the art of being graceful and in the naive expression of the soul's affections; it is above rules and cannot be taught; only nature can grant it'. Noverre, *Lettres sur la danse*, p.405. For pantomime, see Sophia Rosenfeld, *A Revolution in Language. The Problem of Signs in Late Eighteenth-Century France* (Stanford: Stanford University Press, 2001); Nye, *Mime, Music and Drama*; Homans, *Apollo's Angels*; Jacquelin Waeber, '"Le Devin de la Foire"? The Role of Pantomime in Roussseau's *Le Devin du Village*', in *Musique et geste en France de Lully à la Révolution. Études sur la musique, le théâtre et la danse*, ed. Jacqueline Waeber (Bern: Peter Lang, 2009); Laurenti, 'De l'entrée de ballet'.

The ideal expressive body was devoid of ornament, deprived of any accessory; almost nude, the new 'naturalness' of the body was unmediated and uncultivated. Excessive training of the body was associated with the courtly stress on physical appearance, exemplified in the female courtier's *toilette*. Reformers of dance and theatre expressed the reaction against such courtly practices most explicitly through changes in the types of costumes and clothing used by dancers and actors. The dancer Marie Salle—Noverre's teacher—triggered a transformation of the costumes worn by female dancers by appearing on stage wearing simpler clothing and without masks, thus showing her hair and face.[641] Later, in the Revolutionary period, the French actor François-Joseph Talma spearheaded a reform of the theatre in regard to costume, declamation, and corporeal gestures, motivated by ideals of sensibility and naturalness. In his first performance, in which he enacted the role of Charles IX, Talma wore a Roman toga, a sharp contrast with theatre's pompous costumes, which drew on neoclassic associations between nature, simplicity, truthfulness, and antiquity.[642] The author of the tragedy, Marie-Joseph de Chénier, mentioned the association between naturalness and antiquity: 'La nature autour de nous est si fardée, si voilée, si chargée de vêtemens étrangers, qu'elle n'est plus reconnoissable. Jetons au loin ces prétendus ornemens qui la couvrent, nous retrouverons les formes antiques. Les Grecs l'ont représentée nue dans leurs poèmes comme dans leurs statues'.[643] The embrace of this ideal of classical nature challenged gallantry and the feminine, both intertwined in the courtly body.[644] The reform of theatre, therefore, presented the picture of a new, ideal citizen which was aligned with the masculine ideal of virtue, and advocated a new social order in Revolutionary times.[645]

These reformist authors drew upon Rousseau's stress on transparency, which, as I mentioned in the previous chapter, not only had political implications but also forged a new

641 See e.g Franziska Bork Petersen, *Authenticity and its Contemporary Challenges: On Techniques of Staging Bodies*, unpublished PhD thesis, Stockholm University (2013), p.83.

642 Feilla, *The Sentimental Theater*, pp.208-9; Outram, *The Body and the French Revolution*.

643 'Nature, as we see her around us, is so made up, so veiled, so laden with foreign adornment, that she has become unrecognisable. Let us tear off these would-be ornaments that cover her, in order to rediscover the forms of Antiquity. In their poems as well as in their statues, the Greeks represented Nature naked'. Marie-Joseph de Chénier, *Charles IX, ou l'ecole des rois* (Paris: 1790), pp.34-5.

644 Chénier claimed: 'The perennial enemy, the most formidable plague, not only of our theatre but of the arts and the customs of modern nations, is the spirit of gallantry, born of the ignorance of our ancestors, a spirit that is contrary to the true goals of society, a spirit that is humiliating for the sex that is conventionally the one to be deceived, and even more humiliating for the sex that deceives'. *Charles IX*, p.32.

645 See Herbert, *David, Voltaire, 'Brutus'*; Feilla, *The Sentimental Theater*; Outram, *The Body and the French Revolution*.

notion of the self.[646] The new expressive body ostensibly achieved transparency between the inner and outer self, feeling, and physical appearance. By virtue of this unmediated relationship with nature, the expressive bodies of mimes, actors, and dancers were more effective signifiers of the passions than verbal language, and more transparent to their audiences. Therefore, the body not only revealed nature, but also the inner essence of the performer.[647] Diderot, in his *Lettre sur les sourds et muets*, claimed that such was the power of gestures to convey emotional meaning that, when attending theatre performances, he covered his ears with his hands firmly, in order not to hear a single word: the emotional impact, he stressed, was much stronger when it only came from corporeal expression.[648] This statement concerning the superior importance of the physical over sound—and of seeing over hearing—recalls the longstanding emphasis placed on the physicality of musical performers. Yet how could the bodies of musical performers convey transparency and authenticity, in light of the sharp critiques that were placed upon them after the 1750s? In the remaining sections of this chapter, I will examine the specific challenges that these demands for naturalness, authenticity, and expression of feeling exerted upon the body of the musical performer, exploring the considerable expansion of 'expressive' resources for musical performers in relation to changing notions of the passions and new musical instruments, and the performer's specific position as intermediator between composers and listeners.

5.1 Playing on the passions: expanding musical expression

Throughout the eighteenth century, musical performers were taught to achieve 'expression', broadly understood. Expression consisted of linguistic and technical elements, and included a heavy emphasis on physicality. Nevertheless, what to express, and which technical, material, and physical resources were adequate, was subject to significant variation and change. In this section, I concentrate on three intertwined shifts in the ways musical performers dealt with the new requirements for expressivity that arose during the second half of the century. With the stress on sensibility and the forging of a new expressive body in other performing arts, I shall argue, the musical performer increasingly moved away from a verbal model of expression to one grounded in the sensible and moving body. Similarly, attention shifted from oratory to

[646] Starobinski, *Jean-Jacques Rousseau.*
[647] Bork Petersen, *Authenticity and its Contemporary Challenges*, p.81.
[648] Denis Diderot, *Lettre sur les sourds et muets. A l'usage de ceux qui entendent & qui parlent* (Paris: 1751).

instrumental technique as the foundation of musical expression, as suggested by the stress placed on the invention and use of new 'expressive' musical instruments. Over the same period, there was a shift in how the passions were understood, from fixed categories to moving, variable and mixed phenomena. The expressivity of performers, therefore, was grounded in a new notion of movement which sympathetically involved his or her moving body and the moving body of the musical instrument. Musical expression stood at the intersection of technical expertise, materiality, and physiology. What the passions were, and how to express them, were thoroughly interwoven.

As discussed in the previous chapter, music was considered a language. Consequently, musicians followed models of verbal language when composing, teaching, and performing. The requirement for expressiveness led musicians to draw upon strategies of rhetoric to trigger emotional reactions in the listener. During the first half of the century, rhetoric was studied at schools and universities. Students were taught how to give speeches in accordance with a series of established criteria of beauty in oral language, and were provided strategies of persuasion to create emotional impact. Scholars have documented the rhetorical foundations not only of literature, but also of the visual arts and music.[649] Music, still comprising primarily vocal music, appropriated the techniques of oratory and poetry declamation.[650] The accomplishment of expression depended on linguistic elements including good 'articulation' and 'phrasing'. A musical 'phrase' was a section of music with a beginning and end (or rest), as with verbal language. Phrases were fundamental in singing, a musical practice which relied on texts as well as breathing. In this way, phrasing was both a compulsory physical act and discursive element. Despite this, these categories of singing governed the terminology used for musical performance in general, even in instrumental music where neither text nor breathing was involved.

For Batteux, writing in 1746, musical expression followed the rules that Cicero had established for eloquence in oratory. These rules, moreover, established a relationship between feelings, sounds, and physical gestures: 'Tout sentiment, dit Ciceron, a un ton, un geste propre

649 Heinrich F. Plett, *Enargeia in Classical Antiquity and the Early Modern Age: The Aesthetics of Evidence* (Leiden: Brill, 2012); Tom Beghin and Sander M. Goldberg, *Haydn and the Performance of Rhetoric* (Chicago: The University of Chicago Press, 2007); Dietrich Bartel, *Musica Poetica: Musical-Rhetorical Figures in German Baroque Music* (Lincoln, NE: University of Nebraska Press, 1997).

650 See John Potter and Neil Sorrell, *A History of Singing* (Cambridge: Cambridge University Press, 2014); Ardis Butterfield, *Poetry and Music in Medieval France: From Jean Renart to Guillaume de Machau* (Cambridge: Cambridge University Press, 2002).

qui l'annonce; c'est comme le mot attaché à l'idée'.[651] Building upon Cicero, Batteux's claim recalls the use of 'characters' in music. Characters, discussed in the previous chapter, were essential components of the language of music, as signs that allowed communication between the composer and the listener, channelled through the medium of the score and the performer. Scholarship has demonstrated a concern across the eighteenth century for expressing character in the performative arts, including theatre, pantomime, and dance. As studies have shown, the expression of characters gradually grew beyond physiognomy and demanded the 'expressive use of the whole body'.[652] This new embodiment of character followed the demand for concordance between inner and outer nature, which, as I discussed earlier, was part of a new model of naturalness and authenticity involving the whole body. Similarly, for the new sensible body of the musical performer, passions were embodied. Given that the body was incorporated into the pursuit for unmediated communication, embodied characters performed as crucial signs of musical expression. Therefore, without relying upon a text (as with a singer), the body of the performer of instrumental music was itself a means for communication and expression.

During the second half of the century, characters were not only embodied in the new expressive body, but were also considerably expanded in number and type. The new sensibility and the embrace of the Italian in music, as I argued in the previous chapter, brought in their wake a new repertoire of characters in music. It was at this point in the century that historians have identified major changes of facial expression, such as the public display of smiles and tears.[653] The increase of facial expressions, therefore, went hand in hand with an expansion of expressive characters in the performing arts. Displaying a wide range and variety of characters, thus, became crucial in the desire to deepen musical expression. Furthermore, the expansion of characters was accompanied by a new demand for expressing the movement and dynamism of human passions.[654] A notion of movement had long been fundamental to understanding the affective potential of musical performance. During the early modern period, numerous writers on music's potential to create emotional impact portrayed passions as the motion of the soul, which involved stimulating the nerves or other physiological processes such as blood circulation.[655] In the eighteenth century, didactic music manuals started from the basis that

651 'Any feeling [sentiment], Cicero writes, has a specific tone and gesture that indicates it, in the same way that a word is attached to an idea'. Batteux, *Les Beaux Arts*, p.27.
652 Nye, *Mime, Music and Drama*, p.115.
653Jones, *The Smile Revolution*; Vincent-Buffault, *The History of Tears*.
654 Percival, *The Appearance of Character*.
655 See Linda Phyllis Austern, *Music, Sensation, and Sensuality* (London-New York: Routledge, 2002).

music's aim was 'remuer' or 'émouvoir l'âme' of the listener (to 'stir', 'touch' or 'move' the 'soul' of the listener). The words 'remuer' and 'émouvoir' were closely related to the word 'émotion', which was etymologically linked to movement. In mid-century, 'émotion' meant both 'mettre en mouvement' and 'toucher la sensibilité'.[656] Therefore, during the second half of the eighteenth century, emotion, movement, and sensibility were inexorably combined in the interaction between the performer and listener.

Crucially, the new stress placed on variety and movement drew upon significant changes within medical and scientific research concerning how the human passions were conceived—namely, a departure from fixed notions of the passions, as categorised in the seventeenth century by Descartes and codified in a functional system developed by Charles Le Brun for the use in the visual arts. Instead, new medical treatises in mid-century placed emphasis on both the diversity and flux of human passions. The body-machine model was increasingly replaced by a theory of nervous function and structure that explained both the passions and bodily movements. The vitalist body, for example, was represented as inherently dynamic and moving.[657] Additionally, the increasing emphasis on sensibility and irritability of the nerves and muscles gave place to the rise of the model of nervous disorders—that is, that any perturbation or alteration in the nerves could be the cause of illness. Subtle fluids and nerves, moreover, explained even more mysterious phenomena, such as vibrating bodies and magnetic attraction between bodies.[658] In all these different models of the body and nervous action, movement and transmission were essential to explain both the functioning of music in the internal body and its effects upon other bodies.

Melissa Percival explains how these theories penetrated theatre performance, as characters moved from fixed to permeable notions in the 1750s.[659] This shift was also expressed in the visual arts, physiognomy, and theatre, which increasingly stressed gradations and transitions between one character and another.[660] Similarly, teaching manuals for musical performance during the second half of the century not only embraced a wider variety of

656 'Émotion', *Dictionnaire de la Académie française* (Paris: 1740). ARTFL project.

657 Williams, *A Cultural History of Medical Vitalism*; Roselyne Rey, *Naissance et développement du vitalisme en France de la deuxième moitié du 18e siècle à la fin du Premier Empire* (Liverpool: Voltaire Foundation/Liverpool University Press, 2000).

658 See e.g. Winter, *Mesmerized.*

659 Percival, *The Appearance of Character*. For a further discussion on character and the physical body, see Michael Hagner, *Des cerveaux de génie. Une histoire de la recherche sur les cerveaux d'élite,* trans. Olivier Mannoni (Paris: Éditions de la Maison des sciences de l'homme, 2008); Michael S. Koppisch, *The Dissolution of Character: Changing Perspectives in La Bruyère's Caractères* (Lexington, KY: French Forum, 1981).

660 Percival, *The Appearance of Character*.

passions, but remarked that passions could frequently become mixed. Moving away from a fixed repertoire of characters, this approach to musical performance coincides with the progressive distancing of music from the principle of mimesis which scholars have situated in this period, and the embrace, instead, of a broader notion of expression.[661] Consequently, teaching manuals of musical performance stressed 'nuances' and 'dynamics', that is to say, the transitions on either timbre, volume, or character from one sound to the other. In music, therefore, the physiological emphasis on movement and flux of the passions was mirrored in the expanding range of expressive resources, mainly as provided by the development of instrumental techniques and the improvement of musical instruments.

Historians of music have written of a considerable flowering of instrumental technique during this period, as seen in the growth of orchestras and the symphonic form, among other developments relating to instrumental music.[662] The orchestra of Mannheim has been considered one of the main drivers of these developments, which laid emphasis on expressive elements such as dynamics (volume marks) and their transition through the techniques of *crescendo* and *diminuendo*—processes of growing or diminishing in intensity, respectively. Johann Stamitz, a member of the 'Mannheim school' who became the orchestra's conductor in 1750, moved to Paris in 1754, where he conducted the private orchestra of La Riche de la Pouplinière. The music historian Michel Brenet has argued that Stamitz's stay in Paris was highly influential for the creation and development of instrumental music in the local music scene.[663] François-Joseph Gossec, who worked in La Pouplinière's orchestra at the time of Stamitz's visit, embraced the orchestral techniques from Mannheim and disseminated them thereafter both through his own symphonic compositions and as a conductor, founder, and administrator of musical institutions such as the Concert des Amateurs, the Concert Spirituel, and the École du Chant.[664]

Accordingly, new 'expressive' musical instruments were invented and old instruments were improved. As previously discussed, musical instruments were endowed with specific characters. However, as expression became increasingly associated with variability and transition from one passion to another, instrument makers sought to expand the potential characters and expressive possibilities of their instruments. Instruments that would allow

[661] See e.g. Neubauer, *The Emancipation of Music*; Lessem, 'Imitation and Expression'; Saloman, *Listening Well.*
[662] See Brenet, *Les concerts en France*; Brévan, *Les changements de la vie* musicale; Schwarz, *French Instrumental Music*; Will, *The Characteristic Symphony*; Dolan, The *Orchestral Revolution*.
[663] Brenet, *Les concerts en France*, p.222.
[664] Brenet, *Les concerts en France*, p.222; Macdonald, *François-Joseph Gossec.*

performers to achieve greater levels of nuance and volume dynamics were preferable, including such instruments as harps, clavichords, and bowed instruments. Describing the violoncello, Benjamin de Laborde observed: 'Il y a des nuances pour la Musique qu'il faut observer très-scrupuleusement; on ne saurait trop-tôt s'y appliquer, puisque sans ces nuances il n'y a point d'expression'.[665] To enable greater levels of nuance and dynamics, consequently, became the new mission of instrument makers and inventors. It is striking to notice the importance of timbral nuance and widening volume dynamics in the last third of the century, as the expressive elements *sine qua non* in music. This phenomenon was famously epitomised in debates about the dynamic possibilities of harpsichords and the introduction of the forte-piano. Although harpsichords were seen as achieving 'delicacy' and 'grace' better than other instruments, they were criticised for their inability to offer an extensive dynamic range; the forte-piano, which used a system of hammers instead of plucking the strings like the harpsichord, extended the range of volume in both extremes—*forte* (loud) and *piano* (soft). However, the introduction of the forte-piano in France was not without controversy. Several inventions were created in France which aimed to improve the dynamic control and range of the harpsichords, which were still highly fashionable instruments.[666] The *Almanach Musical* described an improved harpsichord made by Sebastian Érard in 1783—who had already begun building forte-pianos at that time, and later became their main producer—which used pedals and knee pommels to allow for dynamic gradations:

> Tout le monde est convenu que le Clavecin de M. Erard est le plus favorable qui ait encore paru pour les Clavecinistes qui ont de l'âme, du sentiment, de la sensibilité, et qu'il pouvait seul exprimer les différentes modifications du son que la musique peut employer pour peindre les gradations de nos affections, leurs moments de force, leurs dégradations et leurs extinctions. Aucun autre instrument ne fournit, selon eux, plus de moyens pour nuancer

[665] 'In Music, dynamics [*I keep 'nuances' in the text, since it better captures the richness of the French word, which also means 'nuance' and 'shade' in the sense of 'hue'*] must be observed with the utmost scrutiny; one should devote them one's full attention right from the beginning, for without the said dynamics there is no expression'. De Laborde, *Essai sur la musique*, p.322.

[666] Some of the inventions were: Joseph-Antoine Berger's 'Clavecin organisé', *Procès verbaux des séances 10 juillet 1765*, T. 84, f.298 (Achives of the Académie des Sciences); Pascal Taskin 'Clavecin en peau de buste', *Procès verbaux des séances 13 décembre 1788*, T. 107, 267, 280v-285 and *Pochette de séance 8 août 1792*. See Cohen, *Music in the French Royal Academy*; Michael Latcham, 'The Combination of the Harpsichord and the Piano in the Eighteenth Century', in *Instruments à claviers—expressivité et flexibilité sonore/ Keyboard Instruments—Flexibility of Sound and Expression*, ed. Thomas Steiner (Bern: Peter Lang, 2004).

l'expression des différents sentiments dont le génie de M. Gluck a voulu que le spectateur fût pénétré à la représentation de ses ouvrages.[667]

Mirroring the new expressive body of the instrumental performer was the newly improved expressive body of the musical instrument. The technological improvements of Érard's harpsichord were advertised as being unparalleled for expressing performers' sensibilities and their varied, changing, and nuanced passions. With the increased versatility of musical instruments, performers were encouraged to pursue a new range of dynamics and gradations. Performers therefore had at their disposal material technologies which gave expression to a new emotional palette, which performers expressed through both their playing and their own bodies.

The review of Érard's invention situated the harpsichord's expressivity at the intersection between the sentiments of the 'claveciniste' and the sentiments of the 'spectateur' through the *génie* of the composer, in this case, Gluck.[668] The expansion of expressivity, therefore, was an affair of communication and interplay between different actors. Moreover, instrumental techniques such as nuances and dynamics were innovations whose use was related to a new concern with the affective experience of listening through the intensity of sound. The focus on the listener's experience was enhanced by the notion of movement and the increasing stress on vibration, which drawing upon a large tradition of wonder with the acoustic phenomenon of sympathy, was applied to a newly engaged listener. Musical performance triggered sympathetic movements between performers and their audiences, as well as between the body of a performer and the resonant body of their instrument. In the late eighteenth century, therefore, to affect the listener was physical and sensorial. Performance deployed the sense of touch in the relationship between the performer and the instrument—'toucher' is another French word to refer the playing of an instrument—and, metaphorically, it involved the effects of the performer on the auditor, as to affect the listener emotionally was to 'touch'

667 'Everyone agreed that M. Erard's harpsichord is the most favourable ever to have been made, if the Player is a person with soul, sentiment, sensibility, and that it was the only instrument that could express the various alterations in sound that music can resort to in order to paint the gradation of our affections, their moments of strength, their decrease and their extinction. No other instrument, according to these harpsichord players, provides such means when it comes to nuancing the expression of all those sentiments that M. Gluck's genius has wanted the listener to be filled with, when attending performances of his works'. 'Clavecin d'une nouvelle construction, inventé par M. Erard, attaché à Madame la Duchesse de Villeroi', *Almanach Musical* (Paris: Ruault, 1783), p.54. For a description of Érard's invention, see Robert Marshall, *Eighteenth-Century Keyboard Music* (London-New York: Routledge, 2004), p.17.

668 The journal indicates that the harpsichord player Maréchal played the overture of 'Iphigénie en Aulide', among other pieces by Gluck.

their hearts and soul. Moreover, in order to 'touch' and generate this transmission, performers 'touched' instruments that were themselves increasingly expressive and responsive.

5.2 Moving bodies (2): from the performer to the listener

Consequently, the new expressive body of the musical performer, itself a moving body, was part of a chain of communication and transmission of feeling. Was the musical performer supposed to *feel* what he or she was performing?

The new sensibility's stress on authenticity encountered in music a notion of emotion that was not situated in the interiority of the performer. Instead, emotion was considered as movement, transmission and communication. Therefore, the paradox of authenticity in musical performance was that whatever was expressed in performance was not the performer's inner emotion, but rather a combination of technical elements, musical characters, and physical display. Musical performers enacted emotion or character that did not originate in them. Rather, they interpreted and embodied emotion as it was infused by the composer into the music. The role of the performer was to receive, and then to convey, transport, and communicate passions from the composer's score, through the medium of the instrument, to the listener. On its own, there was nothing to be 'felt' by the performer; feeling was articulated and expressed through interaction and movement.

The extent to which theatre performers were to 'feel' the role they were enacting had already been a subject of debate. Denis Diderot's position on this point has been discussed in detail in the secondary literature.[669] In his *Paradoxe sur le comédien*, written between 1770 and 1773 though published posthumously, Diderot argued that actors must be in control of their actions, and not to feel what their role demanded. Given that actors were to repeat their performances many times, they could not fully engage emotionally in each of them: 'If the actor were full, really full, of feeling, how could he play the same part twice running with the same spirit and success? Full of fire at the first performance, he would be worn out and cold as marble at the third'.[670] The high degree of discipline and practice required for acting, together with the versatility of theatre plays, were incompatible with the actor's individual feeling.

669 See e.g. Fried, *Absorption and Theatricality*; Revel, 'The uses of Civility'.
670 Denis Diderot, *The Paradox of Acting*, trans. Walter Herries Pollock (London: Chatto & Windus, 1883), p.8. Published originally as *Le paradox sur le comédien* (Paris: 1830).

Diderot made a similar argument for musical performers in his daughter's fictional lesson with Bemetzreider. The first dialogue of 'le Maître' with his pupil opened in tension:

> *Le Disciple:* Quelle expression! quelle légèreté! quel tact! que vous êtes heureux, Monsieur, de jouer si bien d'un instrument aussi difficile!
>
> *Le Maître:* C'est un bonheur que j'ai peu senti, et que je ne sens plus.
>
> *Le Disciple:* Et pourquoi?
>
> *Le Maître:* C'est qu'il y a des pédans en tout genre, en politique, en Littérature, en Musique. J'ai été mal montré; et au moment où j'aurois pu jouir du fruit de mon travail, des circonstances malheureuses...
>
> *Le Disciple:* J'entens; le soir, lorsque vous rentrez, vous êtes si ennuyé, si las, vous avez un si pressant besoin de repos, que vous êtes peu tenté de vous mettre au Clavecin.
>
> *Le Maître:* Cela m'arrive pourtant quelquefois.[671]

In this dialogue, the teacher, an accomplished harpsichord player according to the student, was not feeling what he played; there was no emotional engagement between the performer and the piece of music and yet he was deemed an excellent performer. In so doing, the musician was a 'pedant', similar to other 'pedants' in politics and the world of letters, in relation to Diderot's broader critique to the 'artificial' of courtly behaviour. Therefore, Diderot's view on performance precluded the performer from being a subject of feeling, and moved the experience of feeling into the domain of the listener instead.

Nevertheless, this does not mean that musical performers were not required to achieve authenticity and transparency. Performers became vehicles for expressing the genius and emotions of composers. Musical performers were repeatedly taught to be 'faithful' to the composer; they were supposed to carefully study and recover the composer's intention, as expressed in the written music, and to tastefully embody and transmit it to the audience. This process stood in opposition to virtuoso performance, which was viewed as expressing the performer's skill instead of the composer's. Too much attention on the performer's individuality, therefore, threatened to obscure the authenticity and transparency of the

671 'The Disciple: What expression! What lightness! What fineness of touch! How fortunate you are, Sir, to play so well an instrument that is so difficult!/ The Master: It is a blessing I have rarely experienced, and do not experience any longer./ D: Why is that so?/ M: Because there are pedants of all sorts everywhere– politics, Literature, Music. I have been looked down upon; and when came when I should have been able to enjoy the fruits of my labour, unfortunate circumstances–/ D: I understand; when you go home at night, you are so tired, so weary, your need for rest is so pressing, that you do not care too much for playing the Harpsichord./ M: And yet I do play at times'. Bemetzrieder (Diderot), *Leçons de clavecin*, pp.1-2.

transmission. In his violin manual, Francesco Geminiani lamented performers who sought their own ostentation rather than tastefully expressing the composer's intention:

> And as most flatter themselves to have this Perfection, hence it happens that he who sings or plays, thinks of nothing so much as to make continually some favourite Passages or Graces, believing that by this Means he shall be thought to be a good Performer, not perceiving that playing in good Taste doth not consist of frequent Passages, but in expressing with Strength and Delicacy the Intention of the Composer. This Expression is what everyone should endeavour to acquire, and it may be easily obtained by any Person, who is not too fond of his own Opinion, and doth not obstinately resist the Force of Evidence.[672]

A performer's authenticity, therefore, related entirely to the composer's 'intention'. The composer's intention, indeed, became the undisputed place for genius in music.[673] If musical performers were to possess any genius, it consisted first and foremost in their ability to comprehend and channel appropriate emotions from a musical piece: 'mais le génie les trouve, le coeur les sent, et tout l'art en cette partie ne consiste qu'à savoir allumer en son propre coeur le feu, que l'on veut porter dans celui des autres'.[674] Although 'feeling' did not originate with performers, numerous authors active in the second half of the century suggested that performers should be 'inspired' or 'light the fire' inside them in order to inspire their audience effectively.[675] However, in the majority of cases, this ignition of the performer's heart was rather the result of the sparks coming from the fire of the composer's genius: the performer was but a conduit for the emotion of the composer. The performer assumed a crucial, yet passive, position as a link between the sound of the musical instrument, the composer, and the listener. In this chain of musical actors, the composer was increasingly considered to be the source of feeling, while the listener remained its indisputable target.

Unlike Diderot's view on theatre, which was controversial both in Diderot's time and when the *Paradox* was published, the locating of emotion outside the performer gained a

672 Geminiani (English edition), *The Art of Playing on the Violin*, p.6.

673 See e.g. Rousseau, 'Compositeur', in *Dictionnaire de musique*. See Milliot, 'Le virtuose international'; Kivy, *The Possessor and the Possessed.*

674 'But genius [ingenuity, ingeniousness] finds them, the heart feels them, and in this matter the art consists entirely in knowing how to light in one's own heart the fire that one wishes to bring about in others' hearts'. Bach and Ricci, *Méthode ou recueil des connaissances élémentaires*, p.9.

675 See e.g. Geminiani, (English edition), *The Art of Playing on the Violin*, p.8; Meude-Monpas, 'exécution', *Dictionnaire de musique*; Rousseau, 'Accent', *Dictionnaire de musique*, pp.5-6.

consensus among writers during the last decades of the century. Moreover, it further accentuated the division between the professional and the amateur performer, the latter of which was endowed with taste and sensibility, and thus could experience feeling. It is no coincidence that, in Bemetzreider's fictional lesson, Diderot represented the teacher as being unmoved by music, while the pupil—Diderot's daughter, an amateur—was extremely sensitive to it, and shed tears. Amateurs were still owners of their feelings. The price they paid for that privilege, nonetheless, was that they were progressively relegated to the role of listeners rather than performers towards the end of the century. Significantly, this new role corresponds with the decline of amateurs as musicians, discussed in Chapter 1.

New sensitive listeners, like performers, experienced emotion as physically embodied. Therefore, by means of communicating their feeling, and especially their 'feelings' for music, listeners were tied to a wider community of *sensible* people. Given the central importance of music in the new sensibility, as I have previously remarked, listeners of music went about fashioning themselves as sensible people, claiming membership in a wider community of sensibility. This sensibility was expressed visually and materially through their physical bodies. In this regard, it is striking to find an abundance of mentions to the 'tears' shed by listeners during musical performances. According to Vincent-Buffault, tears were also shed by readers of novels, displaying individual and shared feeling at once.[676] As discussed in the previous chapter, tears were a landmark in the achievement of a musical work. Therefore, tears should be understood as the final spark in the moving chain of performance. Like applause and booing, among other reactions, tears in the second half of the century were the response of an engaged and 'transparent' listener. Historians of music have recently expanded scholarly understanding of listening considerably in this period.[677] Yet the fact that emotion in music was fundamentally embodied, and that the body was a site of self-fashioning for the listener in relation to the new sensibility, had not been explored by previous studies.

In sum, the 'sensible body' was pursued by musical performers as well as newly-fashioned listeners. Whereas for listeners and amateur performers the sensible body was attached to feeling, the majority of musical performers transmitted and conveyed feeling and sensation originating outside themselves. In doing this, musical performers were themselves moving bodies that moved others. There were, however, two crucial distinctions in that action of 'moving'. Just like the musical instrument, the performer's 'moving body' carried a

676 Vincent-Buffault, *The History of Tears*.
677 See e.g. Johnson, *Listening in Paris.*

mechanical action of motion, enhanced by a new emphasis on vibration. The sensible listener, instead, was 'moved' by passionate and embodied feeling, as conceived in the new sensibility. 'To be moved' by music, in this sense, was a landmark of one's possession of sensibility. Consequently, the two models of the body previously discussed (namely, the mechanical and sensible body) would co-exist and interact in the last decades of the century, yet were associated with two different 'moving' capacities. They ultimately belonged to different social actors and musical agents, that is, the professional musician and virtuoso on the one hand, and the amateur and listener on the other.

Virtuoso performers, who themselves epitomised mechanical bodies, would eventually be recognised as bearers of feeling. Yet the inexorable links established between virtuoso performers and machines (and both of them to artificiality and courtly demeanour) and between musical amateurs and the new sensibility made the blending of mechanical and sensible bodies unattainable during the declining Ancien Régime. Furthermore, the critiques to virtuoso, automata, and 'mechanical' performers formed part of a general critique against the current regime, and thus were deemed hostile to the forging of a new socio-political order. Specifically, virtuosi were seen as a threat for the projects of universality and commonality based on shared feeling that spread in the decades leading to the French Revolution.[678] The virtuoso performer spoke a language that no one could understand. According to Noverre, the technically overloaded body of the virtuoso was a 'jargon', which reinforced the distance between the performer and the audience.[679] The wonder and amusement created by virtuosi were founded precisely on the marked separation of virtuosi from ordinary people. Their was an intrinsic asymmetry in the attractiveness of their virtuosic spectacles. Consequently, reactions against the 'excess' of skill and technique deployed by the virtuoso performer echoed a larger concern over the abuse of words and the pursuit of a communal language in this period.[680] This was a critical issue in the second half of the century, when, as discussed in Chapter 2, writers often claimed that music was a 'universal' language. The universal language of music, therefore, demanded an expressive, and universally intelligible, body. In this way, the pursuit of expressive bodies supported political calls for commonality and sympathetic bonding. At the base of that call was the transparent body of the performer, who served to transmit feeling from

678 Le Guin, *Boccherini's Body,* p.138.
679 Noverre, *Lettres sur la danse,* p.271.
680 Rosenfeld, *A Revolution in Language.*

composers to listeners. This political ideal of the expressive body reflected a new ideal body politic, which is the subject of the next chapter.

Conclusion

This chapter has argued that in the performance of musical instruments in eighteenth-century France, close attention was paid to the cultivation and display of the physical body. Examining a range of literature, it has shown that the body of the musical performer was cultivated and signified according to changing models of musicality, musical instruments, human physiology, emotions, the culture of entertainment, and social and political concerns. Representations of musical instruments mirrored the body of the performers in their visual appearance, materiality, morality, and physiology; moreover, they provided insights on the specific performativities and social constituencies that were associated with specific musical instruments and musical performances. Thus, the specific agency of musical performers was shaped and challenged by musical instruments, prescribed by music teachers who authored didactic manuals, and situated as an intermediary between composers and listeners. The figure of the performer raises a specific set of individual insights and debates concerning the performer's relationship to genius, the interplay between training and feeling in music, the physicality of emotions and, once again, the question of who was supposed to embody musical taste.

The study of musical performers illustrates that different models of the body coexisted in the last half of the century, including the courtly, mechanical, and sensible body. For much of the century, performing methods of musical instruments stipulated a series of requirements on body posture, gestures, and appearance that drew upon courtly codes of behaviour. This insistence on the training of the body reveals the spread of courtliness and courtly standards of taste across the new public sphere. In this context, the ideal performing body was physically, morally, and sonically disciplined according to notions of French taste and civility. Yet the body of the musical performer also became a site of contestation of those same standards. Growing demands for technical skill and virtuosic playing, together with new mechanistic views of human anatomy, further emphasised the importance of physical discipline and repetitive training. Consequently, musical performers were associated with android automata, which, highly fashionable during this period, blurred the boundaries between musical instruments and musical performers. Nevertheless, during the second half of the century, musical automata and musical performers were jointly criticised as part of a wider critique of

the artificiality of courtly behaviour. The virtuoso's 'excessive' physical training was denigrated as artificial, morally corrupted, and distant from French taste and feeling. Instead, a new model of the body was shaped within the new sensibility, which stressed the expression of feeling and a new notion of naturalness associated with nudity, transparency, and authenticity.

This new sensible body, whose characteristics and main exponents have been thoroughly explored by scholars for the cases of dance and theatre, confronted specific challenges in the case of the musical performer. As discussed in Chapter 2, music was understood as a primitive language and a transparent signifier of the passions within the new sensibility. Yet the precise role of the performer in this primacy of feeling and naturalness was not self-evident. There was a considerable expansion of the 'expressive' techniques available for performers, in relation to both changing notions of the passions and the affordances of new musical instruments. Nonetheless, this chapter examined the question of whether the musical performer was supposed to experience feeling, as Diderot formulated in his famous paradox of acting. I argued that, in the new sensibility, the musical performer stood as a crucial piece in a chain of movement and transmission of feeling, following new understandings of the body as movement, flux and variable characters. In this position, the musical performer was not a subject of feeling, but a bearer of sympathetic movement between the resonating body musical instruments, their own bodies, and that of the listeners.

Both the mechanical and sensible bodies perpetuated elements of the courtly body in the second half of the century: while the mechanical body was built upon training and physicality, the sensible body, in specific contrast with both the mechanical and courtly, emphasised taste and reinforced its social privilege. Critiques aimed at the mechanical virtuosic body—mostly consisting of musicians who made a living in paid venues—favoured the amateur performer, whose 'love' of music was allegedly more authentic and transparent, given that it had not been corrupted by virtuosity. Therefore, this new relationship between the body and feeling resulted in an increased separation between professional and amateur performers. Musical amateurs were possessors of sensibility in the last decades of the century, which perpetuated the possession of musical taste by the socially privileged. But as musical amateurs consolidated their privilege of sensibility, they were progressively identified as listeners rather than performers. These newly-fashioned listeners also expressed their feeling for music physically, forging social bonds and claiming membership in a community of sensible individuals. Musical performers had the power of 'moving' audiences; they could conquer the hearts of listeners and create a sense of commonality and universality. The next chapter further

explores the power of music over physical bodies, as translated into the body politic. Whereas this chapter addressed the musical body as shaped by social and political views, Chapter 4 addresses society and government as a body to be shaped by musical views.

Chapter 4

The harmonic republic

In the years leading up to the French Revolution, the theme of musical harmony flooded political writings. The language of organised sounds, chords, and consonances, the invention of which was often attributed to Jean-Philippe Rameau, was by then commonplace for the literate. In the midst of the Revolution's political turmoil, during which new and diverse political voices spread visibly and vocally via political pamphlets and gatherings, referencing musical harmony was a call for order, clarity, and concord. Yet the imagery of musical harmony was invoked to advocate further political and social ideals. Revisionist histories of the French Revolution have explored the vast projects of reform undertaken during revolutionary times. These projects, in addition to proposing a new political, economic, and social regime, involved an enormous symbolic redefinition.[681] Spokesmen of the French Revolution sketched new possible futures, committing to overturn the established order of things across different levels of society, even rethinking conceptions of space and time. Everything was subjected to revolutionary revision and modification: nature, the urban landscape, the calendar, clothing, language, gender relations, national heroes, and religious beliefs. The building of a new society entailed the search for new languages, emblems, and rituals. What was the role of music in this great symbolic reform? Historians of music have argued that music served for spreading revolutionary ideals during this period. Music was central to revolutionary festivals and anthems, through which liberty was to be 'sung'.[682] Composers such as François-Joseph Gossec, Jean-François Le Sueur, André Grétry, Étienne-Nicolas Méhul, Charles-Simon Catel, and Luigi Cherubini—to name only a few—composed

[681] See e.g. Mona Ozouf, *La fête révolutionnaire, 1789-1799* (Paris: Gallimard, 1976); François Furet, *Penser la Révolution française* (Paris: Gallimard, 1978); Daniel Roche, *Le siècle des lumières en province. Académies et académiciens provinciaux, 1680-1789* (Paris and The Hague: Mouton, 1978); Darnton, *The Business of Enlightenment*; Keith Michael Baker, *Inventing the French Revolution: Essays on French Political Culture in the Eighteenth Century* (New York: Cambridge University Press, 1990); Chartier, *The Cultural Origins of the French Revolution*. For a more recent discussion of this literature, see J. B. Shank, 'Is It Really Over? The French Revolution Twenty Years after the Bicentennial', *French Historical Studies* 32:4 (2009), 527–30.

[682] Laura Mason, *Singing the French Revolution: Popular Culture and Politics, 1787-1799* (Ithaca, NY: Cornell University Press, 1996).

revolutionary hymns, songs, and operas.[683] Music enhanced revolutionary propaganda, while the Revolution itself enabled the consolidation of music as a profession, epitomised by the foundation of the Conservatoire de Paris in 1795.[684]

Notwithstanding music's involvement in revolutionary ideals, the frequent reference to musical harmony in political pamphlets and speeches reveals a more complex and widely politicised notion of music. Not only was music intertwined with politics since before the French Revolution, but music also acted at a fundamental symbolic level: musical harmony stood at the heart of political and social reform. In the years surrounding the French Revolution—broadly from 1787 to 1794—references to musical harmony proliferated, and spanned legal, economic, social, and governmental debates. They arose in discussions over the three estates, the distribution of wealth, the abolition of privileges, the power of municipalities, and the role of the clergy, among other things. Yet these countless references to harmony have been largely overlooked both by historians of the French Revolution and by historians of music. Why was musical harmony so frequently referenced in political contexts? What did calls using the imagery of musical harmony advocate, and how did they relate to revolutionary concepts or programmes? The central argument of this chapter is that musical harmony provided a powerful model for envisaging a new public order during revolutionary times. This means not only that music was deployed to pursue revolutionary ideals, but also that musical harmony in itself constituted an ideal for political and social reform. In the construction of a new nation-state, the call for musical harmony was not merely a metaphor: it constituted an archetype and prescriptive model for making a new public order.

Although the modern reader might think that political uses of the term 'harmony' referred to a free-standing definition other than the musical meaning of the word, this chapter demonstrates that dictionaries throughout the century defined 'harmony' first and foremost as

683 See e.g. Constant Pierre, *Musique des fêtes et cérémonies de la Révolution française; oeuvres de Gossec, Cherubini, Lesueur, Méhul, Catel, etc.* (Paris: Imprimerie Nationale, 1899); Constant Pierre, *Les hymnes et chansons de la Révolution. Aperçu général et catalogue avec notices historiques, analytiques et bibliographiques* (Paris: Imprimerie Nationale, 1904); Constant Pierre, *Le Magasin de musique à l'usage des fêtes nationales et du Conservatoire* (Genève: Minkoff Reprint, 1974); Jean-Rémy Julien and Jean-Claude Klein (eds.), *Orphée phrygien: les musiques de la Révolution* (Paris: Éditions du May, 1989); Jean-Rémy Julien and Jean Mongrédien (eds.), *Le tambour et la harpe: oeuvres, pratiques et manifestations musicales sous la Révolution, 1788-1800* (Paris: Éditions du May, 1991); Malcom Boyd (ed.), *Music and the French Revolution* (Cambridge and New York: Cambridge University Press, 1992); Darlow, *Staging the French Revolution*; James Arnold, *Gretry's Operas and the French Public: From the Old Regime to the Restoration* (London: Ashgate, 2016).

684 See e.g. Pierre, *Bernard Sarrette et les origins du Conservatoire*; Constant Pierre, *Le Conservatoire nationale de musique et de déclamation: documents historiques et administratifs* (Paris: Imprimerie Nationale, 1900); Geoffroy-Schwinden, *Politics, the French Revolution, and Performance*.

a musical concept. The recurrent call for musical harmony in the early revolutionary years demonstrates that, by that point, a broad notion of musical harmony was widely embedded in French society. It resulted from a century in which, as I have shown, music was a matter of public and national importance: musical harmony was an Enlightened science, a form of tasteful knowledge, an essential feature of French national character and civilisation, a model for corporeal discipline, and a tool for self-fashioning and debate in the public sphere. Drawing upon this array of meanings, this chapter examines the uses of musical harmony in revolutionary times in relation to the simultaneous resurgence of metaphors of the body-politic and machines, the recasting of Plato's Republic in neoclassical terms, and the links between Enlightened science, technology, and political agendas. The uses of musical harmony in revolutionary reforming projects did not rely upon contemporary musical practice and innovation; indeed, historians of music have emphasised a stress on melody, rhythm, and singing in revolutionary musical practice which may even seem to contradict the emphasis on harmony in public matters.[685] Instead, the uses of musical harmony were grounded on a highly symbolic and political understanding of musical harmony in French culture. Through addressing these cultural uses and representations of musical harmony, this chapter explores non-musical settings and historical actors for whom 'musical harmony' was more than a musical theory, structure, style, or set of rules for composing. This chapter's concern is with political writers and pamphleteers who, for socio-political purposes, invoked notions of musical harmony and the musical elements associated with it—such as chords, consonance, dissonance, tuning, and harmonic proportion.

I shall argue that, in order to constitute a political ideal, musical harmony was translated from a divine and cosmic order to a socio-political order. In revolutionary times, musical harmony naturalised the revolution. It offered celestial, physical, and scientific grounds to legitimise new political agendas. Consequently, authors writing in the years surrounding the French Revolution returned to the traditional cosmology of the 'harmony of the spheres' to envisage a new future. It should not be surprising that in such a crucial period of French history writers and politicians drew upon ancient cosmography to convey ideas about a possible organic world without despotism. The word 'révolution' was by that time chiefly defined as the motion of a celestial body, as the *Dictoinnaire de l'Académie française* had done

[685] See e.g. Mason, *Singing the French Revolution*; David Whitwell, *Band Music of the French Revolution* (Tutzing: Schneider, 1979).

throughout the century: 'La révolution des Planètes. les révolutions célestes'.[686] Since the 1750s, musical practice had been portrayed by public opinion as experiencing a 'revolution'. The term 'revolution' was introduced in music to refer to the proliferation of musical performances, instruments, performers, institutions, and musical criticism and theory.[687] Thus, the close links between revolution, cosmic motion, and the new public culture of music were already in circulation by the time of the French Revolution. Invoking musical harmony, therefore, was a form of underlining the cosmic origins of the revolution, as well as grounding it in a well-established mark of Frenchness, rationality, sensibility, and learned sociability. Musical harmony offered a new political model which was, nonetheless, legitimised by tradition, celestial order, the 'public', and 'nature'. Musical harmony bridged the past and utopian future.

Additionally, musical harmony instantiated both disciplined sounds and controllable audiences: it was a model of both order and influence. Drawing upon the cosmology of the harmony of the spheres, music was considered to have powerful effects over its listeners, and, thus, it had the potential to be an effective political instrument. Music strongly affected its listeners, through music's power to heal, educate, control, assemble, organise, and entertain them. Additionally, music had demonstrated that there was indeed a public for a new form of political cohesion. The new audiences for music, and the proliferation of musical performance and more large-scale musical genres in the time, illustrated that music was able to gather and 'move' crowds. Music exerted these powerful effects by means of affecting the physical body. As discussed in the previous chapter, musical performers were expected to 'move' the listeners and 'conquer' their hearts, thus triggering emotional and physical responses which could eventually become an efficient means of control. This chapter further develops these allegedly powerful effects of music, from the physical body of the listener to the body politic as a whole. While the previous chapter discussed the analogies between musical instruments and physical bodies, the present chapter addresses the belief that public order was a body that could be

686 'The revolution of Planets. Celestial revolutions'. See 'Révolution', *Dictionnaire de l'Académie française* (Paris: 1694), *Dictionnaire de l'Académie française* (Paris: 1762), *Dictionnaire de l'Académie française* (Paris: 1798). ARTFL project. For a discussion of the term, see Baker, 'Inventing the French Revolution'.

687 Chabanon claimed: 'Ce qui doit sur-tout faire juger la Musique arbitraire, c'est la rapidité des révolutions qu'elle éprouve, & qui semblent l'une après l'autre renouveller l'Art tout entier'. Michel-Paul-Guy de Chabanon, *Observations sur la musique et principalement sur la metaphysique de l'art* (Paris: 1779), p.175; See also Jean François Marmontel, *Essai sur les révolutions de la musique* (Paris: 1777). For a discussion of the notion of revolution in music, see Vendrix, *Aux origines d'une discipline historique*, pp.229-242.

tastefully and musically composed, tempered, and disciplined. The corporeal-political aspect of harmony took on new and powerful significance in the revolutionary period.

The extension of musical harmony from the physical realm into the political realm was hardly surprising at a time when metaphors of the 'body politic' abounded. Sara E. Melzer and Kathryn Norberg have claimed that 'few states were as body-centred as seventeenth and eighteenth-century France'.[688] Historians have explored the centrality of the body to the entirety of the eighteenth century, which also took different forms, ranging from the cultivation of Louis XIV's image to medicine, the new sensibility, and revolutionary politics.[689] This interconnection between the body and politics crystallised in the transformations that took place in the years surrounding the French Revolution.[690] The emphasis on the body, which I explored in the previous chapter, helped to spread metaphors of the 'body politic' which portrayed the state as a composite organism, orientated towards a common function. I have shown that the association of musical instruments with human bodies operated across different physiological models, surviving the critique of the *esprit géométrique* and mechanistic views of the 1770s onwards. Similarly, the socio-political uses of musical harmony emerged from the symbiosis of geometrical order and the cult of sensibility. Musical harmony embodied courtly taste, geometry, and celestial order, yet it simultaneously enshrined notions of sympathetic bonding, transparent commonality and collective feeling. Musical harmony, I contend, provided an Enlightened rational model for the organisation of the body politic, while it conveyed sensibility as a law of public order.

This chapter begins by discussing the belief that music had powerful effects; from celestial spheres to the public sphere, and from physiological bodies to the body politic. Under the rubric of the harmony of the spheres, music was understood as acting at both a macrocosmic and microcosmic level. Accordingly, during the eighteenth century, music was thought to exert great powers over inanimate and animate bodies, humans and non-humans. I shall argue that this powerful influence of musical harmony over bodies was appropriated in political terms as an efficient yet tasteful tool for uniting, 'improving', and 'moving' crowds. Examining a poetic essay written by Jean-Baptiste-Louis Gresset in 1737, the first section illustrates how this political appropriation of musical harmony functioned in the first half of the century. According to Gresset, because music exerted an ineluctable power on audiences through pleasure, musical

[688] Melzer and Norberg (eds.) *From the Royal to the Republican Body*, p.1.
[689] A few examples include Burke, *The Fabrication of Louis XIV*; Percival, *The Appearance of Character*; Vila, *Enlightenment and Pathology*.
[690] Outram, *The Body and the French Revolution*; De Baecque, *The Body Politic*.

harmony was capable of creating a new social order of a 'charmante societé' (a 'charming', 'pleasing' or 'lovely' society).[691] During the second half of the century, the role of women as maintainers of harmony in salon sociability, which has been well documented by Dena Goodman and Daniel Gordon, was applied to the orchestration of discordant political voices in the making of a new public order.[692] Thus, from the second section of this chapter onwards, I will focus on the ways in which musical harmony helped political writers to imagine a utopian social order during revolutionary times. I explore the different constituencies to which musical harmony appealled, how they functioned in society though musical harmony, and where they placed harmony in relation to other concerns and values discussed at the time. After this, I move to discuss the *accord parfait*, which crystallised different versions of agreement and proportional order, especially during the debates over the three estates. Under whose authority was social harmony legitimised and guaranteed, what was the role of the king within, and how it related to equality, were all subjects of discrepancy. In the last section, I compare the concept of harmony with fraternity, arguing that musical harmony was ultimately left behind in fraternity's call for 'unanimity', a principle that overtook the pursuit of harmonic integration of dissent into a social chord.

1. The great powers of harmony: from macrocosm to microcosm

The uses of musical harmony in revolutionary politics followed a re-appropriation of the classical worldview of the 'harmony of the spheres' during the eighteenth century. As described in the first chapter of this dissertation, the doctrine of the harmony of the spheres (or *musica mundana*), which was attributed to the school of Pythagoras, argued that consonances followed regular patterns which could be expressed in numerical ratios, and were considered to correspond to the proportions of the celestial bodies. These ideas were appropriated and widely discussed by neo-Platonic humanists during the Renaissance.[693] During early modern times, therefore, music was woven into the fabric of the universe: the cosmos was musical, and, conversely, the soul could grasp the sense of transcendent cosmic harmony through music, which connected the immaterial and material, visible and invisible worlds. In neo-Platonic terms, music acted at both the macrocosmic and microcosmic levels. An essential feature of

691 Gresset, *Discours sur l'harmonie*.
692 Goodman, *The Republic of Letters*; Gordon, *Citizens without Sovereignty*.
693 See e.g. Prins, *Echoes of an Invisible World*, p.6.

this cosmography was that all elements of the cosmos were interconnected by means of sympathy. The phenomenon of sympathetic vibration between musical instruments or strings, which provoked great fascination amongst contemporaries, represented the moving force and link between the macrocosmic and microcosmic spheres of the world.[694] For Robert Fludd, sympathy was a property of the *spiritus mundi* or world soul, which linked God to his creation.[695] Later, Athanasius Kircher similarly represented the world as a sympathetic cosmos in which all realms were interlinked, from the viscera of the human body to the divine.[696] Sympathy, therefore, was the force that established the affinity and interaction between the different parts of the universe. In the eighteenth century, the uses and representations of musical harmony retained two crucial elements from the early modern cosmology of the harmony of the spheres: music continued to be regarded as both a model of well-proportioned order, and a highly powerful and sympathetic force that could affect animate and inanimate beings. In both senses, musical harmony had great political potential.

Early in the eighteenth century, the poet Jean-Baptiste-Louis Gresset asserted the political power of musical harmony. In 1737, Gresset published a poetic treatise called *Discours sur l'Harmonie,* which he claimed to have originally written in Latin four years earlier. During this time, he left the Jesuit order, following his poems, especially *Vert Vert*, being deemed litentious.[697] His *Discours sur l'Harmonie*, however, aligned with the general interest among Jesuits in musical harmony as a divine principle of order; issues of musical harmony were well received and widely commented on by Jesuits, as was the 'ocular harpsichord' invented by Pére Castel.[698] Indeed, the Jesuit *Journal de Trévoux* praised the *Discours* just after its publication in 1737, and endorsed 'the triumph of harmony'.[699] Gresset was among many writers who addressed musical harmony in the years after Rameau's first formulations of his theory, as mentioned in Chapter 1, but Gresset understood musical harmony in a much broader sense than Rameau. In the midst of the debates about the scientific status of music, Gresset suggested that musical harmony—meaning either 'harmony of the spheres',

694 See e.g. Gouk, *Music, Science, and Natural Magic*.
695 Fludd, *Utriusque Cosmi.* See Gouk, *Music, Science and Natural Magic*, p.99.
696 Kircher, *Musurgia Universalis*, p.402.
697 Jules Wogue, *Jean-Baptiste Gresset: sa vie et ses œuvres* (Paris: Lecene, Oudin et Cie, 1894).
698 For Castel, see Donald S. Schier, *Louis-Bertrand Castel, anti-Newtonian Scientist* (Cedar Rapids, IO: Torch Press, 1941); Maarten Franssen, 'The Ocular Harpsichord of Louis-Bertrand Castel: The Science and Aesthetics of an Eighteenth-century "cause Célèbre"', *Tractix* 3 (1991), 15-77; Hankins and Silverman, *Instruments and the Imagination*, 72-85.
699 *Journal de Trévoux,* VI (Paris: 1737), pp. 992-1007.

Rameau's theory, or just 'music'—was not only a science, but the superior and most extended science among all peoples and things existing in the natural world. Gresset indicated that the purpose of his poetic treatise was twofold: it praised the 'nobility' of harmony on the one hand, and its 'usefulness' on the other. He defended the 'nobility' of harmony through three 'illustrious prerogatives', which he named 'l'antiquité de son origine, sa Puissance marquée, et la vénération de tous les peuples pour elle'.[700] Hence Gresset sketched a history of the origins of music, which he considered sufficient testimony to its grandeur: 'Heureux un Art, dont l'Histoire est l'Eloge'.[701] Like many of his contemporaries writing histories of music, as mentioned in Chapter 2, Gresset intended to demonstrate that music was older and more expansive than all other arts. However, he claimed: 'Consultons les archives du Monde (...) que nous diront-ils? Que la Musique compte autant de siècles de durée que l'Univers même'.[702] Unlike most other contemporary histories of music, Gresset's did not begin with humans but with the celestial bodies. For Gresset, harmony was an 'art sublime par qui la Terre s'entretint toûjours avec les Cieux', so that both the explanation of its origins and effects were bound to the heavens.[703] Like most neo-Platonists, Gresset claimed that music interwove the celestial and earthly, and this was the cause of its great powers.

The point of departure of Gresset's argument was the inescapable 'power' of music. According to Penelope Gouk, in early modern cosmography music shared with natural magic the ability to manipulate emotions, and to affect things or people by invisible means.[704] Similarly, Gresset claimed that, given that music was written into the laws of nature, its power affected the whole of nature as an invisible force: 'Sans que je parle, Messieurs, déjà cette puissance est assez prouvée; tout l'empire de la Nature est l'empire de l'Harmonie; tout ce qui respire, tout ce qui est né sensible subit sa Loi'.[705] Music, therefore, was a function of living beings, a 'law' that later authors would assimilate as the law of sensibility, as I shall discuss below. Expanding his claim, Gresset argued that both animate and inanimate bodies were

[700] 'The antiqueness of its origin, its marked Power, and the veneration in which all peoples have held it' Gresset, *Discours sur l'harmonie*, p.3.

[701] 'Happy the Art, whose praise is sung by History itself' Gresset, *Discours sur l'harmonie*, p.4.

[702] 'Let us consult the archives of the World (…) What shall they tell us? That Music has existed for as many centuries as the Universe itself' Gresset, *Discours sur l'harmonie*, p.5.

[703] 'A sublime art through which the Earth has always conversed with the Heavens' Gresset, *Discours sur l'harmonie*, p.1

[704] Gouk, *Music, Science and Natural Magic*, p.13.

[705] 'Gentlemen, such a power is evident without my having to even prove it further [another option: Gentlemen, such a power has been well proven before my having to talk about it]; the whole empire of Nature is that of Harmony; everything that breathes, everything that was born a sensitive being observes its Law'. Gresset, *Discours sur l'harmonie*, p.14.

subject to the powers of music, by means of which inanimate beings could be potentially 'animated' and altered: 'À la voix de l'Harmonie, cette Reine aimable de l'Air, les Estres les plus insensibles sont animés, les Estres les plus tristes sont égayés, les Estres les plus féroces sont attendris'. Nothing could resist music's effects: 'Les rochers même et les farouches animaux sont sensibles à de touchants accords'.[706] That rocks and animals were sensitive to music was a widespread belief which persisted throughout the eighteenth century, which was as old as the myth of Orpheus, who charmed wild beasts, trees, and stones while playing his lyre. The association between Orpheus, musical instruments, and animals was a common topic in Hellenistic iconography, later appropriated by Christian iconography.[707] Moreover, the theme of Orpheus was referenced in the study of musical harmony by natural philosophers, as evidenced by the use of an image of Orpheus enchanting animals on the frontispiece of Marin Mersenne's *Harmonie Universelle* (see Figure 15). From Hellenic mosaics to Renaissance paintings, it is possible to see music, embodied in the stringed musical instrument, as offering a bridge between humans and non-humans, the earthly and the celestial. This enchanting power of music was also present in Hebraic tradition: David was said to calm the soul and rescue it from illness or evil spirits by playing his harp. As showed in Mersenne's engraving, the lion was lying down with the lamb, following the Scriptural reference of the pacifying powers of music. During the late seventeenth and eighteenth centuries, the harp, like Orpheus' lyre, was associated with special spiritual powers, and it is not surprising that many treatises on music in the eighteenth century bore dedications to David.[708] Furthermore, in mid-eighteenth century, there was a renewed interest in the theme of Orpheus, as demonstrated by Vanessa Agnew.[709]

[706] Upon hearing the voice of Harmony, this lovely Queen of the Air, even the most insensitive Beings are animated, the saddest become gay, the fiercest become tender'; 'The rocks themselves and the fierce animals are sensitive [*sensibles*] to the charm of touching chords [*accords*]'. Gresset, *Discours sur l'harmonie*, p.14.
[707] See Hope B. Werness, *Continuum Encyclopedia of Animal Symbolism in World Art* (New York and London: A&C Black, 2006), p.300.
[708] See e.g. Bonanni, *Gabinetto armonico.*
[709] Agnew, *Enlightenment Orpheus.*

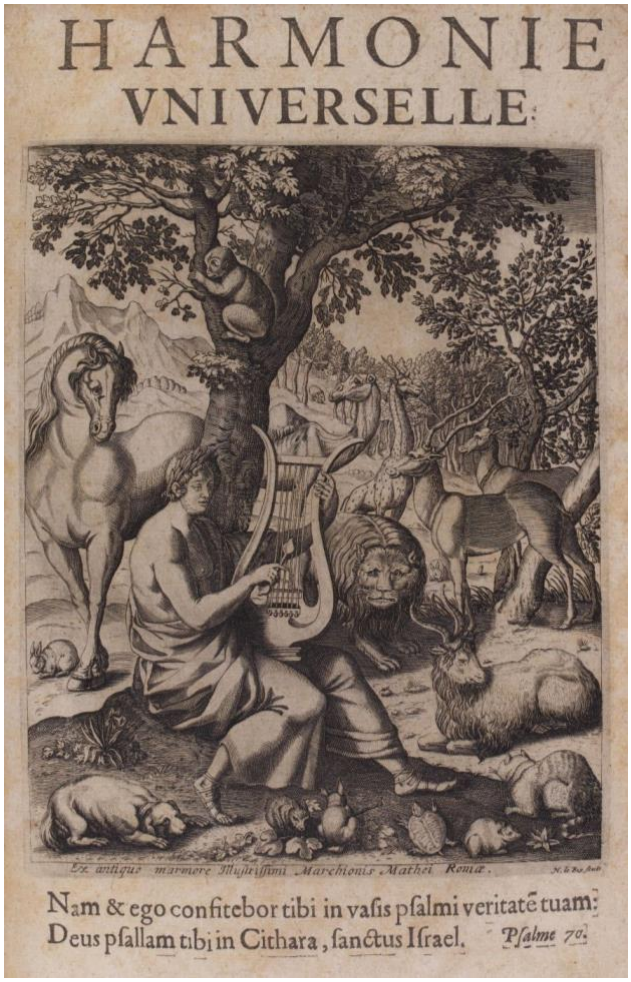

Figure 15. Marin Mersenne, *Harmonie Universelle. Contenant la théorie et la pratique de la musique* (1636-37).

This power of music to attract, domesticate, and congregate animals was not a mere myth in the eighteenth century. It is striking to find a myriad of accounts of animals hearing, following, or responding to music in different ways. A number of authors read memoirs in the Académie Royale des Sciences of comparative anatomy, which addressed human and animal hearing. There was widespread interest in whether animals and insects could hear, and whether they had ears at all. Anatomists and physicists such as Antoine Ferrein, Michel-Philippe Bouvard, Etienne-Louis Geoffroy, Petrus Camper, François-David Hérissant, Félix Vicq d'Azyr, and Jean-Antoine Nollet all wrote about animal hearing and phonation.[710] Special

[710] See e.g. Etienne-Louis Geoffroy, *Dissertation sur l'organe de l'ouie de l'homme, des reptiles, et des poissons* (Amsterdam and Paris: Caveleir, 1778); Antoine Ferrein, 'De la formation de la voix de l'homme', *Mémoires de l'Académie royale des sciences* (Paris: 1741), 409-432; Nollet, 'Mémoire sur l'ouie des poissons'; Félix Vicq

attention was devoted to fish, which, according to Nollet, were particularly striking because they had no visible ears and yet seemed to be very sensitive to sound. Nollet's enquiry into the hearing of fish led him to a broader enquiry on whether sound could be transmitted through water, for which he carried out several sound experiments plunging himself into the river Seine.[711] This scientific attention not only tackled the question of animal hearing, but sought to explain animals' attraction to music and their possible possession of musical taste. The fact that animals were attracted to music was included in the very definition of 'musique' in the *Dictionnaire* by Antoine Furetière.[712] Furthermore, animals' taste for music was largely documented throughout the century, from scientific reports to aesthetic essays, fictional tales, and announcements in the press. The surgeon Claude-Nicolas Le Cat claimed that birds 'sont les plus grands musiciens de tous les animaux'.[713] Birds were not only outstanding listeners but also performers of music themselves. Training canaries to sing was a common practice in eighteenth-century France, and a field of enquiry into the origins of civility, language, and musicality.[714] The *serinette*, a mechanical organ which often came richly ornamented, was designed to train *serins* (canaries) to sing and constituted a tasteful commodity amongst the elites.[715] Yet beyond these domesticated 'polite' birds, the study of animals' musical pleasure served as a basis for physiological explanations of musical taste more generally, in relation to the scientific approach to musical pleasure discussed in the first chapter. In the 1770s, Michel-Paul-Guy de Chabanon exemplified his sensualist approach to musical pleasure by describing how a spider stopped weaving when hearing music.[716] What is more, the *Almanach sous Verre* declared in 1781 that animals could also be musical amateurs:

> Animaux Amateurs de la Musique: Le Chat, l'Araignée, les Poissons sont sensibles aux accens de la Musique. La Musique lente et harmonieuse plaît sur

d'Azyr, 'De la structure de l'organe de l'ouïe des oiseaux comparé avec celui de l'homme, des quadrupèdes, des reptiles et des poissons', *Mémoires de l'Académie royale des sciences* (Paris: 1778), 381-392.

711 Nollet, 'Mémoire sur l'ouie des poissons'; see also his 'Leçon XI' in Jean-Antoine Nollet, *Leçons de physique expérimentale* (Paris: 1745).

712 Antoine Furetière, 'Musique', *Dictionnaire universel contenant generalement tous les mots françois, tant vieux que modernes, & les termes de toutes les sciences et des arts* (Paris: 1690), p.700.

713 '(Birds) are the greatest musicians amongst all animals' p.190, Claude-Nicolas Le Cat, *La théorie de l'ouie, supplément a cet article du traité des sens: ouvrage qui a remporté le prix triple proposé pour 1757 par l'Académie de Toulouse* (Paris: 1768).

714 For training canaries see Jean-Claude Hervieux de Chanteloup, *Nouveau traité des serins de Canarie, contenant la manière de les élever, de les appareiller pour en avoir de belles races; avec des remarques aussi curieuses sur les signes et causes de leurs maladies, et les segrets pour les guerir* (Paris: 1705); Georges Louis Leclerc (comte de) Buffon, *Histoire naturelle des oiseaux,* vol. 4 (Paris: 1778).

715 See e.g. Bedos de Celles, *L'art du facteur d'orgues*, pp.563-571.

716 Chabanon, *Observations,* p.20. Chabanon draws upon Buffon's comments on animal musical taste.

> tout à l'Araignée. On a vu de petits Poissons nourris dans un vase, chercher le son du violon, monter à la surface de l'eau pour l'entendre, élever la tête et rester immobiles dans cette situation; à l'égard du Chat, son instinct musical est assez connu.[717]

Regarded as a fact 'assez connu', indeed, the effects of music on animals were equivalent to the 'undeniable' effects of music upon human bodies. Le Cat declared that he did not include observations on the enchanting and healing powers of music, which he considered a well-established fact: 'Je ne grossirai point ce Mémoire des observations qui prouvent le pouvoir enchanteur de la Musique, les guérisons mêmes de maladies qu'elle a seule opérées. Ces faits sont connus, avoués'.[718] Music affected the human body because bodies were viewed as intrinsically harmonic and vibrant. According to the worldview of the harmony of the spheres, music had the power to heal the sick body by virtue of its position between the macrocosm and microcosm. As a vehicle of celestial harmony, medieval and early modern music restored the harmony of the Galenic sick body.[719] Later, music retained medical powers in different models of the body through the sympathetic vibration of membranes, fluids, fibers, and nerves.

Throughout the eighteenth century, it is striking to find consensus about the ability of music to heal the body. Consensus is seen, for instance, in the treatment of tarantula bites. In his *Essai sur l'origine des langues,* Rousseau endorsed the underlying belief that music could affect the body and could be used for healing purposes, referring to traditional experiences of music being used to cure tarantula bites.[720] This ancient belief, disseminated especially in Southern Italy with the 'tarantella' dance, coexisted with Enlightened scientific practices at least until the nineteenth century.[721] Throughout the eighteenth century, there were many

[717] 'Animals that are Amateurs of Music: Cats, Spiders, Fish, are susceptible to the charm of Music's accents. Spiders will especially like slow and harmonious Music. Small Fish in a bowl have been known to seek the sound of the violin, swim up to the surface of the water in order to hear it, raise their heads and remain still in such a situation; as for the Cat, its musical instinct is well known'. *Almanach sous Verre* (Paris: 1781), p.147.

[718] 'I will not burden this Memoir with observations proving the enchanting power of Music, or the illnesses that it has been known to cure through its own powers. These facts are known, and admitted'. Le Cat, *La théorie de l'ouie,* p.193.

[719] See e.g. Gouk, *Music, Science and Natural Magic*; Jackie Pigeaud, 'The Tradition of Ancient Music Therapy in the 18th Century', in *The Emotional Power of Music: Multidisciplinary Perspectives on Musical Arousal, Expression, and Social Control,* eds. Tom Cochrane, Bernardino Fantini, and Klaus R. Scherer (Oxford: Oxford University Press 2013), 315-28.

[720] Rousseau, *Essai sur l'origine des langues*, p.418.

[721] For the nineteenth century, see e.g. Francesco Cancellieri, *Lettera di Francesco Cancellieri al Ch. Sig. Dottore Koreff, Professore di medicina nell'Università di Berlino, sopra il Tarantismo, L'aria di Roma, e della sua campagna, ed i palazzi pontifici entro e fuori di Roma, con le notizie di Castel Gandolfo, e de paesi circonvicini*

references to this phenomenon in France, which were included in the very definition of 'musique' in dictionaries.[722] Nollet referred to tarantula bites and added: 'Ce n'est pas seulement dans cette maladie que la musique peut avoir des bons effets; on a vû des gens attaqués de fiévres chaudes, être touchés d'un air de violon, se lever, sauter, suer de fatigue, et être guéris'.[723] As Downing A. Thomas has pointed out, eighteenth-century researchers were fascinated by ancient accounts of the enchanting and healing effects of music, although some authors took these assumptions cautiously.[724] There were several reports on the physiological and moral effects of music during the eighteenth century, yet they relied upon different models of the body and nervous action.[725] According to James Kennaway, the action of music upon the body came to be seen increasingly as a cause of disease in the last decades of the century.[726]

Therefore, music could not only affect animate and inanimate bodies; it could *change* them. The use of music in mesmerising experiments illustrated this power most spectacularly. Franz Anton Mesmer built upon the relationship between macrocosm and microcosm and believed that there was a harmony between astral and human bodies, which, similarly to gravitation, also attracted bodies to one other.[727] By virtue of this force, bodies could be moved and manipulated. This view was similar to sympathy, in that it was proven to exert power among equivalent bodies, as concluded in experiments on sympathetic resonance between stringed instruments. The phenomenon of vibrating bodies, therefore, was linked to celestial motion. Moreover, music made bodies vibrate both internally and collectively. Le Cat referred to the common association between the human ear and musical instruments: 'Nous avons

(Rome: 1817). See Katherine Butler, 'Myth, Science and the Power of Music in the Early Decades of the Royal Society', *Journal of the History of Ideas* 76:1 (2015), 47-68.

722 See e.g. 'La Musique peut beaucoup pour les maladies tant du corps que de l'esprit. Le son des instruments de Musique guerit ceux qui ont été piquez de la Tarentule. La musique est salutaire à d'autres malades. On doit à ce remede des guerisons merveilleuses, qui doivent faire compter desormais la musique entre les specifiques de la Medicine'. 'Musique', Furetière, *Dictionnaire universel*, eds. Basnage de Beauval and Brutel de La Rivière.

723 'This illness is not the only one on which music can have beneficial effects; people with febrile delirium have been known to be touched by a melody played on the violin, and to rise, leap, sweat to exhaustion, and finally be cured'. [The article 'Fièvre' on Littré's dictionary, indicates: 'Fièvre chaude, un des noms vulgaires du délire febrile'—Hence my translation. Émile Littré, *Dictionnaire de la langue française*, T. 2 (Paris: L. Hachette, 1873)]; Nollet, *Leçons de physique expérimentale*, p. 487.

724 Downing A. Thomas, 'Music' in *The Cambridge Companion to the French Enlightenment*, ed. Daniel Brewer (Cambridge: Cambridge University Press, 2014), 167-83, at p.179.

725 See e.g. Joseph-Louis Roger, *Tentamen de vi soni et musices in corpus humanum* (Avignon: 1758). See Gärtner, 'Remuer l'Âme or Plaire à l'Oreille?'; Pigeaud, 'The Tradition of Ancient Music Therapy'.

726 Kennaway, *Bad Vibrations*.

727 For mesmerism see e.g. Robert Darnton, *Mesmerism and the End of the Enlightement in France* (Cambridge, MA: Harvard University Press, 1968); Winter, *Mesmerized*; Simon Schaffer, 'The Astrological Roots of Mesmerism', *Studies in History and Philosophy of Biological and Biomedical Sciences* 41:2 (2010), 158–168.

supposé avec de célebres Auteurs, que ces organes sont faits de fibres distinctes, séparées, et entierement analogues à celles de nos clavecins'.[728] All of these fibres, moreover, resonated harmonically as a result of harmonic sounds, just as with the strings of harpsichords. As discussed in the previous chapter, the metaphor of the *homme-clavecin*, which was directly related to the *homme-machine*, was the reverse side of considering musical instruments as representations of human bodies. Deployed by authors such as Diderot, moreover, *homme-clavecins* were also machines that could be played upon.[729] By virtue of affecting the physical body, music could manipulate and produce action, but also help to forge collective bonds. Therefore, the stress placed on sensibility in the second half of the century, which acted at a physical level, affected the individual body while it also entailed a collective and cohesive dimension.

1.1 A *charmante société*

The cosmological origins of musical harmony and its capacity to affect physical bodies both individually and collectively made musical harmony a 'useful' tool for governing. Gresset's *Discours sur l'Harmonie* concluded his praise of the 'nobility' of harmony and its powerful effects by explaining the 'usefulness' of music for the *Republique*, understood as both 'Etat Politique' and 'Etat Littéraire'.[730] Gresset claimed that, given its undeniable power, music was an efficient political instrument for exerting power and control, and as such 'la science favourite des Conquérans et des Rois'.[731] Musical harmony was a useful guide for politics and an 'instructive science' which helped to instruct political leaders how to rule. Therefore, musical harmony was studied by 'les premiers Sages, les Rois philosophes, et les premiers Législateurs des monarchies antiques', who relied on the principles of musical harmony to organise as well as control their nations.[732] Through musical harmony, 'les premiers Législateurs des Nations étoient sûrs d'engager, de persuader, de soumettre les esprits'.[733]

[728] 'In accordance with famous Authors, we have supposed that these organs are made of fibres that are distinct, separate, & in every respect analogous to that of our harpsichords'. Le Cat, *La théorie de l'ouie*, p.194.
[729] See Sarrasin Robichaud, *L'Homme-clavecin*; Erlmann, *Reason and Resonance*.
[730] Gresset, *Discours sur l'harmonie*, p.47.
[731] 'The favourite science of Conquerors & of Kings', Gresset, *Discours sur l'harmonie*, p.33.
[732] 'The first Sages, the philosopher Kings, and the first Legislators of ancient monarchies' Gresset, *Discours sur l'harmonie*, p.48.
[733] 'The first Legislators of Nations were guaranteed to commit, persuade, and subdue the minds [*esprits*]'. Gresset, *Discours sur l'harmonie*, p.8.

This political power relied upon the capacity of music to affect people physically and morally. According to Gresset, music entered the body, helping blood circulation and healing illness. But music also penetrated hearts and, consequently, changed 'moeurs'. This power over the physical and moral was translated to the body politic as a unique political force. By means of affecting the individual, music was able to make better republics; unlike other sciences— such as eloquence, geometry, astronomy, algebra, history, and philosophy— musical harmony was seen to make better citizens:

> Vous conviendrez avec moi que (…) l'Harmonie seule joüit d'un pouvoir beaucoup plus personnel et plus marqué sur ce coeur; qu'elle en sçait manier tous les replis; qu'elle en sçait faire joüer les ressorts les plus secrets, et que des sens charmés elle passe aux sentimens; preuve invincible de ses avantages, elle est donc utile en particulier aux moeurs de chaque citoyen; ce n'est point tout; elle est encore utile en general à la sécurité et au bonheur du Corps entier de la Republique politique.[734]

The unique relationship that music established between individuals and public order was a result of music's particular way of operating through pleasure. The unrivalled effects of musical harmony resulted from the fact that music exerted its power while being pleasurable. In this way, music could influence the body, morality, and entire societies through the pleasure it created in them. Gresset claimed that all people experienced musical pleasure, which was both a 'plaisir intime' and a pleasure shared and widely experienced. Indeed, it was this wide reach of pleasure that made musical harmony 'venerated in all times'. Furthermore, through pleasure, musical harmony conquered 'hearts' and acted upon them. Hence the extremely powerful mode of operation that Gresset attributed to music:

> Maître ingenieux, qui n'a point l'austerité du Pedantisme, qui n'en prend point les tons altiers, qui par des chemins détournés et couverts réforme nos idées sans révolter notre délicatesse, qui nous présente le devoir sous l'air du plaisir, qui nous méne au vrai par des sentiers fleuris, et nous séduit au profit de la raison, &c.[735]

[734] 'You will agree that (…) only Harmony exercises a more personal and marked power on [Man's] heart; that only Harmony can touch its very core; that it is able to move its most secret mechanisms, and that it charms not only the senses but the sentiments. This is incontrovertible proof of its advantages, and Harmony is therefore useful in particular to guide each citizen's conduct; and there is more: it is also useful in general to ensure the security and happiness of the whole Body of the political Republic'. Gresset, *Discours sur l'harmonie*, pp.59-60.

[735] 'An ingenious Master, free of the austerity of Pedantry and who does not adopt its haughty tone, a Master who reforms our ideas using roundabout and secret routes, without revolting our sensitivity, thanks to whom duty takes

Music acted on humans in a very peculiar way. Gresset explained that by mixing duties with pleasure, and reason with beauty, musical harmony could lead and manipulate people without them noticing it. Musical harmony's enormous power relied on the 'subtle' and pleasurable way in which it acted, through 'hidden and curved paths' and with 'ingenuity but without pedantism'. As discussed in the previous chapter, musical performance placed emphasis on hard work and practice, which modelled self-discipline and tasteful bodies for polite sociability. Presenting 'devoir sous l'air du plaisir', moreover, hard work and pleasure intermingled in music. Similarly, musical harmony enshrined both discipline and naturalness. That birds could learn how to sign, for instance, was verifiable proof of the enormous powers of music to subdue, domesticate, and civilise while also showing the 'natural' origins of musicality and taste through music's animal embodiment. Consequently, the political strength of musical harmony combined its undeniable influence over physical bodies with musical taste, producing both control and pleasure as a result. Gresset argued that it was this special agency over humans that made harmony superior to all other sciences; it 'triumphed' over other sciences because it was more pleasurable but also useful politically.

In a clear response to the literary quarrels of his times—but prior to a musical quarrel that would place harmony at the forefront of public debate—Gresset also praised harmony for bringing peace and calm in contexts of dissent. Instead, he believed, it overcame 'literary schisms' and 'wars of opinions', since harmony was able to blur all 'civil discords':

> N'est-ce point elle qui unit les Citoyens par d'aimables noeuds, qui les assortit, qui les égale, qui les range sous les loix d'une *charmante société*? Chez elle, tout est calme, tout est ami, tout agit d'intelligence; chez elle, on n'entend ni la voix de la discorde, ni les rumeurs populaires, ni le tumulte importun de l'école, ni les hurlemens effrenés des bancs, ni les clameurs des Tribunaux, mais seulement les agréables accords, les acclamations favorables, les doux applaudissemens.[736]

on for us the appearance of pleasure, who leads us to truth down flowered paths, & seduces us in favour of reason, &c.' *Journal de Trévoux* VI (Paris: 1737), pp.1001-2; Gresset, *Discours sur l'harmonie*, p.49.

[736] Is it not [Harmony] that unites Citizens with amiable bonds, that matches them together, makes them equal, arranges them under the laws of a *charmante société*? Where Harmony reigns, everything is calm, everything is closely tied, everything strives towards peaceful coexistence; where Harmony reigns, the voice of dissension is not heard, nor is the rumble of the masses, or the troublesome uproar of schools, or the frantic howls of benches, or the clamour of Courthouses, but only agreeable accord [accord: 'agreement', 'harmony', 'concord', but also 'chord'], favourable acclamation, gentle applause'. [Italics are mine. 'Charmante société' is not translated, to keep the semantic range of 'charmante', meaning both charming, pleasing or lovely, and enchanting] Gresset, *Discours sur l'harmonie,* p.61.

As discussed in previous chapters, musical harmony was broadly regarded as an achievement of rationalised sound over noise, and discipline and civility over rough nature. Consequently, music had the power to discipline and temper individual and collective bodies. In this way, harmony provided a model of tasteful control and regulation over society. It was able to affect, move, and unify, as well as to control and discipline the crowd. Just as musical performers conquered the hearts and bodies of their audiences, so too Gresset claimed that governors should see music as a powerful tool to affect and move the body politic tastefully.

According to Gresset's praise of harmony, it constituted not only an 'instructive' guide for politics but was in itself a political goal. The 'charmante société' generated by harmony was ultimately a utopian state in which people gathered in a 'natural' way following the effects of pleasure and 'universal taste'. Gresset envisaged a new society that effectively married order, morality, and pleasure. Given this image of a utopian and 'tasteful republic', harmony was widely regarded in revolutionary times. Gresset's *Discours* was republished several times over the century, both inside and outside France.[737] For half a century, his praise of harmony combined many of the prevailing thoughts about musical harmony, from a unifying principle of natural order and tasteful science to a powerful means of control and political 'guide' for building a tasteful socio-political republic. From the time of publication of Gresset's work, references to musical harmony in political texts spanned the century. Yet, as I shall discuss below, it was in the 1780s when musical harmony became especially prominent in political contexts. In the years leading to the French Revolution, reaching a tasteful, naturally ordered, moral, and harmonious political regime, like the one depicted by Gresset half a century earlier, proved highly appealing.

2. A musical model for revolutionary politics

From the late 1780s, the word 'harmony' repeatedly appeared in political speeches and print. References to musical harmony in political contexts were not new, as I have demonstrated in the case of Gresset's poetic treatise. Yet, during the turbulent years surrounding the French Revolution, notions of musical harmony were notably taken up in the business of defining

[737] See e.g. *Les œuvres de M. Gresset* (Amsterdam: 1748); *Oeuvres de M. Gresset* (London: 1765); *Die Harmonie, eine Rede aus dem Französ* (Berlin: 1752); Lof der Harmony, van den Heer Gresset (Amsterdam: A. D. Sellschop en P. Huart, 1776); *Discorso sull'armonia* (Venice: 1799); Pierre Marcou, *Manuel du jeune musicien, ou Élémens théoriques pratiques de musique. Nouvelle édition, augmentée d'un Précis historique sur la musique en général et suivie du Discours sur l'harmonie, par Gresset* (Paris: 1804).

revolutionary symbols. Much ink and blood were spilled to establish the famous triad of 'liberté, égalité, fraternité'. Historians have recently demonstrated that these notions intermixed with a complex variety of metaphors and eclectic values, such as notions of nature, property, morality, health, machinery, peasantry, and the body, among other things.[738] The choice of concepts to represent the new republic was the result of processes of contestation, transaction, and equivocal appropriation that cut across the revolutionary years. Revolutionary concepts were versatile, and a particular concept could be appropriated in order to invoke conflicting meanings. Musical harmony was a central component of this conceptual juggling. Nonetheless, the recurrence of notions of harmony in revolutionary times has been largely overlooked by scholarship. As an exception to this, Roger Barny referred to 'harmony', and stressed the 'ambiguity' of its use of during this period:

> L'un des thèmes les plus ambigus de toutes les constructions idéologiques de l'époque est celui de l'harmonie: d'un côté, il tient à la conception féodale de l'ordre naturel; de l'autre il peut venir se fondre dans la doctrine rousseauiste du pacte social. Selon la façon dont il est manié, il révèle donc les attitudes politiques les plus diverses, de la défense de l'ancien régime à l'engagement révolutionnaire. La nature composite de l'idéologie sous-jacente est ici rarement innocente.[739]

Indeed, the notion of harmony bore multiple meanings in eighteenth-century France, some of which appeared contradictory or appealed to opposing parties. It was precisely this versatility and semantic broadness which allowed it to spread widely in the period. I shall argue that musical harmony stood at the crossroads of a variety of political views and purposes. Entirely absent in existing scholarly literature on the subject, including Barny's comments, is the fact that the concept of harmony referenced in the revolutionary years was distinctly musical in nature. Although the modern reader might expect the general definition of 'harmony' to be distinct from 'musical harmony', it is striking to note that dictionaries throughout the

[738] See e.g. Mary Ashburn Miller, *A Natural History of Revolution: Violence and Nature in the French Revolutionary Imagination, 1789–1794* (Ithaca, NY: Cornell University Press, 2011); Alder, *Engineering the Revolution*; Kim, *The Imagined Empire*.

[739] 'Among all the ideological constructions of the period one of the most ambiguous themes is that of harmony: on the one hand it pertained to the feudal notion of a natural order of things; on the other it was able to merge with the rousseauian doctrine of the social pact. Depending on the way it was used, it thus revealed the most diverse political attitudes, ranging from the defence of the Old Regime to the commitment in favour of the Revolution. Here, the composite nature of the underlying ideology is rarely innocent'. Roger Barny, *Le triomphe du droit naturel: la constitution de la doctrine révolutionnaire des droits de l'homme (1787-1789)* (Paris: Annales Littéraires de l'Université de Franche-Comté, 1997), p.135.

eighteenth century defined 'harmony' principally as a musical concept. Even predating the notion of musical harmony as a scientific system, dictionaries defined 'harmony' as simultaneous sounds or chords with an agreeable effect, often associated with the 'harmony of the spheres'. Antoine de Furètiere's *Dictionnaire*, which defined music as a 'science', also defined 'harmony' in 1690 in this way:

> HARMONIE–Musique, meslange de plusieurs voix ou sons d'instruments qui font ensemble un accord agréable à l'oreille. Les sons mesurez et en cadence, comme ceux des marteaux sur une enclume, font une espece d'*harmonie* (…) Les Platoniciens ont eu la vision, de croire que le mouvement des corps celestes faisoit une *harmonie* effective, ces accords, ces instruments rendent une agréable *harmonie*.[740]

After giving a musical definition, the *Dictionnaire* noted that harmony was 'figuratively' used in other contexts, including morality—intrinsically connected with a notion of order or organisation—the cosmos, physical bodies, and politics:

> HARMONIE- se dit figurément en Morale des choses qui ont de l'union, de l'intelligence, qui tendent à même fin. En ce cas on dit l'*harmonie* du monde, l'*harmonie* du corps, les corps politiques ne peuvent subsister sans une parfaite *Harmonie*, ou une intelligence entre les chefs et les membres.[741]

This scheme of defining harmony primarily as a 'terme de musique', and then mentioning its 'figurative' uses, was applied throughout the century using almost all of the same examples. The dictionary of the Académie Française defined harmony in 1694 as a 'Concert et accord de divers sons', before then mentioning that it was also used 'figuratively' to signify order or organization of different parts: 'Il signifie fig. un accord parfait et une entiere correspondance de plusieurs parties ensemble de quelque nature qu'elles soient'.[742] All eighteenth-century editions of the dictionary referenced the same opening. The only exceptions to the trend of

[740] 'HARMONY–In Music, the combination of several voices, or sounds of instruments, which together create an accord [accord: 'chord', 'accord'] that is agreeable to the ear. Regular & rhythmical sounds, such as those of hammers hitting an anvil, make a *harmony* of sorts. (…) The Platonicians had the vision that celestial bodies formed an actual *harmony*; these chords ['accords'], these instruments produce an agreeable *harmony*'. Furetière, *Dictionnaire universel*, p.235.

[741] 'HARMONY–in Moral matters, figuratively, harmony can be attributed to things which form some unity, are intelligent, tend towards the same ends. In this case one talks of the *harmony* of the world, the *harmony* of bodies. Bodies politic cannot subsist without a perfect *Harmony*, or some intelligence between the head & the limbs [Or between the chief or leader of a particular organisation, and its members or adherents]. Furetière, *Dictionnaire universel*, p.236.

[742] 'Figuratively it refers to a perfect accord & a complete correspondence of several parts together, whatever their nature'. *Dictionnaire de l'Académie française* (Paris: 1694). ARTFL project.

defining ‘harmony’ principally as a musical concept were found in Diderot and d’Alembert’s *Encyclopédie* of 1779, and the *Manuel lexique ou Dictionnaire portatif des mots françois dont la signification n'est pas familière à tout le monde* by Antoine Prévost d'Exiles in 1788, both of which presented music as the particular application of a broader concept of harmony meaning ‘suite, enchaînement, jointure des choses’.[743]

The majority of dictionaries defined harmony not only as a particularly musical concept, but one whose main feature was pleasure. The fact that the succession or combination of sound should be ‘agréable’ was not unimportant. It made harmony into an organised whole with a particular moral and aesthetic goal. In this sense, the words ‘harmonieux’ or ‘harmonieuse’ turned harmony into an adjective, expressing the extent to which harmony became an aesthetic value or ideal. Harmony as ‘harmonieux’ was a crucial notion for determining what counted as a good or bad composition, or the ‘quality of sound’ of musical instruments and inventions. However, ‘harmonieux’ took harmony beyond music to become a standard criterion for aesthetic arrangement and judgment. In this sense, it was a shared theme across the arts. In its edition of 1727, Furetière’s *Dictionnaire universel* extended the uses of harmony to other arts, and added references to painting, architecture, and ‘discourse’.[744] Later, the embeddedness of pleasure in understandings of harmony meant that harmony was often portrayed as both the cause and the effect of pleasure.[745] In 1771, the *Dictionnaire de Trévoux* defined harmony as the pleasure or effect that resulted from the combination of sounds:

> HARMONIE- Terme de Musique (…) L’harmonie, chez les Modernes, est le plaisir qui résulte d’un mêlange de plusieurs sons qu’on entend à la fois; ou l’effet de ces sons, quand il en résulte un tout agréable.[746]

This identification of harmony with pleasure was crucial to the understanding of harmony not only as order but also as a tasteful whole which combined morality and beauty. Consequently,

[743] ‘The sequence, the chain, the joint of things’. Antoine François Prévost d'Exiles and C. Duboille, *Manuel lexique ou dictionnaire portatif des mots françois dont la signification n'est pas familière à tout le monde* (Paris: 1788), p.529. See also ‘Harmonie’ in *Encyclopédie*, eds. Diderot and D’Alembert, vol. 7 (Paris: 1779), 63-83.

[744] ‘Harmonie’, Furetière, *Dictionnaire universel*, eds. Basnage de Beauval and Brutel de La Rivière.

[745] The only distinction between cause and effect was given by Féraud in his definition of ‘harmonique’: ‘Qui produit l’harmonie. Il n’est point synonyme d’*harmonieux*: celui-ci est l’éfet, l’aûtre est la caûse’. Féraud, *Dictionaire critique de la langue française*, p.379.

[746] ‘HARMONY–Musical term. (…) According to the Moderns harmony is the pleasure resulting from the combination of several sounds that are heard at the same time; or the effect of such sounds, when they create an agreeable whole’. ‘Harmonie’, in *Dictionnaire universel françois et latin* (*Dictionnaire de Trévoux*) (Paris: 1771), p.731.

harmony became an ideal to be achieved, a model of tasteful order. This model could be applied to a wide range of settings and forms of organisation, hence its multiple 'figurative' uses.

Throughout the century, both the musical and 'figurative' meanings of harmony were further extended. In relation to the development of music as a 'science' and the reception of Rameau's theories, definitions of 'harmony' increasingly integrated more technical elements. In its article on the subject, the *Dictionnaire universel* included explanations of chords, 'consonances', 'dissonances', 'symphony', and the mathematical and physical grounds of harmony in 1727.[747] A larger mathematical discussion was the subject of the term 'harmonique' in the *Dictionnaire de Trévoux* of 1740; the edition of 1771 further expanded the explanation of mathematical proportions.[748]

References to the 'figurative' uses of harmony also increased considerably during the century. Dictionaries agreed on the associations of 'harmony' with order, the universe, moral power, social organisation, and the body politic. The similarities between different dictionaries should not be surprising, since the practice of writing dictionaries was still considered a matter of collection and adaptation of previous works, though in some cases now triggering controversies about authorship and plagiarism.[749] What stands out, however, is the persistence of the thoroughly musical nature of the concept of harmony, even within the varied uses of the term and constant references to the 'harmony of the spheres'. Throughout the century, 'harmony' was associated with order and the organisation of different elements towards a single end. Although this organisation was not described as 'divine', references to 'celestial harmony' persisted throughout the century. The *Dictionnaire de l'Académie française* in 1798 still contained examples of 'celestial harmony' and 'harmony of the universe', recalling the cosmology of the 'harmony of the spheres'.[750] Dictionaries also mentioned the 'harmony of the body' and the 'physical body'. The harmony of the spheres therefore persisted in the concept of harmony, alongside harmony's growing technical elements.

2.1 Making and improving the body politic

Consequently, the political applications of musical harmony combined the cosmology of the harmony of the spheres with the scientific status it had gained over the century. The

[747] 'Harmonie', Furetière, *Dictionnaire universel*, eds. Basnage de Beauval and Brutel de La Rivière.
[748] *Dictionnaire universel françois et latin* (*Dictionnaire de Trévoux*) (Nancy: 1740); (Paris: 1771).
[749] See e.g. the controversy between Antoine de Furetière and the Académie Française in the 1690s.
[750] 'Harmonie', *Dictionnaire de l'Académie française* (Paris: 1798). ARTFL project.

Encyclopédie discussed the political uses of harmony in terms of 'transportation': 'On a transporté le mot d'harmonie à l'art de gouverner, et l'on dit, il regne une grande harmonie dans cet état; à la société des hommes, ils vivent dans l'harmonie la plus parfaite'.[751] It is not surprising that harmony, which was also a shared principle for all of the arts, was 'transported' to politics and understood as the 'art of governing'. In late eighteenth-century France, the new nation-state was thought of as an artefact that had to be composed. Political references to harmony must be related to metaphors of the state-machine in this period, which represented the state as a composite of multiple parts that had to work efficiently in order to generate progress, just as in technological devices. Historians of technology have recently demonstrated that the approaches to technological devices during the period combined notions of usefulness with amusement and spectacle, and had great political and social implications, embodying the extension of politics into the realm of material practices.[752] The task of a political leader was thus not far removed from that of a composer, who produced harmony through bringing multiple voices into a whole, or of an organ-maker crafting different pieces and materials into a single material artefact.[753] The result of this work, the artful political composite, needed to be 'harmonieux', merging notions of beauty and pleasure with political and social agendas.

The metaphor of the state-machine was thus closely related to the metaphor of the body politic, and both models intersected in the representation of musical instruments. As mentioned above, the understanding of the physical body as a microcosm in early modern times took the body as a model of unity, in which a number of different organs efficiently functioned towards the same purpose. Therefore, in a similar way to the state-machine, the body was used as a metaphor for the structure and function of political institutions, and society as a whole was considered an organism constituted by multiple heterogenous elements.[754] Body metaphors in the political realm served to model solutions to political concerns in two ways. On the one hand, the body as a microcosm was a model of functional integrity, which, despite its heterogeneous components, worked efficiently towards a common end. On the other hand,

751 'The word "harmony" has been transposed to the art of ruling, & one might say: a great harmony reigns in this state; it has also been transposed to human societies: they live in the most perfect of harmonies'. 'Harmonie', in *Encyclopédie*, eds. Diderot and d'Alembert, vol. 7 (Paris: 1779).

752 See e.g. Schaffer, 'Enlightened Automata'; Alder, *Engineering the Revolution*; John Tresch, *The Romantic Machine: Utopian Science and Technology after Napoleon* (Chicago: The University of Chicago Press, 2012); Kim, *The Imagined Empire*.

753 For the great prestige of organ making see Bedos de Celles, *L'art du facteur d'orgues.*

754 De Baecque, *The Body Politic*; Melzer and Norberg (eds.) *From the Royal to the Republican Body*; Ulinka Rublack, 'Fluxes: The Early Modern Body and the Emotions', *History Workshop Journal* 53 (2002), 1-16.

illness provided the example of a perfectible state, one whose disorders could be transitory and might well be 'healed'. The resurgence of body-metaphors in this period is consistent with the emphasis given by therapeutic writers to maintaining the integrity of the organism and the interaction of the body and soul, which Dorinda Outram has discussed was a movement away from Cartesian dualism.[755] Hence the act of building a new state was also a moral affair. Taken as body politic, the state was to be organised and controlled, but it was also to be improved. In all of these senses, the body politic could operate through musical harmony.

As mentioned above, musical harmony was a model of order and influence. Consequently, the relationship between musical harmony and the body politic was twofold: harmony regulated the relationship between the whole and the parts, and expressed the power that music had over the physical body. Among the uses of 'harmony', numerous dictionaries mentioned that harmony was essential to reaching political order, claiming, for instance, that 'political bodies' and sovereigns ought to be regulated by harmony: 'Les corps politiques ne peuvent subsister sans une parfaite *harmonie,* une parfaite intelligence entre le chef et les membres'.[756] Musical harmony kept the body politic united; its geometrical quality offered a model of social cohesion. Additionally, musical harmony could efficiently bring people together and heal the sick body. It did so by affecting physical bodies and providing moral discipline, as well as by offering a model in which, as I shall explain below, 'dissonance' was a desirable element, which 'resolved' into consonance just like an ill body once again becoming healthy. From different angles, therefore, musical harmony was a medical prescription for healing an unhealthy body politic.

2.2 A classical model

In revolutionary times, the desired new state was pictured as a republic. The marriage between notions of republic, harmony, and morality was far from new. Raymonde Monnier has argued that, when the idea of the 'république' was raised by the revolution, it drew upon a long tradition, including Italian, English, and American experiences, as well as classical models.[757]

[755] Outram, *The Body and the French Revolution*, p.49.
[756] 'Political bodies cannot subsist without perfect *harmony*, that perfect intelligence between the head (or chief) and the members'. *Dictionnaire universel françois et latin* (*Dictionnaire de Trévoux*) (Paris: 1771), p.732.
[757] Raymonde Monnier, *Républicanisme, patriotisme et Révolution française* (Paris: L'Harmattan, 2005), p.17.

Whether Greek or Roman, republican ideals were re-appropriated in the context of the revival of the classics that historians have documented in the late eighteenth century.[758]

The uses of harmony as a political model should be linked to Plato's representation of the republic. Recalling the Pythagoreans, Plato stated that 'the sciences of astronomy and harmonics are closely akin' in their mutual reference to mathematical ratios.[759] Plato extended this analogy to propose a model of organisation for the polis. In the *Gorgias*, he suggested that the world was a geometrical order, whose proportions regulated both human and celestial affairs. The proportioned order of the universe had moral implications, for it ruled self-control and discipline.[760] Later, in the *Republic*, Plato proposed that the personality or soul was composed of three parts— 'reason', 'spirit', 'appetite'—which stood in mathematical relation to one other, just as the harmony of a musical chord was drawn from the strings of a proportioned lyre.[761] Harmony resulted from the virtuous combination of these three different elements:

> One who is just does not allow any part of himself to do the work of another part or allow the various classes within him to meddle with each other. He regulates well what is really his own and rules himself. He puts himself in order, is his own friend, and harmonises the three parts of himself like three limiting notes in a musical scale—high, low, and middle. He binds together those parts and any others there may be in between, and from having been many things he becomes entirely one, moderate and harmonious. Only then does he act.[762]

Plato's reference to harmony for the governance of the polis, drawing upon this tripartite composition of personality, resounds deeply in the ways harmony was appropriated during the French Revolution. Despite not always mentioning Plato or his works explicitly, these ideas informed the modelling of the republic in the French Revolution in three ways. Firstly, harmony was a musical concept that merged mathematical order with moral power—one

[758] See e.g. Giovanni Lobrano, 'République et démocratie anciennes avant et pendant la Révolution', in *Révolution et République. L'exception française*, ed. Michel Vovelle (Paris: Kimé 1994), 37–66; Marie-Francis Silver, 'La Grèce dans le roman français de l'époque Révolutionnaire: le voyage du jeune Anacharsis en Grèce au IVe siècle avant l'ère vulgaire', *Lumen* 9 (1990), 145-155. See Bertrand, *La fin du classicisme et le retour à l'antique.*

[759] Plato, *Republic* 530d. All quotes from Plato in this dissertation are taken from John M. Cooper and D. S. Hutchinson (eds.), *Plato. Complete Works* (Indianapolis, IN: Hackett Publishing, 1997).

[760] Plato, *Gorgias* 508a.

[761] G. R. F. Ferrari, 'The Three-Part Soul', in *The Cambridge Companion to Plato's Republic*, ed. G. R. F. Ferrari (Cambridge: Cambridge University Press, 2007), p.188.

[762] Plato, *Republic* 443c-443e.

should recall that, for Plato, musical training contributed to moral uplifting. Consequently, once applied to the republican order, harmony was an ideal not only of proportioned order, but also of virtue. This is enhanced by the second of Plato's images to be appropriated in the eighteenth century: namely, that the relationship between the parts of an individual is mirrored in the organisation of the city-state. The three components of the person were analogous to the different groups of the polis. Therefore, a harmonic relationship between these three parts, resulting in temperance and moderation, could be found both within the individual and in public affairs.

Thirdly, the proportionate order suggested by Plato did not mean equality among the parts, each of which was assigned a different function. The principle of justice was based on each of the parts fulfilling its own labour or function, 'every part of him does its own work, whether it's ruling or being ruled'.[763] Harmony, therefore, ruled a state of 'agreement'—but not equality—among the three parts of the soul. This model of agreement among three parts associated with different functions was central to the ideal of a republic based on the Three Estates during the French Revolution.

In sum, Plato's ideal republic bequeathed a model of harmony as a cosmic and mathematical order with moral attributes, which connected the individual to the social and was composed of three categorically different elements acting in agreement. Both Plato and Pythagoras, as well as a broad category of the 'classics', were continuously invoked in the call for a unifying cosmic order during the eighteenth century. The model of the new republic was to be found in ancient times. In his *Voyage du jeune Anacharsis en Grèce*, the numismatist and antiquarian Jean-Jacques Barthélemy tells the story of a traveller in ancient Greece who considered Pythagoras's 'laws of harmony' as the model of divine, cosmic, and republican order:

> Contemplez en même temps avec Pythagore les lois de l'harmonie universelle, et mettez ce tableau devant vos yeux: Régularité dans la distribution des mondes, régularité dans la distribution des corps célestes; concours de toutes les volontés dans une sage république, concours de tous les mouvemens dans

[763] Plato, *Republic* 443b. Plato continues: 'Indeed, Glaucon, the principle that it is right for someone who is by nature a cobbler to practice cobblery and nothing else, for the carpenter to practice carpentry, and the same for the others is a sort of image of justice—that's why it's beneficial' (443c-e). Nicholas White explains this passage: 'under that harmony each part obeys the Principle of the Assignment of Natural Functions (...) each part should perform its function within the entity in question', Nicholas White, 'Plato's Concept of Goodnes', in *A Companion to Plato*, ed. Hugh H. Benson (Oxford: Wiley-Blackwell, 2006), p.358.

> une âme vertueuse; tous les êtres travaillant de concert au maintien de l'ordre, et l'ordre conservant l'univers et ses moindres parties; un dieu auteur de ce plan sublime, et des hommes destinés à être par leurs vertus ses ministres et ses coopérateurs. Jamais systême n'étincela de plus de génie; jamais rien n'a pu donner une plus haute idée de la grandeur et de la dignité de l'homme.[764]

Published in 1789, Barthélemy's work became an international success, and was repeatedly reissued and translated into other languages. After Barthélemy presented his inaugural discourse before the Académie Française in the same year, his respondents claimed that the principles Barthélemy exposed as coming from ancient Greece were in fact their own in eighteenth-century France. The academician Stanislaus Jean de Boufflers stated that Barthélemy's work was more than erudition, for it appealed to his audience's contemporary republican ideals.[765] This demonstrates the extent to which classical models were adopted as blueprints for contemporary politics: in the rhetoric underpinning the new republican ideals, ancient and ideal future overlapped.

2.3 A scientific model

In addition to the perceived authority that classical models conferred upon eighteenth-century thinkers, the recourse to musical harmony was also legitimised by the particular link between harmony and natural order, after harmony had been elevated to the status of a science. The fact that harmony was deemed a scientific system, as I discussed in Chapter 1, became fundamental to its translation into the political realm. Scientific systems were regularly applied to the political sphere, and the 'science of music' was no exception. The Marquis de Condorcet proposed a scientific model for the management of civil society and political governance. The 'moral arithmetics' and 'social mathematics' envisaged by Condorcet sought to create a public

764 'Consider also with Pythagoras the laws of universal harmony, and contemplate this picture before your eyes: the Regularity with which the worlds are laid out, the regularity with which the celestial bodies are laid out; the convergence of all the individual wills in a wise republic, the convergence of all the impulses in a virtuous soul; all beings working together to maintain order, and order preserving the universe down to its smallest parts; a God acting as the author of this sublime design, and men destined to be His ministers and co-operators through their virtues. No system ever was conceived that gleamed with such genius; never could a higher idea of the greatness and dignity of man be conveyed'. Jean-Jacques Barthélemy, *Voyage du jeune Anacharsis en Grèce dans le milieu du quatrième siècle avant l'ère vulgaire*, T. 4 (Paris: 1788), p.295.

765 For a discussion of the reception of Barthélemy's work, see Silver, 'La Grèce dans le roman français'; Colleen A. Sheehan, *The Mind of James Madison: The Legacy of Classical Republicanism* (New York: Cambridge University Press, 2015).

order based in the mathematical sciences and the calculus of probabilities.[766] Physicians too found epistemological links between Enlightened sciences, public order, and morality. Pierre Jean Georges Cabanis, for instance, who exemplified a physician concerned with politics, argued that the physical body was inextricably linked to the environment and socio-political order.[767] Harmony should also be considered amongst the Enlightenemnt sciences that were entwined with socio-political projects in the years surrounding the French Revolution, combing mathematical, physical, and physiogical research.

Just as natural philosophers had done for the physical sciences, political writers aimed at defining the principles that ruled social organisation. When modelling a new public order during Revolutionary times, contemporaries looked for laws and principles that allowed them to justify their proposed reforms. Emma Spary has explored naturalists in the newly reformed Muséum d'Histoire Naturelle in Paris during the Jacobin period, which legitimised and instructed in political portrayals of the future through the representations of nature; 'In the small area of the Muséum, the naturalists were empowered to display the links between the operation of Nature's laws within the universe as a whole, and the operation of those same laws within the new Republic. The goodness and perfection of those laws was made evident by the professors in directing their audience how to look at the collections'.[768] The invisible laws of nature were consequently revealed to the public, in the form of a new public order. By grounding their political and social programmes in nature, the makers of the new order lost authorship and individuality, and were able to blur the boundaries between nature and artifice. In this way, the new order became a political necessity. Given that musical harmony was deemed to unveil the geometrical laws of nature, this natural order was presented during the Revolution as an imminent and necessary form of social and political organisation. Harmony coupled the natural and the artificial, hence it both legitimised the new public order and made it an inevitable ideal to achieve and build.

[766] See David Williams, *Condorcet and Modernity* (Cambridge: Cambridge University Press, 2004); Keith Michael Baker, *Condorcet. From Natural Philosophy to Social Mathematics* (Chicago: The University of Chicago Press, 1975).
[767] See Mariana Saad, *Cabanis, Comprendre l'homme pour changer le monde* (Paris: Classiques Garnier 2016).
[768] Spary, *Utopia's Garden*, p.236.

3. The *Accord parfait*

The natural model that harmony revealed was one in which different spheres—celestial and earthly, individual and collective—were joined into a tasteful whole. Specifically, harmony was appropriated in the revolutionary period as a model for integrating social differences as well as divergent opinions, and offered a geometrical archetype for notions of equality understood as proportion.

Following the abolition of censorship in 1788, there was an explosion of public opinion, which took both printed and oral form. Historians of the French Revolution have numbered in the thousands the number of pamphlets in circulation during the early revolutionary years—an expression of political opinions on an unprecedented scale.[769] From leaflets to longer pieces, this burst of publication circulated to an increasingly larger audience, as indicated by the large number of reprints.[770] These new political voices filled the public sphere not only with paper, but also with sound. The tumult of the crowd sought expression loudly, whether verbally or through non-verbal exclamations. In the words of Sophia Rosenfeld, the outburst of uncensored public opinion was experienced as a 'visceral explosion of human-produced sound'. According to this author, after centuries of imposed silence, everyone made an effort to be heard, something which was noisily expressed in crowds and assemblies. Yet these efforts were far from consensual. Rosenfeld describes these sonic outbursts as a 'cacophony', 'as everyone seemed to be shouting, whether literally or figuratively, at once'.[771] The figure of 'cacophony' was also used by Laura Mason to describe the outburst of singing in public spaces.[772]

The recourse to musical harmony in revolutionary times should be understood within the context of this proliferation of new voices which were expressed as new sounds. Yet harmony was the other side of the coin of Mason and Rosenfeld's 'cacophony'. The turbulent political soundscape was confronted by invoking musical harmony: the ubiquitous noise could be disciplined into musical sounds, as founded in the system of harmony. Like disciplined

[769] What constitutes a 'pamphlet', however, is a disputed issue amongst historians. See Ralph W. Greenlaw 'Pamphlet Literature in France during the Period of the Aristocratic Revolt (1787-1788)' *Journal of Modern History* 29:4 (1957), 349-54; Harvey Chisick, 'Pamphlets and Journalism in the Early French Revolution: The Offices of the Ami du Roi of the Abbé Royou as a Center of Royalist Propaganda', *French Historical Studies* 15:4 (1988), 623-45; Kenneth Margerison, *Pamphlets & Public Opinion: The Campaign for a Union of Orders in the Early French Revolution* (West Lafayette, IN: Purdue University Press, 1998).
[770] Barny, *Le triomphe du droit naturel*, p.78.
[771] Rosenfeld, 'On Being Heard', p.329.
[772] Mason, *Singing the French Revolution*, p.2.

musical bodies and tempered musical instruments, musical harmony offered a specific model of sonic moderation of the socio-political order. Discussions of musical harmony from early 1788 demonstrate continuous efforts to discipline the political 'cacophony' and to bring conflicting political voices in tune with each other. This political-sonic effort crystallised in the understanding of different political voices as 'notes' in a public 'chord'—to which I shall return in the next subsection.

There were differing opinions on precisely how the model of musical harmony was supposed to operate in the new public order. Nevertheless, the majority concurred in their portrayal of harmony as a model of discipline and agreement. Previous chapters of this dissertation have discussed discipline in relationship to polite sociability, manners, morality, sounds, and the physical body. The disciplining powers of music were also well known in war music. Kate van Orden has documented the uses of music as a crucial element for military training and disciplining drawing upon notions of cosmological order.[773] This concern with discipline was then translated into salon sociability and, later, to the disciplining of the revolutionary crowd. Collective performance of music also epitomises attempts to discipline collectivities in this period. During the eighteenth century, and especially during the second half of the century, several attempts were made to standardise and regulate musical tuning, tempo, and notation. New artefacts and theoretical systems were invented in order that ensembles might play together more easily, as well as allowing a particular musical work to be performed identically across different contexts and times.[774] This allowed the standardisation of musical practice, which was linked to the belief that music could be a unifying force and a common language beyond national and linguistic boundaries, as I mentioned previously in Chapter 2.

Musical harmony had stood for domestic cohesion and agreement since much earlier times. The view of harmony as a stabiliser of opinions was fundamental to practices of sociability since the Renaissance.[775] In France during the second half of eighteenth century, musical harmony was increasingly referenced in the development of salon sociability. Mark Darlow has discussed the extent to which music took part in the climate of disputes in polite

[773] Van Orden, *Music, Discipline, and Arms.*

[774] By way of example, see the abundant time-measuring inventions advertised in journals or assessed in the Académie Royale des Sciences throughout the century: e.g. Joseph Sauveur's 'chronomètre' (1696), Louis-Léon Pajot (comte de) Osenbray's 'métromètre' (1732), François Pelletier's 'pendulum' (1782); Jean-Baptiste Davaux and Abraham-Louis Breguet's 'chronomètre' (1798), Dubos' 'Rhytmometre' (1786).

[775] See e.g. Dennis, 'Sound and Domestic Space'.

sociability.[776] After the *querelles* had divided public opinion on literary and musical subjects, controversy was inevitable, hence the call for harmony among *salonnières*. According to Dena Goodman, the role of the *salonnière* in the 1760s and 1770s—usually a woman—was to bring 'discordant voices' and 'unruly egos' into a harmonious whole. Goodman quoted a description of Mme. de Lespinasse by Marmontel:

> Ce cercle était formé des gens qui n'étaient point liés ensemble. Elle les avait pris çà et là dans le monde, mais si bien assortis, que, lorsqu'ils étaient là, ils s'y trouvaient en harmonie comme les cordes d'un instrument monté par une habile main. En suivant la comparaison, je pourrais dire qu'elle jouait de cet instrument avec un art qui tenait du génie; elle semblait savoir quell son rendrait la corde qu'elle allait toucher; je veux dire que nos esprits et nos caractères lui étaient si bien connus, que pour les metre en jeu, elle n'avait qu'un mot à dire.[777]

The fact that women were agents of harmony in sociability coincides with the portrayal of music as eminently feminine at this time, as I discussed in the previous chapter. One engraving by Jean Michel Moreau, entitled 'l'Accord parfait', shows a woman plucking the strings of the harp (see Figure 16). Published in 1777, the engraving enhances the feminine character of the performer by representing a harp, then a fashionable instrument amongst elite women. Yet the woman and her harp have a central function when placed between the two men. The woman's playing can be seen as a way of 'harmonising' the conversation of the two men. Between the three, there was a 'perfect chord'—this could also be a trio amoureux, in which the musical chord bespoke their romantic bond. The words 'harmony' and 'accord' appeared in the titles of a number of eighteenth-century paintings and engravings, ranging from groups of musicians to scenes of courtship.[778]

[776] See Darlow, *Dissonance in the Republic of Letters*.

[777] 'She found (her guests) here and there in the world, but (they) were so well matched that, when they were (with her), they found themselves in harmony like the strings of an instrument played by an able hand. Following this comparison, I could say that she played this instrument with an art that resembled genius; she seemed to know which sound the string she had touched would make', as translated in Goodman, *The Republic of Letters*, p.100. Jean-François Marmontel, *Oeuvres choisies de Marmontel. Mémoires d'un père pour servir à l'instruction de ses enfants* (Paris: 1827), pp.462-63.

[778] Carole Blumenfeld, 'La touche et la note. Quelques idées sur la représentation musicale dans la peinture sous Louis XVI', in *Regards sur la musique au temps de Louis XVI*, ed. Jean Duron (Brussels: Editions Mardaga, 2007), 1-22.

Figure 16. 'L'Accord Parfait' (1777). Isidore-Stanislas Helman (engraver) after Jean Michel Moreau. Musée Carnavalet, Histoire de Paris G.187.

3.1 'Accord': agreement and chord

The question of how to resolve dissent and unify discordant voices became a pressing public issue. During the 1780s, the pursuit of consensus in the formation of a new political regime was frequently depicted as a musical chord. The musical chord as the embodiment of agreement was established through the double meaning of the word 'accord' in French: 'agreement' and 'musical chord'. This duality was no coincidence: it represented a vision of agreement as the harmonic sum of different parts.

In order to reach agreement, differences should not be abolished, but attuned to one another. Hence to tune, 'accorder', referred to the process of reaching agreement. The article 'accord' in the fourth edition of the French Academy's *Dictionnaire*, which was significantly longer than the article on harmony, illustrates the polysemy of the term 'accord'. It begins with a broad sense of 'convention, accommodement', both among people and elements of the world, in a similar sense to the 'figurative' use of harmony as a principle of order: 'Convenance, proportion, juste rapport de plusieurs choses ensemble. Il y a un merveilleux accord entre toutes les parties du monde, entre les parties du corps humain'. Additionally, it defines 'accord' as an element of musical harmony, 'en Musique, signifie l'union de deux ou de plusieurs sons entendus à la fois, et formant harmonie' as well as the act of tuning musical instruments. This latter sense, the dictionary states, was often used in metaphorical terms, meaning agreement, 'on dit proverbialement, Accordez vos flûtes, pour dire, Convenez de ce que vous voulez faire, convenez des moyens de faire réussir votre dessein'.[779] Throughout the century, the notion of 'accord' was increasingly identified with musical harmony. The *Dictionnaire de Trévoux* considered 'accord' and harmony to be synonyms, both being defined as combinations of sounds that were pleasurable to the ear.[780] Similarly, the *Dictionnaire de l'Académie française* of 1798 suggested that harmony 'signifie figurém. Un accord parfait, et une entière correspondance de plusieurs parties qui forment un tout, ou qui concourent à une même fin, de quelque nature qu'elles soient'.[781] Like 'harmony', the concept of 'accord' spanned legal, social and domestic contexts, and was applied to collective musical perfomance and good governance. These notions were important in helping to conceptualise how agreement could be reached between fundamentally different individuals.

[779] 'ACCORD: Convention, accommodation (…) It also means, Consent, union of minds [esprit], compliance of wills. They always lived in close association, in perfect accord ['agreement', 'accord'] (…) Also means, Convenience, proportion, a just relation of several things together. There is a wonderful accord ['congruence'] between all the different parts of the world, all the different parts of the human body (…) ACCORD ['chord'] in Music refers to the union of two or more sounds heard at the same time, & forming harmony. Chord made by instruments. Chord made by voices. Fine chord. Harmonious chord. Dissonant, consonant, just chord. (…) When one says that An instrument is d'accord [*finely tuned*], one means that the strings have been set to the right tone. (…) ACCORDER ['to tune', 'to agree'] To agree on. To get in good terms. The proverb Accordez vos flûtes [tune up your flutes] means: Agree on what you want to do, agree on the means of achieving your goal'. *Dictionnaire de l'Academie françoise* (Paris: 1762). ARTFL project.

[780] 'Harmonie', *Dictionnaire universel françois et latin* (*Dictionnaire de Trévoux*) (Paris: 1771), p.731.

[781] '(Harmony) Figuratively. A perfect accord ['congruence', 'agreement'] and a perfect congruence between all the parts that compose a whole, or that contribute to the same end, of whatever nature'. *Dictionnaire de l'Académie francaise* (Paris: 1798). ARTFL project.

The *accord parfait* or 'perfect chord' was a central feature of the system of harmony proposed by Jean-Philippe Rameau. In music theory, the *accord parfait* was the major chord, a chord of three notes in which the first and second notes were separated by the interval of a major third, and the second and third notes by a minor third (take, for example, the chord of C major, composed by C, E, and G). The *accord parfait,* therefore, was the archetype of consonance. Yet musical dissonances were also essential to Rameau's theory of harmony.[782] Dissonances in music would always 'resolve' into consonances, and were crucial for making music more interesting and agreeable. Dissonances were thus inseparable from consonances within a harmonic system. As such, the uses of dissonances in music were widely discussed by contemporaries.[783] Musical chords forged concord between different elements, even when these were ostensibly dissonant, turning them into parts of a harmonious whole. To the 'figurative' uses of harmony given by dictionaries since the seventeenth century—the harmony of the world, the universe, the body, architecture, and political bodies—the fourth edition of the *Dictionnaire de l'Academie française* also gave the example of 'Troubler l'harmonie du Gouvernement politique' in 1762.[784] 'Trouble' was thus associated with 'dissonance'—and harmony offered a solution. Indeed, earlier in the century, a discussion about the nature of political union had led Montesquieu to invoke the newly fashioned science of musical harmony. Montesquieu compared political 'trouble' to dissonances as a desirable element in music composition, a much-discussed topic at the time he was writing, since Rameau had addressed it in 1722. As he argued in his *Considérations sur les causes de la grandeur des Romains et de leur decadence*:

> Ce qu'on appelle union dans un Corps Politique est une chose très équivoque; la vraïe est une union d'harmonie qui fait que toutes les parties, quelque opposées qu'elles nous paroissent, concourent au bien général de la Societé, comme des dissonances dans la Musique concourent à l'accord total. Il peut y avoir de l'union dans un Etat où l'on ne croit voir que du trouble, c'est à dire, une harmonie d'où resulte le bonheur qui seul est la vraïe paix; il en est comme

[782] Rameau was not the first to consider dissonances as an essential element in musical structure. See Christensen, *Rameau and Musical Thought*, p.64.

[783] For debates on dissonance see Albert Cohen, '*La Supposition* and Changing Concepts of Dissonance in Baroque Theory', *Journal of the American Musicological Society* 24:1 (1971), 63-84; Christensen, *Rameau and Musical Thought*, pp.63-65.

[784] 'To trouble the harmony of the political government'. *Dictionnaire de l'Academie françoise* (Paris: 1762). ARTFL project.

> des parties de cet Univers éternellement liées par l'action des unes, et la reaction des autres.[785]

Contemporary to Gresset's *Discours sur l'Harmonie,* this excerpt also shows the translation of musical harmony into the body politic. Moreover, the notion of 'trouble' within harmony was comparable to contemporary understandings of sin in religion. Sin was conceived in the Catholic tradition as a disruption of divine harmony, which could be re-established through penitence. As previously discussed regarding the sick body, the harmonic body politic, when injured by sin, trouble, or dissonance, could potentially find restoration. More broadly, religious faith enabled civil harmony between discordant elements. Jean-Baptiste Massillon, the bishop of Clermont and famous orator, claimed that only through faith and piety could societies reach 'public' harmony: 'La piété véritable est l'ordre de la société'.[786] Religion brought varied social forces into harmony:

> C'est la religión de Jésus-Christ toute seule qui peut former des princes religieux, des Courtisans chrétiens, des Magistrats incorruptibles, des Maîtres modérés, des Sujets fidèles: et maintenir dans une juste harmonie cette variété d'états et de conditions, d'où dépend la tranquillité des peuples et le salut des empires.[787]

These understandings of 'trouble' in both political and religious contexts during the first half of the eighteenth century echoed contemporary debates about dissonance in musical harmony. Integrating dissonance into the harmonic system implied that unanimity was not attainable. In 1789, Jean-Paul Rabaut-Saint Etienne—the Calvinist pastor, acting as deputy of the Third Estate—claimed 'on a donc renoncé à l'unanimité', referring to the impossibility of reaching unanimity in the current state of things: 'Dans une assemblée de plusieurs hommes, on ne peut espérer d'avoir l'unanimité des suffrages. L'accord unanime est presque impossible, et il seroit

785 'What is called union, in a Body Politic, is a very equivocal thing; true union is a harmony in which all the parts, however opposed they may appear, concur to the general good of Society, in the same way dissonances in Music concur to make a harmonious accord. Union can reign in a State where at first one sees only confusion, that is, a harmony from which happiness, which is the only true peace, results—as in the the Universe, all parts of which are eternally connected by the action of some, and the reaction of others'. Charles de Secondat (Baron de) Montesquieu, *Considérations sur les causes de la grandeur des Romains et de leur décadence* (Amsterdam: 1734), p.98.

786 'True piety is the order of society'. Jean-Baptiste Massillon, 'Sermon pour le dimanche des rameaux. Sur les écueils de la piété des grands', in *Sermons de M. Massillon, évêque de Clermont* (Paris: 1776), p.167.

787 'That of Jesus-Christ is the sole religion that can shape pious princes, religious courtiers, incorruptible judges, moderate masters, and faithful subjects, and hold this whole range of states and conditions in a fair harmony, upon which the tranquillity of peoples and the salvation of empires depends'. Jean-Baptiste Massillon, 'Mardi de la Passion. Sur le Salut', in *Sermons de M. Massillon, évêque de Clermont*, T. 4 (Paris: 1774), p.162.

absurde de constituter un Gouvernement quelconque sur la nécessité de cet accord'.[788] As opposed to unanimity, accord represented agreement.

Once again, the agreement that harmony engendered was moral in nature. 'Social harmony' was a moral affair, insofar as it integrated dissonance and resolved it into consonance, made 'trouble' perfectible, and produced a pleasurable whole. For the Baron d'Holbach, 'social harmony' should be the aim of any virtuous education. He portrayed an ideal society as a musical harmony or concert where all individuals and orders acted collectively towards their common interest. Agreement was paramount: 'La haine et le mépris anéantissent l'harmonie sociale. Toute société est un concert, dont le charme dépend de l'accord des parties qui le composent'.[789] This 'charming society', like that portrayed by Gresset in the 1730s, was now an ideal society of agreement which incorporated dissent. Even in the 1790s, Antoine Suard grounded this ideal society in the harmony of the spheres: 'L'accord des opinions donne seul à tous les ressorts de l'ordre public un jeu doux et facile. Alors que cet accord est trouvé, l'obéissance va au-devant de la loi, et les sphères politiques ne sont soumis qu'à l'harmonie comme les sphères célestes'.[790] Suard was alluding to harmony within polite sociability, in which discord—or 'dissonance'—formed an important element.[791] The belief that harmony resulted in a tasteful whole was shared by defenders of harmony across different political factions and religious beliefs.

4. Harmonising the Three Estates

Debates about 'social harmony' were fuelled by the presence of a new political actor: the 'Third Estate'. Louis XVI called the election of the Estates General in the spring of 1789. This institution had not been called for a century and a half, thus its convocation resulted from a

[788] 'In an assembly of several men, unanimity of vote is beyond reach. Unanimous accord is almost impossible, & it would be absurd to try and form any Government based on the necessity of such an accord'. Jean-Paul Rabaut-Saint Etienne, *Question de droit public: doit-on recueillir les voix, dans les États-généraux, par ordres, ou par têtes de délibérans?* (Languedoc: 1789), p.6.

[789] 'Hatred & contempt destroy social harmony. Any society is a concert, the charm of which depends on the accord between the parts of which it is composed'. Paul Henri Thiry (baron d') Holbach, *La morale universelle ou Les devoirs de l'homme fondés sur sa nature* (Amsterdam: 1776), p.94.

[790] 'The agreement of opinions alone gives the springs of public order a mild and easy force. Once this agreement is found, obedience anticipates the law, and the political spheres are subject to harmony, just like the celestial'. English translation from Baker, *Inventing the French Revolution*, p.197. The passage is originally quoted by Dominique Joseph Garat, *Mémoires historiques sur le XVIIIe siècle, sur les principaux personnages de la Révolution française, ainsi que sur la vie et les écrits de M. Suard*, T. 2, 2nd edn. (Paris: 1829), p. 94.

[791] See Darlow, *Dissonance in the Republic of Letters*.

combination of political crisis and the pressure of public opinion. The broader public closely followed events at the Estates General through reading and writing a flood of pamphlets.[792] It is striking to note that musical harmony was frequently invoked in these discussions, especially in controversies about the union of the three orders, and the rights that corresponded to each. I shall argue here that the musical chord offered a model for the harmonious interplay of the three estates, which was endorsed by people from different factions for different reasons. Given that the musical chord was defined in musical terms as the union of three notes, the new political regime in revolutionary times was portrayed as the union of the three estates—the nobility, the clergy, and the Third Estate—as a harmonious whole.

To the king, nobility, clergy, and Third Estate, the call for harmony meant different things. Nevertheless, harmony was invoked by all of these political actors. In correspondence following the first general assembly of the Estates General on 5 May 1789, the rhetoric of 'harmony' was strategic to the intricate diplomacy between the estates and the king. The clergy endorsed on 7 May the Third Estate's call for the verification of powers of the deputies, and expressed a 'desire' for harmony between the orders: 'Les Membres du Clergé assemblés ont chargé leurs Députés de témoigner à MM. de l'Ordre du Tiers-Etat, le zèle et l'attachement dont ils sont pénétrés pour eux, et leur désir de concourrir à la plus parfaite harmonie entre les Ordres'.[793] Six days later, the clergy reaffirmed their desire of 'la plus parfait harmonie', and nominated eight commissioners to represent their order alongside the nobility and the Third Estate.[794] Subsequently, Archbishop of Arles expressed 'le desir qu'il a de contribuer au rétablissement de l'harmonie entre les Ordres, et la résolution de ne séparer jamais ses intérêts de ceux de la Nation'. His desire of 'perfect harmony' was manifested in the clergy's agreement to pay taxes 'dans la même proportion et de la même manière que tous les autres Citoyens'.[795]

Reaching agreement between the three estates became increasingly more complex. In his letter of 28 May 1789, the king expressed his awareness of the current difficulties faced by

[792] Margerison, *Pamphlets and Public Opinion*.

[793] 'The assembled Members of the Clergy tasked their Deputies with assuring the honourable Members of the Third Estate of their zeal and attachment to them, as well as their desire to strive towards the most perfect harmony between the Orders'. 'Délibération du Clerge. 7 Mai 1789', *Procès-verbal des conférences sur la vérification des pouvoirs, tenues par MM. les commissaires du clerge, de la noblesse & des communes, tant en la salle du Comite des Etats-Generaux, qu'en presence de MM. les commissaires du roi, conformement au desir de sa majeste* (Paris: 1789).

[794] 'The most perferct harmony'. 'Arrêté des Membres composant la Chambre du Clergé. 13 Mai 1789', *Procès-verbal des conferences.*

[795] The desire he had to contribute to the restoration of the harmony between the Orders, and his resolution never to separate his interests from those of the Nation'; 'In equal proportion and in the same manner as all other Citizens'. '3 Mai 1789', *Procès-verbal des conferences.*

the assembly regarding the verification of powers, despite the efforts of the commissioners chosen by each order. He asked the commissioners to resume the meetings, 'en présence de mon garde-des-sceaux et des commissaires que je réunirai à lui, afin d'être informé plus particulièrement des ouvertures de conciliation qui seront faites, et de pouvoir contribuer directement à une harmonie si desirable et si instante'.[796] Thus, the session of 30 May opened with the the aim to 'conférer sur les moyens de conciliation, relatifs, tant a la vérification des pouvoirs qu'au maintien de l'harmonie et de la concorde'.[797] The nobility, which repeatedly appealed to history to legitimate its claims, invoked the pursuit of harmony in nostalgic terms, namely as a desire to recover a lost bond between the king and the chambers, 'ce qui pouvoit être, entre les Chambres et le Roi, une confiance et une harmonie qu'il seroit à desirer de voir renaître'.[798] Despite these different purposes, the shared appeal to harmony expressed an agreement to participate in the convocation of the General Estates, and the notion that all factions were important parts of the political whole.

The pursuit of agreement between the three estates in this early stage of the French Revolution was quite literally represented through the musical chord. The circulation of many engravings illustrating the three estates as three men playing music together (see e.g. Figures 17–19) reveals the extent to which music was a model for socio-political agreement. This was true in two senses. On the one hand, mutual performance expressed the capacity of music to bring people into 'concert'. Thus, it was an effective means of communication and an example of disciplined congregation. On the other hand, the musical chord epitomised cohesion between three dissimilar elements, alluding to the double sense of 'accord' previously mentioned. Each of the three elements was different from one another, yet each was fundamental to the constitution of a harmonious ('perfect') social order—in that when they performed together, they formed a 'perfect' chord. The engravings in Figures 17 and 18 represented an almost identical scene. Yet, one was labelled an 'accord' and the other a 'concert', thus representing two concepts by which music provided a referent of socio-political agreement.

In these engravings, the three estates are clearly identifiable by the apparel of the performers, including the three different hats, the clergyman's gown, and the nobleman's wig,

[796] 'In the presence of the Keeper of the Seals, and the commissioners I will send alongside him, so that I be informed more precisely of the proposals of conciliation that will be put forward, & be able directly to contribute to a harmony so desirable and so pressing' 'Lettre du Roi. 28 Mai 1789'. *Procès-verbal des conferences.*

[797] 'To confer about the means of conciliation, pertaining to the *vérification des pouvoirs* as well as to the maintenance of harmony & accord'. '30 Mai 1789', *Procès-verbal des conferences.*

[798] '[To reestablish] between the Houses & the King, what had been a confidence & a harmony that one would wish to see reborn'. '30 Mai 1789', *Procès-verbal des conferences.*

shoes, and sword. The different kinds of instrument also suggest the different status of the three performers: the serpent, for instance, was an instrument typically associated with Church music. While the three performers play, they look at one other in what appears to be engaged communication. Figure 18 depicts the scene as a concert and adds: ‘L'essentielle est d'accorder nos instruments pour que l'harmonie produise son effet’. ‘Accorder’, to tune, epitomised the act of reaching consensus. Moreover, by referring to tuning, the scene makes it clear that the ‘concert’ resulted not from each player simply creating random sounds, but from the disciplined production of sound. Harmony ‘produced its effects’ as the result of tempered instruments and systematised sound. Thus, the ‘accord’ encapsulated notions of agreement, discipline, and training. Furthermore, the political consensus relied on musical harmony being understood as both a powerful means for affecting individuals and generating collective action, and a scientific and disciplined natural and moral order, as I have discussed in previous chapters.

Figure 17. 'Bon, nous voila d'accord'.[799] Anon. Engraving (1789). Bibliothèque National de France, département Estampes et photographie, RESERVE FOL-QB-201 (117).

Figure 18. 'Le Concert: l'Essentielle est d'accorder nos instruments pour que l'harmonie produise son effet'.[800] Anon. Engraving (1789). Bibliothèque National de France, département Estampes et photographie, RESERVE QB-370 (10)-FT 4.

799 'Good, now we are in agreement/in tune'.
800 'The essential thing is to tune our instruments in such a way that harmony will produce its effect'.

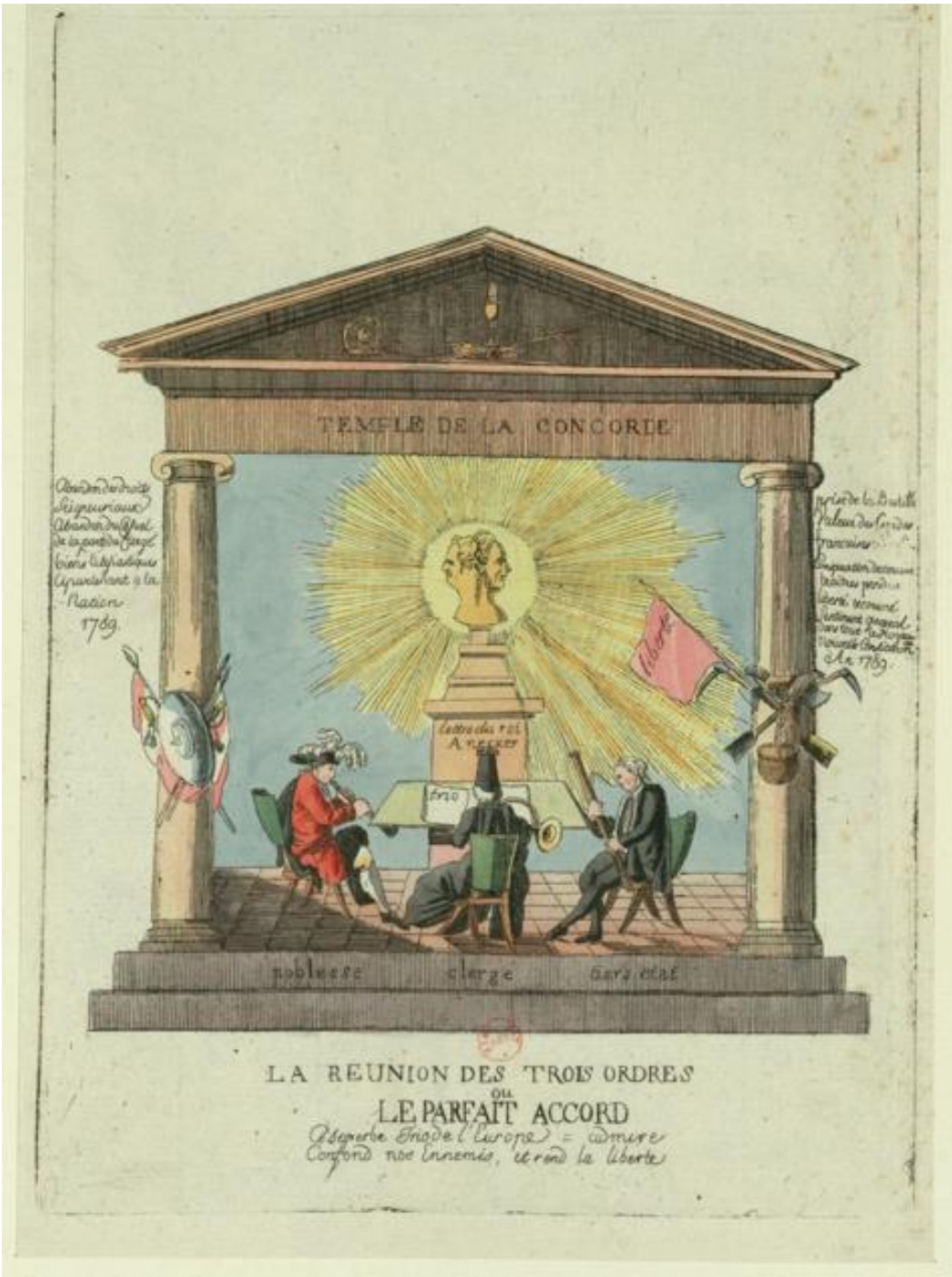

Figure 19. 'La reunion des trois ordres ou Le parfait accord: Ce superbe Trio de l'Europe = admire Confond nos Ennemis, et rend la liberté'[801]. Anon. Engraving (1789). Bibliothèque National de France, département Estampes et photographie, RESERVE QB-370 (12)-FT 4.

[801] 'The reunion of the three orders or The perfect accord: This superb Trio of Europe = admire/ Confounds our Enemies, and grants freedom'.

Relying on the national defense of musical harmony—as discussed in Chapter 2—the musical chord framed consensus and the tripartite social order as a national achievement, worthy of national pride. This national connotation is evident in Figure 19, which represents a celebration of the reunion of the three estates in the performance of a wind trio, their gathering embodying a *parfait accord*. The performance takes place in a 'temple de la concorde', whose three sides represent each of the three estates with their symbols. The word 'trio' written on the score emphasises the fact that this performance of national pride was realised by means of the co-operation of three elements: the trio played by the three estates was assuring a new public order, performed by the enjoyable 'accord' of three different elements, drawing upon the great divine, cosmic, and geometrical symbolism that was historically attributed to triads. The epigraph proclaimed that this trio aimed to convey 'freedom' as well as to generate admiration and create confusion among other European nations. This temple of harmony, then, was deemed a national accomplishment; it was the emblem of Frenchness, with its prized formula of harmony. Yet this harmonious trio was led and orchestrated by a double-faced authority. At the centre of the temple, the double-faced bust (possibly that of Louis XVI and Jacques Necker) was circled by the sunrays that had identified the king. Necker, a former Swiss banker appointed by the king to administrate royal finances between 1777 and 1781, was recalled in the midst of the financial crisis in August 1788 as a minister of finance. At a prominent place in the illustrated temple, the double-faced bust that depicts both Necker and the king performs as a conductor, escort, or guarantor of the musical trio—I shall return to this figure below.

National glory and revolutionary ideals thus coexisted. On both walls of the temple, the achievements of the Revolution are listed: the right column announces the abolition of feudal and ecclesiastical privileges, while the left column lists revolutionary milestones such as the storming of the Bastille, the new constitution, and the 'sentiment general' in all the kingdom. The sensibility towards music and national sympathy were closely intertwined in revolutionary emotions. As mentioned above, music's capacity to link the individual to the collective, achieved through the stress on sensibility as both a physical law and motor of collective action, was considered a powerful political force. Therefore, by placing music at the centre of a temple that honoured revolutionary conquests, this engraving recalls earlier claims—such as those articulated by Gresset—that music was indeed a powerful political force and that politics relied upon managing sensibilities. As with Gresset's 'charmante societé', the format of engaging in political activity represented in these engravings appealed to a socio-political order which performed and delivered sensibility in a way similar to music. Tasteful politics were the subject

of an anonymous tragedy from 1790, which claimed that music was a unique political resource which 'affected' and exerted power over people while also keeping them 'agréablement fasciné'.[802] Thus, the fact that the Three Estates performed as a *parfait accord* not only referred to the rational, national, and symbolic associations of harmonic chords, but also to a socio-political order which delivered the same tasteful and sociable pleasures associated with musical performance.

4.1 Back to harmonic proportions

Although the three orders were performing together in the sonorous General Estates, the degrees and forms of participation of each of the orders were widely disputed. In this sense, amidst the debates over the Three Estates, musical harmony was often invoked as a well-known system of mathematical proportions. Musical harmony offered a model of a society geometrically organised in times when issues of proportionality and mathematical arrangements cut across political debate, being manifested in debates over the relationship between the estates and notions of equality. One of the questions that resonated most loudly in the first years of the Revolution was that of proportioned representation of the Third Estate. For one 'gentilhomme', the number of representatives of the Third Estate was 'la grande question qui agite les esprits françois et qui paroît diviser les grands et le peuple'. This author advocated for 'la plus entière harmonie des trois ordres', supported by the Crown: 'Autorité royale dont le plus bel attribut et le droit inconciliable sont de maintenir sur tout l'accord et l'harmonie de l'ordre social'.[803] Necker promised to double the representation of the Third Estate, yet he still counted one vote for each order. The Third Estate demanded voting by head rather than by orders, which meant gaining a representation equal to that of the other two estates combined. In this way, the Third Estate sought 'just proportion' between their numerical majority and their representatives. Rabaut-Saint Etienne denounced the unequal proportion of the representatives in the General Estates and declared: 'Comme on ne peut assembler en un

[802] Anon., *Les quatre préjugés du ministre, ou la France perdu; tragedie welche, en six actes, et en prose; attendu que les crimes des enfers ne peuvent se peindre en vers, qui sont le langage des dieux* (Paris: 1790), p.77.

[803] 'The big question that is stirring the French minds [*esprits*] & appears to divide the mighty & the people'; 'The most perfect harmony between the three orders'; 'Royal authority, whose highest attribute & indisputable right are those of maintaining the accord & harmony of social order over anything else'. Anon. ('Un gentilhomme'), *Apperçu rapide et impartial d'un gentilhomme: sur la grande question qui agite les esprits françois & et qui paroît diviser les grands & le peuple, le clergé & la noblesse réunis d'une part, & le Tiers-Etat de l'autre, au sujet du nombre de représentans que celui-ci doit fournir aux Etats-généraux* (Paris: 1788).

lieu tant de millions d'hommes, le nombre des Représentans qu'ils enverroient, devroit être très-exactement en proportion des intérêts exprimés par les volontés'.[804]

Mathematical proportionality was not only an issue of elections and the Estates, but was at the heart of legal, social, and economic disputes around the concept of equality. There was a common concern with the inequality 'de facto', that is to say, the existence of ingrained differences such as physical features, talents, and capacities. Accordingly, two types of models for equality were raised, namely 'geometric' and 'arithmetic' proportion. In her study on the notion of 'equality' in the Revolution, Mona Ozouf has argued that debates about equality and the abolition of privileges combined concerns for homogeneity as well as proportionality. Mirabeau declared that the arithmetic equality in the calculation of taxes was inequitable, since one had to consider the 'contributive capacity' of each taxpayer to achieve a proportioned distribution of taxes.[805] Similarly, the clergy advocated the proportioned payment of taxes. The equality of rights was also portrayed in geometrical terms, as Sièyes expressed it: 'I envision the law as standing at the centre of an immense globe. All citizens, without exception, stand at the same distance from it on the circumference and occupy equal areas'.[806] Therefore, the disputes over what precisely equality entailed were expressed in relation to different mathematical arrangements and models.

Given that equality was an issue of mathematical proportions, references to harmony, which epitomised the science of proportions, should not be surprising. It was through establishing a regime of mathematical proportions that harmony offered a new socio-political future. In 1789, an essay entitled *L'esprit de Grotius, ou du gouvernement harmonique* was published alongside a treatise on the history and structure of municipalities, which likely appeared in relation to the projects to reform municipalities in 1789.[807] This essay discussed the notion of 'equality' using different historical examples. The author claimed that there were two natural regimes in societies: 'L'un *d'égalité,* comme entre frères, amis, associés; l'autre

[804] 'Since it is impossible to gather so many millions of men in one place, the number of Representatives they would send should be exactly proportional to the interests expressed by the individual wills'. Rabaut-Saint Etienne, *Question de droit public*, p13.

[805] Mona Ozouf, 'Equality', in *A Critical Dictionary of the French Revolution*, eds. Françoise Furet and Mona Ozouf, trans. Arthur Goldhammer (Cambridge, MA: The Belknap Press, 1989), p.675.

[806] Quoted in Ozouf, 'Equality', p.678.

[807] Favier, 'L'esprit de Grotius, ou du gouvernement harmonique', in *Recherches historiques sur les municipalités: pour servir à éclairer sur leurs droits, leur jurisdiction et leur organisation; contenant 1º. Leur état et celui de toutes les Gaules, avant l'invasion des peuples du nord. 2º. Leur administration, depuis cette invasion. 3º. Leur situation sous la race Carlovingienne. 4º. Leur position au commencement de la race regnante. 6º.* [sic] *Leur état par l'effet de la police des communes. Suivies de l'esprit de Grotius, ou du gouvernement harmonique* (Paris: 1789). The BNF attributes the authorship to Favier, a 'commissaire de roulage'.

d'inégalité, comme entre les pères et les enfans, les tuteurs et les pupilles, les maîtres et les valets, ceux qui commandent et ceux qui doivent obéir'.[808] These two regimes led to two kinds of justice based on arithmetic or geometric proportion, which he compared: 'La proportion géométrique a des rapports *semblables*; la proportion arithmétique en a d'*égaux*'.[809] After describing and discarding different political regimes, such as the 'Gouvernement Populaire', 'Gouvernement Aristocratique ou de plusieurs', and different types of 'Gouvernement Monarchique', the author proposed a new regime, one governed by 'harmonic proportions' and drawing upon the 'proportion harmonique' suggested by Jean Bodin in the sixteenth century and discussed by Hugo Grotius.[810] Unlike arithmetical and geometrical proportions which produced relations among 'equals' or 'similars', harmonic proportions were a combination of both. These 'harmonic' relations were associations of reciprocity, such as those forged between merchants and buyers, or 'lorsqu'un riche paresseux se trouve associé avec un pauvre actif, parce qu'alors il y a *égalité* et *similitude* à-la-fois, ce qui produit le rapport harmonique'.[811] The author's new harmonic regime was based on the mathematical ratios of musical chords. Drawing on Plato, the author claimed that harmony offered a model of mathematical proportion as well as combining heterogeneous elements. Yet this combination required the monarchy to function as a 'necessary centre' where all discrepancies were to meet: 'Ainsi la proportion harmonique unit les extrêmes par des moyens termes qui s'accordent avec l'un et avec l'autre, et forme des rapports à l'aide de la discordance elle-même'.[812] The harmonic cohesion among these conflicting elements was represented by four musical numbers, which corresponded to the ratios between proportions in musical harmony:

> L'harmonie musicale la plus parfaite est celle de ces quatre nombres,
>
> 4. 6. 8. 12.

[808] 'A regime of equality, as for instance between brothers, friends, or associates; another of inequality, as between fathers and children, guardians and wards, masters and servants, those who rule and those who must obey'. Favier, 'L'esprit de Grotius', p123.

[809] 'Geometric proportion involves relations of *similarity*; arithmetic proportion involves relations of *equality*'. Favier, 'L'esprit de Grotius', p.149.

[810] Jean Bodin, *Les six livres de la République. Livre VI.* (Paris: 1576). For references of this theory by Hugo Grotius, see his *Le droit de la guerre et de la paix: Avec les notes de l'auteur même, qui n'avoient point encore paru en françois; & de nouvelles notes du traducteur*, T. 2, trans. Jean Barbeyrac (Amsterdam: 1724).

[811] 'When an idle rich person forms an association with an industrious poor person, because then there is both *equality* and *similarity* at the same time, which creates a harmonic relation'. Favier, 'L'esprit de Grotius', p.151.

[812] 'Harmonic proportion thus unites two extremes using medium terms that are in accordance with one as well as the other, and forms relations with the aid of discordance itself'. Favier, 'L'esprit de Grotius', p.151.

> Où les deux quintes sont en même raison avec les deux extrêmes, les octaves du premier au tiers, et du second au quart, et la raison du second au troisième une quarte, ce qui forme la parfaite consonance.
>
> La forme de gouvernement ainsi modelée, entremêlerait doucement la royauté avec la noblesse et la roture, la richesse et la pauvreté.[813]

The author's 'harmonic government' depicted an ideal society in which each estate would be remunerated in proportion to their individual states of need. Most interestingly for this dissertation, his essay reveals the extent to which musical harmony was interwoven into the social fabric. The author's utopian social order was modelled according to the proportions of musical harmony. The given numbers 4, 6, 8, and 12 have the following proportions among them: 2:3, which corresponds to the musical fifth (between 4 and 6, and between 8 and 12); 1:2, which corresponds to the octave (between the 4 and 8, and 6 and 12); and 3:4, the musical fourth (between 6 and 8). These musical intervals—the octave, fifth, and fourth—defined consonances in the theory of musical harmony. The same four numbers had been used by Jean Bodin in 1576, who saw their combination as producing 'une harmonie melodieuse', a model of justice whose intrinsic beauty was rooted in the 'law of God'.[814] The fact that Bodin's neo-Platonic harmonic government was rehearsed during the effervescence of the French Revolution is highly significant. In the same way that Rameau had elevated the status of musical harmony to a superior and tasteful science and national achievement, to the author of *L'esprit de Grotius, ou du gouvernement harmonique* in 1789, harmonic ratios supplied the key to an ideal social order which was intrinsically natural, beautiful, and just. Musical harmony operated as a law that regulated, arranged, and balanced the interplay between different social groups. Essentially, the author suggested that all social relations were already fixed according to a law of proportions, that is, they were built into the architecture and harmony of the cosmos itself. Therefore, musical harmony supplied a cosmic and mathematical archetype for social order, which prescribed the specific needs, duties, and rights of each social group. This new 'harmonic government' required both reciprocity and distinction between the three social groups that together formed French society. Within the specific context of the debate over the

[813] 'The most perfect musical harmony is that of the following four numbers: 4. 6. 8. 12. In which the two fifths have the same ratio as the two extremes [ie. 3:2], the octaves have the same ratio as that of the first and the third, as well as that of the second and the fourth [ie. 2:1], and the ratio of the second and the third [6 and 8] is a fourth [ie. 4:3], which forms the perfect consonance. A form of government thus modelled would gently weave together Royalty with aristocracy and commonalty, wealth with poverty'. Favier, 'L'esprit de Grotius', p.154.

[814] Bodin, *Les six livres de la Republique*, p.752.

three estates, this mathematical archetype legitimised a notion of equality understood as proportion, in which each estate had its own specific place and purpose—just like Rameau's perfect musical chord.

5. The hand behind the chord

Yet who was responsible for bringing the divergent notes together and ensuring harmony? Whose hands were behind the making of the social chord? In the salon, as I previously discussed, harmony was guaranteed by the *salonnière*. Madame de Lespinasse was depicted as a skilful performer in the creation of social harmony. Her 'habile main' was able to manage divergent opinions like a musician playing the strings of an instrument. As discussed in the previous chapter, learning to play music was widely understood as a form of moderation and discipline, in which acquiring skill was permitted insofar as it was accompanied by taste and morals. The *salonnière*, in this respect, ensured tasteful and disciplined order within the salon. Furthermore, the *salonnière* embodied the values of taste, femininity, and softness attributed to musical performers. Once transferred to the political sphere, however, the role enacted by Lespinasse had no distinct counterpart. Who should be playing the social chord in the broader socio-political realm was rather unclear.

At mid-century, the Physiocratic Marquis de Mirabeau attributed the role of agent and guardian of social harmony to a rationally organised government. Just like Madame Lespinasse, for Mirabeau the government resembled a musical performer, achieving harmony with a skilful and soft hand. The instrument, this time, was not salon conversation, but society as a whole; rather than divergent opinions, Mirabeau's government harmonised social differences, specifically different professions and wages:

> Il est naturel, il est utile même que chacun estime ici-bas sa profession, plus même qu'elle ne vaut. Au fond les touches d'un clavessin contribuent toutes également à l'harmonie, quoique l'une n'ait que des foibles sons, tandis que d'autres en ont des forts. Le Gouvernement est le maître qui touche l'instrument. Si la main est habile, tout concourt au jeu plein et merveilleux; si au contraire elle est dure et vacillante, rien ne va, le clavier souffre, et l'instrument est bientôt discord.
>
> Cependant de même qu'indépendamment de toutes dispositions naturelles, il est des principes d'harmonie sans lesquels ont n'est jamais sûr de ne rien faire

> contre les régles de l'art, il est aussi des principes de gouvernement simples, mais décisifs, auxquels il faut réduire toute la marche politique, sans quoi l'on ne va qu'au hazard et dans le risque continuel de s'égarer. La base de ses principes est de fixer d'abord le degré d'estime qu'on doit à chaque profession et même à chacun des soins et des arts qui les partagent.[815]

Published in 1756, Mirabeau's comment followed the discussions around the *Querelle des Bouffons,* in which musical harmony had been defended as the epitome of a rational and national achievement and discovery. In referring to musical harmony, therefore, Mirabeau meant that his new social order was based on rationality and 'simple principles' that yielded an agreeable result. Governing, then, was both a rational and a tasteful art, just as Gresset had proposed. With the advent of the French Revolution, musical harmony perpetuated this ideal of a rationalised and nationalised public order which was intrinsically also tasteful and beautiful. Yet, as the Revolution moved on, the source of, or main 'hand' behind, musical harmony in the new political landscape remained unclear.

The wide call for musical harmony across different political groups was possible precisely because of this indeterminacy as to harmony's agent or maker. While most references to harmony associated it with ideas of the divine, cosmic, or natural order, there was no agreement over which figure, if any, could produce harmony in public affairs. During the revolutionary years, musical harmony was a fruitful model at times of optimism and reform. When Jacques Necker was called in the midst of the financial crisis in 1788, as previously mentioned, he represented a new possibility of reform and 'healing' of the public order. In this context, he personified the union of the three estates and ensured social harmony.[816] Yet the enthusiasm that welcomed Necker after Louis XVI called him to resume his position after the

[815] 'It is natural, useful even, for every man here on earth to hold his occupation in high esteem, and place it higher even than its real worth. All things considered, every key in a harpsichord contributes equally to its harmony, even though some only produce weak sounds when others produce strong ones. The Government is the master who strikes the keyboard. If its hand is a skilful one, everything concurs to create a full and magnificent playing; if on the contrary it is hard & unsteady, everything is flawed, the keyboard suffers, & soon the instrument will be discordant.
However, just as there are principles of harmony that are independent of any natural disposition, principles without which one is never sure not to go against the rules of the art, in the same way there are simple, but determining principles of government, to which the whole political progress of a republic must be reduced, for fear of progressing aimlessly & continuously running the risk of erring. The basis of these principles is to start with setting the degree of esteem in which each occupation should be held, & even that of each task & art that share them'. Victor Riqueti (marquis de) Mirabeau, *L'ami des hommes, ou Traité de la population*, vol. 1 (Avignon: 1756), p.136. I wish to thanks Maria Semi for kindly showing me this passage.

[816] See Figure 19 above.

storm of the Bastille died down soon after.[817] The fate of harmony in the years that followed was more complex.

Harmony was often associated with the figure of the king. However, the recourse to the king was far from homogeneous. Whereas the king was sometimes portrayed as a guardian of social harmony, he was on other occasions an active agent in producing it. In an explicitly counter-revolutionary call, the anonymous author of the *Catéchisme nouveau et raisonné sur la constitution nouvelle de la France* praised the monarchy in 1791 and defended the principle of subordination: 'Quand la subordination règne dans un état, la paix l'y accompagne'. Here, harmony was understood as hierarchical order: God ruled the king, who in turn ruled the people. The resultant peace legitimised the efficacy of hierarchy as a mode of government and social structure.[818]

Yet the king's harmonising role was also mentioned by moderates. Amidst the agitations of 1788, the role of the king was often considered to be one of 'maintaining' harmony. In this context, harmony was not so much a proposal to revert to the previous regime, or to stop the process of reform, but a means of establishing peace. In this respect, the king was often praised for summoning the Estates General, a measure which promised change while also keeping the peace. In the numerous 'odes' published in favour of the Estates General, harmony was often associated not just with the king, but also with reform.[819] An ode composed by the writer and journalist Pierre-Louis Ginguené praised the king and demanded equal payment of taxes, while at the same time announcing the beginning of a 'new era'.[820] In many of these laudatory poems, the new harmonic order resulted from a marriage between the king and the law, or the king and Necker, and brought peace to current discord. Therefore, the king did not represent the absence of change, but rather mobilised reform in a peaceful way.

Underpinned by the king, harmony thus also preserved the revolutionary project. Le Chapelier, as president of the National Constituent Assembly, addressed a letter to the king in which he celebrated the abolition of privilege, and called the king a 'Restaurateur de la liberté françoise' who embodied 'la touchante promesse de cette constante et amicale harmonie, dont jusqu'à présent peu de Rois avoient assuré leurs Sujets, et dont VOTRE MAJESTÉ a senti que

[817] Marcel Gauchet, 'Necker', in *A Critical Dictionary*, eds. Furet and Ozouf, 287-98, at p.288.
[818] 'When subordination reigns in a state, it is accompanied by peace'. Anon. ('Auteur du Naviget Anticyras'), *Catéchisme nouveau et raisonné sur la constitution nouvelle de la France* (Brussels: 1791).
[819] See e.g. Baudouin l'aîné, *Ode à la France, sur les Etats-généraux* (Paris: 1789).
[820] Pierre-Louis Guinguené, *Ode sur les États generaux* (Paris: 1789).

les François étoient dignes'.[821] In this celebration of revolutionary conquests, harmony pertained to a new future, facilitated by the king. Yet it was a non-despotic king. When attributing the making of harmony to the king, many authors appealed to the figure of the 'Roi bienfaisant', often represented as the head of a composite body or the father of a family, who wished the best for 'his' people.[822] An ode signed by one M. Lebrut in 1789 attributed the abolition of discord to the 'bienfait de Louis', and invoked the special powers of harmony to subordinate the 'sons' of the nation, in a similar way as previously posed by Gresset:

> D'une heureuse harmonie admirable pouvoir!
> Du peuple et de son chef concorde salutaire,
> Qui soumet par l'amour, plus que par le devoir,
> Des fils sensibles à leur père.[823]

The call for the king to act as the purveyor of harmony coincided with the spread of metaphors of the king as the 'chief' and 'father' of the nation. Although both stressed hierarchies, these two associations had very different implications. Portraying the king as 'chief' implied that the people were subjects, whereas portraying him as a father meant that the nation was a family, in which different people were siblings, or more specifically brothers. Casting the king as a father figure satisfied the increasing call for 'fraternity' during the first years of the Republique.

Nevertheless, harmony was not only to reign at the hands of a king. It was also invoked by those desiring a more radical course for the revolution. In November 1789, the revolutionary *Journal universel, ou révolutions des royaumes*, by Pierre-Jean Audouin, exhorted people not to give up arms. The fight against despotism and the 'monstre de l'Aristocratie' justified the perpetuation of violence. Revolutionaries were 'soldats' of 'la Patrie', and their role was to defend it so as to secure harmony: 'Employons tous nos soins à assurer le règne de la concorde, età maintenir, parmi les habitans de cette immense Cité, cette belle harmonie sans laquelle il ne peut y avoir ni sûreté, ni tranquillité, ni liberté'.[824] Harmony was thus a precondition of

[821] 'Restorer of the French liberty'; 'The touching promise of this steady and amicable harmony, which few Kings until now had guaranteed their subjects, & of which YOUR MAJESTY has deemed the French people to be worthy'. Isaac-René-Guy Le Chapelier, *Discours de M. le president au Roi du 13 aout 1789* (Paris: 1789).

[822] See Lynn Hunt, *Family Romance of the French Revolution* (London: Routledge, 1992), pp.17-52; De Baecque, *The Body Politic*; Paolo Grossi, *Pierre-Louis Ginguené, historien de la littérature italienne* (New York: Peter Lang, 2006).

[823] 'O admirable power of a favourable harmony/ Salutary concord of a people & its head,/ It subjects mindful sons to their fathers/ Through love, more than duty'. Labrut, *Ma motion, ode aux États-généraux* (Paris: 1789).

[824] 'Let us put all our efforts into insuring the reign of concord, & maintaining amongst the inhabitants of this immense City the beautiful harmony without which there can be neither security, nor tranquillity, nor liberty'. Pierre-Jean Audouin, *Journal universel, ou révolutions des royaumes. Par une société de patriotes*, 24 Novembre 1789 (Paris: 1789), p.12.

freedom, and had to be actively fought. These guardians of 'la Patrie' were also praised by the abbé Claude Fauchet, the radical bishop who founded the *Cercle Social*. His conception of fighting for patriotic ideals was a continuation of the Christian ideal of sacrifice and 'abandonment' of oneself in favour of a greater or more general good. This act of abandonment resulted in the immersion of oneself 'dans une pleine harmonie avec l'amour des frères'.[825] Furthermore, for Fauchet, the *accord parfait* was an agreement between opinion and legislation. For most revolutionary priests, harmony was guaranteed by law and, increasingly, by the notion of the 'Patrie' as a family of brothers.[826]

6. 'Liberté, égalité, harmonie'

Notwithstanding this early advocation of 'fraternity' by revolutionary priests, historians have documented that the loudest call for fraternity took place later in the Revolution, peaking during the Terror. It was the last of the three concepts composing the emblematic triad 'liberté, égalité et fraternité' to make an appearance in public discourse.[827] According to Mona Ozouf, fraternity was the least used and most obscure term of the three, and before the constitution made this triad of terms official in 1848, it was sometimes replaced by other triads or guiding concepts.[828] Although Ozouf claims that there were scarce references to fraternity in legislative texts during the early revolutionary years, she points out that the concept spread widely in other media, such as revolutionary speeches or religious sermons.[829] This early period, in which fraternity was more or less loosely used, coincided with the period in which ideas of harmony came to be more widespread. A quantitative comparison of both concepts is beyond the scope of this research. However, I shall argue that harmony was mentioned more often than fraternity, or at least equally often, during the first revolutionary years. Harmony was powerful irrespective of religious belief, and was more closely tied to the Enlightenment project than fraternity, given that harmony was considered both a science and the epitome of French genius.

825 'In a complete harmony with the love for brothers'. Claude Fauchet, *Troisième discours sur la liberté françoise, prononcé le dimanche 27 septembre 1789 dans l'église de Notre-Dame* (Paris: 1789), p.27.
826 Fauchet, *Troisième discours*, p.16.
827 See e.g. Alphonse Aulard, 'La Devise: Liberté, Égalité, Fraternité', in *Études Et Leçons Sur La Révolution Française* (1910; Cambridge: Cambridge University Press, 2011), 1–31; Michel Borgetto, *La Devise 'Liberté, Egalité, Fraternité*' (Paris: Presses Universitaires de France, 1997).
828 Mona Ozouf, 'Fraternity', in *A Critical Dictionary*, eds. Furet and Ozouf, 694-703, at pp.694-695; Mona Ozouf, 'La Révolution française et l'idée de fraternité', in *L'Homme régéneré: Essais sur la Révolution française* (Paris: Gallimard, 1989), 158-182.
829 Ozouf, 'Fraternity', p.696.

Unlike fraternity, harmony boasted strong ties with Enlightenment rationality throughout the century.[830]

Indeed, one pamphlet on theatre from 1790, entitled *Influence de la Révolution sur le théâtre français*, did not mention fraternity, but instead proclaimed a triad of liberty, equality, and harmony:

> Cette même révolution, quoique naissante et toujours active, présente à l'oeil de l'observateur trois résultats futurs, mais incontestables, la liberté, l'égalité, l'harmonie; autrement l'empire françois est détruit. Ces trois résultats donnés, la génération présente en jouira, parce qu'ils seront son ouvrage, et parce que d'ailleurs les impressions du despotisme et des vexations ministérielles ne s'effaceront jamais de sa mémoire.[831]

The triad 'liberté, égalité, harmonie' was also used as the heading of a poem celebrating the anniversary of the king's death at the end of the 1790s.[832] Considering that many revolutionary odes and poems were intended to be sung, the mention of harmony in them could signal the importance of music and singing as crucial revolutionary practices.[833] Yet the coupling of harmony with concepts such as 'liberté' and 'égalité' reveals something else: before fraternity was settled as the third piece of the national emblem, harmony occupied an equally relevant symbolical position.

Harmony and fraternity had much in common. Like harmony, fraternity favoured union and social cohesion. Unlike liberty and equality, both were not rights but rather a moral obligation or goal.[834] Moreover, they stressed the bonds between French people and forged an ideal of 'Frenchness'. In this sense, both harmony and fraternity embodied a promised future, and belong to utopian constructions to a greater degree than the other two concepts of the triad, probably related to their mutually close relationship to religion or cosmic order. Last but not least, both were the result of a translation of familial ideals into the public order. Whereas

830 Contrasting the concepts of fraternity, liberty, and equality Ozouf claims that fraternity was the 'least deeply rooted in Enlightenment thought'. Ozouf, 'Fraternity', p.694.

831 'This revolution, albeit nascent & still ongoing, displays three future but indisputable outcomes before the eye of the observer: liberty, equality, harmony; otherwise the French empire is destroyed. Once these three outcomes are assured, the current generation will enjoy them, because they will be its own work, & also because the traces of despotism & of ministerial humiliations never will disappear from its memory'. Anon., *Influence de la Révolution sur le théâtre français. Pétition à ce sujet adressée à la commune de Paris* (Paris: 1790), p.26.

832 Pipaud, *Liberté, égalité, harmonie. Couplets patriotiques, pour la fête républicaine du 2 pluviôse an 7, jour anniversaire de la mort du dernier roi des Français* (Paris: 1799).

833 See Mason, *Singing the French Revolution*.

834 Mona Ozouf pointed out this distintion with regard to fraternity. Ozouf, 'Fraternity', p.694.

fraternity explicitly extrapolated elements of brotherhood, harmony had long been considered a regulator of family life in the household, as mentioned above.

For these reasons, harmony and fraternity were often used in complementary ways. For instance, the new republic was often portrayed as a family in which harmony reigned. For Michel de Cubières-Palmézeaux—the Chevalier and writer who supported the Revolution, calling himself the 'Poète de la Révolution' in 1795—harmony resulted from a republic of equal citizens, like a family of brothers, precisely due to the absence of a king. Harmony could only be sustained by the union of brothers. Consequently, the Republic's main goal was a tasteful concord and union, orchestrated as 'naturally' as birds singing:

> Aimez-vous des oiseaux divers
> La touchante musique?
> Tout est d'accord dans leurs concerts,
> Voilà la République.[835]

Nevertheless, the political fate of harmony would not thrive like fraternity. Indeed, the decline of harmony as a political scope and premise correlated with the rise of fraternity. Fraternity's increase in popularity during the governance of Robespierre has been linked to disappointments with the idea of governance as contract, constructed by rational means.[836] Fraternity supposed that people were intrinsically united, and that union was not an objective to be constructed or achieved. Rather, it responded to a more emotional approach. For Marat, governing was no longer an act of moderation and negotiation of different points of views, but a consensual and collective expression of 'national will'.[837] Consequently, the public festivals conducted by Robespierre evoked mass emotion in an unprecedented way, and affirmed collective will over political conflict.[838] According to Mona Ozouf, by the nineteenth century:

> No longer did anyone believe that the rational calculation of interests or the spontaneous promptings of consciousness could bring about "harmony" among individuals or create "organization" or "association," to use a vocabulary that is simultaneously Saint-Simonian, Fourierist, and Comtist. Despite differences among these various doctrines, all agreed on the difficulty

835 'Does the touching music of various birds/ Please your ears?/ All is harmony [*tout est d'accord*] in their concerts,/ Such is the Republic'. Michel de Cubières-Palmézeaux, *Le calendrier républicain: poëme, lu à l'Assemblée publique du Lycée des arts, le 10 frimaire de l'an 3* (Paris: 1795-1796), p.55.
836 Barny, *Le triomphe du droit naturel*, p.115; Ozouf, 'Fraternity', pp.694, 699.
837 Rosenfeld, 'On Being Heard', p.332; For the ideal of consensus, see Furet, *Penser la Revolution française*.
838 See Ozouf, *La fête révolutionnaire*.

> of reconstructing society on the basis of principles that defined individuals in terms of particular spheres of interest—the principles of 1789.[839]

Faith in the possibility of agreement and the admission of diversity within versions of equality—the social 'accord' provided by harmony—increasingly declined. Fraternity, not harmony, marked a new epoch in which the desire was not agreement but unanimity. 'Choosing terror', Jacobins no longer aspired to reach consensus, but rather followed a pursuit of the 'general good', which might involve destroying all opposition, even if the opposition comes from friends and family.[840] Instead of harmonically integrating different voices, Jacobins aimed to rule out all dissent and disagreement.

The concept of harmony meant different things during the French Revolution. However, whether in endorsements or rejections of revolutionary ideals, musical harmony provided a model of agreement and proportionality based on the realisation of difference. At the heart of the recourse to harmony was the picture of a society compartmentalised into groups of individuals who were precisely defined 'in terms of particular spheres of interest', as expressed in the previous quote by Mona Ozouf. As such, harmony was a successful model for the orchestration of the three estates in a society in which each had a specific purpose, in the way that Plato had conceived his *Republic*. Harmony proved appealing for tempering and disciplining inequalities, but not for dissipating them. It failed to account for a regime in which equality was no longer understood as geometrical proportion, social order no longer supposed distinct spheres of function, and dissonance was no longer a fundamental element of the social chord. The 'accord' broke down.

Conclusion

This chapter has shown that musical harmony was appropriated as a model for envisaging a new public order in revolutionary times, drawing upon the view that music revealed a natural order and had powerful effects over macrocosm and microcosm, the physiological body, and the body politic. Given its cosmological origins, music possessed great powers to affect individual and collective bodies; no one could deny the experience of musical pleasure or the powerful effect that music exerted upon them. Consequently, music was a unique political

[839] Ozouf, 'Fraternity', p.699.
[840] Marisa Linton, *Choosing Terror: Virtue, Friendship, and Authenticity in the French Revolution* (Oxford: Oxford University Press, 2015).

resource. Music had the potential to forge powerful collective bonds among performers and listeners through the operations of sympathy. Furthermore, given that musical harmony mirrored the laws of the universe, a new public order modelled by musical harmony was legitimised by notions of cosmic, divine, and natural order.

Musical harmony, as articulated by Rameau and reinterpreted throughout the century, epitomised the emphasis on rational and geometrical systematisation during the Enlightenment. Rameau's 'accord parfait' was composed by three independent elements whose relation followed fixed mathematical proportions. Subsequently, the 'accord parfait' during the French Revolution represented the rational organisation of the three estates as well as the pursuit of agreement among them—both senses contained in the French word 'accord'. The debates over the three estates in 1789, therefore, were penetrated by notions of taste and its legitimisation through mathematical proportions and reason, as formulated in scientific research on music at the beginning of the century. Rameau's view of dissonance as a desirable element of musical harmony was interpreted in political terms during the 1780s as the acceptance and integration of dissent into a harmonious whole. At a time of profound diversity of opinion, harmony offered an archetype of discipline. Rameau's system of musical harmony showed a way of disciplining noise, both morally and aesthetically. Hence, this chapter has demonstrated that musical harmony was deemed a valid model for disciplining political dissent—or 'noise'—and the body politic as a whole. As such, harmony was a recurrent concept in the language of the early French Revolution, often coupled with notions of equality and liberty.

Harmony was invoked by royalists, clerics, moderates, and even radical Revolutionaries. Broad use of musical harmony in political writings and speeches corresponded with the semantic breadth of harmony and its symbolic status throughout the century, but it also corresponded with its indeterminacy: the question of who was responsible for making and safeguarding harmony—who played the social chord—was neither consistent, nor always specified. Musical harmony was rooted both in the Platonic republican model and the worldview of the harmony of the spheres, yet it was modelled on the principle of taste and mid-eighteenth century notions of French national character and sensibility. There could be a 'harmonic'—peaceful, rational, organised—path to revolution. This not only meant a nation-state in which nature, order, consensus, proportion, temperament, and cohesion would reign; it also meant delivering the same tasteful, moral and sociable pleasures that were associated with music. The new political regime modelled on harmony was, accordingly, a tasteful republic.

Yet musical harmony, I have argued, ultimately failed as a model for public order around the time of the rise of Robespierre and the Terror, when a call for unanimity superseded

the pursuit of a harmonious integration of dissent. The ‘accord’ was no longer feasible nor desirable. Rather than the geometrical proportion of the ‘perfect chord’, which represented a tripartite society with three different—but complementary—elements, the new concept of equality sounded more like a unison. In this new stress on homogeneous equality, fraternity became more appealing than harmony. By ruling out harmony, Jacobins cut out of music the last traces of courtly privileged taste, royal glory, court patronage, polite bodies, femininity, divinity, geometry, and, more broadly, tradition—all of which had been intertwined in the reception of Rameau’s musical harmony throughout the century.

Conclusion

Music, this dissertation has demonstrated, did not have a single, constant, or undisputed meaning in eighteenth-century France. Every chapter of this dissertation has sought to illustrate and shed new light on the expansion of French musical culture, which was rooted in the equally expanding culture of consumption, scientific practices, sociability, urban life, public opinion, and the new sensibility which historians have located in this period. Yet this expanded musical culture did not go unchallenged. This dissertation has shown that music, its status, and the status of its participants were all subjected to a continuous process of negotiation and legitimisation over the course of the century. To accomplish this, contemporaries laid claim to changing sources of knowledge and authority, including celestial order, nature, taste, science, national character, language, the passions, and the body, which cut across institutions and settings from the court and royal academies, to the market, the press, music lessons, and revolutionary politics. I have argued that music was a field of systematic knowledge and learning, as well as a source of knowledge about the natural world. As such, it was appropriated by men of letters, musical amateurs, and musicians who cultivated their 'savant' expertise in music. Yet music was also a material practice: music was experienced and signified through its visual and material embodiments in musical instruments as well as the physical bodies of performers. For a wide range of social actors, music was a platform for self-fashioning individual identity, as well as to pursuing communal projects. Therefore, music became a national and political concern in mid-century debates over French national character, and during the French Revolution to portray a new ideal body politic.

Intertwining knowledge, material practices, and the body politic, I have shown that music was deeply embedded in French culture, and was woven into the fabric of social practices and relationships. Consequently, this dissertation has drawn upon an interdisciplinary methodology, combining cultural history with the history of science, intellectual history, history of music, the history of the emotions and the body, and material and visual culture. The power of music to generate social and political projects is best illustrated by the uses of musical harmony throughout the century. This dissertation has presented a narrative of how musical harmony was conceived and how it operated in French culture across the century. Drawing upon classical models and the paradigm of the harmony of the spheres, musical harmony

epitomised the scientific pursuit of music in the first half of the century, coupling knowledge with taste, before it became a defining feature of French national character and the epitome of modern civilisation around the middle of the century. The values encapsulated by musical harmony were then expressed, cultivated, and contested through competing models of the 'musical' body. By the time of the French Revolution, harmony re-emerged as a model of an idealised form of public order.

Often, statements about what music *was* were simultaneously claims about the constituencies associated with particular understandings of music. For instance, music was elevated to the position of a science by a community of writers interested first and foremost in legitimising their own musical tastes. Similarly, the critique of virtuoso performers at the end of the century was championed by musical amateurs who sought to protect feeling as their own domain. In the same way, Jean-Jacques Rousseau's critique of Jean-Philippe Rameau's theory of musical harmony and the 'savant ears' that were required to hear harmonics served as a means of criticising over-educated and privileged people. Music was at the crossroads of different, often conflicting, interests and pursuits. Thus, this dissertation has intentionally studied a heterogeneous elite and diverse community of learned people, ranging from well-to-do musical amateurs and academicians to 'savant' musicians, music teachers and performers. Each of these constituencies claimed expertise in music by appealing to different combinations of knowledge and taste.

These varied constituencies reveal that music did not form one single national project. Music represented courtly ideals, yet was also central to the formulation of Revolutionary ideals. In the same way, the figure of Jean-Philippe Rameau was used both to endorse the monarchy and to portray a new republican order. I have argued that musical harmony encapsulated notions of taste, genius, modern civilisation, reason, and moral discipline. However, music became a site of contestation of those same standards in relation to the emergence of a new sensibility in the middle of the century. A new notion of nature, emphasising feeling and authenticity, confronted taste as stemming from the court and instead embraced values, sounds, and 'characters' hitherto considered Italianate, and presented an alternative model of the performer's body.

Music, therefore, played a key role in the formulation and development of the new sensibility. I have argued that this significance of music to the new sensibility was the result of the close relationship between music and notions of nature, language, the passions, the body, material culture, and individual and collective identity. Jean-Jacques Rousseau, highly influential in this new sensibility, wrote extensively on music. Historians have shown that the

new sensibility included a new stress on values such as transparency, naturalness, absorption, and inner feeling.[841] In every chapter of this dissertation, I have demonstrated that music constituted both an ideal of naturalness and a means of achieving it. By virtue of this imbrication with notions of nature, music was deemed a privileged language for the expression and transparent transmission of feeling, as opposed to the over-cultivated and deceptive expressivity at court. Furthermore, this dissertation suggests a way of reinterpreting sensibility as a physical and material phenomenon. I have argued that the construction and use of musical instruments reflected changing notions of physiology, emotions, gender, and character, which were also expressed in different sonorities. In this way, the new sensibility was expressed and experienced through material objects. Additionally, the human body *performed* sensibility: not only was the physical body intrinsically sensible, but it was also carefully cultivated and crafted in order to display and convey sensibility. The demands placed upon the bodies of musical performers and listeners encapsulated the values pursued in the new sensibility which saw music as a privileged language for expressing feeling as well as sensorial experience, communicating interior and exterior states, and creating individual and collective bonds.[842] Jean Starobinski has rightly argued that the ideals of transparency and authenticity in the new sensibility were the cornerstone for proposing an alternative political order.[843] Accordingly, notions of music were deeply embedded in socio-political projects and concerns. Music had the power to assemble sensible individuals and direct communal action based on intersubjective affinities and sociable pleasure.

Yet the embrace of both harmony and the new sensibility during the French Revolution might appear contradictory. How can we explain that, despite Rousseau's forceful attacks upon musical harmony in the 1750s, and his vast influence, harmony nonetheless assumed a powerful social and political role in the Revolutionary period? How did musical harmony—initially appropriated as a science of mathematical proportions that epitomised courtly taste, the Enlightenment, and a geometrical natural order—become so widespread within the new sensibility, which precisely rejected the *esprit géométrique* and courtliness? Musical harmony paradoxically represented discipline, a proportionate natural order, the rationalising project of the Enlightenment, and French inventiveness and civilisation, even as it was understood as the

[841] See e.g. Ehrard, *L'idée de la nature*; Starobinski, *Jean-Jacques Rousseau*; Fried, *Absorption and Theatricality*; Atkinson, *Le sentiment de la nature*; Chartier, *The Cultural Origins of the French Revolution.*

[842] See e.g. Vila, Suffering Scholars; Vincent-Buffault, *The History of Tears*; Outram, *The Body and the French Revolution*; Jones, *The Smile Revolution*.

[843] Starobinski, *Jean-Jacques Rousseau.*

most ‘natural’ or ‘transparent’ language of feeling, universally spoken, and transmitted through sensible bodies. In arguing that musical harmony became an emblem of Frenchness and constituted a model for a new public order during the Revolution, this dissertation has attempted to shatter ostensible contradictions.

I have shown, on the one hand, that musical harmony was appropriated as a socio-political model by virtue of its blending of geometrical order with the cult for sensibility. ‘Mechanical’ and ‘sensible’ models of the performer’s body coexisted during the second half of the century. Once translated to the body politic, musical harmony bore courtly taste, geometrical proportion, reason, and celestial order, while at the same time providing sympathetic bonding, transparent expression, and collective feeling. Consequently, the two models of music once represented by Jean-Philippe Rameau and Jean-Jacques Rousseau, namely ‘harmony’ versus ‘melody’, and French versus Italian character, were ultimately combined in the uses of musical harmony as a matter of public importance during the French Revolution. The conspicuous calls for harmony in sociability and political debates during this period retained much of Rousseau’s defence of Italian musicality. They adopted Rousseau’s belief in the powers of music to convey direct messages and manage crowds, despite Rousseau’s attribution of this power to melody, unison, and the Italian language.[844] The moral and political effects of music which Rousseau defended were, however, complemented by the disciplining capacity of harmony. Harmony regulated polite sociability and tasteful bodies, and hence had the potential for tempering the body politic and disciplining the emerging voices of the street. While retaining the scientific status established by Rameau and the national symbolism conferred by his interlocutors, new ‘sensible’ men absorbed Rousseau’s critique of musical harmony and elevated it following the politicisation of emotion in Revolutionary times.[845]

On the other hand, I have argued that music represented *both* nature and artifice, providing a unique connection point between divine and human, nature and culture, universal and national, tradition and future, uncultivated and cultivated. The body of the musical performer combined discipline and naturalness. Similarly, when envisaging a new public order, spokesmen of the Revolution invoked musical harmony to legitimise their agenda based on indisputable moral and natural grounds. Downing A. Thomas describes how, in the making of a utopian social project, eighteenth-century writers searched for the primitive origins of

[844] Rousseau, *Essai sur l’origine des langues*, pp.532-533.
[845] See e.g. Spary, *Utopia’s Garden*.

music.[846] I have argued that musical harmony could fit the pursuit of a 'universal' language based on a primitive natural order, as well as the triumph of French civilisation over other cultures and historical periods. As such, musical harmony was both discovery and invention, and interwove both nationalistic and universalistic claims.

Furthermore, harmony's strong roots in tradition, made it an efficient means for facing uncertain futures. Eighteenth-century French people engaged in a range of musical practices in order to navigate the stormy waters of changing social, cultural, and political models. This dissertation has followed music across a society experiencing great transformations, from the Ancien Régime to the French Revolution, and from the Enlightenment to Romanticism. Yet, while discussing music and the navigation of change, it has also stressed different forms of persistence and continuity. The early modern worldview of the harmony of the spheres persisted in many areas of eighteenth-century French culture. In line with François Furet's argument that the French Revolution had a great deal of continuity albeit under the appearance of change, I have shown that, conceptualised through musical harmony, the 'revolution' did not entail total rupture.[847] The 'harmonic republic' offered an acceptable compromise between courtly and revolutionary symbols. Proposing harmony meant invoking not only a musical model, but a particularly structured system of music, whose figurehead, Jean-Philippe Rameau, had been patronised by the court and elevated as the French musician par excellence. As a well-established symbol of French taste, reason, morality, and national character, musical harmony introduced revolutionary change by way of familiar notes.

Hence, harmony involved people from diverse political factions and social backgrounds. In the early French Revolution, harmony was widely invoked for achieving reconciliation and the harmonic inclusion of dissent—just like dissonance was admitted in a musical piece and three different elements composed a perfect musical chord. Nevertheless, this model of agreement and harmonic transition was no longer appealing with the new stress on common will, unanimity, and fraternity during the governance of Robespierre. Unison, as opposed to harmony, fitted fraternity best. Yet, in these same years, also popular singing ceased to be regarded as a legitimate means of political expression, as argued by Laura Mason.[848] However, how did unison interact with the silencing of popular songs and expressions, to what extent was unison an alternative political model at all, and whether it takes us back to

[846] Thomas, *Music and the Origins of Language*, p.176.
[847] Furet, *Penser la Révolution française.*
[848] Mason, *Singing the French Revolution.*

Rousseau's defence of unison and melody against harmony in the 1750s, are all questions that need further study.

What was the fate of music after the French Revolution? The picture painted in this dissertation begins and concludes at the two ends of the eighteenth century. Music's connections with natural order, knowledge, taste, material culture, the physical body, and the body politics did not persist in the same way the nineteenth-century. It is possible, however, to suggest some paths these appropriations of music may have taken. I have shown that music was thought of as a national and socio-political concern in the middle of the eighteenth century, and a thoroughly collective and communal phenomenon. Music's association with collective action culminated during the Revolution in the use of musical harmony as a model for an ideal public order. Yet harmony failed as a model for public order with the call for fraternity and unanimity. What happened next? Music scholars have documented the embeddedness of music in political events and programmes during the nineteenth century. The importance of music as a national concern and a defining feature of national identity further strengthened and expanded after the French Revolution. A range of musical genres, including operas, anthems, marches, operas, symphonies, and folk songs fostered and expressed nationalism in France as well as across Eastern and Western Europe, and America.[849] Nevertheless, while this connection of music with political programmes and national identity expanded in the nineteenth century, musical harmony no longer represented a valid socio-political model, upon which a new public order could be built.

This does not mean that music ceased to shape utopian ideals. Indeed, in 1844, the composer Hector Berlioz wrote a novel about a utopian musical town called *Euphonia*.[850] Berlioz's utopian town functioned as a big orchestra—or big instrument—were all citizens were musicians. Like most utopian constructions, Berlioz's novel is certainly rooted in his appreciations of contemporary events—in this case, also in rich appreciations of contemporary

[849] See e.g. Fulcher, *The Nation's Image*; Alexander L. Ringer (ed.), *Early Romantic Era: Between Revolutions, 1789 and 1848* (1990; New York: Springer, 2016); Harry White and Michael Murphy (eds.), *Musical Constructions of Nationalism: Essays on the History and Ideology of European Musical Culture*, 1800-1945 (Cork: Cork University Press, 2001); Esteban Buch, *Beethoven's Ninth: A Political History*, trans. Richard Miller (Chicago and London: University of Chicago Press, 2004); Benjamin Walton, *Rossini in Restoration Paris: The Sound of Modern Life* (Cambridge: Cambridge University Press, 2007); Arnold, *Gretry's Operas and the French Public*; Douglas W. Shadle, *Orchestrating the Nation: The Nineteenth-century American Symphonic Enterprise* (New York: Oxford University Press, 2016); Krisztina Lajosi, *Staging the Nation: Opera and Nationalism in 19th-Century Hungary* (Leiden and Boston: Brill, 2018).

[850] Hector Berlioz, *Euphonia ou la ville musicale, nouvelle de l'avenir*. It originally appeared in *La Revue et gazette musicale de Paris*, from 18 February to 28 July (1844).

musical culture and technological innovations.[851] Nevertheless, *Euphonia* does not offer a solution or a model to reorganise these events in present times. *Euphonia*'s fictional setting is the future (year 2344), not in contemporary social and political life. Perhaps failing as a political model for current politics, music became a privileged space of interior retreat. By comparison to the eighteenth century, the experience of music was far more associated with the feelings of the individual and the interior realm in nineteenth-century Romanticism. Music also became increasingly distant from material practices and notions of the body, although scholars are paying increasing attention to the links between music, sound, and materiality in the nineteenth century.[852]

Similarly, music ceased to reveal natural order. Although it remained connected to notions of nature, these notions no longer referenced celestial, geometrical, or rationally organised sets of natural laws. Consequently, music ceased being instrumental to acquiring and testing knowledge of the natural world. Romanticism has often been described as a state of fragmentation between the self and nature, in which the self persistently longed for nature.[853] Yet this longing to restore the 'harmony' of the self and nature was never achieved or resolved in the nineteenth century, unlike the eighteenth. The scientific status of music diminished, and music became increasingly detached from both rational knowledge *and* taste: as the pleasure of music and the experience of the 'sublime' drifted away from rational explanations, taste no longer included the social, moral, physical, and aesthetic assumptions that had characterised it at the beginning of the eighteenth century. In the nineteenth century, musical taste and expertise continued to grow within public institutions and through consumption practices, yet the map of musical actors would also change. Given music's place as a science, musical agents in the eighteenth century sought to become involved in Enlightened practices such as writing essays and manuals, experimentation, theorising, and inventing, and paid great attention to the training and display of their bodies. In the nineteenth century, by contrast, they became 'technical'

[851] Inge Van Rij, 'Back to (the Music of) the Future: Aesthetics of Technology in Berlioz's "Euphonia" and "Damnation de Faust"', *Cambridge Opera Journal* 22:3 (2010), 257-300.

[852] See e.g. James Q. Davies and Ellen Lockhart (eds.), *Sound Knowledge: Music and Science in London, 1789-1851* (Chicago: University of Chicago Press, 2017); David Trippett, 'Exercising Musical Minds: Music and Phrenology in London ca. 1830', *19th-Century Music* 39 (2015), 99-124; Viktoria Tkaczyk, 'Listening in Circles: Spoken drama and the Architects of sound, 1750–1830', *Annals of Science* 71:3 (2014), 299-334; Holly Watkins and Melina Esse, 'Down with Disembodiment; or, Musicology and the Material Turn', *Women and Music: A Journal of Gender and Culture* 19 (2015), 160-168.

[853] See e.g. Isaiah Berlin, *The Roots of Romanticism* (London: Chatto & Windus, 1999); Rüdiger Safranski, *Romanticism: a German Affair*, trans. Robert E. Goodwin (Evanston, Illinois: Northwestern University Press, 2014); Cunningham and Jardine (eds.), *Romanticism and the Sciences*.

aspects which were increasingly detached from the scope of music.[854] The eighteenth-century musical amateur enjoyed respect and reputation as an expert in music, whose 'love' for music was deemed authoritative and combined practices of knowledge making, musical practice, criticising, collecting, and listening. In the nineteenth century, by contrast, the term 'amateur' referred to listeners, and when applied to musical practitioners, it became pejorative. Music's place no longer lay within natural or celestial order, mathematical sciences, material practices and physical bodies; nor could music model utopian social or political regimes.

[854] The literature on music and Romantic aesthetics is abundant. See e.g. Hanslick, *On the Musically Beautiful*; Dahlhaus, *The Idea of Absolute Music*; Blanning, *The Triumph of Music*.

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