

Cambridge University Press

0521023920 - Music Theory and Natural Order from the Renaissance to the Early Twentieth Century

Edited by Suzannah Clark and Alexander Rehding

Excerpt

[More information](#)

Introduction

SUZANNAH CLARK AND ALEXANDER REHDING

At the outset of his short treatise on music, the *Compendium musicae* of 1618, Descartes recounts that if two drums are struck at the same time, one made with sheep's skin and the other with wolf's skin, the drum with sheep's skin will not sound. Descartes suggests that, owing to the natural order of the animal kingdom, the sheep is as frightened of the wolf in death as in life.¹ This transcendent hierarchy seems to manifest itself even when the animals are made into musical instruments. For Descartes, this natural order ultimately controls the production (or smothering) of sound.

From someone whom we have come to appreciate as a key player in the scientific revolution, this seems a surprising and absurd tale. However, the very absurdity of the tale points us to a different epistemology, a fundamentally different understanding of what constitutes nature. In fact, comparable arguments were commonly found in music treatises of the decades preceding the *Compendium musicae*.² In that sense, Descartes's sheep is mutton dressed as lamb: he seems to be reflecting upon an older notion of nature that comprises irrational and magical elements.³ The idea underlying the sheep-and-wolf story is related to the Great Chain of Being, positing a transcendental hierarchy that all things and living beings obey.⁴

The question for Descartes, as for the majority of music theorists, was not so much *whether* music was connected with nature but *how* it was connected with it. A

We are grateful to Daniel K. L. Chua and Peter Tregear for their comments on this introduction.

¹ René Descartes, *Compendium of Music*, trans. Walter Robert, notes by Charles Kent (n.p.: American Institute of Musicology, 1961).

² The editor of the German translation of Descartes's treatise, Johannes Brockt, mentions that the anecdote of the sheep and wolf surfaces in other treatises of the time, such as Ambroise Paré's work on animals of 1575 and Marin Mersenne's *Questiones celeberrime in Genesin* of 1623. See Descartes, *Leitfaden der Musik*, trans. and ed. Johannes Brockt, 2nd edn (Darmstadt: Wissenschaftliche Buchgesellschaft, 1992), p. 71.

³ A corresponding epistemology has been explored in Gary Tomlinson, *Music in Renaissance Magic: Toward a Historiography of Others* (London and Chicago: University of Chicago Press, 1993), based on Michel Foucault's 'archaeological' method expounded, above all, in *The Order of Things: An Archaeology of the Human Sciences* (London: Tavistock/Routledge, 1974).

⁴ See Arthur O. Lovejoy's classic exploration of this concept in *The Great Chain of Being* (Cambridge, Mass.: Harvard University Press, 1936).

Cambridge University Press

0521023920 - Music Theory and Natural Order from the Renaissance to the Early Twentieth Century

Edited by Suzannah Clark and Alexander Rehding

Excerpt

[More information](#)

SUZANNAH CLARK AND ALEXANDER REHDING

conception of nature – in the broadest sense – was deemed necessary for music theorists if they did not want to expose themselves to the criticism that the rules of their systems were arbitrary and unfounded. Nature in music theory thus imposes order: it may function as a source of legitimation for the rules it proposes, as an authority from which to generate supposedly incontestable laws, and as a resource of knowledge and values apparently impervious to cultural and historical changes.

This use of nature has its problems. Is the totalising tendency underlying the definition of nature not undermined by the fact that our understanding of what constitutes nature changes? While it is part and parcel of any idea of nature to rely on the assumption of an essence independent from historical or cultural context, the images invoked in support of this idea will necessarily reflect the culture and historical age in which they arose.⁵ It is on the basis of this circumstance that Descartes's point above appears absurd to us. However, the impression of absurdity is not endemic to his argument; rather, it arises from our fundamentally different understanding of nature, which on the one hand embraces empiricism and on the other offers no place for the Great Chain of Being. The purpose of this book is ultimately not to assess the validity of competing concepts of nature but rather to examine their impact on musical knowledge: in the case of Descartes, the anecdote allows us to see most clearly a clash between one totalising argument of a familiar nature and that of an unfamiliar one.

Music theories employ a concept of nature in the search for an external reference point with which to anchor the stuff we call music and to confer meaning on it. The problem is Archimedean in the very assumption that there *must* be an external reference point, and that pinning down meaning will not itself be arbitrary. While in modern society nature is figured as separated from the human sphere, in fact, as the Marxist scholar Raymond Williams has observed, 'the idea of nature is the idea of man; and this not only generally, or in ultimate ways, but the idea of man in society, indeed the ideas of kinds of societies'.⁶ Thus, in bestowing natural order on music, music theorists assign it a place in their world.

THE ANIMAL KINGDOM

Although Descartes's use of the animal kingdom emphasised natural hierarchy, more commonly it was the sounds of animals in their natural habitat that captured the imagination of music theorists. These sounds are generally proposed as the source of music, and an obvious starting point was birdsong.⁷ Most theorists who drew on bird-

⁵ It is debatable whether modern scientific understanding forms an exception to this. The understanding of nature, as the object of scientific investigation, is forever provisional, and liable to change in light of new discoveries. Not least since Karl Popper, scientific knowledge is conceived as reliable rather than certain knowledge. To be sure, scientific practice aims for context-free observation. Whether it fulfils those tasks is a hotly disputed matter, as seen for example in the repercussions of the recent Sokal affair. On the contextuality of scientific thinking see Thomas S. Kuhn, *The Structure of Scientific Revolutions* (Chicago: University of Chicago Press, 1970).

⁶ Raymond Williams, 'Ideas of Nature', in *Problems in Materialism and Culture* (London and New York: Verso, 1980), p. 71.

⁷ See Matthew Head, 'Birdsong and the Origins of Music', *Journal of the Royal Musical Association* 122 (1997), 1–23.

Cambridge University Press

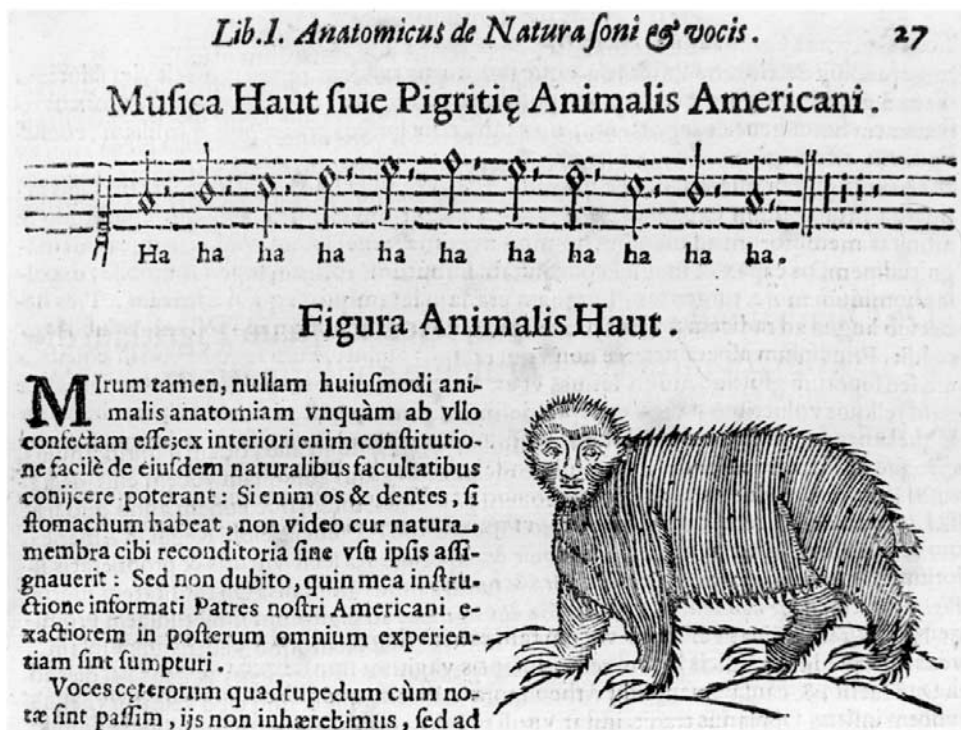
0521023920 - Music Theory and Natural Order from the Renaissance to the Early Twentieth Century

Edited by Suzannah Clark and Alexander Rehding

Excerpt

[More information](#)

Introduction



Illus. I.1 The American sloth singing the hexachord, from Athanasius Kircher, *Musurgia Universalis*, vol. I (Rome: Francesco Corbelletti, 1650), p. 27

song would comment on how birds would perform different melodic or rhythmic fragments of music. The question for them was always to assess the degree to which such chirping and clucking constituted music.

Other animals, most notably mammals, also drew attention by their song. It should not come as a surprise, for example, that Charles Darwin, in a comprehensive survey of music in the animal world, attached particular significance to monkeys in his explanation of the origin of music. He observed that while song is commonly used for sexual selection in lower animal classes, mammals make comparatively little use of their vocal organs to attract the opposite sex.⁸ However, there are two notable exceptions, both apes: the American *Myrcetes caraya* and a closer relative of man, a gibbon of the species *Hylobates agilis*. Darwin quoted an observer's description of their song:

It appeared to me that in ascending and descending the scale; the intervals were always exactly half-tones; and I am sure that the highest note was the exact octave to the lowest. The quality of the notes is very musical; and I do not doubt that a good violinist would be able to give a correct idea of the gibbon's composition, excepting as regards its loudness.⁹

⁸ Charles Darwin, *The Descent of Man and Selection in Relation to Sex*, intro. John Tyler Bonner and Robert M. May, 2 vols. in 1 (Princeton: Princeton University Press, 1981). ⁹ *Ibid.*, vol. II, p. 332.

Cambridge University Press

0521023920 - Music Theory and Natural Order from the Renaissance to the Early Twentieth Century

Edited by Suzannah Clark and Alexander Rehding

Excerpt

[More information](#)

SUZANNAH CLARK AND ALEXANDER REHDING

Two centuries previously, the scholar and Renaissance man Athanasius Kircher had made a similar point using a sloth (Illus. I.1). Kircher, otherwise an unlikely bedfellow of Darwin, made the observation that

the voice is not emitted by this animal [the sloth] except at night, and that it is truly wonderful. When its voice is interrupted by a duration of a single breath or semipause, by ascending and descending through the usual known intervals of six steps, it perfectly intones the first elements of music, *Ut, re, mi, fa, sol, la; la, sol, fa, mi, re, ut* in such a way that the Spanish, from the moment they first possessed those shores and heard by night the distinct calling of this kind, thought that they were hearing human beings trained in the rules of our art of music. It was called a ‘Haut’ by the inhabitants for no other reason than that it repeats this voice, *ha, ha, ha, ha, ha etc.*, through the six individual steps. In order that you understand better the appearance of the animal as well as its voice, it has seemed a good idea to put everything together with a synopsis before your eyes.¹⁰

What the two observers hear is of supreme theoretical import: Kircher’s seventeenth-century listener heard the hexachord, whereas Darwin’s nineteenth-century ear-witness heard the chromatic scale. It is surely no coincidence that in both cases, what the observers heard in nature – and what the theorists chose to report as significant – corresponds to the structural basis of the music of their respective eras.

It would seem that for their respective ages both Kircher and Darwin had solved what Guido Adler in 1924 called one of the most difficult problems of music theory: how to show the derivation of the scalic material.¹¹ In this sense, Kircher’s sloth and Darwin’s apes represent both pure nature and pure theory. Unlike birds, which sing rudimentary music (see Illus. I.2), the sloth and the ape each sing a musical rudiment.

This said, however, it would be wrong to assume that Darwin simply reiterated an argument that had been commonplace for centuries. The difference between the two is that for Darwin the proximity of apes to humans, as their progenitors, was all-important, while for Kircher it was precisely the remoteness of the sloth that made it attractive. Not only did the distance that separated the New World from Kircher’s readership in Europe guarantee that few readers would be in a position to challenge his statement, but, what is more, the connotations of America itself were such that in 1650, the year in which Kircher’s *Musurgia universalis* was published, the continent was still largely *terra incognita*. As such, America came to signify savage, raw nature itself, the Other to Europe’s culture and civilisation.¹² Peter Hoyt, who assesses in this volume the implications of this ‘savage’ concept of America for eighteenth-century

¹⁰ Athanasius Kircher, *Musurgia universalis*, 2 vols. (Rome: Francesco Corbelletti (vol. I) and Ludovico Grignani (vol. II), 1650), vol. I, p. 37. Translation by Raymond J. Clark.

¹¹ Guido Adler (ed.), *Handbuch der Musikgeschichte* (Frankfurt am Main: Frankfurter Verlagsanstalt, 1924), p. 8.

¹² See, for instance, Antonello Gerbi, *Nature in the New World: From Christopher Columbus to Gonzalo Fernández de Oviedo*, trans. Jeremy Moyle (Pittsburgh: University of Pittsburgh Press, 1985), and Joseph M. Powell, *Mirrors of the New World: Images and Image-makers in the Settlement Process* (Folkestone: Dawson, 1977).

*Diuersarum uolucrum voces
notis musicis expresse*

Gallicinium
Cuculien Cuculien
A

Vox parientis Gallinae
to to to to to to to to to to to to
B

Gallina canens pullos
gle gle gle
C

Vox Cuculi
Gu gu gu gu
E

Vox Coturnicis
Bikebik bikebik bikebik
D

Lape

Illus. I.2 Birds and their songs, from Athanasius Kircher, *Musurgia Universalis*, vol. I (Rome: Francesco Corbelletti, 1650), p. 30

Kircher contrasts the exotic sloth with a selection of domestic birds in his *Musurgia universalis*. While the sloth is presented as an unquestionable theoretical authority, the effects of human contact are represented by the parrot in Illus. I.2: it says ‘hello’ – in Greek, no less. Clearly trained in domestic circumstances, the parrot represents a reverse mimesis, imitating as it does human speech. These various animals support very different theoretical claims: some, such as birds, draw a mimetic link between music and the animal kingdom; others, such as the sloth and Darwin’s apes, are more aligned with the ‘sound of nature’ itself. In other words, those theorists using birds would argue that birdsong can tell us where music came from, whereas the ape and the sloth tell us how music ought to go. This latter, prescriptive domain is more commonly associated with acoustics, the ‘hard’ sciences, and the laws of nature.

Cambridge University Press

0521023920 - Music Theory and Natural Order from the Renaissance to the Early Twentieth Century

Edited by Suzannah Clark and Alexander Rehding

Excerpt

[More information](#)

SUZANNAH CLARK AND ALEXANDER REHDING

MUSIC THEORY AS HARD SCIENCE

Descartes begins his *Compendium musicae*, mentioned initially, with a terse programmatic statement: 'Its object is sound.'¹³ With only slight exaggeration one could claim that these four words sum up the impact of the scientific revolution on music – the change from music as a divine force to music as a material phenomenon. As the latter, it could be subjected to scientific scrutiny; music theory turned particularly towards the mathematical and physical sciences as well as physiology. Indeed, Descartes's age witnessed the encroachment of acoustical science on music or, to put it conversely from the perspective of music, the reduction of music to quantifiable sound.¹⁴ For the feminist historian of science Carolyn Merchant, the scientific revolution brought on the death of the female figure of *Natura*. In her influential study on this subject, Merchant describes the changing understanding of nature, from the medieval nurturing womb of which the material world was born, to a corpse on whose body scientific experiments are carried out.¹⁵ This condition is, as Daniel K. L. Chua argues in this volume, the principal trait of modernity, of which music theory forms an integral part.

Why would the music theorists discussed in this volume have taken it as understood that the laws of nature should also be the laws of music? On one level, the 'scientific turn' of music theory seemed a self-evident consequence of its medieval legacy, where music – notably in its significance of the 'harmony of the spheres' – had been firmly associated with the discipline of astronomy, as part of the quadrivium. As the study of astronomy became a modern science with figures such as Kepler and Galilei, so did the study of music. That which began as simple experiments with musical tuning turned out to be of enormous consequences to the history of tonality in the Western world, as Chua argues. Schiller's *bon mot* of the 'disenchantment of the world' (*Entzauberung der Welt*), which was adopted by Max Weber and the Frankfurt School to signify the process of increasing rationalisation in the modern age, can indeed be applied to large parts of music theory since the Renaissance. What the *cognoscenti* of the Florentine Camerata and elsewhere did in their studies of tuning was simply to 'correct' what they conceived of as flaws in nature. By taking such measures as eliminating the Pythagorean or syntonic commas, which invariably hamper the full enharmonic potential of the diatonic system, they forcibly closed the gap in the 'spiral of fifths' and created the 'cycle of fifths' on which the modern conception of the nature of tonal music has rested ever since.

These changes made to music at the turn of the seventeenth century could be likened to the establishment of 'nature reserve areas' in more recent times: an area of landscape is fenced off with the purpose of perennial preservation in exactly the same

¹³ Descartes, *Compendium of Music*, p. 1. Translation modified.

¹⁴ See H. F. Cohen, *Quantifying Music: The Science of Music at the First Stage of the Scientific Revolution, 1580–1650* (Dordrecht, Boston and Lancaster: D. Reidel Publishing Company, 1984).

¹⁵ Carolyn Merchant, *The Death of Nature: Women, Ecology, and the Scientific Revolution* (San Francisco: Harper and Row, 1980).

Cambridge University Press

0521023920 - Music Theory and Natural Order from the Renaissance to the Early Twentieth Century

Edited by Suzannah Clark and Alexander Rehding

Excerpt

[More information](#)

Introduction

state. However, the illusion of untouched nature in areas from which change is emphatically banished is in fact predicated upon an intrusive coercion of the processes of nature. Continual labour and maintenance – as well as their repression – are necessary to maintain this semblance of nature.¹⁶ Likewise, tonal structure first had to be closed off before its nature could be seen to flourish.

In order to prove the natural derivation of triadic material, music theorists of the tonal era commonly resorted to explanations that either drew on the division of the monochord or the harmonic series. While nature readily provided the elements for the consonance of the major triad, its bounteousness was more generous than the theorists had hoped: the harmonic series had to be cut off after the sixth harmonic at the latest, while the string could not be divided more than five times. For music theorists between Zarlino and Schenker, arguments why part of the ‘sound of nature’ had to be truncated were evidently difficult to find, let alone justify.

Furthermore, owing to the resistance of the natural material, music theorists often had great difficulty relating all aspects of harmony, namely the generation of scales, triads and the relations between chords, to one and the same natural principle. As Suzannah Clark suggests in this volume, the physicist Arthur von Oettingen’s dualistic view of harmony came closest to bringing them into alignment. In the second half of the nineteenth century it seemed that ‘naturalistic’ music theory, above all in the writings of the harmonic dualists Oettingen and Hugo Riemann, had completed the rationalisation of the musical material; the scientific rigour of the ‘naturalistic’ approach to music theory appeared to have reached the bottom of certain knowledge about music.

The re-creation of nature in the service of music theory appeared to give theorists full authority over music: the structure of tonal music seemed to comply with the givens of nature; music theorists deemed themselves to possess full knowledge of the nature of music. This power has often been understood to imply the authority of music theory to *prescribe* how music ought to go. Hugo Riemann, for instance, used Strauss’s *Salome* as a pretext to hurl the condemnation of ‘degeneration’ against the condition of modern music, a verdict which implies that such creations are monstrous, unliveable creatures of music – in short, that they are unnatural.¹⁷ While this

¹⁶ On the dilemma of ‘untouched’ nature reserve areas and labour see Joachim Radkau, ‘The Wordy Worship of Nature and the Tacit Feeling for Nature in the History of German Forestry’, in *Nature and Society in Historical Context*, ed. Mikulas Teich, Roy Porter and Bo Gustafsson (Cambridge: Cambridge University Press, 1997), pp. 228–39; David M. Grabner, ‘Resolute Biocentrism: The Dilemma of Wilderness in National Parks’, in *Reinventing Nature? Responses to Postmodern Deconstruction*, ed. Michael E. Soule and Gary Lease (Washington DC and Covelo, Calif.: Island Press, 1995), pp. 123–35; and Raymond Williams, ‘Ideas of Nature’, p. 78.

¹⁷ Hugo Riemann, ‘Degeneration und Regeneration in der Musik’, *Max Hesses deutscher Musiker-Kalender* 23 (1908), 136–41. The article, which appeared in the context of a debate led by the composer Felix Draeseke, is reprinted in *‘Die Konfusion in der Musik’: Felix Draeseke’s Kampfschrift von 1906 und ihre Folgen*, ed. Susanne Shigihara (Bonn: G. Schröder, 1990). On the issue of ‘degeneration’ as a cultural trope around 1900, see particularly Max Nordau’s classic study *Degeneration* (London: Heinemann, 1913), and for an up-to-date discussion of the manifestations of ‘degeneration’ see Daniel Pick, *Faces of Degeneration: A European Disorder, c.1848–c.1918* (Cambridge: Cambridge University Press, 1989).

Cambridge University Press

0521023920 - Music Theory and Natural Order from the Renaissance to the Early Twentieth Century

Edited by Suzannah Clark and Alexander Rehding

Excerpt

[More information](#)

SUZANNAH CLARK AND ALEXANDER REHDING

conclusion is all too easily drawn, and was shared by a great many other theorists, it in fact overtakes the normative power in which nature is used in this music-theoretical context. The tension between music theory and musical works, and the struggle for authority behind this tension – which can be understood in terms of Michel Foucault's nexus of Power/Knowledge¹⁸ – are issues that are almost invariably connected with the employment of the category of nature and that form an underlying theme in various chapters of this book.

Carl Dahlhaus has noted that the theoretical power to tell how music ought to go, to know right from wrong in music, is independent of what actually happens in musical structures.¹⁹ In fact, in the later nineteenth century it was left to a natural scientist to warn music theorists not to exaggerate their authoritative claims about the normative power of the nature of music. In an oft-quoted statement (which was, however, widely ignored by music theorists at the time), the eminent physicist and physiologist Hermann von Helmholtz protested

that the construction of scales and harmonic tissues is a product of artistic invention and by no means furnished by the natural formation or natural function of our ear, as has been hitherto most generally asserted.²⁰

Helmholtz was well aware of the authoritative power of science. As natural science counted – and continues to count – as an epistemologically privileged discourse, many music theorists of his time sought to partake of its prestige, and its apparently pure access to knowledge, but were less rigorous as far as its methods were concerned. Although Helmholtz himself was on occasion prone to making high-handed judgements about music from the perspective of its purported nature, his warning points towards another central theme of this book, the inherently cultural dimension of music-theoretical claims based on nature.

The limitations of the scientific view made themselves felt ubiquitously. As Leslie David Blasius observes in this volume, at the very moment that music theory believed to have discovered the truth about music, music itself began to lie. Scientific truth and moral values seemed to be poles apart. Throughout the history of music theory in the modern age runs an undercurrent of discontent, a feeling that the principles of scientific analysis, which informed the basis of much music theory, left something to be desired. Chua's essay proposes that no sooner did the disenchantment of music begin than there were attempts to re-enchant music, to re-endow it with a pre-modern (super)natural force, as a futile effort to counter the effects of rationalisation.

¹⁸ Michel Foucault's talk 'The Order of Discourse' first introduces this trope and the notion of 'genealogy'. The main books in which he explores these ideas are *Discipline and Punish*, trans. Alan Sheridan (Harmondsworth: Penguin, 1979), and *The History of Sexuality*, vol. I, trans. Robert Hurley (Harmondsworth: Penguin, 1978). One of the most widely read studies on Foucault's writings remains Hubert L. Dreyfus and Paul Rabinow, *Michel Foucault: Beyond Structuralism and Hermeneutics* (Brighton: Harvester, 1982).

¹⁹ Carl Dahlhaus, *Die Musiktheorie im 18. und 19. Jahrhundert: Zweiter Teil Deutschland*, ed. Ruth E. Müller (Darmstadt: Wissenschaftliche Buchgesellschaft, 1989), pp. 252–60.

²⁰ Hermann von Helmholtz, *On the Sensations of Tone*, trans. Alexander J. Ellis, rpt (New York: Dover, 1954), p. 365.

Cambridge University Press

0521023920 - Music Theory and Natural Order from the Renaissance to the Early Twentieth Century

Edited by Suzannah Clark and Alexander Rehding

Excerpt

[More information](#)

Introduction

The discontent with the scientific method, the sense that something was missing from the dissected body of music and the ensuing desire to achieve again the blissful state of enchanted music, however, form a reverse strand to Merchant's dead (or dying) *Natura*, to the process of the increasing rationalisation of music. Linda Phyllis Austern's contribution examines the representation and iconography of music and nature in English natural philosophy in the seventeenth century and traces the transformations of the marvellous figure of *Natura* and the ensuing changes in the understanding of music in the age of Purcell. David E. Cohen's contribution discusses a related figure in Rameau's theorising, the *mère bien faisante*, who is the source of the 'Gift of Nature' to humans. In Rameau's view, it is she who offers us both the *corps sonore* and the instinct to grasp it, an instinct which, as Clark demonstrates in her chapter, Oettingen attempts to put into question.

Nowhere is the attempt to re-establish a connection between nature and elements that transcend nature made clearer than within Rameau's *corps sonore*, which, on the one hand, formed the theoretical basis of music in nature, but was, on the other hand, employed in Rameau's stage works exclusively to signify supernatural events.²¹ The *corps sonore*, the pinnacle of Rameau's rational theorisation – which also meant the amputation of the upper harmonics of the sonorous 'corpse' of nature – harks back to its magical legacy in the harmony of the spheres. If *Natura* was indeed a casualty of the scientific revolution, who had ended up on the slab of the laboratory scientist, it seems that her musical relative was not quite dead – and music theorists seemed anxious to keep her alive.

BREATHING LIFE INTO MUSIC

Perhaps the most influential line of thought that sought to evade post-Newtonian science was the doctrine of organicism, rooted above all in the work of such thinkers as Coleridge, Schelling and Goethe.²² While physics is the epitome of the Newtonian sciences – or, in Friedrich Schlegel's classification, the 'mechanical' sciences, which in his usage was tantamount to pronouncing them 'dead' – the organic model centred on biology, the life sciences. Indeed, the stuff of life, which itself seemed to resist scientific explanation, was at the core of the organicist approach. As Goethe wrote at the outset of his short essay *On Laokoon*, a veritable compendium of organicism,

²¹ Two examples, from *Pygmalion* and *Castor et Pollux*, are discussed in Thomas Christensen, *Rameau and Musical Thought in the Enlightenment* (Cambridge: Cambridge University Press, 1993), pp. 218–31, and Brian Hyer, "'Sighing Branches": Prosopopoeia in Rameau's *Pygmalion*', *Music Analysis* 13 (1984), 7–50, and 'Before Rameau and After', *Music Analysis* 15 (1996), 93–7.

²² The classic introduction to theories of organicism in art remains Meyer H. Abrams, *The Mirror and the Lamp: Romantic Theory and the Critical Tradition* (Oxford: Oxford University Press, 1971), pp. 156–225. See also Severine Neff, 'Schoenberg and Goethe: Organicism and Analysis', in *Music Theory and the Exploration of the Past*, ed. Christopher Hatch and David W. Bernstein (Chicago: University of Chicago Press, 1993), pp. 409–33; William Pastille, 'Music and Morphology: Goethe's Influence on Schenker's Thought', in *Schenker Studies*, ed. Hedi Siegel (Cambridge: Cambridge University Press, 1990), pp. 29–44; and Lotte Thaler, *Organische Form in der Musiktheorie des 19. und beginnenden 20. Jahrhunderts*, Berliner musikwissenschaftliche Arbeiten, vol. XXV, ed. Carl Dahlhaus and Rudolf Stephan (Munich and Salzburg: Katzschichler, 1984).

Cambridge University Press

0521023920 - Music Theory and Natural Order from the Renaissance to the Early Twentieth Century

Edited by Suzannah Clark and Alexander Rehding

Excerpt

[More information](#)

SUZANNAH CLARK AND ALEXANDER REHDING

A genuine work of art remains, like a work of nature, forever unending to our intellect: it is beheld, it acts on us, but it cannot actually be known, much less even can its essence, its merit be expressed in words.²³

The organic work of art is in this conception fundamentally anti-theoretical; it resists intellectual scrutiny. Like a vivisection, the dissection of music – a metaphor which Johann Mattheson had happily embraced in 1754²⁴ – for analytical purposes would amount to an act of cruelty in the organicist view. In Chapter 8 Ian Biddle investigates the change in attitude to the musical work during the early Romantic period and shows how critical writing on music responded to the organicist challenge.

If the musical work resists the scalpel of the analyst, how can the music theorist proceed? The way out required a shift of emphasis from a consideration of the part-to-whole construction to the reverse. Most commonly, this image was supported by an analogy between nature and art which was drawn via the morphology of the plant: the whole work ‘grows’ out of a ‘germ cell’.

The emphasis on the supremacy of the whole over the individual parts gave rise to *Formenlehre*, the theory of forms. Theorists such as Adolf Bernhard Marx attempted to approach the spiritual content of the musical work by understanding its form. In both defining form as a generic category, and at the same time recognising that there could be as many forms as there are works of art, Marx highlighted a tension between the universal and the particular.²⁵ This tension has been the cause of numerous misrepresentations of *Formenlehre*, as a dry, schematic ‘textbook’ approach, in direct opposition to the organicist idealism from which it stemmed. Recognising the risk of losing sight of the intention behind the organicist viewpoint by becoming mechanical, Ernst Kurth had to remind music theorists at the beginning of the twentieth century that *Formenlehre* should be a theory of *Erformung*, that is it should concentrate on the ‘process of forming’.²⁶ Kurth’s contemporary and mentor, August Halm, attached particular significance to this continual ‘process of forming’ that underlies the musical work. His analysis of Beethoven’s *Tempest* Sonata, discussed in this volume by Alexander Rehding, highlights the process by which the thematic material finally ‘finds itself’, as Halm expressed it, by rupturing the form.

If music ‘grows’ organically, it has a spirit and takes on a life of its own. Music theorists endeavoured to capture the spiritual essence of the musical work, referring to it

²³ Johann Wolfgang von Goethe, ‘Über Laokoon’, in *Werke (Hamburger Ausgabe)*, vol. XII: *Schriften zur Kunst und Literatur, Maximen und Reflexionen*, 12th edn (Munich: C. H. Beck, 1994), p. 56. Translation by Alexander Rehding. See also Thaler, *Organische Form*, pp. 56–66.

²⁴ See Ian Bent (ed.), *Music Analysis in the Nineteenth Century*, 2 vols. (Cambridge: Cambridge University Press, 1994), vol. I, p. 7. On Mattheson, see also Peter Schleuning, *Die Sprache der Natur: Natur in der Musik des 18. Jahrhunderts* (Stuttgart: Metzler, 1998), pp. 59–80.

²⁵ See Thaler, *Organische Form*, and Scott Burnham, ‘Criticism, Faith, and the *Idee*: A. B. Marx’s Early Reception of Beethoven’, *19th-Century Music* 13 (1990), 183–92. On the work-concept, see Lydia Goehr, *The Imaginary Museum of Musical Works: An Essay in the Philosophy of Music* (Oxford: Oxford University Press, 1992). See also Mark Evan Bonds, *Wordless Rhetoric: Musical Form and the Metaphor of the Oration* (Cambridge, Mass. and London: Harvard University Press, 1991).

²⁶ Ernst Kurth, *Bruckner*, 2 vols. (Berlin, 1925; rpt Hildesheim: Georg Olms, 1971), vol. I, p. 239.