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RULE VIOLATION IN EARLY MODERN EUROPEAN MUSIC THEORY

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In your books I drank wine, sang songs, . . .
threw myself into abysses, worked miracles.

— Chekhov

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ABSTRACT

This dissertation recounts how now-familiar rules for making music, along with countless unsung violations, issued from the wealthiest cities of early modern Europe. The project thus further historicizes Western music theory's "regulative traditions," per the formative disciplinary programs of Carl Dahlhaus and Thomas Christensen, through sociology on the rise of metropolitan bourgeois culture from roughly 1500 to 1750. Within that pivotal conjuncture of capital accumulation and colonial extraction normalized under what social historians have called "the civilizing process," my dissertation argues that counterpoint rules encoded "aesthetiquette," a poetics of politeness at once aural, oral, manual, and moral.

The argument unfolds over three chapters. Part I, "Mannerist Figures," offers an Introduction to the age-old rule against composing parallel fifths and octaves. By tracing its rehearsal from commonplaces to psychoacoustics, a conceptual history of musical barbarism indexes how forbidden parallels have long amplified ethnoreligious taboos and marvels. As a companion case study, Chapter 1 shows conversely that "Maxims of Brevity in the Lutheran Canon" favored a diminutive rhetorical style for aligning imitative pedagogy with theopolitical reforms. Examples are drawn from my translation of Heinrich Faber's 1549 *Little Compendium of Music for Beginners,* the shortest yet longest-running German Protestant curriculum on the art of singing correctly, measured against wider Northern Renaissance disciplines of recantation.

Part II, "Baroque Licenses," opens with Chapter 2, an exposé of "How the English Madrigal Took Over the Animal World." Among other lasting ecosocial effects, the early Stuart push for Anglosphere standardization redefined sonic mimicry of such beloved microfauna as the birds, the bees, and "Three Blind Mice"—if with equivocation on first principles of liberal humanism. As a closing counterpoint, Chapter 3 explores "Harmonic License in the Libertine

Enlightenment.” Restored to Old Regime milieus and mythos, finally the late *symphoniste du roi* Jean-Philippe Rameau admits all manner of perversion and chaos engendered by irregular chord progressions. A short Conclusion speculates on the fate of music theory to echo orders of hygiene and violence, from subcultures resounding with survivorship bias to those calling forth unheard miracles.

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INTRODUCTION. MUSIC THEORY AS CODE OF AESTHETIQUETTE

This dissertation explores ideas of rule violation in early modern European music theory. Its aim is to help historicize, through close readings of key writings from metropolitan centers between roughly 1500 and 1750, ways of thinking about how rules are made or broken—if not both at once. A familiar case of rule making, for example, is the "prohibition" of parallel fifths in medieval discant guides and modern counterpoint texts.[1] A famous case of rule breaking, as a counterexample, is the "license" alleged of unprepared dominant-seventh chords and other such illicit figures in Baroque monody.[2] But each has also exemplified the very opposite: consider, for instance, Viennese composer Johannes Brahms's conservation project to catalogue "faulty" parallels in classic polyphonic repertory,[3] or Belgian critic François-Joseph Fétis's association of progressive tonal "order" with modern harmonic style.[4] As these cases go to show, a fine line separates infamy from oblivion, with value judgments of make-or-break status (hearings in both the juridical and aesthetic senses of the word) hanging on how certain rules are interpreted.

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[1] For an early example of the former, see Pseudo-Johannes de Garlandia, *Optima introductio in contrapunctum pro rudibus* (c. 1300), ed. Edmond de Coussemaker, *Scriptorum de musica medii aevi nova series a Gerbertina altera*, 4 vols. (Paris: Durand, 1864–76), 3:12–13; cited in Riemann's *Geschichte der Musiktheorie im IX.–XIX. Jahrhundert* (Leipzig: Max Hesse, 1898), 237 and 515. Cf. August Wilhelm Ambros, *Zur Lehre vom Quinten-Verbote* (Leipzig: Heinrich Matthes, 1859), 1–5.

[2] *L'Artusi overo Delle imperfettioni della moderna musica* (Venice, 1600; facs. Bologna, 1968), fols. 39–44; trans. Oliver Strunk, "From *Artusi, or, Of the Imperfections of Modern Music*," *Source Readings in Music History*, ed. Oliver Strunk and Leo Treitler (New York: W. W. Norton, 1998), 526–534. For an insightful technical review, see Thérèse de Goede, "From Dissonance to Note-Cluster: Application of Musical-Rhetorical Figures and Dissonances to Thoroughbass Accompaniment of Early 17th-Century Italian Vocal Solo Music," *Early Music* 33, no. 2 (2005): 233–252, esp. 237. For a revealing discourse analysis of the licentious modernist as "a disobedient Eve," see Suzanne G. Cusick, "Gendering Modern Music: Thoughts on the Monteverdi-Artusi Controversy," *Journal of the American Musicological Society* 46, no. 1 (Spring 1993): 1–25, esp. 12.

[3] *Brahms Octaven und Quinten u. A.*, ed. Heinrich Schenker (Vienna, 1933); trans. Paul Mast, "Brahms's Study Octaven und Quinten," *Music Forum* 5 (1980): 1–196, esp. 43 and 113. Cf. Schenker, *Free Composition*, trans. Ernst Oster (Hillsdale, NY: Pendragon Press, 1977), 57. For an excellent contextualization, see Margaret Notley, *Lateness and Brahms: Music and Culture in the Twilight of Viennese Liberalism*, esp. 107–143.

[4] François-Joseph Fétis, *Traité complet de l'harmonie* (Paris: Durand, 1844), Bk. 3, § 245, p. 152; trans. Peter Landey, *Complete Treatise on the Theory and Practice of Harmony* (Hillsdale, NY: Pendragon Press, 2008). On the revolutionary effects of the "transitonic order," see Thomas Christensen, *Stories of the Age of François-Joseph Fétis* (Chicago: University of Chicago Press, 2019), 241–245.

Yet valuation of the rule's own status as an overarching metacategory has received surprisingly little sustained investigation in music-theory historiography. From creative strategies to interpretive rubrics, from cosmological claims to cognitive norms, for centuries music theories have been ruled by rules.[5] Somehow the precise conditions and mechanisms by which they have been enacted and acted on—made or changed, applied or waived, followed or broken—nonetheless remain largely indefinite, accounted for *ad hoc* rather than *per se*. To better register such latent epistemic and ethical commitments, the case studies that follow plot the rise and fall of rules in imperial musicking archives. By way of Introduction, first the stakes are drawn by tracking some ethnoreligious dimensions of perhaps the best-known specimen, namely the prohibition of parallel perfect consonances, across its decline in *fin-de-siècle* modernism; then previous music-theory historiography on the general concept is reviewed to set the stage for the remaining three chapters, each a survey of origin stories about Reformations, Renaissances, and Revolutions that respectively model the making, following, and breaking of musical rules.

0.1 Emancipation of the Consonance: *Fin-de-Siècle* Forbidden Fifths

To begin at the end, eulogies are in order. "Perhaps the most venerable rule in the history of music theory"; "one of the fundamental rules"; "one of the first rules of counterpoint"; "that great rock of counterpoint": conventional music-theoretic wisdom long held certain parallel perfect consonances, especially fifths, to be strictly forbidden.[6] Even a single stray exception

[5] Consider, respectively, Thomas Campion's "most familiar and infallible rule" for four-part singing, Johannes Ciconia's *omnis cantus* rule of modal classification, Marin Mersenne's acoustic and astronomic reflections on the *règle de consonance*, and Johann Georg Sulzer's proposition that aesthetic pleasure accrues to *Regelmäßigkeit* (perhaps a not-so-distant ancestor of the hedonic calculus behind, say, Lerdahl and Jackendoff's "preference rules").
[6] Frederick Neumann, "Ornamentation and Forbidden Parallels," in *Festa Musicologica: Essays in Honor of George J. Buelow*, ed. Thomas Mathiesen and Benito Rivera (Stuyvesant, NY: Pendragon Press, 1995), 435; Karol Berger, *Musica Ficta: Theories of Accidental Inflections in Vocal Polyphony from Marchetto da Padova to Gioseffo Zarlino* (Cambridge: Cambridge University Press, 1987), 167; Laurie Stras, "Wert's *Ottavo libro de madrigali a cinque*

could mean serious business; composerly authority claims and undergraduate part-writing grades alike hung in the balance.[7] Yet somehow this convention has also carried an air of playful middlebrow humor, as in a recent meme advising that "every time you write parallel fifths Bach kills a kitten."[8] (Despite the meme's mock deathly seriousness, the stern meister recast as straight man was of course not actually above writing them himself, whether carelessly or humorously.)[9] Somehow, then, forbidden parallels have been at once venerable and laughable. Despite holding an apparently fixed place at the front of so many music scholars' and students' mental rulebooks, for some time now the prohibition of consecutive perfect consonances has actually followed a pattern of transmission at turns grave and ridiculous, projecting a public image more mercurial in the long term than has commonly been recognized.

Over the last century and a half or so, then, the rule prohibiting consecutive fifths and octaves has undergone what might be termed “informalization,” a process by which social scientists such as Cas Wouters have theorized that manners and customs grow relaxed through “norm cascade,” a cumulative acceleration of "de-hierarchization, opening up, or levelling."[10] The customary evasion of (the customary evasion of) consecutive perfect consonances reached

voci," in *Eroticism in Early Modern Music*, ed. Bonnie Blackburn and Laurie Stras (Burlington, VT: Ashgate, 2015), 151; Daniel Harrison, *Harmonic Function in Chromatic Music* (Chicago: University of Chicago Press, 1994), 124.

[7] While the Josquin canon offers perhaps the best-known case in point, there is no shortage of comparable examples from the likes of Gluck, Haydn, and Verdi. See, for instance, Murray Steib, "A Study in Style, or Josquin or Not Josquin: The *Missa Allez regretz* Question," *The Journal of Musicology*, vol. 16, no. 4 (Autumn 1998): 519–44; Hector Berlioz, "Musical Polemic on *Armide* and Gluck," in *Berlioz on Music: Selected Criticism, 1824–1837*, ed. Katherine Kolb, trans. Samuel Rosenberg (Oxford: Oxford University Press, 2015), 31; James Webster and Georg Feder, *The New Grove Haydn* (London: MacMillan, 2002), 46; Joseph Kerman, "Verdi: The Late Operas," in *Opera and the Morbidity of Music* (New York: New York Review of Books, 2008), 276.

[8] For a relatively early online posting, the blog *Squeaky Wheel Seeks Grease*, last modified 23 April 2008, can be accessed via the Internet Archive’s Wayback Machine: http://www.squeakywheelseeksgrease.com:80/blog/2008/04/23/every-time-you-write-parallel-fifths-bach-kills-a-kitten/.

[9] For an example of so-called "careless" (*flüchtig*) fifths not included in Brahms's catalogue, see the chorale *Ach Gott, vom Himmel sieh darein*, BWV 2; for an example of humorous fifths, perhaps not coincidentally from the other side of the Baroque master’s career, see the Tenth of the Canons on a Goldberg Ground, BWV 1087, discussed in Peter Harrow, "Bach the Humorist," *College Music Symposium*, vol. 25 (1985): 49.

[10] Cas Wouters, *Informalization: Manners and Emotions Since 1890* (London: Sage, 2007), 202.

critical mass in its informalizing process during the latter half of the nineteenth century. In physiologist Hermann von Helmholtz's influential contention, for instance, the supposedly fundamental rule was seen as culturally constructed rather than biologically coded, a product of "artistic" convention rather than "natural" law thereby reduced from timeless to merely time-honored.[11] The capacity of consecutive fifths and octaves to scandalize listeners in the wake of *fin-de-siècle* musical modernism accordingly went the way of Victorian etiquette: rigid observance came to betray prim over-refinement.

This informalizing process might even be called an "emancipation of the consonance." Inverting the well-rehearsed Schoenbergian battle cry, with its sharp overtones of musical dissonance as overt political dissidence, the notion of emancipated consonance instead calls to mind *sotto voce* undertones of musical consonance, understood as polite consent or consensus. This notion is admittedly counterintuitive, if not outright offensive. According to a trenchant analysis by David Cohen, Western music theory's primary ideological instrument has long been the category of consonance and consensus, or concent and consent, by which the blemish or *vitia* is measured.[12] How, then, can the dominant ideology represent a class bound for emancipation? Does not an inversion of emancipatory focus from dissonance (back) to consonance stifle subversive voices speaking up for a change? And what, precisely, do such worries have to do with the mere bending, breaking, and informalizing of a once-venerable old contrapuntal rule?[13]

[11] One such passage of interest reads thus: "[C]onsecutive Fifths merely infringe the laws of artistic composition, and are not disagreeable to the natural ear." From *On the Sensations of Tone as a Physiological Basis for the Theory of Music*, trans. Alexander Ellis (Cambridge: Cambridge University Press, 2011 [1875]), 558.
[12] "Metaphysics, Ideology, Discipline: Consonance, Dissonance, and the Foundations of Western Polyphony," *Theoria* 7 (1993): 1–85, esp. as articulated on 8.
[13] On the standardization of such contrapuntal rules in the fifteenth century and beyond, see Ian Bent, "*Steps to Parnassus*: Contrapuntal Theory in 1725," in *Cambridge History of Western Music Theory*, ed. Thomas Christensen (Cambridge: Cambridge University Press, 2002), 560–63.

By way of entry into these questions, the next several pages offer an intergenerational triad of critical opinions on the function of parallel perfect consonances, drawn from music periodicals around the turn of the last century. The rule is in turn defined as a threefold standard:

1. to canonize modernity (Pseudo-Satie on "Dieubussy," 1914 *Revue musicale S.I.M.*);
2. to civilize native force (Fillmore on Billings, 1899 *Music: A Magazine*);
3. to order chaos (Wolf on Haydn, 1885 *Wiener Salonblatt*).

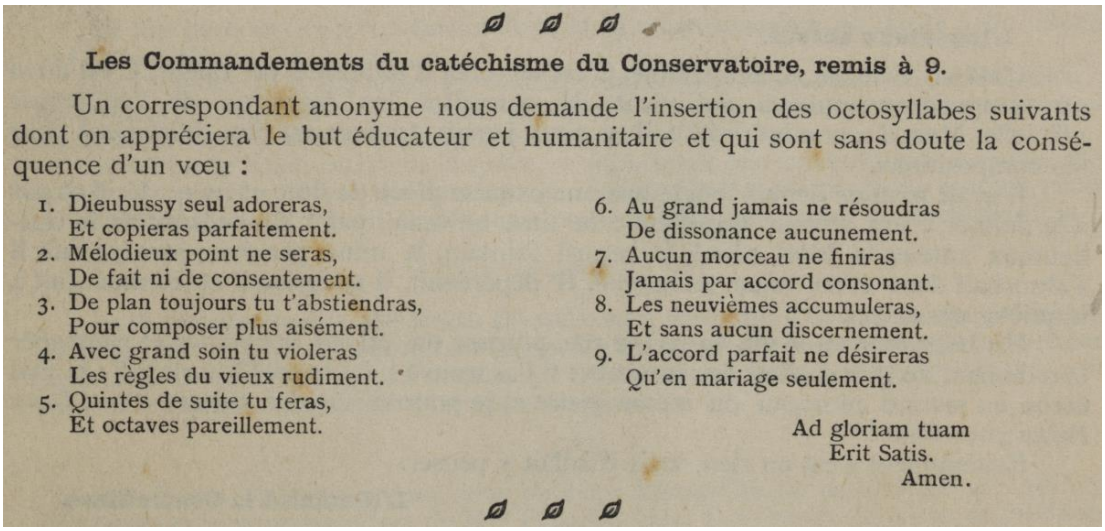
Tonally no less than topically all three pieces of criticism are agreed in their ironic ambivalence: writing parallel fifths may signal bad faith, poor taste, even ill breeding—yet there are still good reasons for writing them.

First, parallel fifths sanction (un)orthodoxy as a means of installing modern canons. As shown in Figure 0.1 below, a satirical "Commandment" ascribed to Satie advises, "Thou shalt make consecutive fifths [*quintes de suite*], and octaves likewise [*pareillement*, hence *parallèles*]."[14] This is but one—the fifth, not coincidentally—of *Les Commandements du catéchisme du Conservatoire, remis à 9*. It is a finely crafted polemic right down to the subtle tagline of its title: numerically, the replacement of an even decalogue with an irregular "nonalogue," so to speak, points jeeringly at amendment for its own sake; phonetically, such blind faith in the new is derisively encoded as well in the pun *remis à neuf*, meaning at once "replaced with nine" and "renovated." No less pointedly critical is the piece's signoff, *Ad gloriam tuam* / *Erit Satis*. / *Amen*, an *euouae* echo of the rhyme patter that throughout models secular revolution in the punctuation of each octet of eight-syllable verse with a feminine ending. Dedicated pseudo-solemnly to the glory of "Dieubussy," these closing lines of Church Latin at once announce Erik Satie as true author and belittle any higher authority: *erit satis* means "it will

[14] See *La Revue Musicale S.I.M.*, vol. 10, no. 15 (15 February 1914), 19. Translation adapted from *Writings of Erik Satie*, ed. and trans. Nigel Wilkins (London: Eulenburg, 1980), 81.

be enough," implying that this cheeky little catalogue glorifies Debussy just as much as He deserves.

Figure 0.1. Reproduction and translation of "Les Commandements"



Les Commandements du catéchisme du Conservatoire, remis à 9.

Un correspondant anonyme nous demande l'insertion des octosyllabes suivants dont on appréciera le but éducateur et humanitaire et qui sont sans doute la conséquence d'un vœu :

1. Dieubussy seul adoreras,
   Et copieras parfaitement.
2. Mélodieux point ne seras,
   De fait ni de consentement.
3. De plan toujours tu t'abstiendras,
   Pour composer plus aisément.
4. Avec grand soin tu violeras
   Les règles du vieux rudiment.
5. Quintes de suite tu feras,
   Et octaves pareillement.
6. Au grand jamais ne résoudras
   De dissonance aucunement.
7. Aucun morceau ne finiras
   Jamais par accord consonant.
8. Les neuvièmes accumuleras,
   Et sans aucun discernement.
9. L'accord parfait ne désireras
   Qu'en mariage seulement.

Ad gloriam tuam
Erit Satis.
Amen.

The Commandments of the catechism of the Conservatory, renovated/ninthed [remis à 9].

An anonymous correspondent requests our insertion of the following octosyllables by which one may appreciate the aim of an educator and humanitarian and which are without doubt the consequence of a vow:

1. Thou shalt adore Debussy-God [*Dieubussy*], / and thou shalt copy perfectly.
2. Thou shalt not be melodious, / neither in fact nor by consent.
3. Thou shalt always abstain from plans / for composing more easily.
4. Thou shalt take care to violate / the rules of ancient rudiment.
5. Thou shalt consecute fifths, / and octaves parallel.
6. Thou shalt never ever resolve / any dissonances at all.
7. Thou shalt never finish a piece / by way of consonant accord.
8. Thou shalt accumulate all ninths, / and without any discernment.
9. Thou shalt not want a perfect accord / except in marriage alone.

To thine glory, O Lord, / be it enough [*Erit Satis*]. Amen.

Yet in truth Satie himself neither authored nor authorized these Nine Commandments.[15] A veil of *de jure* anonymity is indeed precisely to the point of this inflammatory bit of anti-Conservatory conservatism: with each clever octosyllabic, this sing-song catechistic caricature mounts a sort of popular churchyard or playground taunt. And under that guise of innocent whimsy, the *Revue*'s "anonymous correspondent" effectively pokes fun at Monseigneur Debussy's devoted followers, with all their doctrinaire fervor for heavily regulated rule-breaking and all their dogmatic abstention from melodiousness or harmoniousness—in other words, all their harsh subversion of consonance in the name of newness.

The civilizational mode of indexing (im)purity is a second function of parallel fifths. Whether monasticized or secularized, such distinction is inhabited not in a cultural vacuum but rather in the forum of colonial struggle. Take, for example, discourses of native genius surrounding the eighteenth-century American composer William Billings. While perhaps not the most obvious companion to Debussy or, say, Haydn, Billings in fact shares a strong common denominator with such originary figures: his historiographic standing, much like that of "the first modernist" and the first master of "the first Viennese modern Style," rests just as squarely on what Philip Bohlman has called "a rhetoric of 'firsts' and 'beginnings.'"[16] Known as the earliest canonical American composer, Billings has long been cast as the "pioneer" of a distinctly

[15] On authorization, see Satie's letter from 8 March 1914: "Mon cher Directeur. Vous prie de me permettre de dire que je ne suis pour rien dans les stupides 'Commandements' que reproduit votre supplément du 15 février. J'ai l'habitude de signer ce que j'écris." Erik Satie, *Correspondance presque complète*, ed. Ornella Volta (Paris: Fayard, 2000), 200. On authorship, see M. D. Calvocoressi, "A Point for Satie's Biographers," in "Music in the Foreign Press," *The Musical Times* 78, no. 1133 (July 1937): 622.

[16] See Richard Taruskin, "The First Modernist," in *The Danger of Music and Other Anti-Utopian Essays* (Berkeley and Los Angeles: University of California Press, 2009), 195–201; James Webster, *Haydn's "Farewell" Symphony and the Idea of Classical Style* (Cambridge: Cambridge University Press, 1991), 357; Introduction to *Music in American Religious Experience*, ed. Philip Bohlman, Edith Blumhofer, and Maria Chow (Oxford: Oxford University Press, 2006), 4.

American "maverick tradition."[17] This role finds support in the received biographical image of Billings as a "rough-forged, unpretentious, and distinctive" working-class tanner, a bootstrapper both literally and figuratively.[18] And it is a role that pairs well with his billing as a "revolutionary," a heroic characterization due in no small part to his close public, and published, association with Patriots.[19] (Paul Revere, for one, even contributed the frontispiece to Billings's 1770 *New-England Psalm-Singer*, reproduced in Figure 0.2 below. A key symbolic feature of the engraving is its emphatic roundedness, as the excerpted musical round wraps around a homosocial roundtable at which all men are equal in the revolutionary confraternity.) In this crucial regard as well Billings stands with founding fathers on the historical stage: his composerly persona has acted similarly as a bearer of national identity.

[17] For a recent study, see Michael Broyles, *Mavericks and Other Traditions in American Music* (New Haven: Yale University Press, 2004), 13–38. Also of interest is Raymond Morin, "William Billings: Pioneer in American Music," *The New England Quarterly* 14, no. 1 (Spring 1941): 25–33.
[18] Mark Fonder, "William Billings: A Patriot's Life?" *The Bulletin of Historical Research in Music Education* 19, no. 1 (Fall 1997): 1–9. For a more proximate account of "Billings' Voice, Personal Appearance and Habits," see Nathan D. Gould, *Church Music in America* (Boston: A. N. Johnson, 1853), 46.
[19] For a trenchant analysis, see Elizabeth B. Crist, "'Ye Sons of Harmony': Politics, Masculinity, and the Music of William Billings in Revolutionary Boston," *The William and Mary Quarterly* 60, no. 2 (Spring 2003): 333–54.

Figure 0.2. Frontispiece of *The New England Psalm-Singer*

(P. Revere *sculp*.)

A Canon of 6 in One with a Ground,
the Words by Rev. M. Byles set to music by W. Billings.

Wake ev'ry Breath & ev'ry String
To bless the great Redeemer King,
His name thro' ev'ry Clime ador'd:
Let Joy & Gratitude and Love
Thro' all the Notes of Music rove,
And JESUS sound on ev'ry Chord.

And it was the international rule against parallel perfect consonances that set the stage. As the influential late-nineteenth-century musicologist John Comfort Fillmore affirms, by freely penning anthems "full of parallel fifths and octaves," Billings "boldly proclaimed the supremacy of the [American] composer's imagination over the rules of the [English] theorists."[20] This imagination proclamation, so to speak, invokes the terms of Billings's own declaration of artistic independence: "If I am not allow'd to transgress the Rules of Composition," he huffed, "I shall certainly Spoil the Air, and Cross the Strain, that fancy dictated."[21] Yet since there is no consent of the governed without natural law, Billings further stresses that "*Nature is the best Dictator*."[22] He is of course neither the first nor the last to appeal to this justificatory principle; Fillmore, for his part, follows suit. Allying nation with nature through nativism, he lauds Billings's "native inward forces to original production"—"the native vigor, crude though it was, that characterized all he did."[23] It is telling that this otherwise laudatory account of the seminal composer, without whose aboriginal procreative urges American music supposedly would have strayed onto "a considerably less advanced stage," so freely concedes that the "uncultivated tanner" produced "work [that] was exceedingly crude."[24] Crudity and want of cultivation, after all, mark a primitive developmental stage—precisely the sort of historical setting one might picture for the birth of a nation. And there is no better soundtrack for such a scene than a strain of parallel perfect consonances.

The inverse labels of "crudity" and "cultivation"—two sides of one and the same tag—have long been attached to rules of counterpoint. These rules, as codified by Tinctoris and

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[20] "Music In North America, Chapter III: The First American Original Contributions to Psalmody," *Music: A Monthly Magazine Devoted to the Art, Science, Technic and Literature of Music*, vol. 8, ed. W. S. B. Mathews (May–Oct., 1895): 278.
[21] *The New England Psalm-Singer* (Boston: Edes and Gill, 1770), 19.
[22] *Idem*. Emphasis in original.
[23] "Music in North America," 277–8.
[24] *Idem*, 278.

transmitted by compatriots such as Gaffurius, Aron, and Zarlino, are thus explicitly tied to a sort of proto-stadial theory, defining a mythical vision of unilineal progress as much musical as moral. As Lévi-Strauss's culinary analysis of myth formation goes to show, conceptions of the crude, the rude, and the raw are deeply entangled with those of the wild, the barbaric, and the lascivious. So just a binary flip away lie the cultivated, the cultured, and the erudite (*eruditis* = *e–* + *rudis*, equating skill with an exit from roughage), abstractions for the fixed, the fine, and the pure. It is hardly surprising or extraordinary, then, that Tinctoris exalts the consonant "sweetness" (*suavitas*) of the moderns, whose regulated and refined music is perfectly ripe for the delectation of "erudite ears" (*aures eruditae*, after Cicero).[25] In keeping with the rhetorical virtue of *puritas* or *latinitas*, Tinctoris the consummate humanist can only assume that perfection proceeds directly from the regular purging of "barbarisms" through cultivation and refinement—a republican recipe for harmony.[26]

Thus a canon-hungry historian who, like Fillmore, seeks to christen the First American Composer could hardly find a better fit for the job than Billings: his rugged everyman character is not so refined as to risk identification with effete loyalists (despite quite another public and published association, namely with one "Rev. M. Byles"), yet at the same time not so fully raw as to acquire the flavor of heathen savagery.[27] It is scarcely a coincidence, then, that Fillmore's research program was given over not only to American nativeness but also to Native Americans.

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[25] *Liber de arte contrapuncti* (Naples, 1477), prologue; *De re publica* (Rome, 54–51 BCE), II. 69. For further discussion, see Rob C. Wegman, "Sense and Sensibility in Late-Medieval Music: Reflections on Aesthetics and 'Authenticity,'" *Early Music* 23 (1995): 298–312; and "Tinctoris and the 'New' Art," *Music and Letters* 84, no. 2 (May 2003): 172.

[26] See also Margaret Bent, "Grammar and rhetoric in late-medieval polyphony," in *Rhetoric Beyond Words: Delight and Persuasion in the Arts of the Middle Ages*, ed. Mary Carruthers (Cambridge: Cambridge University Press, 2010), 58.

[27] As noted in Appendix 3, Byles authored the text for the round framing Billing's frontispiece. While there are certainly more current examinations, the title of this biography says it all: Arthur W. H. Eaton, *The Famous Mather Byles: The Noted Boston Tory Preacher, Poet, and Wit* (Boston: Butterfield, 1914), 109–10.

Convinced that "harmony is an innate endowment of human nature, that it is the same for the trained musician and for the untrained primitive man," Fillmore appealed to Americanist ethnographers and composers alike with a series of harmonized transcriptions, regularizing and hymnizing Omaha songs at will with stereotypical bare fifths.[28] Turning back to the European theoretical tradition that forwarded this stereotype, Fillmore's harmonic teleology may recall the predilections of Coclicus, a Josquin acolyte who held that plainchant is but a "crude" ingredient in a full polyphonic dish of "meat seasoned with salt and mustard."[29] The quaint effect of Fillmore's open fifths moreover brings to mind the trinitarian preferences of Lippius, who much like Tinctoris savored the complete triad's holy spirit of "sweetness."[30] But perhaps above all, Fillmore's nativism serves at last as a reminder of the close affinity between regulation and region, whereby the dominant class's taste for fixity and purity tends to resound with an air of perfect consensus, even or especially against strains of imperfect consent; the musical rule thus resounds against not only the antique but the pre-civilized.

Third, parallel fifths create (dis)order through progressive liberalism. In the whimsical review of Haydn's *Creation* excerpted below, a young Hugo Wolf asks what it would sound like "if a modern composer wanted to illustrate chaos."[31] His answer is worth quoting at length:

> [W]e would certainly not thereby encounter a triad, unless possibly an augmented one; but in all probability paying the musical cost of such a depiction is a task that would fall to a pure fifth. (If we may assume that the good Lord had consecutive fifths ringing in his ears at the first glimpse of chaos, then it follows that justified self-defense rather than

[28] Those ethnographers included Alice Fletcher, Frances Densmore, and Carl Stumpf; those composers, Athur Farwell, Edward MacDowell, and Antonín Dvořák. See Fillmore's "Report on the Structural Peculiarities of the Music," in Alice Fletcher's *Study of Omaha Indian Music* (Cambridge, MA: Peabody Museum, 1893), 61. Regarding Fillmore's notoriety, see James C. McNutt, "John Comfort Fillmore: A Student of Indian Music Reconsidered," *American Music* 2, no. 1 (Spring 1984): 61–70; and Hewit Pantaleoni, "A Reconsideration of Fillmore Reconsidered," *American Music* 3, no. 2 (Summer 1985): 217–28.
[29] "*Caro cum sale et sinapio condita*," in *Compendium musices* (Nuremberg: Montanus and Neuber, 1552).
[30] *Liber de arte contrapuncti*, IV. 5; *Synopsis musicae novae* (1612), F4r.
[31] "Konzerte," *Wiener Salonblatt* (15 November 1885); reprinted in *Hugo Wolfs musikalische Kritiken*, ed. Richard Batka and Heinrich Werner (Leipzig: Breitkopf & Härtel, 1911), 213. Translation adapted from *The Music Criticism of Hugo Wolf*, ed. and trans. Henry Pleasants (New York and London: Holmes & Meier, 1978), 164.

> recklessness or even malice, as some philosophers have presumed to call it, led him to the desperate resolution, in a ridiculously short span of seven days, of imposing so much evil on the world. To be sure, an ordinary piece of cotton would have done the same job, but there were still no trees available at that time, and still no plantation owners either, and the cotton industry still dreamt peacefully in the womb of chaos, and hunter shirts were still rightly a chimera back then. O, you blissful time of chaos!)

Like Pseudo-Satie, Wolf targets the ultramodern. The teasing postulation of would-be vanguards' tone-painting artifice, the quaint aside about a cosmogony assailed by a tinnitus buzz of ungodly sonorities, the absurd final polysyndeton breathlessly recounting a pre-industrial age (unlike that depicted in the fashion of Figure 0.3 below) innocent of property and violence and consumption—these points are all mobilized not in defense of an old order so much as a mock agitation of mutiny against the new.

Figure 0.3. Cover of a Contemporary Men's Magazine

This division between old and new orders rests, however consciously or not, on a dichotomy that has remained subject to quarrel more or less since antiquity, especially in and after Renaissance humanism: "the dichotomy," in Karol Berger's words, "between harmony and passions."[32] On the former side lies the idea of "music as the sensuous embodiment of the intelligible universal harmony"; on the latter side, "music as ethical imitation of human passions and characters."[33] Berger's dichotomy presents a powerful historiographical analytic, inasmuch as these two sides have given rise to some of the most vigorous controversies sounded in the annals of music history, among them Artusi–Monteverdi, Rameau–Rousseau, and Brahms–Wagner (all harmonists–"passionists," respectively).

Along these lines, at first blush it may seem surprising that the piece of criticism at hand, written by an ardent Wagnerite whose fierce progressive leanings later earned him the epithet "the wild wolf from the *Salon Leaf*," comes down so firmly on the side of traditional harmony.[34] Perhaps what ultimately bears emphasis, however, is not the coherence of any one historical subject so much as that of their broader discursive paradigm. In that regard, it is telling that this supposed archmodernist vindicates a hoary old oratorio by cuing precisely the talking points identified by Berger: exaltation of the sensually intelligible, along with invective against the ethically unharmonious.

With respect to intelligibility, the review emphatically starts and ends with praise for Haydn's artistic or musical "sense" (*Kunstsinn* or *musikalisches Gefühl*), by which "a spirit of childlike faith speaks from the heavenly pure tones of [his] muse," and by which his timeless

[32] Karol Berger, "Concepts and Developments in Music Theory," in *European Music 1520–1640*, ed. James Haar (Woodbridge: Boydell Press, 2006), 308.
[33] *Ibid*., 313.
[34] "Der wilde Wolf vom Salonblatt." See Ernst Decsey, *Hugo Wolf*, Band 2 (Leipzig and Berlin: Schuster & Loeffler, 1904), 1. For a discussion of influence, see also Amanda Glauert, *Hugo Wolf and the Wagnerian Inheritance* (Cambridge: Cambridge University Press, 1999).

music "speaks the more intelligibly [*verständlicher*] to us now."[35] As for disharmony, the core of the review is devoted mostly to renouncing the moral corruptness of certain unnamed or unnamable modernists, whose monstrous "disharmonies and shrill instrumental effects" Wolf likens—ironically, given his own nickname—to the "moans and groans" of "a wild animal suffering from a toothache."[36] The butt of this remark is not merely *a* beast, however, but rather the mark of *the* Beast: the "devilish means" of consecutive fifths, linked here to the origin of evil.[37] Even in the service of tone-painting artifice and well-meaning industry, this sonority remains irredeemably ungodly, generator of diabolical tritones and untamable wolf fifths.[38] Thus Wolf plays on several meanings of "means": *Mittel* refers at once to a medium of artistic expression, a medial arithmetic term in acoustic theory, and the financial mediation of property (a Wagnerian motif trenchantly analyzed by Berthold Hoeckner).[39] Rule-abiding consonances thereby protect the original harmonic order on multiple fronts, insulating good from evil, civilized from barbarian, and newfangled from old fashioned.

[35] "Welch ein gläubiges, kindliches Gemüt spricht aus den himmlisch reinen Tönen der Muse Haydns!" "Aber hätte Haydn das in Musik setzen wollen, was er gesehen, so dürfte man mit ziemlicher Sicherheit annehmen, dass das Chaos uns gerade um das unverständlicher geblieben wäre, um was es jetzt eindringlicher zu uns spricht." See Wolf, 212–3 and 214; Pleasants, 164 and 165.

[36] ". . . denn jetzt fallen Disharmonien und grelle Instrumentationseffekte hageldicht nieder, und man möchte glauben, das Chaos sei ein wildes Tier geworden, das an Zahnweh leidet, so stöhnt und ächzt es im Orchester." See Wolf, 213; Pleasants, 164–5.

[37] ". . . diesem teuflischen Auskunftsmittel." See Wolf 213; Pleasants 164.

[38] In this light there is a subtle numerological correspondence to be drawn, if one wants, from Wolf's odd sketch of the genesis: the good Lord inflicted evil on the world "in the ridiculously short span of seven days," just as the *diabolus in musica* inflects the global span of seven tones stacked in pure fifths: *F*–C–G–D–A–E–*B*.

[39] Hoeckner, "Wagner and the Origin of Evil," *Opera Quarterly* 23 (2007): 151–83, esp. 166. On original sin in Romantic aesthetics, see also Lawrence Kramer, "Haydn's Chaos, Schenker's Order; or, Hermeneutics and Music Analysis: Can They Mix?" *19th-Century Music* 16, no. 1 (Summer 1992): 3–17; and Derek B. Scott, *From the Erotic to the Demonic: On Critical Musicology* (Oxford: Oxford University Press, 2003), 101–52, esp. 131.

0.2 Preliminary Claims of Regulative Music-Theory Historiography

As the preceding triptych suggests, the scene of a musical rule's breaking is often no less that of its remaking. But rather than dwell on a deathbed definition drawn from late legacies of forbidden fifths more honored in the breach, the bulk of this dissertation is given rather to revisiting related origin stories. These stories accordingly return to quasi-sacred commandments and catechisms, pre-civilized mirages and mores, and even the proto-mythic form and void of chaos, with each such backdrop carrying forth through the proscenium of music-theoretic scripture and stricture a tale of ethnoreligious polarity submerged in the vagaries of fashion. Along the way, three corresponding historiographic claims are developed.

First, secular periodization schemes and disciplinary divisions continue to accrue around founding figures of Lawgivers and Rulebreakers. Not unlike Biblical historical schemas organized around the juridical consolidations of great patriarchs (*Sex aetates mundi* being the millennial Ages of Noah, Abraham, David, and so forth, each a kind of divine dispensation from Adamic fall to Mosaic covenant), encyclopedic music histories from Kiesewetter to Taruskin have turned on the stylistic regimes of world-historical actors. However rebuffed as quaint or passé, the genre is in fact alive and well; especially in comparative studies of explicit regulations and tacit regularities, normative discrepancies exploited by elite figures continue to demand explanation and summon mystery. The Beethoven Hero is perhaps the best-known of these prophets, with righteous acolytes such as Hugo Riemann and Heinrich Schenker dismissing any misguided scribes whose curations fell short.[40] But of course the Monteverdi Maestro or Josquin Genius is no less viable as an epochal personage, with both invoked in all but name with any

[40] Outstanding examples of such study also include Alexander Rehding, "Tonality between rule and repertory; or, Riemann's Functions—Beethoven's Function," *Music Theory Spectrum* 33/2 (Fall 2011): 109–123; Joseph Dubiel, "'When You are a Beethoven': Kinds of Rules in Schenker's *Counterpoint*," *Journal of Music Theory* 34/2 (Autumn 1990): 291–340.

ascription of “Baroque and Renaissance” per the scholarly legacies of Manfred Bukofzer and Gustave Reese no less than art historian Heinrich Wölfflin. Take, for instance, Lee Rothfarb's "Tinctoris vs. Tinctoris: Theory and Practice of Dissonance in Counterpoint" and Benito Rivera's "Theory Ruled by Practice: Zarlino's Reversal of the Classical System of Proportions."[41] In recounting how such *Rinascimento* composer-theorists have struggled to align incommmensurable rational and empirical edges, these studies confirm that making and breaking rules is by no means exclusive to Romanticism, with the shared *anno mundi* linear chronicle punctuated likewise by the periodic mechanism of some regulative *anno domini*.

The figure of Beckmesser, crypto-Jewish pedant from Wagner’s *Meistersinger*, is one such mainstay of essays on musical freedom. The caviling guildsman is discussed, for instance, by Theodor Adorno on the sociology of creativity,[42] Edward Lowinsky on genius as an ecstatic spirit transcending technical skill,[43] Matthew Shirlaw on the imperative of revelation,[44] and Charles Rosen on freedom in the arts conceived in terms of Romantic inspiration.[45] Special mention goes to a study by William Marvin illustrating how the fictional personage differs little from the actual as a point of methodological articulation around which to distinguish theory from

[41] Rothfarb, "Tinctoris vs. Tinctoris," *In Theory Only* 9/2–3 (June, 1986): 3–32. For related discussion, see also Eunice Schroeder, "Dissonance Placement and Stylistic Change in the Fifteenth Century: Tinctoris's Rules and Dufay's Practice," *Journal of Musicology* 7/3 (Summer 1989): 366–389; and, from the succeeding century and an opposite direction of fit, Rivera, "Theory Ruled by Practice," *Indiana Theory Review* 16 (1995): 145–70.
[42] Theodor Adorno, “Lecture 21, 12 February 1959,” in *Aesthetics 1958/59*, ed. Eberhard Ortland, trans. Wieland Hoban (Cambridge: Polity, 2018), 329–31; *In Search of Wagner*, trans. Rodney Livingstone (London and New York: Verso, 2005), 37–39.
[43] Edward Lowinsky, “Musical Genius—Evolution and Origins of a Concept—I,” *The Musical Quarterly* 50, no. 3 (July 1964): 321–40, esp. 322–25; see also the parting reference in the essay’s closing half to a poetic freedom “not even dreamed of” by *Meistersinger* such as Beckmesser, in “Musical Genius—Evolution and Origins of a Concept—II,” *The Musical Quarterly* 50, no. 4 (Oct. 1964): 476–95, at 478. For more recent critique, see Paula Higgins, “The Apotheosis of Josquin des Prez and Other Mythologies of Music,” *Journal of the American Musicological Society* 57, no. 3 (Fall 2004): 443–510.
[44] Matthew Shirlaw, “Aesthetic—and Consecutive Fifths,” *The Music Review*, vol. 10, ed. Geoffrey Sharp (Cambridge: Heffer & Sons, 1949), 89–96, esp. 89.
[45] Charles Rosen, “The New Grove Dictionary Returns,” in *Freedom and the Arts* (Cambridge and London: Harvard University Press, 2012), 203–209, esp. 207–08; see also “Freedom and Art,” 7–14, and “Tradition without Convention,” 135–68.

history or practice; whatever the existential status of the subject, some comparative measure is invoked.[46] Thus Henry Raynor's social history offers helpful contextualization of guild rule with the onset of bourgeois trade,[47] as does Stephen Rose's review of German Baroque musician novels discussing peasant beer fiddlers—ribald producers of parallel fifths, among other traces of dilettantism—in antagonism with petty bourgeois municipal functionaries such as the *Stadtpfeifferei*.[48] In both cases the mediating concept of the rule remains entrenched, as the *Leges Tabulaturae* of the priesthood are ultimately broken in favor of the tabula rasa of an individual soul, a Reformation gesture in keeping with the notion of a progressive arc toward a Romantic aesthetics of inspiration as a particular kind of interior mimesis. Whatever the moral stakes of such a reading, the intended upshot of this study is not to legislate any patently paradoxical rule against rules but rather to support explication of where they remain tacit.

Thus a second claim developed in the dissertation is that the rule concept serves as a middle term in and among discourses of cultural theory and history. From liberal and mechanical arts to human and social sciences, exceptions to the rule are central to navigating interdisciplinary traffic: every field has its boom-and-bust sanctioning of meter and syncope, recipe and impromptu, structure and agency, ritual and taboo, and so forth; and by tracking such figures of transgression and clemency, the cross-domain mappings and form-function pairings that undergird any history of theory or theory of history can be made manifest, as clarified by Lawrence Zbikowski's powerful formulations of cognitive musicology as cultural practice.[49]

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[46] William M. Marvin, "The Function of 'Rules' in *Die Meistersinger von Nürnberg*," *The Journal of Musicology* 20, no. 3 (Summer 2003): 414–60, tabulated 457–60.
[47] Henry Raynor, *A Social History of Music from the Middle Ages to Beethoven* (London: Barrie and Jenkins, 1972).
[48] Stephen Rose, "The Musician-Novels of the German Baroque: New Light on Bach's World," *Understanding Bach* 3 (2008): 55–66.
[49] My thinking on these matters and many others has been influenced by Zbikowski's theories of theories as consolidated particularly in the monographs *Conceptualizing Music: Cognitive Structure, Theory, and Analysis* (London and New York: Oxford University Press, 2002) and *Foundations of Musical Grammar* (Oxford and New York: Oxford University Press, 2017).

In a related vein, one need only look to the layout of *The Cambridge History of Western Music Theory*, edited by Thomas Christensen, for "a snapshot of current opinion" on the topic, as one distinguished reviewer put it, though the intervening decades surely offer less of a still life than a vivid motion picture.[50] Building on a disciplinary tripartition set up by Carl Dahlhaus, the bulk of this touchstone reference work is indeed devoted to "Regulative Traditions" (as opposed to "Speculative" and "Descriptive" ones).[51] "Such music 'theory,'" Christensen observes, "seeks to draw from practice normative rules of syntax and models of structure, while at the same time disciplining that practice through pedagogical strictures. Here we would have an even more expansive category of pedagogical writings crossing the centuries and touching on just about every parameter of music: counterpoint, harmony, rhythm, meter, melody, form, genre, and style."[52] In sum, even abstracted synchronically the manifold regulative dimensions of music theory arc toward diachronic value judgment, with the implicitly historicized juxtaposition of counterpoint and harmony initiating a parametric pileup culminating in genre and style, benchmarks of periodization and progressivism.

Elsewhere Christensen explores this very point in considering how "critics have always sought ways to balance the desideratum of prescribing objective norms of art while granting artists free reign to their imagination," just as "theorists of music have always faced a tension between theoretical unification and practical variety, between the synthetic aspirations of the 'musicus' and the empirical creativity of the 'cantor.'" In tracking this "dialectic of normativity and freedom" across French musical poetics of the *grand siècle*, Christensen touches on many of

[50] Dmitri Tymoczko, Review of *The Cambridge History of Western Music Theory* by Thomas Christensen (editor), *Isis* 94/2 (June 2003): 345.
[51] Dahlhaus, "Was heißt 'Geschichte der Musiktheorie'?" in *Ideen zu einer Geschichte der Musiktheorie: Einleitung in das Gesamtwerk*, Geschichte der Musiktheorie, ed. Frieder Zaminer (Darmstadt: Wissenschaftliche Buchgesellschaft, 1985), 8–39.
[52] "Introduction," *CHoWMT* (Cambridge: Cambridge University Press, 2002), 13–14.

the issues that this dissertation takes up, among them the mediating role of rules in differentiating bad from good, old from new, and implicit from discursive.[53]

Yet there remains much ground left to cover. This project certainly cannot hope to traverse it all, though it does essay to orient the map according to a signal coordinate in Christensen's reflections on taste: the intersection of music and manners. In short, the insight that music theory acts as a code of etiquette, mediated by rules, suggests a certain approach to the vast terrain of regulative music theory. The following case studies accordingly interweave three strands of scholarship. First, they respond to sociological studies of manners and deviance; most notably, a cultural history is developed from Norbert Elias's view that civilized personal conduct emerged in the Renaissance alongside centralized state power, as well as Émile Durkheim's contention that deviance is paradoxically normal.[54] Second, the case studies draw on Anglophone intellectual history and its continental counterparts, especially conceptual history, in tracking the unit idea of a musical rule across the cultural grid of a *longue durée*.[55] And third, the case studies center the history of music theory through close readings of texts representative of major sites of rule production and interpretation.

The undertaking of such an epistemic discourse analysis is of course indebted in no small part to the atmosphere of Foucauldian regime that has supported political life and indeed biopolitics in the academic humanities for several generations. Michel Foucault's teacher Georges Canguilhem was instrumental in extending the notion of regulation from biology to

[53] Christensen, "Rules, License, and Taste in 17th-Century French Music Theory: From Mersenne to Rameau," in *Musikalische Norm Um 1700*, ed. Rainer Bayreuther (2010), 81.
[54] Elias, *The Civilizing Process*, vol. 1: *The History of Manners* (New York: Pantheon, 1978); Durkheim, *The Rules of Sociological Method*, ed. Steven Lukes (London: Palgrave Macmillan, 2013), 42–46.
[55] The scholarly tradition I refer to is a threefold legacy of *histoire des mentalités*, *Begriffsgeschichte*, and "history of ideas" (now represented respectively by the journals *Annales d'histoire économoque et sociale*, established by Marc Bloch and Lucien Febvre in 1929; *Archiv für Begriffsgeschichte*, est. Erich Rothacker, 1955; and *Journal of the History of Ideas*, est. Arthur Lovejoy, 1940).

sociology,[56] and today one can scarcely consider the notion of an aesthetic norm otherwise:[57] to look back on the musings of, say, turn-of-the-century English critic Donald Tovey on artistic "normality," the formerly invisibilized institutional corollaries of medical pathology are now glaringly close at hand.[58] Thus musical rules acquire a moral urgency diagnosed by, for instance, Arved Ashby on the juridical dimension of tonality, William Cheng on critical play as an intervention into reparative ethics of sonic justice, and Jessica Peritz on vocal conventions as indices of selfhood and statecraft.[59] The list could go on, as the ethical stakes of regulative musicology embrace sociopolitical considerations including gender, sexuality, race, and labor. A recent monograph by historian of science Lorraine Daston illustrates in extending the suspension of the miracle from rules of thumb to exacting Taylorist scientific management;[60] various socially engaged subfields, among them queer music theory, Marxist musicology, improvisation studies, and disability scholarship, offer crucial interventions in laying bare the texture of the sonic and the social in normative terms exceeding articulation in legislation and jurisprudence.

In this regard one last gray eminence ought to be explicitly invoked, namely German sociologist Max Weber. If rubrics and red tape came to be understood in a pivotally different

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[56] Georges Canguilhem, "Régulation (épistémologie)," in *Encyclopaedia Universalis*, Vol. 14 (Paris: Universalia, 1972), republ. in *Oeuvres completes, Histoire des sciences, épistémologie, commemorations, 1966–1995*, ed. Camille Limoges (Paris: Vrin, 2015), 541–53. Cf. "The Problem of Regulation in the Organism and in Society," in *Writings on Medicine*, trans. Stefanos Geroulanos and Todd Meyers (New York: Fordham University Press, 2012), 67–78.

[57] An outstanding example in the history of music theory is Jairo Moreno, *Musical Representations, Subjects, and Objects: The Construction of Musical Thought in Zarlino, Descartes, Rameau, and Weber* (Bloomington: Indiana University Press, 2004), esp. the opening exposition on music-theoretic epistemes after Michel Foucault's *The Order of Things* (trans. 1970), 2–9, as well as the dedicated reading of René Descartes's *Rules for the Direction of the Mind* (publ. 1701), 67–72.

[58] "This will suffice for a definition of freedom in art. Freedom is not opposed to normality. It is in every sense of the term a function of it." Donald Tovey, "Normality and Freedom in Art," in *The Main Stream of Music and Other Essays* (New York: Oxford University Press, 1949), 183–201, at 184.

[59] Arved Ashby, "Tonality as Law, Contravention, Performativity," *Trans: Revista Transcultural de Música* 13 (2009); William Cheng, *Just Vibrations: The Purpose of Sounding Good* (Ann Arbor: University of Michigan Press, 2016); Jessica Gabriel Peritz, *The Lyric Myth of Voice: Civilizing Song in Enlightenment Italy* (Los Angeles and Berkeley: University of California Press, 2022).

[60] Lorraine Daston, *Rules: A Short History of What We Live By* (Princeton, NJ: Princeton University Press, 2022), esp. 122–50.

way after the antiwar movements of 1968, reflected in structuralism's fall from grace in a paradigm shift from Weberian conduct to Foucauldian discipline, then perhaps something was lost in the elevation of contingency over totality—that is, the ratio. The process of rationalization, a red thread winding through narratives of Freudian repression and Eliasian civilization, draws in no small part on music historiography. As David Graeber's anthropology of bureaucracy explains, there remains a special place for Neopythagoreanism in telling the story of a *Utopia of Rules*, as a key critique of economism rests on the numerological correspondences that serve as, and conscript servants for, a religion of proto-bureaucracy in which musical relations are taken to instantiate Greco-Roman juridical relations.[61] The comma or wolf fifth has long been held as a limit of reason in equal temperament no less than the solar calendar and even the fragmentary psyche;[62] the corresponding Weberian question this dissertation asks is how early modern cultural economy sounded this rounding off during the eras of primitive accumulation, and thus how a corresponding rhetorical *accumulatio* was figured during a parallel but not quite identical process of regularization.

A third claim developed in the dissertation, then, is that rules of perspective no less than mannerist distortions and baroque figures guide the shaping of historiography; in other words, historical change can be registered as a function of rule violation. As twentieth-century exponents of narratology such as Kenneth Burke and Hayden White took pains to emphasize, histories tend to rehearse certain tropes.[63] This dissertation returns to those turns by troping on

[61] David Graeber, *Utopia of Rules: On Technology, Stupidity, and the Secret Joys of Bureaucracy* (New York and London: Melville, 2015), 166–74, esp. 171: "It's easy to see the grand cosmic hierarchies of late Antiquity, with their archons, planets, and gods, all operating under the unfolding of abstract rational laws, as simply images of the Roman legal bureaucratic order writ very, very large."
[62] For a superb history of medical, musicological, and astronomical *eucrasia*, see Andrew Hicks, *Composing the World: Harmony in the Medieval Platonic Cosmos* (New York: Oxford University Press, 2017), esp. 132–37.
[63] Kenneth Burke, "Four Master Tropes," *The Kenyon Review* 3, no. 4 (Autumn 1941): 421–38; Hayden White, *Metahistory: The Historical Imagination in 19th-Century Europe* (Baltimore: Johns Hopkins University Press, 1973).

the tropes themselves in order to propose not just a history of music theory but a music theory of history. The result is an essay in the ironic voice, where phonological texture is often pronounced in tandem with semantic content; and this historiographic sensualism is in turn registered and directed by rhetorical operations. According to certain enshrined complements, these include amplification, attenuation, metaphor, and metonymy;[64] or increase, diminution, alteration, and relocation.[65] As the following chapter summary elaborates, the case studies explore scope and distance through a trichotomy of the anamorphic, the adjacent, and the affine.[66]

Chapter 1, "Maxims of Brevity for the Lutheran Canon," explores issues of scope in the theopolitics of musical precepts and imitative *bicinia* in mid-sixteenth-century Nuremberg, particularly as manifest in Heinrich Faber's *Little Compendium of Music for Beginners*, the most widely used music textbook of the period. The chapter argues that as a counterbalance to the technical affordances of mass production, consumer use-value pressures elevated the rhetorical desideratum of brevity. It was thus a formal feature of the precept that it was rendered in its most spare presentation; the canon, whose subscription enabled compressed representation, was its natural pairing. Theoretic concepts were moreover subject to the Second Commandment injunction against graven images, an iconoclasm or *Bildverbot* imposed through the educational reforms of Phillip Melanchthon and Peter Ramus. They were also shaped in part by the mapping of bodily scope that attended the Protestant New World missions. Thus the miniature came into its own as both a genre and a model, with Mosaic lawgiver figures both at home and abroad

[64] Quintilian, *Institutio Oratoria*, Chap. 7, Books 4–6. NB the distinction from "abuse" in Chap. 6 verses 34–36, following from the consideration of propriety in Chap. 2.
[65] *Categories*, Sect. III, Part 14. For context, see Alessandro D. Conti, "Categories and Universals in the Later Middle Ages," in *Medieval Commentaries on Aristotle's* Categories, ed. Lloyd Newton (Leiden and Boston: Brill, 2008), 369–410, esp. 406–07.
[66] I am grateful to Berthold Hoeckner for lending me this elegant analytic.

refining its dimensions as a rule. Particularly in this context, the Freudian sociology of totemism suggests a politicized reading of the concept of *usurpatio*, a term of art in Faber's pedagogy.

Chapter 2, "How the English Madrigal Colonized Even the Animal World," explores relationships between pleasure and power in Stuart England with reference to the English polymath Charles Butler, particularly his *Principles of Musik* and *The Feminine Monarchie, or a Treatise Concerning Bees*. Just as popular sovereignty was a fraught concept in early modern state formation, its symbolism was often abuzz with complexities if not antinomies thickened in the figure of the bee, an enduring symbol of governance with rich musical associations: at turns conceived as beneficent and dangerous, harmonious and strident, orderly and lawless, its cultural genealogy parallels self-conception of the people as a political unit, with all their inherent ambivalences and misgivings expressed not only in the emblem or fable but also crucially in sonic textures from fauxbourdon to the madrigal. Its invocation of natural history within rather than against artistic or artificial history opens moreover an entry into consideration of tacit rules disguised as what Francis Bacon called customs of nature, with the foil of arbitrary heteronomy in convention, contract, and consent registered in the early modern musical soundbites of consent, compact, and concord. As Horkheimer's account indicates, this form was indeed crucial to the collective's self-understanding during the period, as the bee emblem was part and parcel in the regularization of conscience in the shift from shared belief in natural law to a public investment in laws of nature corresponding with not only the rise of empiricism but also the elevation of individual privacy in tandem with that of the public sphere. (Some related concepts include the animalic onomatopoeias of buzz, hum, and fauxbourdon; the crosspollination of texture and genre in notions of floridity, florilegium, anthology, and collection/collectivity; and the natural authority of mellifluousness, suavity, and sweetness.)

Chapter 3, “Harmonic License in the Libertine Enlightenment,” considers at last psychic representations of probity with an essay on the social biography of cultural elites in the manner of Elias’s Mozart study, Bourdieu’s Flaubert or Monet studies, and De Nora’s Beethoven monograph, to discover the various historiographic personae of Jean-Philippe Rameau, royal symphonist and author of 1722 *Traité de l’Harmonie* in relation to the 1748 opéra-ballet *Zaïs*. By examining his biography from three distinct vantage points (disembroiler, diplomat, and debonair), the chaos of intellectual reception is clarified through the concept of license, with its vicarious extension of *noblesse du robe* accounting for the caprices of this embattled figure. In attempting to represent lawlessness, the paradox is how to reconcile universal law with ingenious virtue in a cultural refraction of theodicy.

Each of these case studies more generally suggests that, in addition to the standard examples of discant and counterpoint, musical rules can be found in a variety of scenes. Each case study highlights a distinct period, namely German Reformation, English Renaissance, and French Enlightenment (and Revolution); each moreover illustrates a distinct phase in the active recasting of cultural norms, namely rule making, rule following, and rule breaking. By thus showcasing the fits and starts of regulist production in imperial European metropoles during pivotal conjunctures, a key claim substantiated is that historical periodization is in no small part a language game of regulation (and its discontents). The practice of music theory is accordingly registered not simply as a reflection of changing times but as an active participant in the bourgeois public spheres by which notions of sovereignty were dynamically constructed and reframed. As a case in point, this study turns to a modernizing musical culture now largely forgotten, though certain memorable features inevitably reside in little artisanal traces.

CHAPTER 1. MAXIMS OF BREVITY FOR THE LUTHERAN CANON

1.1 A Brief History of "Brevity" in Music Theory of the German Reformation

Enlarging on a maxim borrowed from the Bard, the great German Romantic humorist Jean Paul once quipped that **"**brevity is the body and soul of wit."[1] But well before such grand ironists got to it, *brevitas* served a bit more modestly as the daily bread of European liberal education reform for certain humble preceptors. Among their many dutiful bids to enshrine a curriculum of basic precepts and paradigms, music theory of the continental *gymnasium* offers a particularly rich historic archive, brimming at every turn with dense paraphrases and handbooks, themselves often digests of pithy guidelines and rubrics. Consider, for example, Bonaventura da Brescia's *Breviloquium* for teaching plainchant rules to "the simple and poor," Jean le Rond d'Alembert's academic précis of elementary harmonic theory (discussed at some length in Chapter 3 of this dissertation), or Hugo Riemann's relatively slight vade mecums on the practical rudiments of piano performance.[2] However divergent in import and ecology, from cloisters to conservatories such bite-sized compendia have long been staples for protecting and propagating the expansive musical residuum of the Holy Roman Empire. And yet the popular reach of their breviloquence belies a want of historiographical attention, with lengthy and learned tomes far more often presented as the main scholarly course. As a corrective, this chapter takes up an example at once little and now little known but at one time quite ordinary.

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[1] *Vorschule der Aesthetik*, 2.9.41 (Hamburg: Friedrich Verthes, 1804), 275: "Kürze ist der Körper und die Seele des Witzes." Cf. Lord Polonius's counsel from *Hamlet*, 2.2, in *Shakspeare's dramatische Werke*, trans. August Wilhelm Schlegel (Berlin: Johann Friedrich Unger, 1798), 199: "Weil Kürze dann des Witzes Seele ist."

[2] Bonaventura da Brescia, *Rules of Plain Music = Breviloquium musicale, Regula musica plane* [1497], trans. Albert Seay (Colorado Springs: Colorado College Music Press, 1979), cf. *Brevis collectio artis musicae* [1489], ed. Albert Seay (Colorado Springs: Colorado College Music Press, 1980), 84; *Elements of Music*, trans. Kristie Beverly Elsberry (PhD diss., University of Florida, 1984), from *Elémens de musique* (Paris: David, 1752); Hugo Riemann, *Vademecum für den ersten Klavierunterricht*, Op. 24 (Cologne: P.J. Tonger, 1877) and *Vademecum der Phrasierung*, 3rd ed. (Berlin: Hesse, 1912).

Enter *homo faber*.[3] Of music texts for German *Lateinschulen* of the late-sixteenth and early-seventeenth centuries, probably the most widely used was Heinrich Faber's *Compendiolum musicae pro incipientibus*, or "Little Compendium of Music for Beginners." First published in Brunswick in 1548, it saw no fewer than forty-six print runs through 1665, spread all the way from Bavaria up to Brandenburg.[4] To put those dates into perspective, imagine if North American primary music classes based their curricula on a theory textbook that first saw the light of day at the turn of the twentieth century.[5] Given such an eerily long shadow on educational publishing, the surprising endurance of this afterlife advances a certain mystery of microhistory: what accounts for the *Compendiolum*'s unusual longevity?

It was certainly not for any shortage of options; there were already stacks of fine alternatives from authors such as Georg Rhau, Martin Agricola, Sebald Heyden, and above all Nikolaus Listenius, whose 1537 *Musica* had previously cornered the market. Nor was it a matter of any especially unique or imaginative content; as its title implies, and as its preface confirms, the *Compendiolum* is no more than a summary of "all the most usual precepts of singing."[6] But perhaps that was precisely Faber's winning innovation: it was by summarizing the work of his predecessors that he beat them at their own language game, so to speak—the name of the game being *brevitas maxima*.

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[3] That is, the primordial craftsperson whose instrumental work undergirds the free play of *homo ludens*, theorized in Dutch historian Johan Huizinga's *Homo Ludens: A Study of the Play-Element of Culture* (London: Routledge, [1949] 2003), and developed in French sociologist Roger Caillois's *Man, Play, and Games*, trans. Meyer Barash (Chicago: University of Illinois Press, [1961] 2001). This line of cultural anthropology has recently been extended by such diverting ludo-musicologists as Julianne Grasso, Will Cheng, and Roger Moseley.

[4] For an expert discussion of the Compendiolum's publication history, see the opening commentary to Oliver Trachier's French translation, *Heinrich Faber: Compendiolum musicae pro incipientibus*, Collection d'études musicologiques/Sammlung musikwissenschaftlicher Abhandlungen 96 (Baden-Baden: Valentin Koerner, 2005), 22–28. For a helpful guide in English, see also David Damschroder and David Russell Williams, *Music Theory from Zarlino to Schenker: A Bibliography and Guide*, Harmonologia 4 (Stuyvesant, NY: Pendragon Press, 1990), 84.

[5] A proximate American domestic ware, to skip over *Harmonielehre* imports, might be Hugh A. Clarke's *Harmony: A Texbook* (Philadelphia: Presser, 1898).

[6] ". . . usitatissima quaeque canendi praecepta." Faber, *Compendiolum* (Nuremberg: Berg & Neuber, 1551), A2r.

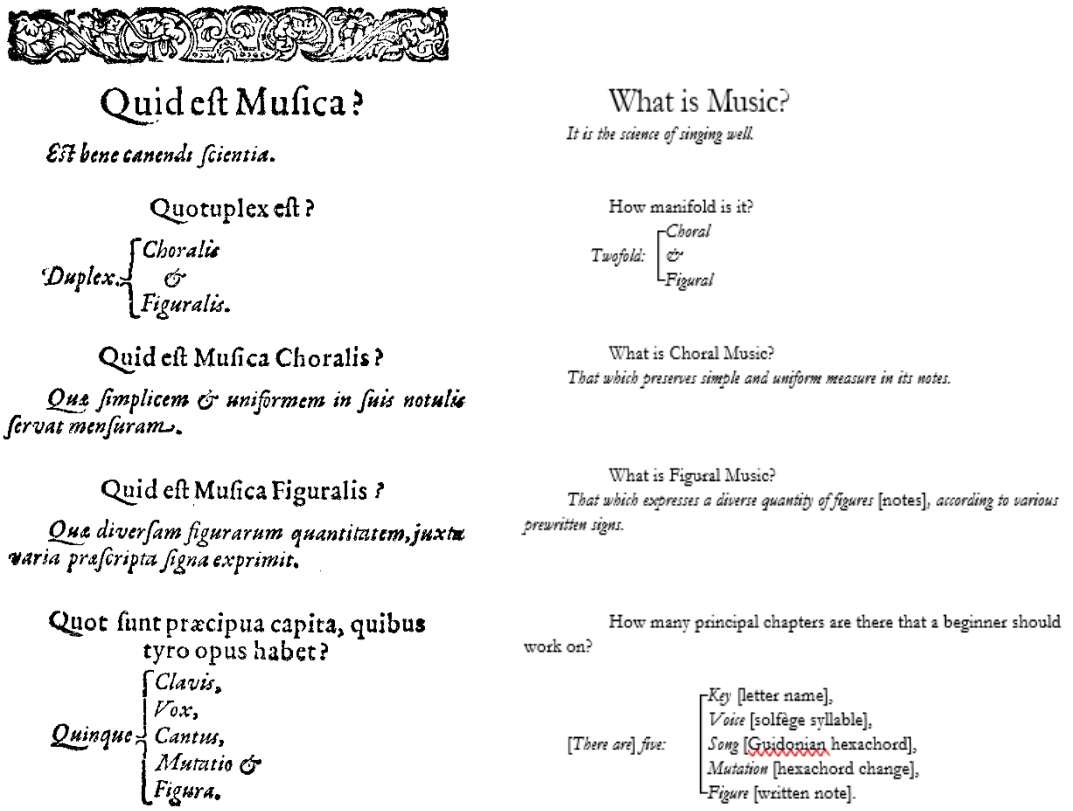
This ancient oratorical desideratum was peddled again and again by writers on music throughout the German Renaissance. Faber, for his part, opens with a Horatian dictum urging that "whatever the precepts, be brief."[7] It was a classical truism long taken as gospel truth. Writing a half-century earlier, Adam of Fulda likewise rehearsed Quintilian's advice that "we make ourselves intelligible shortly [*breviter*] if we explain the sum of something aptly and briefly [*breviter*]."[8] And similar pronouncements on the virtues of *brevitas* were made by just about every contemporary author in between: Rhau, for instance, recommended "utility indeed no less than brevity [in] the most elegant precepts that our age has delivered";[9] Agricola claimed to convey "only the essential elements of music, which are explained in this book with no less brevity than clarity";[10] and Listenius also touted "the brevity of a little book [that] potentially moves you with succinctness."[11]

Yet none of those authors managed to write a book quite as succinct as Faber's "Little Compendium," which is nothing if not little. As made manifest by a recent facsimile, the *Compendiolum*'s thin spine holds a mere three-dozen duodecimo pages (each measuring about 4½ by 6½ inches across), making it portable, pocket-sized.[12] The layout of those pages is also little in another sense (shown in Figure 1.1): the text is strewn sparsely across the page, inviting the reader to scan just a few lines at a time. Ultimately, however, the book is small not only

[7] "Quicquid praecipies, esto brevis." *Compendiolum*, A2r. The source is Horace's *Arte Poetica* (c. 18 CE), line 335.
[8] "Nos ipsos breviter dociles facimus, si apte et breviter summam rei exponimus." Fulda, *Musica*, in *Scriptores ecclesiastici de musica sacra potissimum*, ed. Martin Gerbert (St. Blaise: Typis San-Blasianis, 1784; repr., Hildesheim: Olms, 1963), 3:329–81. Cf. Quintilian, *Institutio Oratoria*, 4.1.34: "docilem sine dubio et haec ipsa praestat attentio; sed et illud, si breviter et dilucide summam rei, de qua cognoscere debeat, indicaverimus, quod Homerus atque Vergilius operum suorum principiis faciunt."
[9] ". . . non inferiori quidem utilitate quam brevitate, elegantissima praecepta, hoc nostro seculo tradita sunt." *Enchiridion musices* (Leipzig: Rhau, 1517), Aiijr.
[10] ". . . precipua tantum Musices precepta, in hoc libello succincte simul & dilucide explicata." *The Rudiments of Music (Rudimenta Musices, 1539)*, trans. John Trowell, Classic Texts in Music Education 21 (Aberystwyth: Boethius Press, 1991), Aijv.
[11] "Te breuitas fortasse mouet succincta libelli." *Rudimenta musicae* (Wittenberg: Rhau, 1535), a1v.
[12] Faber, *Compendiolum* (Nuremberg: Paul Kauffmann, 1594; repr., Bologna: Arnaldo Forni, 1980).

literally but literarily, inasmuch as its subject matter is basic and its prose style simple, couching the rudiments of music notation in a singsong question-and-answer game—the language of little children.

Figure 1.1. A Page out of Faber's Book, with Translation



Quid eſt Muſica?

Eſt bene canendi ſcientia.

Quotuplex eſt?

Duplex: *Choralis & Figuralis.*

Quid eſt Muſica Choralis?

Quæ ſimplicem & uniformem in ſuis notulis ſervat menſuram.

Quid eſt Muſica Figuralis?

Quæ diverſam figurarum quantitatem, juxta varia præſcripta ſigna exprimit.

Quot ſunt præcipua capita, quibus tyro opus habet?

Quinque: *Clavis,* *Vox,* *Cantus,* *Mutatio &* *Figura.*

What is Music?

It is the science of singing well.

How manifold is it?

Twofold: *Choral* & *Figural*

What is Choral Music?

That which preserves simple and uniform measure in its notes.

What is Figural Music?

That which expresses a diverse quantity of figures [notes], *according to various prewritten signs.*

How many principal chapters are there that a beginner should work on?

[*There are*] *five:* *Key* [letter name], *Voice* [solfège syllable], *Song* [Guidonian hexachord], *Mutation* [hexachord change], *Figure* [written note].

These aspects of littleness, both material and formal, go to show how such brief books were underwritten by an emergent capitalist logic of commodity circulation. On the supply side, being brief meant minimal manufacturing overhead and maximal profit margins for publishers: authors who, like Faber, used words sparingly in turn spared printers from using up their stores of "constant capital," saving single-use resources such as paper and ink, as well as reusable equipment such as woodblocks and metal types;[13] and lower production costs meant that their products cost less, with distribution stretching farther and spreading faster into new markets. On the demand side, rhetorical brevity also afforded a certain ergonomic and cognitive ease for readers: the *Compendiolum*'s format, for instance, fit comfortably into small hands and heads alike; its fitness for juvenile user-friendliness thus expressly maintained and capitalized on the era's growing accommodation of "childhood" capacities and sensibilities.[14] At the risk of grandiloquence, this latter formulation might even be read as a bit of economic theology: if the nature of commodity fetishism is indeed to "transubstantiate" labor- and use-values into exchange-value, as capitalism's head heresiarch revealed some centuries later, then the Lutheran book trade's commodification of brevity as such offered something like a sacramental union of market forces, a holy grail for investing consumer sovereignty into the various rites, relics, and real presences of confessional literature.[15]

Music-theoretic brevity, for its part, was also employed toward theopolitical ends. Cristle Collins Judd has illustrated, for example, how Heyden's short dialogue *De arte canendi* promoted Protestant ideology in Nuremberg during the 1530s and '40s. This agenda, Judd

[13] For a discussion of European print history after Marx's distinction between constant and variable capital, see Lucien Febvre and Henri-Jean Martin, *The Coming of the Book: The Impact of Printing, 1450–1800*, ed. Geoffrey Nowell-Smith and David Wootton, trans. David Gerard (New York: Verso, 1997), 216–24.
[14] The classic, if controversial, study of this development is Philippe Ariès, *Centuries of Childhood: A Social History of Family Life*, trans. Robert Baldick (New York: Alfred A. Knopf, 1962).
[15] Cf. Marx's *Capital*, vol. 1, chap. 3, with discussion by Andrew Cole, "The Eucharist and the Commodity," in *The Birth of Theory* (Chicago: University of Chicago Press, 2014).

argues, was advanced in ways both overt and implicit: overtly, by way of a preface entreating the powerful Reformer Hieronymous Baumgartner to relieve boys of their duty to sing (Catholic) plainchant in church and school, "claiming that they are overtaxed by this burden"; and implicitly, by reviewing standard music-theoretic topics "in a more superficial way," covering only the bare features of mensural (not chant) notation.[16] The *Compendiolum* more or less followed suit, but with two significant departures: it also addressed itself to a powerful Reformer, namely Nikolaus Medler, or rather to his three young sons;[17] and it also introduced those readers, among countless others, to the bare features of mensural notation, indeed to the very barest of the bare. Whether influential or incidental, these miniature musicological reforms accorded with liberal burgher ordinances, some issued by Medler himself,[18] that sought to curb the force and reach of Catholic musical traditions (e.g., Jesuit Ciceronianism).[19]

To put it starkly, music-theoretic abbreviation thus served as a soft weapon, a subtle instrument of turf war. Granted, it may seem a bit tendentious or even sensational to credit music pedagogy with such martial import. But "the battle over polyphony," as Rob Wegman observed, has long been framed in terms of military contest (a striking example being Claudius Sebastiani's 1563 *Bellum musicale*, where measured polyphonic music is pitted against monophonic

[16] Judd, “Music Anthologies, Theory Treatises, and the Reformation: Nuremberg in the 1530s and 1540s,” in *Reading Renaissance Music Theory: Hearing with the Eyes* (Cambridge: Cambridge University Press, 2000), 92.
[17] For further information on the relationship between Faber and Medler, see Christoph Stroux, "Faber, Heinrich," in *Neue Deutsche Biographie* (Berlin: Duncker & Humblot, 1959), 4: 720; and Hermann Axel and Kluge Arndt, *Nikolaus Medler (1502–1551): Reformator, Pädagoge, Mathematiker* (Klosterneuburg: Malotas, 2003).
[18] For transcriptions of earlier such ordinances, see Felix Köster, "Die Naumburger Kirchen- und Schulordnung von D. Nicolaus Medler aus dem Jahre 1537," *Neue Mitteilungen aus dem Gebiet historisch-antiquarischer Forschungen*, Band 19 (Halle: Anton, 1898): 497–569.
[19] I am especially grateful to Robert Kendrick for helping to clarify my thinking on the critical role of Counter-Reformation missionary orders and musical cultures in a larger global-historical scene. For an excellent summary of historiography on the topic, see Kendrick, "Catholic Music," *Cambridge History of Sixteenth-Century Music*, ed. Iain Fenlon and Richard Wistreich (Cambridge: Cambridge University Press, 2015), 27–55.

plainchant).[20] And it is no mere metaphor, considering the lives actually lost. Reformation historians have shown time and again that as religious/imperial dissidence gave way to bloodshed, evangelists raked over multi-confessional territories with increasing urgency for fresh converts/recruits.[21] Along these (battle) lines, Faber's preface might well be read as a bid at swelling the ranks, particularly his subjunctive plea "that boys committed to our faith be invited to the study of Music in lower [age] groups," so that "God [may] … guide them toward the service of Church and State."[22] Reducing the preconditions of music literacy facilitated not just enculturation but enlistment.

Viewed against this background of sectarian conflict, the *Compendiolum*'s small stature puts into perspective the relative dimensions of theory and practice—and why the latter so thoroughly overshadowed the former. The late 1520s saw Philipp Melanchthon, an eminent Lutheran humanist, launch sweeping educational reforms; and so later generations of schoolchildren came to study liberal arts, especially music, through a classically inspired pedagogical model: students memorized a few basic theoretical principles (*praecepta*), then practiced rehearsing examples and composing imitations of their own.[23] Emphasis clearly fell on the advanced practical stages, as maintained by one local rector who "recommended *praecepta*

[20] *The Crisis of Music in Early Modern Europe, 1470–1530* (New York: Taylor & Francis, 2005), 167. See also 200, n. 41, where Wegman reviews Sebastiani's *Bellum musicale inter plani et mensuralis cantus* (Strasbourg: Paul Messerschmidt, 1563).

[21] Hence historian Ernst Troeltsch's definition of the period as "the 'Confessional' Age of European History" in *Protestantism and Progress: A Historical Study of the Relation of Protestantism to the Modern World*, trans. W. Montgomery (New York: G. P. Putnam's Sons, 1912), 89. For a recent response, see Susan R. Boettcher, "Confessionalization: Reformation, Religion, Absolutism, and Modernity," *History Compass* 2, no. 1 (2004): 1–10.

[22] Emphasis mine. "[U]t pueri nostrae fidei commissi, in inferioribus classibus (majoribus enim haec praecepta copiosius tradi necesse est) ad Musicae studium invitarentur . . . . DEUS opt[imus] max[imus] ea fortunet, atque ad Reipub[licae] & Ecclesiae utilitatem gubernet." *Compendiolum*, A2r.

[23] The classic study of Melanchthon's educational program (still based largely on texts popular throughout the Middle Ages, such as Donatus's grammatical *Ars Minor,* Cato's proverbial *Disticha*, and Aesop's translated *Fabulae*) is Karl Hartfelder's *Philipp Melanchthon als Praecepter Germaniae*, Monumenta Germaniae Paedagogica, Vol. 7 (Berlin: A. Hoffman, 1889).

briefly, *usus* extensively."[24] Melanchthon himself prescribed much the same method in a standard-bearing 1527 article "On Schools," advising that Latin teachers not just stop at abstract grammar lessons, but move on to applied conversation; that way, students "acquire the practice by use."[25] The underlying value assumption is telling: the conviction that such use is ultimately useful, that such practice is at last practical and not just propaedeutic, marks a crucial step away from old didactic ideals of clerical privilege and Boethian contemplation. By pivoting instead toward democratized learning under the populist hermeneutic banner of *sola scriptura*, general education came to spread the gospel far and wide through the German bourgeoisie and beyond.[26]

In brief, music theory of the period was thereby shaped—and sized—by the exigencies of mass conversion/conscription. Following religious historian Robert Scribner's groundbreaking work on "popular propaganda," both Reformation studies and music scholarship have grown more attuned to the role of song in broadcasting the Protestant party line to and through lay people or "simple folk."[27] Much of this research has centered on early Lutheran hymnody, from the seminal 1524 broadsheets of the *Achtliederbuch* to the mature 1545 omnibus of *Geistliche Lieder*.[28] (Take, for instance, the tradition of commentary on Luther's anthem *Ein feste Burg ist*

[24] Frederick W. Sternfeld, "Music in the Schools of the Reformation," *Musica Disciplina* 2 (1948): 115 and 118.
[25] This turn of phrase comes from the last line of Melanchthon's important *Articuli de quibus egerunt per visitatores in regione Saxoniae* (Wittenberg: Schirlentz, 1527), adapted and expanded into *Unterricht der Visitatorn an die Pfarhern ym Kurfürstenthum zu Sachssen* (Wittenberg: Schirlentz, 1528). For editions of both, see Richard Laurence, *The Visitation of the Saxon Reformed Church in the Years 1527 and 1528*, ed. Henry Cotton (Dublin: Hardy and Walker, 1839), 21–144; for a partial English translation, see "Public Education in Saxony," ed. Henry Barnard, in *The American Journal of Education* 4, no. 20 (1870): 538.
[26] This doctrine, most closely associated with Melanchthon's theology, finds expression in the dedicatory epistle to his *Loci communes*, where he avers, "I would not by any longer writings of mine, restrain anyone from the study of the Canonical Scripture. On the contrary, I would desire nothing quite so much if it were possible, as that all Christians be thoroughly conversant with divine letters alone." Trans. Charles Leander Hill (Eugene, OR: Wipf and Stock, 2007), 64.
[27] Scribner, *For the Sake of Simple Folk: Popular Propaganda for the German Reformation* (Cambridge: Cambridge University Press, 1981). See also Rebecca Wagner, *Music as Propaganda in the German Reformation* (Aldershot: Ashgate, 2001); and Alexander J. Fisher, *Music, Piety, and Propaganda: The Soundscape of Counter-Reformation Bavaria* (Oxford: Oxford University Press, 2014).
[28] Martin Luther and Paul Speratus, *Etlich Cristlich lider Lobgesang, un Psalm* (Nuremberg: Jobst Gutknecht, 1523/24); Martin Luther, *Geystliche Lieder* (Leipzig: Valentin Babst, 1545).

unser Gott, nicknamed "The Battle Hymn of the Reformation."[29] That it started life as a mere tune, a sort of neo-chant, gives some indication of how the movement's musical practices reformed theology with liturgy, stripped down and repurposed to rally ordinary *Volk*.) Through careful study of these hymnbooks, a richly textured portrait of sonic evangelism has come into focus, detailing how "group singing" (*Gruppengesang*) gave voice to a culture of not only piety but persuasion.[30] Yet relatively little attention has been paid to how music textbooks, the theory before but beneath the practice, not only abided but abetted that cultural turn. And as a close reading of the *Compendiolum* reveals, such books were anything but innocent.

1.2 *Kleine Chironomie* as Precept and Protest

The *Compendiolum* holds, quite literally, a handful of topics. As announced on its opening page, the manual organizes five "principal chapters that a beginner should work on."[31] Given this principled fiveness, perhaps recalling the *Fünf Hauptstücke* of Luther's 1529 *Kleine Katechismus*, it is not hard to imagine the chapters being rehearsed chironomically and -mnemonically;[32] thus one pictures tyros and teachers reading aloud with outstretched hands, uncurling their fingers one by one as they recite each precept heading (reproduced in Figure 1.2).

[29] The nickname stuck through conflation of a similarly named American Civil War paean to the "Republic" and, ironically, a sarcastic remark Heinrich Heine made with reference to "La Marseillaise" in *Zur Geschichte der Religion und Philosophie in Deutschland*, vol. 2 of *Der Salon* (Hamburg: Hoffman and Campe, 1834), 80.
[30] The notion of a "culture of persuasion" comes from Andrew Pettegree, *Reformation and the Culture of Persuasion* (Cambridge: Cambridge University Press, 2005), esp. 40–75.
[31] ". . . praecipua capita, quibus tyro opus habet." *Compendiolum*, A2r.
[32] The "Five Main Pieces" of the *Little Catechism* included study of Ten Commandments, the Apostles' Creed, the Lord's Prayer, the Sacrament of Baptism, and the Sacrament of Eucharist. Cf. Carol Berger, "The Hand and the Art of Memory," *Musica Disciplina* 35 (1981): 87–120; and Susan Forscher Weiss, "*Disce manum tuam si vis bene discere cantum*: Symbols of Learning Music in Early Modern Europe," *Music in Art: International Journal for Music Iconography* 30 (2005): 35–74.

Figure 1.2. Five Precepts of the *Compendiolum*

I. *Clavis* ("key" or letter name: Ί, A, ♮, etc.);

II. *Vox* ("voice" or solmization syllable: ut, re, mi, etc.);

III. *Cantus* ("song" or hexachord type: natural, hard, soft);

IIII. *Mutatio* ("mutation" or hexachord change: natural–hard, natural–soft, etc.);

V. *Figura* ("figure" or note/rest sign: maxim, long, breve, etc.).

However they may have been grasped, the contents' majority share in old-fashioned medieval pedagogy certainly suggests some manner of digital techne or manuduction: the first four chapters, on the *loci* of letter-syllable conjuncts, are devoted in all but name to the Guidonian scale; and this *scala* or "ladder," a music-theoretic mainstay since its papal endorsement in the eleventh century, had of course formed an enduring association with the Hand.[33] Yet nowhere in Faber's treatise, nor generally in those of his compatriots (including Rhau, Agricola, Heyden, and Listenius), is there any standard-issue gamut-inscribed palm diagram—only the abstract notational grid of a *divisio scalae*.[34]

There is a good reason for this skew toward graphic abstraction, which has little to do with technological limitation and much to do with theological imagination. Susan Forscher Weiss has observed that in the sixteenth century "a great majority of printed musical textbooks—particularly in areas where Catholicism reigned—contained the ubiquitous image of the so-called

[33] See Dolores Pesce, *Guido d'Arezzo's* Regulae Rithmice, Prologus in Antiphonarium, *and* Epistola ad Michahelem: *A Critical Text and Translation with an Introduction, Annotations, Indices, and New Manuscript Inventories* (Ottawa, 1999), esp. 406–35. For further commentary, see Joseph Smits van Waesberghe, "The Musical Notation of Guido of Arezzo," *Musica Disciplina* 5 (1951b): 15–53; Ian Bent et al., "Notation," *Grove Music Online*, Oxford Music Online, III.v.b; and Anna Maria Busse Berger, *Medieval Music and the Art of Memory* (Berkeley and Los Angeles: University of California Press, 2005), 85–94.

[34] Faber, *Compendiolum*, A3r. Cf. Rhau, *Enchiridion*, biiiv; Agricola, *Rudimenta*, Bir; Heyden, *De arte canendi*, B4v; Listenius, *Rudimenta musicae*, a4v.

Guidonian hand."[35] Faber's textbook, among others made and used in areas under the sway of Protestantism, is the exception that proves the reign.

What is more to the point, however, is that Faber has excluded concrete imagery altogether. Even the ornamental motifs embellishing title and chapter pages are devoutly nonrepresentational, as they visually accentuate the contours of pure discourse, all the while resisting any hint of the flesh-and-blood sensuality oozing through Catholic iconography (read: idolatry, *Bilderverehrung*).[36] Figure 1.3 offers a sacrilegious visual aid. Like the always messy and often noisy protest praxis of iconoclasm or *Bildersturm*, such *sub voce* suppression of imagery (i.e.: aniconism, *Bilderverbot*) was an upshot of Luther's attack on transubstantiation as scholastic "pseudo philosophy"; both within and without the region he christened the true "German nation," sympathists far and wide came to sustain his Second Commandment sacramental critique.[37] Thus Protestant music education writ large came to favor, in the words of eminent *ars memoriae* historian Frances Yates, "an art of memory based on imageless dialectical order."[38]

[35] "Vandals, Students, or Scholars? Handwritten Clues in Renaissance Music Textbooks," in *Music Education in the Middle Ages and the Renaissance*, ed. Russell E. Murray, Jr., et al., 207–46 (Bloomington: Indiana University Press, 2010), 207.

[36] For a discussion of Reformation visuality in general, see William A. Dyrness, *Reformed Theology and Visual Culture: The Protestant Imagination from Calvin to Edwards* (Cambridge: Cambridge University Press, 2004), 97–102. On logics of ornamentation in particular, see Ethan Matt Kavaler, "Ornament and Systems of Ordering in the Sixteenth-Century Netherlands," *Renaissance Quarterly* 72, no. 4 (Winter 2019): 1269–1325, esp. 1270 on the emergent artisanal occupation of "miniature carver" or *cleynsteker*.

[37] On "The Origins of Reformation Iconoclasm," particularly around the *Bildersturm* activity of Andreas Karlstadt, see Carl Christensen, *Art and the Reformation in Germany* (Athens, OH: Ohio University Press, 1979), 13–41. For a critically rendered yet conveniently bundled volume of Luther's 1520 tracts, see *Three Treatises from the American Edition of Luther's Works*, trans. Charles M. Jacobs, A. T. W. Steinhäuser, and W. A. Lambert (Minneapolis: Fortress Press, 1990), esp. 147 and 102.

[38] *Art of Memory* (New York: Routledge, 1966), 235. For further discussion of the art in relation to music pedagogy, see Anna Maria Busse Berger, *Medieval Music and the Art of Memory* (Berkeley: University of California Press, 2005), esp. 85–91.

Figure 1.3. Erhard Schön, "Lamentation of the Poor Persecuted Idols" (Nuremberg, 1530)

So next to Luther and company there is yet another elephant in the Roman room:[39] namely, the internationally infamous French Protestant logician Petrus Ramus,[40] whose *Dialectica* of 1543 asserts that "order is the father of memory."[41] If so, then perhaps Faber's exposition of "keys," or letter names, engenders a kind of musical mnemonic, where the back-and-forth dialogue between an open inquiring mind and its firm assertoric encoder bears a standard patriarchal sensibility:[42] first a definition is seized upon: "What is a key? *It is an indication of the voice* [*or solmization syllable*] *to be formed*"; then a division is installed: "How many keys are there? *Twenty. And they are spread out on the following figure, commonly said to*

[39] The "Roman Room" mnemonic technique, better known as the "memory palace" or "method of loci," is so called because of its advocacy by Roman rhetoricians such as Cicero and Quintilian (e.g., *De Oratore* 2.86, *Institutio Oratoria* 11.2).
[40] According to Yates, the technique lost currency among Western intellectuals in the sixteenth century, when "Ramus abolished memory as a part of rhetoric" (*Art of Memory*, 232). For a taste of Ramus's acerbic contrarianism, see *Arguments in Rhetoric against Quintilian: Translation and Text of Peter Ramus's* Rhetoricae distinctiones in Quintilianum *(1549)*, trans. Carole Newlands, ed. James Murphy (DeKalb: Northern Illinois University Press, 1986).
[41] "Ordo enim memoriae pater est." *Dialectica*, Book 2 (Cologne: Theodore Baumius, 1573), Aa4v.
[42] For a classic feminist critique of logicality, see Valerie Walkerdine, *The Mastery of Reason: Cognitive Development and the Reproduction of Rationality* (London: Routledge: 1988).

be a Scale"; and at last a diagram springs forth: the *scala*, with its familiar conjunctions of key and voice.[43] It is not just the chapter on keys that Faber orders this way, either. The text punctuates its precepts rather generously with opportunities for *usus* by way of two-voice canons, or *bicinia*, that reinforce a similar interplay of dux and comes, control and conformance. And the remaining chapters are arranged in kind, right down to the introduction in which he defines music in venerable patristic fashion (as "the art of singing well"), divides it into two halves (a dichotomy of "choral" monophony and "figural" polyphony), and diagrams its "branches" or *rami* (dissected into the five "principal chapters" of key, voice, song, mutation, and figure).[44]

From a Ramist standpoint, this 3-D logical order (def., div., diag.) poses the natural conceptive method, the universal mode of reproduction behind the arts of music and memory, indeed behind any and all art.[45] In Walter Ong's elegant paraphrase, "What holds everything together [in Ramism] is solely definition and division. 'The principles of the arts are definitions and divisions; outside of these, nothing.'"[46] Hence the renunciation of imagery: Ramists declared diagramming, among other things, secondary to discoursing. Yet as Ong authoritatively demonstrated, such overemphatic declarations tell only part of the story; in all actuality, he argued, Ramus and his followers effectively raised diagrams, figures, tables, charts, and related

[43] "Quid est clavis? *Est vocis formanda index*. Quot sunt claves? *Viginti*. *Atque ex sequenti figura, quae vulge Scala dicitur, patent*." *Compendiolum*, A3r.
[44] *Compendiolum*, A2v; see also A3v–A4r, A4v–A5r, A5r–A5v, and A6v. Faber's definition approximates Augustine's from *De musica* (c. 390) 1.2, "Musica est scientia bene modulandi," in *Patrologia cursus completus, series latina*, ed. J. P. Migne, 221 vols. (Paris: Garnier, 1844–1904), 32:1083.
[45] Not until the twentieth century was it commonly acknowledged that memory is more a matter of "reconstruction" than reproduction, as Frederic Bartlett established in *Remembering: A Study in Experimental and Social Psychology* (1932; repr., Cambridge: Cambridge University Press, 1995), 213.
[46] *Ramus, Method, and the Decay of Dialogue: From the Art of Discourse to the Art of Reason* (1958; repr., Chicago: University of Chicago Press, 2004), 188. As Ong notes (p. 352, n. 75), the quote is adapted from Ramus's *Dialecticae institutiones: Aristotelicae animadversiones* (Paris: Bogard 1543), 58: "principia igitur artium definitiones, divisiones sunt, aut certe quaedam ex definitionibus, divisionibusque deducta, praeterea nulla."

"visualist analogies" to a level of unprecedented primacy—or, rather, ultimacy.[47] Ramus's *Tabula Artium* (in Figure 1.4), the very "curriculum" from which the term itself sprang, is a prime germinal specimen.[48]

Figure 1.4. Ramus's Table of the Arts, the First "Curriculum"

[47] *Ramus, Method, and the Decay of Dialogue*, 107; see also 83–91.
[48] Peter Ramus, *Professio Regia* (Basel: Sebastian Henricpetri, 1576), ✿3v. On the importance of this diagram to the history of Western education, see David Hamilton, *Towards a Theory of Schooling* (New York: Taylor and Francis, 1989), 53–55.

Recent analyses of the tradition's geopolitical range have emphasized that "after Ramus's death, Germany is the real seedbed of Ramism."[49] If so, then news of his martyrdom in the St. Bartholomew's Day Massacre of 1572 undoubtedly helped his teachings take root.[50] But as intellectual historian Howard Hotson has brought to light, Protestant *Lateinschulen* sheltered the actual sites of germination; there the Ramist method was cultivated not by high-profile university professors but rather by common Latin preceptors and simple schoolboys, giving rise to the Melanchthon-Ramus hybrid known as Philippo-Ramism.[51] In surveying the remarkable extent to which Faber's slight treatise flourished, it seems likely, then, that a vital factor was its ready adaptability to, if not direct descent from, the logical order encoded in Ramus's pedigree and later grafted onto Melanchthon's pedagogy.

Yet there remains an obvious morphological discrepancy: the *Compendiolum* is a dialogue, precisely the form whose "decay" Ong detected in Ramism's upsurge.[52] And it is hardly alone in that regard; there are many other instructional dialogues on the art of music besides—especially coming, like so many of Faber's reprints, from the Lutheran stronghold of Nuremberg.[53] Then again, the city also produced an abundance of instructional dialogues on

[49] Ong, *Ramus, Method, and the Decay of Dialogue*, 298. For a chronology of distribution across various European municipalities, see also Ong's *Ramus and Talon Inventory* (Cambridge, MA: Harvard University Press, 1958) and Peter Mack, *A History of Renaissance Rhetoric, 1380–1620* (Oxford: Oxford University Press, 2011), esp. 139–40.
[50] Take, for instance, the first English translation of Ramus's *Dialectica*, rendered by Roland MacIlmaine in 1572 as *The Logike of The Most Excellent Philosopher P. Ramus, Martyr*, ed. Catherine M. Dunn (Northridge, CA: San Fernando Valley State College, 1969).
[51] *Commonplace Learning: Ramism and its German Ramifications, 1543–1630* (Oxford: Oxford University Press, 2007), 35–6.
[52] See *Ramus, Method, and the Decay of Dialogue*, esp. 176–8 and 314–8.
[53] Examples include Johannes Spangenberg, *Quaestiones musicae* (Nuremberg: Petreius, 1536); Sebald Heyden, *De arte canendi* (Nuremberg: Petreius, 1540); Lucas Lossius, *Erotomata musicae practicae* (Nuremberg: Berg & Neuber, 1563); Friedrich Beurhaus, *Erotematum musicae* (Nuremberg: Gerlach & Berg, 1580). The latter author, as it happens, was also an ardent Ramist; see August Döring's entry on him in the *Allgemeine Deutsche Biographie*, Band 2 (Leipzig: Duncker & Humblot, 1875), 584–5.

articles of faith; Luther's Nuremberger disciples seem to have excelled at promoting, if not monopolizing, his catechisms within the township and its hinterlands.[54]

But while the *Compendiolum*'s form is catechismal, its function was rather pre-hymnal. Upon reviewing a simplified hexachord-mutation protocol derived from Rhau, Faber proceeds to outline rules for deciphering the various ligatures lining Lutheran hymnbooks also issued from, among other printers, Rhau.[55] No mere coincidence, the overlap points not simply to Rhau's multifarious support for the cause but moreover to a common thread binding precept to practice. Nor is it any coincidence that said hymnbooks were published alongside Luther's *Kleiner Katechismus*, a little doctrinal handbook delineating the sacraments in commonsense language according to his sectarian populist vision.[56] As church historian Christopher Brown observes, catechisms and hymnals alike circulated in both public and private spheres, giving shape to an emergent religious discourse of and in domesticity.[57] The degree to which Faber's treatise straddled those two spheres is hard to define, though it seems likely that it too found a home outside the school—the very site claimed some four hundred years later, with all the excruciatingly self-aware antihumanism of the "Althusserian school" (from Alsatian *Alte Haüser*), as the original institution of an ideological state apparatus.[58] Yet it is clear enough that the *Compendiolum*'s bestselling brand of brevity, its *Kürze*, was cut from the same cloth as the

[54] See Gerhard Bode, "Instruction of the Christian Faith by Lutherans after Luther," in *Lutheran Ecclesiastical Culture, 1550–1675*, ed. Robert Kolb, Brill's Companions to the Christian Tradition 11 (Leiden: Koninklijke Brill NV, 2008), 169–70.
[55] See Faber, A5r–v and B2v–4r; Rhau, d4v–f3v; and, for instance, Luther and Walter's *Geystliche Gesangk Buchleyn* (Wittenberg: Rhau, 1524).
[56] *Der kleine Katechismus* was also printed by Rhau's Wittenberg publishing house in 1529.
[57] *Singing the Gospel: Lutheran Hymns and the Success of the Reformation*, Harvard Historical Studies 148 (Cambridge, MA: Harvard University Press, 2005), 105–129.
[58] Louis Althusser, *On the Reproduction of Capitalism: Ideology and Ideological State Apparatuses* (New York: Verso Books, 2014).

plainspoken theological reductions that parents intoned to their children in the privacy of good German Protestant households.

As a parting illustration, an old joke in Alemannic German sheds light on the historic crossroads at which the *Compendiolum* sits, caught between fragmented ecclesiastical traditions and upstart vernacular idioms. Once upon a time somewhere in the Alpine hinterlands, a Swiss farmboy skipped that day's *Lateinschule* lecture to stay home and help with the family harvest. That much the dutifully truant child understood all too well, though he was puzzled by the note his parents told him to offer the *Gymnasium* preceptor as an excuse: it was to read *Benedicte tempum*, whose grammar and import he struggled to reconcile ("O blessed time?"). Yet when the young scholar spoke up, his bumpkin father only laughed: "Thanks for the free Latin lesson, Junior, but your note should say *Benötigte dem Buam*" (in the local yokel speak of Bavarian *Bauernsprache*: "Needed the boy!").[59] Or so the story goes. Nestled between orality and literacy—with all their operations of discursive power in chirographic modernity, among them circuits of mother tongues and phallogocentrisms, alienated labors and primogenitures, empty signifiers and enclosures—the joke's terse intergenerational father–son *double entendre/écrire* embodies something of the manifold ideological tensions in early bourgeois education to which the *Compendiolum* conformed and against which it strained, as an inscription of *Bildersturm* in the forming of *Bildung* itself. Not until the end of the century would Faber's primer appear in German translation. By then, of course, Luther's Bible had rendered Saxon standard. But that is all to make a long story short.

[59] Adapted (thanks to Barbara Dietlinger) from Elizabeth Loentz, "The Literary Double Life of Clementine Krämer," in *Nexus: Essays in German Jewish Studies* 1, ed. William C. Donahue and Martha B. Helfer (Rochester: Camden, 2011), 126; cf. n. 63. Some versions standardize the punchline's grammatical object as *den Bub'n*, such as Eduard Stepan, *Burgenland: Festschrift aus Anlass der Vereinigung des Landes der Heidebauern und der Heinzen mit Deutschösterreich* (Vienna: Deutsches Vaterland, 1920), 79.

1.3 Excursus: The Short-Lived Settlement of New Nuremberg

There was, briefly, a New Nuremberg. In 1519, one of the most powerful European political dynasties, the Habsburgs, needed some financial help getting their next in line onto the vacant imperial throne. So naturally they turned to two of the richest European banking families, the Fuggers and the Welsers.[60] Their campaign fundraiser worked: Carlos I, King of Spain (also known as Karel II, Lord of the Netherlands), was soon elected Carolus V, Holy Roman Emperor (AKA Kaiser Karl V.). And with this king of kings' grand coronation, as if announcing a transnational corporate merger for a brave new mercantile military-industrial complex, their royal-patrician alliance cut the ribbon on a global empire spanning much of the continent and then some. At the peak of its grandeur, the Habsburg kingdom stretched longitudinally from the Low Countries and German lands down to the Italian provinces, as well as latitudinally through the Spanish realm and over the Atlantic to a fast-growing portfolio of American coastal territories. This First Reich, the original modern Eurocolonial "empire on which the sun never set," renewed a model of universal (Western) sovereignty that would inspire adventurism for centuries to come.[61] As for the Fuggers, their fortunes soared in kind thanks to nearly monopolistic control of the international copper trade. The Fugger patriarch—Jakob, nicknamed *der Reiche* ("the Rich")—soon became the wealthiest man alive, repaid many times over for investing in the rising hegemonic power. For perhaps the first time in European history, the

[60] Despite any vulgar suspicions, the Fugger line bears no apparent relation to that of Johann Joseph Fux, "the Austrian Palestrina" who authored *Gradus ad Parnassum* (Vienna: Van Gholen, 1725), discussed in the Introduction.
[61] Friedrich Schiller, *Dom* [*Don*] *Karlos, Infant von Spanien* (Leipzig: Göschen, 1787), I.6: "Die Sonne geht in meinem Staat nicht unter."

power of the purse had grown mightier than that of the pen, the sword, and even the crown—hence the period's characterization as the Age of Fugger.[62]

Somewhat less fortunate was the House of Welser. To be sure, its members likewise prospered, at least for a little while, by cashing in their well-timed favor for an exclusive charter to settle the recently claimed province of *Klein-Venedig* (i.e., "Little Venice" or Venezuela). From 1528 onward, they shipped in hundreds of Spanish and Flemish commoners in a quixotic bid to plunder the fabled city of *El Dorado* ("The Golden"), en route to a likewise nonexistent inland shortcut to the equally storied trade waters Magellan dubbed *El Pacífico* ("The Peaceful"). Much more lucratively, the Welser Company also had Guineans abducted and enslaved by the thousands to cultivate sugar cane.[63] They further honored the family pedigree by violently displacing the indigenous Arawak and Carib peoples—dubbed Caribals, Calibans, cannibals, and canines—in order to christen their expropriated settlements after the Old World hometowns, namely *Neu-Augsburg* and *Neu-Nürnberg*. When gold and silver mines were discovered after all, more black and indigenous slave labor was brought to bear on the site of extraction, and soon precious bullion flooded the markets back home.[64] Yet this fortune was not to fill the Welser coffers. Setbacks in litigation and governance ultimately forced the firm to cede its colonies; the final blow landed in a 1545 Spanish takeover, as one-upping conquistadors added insult to injury by executing the Welsers' heir apparent and rechristening New Nuremberg as Maracaibo, in

[62] For a classic study, see Max Jensen, *Jakob Fugger der Reiche: Studien und Quellen I* (Leipzig: Von Duncker and Humblot, 1910). Cf. Wilhelm Roscher, *Geschichte der Nationalökonomik in Deutschland* (Munich: Oldenbourg, 1874).
[63] An outstanding economic-historical analysis of the regional slave trade during this period is given by Javier Laviña and Michael Zeuske, "Failures of Atlantization: First Slaveries in Venezuela and Nueva Granada," *Review (Fernand Braudel Center)* 31, no. 3 (2008): 297–342, esp. 299–312.
[64] For synthetic accounts of this inflationary trend, see Ellen Meiksins Wood, *The Origin of Capitalism* (London: Verso, 2002), 147–65; and David Graeber, *Debt: The First 5,000 Years* (New York: Melville House, 2011), 320.

honor of a deposed local chieftain.[65] So much for the proudest scion of the Welser family tree, and no less the most promising new branch of their budding family franchise—*kein' feste Burg*! In historian Christine Johnson's apt riff, such a scene of hapless striving and early ruin might well be recounted in a German romantic vein as "The Sorrows of Young Welser."[66]

Enter one *Federmann*.[67] Of the many sensational travelogues to emerge from this era, few offered literary pastimes as beguiling as those of the late Captain Nikolaus Federmann's 1557 *Indianische Historia*, a "nice diverting" (*schöne kurzweilige*) posthumous record of the Welser expedition. "Written with utmost brevity" (*auffs kurtzest beschriben*) in a debtors' prison under suspicions of Lutheran sympathy, among other derelictions of faith intolerable to his sponsors, the text retraces "Christian" quests in "Indian" lands (*Christen* and *Indio*).[68] Almost needless to say, the standard fare of exoticist carnal spectacle is on full display here, with eyewitness reportage on "morals and customs" (*sitten und gebräuche*) encoding thrilling exposé of flesh-eating and -baring.[69] Yet no less significant, if by definition less spectacular, is the emergent anthropological matrix of rules and norms around size and sound.

By way of example, Federmann tells of how one tribal nation, the Cayones, resisted his colonizer diplomacy with a collective screech. Against the concessions of a neighboring pueblo

[65] For a helpful overview, see Susanne Zantop, *Colonial Fantasies: Conquest, Family, and Nation in Precolonial Germany, 1770–1870* (Durham, NC: Duke University Press, 1997), 18–30.
[66] *The German Discovery of the World* (Charlottesville, VA: University of Virginia Press, 2008), Chapter 5.
[67] Like the English surname "Featherman," as in a hawker of plumage, the patronym *Federmann* bears particularly apt associations with travel literature, given the quill's place as a full-fledged symbol of both flight and script technologies (e.g., *Schreibfeder*).
[68] *Indianische Historia. Ein schöne kurtzweilige Historia Niclaus Federmanns des Jüngern von Ulm erster raise so er von Hispania und Andolosia ausz in Indias des Oceanischen Mörs gethan hat, und was ihm allda ist begegnet bisz auff sein widerkunfft inn Hispaniam, auffs kurtzest beschriben, gantz lustig zü lesen.* (Haguenau: Sigmund Bund, 1557). A modern edition can be found in Karl Klüpfel, *N. Federmanns und H. Stades Reisen in Südamerica, 1529 bis 1555* (Stuttgart: Bibliothek des Litterarischen Vereins, 1859). For a serviceable French translation, see also Henri Ternaux, *Voyages, Relations et Mémoires Originaux pour Servir a l'Histoire de la Découverte de l'Amérique* (Paris: Arthur Bertrand, 1837).
[69] This conjunction of terms recurs throughout Federmann's *Indianische Historia*, e.g., G1v. For comparison, the terms are consistently rendered as *moeurs et coutumes* (cognate with *costumes*) in Ternaux's *Voyages*, e.g., 95.

of "dwarves" (*zwergen*), a "little people" (*khlain volck*) with whom the Welser Group had claimed alliance, the unyielding Cayone tribe puffed itself up during an overnight raid "with great shrieking, as if their [numbers] were many more" (*mit grossem geschrey, als ob ihr noch sovil weren*).[70] While the shrillness of their outsized screams succeeded in "scaring" (*schrecken*), this acoustic feint nonetheless failed; soon the Cayone warriors found themselves decimated and quite clearly outnumbered, with particularly harsh indignities visited on their captured chieftain for having "broken his word" (*sein zusagen . . . gebrochen*).[71] But perhaps Federmann simply misheard. When he and his entourage approached the abandoned villages to scavenge plunder and secure passage, yet another sizeable guerilla force of Cayones emerged "two by two" (*zwaimail an zwaien*), and once more there resounded a colossal "shout under that entire Nation" (*unther alle diser Nation erschall*).[72] This time Federmann's forces listened and retreated.

Even in paraphrase, this narrative goes to show how such social facts are not simply *mises-en-scène* but more specifically *mises-en-son*. As literature, the narration itself not only conveys but dramatizes its ethnographic scene through an accumulation of sibilants (as in the [ʃ] or /sh/ phoneme of *geshrey*, *schrecken*, and *erschall*), expressing something of the episode's strident intensity paralinguistically, perhaps even musico-poetically. Yet still more revealing is how this drama is reconstructed for Federmann's audience: led to perceive indigenous social forms under an acousmatic veil of night, the early modern European racial imaginary shows itself to be in no small part a repository of anxieties about the sizing up of colonial quarry. One consequence for sensory historiography is that affective charge and putative range cannot be mapped onto one another in any straightforward way; when outlining faraway sonic scenery,

[70] Federmann, *Indianische Historia*, D4v and F2r; or Klüpfel, *N. Federmanns und H. Stades Reisen*, 23 and 31.
[71] Federmann, *Indianische Historia*, F2v; Klupfel, *N. Federmanns und H. Stades Reisen*, 31.
[72] Federmann, *Indianische Historia*, F2v and F2r; Klüpfel, *N. Federmanns und H. Stades Reisen*, 31–32. For context, the episode is drawn from Chapter 7, "Die Nation Cayones" (Federmann, F1r–F3r; Klüpfel, 29–32).

extent seems always and everywhere a topic of ambivalence. Thus the counterpoint for any cute chatter that surrounds parleying "dwarves with love and friendship" (*Zwergen mit lieb und freindtschafft*) is not only the sharp ping of a pygmy fist or Lilliputian spear, nor even just the cavernous bellows and colossal thrums of cyclopes, goliaths, and other such gargantuan threats.[73] Rather, the aural complement that rounds off such menageries of mythic magnitudes is also, last but not least, the marvelous expressive capacity of gentle giants.

By way of another example, a crewmember and chronicler of Magellan's final voyage tells of how off the coast of Patagonia "we suddenly saw a naked man of giant stature on the shore of the port, dancing, singing, and throwing dust on his head"; ever the *bon pastore,* Captain Magellan sent an envoy to "perform the same actions as a sign of peace."[74] Upon further enticement with gifts, most notably "a large steel mirror . . . [in which] he saw his reflection," the gymno-giant's emboldened compatriots "came one after the other, completely naked. When our men reached them, they began to dance and to sing, lifting one finger to the sky."[75] While distinctly provocative, this is hardly the only scene of civilization thus sized up and sounded out in Magellan's chronicle. Among others, for instance, is the moment soon thereafter when yet another big friendly giant was converted by baptism, whereupon he "pronounced the name Jesus, the Pater Noster, Ave Maria, and his own name ['John'] as distinctly as we, but with an exceedingly loud voice."[76] It was a well-timed good omen. Having met not long beforehand a gigantic leader of *Canibali* with "a voice like a bull," the relatively tame pronouncement of John

[73] Federmann, *Indianische Historia,* E2v; Klüpfel, N. Federmanns und H. Stades Reisen, 26.
[74] Antonio Pigafetta, *The First Voyage around the World, 1519–1522: An Account of Magellan's Expedition*, ed. Theodore J. Cachey, Jr., trans. James Alexander Robertson [Cleveland: Arthur H. Clark, 1906] (Toronto: University of Toronto Press, 2007), [25] 12. Cf. *Il Primo Viaggio Intorno al Globo di Antonio Pigafetta* (Rome: Ministero della Pubblica Istuzione, 1894), 57–58, and 80: "as a good pastor, he would not turn to abandon his flock" (*como bon pastore non volse abandonare lo suo grege*).
[75] Pigafetta, *An Account of Magellan's Expedition*, [26] 13.
[76] Pigafetta, *An Account of Magellan's Expedition*, [28] 14.

the Baptized articulated a turning point in the mission.[77] Passage through the Strait of Magellan, as it came to be called, attuned a nascent Euro-globalist sensorium to not only the danger but also the docility of large bodies—both of people and of water, measured in ways no less anthrophonic than cartographic.[78]

Such mapping of bodies, whether chartered by Bavarian capitalists or Iberian royals, recalibrated the scope of aesthetic axiology along not only maritime but mercantile lines. As literary critic Susan Stewart observed in her signal study of the miniature and the gigantic, use- and exchange-values have tended to coordinate distinct modes of excess in knowledge production. "Under a use-value economy," she submits, "exaggeration takes place in relation to the scale of proportion offered by the body. . . . Yet once the abstractions of exchange are evident, exaggeration must be seen in relation to the scale of measurement, and thereby the scale of values, offered by a more abstract domain of social convention."[79] Now mixed and merged, the modern commerce of corporeal and conventional valuations is called forth by what Stewart describes as "the voice of abstraction, a voice which proclaims its absence"; and it is this transcendental speaker figure, with all their attendant figures of speech, whose command of audiovisual reference "works within the convention of travel writing and, by déjà vu, within the voice of early anthropology."[80] Brought to bear on natural kinds and artificial contrivances alike, the global value relation thereby impresses itself on how things seem and sound, how they are seen and said; so in everything from epics to epigrams, all manner of intensities, diversities,

[77] Pigafetta, *An Account of Magellan's Expedition*, [23] 11.
[78] For critical historiography, see Felipe Fernández-Armesto, *Straits: Beyond the Myth of Magellan* (Oakland: University of California Press, 2022), esp. Chap. 7.
[79] Susan Stewart, *On Longing: Narratives of the Miniature, the Gigantic, the Souvenir, the Collection* (Durham, NC: Duke University Press, 2007), xiii. I am grateful to Tien-Tien Jong for sharing this reference, among other insights that have encouraged my thinking on this topic.
[80] Stewart, *On Longing*, 22 and 68.

qualities, and quantities intermingle, however deceptively patent their authorial "containment of representation."[81]

No doubt the long arm of the law of value catches up to music and sound studies as well, in treatises no less than travelogues, though any deliberation on the precise dimensions of these archives' representational conjunctures has yet to reach any conclusive verdict. According to a certain sociology of knowledge, music-theory archives staged particularly acute trials of epistemic proportionality by which old institutions of harmonious order were thrown into question, if not inquisition. Thus the Renaissance system of resemblances, once safely enshrined in a venerable Neoplatonic triad of celestial, psycho-anatomical, and acoustic concords (per Boethius, the *mundana, humana,* and *instrumentalis*), fell to Classical iconoclasms that rewrote the rules of correspondence in emergent spheres of knowledge/power.[82] With the advantage of 2020s hindsight, enhanced by circumspect archaeologies of musical thought from earlier Foucauldian critics such as Gary Tomlinson and Jairo Moreno, annalist metanarratives of music-theoretic *mentalité* have regained some credibility, particularly through the intrigue of *gouvern-mentalité*.[83] Yet as the temporal unit of account has passed from event to epoch, with short-term scenes giving way to *longue durée* -cenes, the middle-ground conjuncture remains contested territory.

"The darker side of the Renaissance," in colonial theorist Walter Mignolo's colorful phrase, has been illustrated in particularly revealing ways by recent global music history.[84]

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[81] See also Stewart's earlier *Crimes of Writing: Problems of Containment of Representation* (New York: Oxford University Press, 1991), especially 31–66 and 173–205 on the genres of conversion testimony and travel writing.
[82] Boethius, *Fundamentals of Music*, trans. Calvin M. Bower (New Haven, CT: Yale University Press, 1989), 9–10, with the three kinds of music rendered as "cosmic," "human," and "instrumental."
[83] Tomlinson, *Music in Renaissance Magic: Toward a Historiography of Others* (Chicago: University of Chicago Press, 1993), esp. 52–61; and Moreno, *Musical Representations, Subjects, and Objects: The Construction of Musical Thought in Zarlino, Descartes, Rameau, and Weber* (Bloomington, IN: University of Indiana Press, 2004), 28–38.
[84] Mignolo, *The Darker Side of the Renaissance: Literacy, Territoriality, & Colonization* (Ann Arbor: University of Michigan Press, 1995), esp. Chap. 6, "Putting the Americas on the Map," 220–258.

Olivia Bloechl's overviews of the long sixteenth century are highly illuminating in this regard, with one disciplinary upshot including records of early "Protestant imperialism" drawn out of the shadows of Jesuit ministry.[85] A key point thereby brought to light may be found in the rhetorical convergence of confessional and civilizational polemics: as Bloechl has shown, Protestant ethnographies often resorted to invocation of animal noise for belittling Roman Catholic and Native American "superstition" alike as subhuman in one and the same breath.[86] Whether heretic or heathen, the "popish" and the "savage"—not to mention the "whorish," the "Moorish," and the "Jewish"—were thus disparaged in comparably dehumanizing tones as "bestial" or "demonic."[87] The devilry of "shouts and screeches" that the Virginian soldier John Smith heard in Algonquin cries, not unlike the infernally cthonic *schallen* and *shreyen* that Nikolaus Federmann had earlier ascribed to Cayone warriors, were meanwhile distinguished from what Bloechl calls "the godliness of that quintessential Reformation genre, the vernacular psalm setting."[88] Thus theriomorphism abetted theology, as "the lighter side" battled out internecine claims to the illustrious distinction of sound evangelism.

Before returning to the ethereal strains of said godly genre, then, a parting illustration is in order about meat-and-potatoes matters of good taste in early Protestant empire. However disciplined otherwise, Reformed tastemakers betrayed omnivorous opportunism in their appetite for one of the period's most beloved feel-bad settler accounts, namely Fray Bartolomé de las Casas's 1542 *Brevísima relación de la destrucción de las Indias*. In bringing this most "Short

[85] Bloechl, "Protestant Imperialism and the Representation of Native American Song," *The Musical Quarterly* 87, no. 1 (Spring 2004): 44–86; and Bloechl, "Music in the Early Colonial World," in *Cambridge History of Sixteenth-Century Music*, ed. Ian Fenlon and Wistreich (Cambridge: Cambridge University Press, 2019), esp. 140.
[86] See Bloechl, "Protestant Imperialism": 50–53 for conceptual history of "superstition," 55–57 and 72–74 for discussion of Catholic–indigenous identification.
[87] Bloechl, "Protestant Imperialism": 46.
[88] Smith, *The Generall Historie of Virginia, New-England, and the Summer Isles* (London: I[ohn] D[awson] and I[ohn] H[aviland] for Michael Sparkles, 1624); qtd. in Bloechl, "Protestant Imperialism": 71, juxtaposed with Bloechl's characterization of vernacular psalm settings' ideological function on 56.

Account" before Charles V's administrative Council of the Indies, Las Casas boosted his long career as official Protector of the Indians. As has been well diagnosed in Lascasian scholarship, the Dominican critic and cleric kept his vow of poverty in complicated fashion: discoursing on the horrors of colonial violence made some powerful and litigious enemies, to be sure, but it also won him prestigious estates and titles.[89] Thus it bears emphasis that while the good friar and soon-to-be bishop took pains to witness the cruelties of both his Spanish compatriots and their German counterparts, the latter suffered far harsher censure. "In my opinion," Las Casas advised, "the Venezuela expedition was incomparably more barbaric than any [Spanish Catholic precedent] we have so far described, and the men involved in it more inhumane and more vicious than savage tigers, more ferocious than lions or than ravening wolves."[90] So it was in no uncertain terms that Las Casas, with all vested authority of the Council of the Indies, found said German "devils" and "fiends" responsible for "the costs [*los daños*]: the blasphemous and dishonourable outrages committed against God and against divine law, and the countless souls, now beyond redemption [*recompensarán*], who burn in everlasting Hell as a direct result of the greed and the inhumanity of these Swabian—or, more properly, swinish—butchers."[91]

It is a delicious bit of legal oratory, this pungent pairing of economic theology with gastropolitics, though not all of Las Casas's many translators seem to have savored it. The "Not-

[89] A classic critical biography discussed further below is Ramón Menéndez, *El Padre Las Casas: Su Doble Persona* (Madrid: Espasa-Calpe, 1963). For a recent survey of scholarly work, see also *Bartolomé de las Casas, O.P.: History, Philosophy, and Theology in the Age of European Expansion*, ed. David Thomas Orique and Rady Roldán-Figueroa (Leiden: Brill, 2019), esp. Orique and Roldán-Figueroa's "Introduction: Three Waves of Lascasian Scholarship," 1–25, and Rolena Adorno's chapter on "The Not-So-Brief Story of the *Brevísima relación de la destrucción de las Indias*," 29–57.

[90] Las Casas, *A Short Account of the Destruction of the Indies*, trans. Nigel Griffin (New York: Penguin, 1992), 96.

[91] Las Casas, *A Short Account*, 101. For the original oratory of this famous passage, see *Brevíssima Relación de la Destruyción de las Indias*, ed. Andrés Moreno Mengíbar (Seville: Revista de Filosofía, [1552] 1991), 62: "Éstos son los daños temporales del rey, sería bien considerer qué tales y qué tantos son los daños, deshonrras, blasphemias, infamias de Dios y de su ley, y con qué se recompensarán tan innumerables ánimas como están ardiendo en los infiernos, por la cudicia e ynumanidad de aquellos tiranos animales, o Alemanes."

So-Brief Story" of its reception, as in Latin Americanist Releno Adorno's remarkable telling, serves up an especially rich perpetual stew of paratextuality.[92] Once outside Spanish Habsburg ambience, the text was ironically absorbed and reconstituted by a larger social metabolism of Hispanophobic "Black Legend" (*Leyenda Negra*) literature, in tandem with Spain's fall from global hegemony under merchant capitalism.[93] Thus a corresponding "biopolitics of translation," to build on Gayatri Spivak's postcolonial deconstruction, is borne out in the pricing of bodies and souls across major late-sixteenth-century European imperial languages: [94] from "damages" in the Spanish and French versions (*daños* and *dommages*, from the Latin *damna*) to "scathes" in the Dutch and German (*Schaden* and *Schad*, cognate with the Middle English legal term for a claimant's losses), through translations of translations the Lascasian standard tempered regulatory debate about personal injury as humanitarian injustice.[95] Thus legal measures of physical and financial intactness are found not only among the earliest inheritances of common law, from Mesopotamian code to the medieval European *corpus iuris civilis*, but also among the principal doctrines of international law that came to be known as *ius gentium*—a case in point being the 1542 "New Laws" (*Leyes Nuevas*) that occasioned Las Casas's exhortations.[96] As such

[92] Adorno, "The Not-So-Brief Story," esp. 49–51.
[93] A classic overview of this historiography against the exonerating counterforce of "White Legend" can be found in Benjamin Keen, "The Black Legend Revisited: Assumptions and Realities," *Hispanic American Historical Review* 49, no. 4 (1969): 703–19. For more recent approaches, see *Rereading the Black Legend: The Discourses of Religious and Racial Difference in the Renaissance Empires*, ed. Margaret Geer, Walter Mignolo, and Maureen Quilligan (Chicago: University of Chicago Press, 2007), esp. Patricia Gravatt, "Rereading Theodore de Bry's Black Legend," 225–43.
[94] Spivak, "The Politics of Translation," in *Outside in the Teaching Machine* (New York: Routledge, [1993] 2009), 200–25; see also her "Inscriptions: Of Truth to Size," 226–44.
95 For Spanish, cf. note 90; for French, see *Tyrannies et cruautez des Espagnolz perpetrees*, trans. Jacques de Miggrode (Paris: Guillaume Iulien, 1582), 98: "les dommages, des honneurs blasphemes & infamies"; for Dutch, *Seer cort verhael vande destructie van d'Indien* ([Antwerp]: n.p., 1578), M3r: "de Schaden oneer blasphemien Schande"; for Latin, *Narratio regionum Indicarum per Hispanos quosdam devastatarum verissima*, trans. Theodor de Bry ([Frankfurt]: Johannes Saur, 1598), 79: "damna, dedecora, maledicta sacrilege, & infamias"; and for German, *Warhafftiger und gründtlicher Bericht Der Hispanier grewlichen, und abschewlichen Tyrannen von ihnen in den West Indien*, trans. Theodor de Bry ([Frankfurt]: Johannes Saur, 1599), 80/K4v: "der Schad, Schmach, Lästern und Unehr."
[96] A readily available edition and still serviceable translation is *The New Laws of the Indies for the Good Treatment and Preservation of the Indians*, trans. Henry Stevens (London: Chiswick Press, 1893), i–xxxi.

decrees brought to light, colonial legitimacy demanded a normative threshold for preservation and violation of life, the minimal unit then newly conceived in terms of civility and humanity.

Whether cast as demonizing *Leyenda Negra* or dovish *Leyes Nuevas*, the search anew for biopolitical minima initiated a literary process whereby European human sciences, among them disciplines of musical expression, self-articulated in terms of racial capital. As a recent article by musicologist Andrew Chung compellingly argues, "New World" economic activity thereby imposed itself at a mass ecological scale with a catastrophic accelerando of "the breath of the planet";[97] and it was precisely this globalist gust's fatal tidal wave of rupture and reorder, driving incipient culture industries around what Elizabeth Alvarado has called "musical worlding," that impelled a "new human epoch," the Anthropocene.[98] By linking anthropogenic climate crisis with the sonic culture of early *homo economicus*, whose putative species-being of self-commodification purports to render damages universally fungible, such scholars of the Anthropo-sound have modeled new ways of attending critically to how humanist thought has historically both valorized and devalued personhood in the ambient heat of transaction.

The posthumanist mode of attention helps to amplify, for instance, a Lascasian ethnomusicology. With Flemish Protestant printer Theodor de Bry's notoriously tendentious indirect translations, a signal shift of emphasis attached to depictions of the Welser company's musico-economic exchange with indigenous Venezuelan tribes. Next to the French and Dutch versions' relatively straightforward recapitulations, de Bry's stylized iterations in Latin and German introduced a distinctly Reformed chauvinism to the account of record. Thus earlier translators submitted that "the Indians came to receive them [the Welser group] with songs and

97 Chung, "Songs of the New World and the Breath of the Planet: Toward a Decolonial Musicology of the Anthropocene," *Journal of the American Musicological Society* 76, no. 1 (2023): 57–112, esp. 72–74 on Las Casas.
98 My thinking on this issue has been greatly influenced by Alvarado, whose "Songs of Science: Musical Worlding in the American Space Age" (PhD diss., University of Chicago, 2020) is discussed further in the following chapter.

dances and with presents of gold in great quantity," that "the people went to meet them singing and dancing with many presents of gold in great quantity"; yet in the latter-day hands of de Bry and sons it came to pass rather that "they were received by the Indians with songs, dances, and inordinate [*ingentibus*] gifts of gold," that "the Indians came toward them joyfully with song, and in so receiving them they also brought a great tribute [*verehrung*] of gold."[99] However subtle, the interventionist style of such flourishes propagandized for a Northern European ethnostate by embellishing kinds and qualities of social difference as parahuman caricatures: with the universal humanism of *ius gentium*, New World gifts grew not simply great but *ingentium*, of an extraordinary nature or even an unnatural kind; and against the stereotyped animism of *Bilderverehrung*, their pagan stewards shrank in mental stature such that the likes of papist tyrants were supposedly not fought off but rather *verehrt*, honored with ecstatic devotion or even idolatry through offerings of canticles and treasures.

If these parahuman coordinates of pagano-papist censure have propped up an enduring moral framework against the subhuman no less than the inhumane, some caution is nonetheless advised before condemning their humanist scaffolding as simply fraudulent or fragmentary. At the risk of inverse moralizing, perhaps the lesson to be drawn is rather that the pristine structure of Christian humanism, particularly as blueprinted in its manifold evangelical manifestos, was largely compatible after all with the dirty business of colonial capitalism. So while Las Casas's reception history invites musicological study, very hopefully piqued by the trail of bibliographic breadcrumbs left behind on this little excursus into the macroscopic sound worlds of

[99] *Tyrannies et cruautez*, trans. Miggrode, 93–94: "les Indiens les allerent recevoir avec chants [94] & danses & avec presens d'or en grande quantité"; *Seer cort verhael*, M1r: "gonck het volck hen te ghemoete / ſinghende ende danſende ende met veel preſenteu van gout in groote quantiteit"; *Narratio regionum Indicarum*, trans. de Bry, 77–78: "ab Indianis [77] cannis cantibus, & saltationibus, & ingentibus auri donis recepti sunt"; *Warhafftiger und gründtlicher Bericht*, trans. de Bry, 76–77: "die Indianer mit Gesang und allen frewden [77] entgegen kommen unnd sie also empfangen ihnen auch grosse verehrung von Gold gebracht."

Reformation travel literature, at last it hardly requires great imaginative leaps or interpretive twists to make sense of the Benedictine friar's grandiloquence. The "Brief Account" treks through Little Venice by way of a well-worn Biblical *Fiendbildern*, as it starts by decrying unchristian "lions and wolves" and ends by lamenting their slaughter of "lambs and muttons";[100] while decidedly uncivilized at any rate, it is the intermediary step of designating *animales o Alemanes* that translators stumbled over, with "these Swabian—or, more properly, swinish—butchers" passed off in more anodyne fashion as "these German tyrants' greed and tyranny" (*dieser teutschen Tyrannen Geisz und Tyrannie*; cf. *Geiss* or "goat" and *Tier* or "animal").[101] The want of fidelity nonetheless produced translations that were, in a sense, faithful to the Lascasian spirit of what one critic called "enormicasión," in a neologism for the normalization of enormities, particularly in diagnosing the ills of cruelty, greed, tyranny, and other excesses.[102]

Similar critical charges have been registered in scholarship on the Lutheran tradition of ethnographic commentary. Most glaringly, Luther's antisemitic and Islamophobic screeds, in hymns no less than pamphlets, have been cited as harbingers of totalitarian genocide;[103] as a companion piece from the height of the Second World War, one Gustav Faber, among others, published a sympathetic blood-and-soil recount of Federmann's first coming as a Christological prefiguration of second- and third-wave German colonialism.[104] More sophisticated treatments

[100] The typological trope of sheep and wolves recurs in books of Old Testament prophets (e.g., Isaiah 11:6 and 65:25) as well as New Testament Gospels (Matthew 7:15 and 10:16).
[101] Susanne Zantop, *Colonial Fantasies*, 22–25.
[102] See Ramón Menéndez, *El Padre Las Casas: Su Doble Persona*, 106–108, for a diagnosis of the subject's "carácter patológico de exageración" and tendency toward "exageración enormisima, regla y juramento."
[103] Two key exemplars include *On the Jews and Their Lies* (*Von den Jüden und iren Lügen*) (Wittenberg: Hans Lufft, 1543), following on the heels of the 1542 battle hymn "Erhalt uns, Herr, bei deinem Wort" that sharpened views expressed earlier in *On War Against the Turk* (*Vom Kriege widder die Türcken*) (Wittenberg: Hans Weiss, 1529). For helpful review of their very broad respective literatures, see Betsy Halpern Amaru, "Martin Luther and Jewish Mirrors," *Jewish Social Studies* 46, no. 2 (Spring 1984): 95–102; and Kenneth Setton, "Lutheranism and the Turkish Peril," *Balkan Studies* 3, no. 1 (1962): 133–68.
[104] Faber, *Deutsches Blut in Fremder Erde* (Berlin: Junge Generation, 1944).

also maintained this through-line: in the enduringly influential ontology of Martin Heidegger, for instance, the interpretive method of *Destruktion* explicitly generalized Lutheran *disputatio*.[105] And a metaphysics of presence indebted to the eucharistic doctrine of sacramental union has likewise framed anthropologies of music, particularly in the insight that song and dance around gift exchange represent martial demonstration in absentia. As Adorno has indicated, travel imagery of the period frequently juxtaposed feasting with spectacles of absent belligerence that at times erupted into real presence;[106] Tomlinson has also thus analyzed how "musico-anthropophagy" mediated the oralities of etic cannibalism and emic transubstantiation in part by way of prosthesis.[107]

Thus a further point of entry into the panoramic *sympathia* of Lutheran doctrine and American conquest may be found in martial organology, whose philosophical dimensions are brilliantly analyzed in a recent study by Bryan Parkhurst and Stephan Hammel.[108] Ian Woodfield and Nicholas Cook have also highlighted how sixteenth-century Atlantic voyages generally included trumpeters and drummers as "shoreline ambassadors";[109] the point can be visually corroborated by Jerome Coeler the Edler's watercolor portraiture of the poorly compensated *Landsknechte* in Federmann's expedition carrying such noisemakers from their disembarkment to a parley with indigenous peoples (Figure 1.5). Such tactics were of course hardly unique to these marines; as prescribed by manuals of siegecraft such as Vegetius's *De re militari*, widely

[105] For discussion, see Jayne Svenungsson, "Introduction: Heidegger and Theology after the Black Notebooks," in *Heidegger's Black Notebooks and the Future of Theology,* ed. Mårten Björk and Jayne Svenungsson (London: Palgrave Macmillan, 2017), 1–22, esp. 4; and Marten Herman Philipse, *Heidegger's Philosophy of Being: A Critical Interpretation* (Princeton, NJ: Princeton University Press, 1998), 174–75 and 446.
[106] Adorno, "The Not-So-Brief Story": 49–51.
[107] Tomlinson, *The Singing of the New World*, 111–12.
[108] Parkhurst and Hammel, "Pitch, Tone, and Note," in *The Oxford Handbook of Critical Concepts in Music Theory*, ed. Alexander Rehding and Steven Rings (Oxford: Oxford University Press, 2020), 3–39.
[109] Woodfield, *English Musicians in the Age of Exploration* (New York: Pendragon Press, 1995), 112; qtd. in Cook, "Western Music as World Music," in *The Cambridge History of World Music*, ed. Philip V. Bohlman (Cambridge: Cambridge University Press, 2013), 75.

reprinted in translation from the late fifteenth century onward, brass and percussion were used to "summon troops to action and then regulate their movements."[110] Then as now, a similar function obtained between international and domestic forces, as illustrated by Northern Renaissance engravers such as Hans Holbein the Younger and Daniel Hopfer (Figure 1.6), in maintaining municipal order for German townships. The indexical relationship between state violence and acoustic intensity manifest in these images thus contextualizes the nature of sonic diplomacy not only abroad but at home.

Figure 1.5. From the Travel Memoirs of Coeler the Elder (1533–34)

[110] Christopher Allmand, *The De Re Militari of Vegetius: The Reception, Transmission and Legacy of a Roman Text in the Middle Ages* (Cambridge: Cambridge University Press, 2011), 135; for the reception history of its German translation by Ludwig Hohenwang (Ulm: Elchingen, 1475), see 193–96.

Figure 1.6. Daniel Hopfer, "Five German Soldiers" (ca. 1520/36)

The resultant social-historical picture shows an emergent European bourgeois class grappling not just internally with new forms of political agency, but moreover with the structuring of a world-system conditioned by transcontinental material and cultural entanglement.[111] The tale of New Nuremberg is obviously a story about rapacious colonial capitalism, but it is no less, if less obviously, a story about the seemingly innocuous music-making taking place a world away back in such municipalities as the Free Imperial City of Nuremberg. Not only are outward-looking financiers, adventurers, missionaries, and the like implicated; so too are seemingly blinkered merchants, laborers, and laity touched by transfers of

[111] Of the monumental literature on imperialism studies, one of the most influential accounts is Immanuel Wallerstein's on the hegemonic rise of sixteenth-century German and especially Dutch merchants in *The Modern World-System*, 4 vols. (Los Angeles and Berkeley: University of California Press, 1974–2011), 1:164–223. For a measured musicological perspective, see Olivia Bloechl and Melanie Lowe's Introduction to *Rethinking Difference in Music Scholarship*, ed. Olivia Bloechl, Melanie Lowe, and Jeffrey Kallberg (Cambridge: Cambridge University Press, 2015, 9–10.

once-remote goods and ideas. Knowledge work through liberal education in this period of accelerated technical and environmental change was therefore not simply contained by the economics and logics of discovery but actively pressured by them, such that the textual residue of reform reveals its commodity character in both conceptual and material terms. As part and parcel of commodification under primitive accumulation, the aesthetics of brevity thus grew thoroughly valorized and canonized.

1.4 *Kleinmeistern* Canons

At its 2010 annual convention, the Society for Music Theory hosted a panel debate on "Firing a Cannon at the Canon." As in old-fashioned public intellectual showdowns, such as the famed duel of wits between Nicolo Vicentino and Vicente Lusitano, distinguished scholars of one radical bent or another fired back and forth in a debate on the merits of a standardized catalogue of classics; enfranchised attendees then voted yea or nay for one fusillade or the other. And when the smoke cleared in 2010 Bloomington, as in 1551 Rome, the old guard prevailed by a superparticular ratio of 2:1.[112]

Polemics and their proportions aside, the term "canon" has long been a moving target. Granted, its polysemy presents a clear definitional front runner, with the most well-known reference nowadays related to a representative literary archive bound together by an explicit rule or logic of authentication, as in the canonical books of the Bible or the canon of saints.[113] Yet as media theorist W. J. T. Mitchell has highlighted, such scriptural canons hardly ever maintain

[112] *Nota bene*: While the judging of this famous contest of virtuosi was exactly 2 to 1, my reportage of the SMT session's supermajority is of course approximated. In recent years the traditional mapping of progressive *futurismo* onto Vicentino's sponsorship of *musica reservata* has been challenged, while Lusitano's image has been rehabilitated with respect to cultural histories of race and ethnicity as well as improvisation studies. See, e.g., Robert Stevenson, "The First Black Published Composer," *Inter-American Music Review* 5, no. 1 (1982): 79–103.
[113] For an instructive study, see Kilian McDonnell, "Canon and Koinoia/communio: The Formation of the Canon as an Ecclesiological Process," *Gregorianum* 79, no. 1 (1998): 29–54.

rigidity: even in the hallowed chambers of scholastic and clerical conservatories, both "priestly and prophetic" catalogues often sway in dynamic tension across distributed sources of authority and sites of administration.[114] In music studies, among other humanities disciplines, canonicity has thus offered a signal repository of research and contest since at least the early twentieth century;[115] and now well into the twenty-first century, even with some signs of fading amid observations of what music historian Robert Fink has hailed as "The Twilight of the Canon," an atmosphere of intellectual urgency still hangs over the ironic post-Nietzschean cries of *Kanonsdämmerung* no less than earnest quasi-Fanonian calls for *décanonisation*.[116]

But lost in this thick constellation of apocalypse and apocrypha are two relatively archaic and still murkier senses of canon. The first encompasses a certain rule or code of conduct, such as the corpus of Church canon law or the customaries of monastic canonical hours; yet while the former was traditionally justified by natural law, the latter rested on some manner of positive law no less divine. Thus even an anonymous "Rule of the Master" (*Regula Magistri*)—concretized chiefly in the Rules of Saint Augustine (c. 400 CE) and Saint Benedict (c. 530), major patristic orders whose modern adherents came to include the likes of Luther and Las Casas, respectively—imposed canons of duty on religious separatists by ordering not only their daily lives but their very communities. For all the antimonastic fervor of reformers such as Melanchthon and Medler, inevitably there remained a certain freight of *ordo* in their own

[114] W. J. T. Mitchell, "Canon," in *New Keywords: A Revised Vocabulary of Culture and Society*, ed. Tony Bennett, Lawrence Grossberg, and Meghan Morris (Malden, MA: Blackwell, 2005), 20–22.
[115] A clear-eyed and prescient appraisal remains Sumanth Gopinath, "Diversity, Music Theory, and the Neoliberal Academy," *Gamut* 2, no. 1 (2009): 61–88, esp. on the relationship between entrepreneurial self-canonization and disciplinary "self-regulation" (72–73; cf. Thomas Christensen, "From the President," *Society for Music Theory Newsletter* 24, no. 2 (2001), 4). See also William Weber, "The Intellectual Origins of Musical Canon in Eighteenth-Century England," *Journal of the Americans Musicological Society* 47, no. 3 (Autumn 1994): 488–520; and Edward Komara, "Culture Wars, Canonicity, and 'A Basic Music Library,'" *Notes* 64, no. 2 (Dec. 2007): 232–47.
[116] Robert Fink, "Elvis Everywhere: Musicology and Popular Music Studies at the Twilight of the Canon," *American Music* 16, no. 2 (Summer 1998): 135–179.

educational *Kirchenordnungen*. This metonymic slippage was indeed essential: the habitus of self-sacralization is semantically captured in the dual reference of "canon" to both monastic rule itself and the monk (*canonicus*) who embodies it, much like "order" applies to the governance process of monasticizing (*ordinans*) as well as the monastery. Given the ritual basis of prayer in song, whether ordained as *ora et labora* or made ordinary in *horae* (incorporated respectively in the Benedictine motto of "prayer and work" and the popular devotional books of "hours"), incantation not only filled but tracked time in the disciplined conversion of biocapital.[117] And in this sense, such canons might well be understood less as ascetism than as aestheticization, if not anaesthetization, of anatamopolitics.

The progression from literary canons to monastic canons, from rules of authentication to those of conduct, leads at last to another relatively submerged sense of the word: imitative canons, rules of polyphonic recursion. However limited as a term of art, this semantic provenance is certainly no less winding. The ancient techne of "harmonic canon" (*κἄνών ἁρμονικός*)—rendered in Latin as *canon harmonicus*, *monochordum*, or simply *regula*—also found its way into the writings of countless sixteenth-century musical humanists, including not only sprawling discourses by major *eruditi* such as Gaffurio and Glarean but also the pithy practical enchiridions of relative *Kleinmeistern* like Agricola and Ornithoparcus;[118] at any rate, later canonists tended to follow Gaffurio in recommending the Neoplatonic spiritual benefits of thereby moderating "the motion of the soul under rule and reason."[119] Such technicity illustrates

[117] For a fascinating study of this process in New World convents, see Cesar D. Favila, *Immaculate Sounds: The Musical Lives of Nuns in New Spain* (New York: Oxford University Press, 2024).
[118] See Franchino Gaffurio, *De harmonia musicorum instrumentorum opus* (Milan: Gotardus Pontanus, 1518; repr., New York: Broude Bros., [1979]), 4:LXXXXVIr; Henricus Glareanus, *Dodekachordon* (Basle: Henrichus Petri, 1547: 1:42–58 and passim; Martinus Agricola, *Rudimenta musices* (Wittenberg: Georg Rhaw, 1539; repr., New York: Broude Bros., 1966), D5r–D6v; and Andreas Ornithoparcus, *Musice active micrologus* (Leipzig: Valentin Schumann, 1517; repr., New York, 1973), 1:C3v–C4v.
[119] *Theorica musice* (Milan: Ioannes Petrus de Lomatio, 1492; repr., New York: Broude Bros., 1967), 1:a5r. Cf., e.g., Agricola, *Rudimenta*, D5r.

the original sense of a rule or canon as a straight rod or string for measurement, hence the metonym of a standard or norm of governance; and thus it was reapplied to medieval polyphony, in the manner of a catch or fugue, as a subscription or convention for imitation, hence the further metonymic shift from technique to genre. Granted, this province of the children's round and Pachelbel's ground might seem distinctly minor next to the full-bodied world-historical character of archives and orders. But there is a case to be made that perhaps, to ape an infamous musicological refrain, canon is the cradle of modality.[120] What is more, there is a story to be told in turn about the liberal art of music as a playground of economic theology, and its stage is set in the schoolhouses of the Free Imperial City of Nuremberg.

Re-enter *homo faber*. If Faber's "Little Compendium" holds a handful of topics, then its rather lengthy and learned sequel boasts an armload—both tablets of the decalogue, as it were. The 1549 "Introduction to Practical Music (By Way of Not Only Precepts, but Also Examples Accommodated to the Use of Boys, Contained as Briefly as Possible)," also published by a midcentury Nuremberg print house,-indeed outlines twice as many "principal chapters" (*praecipua capita*) for Part 1 alone, as seen in Figure 1.7.[121]

[120] Edward Lowinsky, *Tonality and Atonality in Sixteenth-Century Music* (Berkeley and Los Angeles: University of California Press, 1976), 4–5: "cadence is the cradle of tonality." For a similar variation on this theme, see also Lowinksy, "Canon Technique and Simultaneous Conception in Fifteenth-Century Music: A Comparison of North and South" (New York: Pendragon Press, 1981), 185–89.
[121] Faber, *Ad musicam practicam introductio* (Nuremberg: Johannes vom Berg (Montanus) and Ulrich Neuberg, 1550), B2v.

Figure 1.7. Ten Precepts of the *Introductio*

I. *Clavis* ("key" or letter name: Ɨ, A, ♮, etc.);

II. *Vox* ("voice" or solmization syllable: ut, re, mi, etc.);

III. *Cantus* ("song" or hexachord type: natural, hard, soft);

IIII. *Mutatio* ("mutation" or hexachord change: natural–hard, natural–soft, etc.);

V. *Figura* ("figure" or note/rest sign: maxim, long, breve, etc.);

VI. *Syncopatio* ("elision" or offbeat stress: minim–*semibreve*–minim, e.g.);

VII. *Clavis Transpositio* ("interchange of key" or clef sign: F-clef, C-clef, G-clef, etc.);

VIII. *Modus*/*Intervallum* ("measure" or interval size: semitone, whole tone, ditone, etc.);

VIIII. *Tonus* ("tone" or church mode: Dorian, Hypodorian, Phrygian, etc.);

X. *Solmisatio* ("sol-fa" or audiation system: syllabification, manuduction, i.e.).

The initial five chapters of the *Introductio* are, it may be recalled, precisely the same as the five in total of the *Compendiolum*: the first four exfoliate simple conjunctions of letters and syllables, while the fifth and last generates compound ligatures of properties and perfections. Taken together, this pentad offers a basic crash course in *cantus figuratas* ("figured song"), the "Measured or New" Music whose reformed precepts designate not only a diachronic progression from the same old "Plain and Old" orthopraxy, but also a synchronic system of "unequal notes [*figuras*], the quantities of which are now increased, now decreased."[122]

But inequality is not to be confused with irregularity—far from it. All the remaining five chapters specific to Part 1 of the *Introductio* indeed define their constitutive *praecepta* with

[122] Faber, *Introductio*, B2r: As opposed to the old style of choral plainchant, "Figuralis est quae inaequales habet figuras, quarum quantitates nunc augentur nunc minuuntur, iuxta variè praescripta signa. Dicitur etiam Mensuralis et Noua." ("Figural is that [music] which has unequal notes, the quantities of which are now increased, now decreased, according variously to prescribed signs. It is also said to be Mensural or New.")

clarifying *regulae*. And these regulative definitions are not simply extensional or ostensive, but moreover intensional: that is, the rules that punctuate each chapter do not just enumerate or demonstrate definienda with lists and indices of exemplary objects; they also characterize and typologize by asserting essential properties, such that every rubric is understood as a rule in and of itself.

Tonus or mode was especially subject to such definition. Understood since the Carolingian Renaissance as the "smallest part of a musical rule," a conceptual primitive comparable to arithmetic integer or alphabetic miniscule, the coherence or *Zusammenhang* of mode was likened to "a kind of glue with which every measure [*modulatio*] seems to self-adhere."[123] Faber, for his part, similarly described the modal determinant of "ambitus or course" as "a certain rule signifying how far songs are bound to stretch and yet return to their finals."[124] So he followed Agricola in likewise declaring mode, with a whiff of medieval legalism, as a hard and fast "law or rule to which the course and melody [*melodia*, "repercussion"] of any singing conforms [*coaptatur*, "is fastened"] in beginning, middle, and end."[125] Further relating metaphors of agglutination to those of adjudication, Ornithoparcus channeled an ecclesiastical air of his own when rather more succinctly considering mode, after St. Bernard of Clairvaux, simply a "rule determining cofinal [*maneria*]."[126] Here the influence of a key catechism attributed to

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[123] Alcuin of York, *Musica,* in *Scriptores ecclesiastici de musica sacra potissimum,* ed. Martin Gerbert (St. Blaise: Typis San-Blasianis, 1784; repr., Hildesheim: Olms, 1963), 1:26: "Octo tonos in Musica consistere musicus scire debet, per quos omnis modulatio quasi quodam glutino sibi adhaerere videtur..Tonus est minima pars musicae regulae."

[124] Faber, *Introductio*, I2r: "Medio cognoscuntur toni duobus modis. Ambitu seu cursu et repercussione. Ambitus est certa regula significans quantum cantilenae intendi ac remitti debeant à suis finalibus."

[125] Faber, *Introductio*, I1v: "Tonus est certa regula, secundum quam cursus et melodia cuiuslibet concentus in principio, medio et fine formatur"; Agricola, *Rudimenta musices* (Wittenberg: Rhau, 1539; repr., New York: Broude, 1966), B8r: "Tonus hoc loco, lex est vel regula, secundum quam cursus ac melodia cuiuslibet concentus, in exordio, medio ac fine coaptatur."

[126] Ornithoparcus, *Musice active* micrologus, 2nd ed. (Leipzig: Valentin Schumann, 1517; repr., New York, Dover, 1973), D1v: "Primus tonus: ut divus Bernhardus scribit: est regula autentum prime manerie determinans." Cf. *Tonale Sancti Bernardi,* in *Patrologia cursus completes, series latina,* ed. J. P. Migne, 221 vols. (Paris: Garnier,

proto-Guidonian monochordist Pseudo-Odo of Cluny, *fons litterae*, perhaps also springs forth not only technically but rhetorically in finding that "tone or mode is a rule which adjudicates on every song in the end."[127] Erudite and influential controversialist Johannes Cochlaeus, an old teacher of Sebald Heyden's, offered a similarly elegant and learned formulation in summarizing mode as "a rule for adjudicating through rise and fall whatever is sung in the end."[128]

As an accessory to modality, the case of solmization required a certain coherentist advocacy as well. Presiding in the esteemed company of Rhau and associates, Faber was one of many Lutheran musicians to deliver "precepts on solmization" (*praecepta de solmisatione*) that affirmed "regular modes" (*toni regulares*) with a "regular hexachord" (*cantus regularis*).[129] For instance, another representative contributor to this precedent was one Johannes Vogelsang—an honorable figure unrelated to Andreas Ornithoparcus, *caveat lector*, despite their shared cognomen—who opined that "solmization is regulated measurement [*regulata modulatio*], according to the exigency of mi and fa, of any song you please with musical syllables."[130] Majority opinion on the regulatory status of solmization was thus rather complex, at turns registering syllabification less as impartial testimony than as sovereign arbiter of *musica recta*. Any theoretical discrepancy was then to be pronounced either venial or cardinal: fleeting departures, whether by wandering mode or mutating hexachord, could be pardoned with what

1844–1904), 182:1153: "Quid est tonus? Regula, naturam et formam cantuum regularium determinans" ("What is a mode? A rule determining the nature and form of regular songs").

[127] Pseudo-Odo, *Dialogus de musica*, in *Scriptores ecclesiastici de musica sacra potissimum*, 3 vols. (St. Blaise: Typis San-Blasianus, 1784; repr., Hildesheim: Olms, 1963), 1:257: "Tonus vel modus est regula, quae de omni cantu in fine diiudicat."

[128] Cochlaeus, *Tetrachordum musices* (Nuremberg: Friedrich Peypus, 1514), C1v: "Quid est Tonus? Est regula per ascensum et descensum quemuis cantum in fine diiudicans."

[129] Faber, *Introductio*, L1r–L1v and I2v; Heyden, *De arte canendi* (Nuremberg: Johannes Petreius, 1540), 20–24; Rhau, *Enchiridion utriusque musicae practicae* (Wittenberg: Rhau, 1538; repr., Kassel: Bärenreiter, 1951), D1r–D2r; Spangenberg, *Quaestiones*, B6v–B7v, esp. B7r.

[130] Renate Federhofer-Koenigs, "Johannes Vogelsang und sein Musiktraktat (1542): Ein Beitrag zur Musikgeschichte von Feldkirch (Voralberg)," *Kirchenmusikalisches Jahrbuch* 49 (1965): 84: "Solmisatio est cuiuslibet cantus per voces musicales—iuxta mi et fa exigentiam—regulata modulatio."

"the Musicians call licenses," freely granted by Faber and indeed other learned authors;[131] yet a more exacting classification scheme including the "irregular or transposed" became necessary wherever the final balance of usage or practice tilted toward outright "usurpation" (*usurpatio*).[132]

The ancient legal notion of usurpation thus applied not only to modal taxonomy but also, mutations *mutandis*, to systems such as mensural hierarchy. This deposition from property rights to technical skills can be found, for one, in the pedagogy of prolific and influential Philippo-Ramist Prorector Friedrich Beurhaus: his 1590 theological polemic on "Principles and Authority of Doctrines" perhaps most conclusively articulated an educational psychology in terms of things "to be Perceived" and concepts "to be Usurped";[133] but it was his 1580 musical catechism on "Rudiments of Music" that initially advanced the metaconcept itself from first principles to full-blown practice through "brief Precepts" ordered with "perspicuous Method."[134] Thus tyros traversed the standard *progressio* of graded rubrics, rules, exercises, and examples; but at several turns along the way, they moreover landed on the conceptual foothold of usurping, "taking into use" one technique or another as if to ally appropriation with apprehension, seizure with selection. In a preliminary chapter "On Lines" of the staff, for instance, the disciple asks "how many lines are taken into use" (*usurpantur*), to which the master answers, "Seldom four, more

[131] Faber, *Introductio*, I2vr; cf., e.g., Cochlaeus, *Tetrachordum musices*, C2v.
[132] Faber, *Introductio*, I3r; cf., e.g., Hermann Finck, *Practica musica* (Wittenberg: Rhau, 1556), Pp4r.
[133] Beurhaus, *De doctrinarum principiis et auctoritate, deque hominis ad eas percipiendas ac usurpandas facultatibus* (Dortmund: A. Sartor, 1590).
[134] See Beurhaus, *Musicae rudimenta* (Dortmund: Albert Sartor, 1581; repr., ed. Walter Thoene, Köln: Arno Volk, 1960), abridged from his *Erotematum Musicae Libri Duo* (Nuremburg: Katharina Gerlachin, [1573] 1580; repr., ed. Walter Thoene, Köln: Arno Volk, 1969), whose view of Ramist method as the master rule of art is outlined on p. 13: "Et cum huic studio hoc tempore Artis methodica descriptio, praecipueque exemplarium copia deesset: ego qua potui industria brevia quidem et pauca Musicae praecepta collegi: sed ea ita perspicua Methodo (quantum ex Dialectica Artium formandarum magistra cognoscere potui) descripsi, ut et ars commodius doceri, et usus facilius comparari posse videatur." ("And with this study at this time, it was lacking a methodical description of the Art and above all [*praecipue*] a supply of exemplars. I collected with the industry I was able indeed brief and few precepts. But thus I described it with a perspicuous Method (insofar as I was able to ascertain from a master Dialectic of the Arts to be formed), in order that both the art be taught more comfortably and its use seem capable of being learned more easily.")

often five, to which a sixth [ledger line] is accustomed to being added anywhere on account of the ascent and descent of the song."[135] In another early chapter "On Letters" of the scale, the disciple similarly queries "how many letters are taken into use here," to which the master responds, "The first seven of the alphabet . . . , but the B is distinguished twofold: one round ♭, another square ♮."[136] So in both chapters, interrogatives of quantity (*quot*, "how many"), among other forensic "circumstances" around which trial lawyers and church doctors posed rhetorical questions, lay the categorial groundwork for usurping *loci* in pitch space.[137]

Yet for accessing the wider realm of *musica mensuralis* or *cantus figuratas*, what also had to be taken into use was some instrument for reckoning timespan—or *quantitas*, in Beurhaus's prosodic nomenclature for the "how-much-ness" of mensural figures.[138] Metaphors of sovereignty accordingly grow even more pronounced in his lessons as the master leads the charge from usurpation of tone to that of note: first, a hexachord type or "order of voices" (*vocum ordo*) is classed and usurped along the lines of "princes" (*principes*) and "ministers" (*ministrae*), the former being an "indicator of invariable voice [or syllable]," as in round ♭ or

[135] Beurhaus, *Musicae rudimenta*, 6: "Quot lineae usurpantur? Raro quatuor, saepius quinque, quibus propter cantus ascensum et descensum uspiam sexta addi solet."
[136] Beurhaus, *Musicae rudimenta*, 7: "Quot hic litterae usurpantur? Septem primae alphabeti . . . ; sed B duplex distinguitur, unum rotundum sic ♭, alterum quadratum sic ♮, illud b molle, hoc b durum dicitur."
[137] Ancestor of the Five Ws (who, what, when, where, why), the *Septem Circumstantiae* were tabulated in countless rhetorical inventions and theological investigations from Cicero and Quintilian to Pseudo-Augustine and Aquinas, as in the latter's *ST* 1–2.7.3, where they are listed in Ciceronian fashion as *quis, quid, ubi, quibus auxiliis, cur, quomodo, quando* (who, what, where, with what aids, why, in what way, when). Note that the ancient Greek *peristasis* (like its modern English calque, "circumstance") implies a connection *between* stasis and status by denoting standing around for a special occasion or ritual procession, hence its metonymic application to ecclesial architecture. See Michael Sloan, "Aristotle's *Nicomachean Ethics* as the Original *Locus* for the *Septem Circumstantiae*," *Classical Philology* 105, no. 3 (July 2010): 236–51, esp. 245–46.
[138] Beurhaus, *Musicae rudimenta*, 15: "Quid est quantitas sonorum? Quantitas est tempus soni edendi." ("What is the quantity of sounds? Quantity is the time of a sound to be produced.") Note that *quantitas* is one of several terms Cicero calqued from Hellenistic philosophy that has since entered a wider lexicon of everyday *comprehensio*. For a review of the *evidentia*, see John Glucker, "Cicero's Remarks on Translating Philosophical Terms—Some General Problems," in *Greek into Latin from Antiquity until the Nineteenth Century*, ed. Charles Burnett and John Glucker (London: Warburg Institute, 2012), 37–96.

square ♮, and the latter having "more voices that are subject [*servientes*] to them and hence changeable," as in *cantus naturalis*;[139] second, a rhythmic figure or "quantity of sounds" (*quantitas sonorum*) is likewise ranked and "taken into use" with respect to "peers" (*pares*) and "unequals" (*inaequalis*), the former having "values [*puncti*, 'pricks'] of the same size," as in choral style, and the latter being those that "change for a variety of signs," as in any number of multivalent neumes or figures (e.g., the *podatus*, a "footed" ascending breve–long *binarium*, among countless other lopsided compounds).[140] In a word, "usurpation" was itself usurped by Philippo-Ramist teachers and cantors such as Beurhaus, taken into use as a term of art for aesthetics and cognition in general but forged in no small part through a methodism of solmization and figuration in specific; thus an intersection of placefinding and timekeeping rules fused precept to percept through structural identification of modal *cantum* with mensural *quantum*.

Beurhaus was by no means alone in seizing on this two-for-one regulatory amalgamation. Like the mi–fa node, the breve–long foot was taken for a site of orientation as well as a standard of measurement, a thing both characteristic and quantitative. So it was stealing no less from definitions of musical *tonus* than from those of poetic *ictus* ("stress" or "strike") when Listenius described the *tactus* as a "rule for directing song measuredly" (*regula cantum mensuraliter dirigens*).[141] And it was in keeping with the absolutist *fundamentum relationis* or "basis of comparison" put forward by Tinctoris's tenor principle—a *Grundnorm* for determining

[139] Beurhaus, *Musicae rudimenta*, 7: "Principes sunt unius quaeque immutabilis vocis indices ut b rotundum et quadratum. . . . Ministrae sunt reliquae omnes, quae singulae plures voces illis servientes ideoque mutabiles indicant."
[140] Beurhaus, *Musicae rudimenta*, 18–19: "Pares cum suis punctis eiusdem sunt quantitatis, quae chorales appellantur . . . . Impares sunt inaequalis formae et quantitatis et hanc pro signorum varietate mutant. In his praecipue pausae, id est virgulae silentii, usurpantur singulisque singulae respondent."
[141] Listenius, *Musica* (Nuremberg: Petreius, 1549; repr., Berlin: Martin Breslauer, 1927), e5r.

polyphonic *Gesamtmodus*[142]—that Heyden prescribed a *regula catholica* ("universal law") for the semibreve tactus to be respected above all, in the cosmopolitan legal spirit of *ius cogens erga omnes,* a peremptory norm or "compelling law for all."[143]

To be sure, pluralist contrarians persisted: contra Heyden, Wittenberg organist Hermann Finck took pains to rationalize how "several kinds of tactus are taken into use" (*plura genera tactuum usurpantur*); yet even Finck yielded to Tinctoris's school of thought in analogizing meter to mode by itemizing the *proprietas* ("property") of not only ligatures but hexachords.[144] Faber, too, may be counted among such usurpers: his investigation into mensural signs "now commonly taken into use improperly" (*perperam iam vulgo usurpari*) likewise touched on an extended if not insurgent sense of *usus* in quantifying what might be called mensural *ficta*;[145] metric alteration or *anomalia* thus included any syncopation feigned "against the beat" (*contra tactum*) as "reduction of a smaller note [subdivision] beyond the larger [pulse] to which it is counted equal."[146] But if indeed such equality is not to be confused with regularity, especially given all the asymmetries that inhere in the regal scales and accents of hand and foot (cf.

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[142] Tinctoris, *Liber de natura et proprietate tonorum* (Naples, 1476; ed., Paris: Durand, 1864–76; repr., Hildesheim: Olms, 1963), 4:21 and 29: "debet absolute respondere secundum qualitatem tenoris eo quod omnis compositionis sit pars principalis et fundamentum totius relationis" (a musician assessing *tonus* "must respond absolutely according to quality of the tenor so that of every composition it be the principal part and foundation of the total relation"). For discussion, see Carl Dahlhaus, *Studies on the Origins of Harmonic Tonality*, trans. Robert Gjerdingen (Princeton, NJ: Princeton University Press, 1987), 200–04, where *Gesamtmodus* is translated as "collective mode"; cf. 216–17 on Johannes Lippius's distinction between tenor as *melodia regalis* and bass as *melodia fundamentalis*, in *Synopsis Musicae Novae* (Strasbourg: Paul Ledertz, 1612), G2v.

[143] Heyden, *De arte canendi*, 119: "Ut omnis Augmentatio ac Diminutio quantitates Notularum, ad essentialem Semibrevis Notulae integrum tactum relative intelligi, et aestimari debet: ita quoque omnia signa, omnesque Proportionum numeros, ad hos Temporis, non diminutos Circulos [O,C], appendere oportebit." ("As all Increase and Decrease in the quantities of Notes should be discerned and assessed relative to the essential integral tactus of the Semibreve Note, so also will it be obliged that all signs and all numbers of Proportions be weighed by these non-decreased Circles of Tempus [O and C: 3:1 and 2:1 semibreves per breve, respectively].") For additional commentary, see Clement Miller, "Sebald Heyden's 'De Arte Canendi': Background and Contents," *Musica Disciplina* 24 (1970): 79–99, esp. 83–95.

[144] Finck, *Practica musica*, K1v.

[145] Faber, *Introductio*, N4r.

[146] Faber, *Introductio*, G2v: "Quando inter cantandum maiores notulae minoribus contra tactum immiscentur" ("when, in the midst of what is to be sung, larger notes are intermingled with smaller ones against the beat"), "est autem Syncopatio, reductio minoris notulae ultra maiores ad aequalem cui connumeratur."

Beurhaus's princes and peers), then the widespread qualification of *mensura recta* nevertheless implies that the measuring of measure itself generally presumed a conceptual background based not simply on aliquot units but moreover on incommensurable divisions.

Theology of number was therefore essential for theory of music, though it bears emphasis that music theory played its part as well in how the numinous was enumerated and rationalized. The documented *Tischreden* ("Table Talk") of Luther and company bears witness to such metaesthetics, as in this fine morsel preserved by Faber's Nuremberg sponsor Nicolaus Medler on the nature of B♭–B♮, prince of augmented unisons:

> B fa mi is the gospel in music, as it moderates all music; the other letters are the law. And just as the law obeys the gospel, so does B fa mi rule the other letters; and just as the gospel is the sweetest teaching, so is mi fa the sweetest of all syllables. In this way the second mode [Hypodorian] is a poor sinner who permits both mi and fa to be sung on B fa mi; at the summit, discernment of gospel and law is depicted.[147]

Luther's Parable of the Pair of Bs, recorded in a moment of conviviality if not communion, is certainly not without its hermeneutic and codicological obscurities, as tracked by Danish music scholar Eyolf Østrem.[148] Yet the analogy it develops, even as represented here in brief synopsis rather than full narrative, nonetheless sheds light on how the early Lutheran doctrine of law and gospel was conceptualized in part through music-theoretic scripture, among other guild archives later canonized by second-generation cantors such as Beurhaus and Faber. Just as the Pauline

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[147] *D. Martin Luthers Werke. Kritische Gesamtausgabe* [*Weimarer Ausgabe*] (Weimar: Böhlau, 1883–2009), part 2: *Tischreden*, vol. 1 (1912), 396, no. 816: "B molle [or 'b fah mi'] in musica est evangelium, moderator in tota musica, ceterae claves sunt lex, et ut lex obtemperat evangelio, ita B molle [or again 'b fah mi'] regit ceteras claves. Et ut evangelium est doctrina suavissima, ita mi fa est omnium vocum suavissima. Ideo infirmus peccator est secundus tonus, qui in h fa b mi tam mi quam fa canere permittit. Summa, legis et evangelii discrimen est depictum." ("Das Evangelium ist gleich wie das B fa b mi in der Musica, als die von ihm regiret wird; die andern Claves sinds Gesetz. Und gleich wie das Gesetz dem Evangelio gehorchet, also sind auch die andern Claves dem B fa b mi gehorsam. Und gleich wie das Evangelium eine liebliche, holdfelige Lehre ist, also ist das Mi und Fa unter allen Stimmen die lieblichste. Aber der ander Tonus ist ein armer schwacher Sünder, der läszt im B fa b mi beide, Mi und Fa, singen.")

[148] Eyolf Østrem, "Luther, Josquin, and *des fincken gesang*," in *The Arts and the Cultural Heritage of Martin Luther*, ed. Eyolf Østrem, Jens Fleischer, and Nils Holger Petersen (Copenhagen: Museum Tusculanum Press, 2003), 51–80, esp. 60–63.

logos of *evangelium* both redeemed and repealed the Mosaic decalogue of *praecepta*, so did the accidental chromatics of *ficta* at once transpose and transcend the essential gamut of *recta*. The exception thus proved the rule for the late medieval *cantus regularis* no less than the Lutheran *regula fidei*, with any tone feigned above the book (e.g., B♭) not simply reinscribing authority but transfiguring its justification by faith alone—an otherwise almost unfathomable usurpation of divine commandment.

Such musical miracles, however constrained, were hardly unique to Reformation thought.[149] Among the many mystical antinomies and falsidical paradoxes in Western theology of music, one widely anthologized example of such wonderworking is the ninth-century *Enchiriadis* authors' discernment of an "amazing relationship" (*mira ratio*) wrought "by miraculous mutation" (*mutatione mirabili*) in the augmented diapason from B♭–B♮.[150] But even in the wake of scholastic rationality, technical literature on music phenomenology continued to present its own marvels of trinitarian metaphor: expressed in harmony and counterpoint, Lippius's *trias harmonica perfecta*, like Zarlino's *harmonia perfetta*, manifested the chordal mystery of *Unitrinitatis*;[151] in rhythm and meter, Franconian mensural notation codified the

[149] For a classic essay on the "miracle" as central to liberal constitutionalism, see Carl Schmitt, *Political Theology: Four Chapters on the Concept of Sovereignty*, trans. George Schwab (Chicago: University of Chicago Press, 1985), 5–15. See also historian of science Lorraine Daston and Katharine Park's more measured but no less magisterial account, *Wonders and the Order of Nature, 1150–1750* (New York: Zone, 1998), 21–24.

[150] For philological discussion of how disjunct T–S–T scalar tetrachords thus concatenate in the Dasia system (e.g., G–A–B♭–C, D–E–F–G, A–B♮–C–D, E–F♯–G–A), see Charles Atkinson, *The Critical Nexus: Tone-System, Mode, and Notation in Early Medieval Music* (Oxford and New York: Oxford University Press, 2009), 133–35. To review in further detail how the *Enchiriadis* treatises described this *sonorum ordo* ("order of sounds"), see their edition in *Scriptores ecclesiastici de musica sacra potissimum*, 3 vols., ed. Martin Gerbert (St. Blaise: Typis San-Blasianis, 1784; repr., Hildesheim: Olms, 1963), 1:163–64.

[151] For an incisive conceptual history of Lippius's *Synopsis musicae novae* (Strassburg: Kieffer, 1612), see Caleb Mutch, "How the Triad Took (a) Root," *Journal of Music Theory* 66, no. 1 (Apr. 2022): 43–62; cf. Benito Rivera, "The Seventeenth-Century Theory of Triadic Generation and Invertibility and Its Application in Contemporaneous Rules of Composition," *Music Theory Spectrum* 6 (Spring 1984): 63–78.

subtle art of rendering temporal *perfectio* with ternary units;[152] and in form and texture, the imitative designs of countless erudite symphonists from Alamire to Zarlino perfected the scoring of hypostatic union for three-in-one canon, the incarnation *mirabile dictu* of a higher law made sensually cognizable.[153]

Yet canon as a musical genre has historically been perceived in astonishingly contradictory ways, at turns honored as consummate or sublime and censured as pedantic or even lascivious. While tempting to valence this antinomy of antinomies with respect to the confessional poles of Reformation and Reaction, even apart from the internal jostling of offshoots including Calvinism and Zwinglianism, such straightforward analysis is undercut by further intersecting macrohistorical axes. For one, canon as a typographic code held a technological ligament between print and scribal cultures: as Cristle Collins Judd has pointed out, authors such as Heyden not only saved space on the page with *signa convenientiae* but also saved work for rectors and students who reproduced these *exampla fugae* on slates and tablets.[154] For another, canon as a stylistic index drew a sociological distinction between vernacular and elite registers: Wittenberg musicians such as Georg Rhau and Johannes Spangenberg thus demarcated "vulgar music" from "regulated music" (*musica usualis*, *musica regulata*).[155] The latter art is certainly borne out in the enigmatic subscriptions cited by Faber and others, but it is crucial to recall that, even against a much larger regulist sweep in Lutheran pedagogy, instances

[152] For an excellent recent survey of "trinity and perfection" in Ars Nova music theory, see Anna Zayaruznaya, "Quotation, perfection and the eloquence of form: introducing *Beatius/Cum humanum*," *Plainsong and Medieval Music* 24, no. 2 (2015): 140–45. Cf. Gustave Reese, *Music in the Middle Ages* (New York: Norton, 1940), 302–03.
[153] A fascinating example from the Fugger library is the *Trinitas in unitate* canon of North German scribe and spy Pierre Alamire, discussed in Zoe Saunders, "Hidden Meaning in Agnus Dei Canons: Two Cases from the Alamire Manuscripts," *Early Music* 44, no. 4 (Nov. 2016): 593–606. For a general overview of trinitarian musical symbolism, see Chiara Bertoglio, "A Perfect Chord: Trinity in Music, Music in Trinity," *Religions* 4, no. 4 (2013): 485–501.
[154] Judd, *Reading Renaissance Music Theory*, 95–96.
[155] Rhau, *Enchiridion utriusque musicae practicae* (Wittenberg: Rhau, 1538; repr., Kassel: Bärenreiter, 1951), A5v; Spangenberg, *Quaestiones musicae in usum scholae Northusiane* (Nuremberg: Johannes Petreius, 1536), A5r–A5v.

of puzzle canon as refined as Ludwig Senfl's 1527 *Crux fidelis* were transmitted not primarily by way of learned treatises or collectors' curios but rather in popular broadsheets.[156]

What is more, canons were devices not simply for identifying register in itself but also for mobilizing if not reconfiguring the laity as a class for itself. So it is not simply a lexical happenstance that second-order *canones de canendi* ("rules for singing") were also produced in and for imitation. Such mannered aesthetic self-regulation was indeed often cast in terms of bestial housebreaking, with thinly veiled implications for the ethno-confessional disciplining of productive forces. While examples are manifold, those of the composer and chronologer Seth Calvisius provide an especially illustrative link between the *Schulregeln* of reformers such as Nicolaus Medler and the *rationes studiorum* of Jesuit Counter-Reformational literature.[157] It is to the point that the first of Medler's *Kirchenordnungen* issues a directive to "fear GOD," with additional directives to "obey superiors" and follow a basic code of conduct or *Mussregel* organized under the rubric of loving thy neighbor.[158] In all such cases, a *Gesetzgeber* or "lawgiver" figure invokes Old Testament code not only in parallel format but with direct reference to *Gebotslieder* or "commandment songs."

Luther's setting of the Ten Commandments, as noted in a magisterial analysis of "musical catechesis" by hymnologist Robin Leaver, necessarily performed a dual function: at once contrafact and Leis, it struck a delicate balance between vulgar and regulated, secular and liturgical.[159] Thus its subjunctive injunctions carry latent palimpsestic allusion to a familiar pilgrimage song entreating mercy during versicles, made explicit in the responsories' vocative

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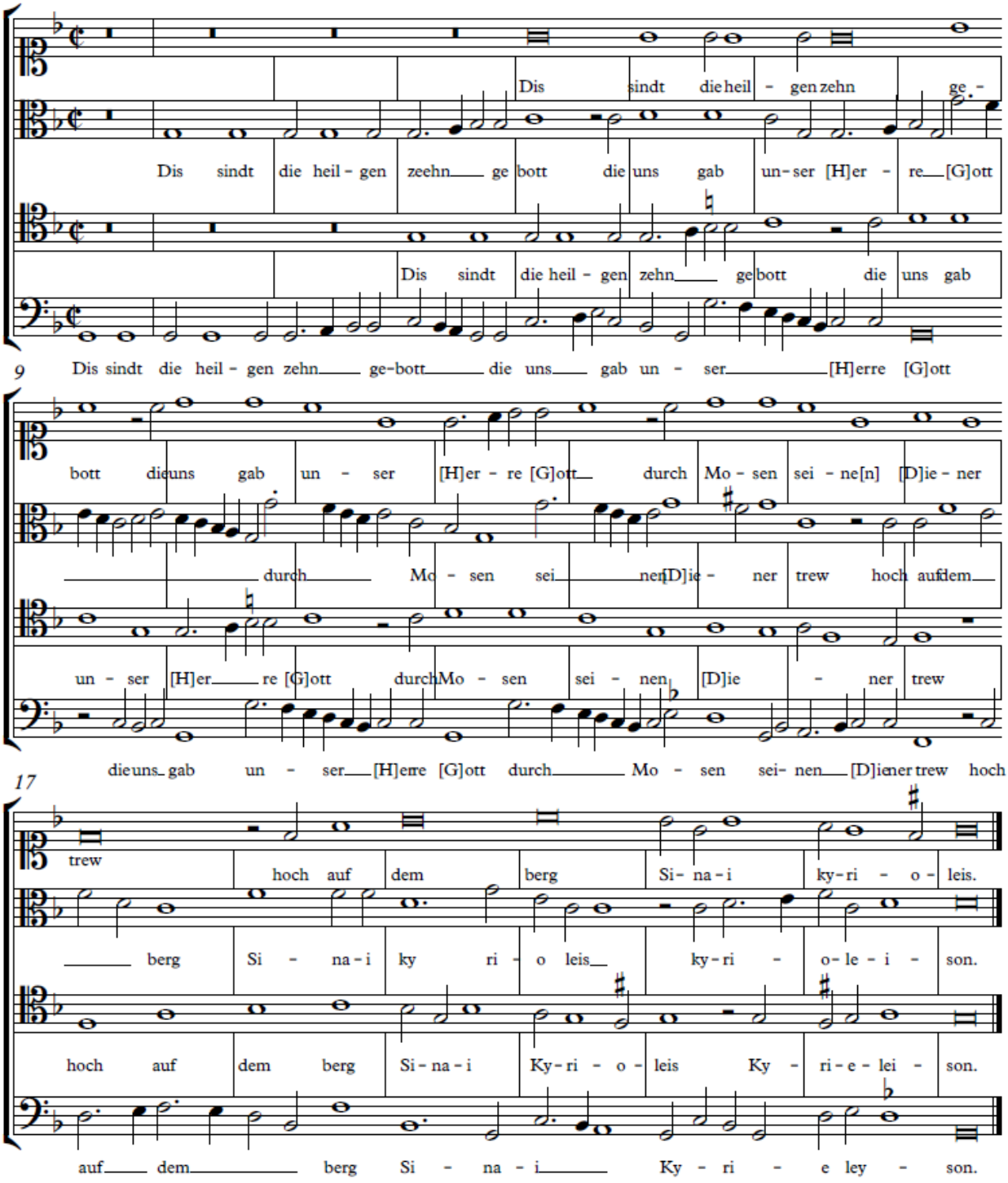
[156] Cited by Faber, *Introductio*, S3v.
[157] Calvisius, "Canones de canendi ratione," in *Biciniorum* (Leipzig: Jacob Apel, 1607); Medler, *Ratio instituendi ventutem christianam* (Wittenberg: Petri Seitz, 1550); *Ratio atque Institutio Studiorum Societatis Jesu* (Naples: Tarquinius Longus, 1599).
[158] Medler, *Ratio*, E2r.
[159] Leaver, *Luther's Liturgical Music: Principles and Implications* (Minneapolis: Fortress Press, 2017), 116–21. See also 107–15 for introduction to the problem of catechetical representation.

invocations of divine clemency. (A classic example is “Erbarme dich,” the German Kyrie.) As a central tenet of Lutheran soteriology, *Gnade* is the counterpart to *Gesetz*, the Law and the Gospel—or what Faber calls *gratium* versus *officium*, in his repeated protosecularist references to division of Church and State.[160] The transcription of Figure 1.8, from the 1545 *Gothaer Chorbuch*, gives voice to the doctrine. *Dies sind die zehen gebot* begins by intoning the *vox principalis*, per Tinctoris, or the lowest rung of the *scala*, as if suggesting a fundament to the firmament, a visitation of theodicy upon the lowest fixture in the earthly realm. The Ten Commandments themselves proceed to enact their own canonization as a dynamic process, with the *dux* enjoining obedience by successive generations of each commanded *comes*.

[160] *Compendiolum*, A2r: “ad Reipublicae et Ecclesiasticae.”

Figure 1.8. 1545 Version of Walter and Luther's Hymn "Dies Sind die Zehn Gebot"



The humanist conception of species-being as *homo faber*, maker of worlds and master of fates, is perhaps ancient in origin but distinctly modern in emphasis.[161] While once something of an industry for twentieth-century sociologists of science and religion to trace its inflection point to the banishment of miracle in Reformation theological controversy (e.g., Lutheran sacramental union, Calvinist predestination, Philippist antinomianism), the post-humanities turn has leaned rather into a matrix of sociobiological and necropolitical explanation. Yet by the same token there remains a certain enduring truth in the quaint medieval typology of *Nürnberger Witz*, a Northern Renaissance artisanal *genius loci* reputed for wielding an outsized mandate of no-nonsense rule-bound technicity, as embodied by the cartographer Martin Behaim, the engraver Albrecht Dürer, and even the shoe-cobbling songsmith Hans Sachs.[162] While at first blush the case of schoolmaster Heinrich Faber may not quite seem to fit the bill of world-historical actor, the foregoing study offers an essay in reckoning with the interconnectedness of anthropogenic global changes and the small gestures of such cosmopolitan cultural legislators, whether they be taken as prophetic demiurges or mere priestly decalogists.

As a parting word on the regulative power of the miniature, one last joke is in order, again making light of intergenerational heterophony. Once upon a time, a German peasant family shipped off their eldest son to study in Paris, only for him to sheepishly return years later with nothing to show for himself but a suitcase of scholastic deductions. But lo, the very next morning this prodigal scholar lit up over breakfast with his parents when he saw an opportunity to deliver

[161] Renaissance humanists frequently quoted the saying, generally attributed to Appian Way architect Appius Claudius Caecus, that "everyone is maker of their own fortune" (*homo faber suae quisque fortunae*). See, e.g., Francis Bacon, "On Fortune," in *Essays*, ed. Basil Montagu (London: John Beale, 1612; repr., New York: Worthington, 1884), 46. For an influential study of this figure in "the modern age" of *vita activa*, see Hannah Arendt, *The Human Condition* (Chicago: University of Chicago Press, 1998), 153–58, 207–11, and 294–305.
[162] The imperial city's renowned industry was celebrated in, among other late-medieval merchant proverbs, the motto that *Nürnberger Hand* [or *Tand*] *geht durch alle Land* ("the Nuremberg hand [or trifle] goes through all the land"). See, for instance, Martin Schieber, *Geschichte Nürnbergs* (Munich: C. H. Beck, 2007), 52.

an apropos *Tischrede*: "Behold, there are not three eggs on this table but five! For three contains two; and three plus two equals five; therefore logic dictates that we count five eggs here." Unskilled as they were in syllogism, the poor old couple could only accept the demonstration with a smile: "Well, son, please help yourself to those additional two eggs laid by the hen (*gallina*)!" (*Gallina* is the feminine form of *gallus*, a "rooster" or "Gaul.")[163] The punchline's chauvinist taunt is hardly flattering, yet it is the absurd setup that packs real heft in this Sorbonne sophist's self-inflicted comeuppance: at an intensely precarious moment of materialist reckoning with *theologia gloriae*, such a pharisaic pie-in-the-sky muddling of multiplied loaves and fishes was bound to fall flat amid an overwhelmingly obvious crisis of production. Yet less obvious is how to make sense of a scene where the wise fool ratiocinates quite accurately but no less unproductively that the sesquialtera (3:2) equals a fifth: under what circumstances does that sort of knowledge count as, if not productive, nonetheless worthy of reproduction?[164] The windbag Polonius, in Freud's diagnosis, makes a fool of himself in holding up brevity as the soul of wit; social cohesion arises from being in on the joke and claiming a share in making sense of the nonsense as if by *concordia discordantium*.[165] It has been an animating contention of this chapter that the canonization of brevity by Faber and friends invoked a much larger social atmosphere in which iron-wrought techne afforded a burst of prolixity countered with a spirit of not just restraint or withholding but liberation of the small, a new *regula fidei* or *Glaubensregel* of micronomy that had to be not just seen but sung to be believed.

[163] This popular "moron joke" was relayed by Ottmar Luscinius, an early-16th-century Alsatian Catholic humanist renowned for his writings on music theory and canon law, in *Loci ac sales mire festivi* (Augsburg: Grimm, 1524), XXXVI, C6v–C7r; repr. with English translation in *One Hundred Renaissance Jokes: An Anthology*, ed. Barbara C. Bowen (Birmingham, AL: Summa, 1988), 58–59.
[164] On the wise fool trope, see C. F. Goodey, *A History of Intelligence and "Intellectual Disability": The Shaping of Psychology in Early Modern Europe* (New York: Ashgate, 2013), 236–37.
[165] Freud, *Jokes and Their Relation to the Unconscious* (New York: Norton, 1989), 10–11.

CHAPTER 2. HOW THE ENGLISH MADRIGAL TOOK OVER THE INSECT WORLD

Music, Act I: "Desire spurs me to tell you of Orfeo,
Of Orfeo who tamed wild beasts with his song."

Spirit, Act IV: "You have broken the law,
And are unworthy of grace."[1]

–Monteverdi/Striggio, *L'Orfeo, Favola in Musica* (Mantua, 1607)

Not long ago there was a certain interdisciplinary charge in which music theory led the pack. The last decade has seen something of an academic stampede into animal studies, leaving a widening cloud of conferences, journals, and monographs kicked up in the wake of an ongoing posthumanist turn. As the dissertation research of musicologist Liz Alvarado has recently illustrated, this moment's genealogy descends in no small part from the postmodern televisual boom of science-fiction soundscapes.[2] And it is indeed against this lineage that one may catch an early analogue glimpse of the zoological bull run: across the divisions of the humanities and social sciences, through the various classes of music departments and their specialist societies, at last there is a taxonomic order known as the history of music theory; and it is well represented by a wonderful 2001 collection, edited by Suzie Clark and Alex Rehding, titled *Music Theory and the Natural Order*.

[1] *L'Orfeo*, 2nd ed. (Venice: Ricciardo Amadino, 1615), 4 and 81: "Musica, *Quinci à dirvi d'Orfeo desio mi spro[n]a, D'Orfeo che trasse al suo cantar le fere*" [literally, he "drew the wild to his singing"]; "Spirito, *Rott'hai la legge, E se di grazia indegno*."

[2] My own thinking on the topic at hand is indeed shaped profoundly by Alvarado's discussion of satellite chirps, octopus burbles, and monster pulses in *Songs of Science: Musical Worlding in the American Space Age* (PhD diss., University of Chicago, 2020), 116.

As familiar readers may recall, the editors' introduction offers a truly striking opening example from Descartes's 1618 *Compendium of Music*. "Descartes recounts," they write, "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. 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."[3] "The idea underlying the sheep-and-wolf story," they offer, "is related to the Great Chain of Being, positing a transcendental hierarchy that all things and living beings obey."[4]

The Foucauldian invocation of "obedience" (*ob* + *audiens* = listening to) implies a convergence of the aural and the moral. Clark and Rehding indeed seem to promise a historiography that would at once vivify a moribund episteme and dissect a corresponding biopolitical regime. But it reaches a tantalizing limit: with its parallel Marxian invocation of Raymond Williams, a literary critic well known for theorizing the "homology" of material conditions and artistic culture, the introductory vignette concludes on a progressive secular humanist note that "the idea of nature is the idea of man."[5] Yet by placing the ideology of natural order and transcendent hierarchy in a bygone benighted era, metaphorics and metaphysics rather

[3] Clark and Rehding, Introduction, *Music Theory and the Natural Order* (Cambridge: Cambridge University Press, 2001): 1. Notice in the source text how the scientifically legible claims of sympathetic vibration and acoustic interference jostle against not just the magic of passions but the bioethics of predation: "they say a sheep pelt stretched over a drum is mute if it is struck [or slain] with that of a wolf resonating in another drum" (*ajunt ovis pellem tensam in tympano obmutescere si feriatur, lupina in alio tympano resonante*), *Musicae Compendium* (Utrecht: Zÿll and Ackersdÿck, 1650), A3.

[4] *Ibid.*, 2. Note the Cartesian constellation of terms for sociological and organological "conformity" (br, Ar) in *Renatus Des-Cartes excellent compendium of musick*, trans. William Brouncker (London: Thomas Harper, 1653): here the body-mind disciplines of physics and psychology are mediated by music theory, as "commensurable[ness]" (a3r) and "contemporation" (br) are linked with "sympathy" (bv, Ar) and "animadversion" (a2v) through "harmony" (a3v) and "concord" (a3v, a4r).

[5] *Marxism and Literature* (Oxford: Oxford University Press, 1977), 101–07; "Ideas of Nature," in *Problems in Materialism and Culture* (London and New York: Verso, 1980), 71.

ironically eclipse dialectics; for every historicist gesture toward denaturalizing quaint musical menageries, the potential for reordering our present political juncture recedes into an epistemic constructivism wherein knowledge is empowered more than power is acknowledged. To put it polemically, for all the visionary originality of this volume, its view on human nature ultimately seems to rest on a *homo sapiens non violens*, and thus its music-theoretic zoology focuses on a history of science while often blurring a history of violence.[6]

But that was some two decades ago, after all, so maybe it's worth a second look now. Particularly in the last few years several intrepid musicologists have cleared the way by alighting on the songs and squawks of birds, following Linda Phyllis-Austern's discussion of how English natural philosophy gendered musicality with reference to nightingales, among other trilling creatures.[7] For instance, Elizabeth Eva Leach has shown how medieval European musical ontology defined itself in relation to larks and cuckoos;[8] Martha Feldman's definitive work on castrati has revealed how the androgynous origins of modern Italian vocality contained fowl play;[9] and Lindsay Wright has spotlighted how current televisual spectacles and oracles of talent have showcased parrots.[10]

Yet as Naomi Waltham-Smith explicates, it is still the figure of the wolf that looms largest in animal studies, nourished by Jacques Derrida's formative last lectures on *The Beast and*

[6] Clark and Rehding, "Introduction," *Music Theory and the Natural Order*: Descartes's treatise on harmonics signals "the impact of the scientific revolution on music," whose secular materialism of nature is "the principal feature of modernity" (6). Cf. Roger Dadoun, *La violence : essai sur l'homo violens* (Paris: Hatier, 1993).
[7] As discussed further below, Austern's research is a major precedent of and inspiration for my own. See especially her contribution to the volume under discussion, "'Tis Nature's Voice': music, natural philosophy and the hidden world in seventeenth-century England," in *Music Theory and the Natural Order*, 30–67; and "Nature, Culture, Myth, and the Musician," *Journal of the American Musicological Society* 51, no. 1 (1998): 1–47, esp. 27–38.
[8] Leach, *Sung Birds: Music, Nature, and Poetry in the Later Middle Ages* (Ithaca: Cornell University Press, 2007).
[9] Feldman, *The Castrato: Reflections on Natures and Kinds* (Oakland: University of California Press, 2015): 4 and 22.
[10] Wright, "'Why Can't I?': Non/Human Performances of Musical Talent on Reality TV" (unpublished manuscript, August 12, 2019), Microsoft Word file; see also her *Discourses of Musical Talent in American Culture* (PhD diss., University of Chicago, 2018).

the Sovereign.[11] In this seminar's overarching lupine genealogy or "genelycology," Derrida drew out an underlying kinship between folklore of the werewolf or *loup-garou* (sometimes rendered as "outlaw" due to connotations with heresy and monstrosity) and the folk etymology of "sovereignty" or *souveraineté* (commonly held to derive from *super* + *regnum*, "above the rule" of law).[12] By tunneling through such folkways across the old humanist border between these "two species of living beings radically heterogenous to each other, the one infrahuman, the other human or even superhuman," gradually the seminar brings to light how "both share that very singular position of being outlaws, above or at a distance from the law, the beast ignorant of right and the sovereign having the right to suspend right." Thus an initial opposition between "the beast *and* [*et*] the sovereign" leads to a startling "identificatory metamorphosis": "the beast *is* [*est*] the sovereign."[13] This collapsed distinction gives rise to an elaborate and expansive social theory to be sure, and yet it also lays bare a fairly simple point of direct relevance to the opening vignette: the wolf euphemizes not a predator so much as a known threat to the state and thus a sanctioned target of violence. For example, Indigenous Americans were identified as “wolves” by English colonizers, establishing one of Western liberalism’s foundational persecution complexes; by confusing dominating and subaltern classes within a putatively neutral legal matrix, nonconformism has perversely been heard as deafening even as it’s being smothered.

Yet the complementary avatar of choice for white settlers was, and is, seldom the sheep; for an icon of gentility and genocide, something rather more bivalent is called for. So while the

[11] Waltham-Smith, “*Hurler avec les loupes*: Vestiges of beastly writing in Nancy, Derrida, and Cixous,” in *Postmodern Culture*, ed. Stefanie Heine, Philippe Haesnler, and John Ricco, forthcoming.
[12] Derrida, *The Beast and the Sovereign*, trans. Geoffrey Bennington (Chicago: University of Chicago Press, 2008), 1:206–207: "Every wolf in this genelycology or this politic-eco-lycology could hear this call, both as beast and as [207] sovereign, as Beast and Sovereign, be the wolf an outlaw or be he above the laws like the werewolf, be he outside the law insofar as he makes the law or above the law like the sovereign possessing the right of pardon, of life or death over his subjects."
[13] Derrida, *The Beast and the Sovereign*, 1:32.

hegemonic political bestiary remains sizeable and in no small part mammalian, let us consider a very particular specimen of microfauna, namely the honeybee. It first hummed and buzzed into the Americas in the seventeenth century as part of a global ecosocial annexation defined by profit rates for violently extracting Indigenous and Black peoples' land and labor.[14] Not surprisingly this domesticated insect came to be prized most basically for its disproportionate utility, a sort of productive volume for wax and honey deemed relatively valuable—and tamable—for its physical size (cf. Asian silkworms). Thus its reputation as a charismatic creature was seen and heard not neutrally or per se but rather through a colonialist/capitalist veil of quantified relationality, and so its famed quality of cooperative industry or eusociality was praised in kind through a multitude of proverbs, allegories, and acoustic imaginaries. Given these stakes for grasping the idea of nature alongside and as that of the human, there is perhaps some continued urgency or at least relevancy to the project of denaturalizing music theories and practices by deneutralizing their political ideologies. So this chapter tries to answer a fundamental musicological question: what about the sound of, as English Renaissance literature scholar Joseph Campana recently put it, not the beast but "The Bee and the Sovereign?"[15]

It is a question that indeed tantalized Derrida himself. "Why," wondered the philosopher, "in the great corpus of animal figures that people the fable of the political, do we find this or that animal and not others? We can make the most open and liberal list, from the wolf to the fox, from the lion to the lamb, from the serpent to the eagle, to ants or frogs, but we'll have to

[14] Tammy Horn, *Bees in America: How the Honey Bee Shaped a Nation* (Lexington: University of Kentucky Press, 2005). See also Danielle Allen, "Burning *The Fable of the Bees:* The Incendiary Authority of Nature," in *The Moral Authority of Nature*, ed. Lorraine Daston and Fernando Vidal (Chicago: University of Chicago Press, 2004), 77–102.
[15] Campana, "The Bee and the Sovereign? Political Entomology and the Problem of Scale," *Shakespeare Studies* 41 (2013): 94–113. See also Campana's sequel article, "The Bee and the Sovereign II: Segments, Swarms, and the Shakespearean Multitude," in *The Return of Theory in Early Modern English Studies*, ed. Bryan Reynolds, Paul Cefalu, and Gary Kuchar (London: Palgrave Macmillan, 2014), 2:59–80. The author's professional site also teases a larger book project titled *Bee, Tree, Child: Sovereign Creatures in Renaissance Contexts*.

concede that not all the animals of earth and sky are represented, do not seem to be as prone, as equally appropriate, to political figuration."[16] Whence the foundations of this figurative taxonomy's "rhetorical codification, a law of genre," was to remain an open question for the arch deconstructionist.[17]

An answer may nonetheless lie in plain sight—just barely. In Campana's view, the selective attention of political fabulists simply partakes of an even bigger problem with bigness itself, namely "the problem of the *charismatic megafauna*."[18] Visibly endowed with mammalian morphological charms, furry four-legged creatures have long been granted a certain cuteness and cuddliness by virtue of "ontologico-sexual attraction."[19] Yet insects, whose alien anatomies appear "both exquisitely tiny and despicably small," have only their ethological wits about them to ward off human disgust.[20] Even the noble bee, largely exalted in Western thought for its eusociality and utility, has on occasion abhorred observers. As Mary Campbell's history of utopian entomology exposes, the development of micrography in the seventeenth century (as illustrated in Figure 2.1) offered bug-eyed voyeurs a peek at the delicate assets and exotic rituals of arthropod reproduction, particularly bees whose evident unfleshliness sustained their idealization as divinely asexual creatures capable of spontaneous generation.[21] Even amid and well after the empirical turn of early modernity, however, fantasies and anxieties of insectoid polity and purity have persisted. In short, size matters, and the insect has long been a little other.

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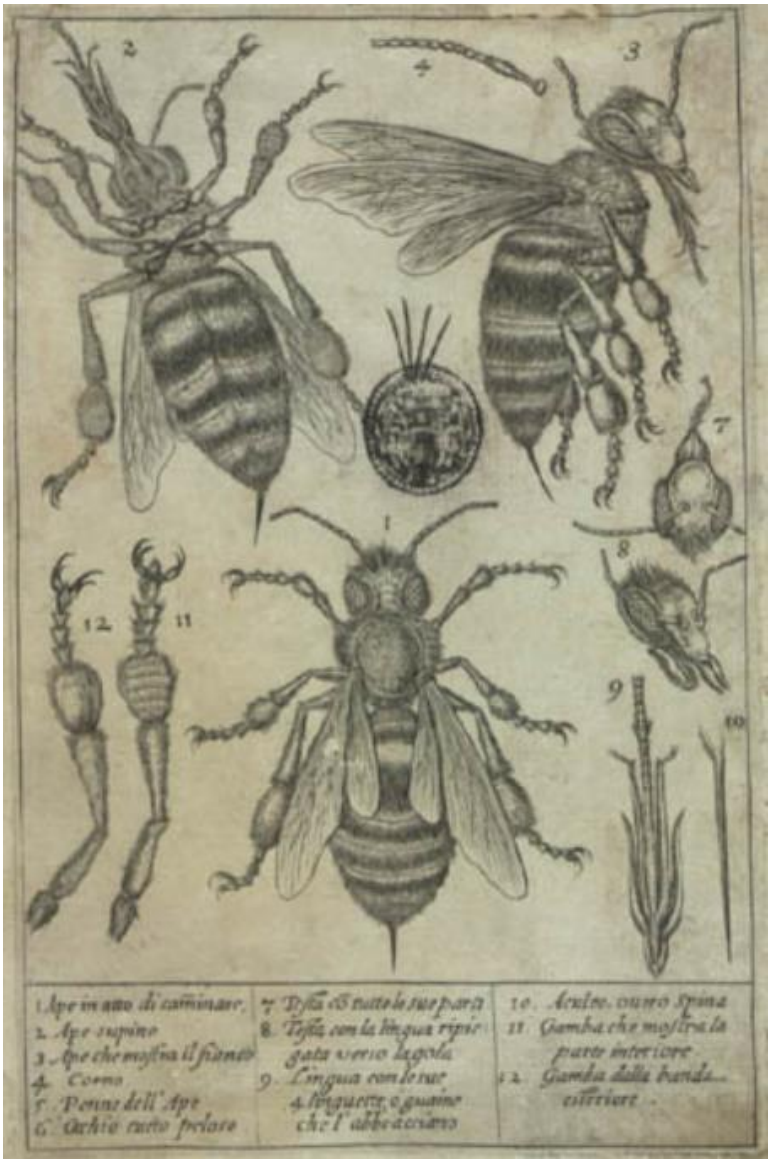
[16] Derrida, *The Beast and the Sovereign*, 1:80.
[17] Derrida, *The Beast and the Sovereign*, 1:81. See also Bruce Boehrer, *Animal Characters: Nonhuman Beings in Early Modern Literature* (Philadelphia: University of Pennsylvania Press, 2010); Alasdair Cochrane, *An Introduction to Animals and Political Theory* (New York: Palgrave Macmillan, 2018).
[18] Emphasis in the original. Campana, "The Bee and the Sovereign?," 106.
[19] Derrida, *The Beast and the Sovereign*, 1:32. See also Erica Fudge, "Monstrous Acts: Bestiality in Early Modern England," *History Today* 50, no. 8 (August 2000): 20–25.
[20] Campana, "The Bee and the Sovereign?," 102.
[21] Mary Campbell, "Busy Bees: Utopia, Dystopia, and the Very Small," *Journal of Medieval and Early Modern Studies* 36, no. 3 (Fall 2006): 619–42, esp. 630–38.

Figure 2.1. Frontispiece from Francesco Stelluti, *Melissographia* (Rome, 1625)



But it is not simply the case that insects have been overlooked. The problematic animating this chapter is that they have moreover been overheard and underheard, their rich chorus of chirps, trills, clicks, whirs, buzzes, and hums half-registered as background noise to be tuned out. Yet even when thus monotonized or sanitized by the flattening auditory regimes of

humanist modernity, they always leave behind a sticky residue. Just as humanity absent animality would be unthinkable as well as unlivable, so too are our auditory cultures teeming with traces of natural noise, particularly the staccato strains emitted by "pest friends."[22] In order to draw some of them out, I adopt an approach wherein animal studies and sound studies are regarded as symbiotic, if not symphonic.

The present chapter accordingly examines a type of music-theoretic metaphor that might be called, to adapt Walter Benjamin's slogan for propaganda, the "musicalization" of politics.[23] A familiar example may be found in Adornian accounts of sonata form, whose schematics are commonly thought to illustrate a false reconciliation between individual and collective, subjectivity and normativity, freedom and force. (Admittedly, this example is just one among many supporting Adorno's broader critique of traditional *Formenlehre* as a conflation of form and structure.)[24] Yet even at their broadest levels of abstraction, such accounts are often determined not only by a certain cultural register and historical range particular to high German modernism, but also by a particular aesthetic and political philosophy that might be characterized as antiauthoritarian. The chapter that follows provides an alternative account of political musicalization based on an example written under quite another philosophical regime: monarchism.

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[22] Erica Fudge, "Pest Friends," in *Uncertainty in the City*, ed. Bryndis Snæbjörnsdóttir and Mark Wilson (Berlin: The Green Box, 2011), n. pag.

[23] For a foundational media-theoretic document on "the aestheticizing of politics," see Benjamin's eponymous piece in *The Work of Art in the Age of Its Technological Reproducibility, and Other Writings on Media*, ed. Michael W. Jennings et al., trans. Edmund Jephcott et al. (Cambridge, MA: Harvard University Press, 2008), 19–55, esp. section XIX. For a prescient discussion of the "'musicalization' of our culture," see George Steiner's 1971 essay, "A Future Literacy," in *George Steiner: A Reader* (Oxford: Oxford University Press, 1984), 423–47, esp. 435.

[24] See especially Max Paddison, *Adorno's Aesthetics of Music* (Cambridge: Cambridge University Press, 1993), chapter 4, "A Material Theory of Form"; and Robert Witkin, *Adorno on Music* (New York: Routledge, 1998), chapter 2, "Society in Sonata Form."

The remainder of the chapter unfolds in four sections. In section 1, I consider how Charles Butler's music theory (1636) encodes theologico-political order. In section 2, I analyze Butler's "Bees Madrigall" (1609), especially its depiction of a queen granting her colony "consent" to swarm through "concent" (i.e., singing together)—in other words, a system of rule whereby harmonization confers privilege. Section 3 turns to the dark side of the apiary by investigating both modern devaluations of and protohistorical speculations on the political bee. And in Section 4, I seek to generalize music-theoretic metaphors of insect sociality and monarchism by examining their conceptual attachments to identity politics and antiauthoritarian discourse.

2.1 Political Theology in *The Principles of Musik*

The "Father of English Beekeeping" was no mere apiarist.[25] Born a peasant in 1560 and buried a pastor in 1647, Charles Butler financed his master's degree from Oxford by working as a Bible clerk; upon graduating at the turn of the century, he then settled into a country vicarage in Hampshire where he authored a string of bestsellers on rhetoric, grammar, marriage, music, and beekeeping.[26] His 1597 textbook *Ramae rhetoricae* developed an epochal curricular reform for late Tudor England; *The English Grammar* of 1633, an idiosyncratic but commendably descriptivist phonetic orthography; his 1625 study *On the Propinquity of Matrimony*, a theological apology for cousin marriage that just so happened to coincide with his daughter's betrothal to his nephew; *The Principles of Musik* from 1636, a heptatonic solmization system;

[25] Eva Crane, *The Archaeology of Beekeeping* (Ithaca, NY: Cornell University Press, 1983), 220.
[26] A. H. Bullen, "Butler, Charles (1560–1647)," rev. Karl Showler, *Oxford Dictionary of National Biography* (Oxford University Press, 2004), accessed December 17, 2016, http://www.oxforddnb.com/view/article/4178. Regarding local institutional history of the sixteenth century, see Penry Williams, "Elizabethan Oxford: State, Church and University," in *The History of the University of Oxford*, vol. III: *The Collegiate University*, ed. J. K. McConica (Oxford and New York: Oxford University Press, 1986), 397–440.

and, last but by no means least, *The Feminine Monarchie* of 1609, a model of honey cultivation with a queen rather than a king installed at the head of the hive. It is an impressive literary résumé, to be sure.

But my point is not that this bootstrapping polymath merits promotion to the research canon. The point, rather, is that his rags-to-riches tale tells an origin story of meritocracy itself, Hannah Arendt's original "crisis of education."[27] Following Max Weber's influential narrative, the early modern nation-state bloated its ranks with middle managers, at once consolidating and distributing politico-economic power in the swollen folds of a bureaucratic center, monopolizing violence and congealing class conflict in a blob of learned legal mediation; thus modern human behavior has at once incorporated and been consumed by a process of ever-expanding, tradition-devouring rationalization. Even the curriculum vitae of an eccentric such as Butler, set adrift between Renaissance and Enlightenment, is all too readily swallowed up and assimilated as the traditionalist musing of a parish priest, collector of tithes. Yet does not the critique of rationality that runs through twentieth-century European political philosophy, from Weber through Horkheimer and Adorno to Heidegger and Arendt, undermine the reasonability of classifying someone like Butler as a compliant historical subject?[28] If, as Arendt submits, the rationalized and instrumentalized—in a word, the ruled—are largely denied the political praxis of a *vita activa*, then what is the remainder that persists, the spark of human surplus that shines through their passivity?[29] And when is aesthetic activity legitimately active?

I propose that an answer may lie hidden in plain sight. During the century plus during which this sociological narrative of modern rationalization has itself been metabolized, somehow

[27] See "The Crisis of Education," in *Between Past and Future* (New York: Viking Press, 1961), 180.
[28] For a detailed synopsis, see Darrow Schecter, *The Critique of Instrumental Reason from Weber to Habermas* (New York: Continuum, 2010).
[29] *The Human Condition*, 2nd ed. (Chicago: University of Chicago Press, 1998), 12 and 58.

a closely related metaconcept has stayed almost entirely out of the mix: the corresponding pedagogical narrative of a contemporary mass educational movement, namely the rise and spread of Calvinist reformer Petrus Ramus's antischolastic doctrine of *ratio*.[30] Several factors may well inform the separation of this pedagogical program from the sociohistorical mainstream: its apparently anodyne political charge, its embarrassingly parochial disciplinary stature, its tediously Stoic intellectual derivativeness.

As the previous chapter nonetheless argued, by many contemporary accounts Ramism's political impact was deep, its cultural reach wide-ranging, and its intellectual significance "revolutionary."[31] However empty or overblown its pretenses to revolution may seem today, the crucial fact remains that Ramists passionately rebelled against the forbiddingly byzantine mnemonics of scholasticism, thus elbowing advanced learning outside the exclusive province of a privileged (Catholic) elite.[32] Epistemically contextualized along these lines, Butler's learned jabs at Aristotelian orthodoxy assume a well-nigh radical character, with each swipe at the received wisdom of, say, syllogism or apiculture embodying a form of resistance to power-knowledge.

But, of course, Butler did join the clerical class; he did reverentially quote the Philosopher;[33] and he did dedicate several tracts, including his last, *The Principles of Musik*, to the Crown. That work's opening Epistle, dedicated "to the moste noble and gracious lord, Charls, by the Grace of God, Prince," merges all three of these politico-theological tendencies through

[30] An exception is Robert Chia, "Ontology: Organization as 'World-Making,' in *Debating Organization: Point–Counterpoint in Organization Studies*, ed. Robert Westwood and Steward Clegg (Oxford: Blackwell, 2003), 98–113.
[31] Walter J. Ong, *Ramus, Method, and the Decay of Dialogue: From the Art of Discourse to the Art of Reason* (Cambridge, MA: Harvard University Press, 1958), v–vi, 22, and 145. Ong explicitly casts doubt on the program's radicality, emphasizing instead its continuities with earlier medieval debates.
[32] Ong, *Ramus, Method, and the Decay of Dialogue*, 195.
[33] An Oxford scholar scarcely had a choice at the time; at most, deferential animadversion was de rigueur. See Marco Sgarbi, *The Aristotelian Tradition and the Rise of British Empiricism: Logic and Epistemology in the British Isles (1570–1689)* (Dordrecht: Springer, 2013), 40–41.

deferential appeals to a "victorious King of the holy Land" and a "worthy precedent for all Christian potentates."[34] That holy land (namely Jerusalem), following medieval historian Ernst Kantorowicz's concept of a body politic, maps directly onto the body natural of that victorious king (*Advocatus Sancti Sepulchri*); and his worthy precedent, following Kantorowicz's analysis of Aristotelian political thought, is to thereby associate the king's body, especially the potency of his holy sepulcher, with the "'organ and instrument of the just Law.'"[35]

As Kantorowicz elaborates, this association has often been personified in the figure of Emperor Justinian, perhaps due as much to historical reference as to phonetic resemblance: "justice" rings audibly in the title "Codex Justinianus," the best known of the Eastern Roman legal reforms bundled under the *Corpus Jurus Civilis*. It is fitting, then, that Butler invokes Emperor Justinian's zeal for psalmody in one and the same breath that he urges Prince Charles to be "Prudent" as well as "Puissant," "Religious" as well as "Politik" in ordering (or organizing or instrumentalizing) his own voice for "Divine use" as well as "Civil."[36] It is undoubtedly an erudite case that Butler presents, as well as a fine sales pitch for a handy pair of books on the "vocall Arts"—grammar and music, speech and song—that he just so happens to have dedicated to his royal reader.[37]

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[34] Charles Butler, *The Principles of Musik, in Singing and Setting: with The two-fold Use thereof, Ecclesiasticall and Civil* (London: Haviland, 1636), ¶ 2r, ¶ 3r, ¶ 3v. In an attempt to strike some middle ground between fidelity and transparency, throughout this chapter I draw Butler's somewhat eccentric orthography into some conformance with standard Late Modern English.

[35] Ernst Kantorowicz, *The King's Two Bodies: A Study in Mediaeval Political Theology* (Princeton: Princeton University Press, 1997 [1957]), 133–34. Aristotle, Kantorowicz notes, is identified with Justinian.

[36] Butler, *The Principles of Musik*, ¶ 3v; on "ordering," see also n. 13 (¶ 2r).

[37] *Ibid.*, ¶ 2v. Here, as on ¶ 4r, Butler likens grammar and music to "sisters." This comparison, in keeping with the tradition of Martianus Capella, feminizes the so-called liberal arts as objects to be mastered and possessed, a role intuitively supported by the aural/invisible otherness of speaking and singing. As for the association between gender designations and trinitarian hypostases outlined in the following paragraph, see "The Baptism of the Acousmate" in Brian Kane, *Sound Unseen: Acousmatic Sound in Theory and Practice* (Oxford and New York: Oxford University Press, 2014), 73–94.

So it is telling that Butler wastes no time before enlisting Aristotle's *Politics* to defend a larger trinity of learned arts, namely "Grammar, Musik, Gymnastik."[38] The third, Butler clarifies, is allied with "the exercise of … lims" and "feats of Arms," manifesting the latent connection between a king's fighting prowess and a kingdom's—or perhaps between a prince's and a principality's, given the Christological character of fleshly sacrifice in martial arts.[39] What is far less clear, yet all the more critical to Butler's project, is an even deeper tie to "the ordering of … voices in Speech and Song."[40] The first administers legal-rational exchange in *verbum Domini*, the Father's auto-theology; the second delivers charismatic spiritual gifts in glossolalia, the Comforter's pneumatology. (Bearing in mind the trinitarian process of penance, or prayer–absolution–benediction, perhaps grammar may also be understood as a prayer or interrogative entreaty, music as a benediction or imperative prophesy, and gymnastic as an absolution or declarative clemency.) Since, according to Butler, mimesis inheres in the relationship between the monarch and the masses, the king must himself imitate "the practice of approved Authors" in order to gain legitimacy.[41] Thus speaks pre-Enlightenment: correctness hinges on traditional authority rather than autonomous reason.

Butler's rehearsal of scholastic doctrine also anticipates Hobbesian contract theory. Without the rules of music and grammar, he avers, civil society reverts to a fallen state of nature as the body politic is corrupted, for "meerly to Speak and to Sing, ar of Nature: and therefore the rudest Swains of the most barbarous Nations doe make this dubble use of their articulate voices: but to speak well, and to sing well, ar of Art: so that [¶2v] among the best Wits of the most civilized people none may attain unto perfection in either facultie, without the Rules and

[38] Butler, *The Principles of Musik*, ¶ 2r.
[39] *Idem*. Cf. "Coat of Armes," ¶ 4r.
[40] *Ibid*., ¶ 2v.
[41] *Ibid.*, ¶ 2r.

Precepts of Art, confirmed by the practice of approved Authors."[42] Butler does not simply draw on the old distinction between precept and use but also announces himself as its arbiter and enforcer, an entrepreneur in the free marketplace of musical codes. Thus he rules the ruler.

But there is also a "Preface to the Reader," prompting the question of how the aforementioned address to the prince (and implicitly the king, the queen, and their retinue) coexists with one to common readers. While the demographic makeup of Butler's audience remains unclear, the "intellectual style" of this learned text, particularly given the stratified history of the book in early modern England, suggests that it was intended largely for polite society.[43] While not exactly performing ablution of the unwashed masses, presumably this book served nonetheless as a vessel for public refinement.

And if indeed "one hand washes the other," as an Elizabethan proverb maintains, then this is how the second book of Reverend Butler's treatise baptizes the first.[44] "To the essence of an Art," the vicar proclaims:

> 2 things are requisite: a *Systema* or constitution of Rules and Precepts, and some profitable Uses or Ends, whereunto they are referred. The Principles and Precepts of this Art, in Singing and Setting, being declared, come we now to the profitable Uses thereof: which, though they bee many, may be all reduced unto two: one Ecclesiastical, for the Service of God; the other Civil, for the Solace of Men.[45]

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[42] *Ibid*., ¶ 2r – ¶ 2v.

[43] Still pertinent is Lawrence Gushee, "Questions of Genre in Medieval Treatises on Music," in *Gattungen der Musik in Einzeldarstellungen: Gedenkschrift Leo Schrade*, ed. W. Arlt, E. Lichtenhahn, and H. Oesch (Bern: Francke, 1973). For broad secondary accounts, see Jonathan Rose, *The Intellectual Life of the British Working Classes* (New Haven: Yale University Press, 2001); *The Cambridge History of the Book in Britain*, Vol. 4: 1557–1695, ed. John Barnard and D. F. McKenzie (Cambridge: Cambridge University Press, 2002); James Raven, *The Business of Books: Booksellers and the English Book Trade 1450–1850* (New Haven: Yale University Press, 2007). For relevant primary sources, see *Reading Early Modern Women: An Anthology of Texts in Manuscript and Print*, ed. Helen Ostovich, Elizabeth Sauer, and Melissa Smith (London: Routledge, 2004); and *Literary Criticism of 17th Century England*, ed. Edward Tayler (New York: Excel, 2000 [1967]).

[44] The forgotten tagline to the proverb is that "both wash the face." See [Ludovico Guicciardini,] *TheGarden of Pleasure: Contayninge most pleasante Tales, worthy deeds and witty sayings of nobles Princes & learned Philosophers, Moralized*, trans. Iames Sanforde (London: Bynneman, 1573), 110: "*Una man laua l'altra, e tutte due lauan' il viso*."

[45] Charles Butler, *The Principles of Musik, in Singing and Setting: with The two-fold Use thereof, Ecclesiasticall and Civil* (London: Haviland, 1636), 93/M3. In an attempt to strike some middle ground between fidelity and

Bearing in mind their profitable uses, the following pages offer a brief summary of those principles, precepts, and rules that stand together to form Butler's system or constitution, shown in Figure 2.2. In short, the *Principles* are threefold, concerning the five "moodes" (Dorik, Lydian, Aeolik, Phrygian, and Ionik), the five parts of singing (the number, names, tunes, time, and adjuncts of notes), and the five parts of "setting" or composing (parts, melody, harmony, ornaments, counterpoint). As with Faber's handbook [discussed in the previous chapter], the recurrent pedagogical appeal to fiveness offers straightforward digitization, affording ready somatic and hence mnemonic incorporation.

transparency, throughout this chapter I modify Butler's idiosyncratic orthography in conformance with standard Late Modern English.

Figure 2.2. *Principles of Musik*, Chapter Summary (Ramist Transcription)

Lib. I. Cap. I. Of the Moodes. 1–9

Cap. II. Of Singing.
- Sec. I. Of the Number of the Notes. 9–11
- Sec. II. Of the Names of the Notes. 12–22
- Sec. III. Of the Tunes of Notes. 22–23
- Sec. IV. Of the Time of Notes:
  - Par. I. Of Figures. 24
  - Par. II. Of Proportion. 24–35
- Sec. V. Of the Notes external Adjuncts. 35–38
- Sec. VI. The five Initial Lessons. 39–40

Cap. III. Of Setting.
- Sec. I. Of the Partes of a Song. 40–43
- Sec. II. Of Melodi. 44–46
- Sec. III. Of Harmoni:
  - Par. I. Of Intervalls. 46–48
  - Par. II. Of Concords and Discords. 48–55
- Sec. IV. Of the Ornaments of Melodi and Harmoni:
  - Par. I. Of Consecution. 55–64
  - Par. II. Of Syncope. 64–71
  - Par. III. Of Fuga. 71–81
  - Par. IV. Of Formaliti. 81–88

Cap. IV. Of the two ways of Setting:
- Sec. I. Of Setting in Counterpoint. 89–90
- Sec. II. Of Setting in Discant. 90–91

Epilogus. 92

Lib. II. Cap. I.
- Sec. I. Of Instruments. 91–94
- Sec. II. Of the Voice, and Ditti-Musik. 95, 96–98
- Sec. III. Of mixt Musik. 98–102

Cap. II.
- Sec. I. Of the Divine use of Musik. 103–104
- Sec. II. Of the Continuance of Lyre-Musik. 105–108
- Sec. III. Of Objections against Solemn Lyre-Musik. 108–113
- Sec. IV. Of the Special Uses of Divine Musik. 113–115
- Sec. V. An Apostrophe to our Levites. 115–119

Cap. III.
- Sec. I. Of the allowance of Civil Musik, and the Use thereof in general. 119–121
- Sec. II. Of the divers special Uses of Civil Musik. 122–128
- Sec. III. Of Objections against the Uses of Civil Musik. 129–131

Epilogus. 132–135

Yet, much unlike Faber, Butler invested less in pillowing his tract with aides-mémoires than in rubber-stamping it with evidence of his scholarly exertions. The opening chapter on the modes, for example, comprises less than two pages of proper text and more than six of erudite endnote "annotations." A reader need only scan the margins to ascertain the ancient provenance of this modal system, as Cassiodorus and Capella are directly acknowledged.[46] Yet the practical payoff is virtually nil. For all his tremendous bibliographic pains, including a diligent citation (if idiosyncratic translation) of Augustine to supplement the standard opening definition of music as "the Art of modulating Notes," nowhere has Butler notated the modes.[47] Granted, avoidance of notation prior to the second chapter's dedicated discussion of notes shows sensible didactic restraint and consistency; Butler's Greek ethnic labels presumably square with Glarean's now-familiar applications anyway; and, besides, the opening chapter obviously focuses rather on the distinct aim of cataloguing the communal functions and affective characters of "moodes."

Even so, here it is instructive to recall that *modus* is at last not only a manner but a metric. *Nomos* is likewise not only a legal ordinance but a tonal type, and *rule* not only a guideline but a yardstick. Bearing in mind the legal or regulatory basis of classification and measurement, the conflation of tone and time evident in Butler's later reference to the "4 moodes" of mensuration (perfect and imperfect tempus, major and minor prolation) is more revealing than confusing.[48] Not only is the shared taxonomic thrust of modal and mensural theory thereby highlighted, so too is the overarching political impulse: as Butler has already assured the Reader, it was through "their art and wisdom," or science, that the ancient Greek

[46] *Principles of Musik*, 1 and 3e. Note that Butler dispenses with the register-specific prefixes *hyper–* and *hypo–*, thus reducing Cassiodorus's fifteen modes to five. See Cassiodorus, *Institutions of Divine and Secular Learning and On the Soul*, trans. James W. Halporn (Liverpool: Liverpool University Press, 2004), 219–21.
[47] *Ibid*., 1 and 2b.
[48] *Ibid.*, 28c. See also the elaborate excursus on monochord ratios in the chapter on time, 28–35.

tribes were "browght from a wilde and brutish manner of living, to Civiliti and Moraliti."[49] Thus the supposed effects of their modes—whether to inspire merriment or sobriety, courage or delicacy, manliness or effeminacy, bearing in mind that Harmonia was the daughter of Ares and Aphrodite—work on "all sorts of people, as well learned and ingenuous, as ignorant and barbarous."[50] Sorting out such people according to the civilizing parameters of modes, manners, laws, and rules, Butler's treatise promises to purify the body politic. And in offering regularity to the region, Butler assumes the role of regent.

Butler's second chapter, concerning the basic mechanics of "singing," or music literacy, seems to hew more closely to neutral technical matters. Yet this is precisely where he is at his most radical. Each section presents a distinct and complementary dimension of those elementary units called "notes": the "number," the "names," the "tune," the "time," and the "adjuncts" thereof. And each goes to show how a commonsense assumption that notes are fixed or given is deceptive. In reckoning the number of notes, for instance, Butler does not simply stop at the usual twenty-one conjunctions, or "constituted Tones," of the gamut (a contrivance that is itself of course the customary Guidonian extension of Pseudo-Odo's fateful fifteen-part monochord division); he also goes on to countenance twenty-nine natural keys of the virginal and fifty-one of the organ.[51] Faced with the elusive anatomy of not only the voice but a litany of instruments, the only numbers to which Butler can hold fast are "septenariz" or heptachords.

But even apart from organological circumstance, further enshrined in a retelling of the tetrachord's legendary basis in the lyre, this very insistence on septenaries dissolves the

[49] *Ibid.*, ¶¶ 1r–v. Cf. ¶ 2v.
[50] *Ibid.*, 2. See 1–2 and 2–7 for a catalog of corresponding genres and affects.
[51] *Ibid.*, 9–10. On what Butler calls "constituted Tones" (that is, of letters or clefs conjoined with syllables or voices), see 2 and 9o.

conjunction or constitution of the note name itself.[52] Butler was hardly the first to propose a heptachordal solmization system—an honor reserved for the likes of Ramos and Calvisius, the latter's bocedization apparently supplying Butler's seventh degree, "pa."[53] But he probably would not have minded leading such a charge, given his evident comfort alternating between veneration and generation. Even the hand was not safe: at one point he proposed a chiromnemonic method that wrapped a septenary around each finger, from the lowest palm-side knuckle up to the tip and back down through the outer knuckles.[54] The reverend was not incapable of irreverence.

To sum up, I have tried to show that while Butler's treatise draws on a conformist politico-theological framework to justify its own foundation of rules, it counterbalances deference with difference, neophobia with neophilia, orthodoxy with heterodoxy or even heresy. As I suggest through the loose genealogy within which the latter portion of this chapter contextualizes Butler's work, there is ample occasion for understanding abstract music-theoretic categories such as tonality, meter, and form with respect to monarchist correlates. But in order to extend this metaphorical chain not only bidirectionally but transitively (… ←→ music ←→ politics ←→ …), I will first triangulate toward a miniature mediator much beloved by Butler: that other *zoon politikón*, the bee.

[52] For Butler's history of the tetrachord as a baptism of the lyre, see *ibid*., 17. Butler seemed unaware of a deeper genealogy transmitted by Plutarch, among others, wherein the Greek notes are named after not only the lyre but the Muses, originally three in number: Nete, Mese, and Hypate, also known as Aoide (Song), Melete (Contemplation), and Mneme (Memory).
[53] See Calvisius's *Exercitationes musicae duae: im Anhang, Exercitatio musica tertia* (Hildesheim: Olms, 1973 [Leipzig, 1611]), 123. For an illuminating study, see also Jesse Ann Owens, "Waelrant and Bocedization: Reflections on Solmization Reform," *Yearbook of the Alamire Foundation* 2 (1995): 377–93.
[54] Butler, *Principles of Musik*, 22.

2.2 Consent and Concent in the "Bees Madrigall"

It is a matter of common knowledge that the history of Western political thought returns time and again to the hive as a model of social organization, in modes of address ranging from the poetic or dramatic to the philosophic or parodic, in sites of authority ranging from classical (Plato, Aristotle, Polybius) to contemporary (Milton, Hobbes, Mandeville). Less commonly acknowledged is the frequent copresence of appeals to harmony as a model of order and balance, particularly with regard to the ideal of mixed government central to republicanism; again, precedents range widely (Pindar, Virgil, Varro, Dante, Shakespeare, Swift).[55] And of course the bee is also among the most common of musical zoomorphisms, rendered in scores of scores from romantic opera and song (Rimsky-Korsakov, Wolf) to recent pop and hip-hop (Beyoncé, Wu-Tang Clan); countless other examples obtain in blues, jazz, rock, and classical, among the most proximate being those by three Johns of the English Renaissance: Bartlet, Dowland, and Wilbye. As perhaps the most performed and representative English madrigalist, it is a tantalizing factual tidbit that Wilbye's "Sweet hony sucking bees" was published in the very same year as the first printing of Butler's *Feminine Monarchie* (1609, harmonized in '23 and '34).

Yet even a glancing comparison goes to show what a distinctly sui generis creation Butler's "Bees Madrigall" is, though the first movement starts off innocuously enough (shown in Figures 2.3 and 2.4, reproducing the full text and first half's setting, respectively). While Wilbye's polyphony glides lithely from one suave harmony to another, its voice-leading cushioned with finely dovetailed imitative counterpoint, Butler's chorale tumbles from one

[55] Among the many overviews, those I have found most helpful include the aptly named Bee Wilson, *The Hive: The Story of the Honeybee and Us* (London: John Murray, 2004); Christopher Hollingworth *Poetics of the Hive* (Iowa City: University of Iowa Press, 2001); Eric C. Brown, *Insect Poetics* (St. Paul: University of Minnesota Press, 2006); Juan Antonio Ramirez, *The Beehive Metaphor: From Gaudi to Le Corbusier* (London: Reaktion, 1985); Jussi Parikka, *Insect Media* (St. Paul: University of Minnesota Press, 2010).

homophonic coincident to the next, sometimes landing on a complete triad, sometimes not quite, and sometimes just not at all.[56] And of course, in keeping with Morley's precepts, Wilbye wastes no opportunity to deploy a clever madrigalism (rehearsing again and again the same two-voice snippet set to "why do you still," accenting the spatial and emotional fixity of this plea; rushing upward in a melismatic scale set to "flight"); Butler's setting, on the other hand, just seems to bustle along virtually irrespective of the text, with no immediately palpable correspondence.

[56] For a virtuosic investigation of homophony's ideological and technical bases, see Megan Kaes Long, *Hearing Homophony: Tonal Expectation at the Turn of the Seventeenth Century* (New York: Oxford University Press, 2020), esp. 203–48.

Figure 2.3. Text of Butler's "Bees Madrigall," with Late Modern English Gloss

As of all states the Monarchie is best,
So of all Monarchies that Feminine,
Of famous Amazons excels the rest,
That on this earthie Sphaere have ever bin,
Whose little hearts in weaker Sex (so great in field)
No powers of the mightiest Males can make to yeeld:
They living aye, most sober and most chast,
Their paine-got goods in pleasure scorne to wast.

They work in common for the common weale:
Their labour's restlesse to maintaine their state:
Their Hexagonia no Bezaleell,
For curious Art may passe, or imitate,
One Sov'raign and but one commands this people loyall,
The great Marpese with plenty blest of issue royall:
Antiope, and Orithyia faire,
With other Princes her Infantaes are.

When so increased is this prudent Nation,
That their owne limits cannot them suffice;
To seeke new Cities fer new habitation,
They send abroad their num'rous Colonies:
Antiope the prime Prince gone, *Orithya* soone
Of hir Queene mother, making mone, Begs the like boone:
That with hir traine hir fortune she may seeke;
And this she sings in measures mournfull sweete.

To whose grave accents if hir Princely Grace
Vouchsafe with Trine Aspect reply to make,
To sweetest Treble tuning sweeter Base;
Hir mournefull suit a joyfull end doth take:
And then, when fit time they espy, Some thousands strong
This Armie royall gallantly Doth march along.
Harke, harke, me thinks I heare in Notes of choice,
This fairest Ladies sweetest mournfull voice.

* * *

But all this while shee doth chant it alone,
Most humbly begging in hir Dorik straines,
Of hir deare Liege leave to be gone,
But comfort none she yet obtaines.

Hir mothers silence makes hir much to doubt,
Hir Grace unto hir will this grace denie:
But still hir suite shee doth hold out
In hope at last to move pittie.

Importunate Orithya now hath wonne
Hir sterne Queene-Mothers grant to hir desire:
For Joy, hir Sisters all as one
Wish cheerefull tones fill up the Quire.

These Ladies Musicall Consort assures
The Prince hir much-desired Sov'raigntie:
The vulgar, when occas'on serves,
(This watch-word past) abroad doe hie:

Where treading the Hey, right nimbly they prance,
Thus waiting their Prince in and out they trace:
Who come, these Maids the Morice dance,
Along unto their resting-place.

Just as monarchy is the best government of all,
so too the best female monarchy of any
to have ever been in this earthly sphere
is the mythical tribe of Amazons.
The little hearts of their women (so fierce in battle)
cannot be won by even the strongest of men;
they are so moderate and virtuous that they always
abstain from squandering hard-earned resources on luxury.

They work together for the common wealth;
they take no rest from their labors for the state.
Their hexagonal walls cannot be surpassed or matched
even with the care and skill of a tabernacle architect.
One and only one ruler governs the loyal subjects:
the great Marpesia ["Seizer"], blessed with many heirs.
Antiope ["Countervoice"], fair Orithyia ["Mountain rager"],
and other princesses are her children.

When this wise nation has grown so populous
that its own walls can no longer hold the people,
they send out a number of colonies
in search of new cities to inhabit.
With eldest Antiope gone, Orithyia cries and
pleads with their mother, the queen, for the same chance
to set off with a retinue in search of her fortune.
And this she sings in a sweet mournful melody.

If the stars align and Her Grace deigns
to answer this somber song
by harmonizing its sweetest soprano with her sweeter bass,
then Orithyia's mournful quest will have a joyful ending.
And then, when the time is right, a royal army
of several thousand will bravely come forth.
Listen, listen! I think I hear in these carefully chosen notes
This fair lady's sweetest mournful voice.

* * *

But all this time she has sung by herself,
pleading humbly in the Dorian mode
for her dear sovereign's permission to depart,
and she has yet to get any relief.

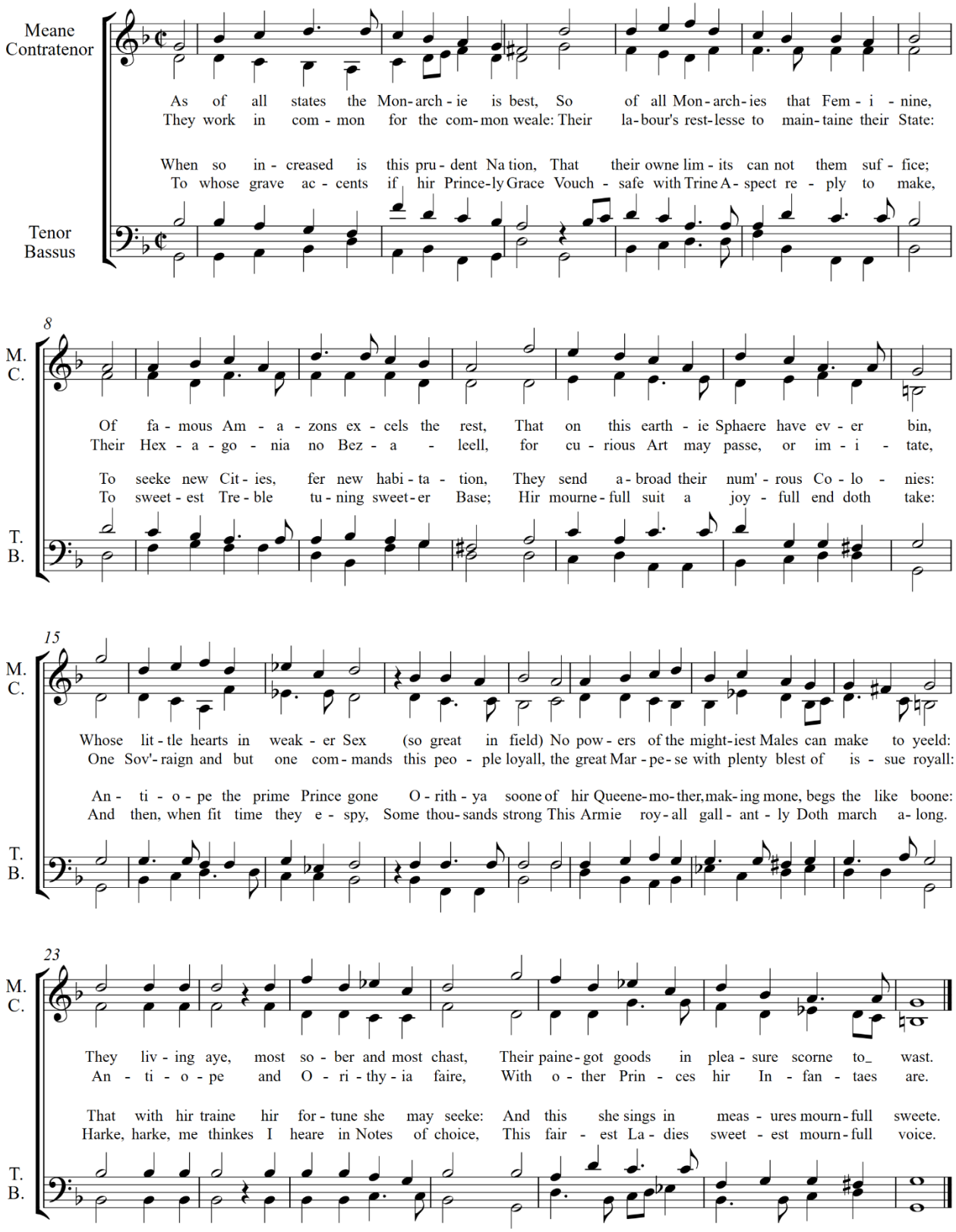
Her mother's silence leaves her wondering
whether Her Grace will grant this wish;
she nonetheless continues her pursuit,
hoping to finally win some sympathy.

Now Orithyia's persistence has earned
the approval she sought from her mother, the queen;
elated, her sisters join together
in a chorus of joyful tones.

This harmonious women's ensemble guarantees
the sovereignty that their princess craved.
When given the opportunity, the commoners
set forth (following this rallying cry).

As if stepping to a country reel, their nimble parade
weaves in and out while they wait on their princess.
Upon her arrival, the maidservants do a Moorish folk dance
all the way to their final destination.

Figure 2.4. Butler, "Bees Madrigall," I



Butler's second movement hardly seems any better (see Figure 2.5). At its midsection is yet another chorale, introduced by a wordless solo tremolo and finished off with an extended reprise in four-part imitative counterpoint. The critical assessment has not been altogether favorable. One reviewer declares it "definitely wrong." [1] In no less definite terms, another elaborates: "Butler's gifts of musical invention—like his poetic gifts—were apparently far from overwhelming, judged by this composition with its rather monotonous rhythm reminiscent of metrical psalm settings, his ofttimes awkward voice leading, distorted word accent, general heavy-handedness, and lack of humor."[2] Somewhat more charitably, yet another reviewer, one James Pruett, discerns in that monotonous rhythm "a buzzing-like intonation," though he admits that "there arises the temptation to question a bit Butler's self-asserted capabilities in buzzing transcription"—"an oddity … [that] might well have been written with tongue in cheek."[3] And as Lynda Phyllis-Austern observes in her trenchant study of this "insectoid buzzing," the shift from chorale to counterpoint finds "the clear English words disintegrate into a humanly incomprehensible buzzing complete with insistent harmonic dissonance," "colored only by the harshly exotic intervals."[4]

[1] "Almost the only place where our author is definitely wrong is the very part which concerns the music." Gerald R. Hayes, "Charles Butler and the Music of the Bees," *The Musical Times* 66, no. 988 (June 1, 1925): 513.
[2] Nan Cooke Carpenter, "Charles Butler and the Bees' Madrigal," *Notes and Queries* (March, 1955), 106.
[3] James Pruett, "Charles Butler—Musician, Grammarian, Apiarist," *The Musical Quarterly* 49, no. 4 (Oct., 1963): 499, 500, 502.
[4] Linda Phyllis Austern, "Nature, Culture, Myth, and the Musician in Early Modern England," *Journal of the American Musicological Society* 51, no. 1 (Spring 1998): 10, 12.

Figure 2.5. Butler, "Bees Madrigall," II

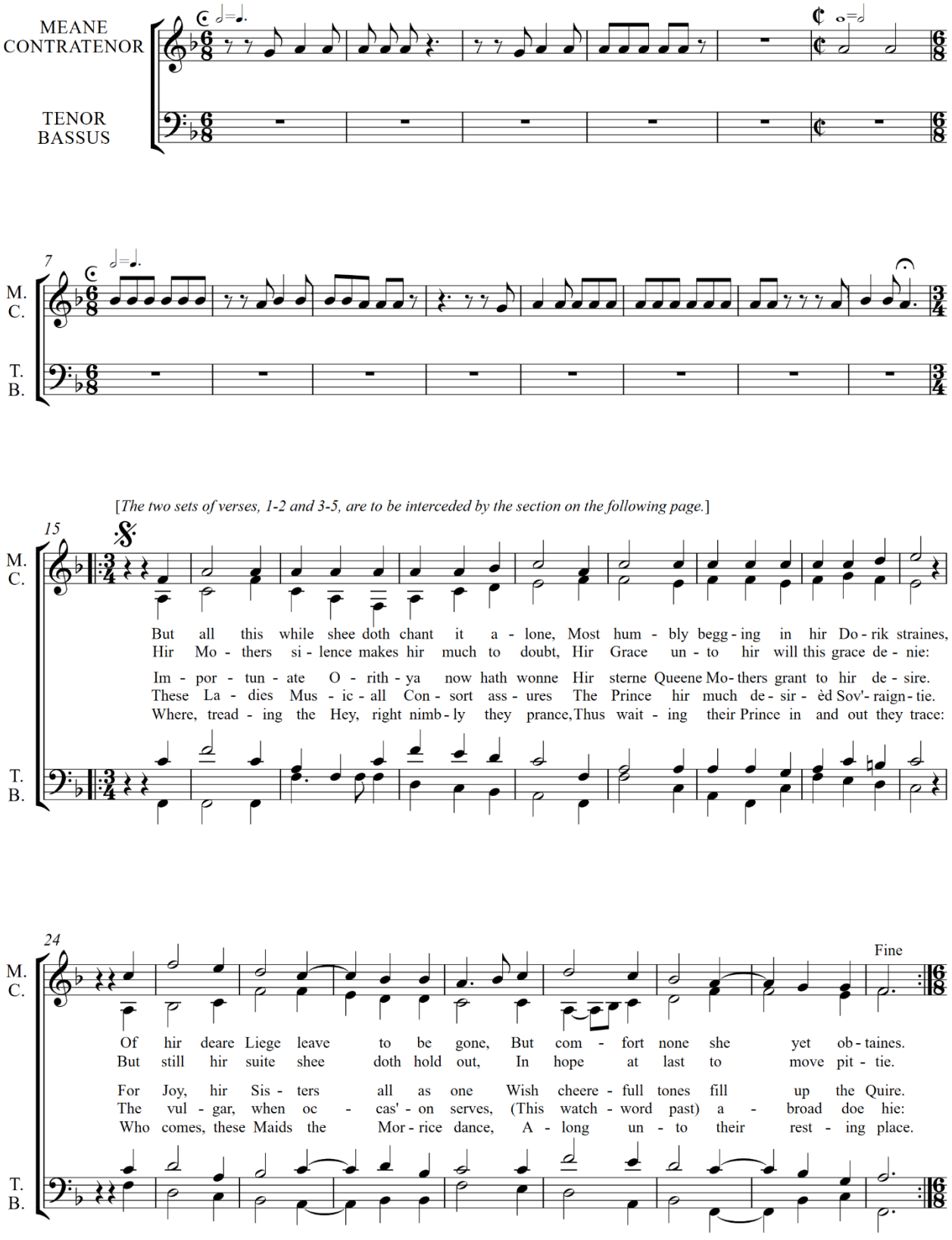
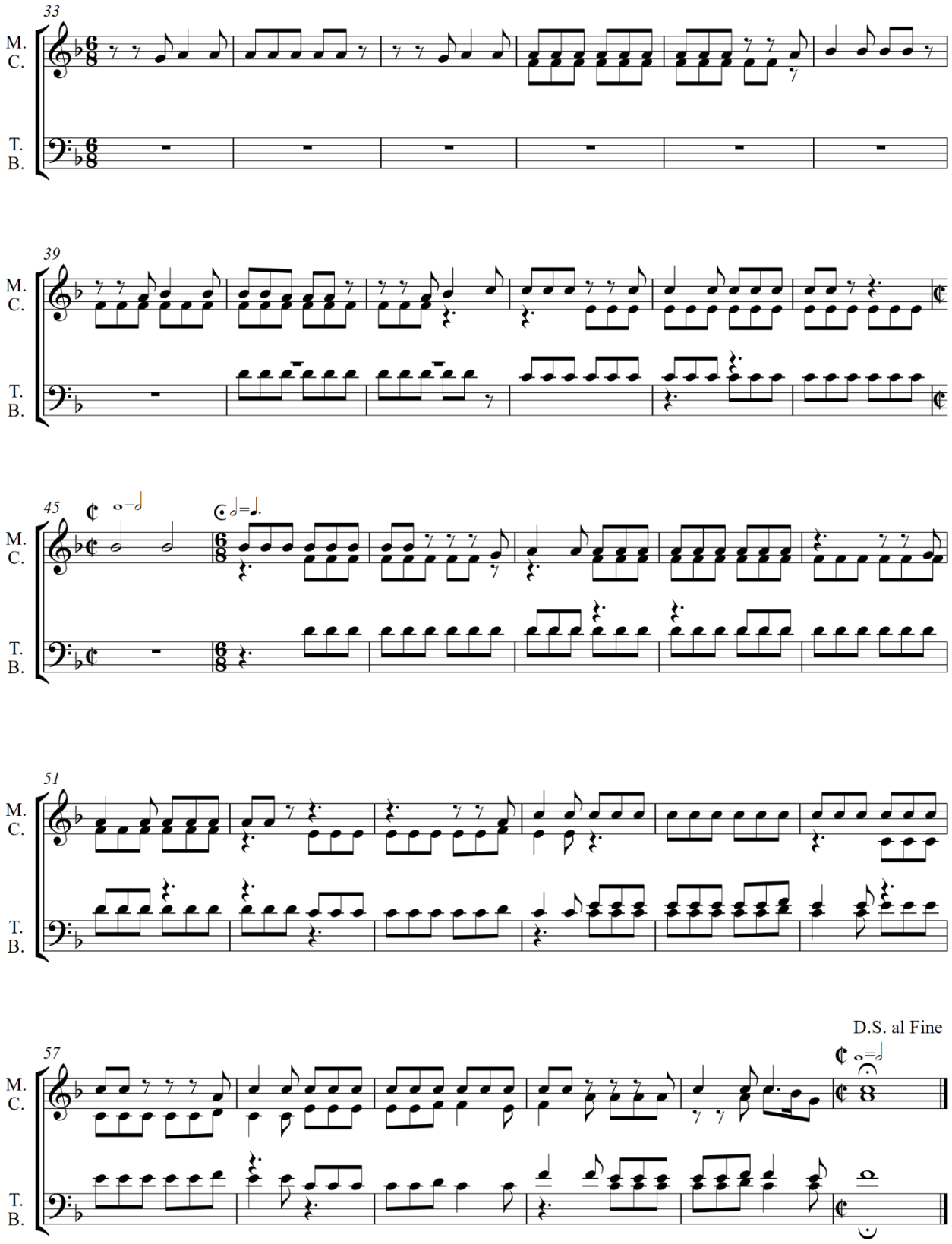


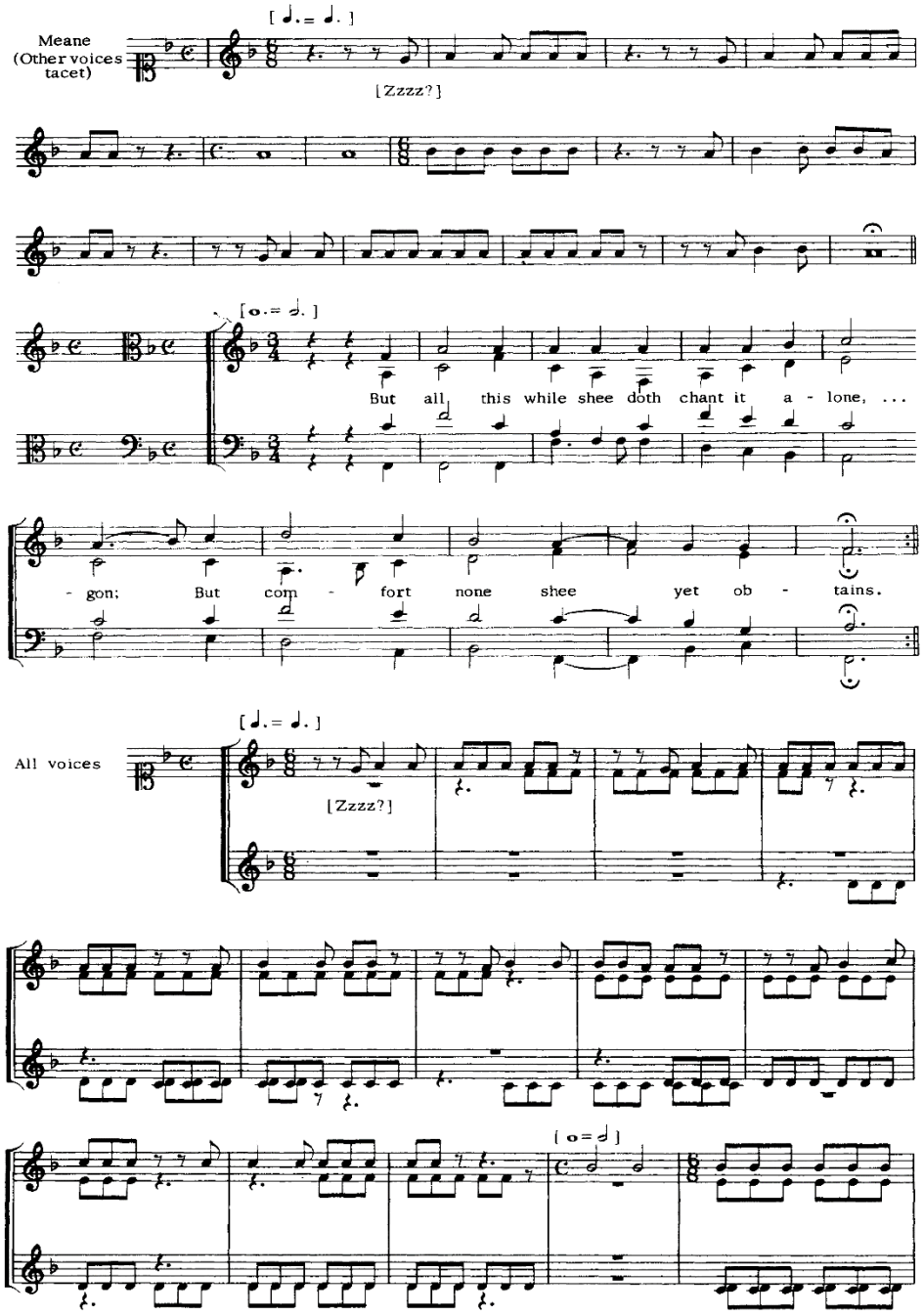
Figure 2.5 (continued). Butler, “Bees Madrigall,” II



These recent musicological assessments are all credible. And they are all, alas, "definitely wrong." The first two offer no transcription whatsoever; the third provides a partial and incorrect one (shown in Figure 2.6); the fourth reproduces the third with attribution. Pruett's error lies in the early entrance of the "Queene" (contratenor)—quite an irony given that the madrigal takes pains to represent her concordant imitation of the "Prince" (meane), thus signifying her consent to swarm through "concent" (archaic, from *concentus*, "sung together").[5] Far from "exotic intervals," the harmony consists of "the six Concords, an *imperfect Third*, a *perfect Third*, a *Diatessaron*, a *Diapente*, a *Sixt*, and a *Diapason*," offset by the "harshnesse of the *Seconds* and *Sevenths*."[6] Every possible harmonic interval is thus accounted for, along with all four mensural "Moodes," all six "tunes" (solfège syllables), and all seven "Cliefes" (note names). "With these various and harmonious notes," Butler avers, "Musicians may see the grounds of their Art."[7]

[5] Butler, *The Feminine Monarchie* (London: Turner, 1634), K4v.
[6] *Idem*.
[7] *Idem*.

Figure 2.6. Butler, "Bees Madrigall," II, Pruett Transcription



Not quite. In the madrigal musicians may hear the grounds of their Art, but it is rather on the title page that they may see them (see Figure 2.7). Here, assembled against the finely wrought cells of hexagonal honeycomb, we see "the four orders of bees: the prince, the dukes (or commanders), the plebeians (commoners), the idle drones." Around and below it reads, "With skill [literally "unbroken art," *sollus* + *ars*] and work, with skill and work, we wash away laziness. You marvel at homes built [*conditas*] with marvelous art, at the wealth and royals concealed in [literally "built into," *reconditas*] them? With skill and work, all things are made." Or, given the ambiguity of case and voice in the final phrase, *omnia fiunt*, "they make all things." Perhaps this discreet shift from active to passive (recall Arendt's *vita activa*), from built-with to built-into, illustrates an art of toggling from isonomy to heteronomy, from rule of law to rule of or by another, that is meant to be unbroken.

Figure 2.7. ***Feminine Monarchie*****, Front Matter**

Yet this critique is confounded by one final detail. To push back against recent commentators once more, notice that the last two referred to the meane's tremolo as "buzzing." I propose, however, that this tremolo might well correspond instead with the eusocial vibration signal known as "piping." Consisting of a series of loud pulses produced by activating the flight motor without moving the wings, particularly when one queen communicates with another in advance of a swarm, the frequency profile of bee piping is reported to hover around 415 Hz—corresponding precisely, per a Baroque pitch standard, with the A4 drone announced at the outset of the madrigal.[8] Two not altogether mutually reinforcing conclusions follow. One is that perhaps Butler's claims ought to be taken seriously. As his epigraph reminds readers, "of more value is one eyewitness than ten hearsays"—a motto that, dismissals of aurality aside, supports an ideal of democratized knowledge production.[9] Another potential conclusion is that in this case what seems to be a floating signifier is not so much the musical mapping as the political. Butler acknowledged, for instance, that insurrection is possible, that queens are sometimes slain by the hive.[10] While the model of order he articulates remains royalist, focused on the

[8] I am grateful to Lawrence Zbikowski for drawing my attention to this correspondence; on figures of repetition, see his *Foundations of Musical Grammar* (New York: Oxford University Press, 2017), esp. 91–92. For further reading on the ethology of piping, see P. T. Haskell, *Insect Sounds* (Chicago: Quadrangle, 1961), 155–56; see also the magnum opus by the "Father of American Beekeping," Lorenzo Lorraine Langstroth, *On the Hive and the Honey Bee* (Hamilton, IL: Dadant, 1915), 51.

[9] "Plaut: in Trucul: Act: 2. Sc. 6. *Pluris est oculatus testis unus, quam auriti decem*," a paraphrase of the legal maxim *oculatus unus plus valet quam auriti decem* ("one eyewitness is worth more than ten hearsays"). Plautus's satiric comedy *Truculentus* (184 BCE) centers on the courtesan Phronesium as she seduces three men (according to Priscian, one from the city, one from the country, one from abroad). The only character who can resist her wiles is the titular slave Truculentus (from the Latin *trux* or "savage," hence the modern connotation of combativeness), though even he ultimately yields to Phronesium's maid Astaphium. The line quoted in the epigraph is given by the soldier Stratophones in a humblebrag refusing to recount his battles to the audience because he trusts deeds above gossip, valiance above eloquence, and what he sees above what he hears. Ironically, Stratophanes is shortly thereafter duped into lavishing gifts on Phronesium after she introduces an abducted infant she claims he sired. Butler seemingly used this epigraph because it suggests that his own book is valuable for having been written, as he put it, "out of experience." Yet Stratophanes's gullibility goes to show that keeping an eye out still leaves one prone to fraud, while perking up an ear can offer redemption. Granted, this interpretation was likely unavailable to Butler's average reader, who might have been lucky just to catch the drift of this Latin law; one might wonder what Butler and/or his publisher knew about this play. Still, the valorization of visuality above aurality complicates the evidentiary status of Butler's bees-madrigall.

[10] Butler, *Feminine Monarchie*, K4v.

consent/concent of the governor rather than that of the governed, such points of incongruity are suggestive in light of the popular uprising, culminating in regicide at the hands of parliamentary forces, that was to claim the dedicatee of his treatises.[11] It would not be until some two centuries later that the French republican historian Jules Michelet would explicitly represent insect life through revolutionary historiography.[12]

The historiography of music theory has yet to take note of such representation; there is too little source material to work with. To widen the net both conceptually and synchronically, however, a suggestive example may be found in August Halm's closing remark on the Beethovenian half of his *Two Cultures of Music*, where he observes:

> "There is something of a bureaucratic attitude in the classical sonata. The individual, that is, the theme, the melody, counts as not only a being unto itself, with its own rights, with its own life; it will be rather used, consumed: its performance will be in demand. It has its place and its function in the whole, and often it is only this function that confers or lends [*verleiht oder leiht*] it life; it will from the atmosphere of the entire event be at the same time pressured and held together. Or, if you will, the classical sonata might also be likened to an ant colony [*Ameisenstaat*] that, as an embodied division of labor, both terrifies us and moves us to admiring astonishment. The single ant, biologically atrophied, is the born stately function."[13]

Halm's form-as-colony metaphor explicitly recalls the narrative of a modern bureaucratic state that functionalizes or instrumentalizes individuals under the sponsorship of rationality; it is of

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[11] For background, see Lawrence Stone, *The Crisis of the Aristocracy* (London: Oxford University Press, 1967).
[12] Jules Michelet, *The Insect* (London: Nelson and Sons, 1875), 111–30, 267–73, 316–17
[13] August Halm, *Von zwei Kulturen der Musik* (Munich: Müller, 1913), 252–53. The passage at hand comes just before Halm's introduction of a third, synthetic culture associated with Bruckner; essential to the biting tone of this peroration, then, is that it ultimately describes the second, imperfect culture of Beethoven, Bach's antithesis: "Es ist etwas von bureaukratischer Gesinnung in der klassischen Sonate. Das Individuum, d. i. das Thema, die Melodie, gilt dort nicht sowohl als ein Wesen für sich, mit eigenen Rechten, mit eigenem Leben; es wird vielmehr gebraucht, verbraucht: seine Leistung wird begehrt. Es hat seine Stelle und seine Funktion im Ganzen, und häufig ist es nur diese Funktion, was ihm Leben verleiht oder leiht; es wird von der Atmosphäre des gesamten Geschehens zugleich gedrückt und zusammengehalten. [253] Oder, wenn man das lieber will, möchte die klassische Sonate wohl auch mit einem Ameisenstaat verglichen werden, der uns als die verkörperte Arbeitsteilung sowohl erschreckt als auch in bewunderndes Staunen versetzt. Die einzelne Ameise, biologisch verkümmert, ist die geborene staatliche Funktion." See also Thomas Christensen's reference to this passage in his "Review of Lee Rothfarb, *August Halm: A Critical and Creative Life in Music* (University of Rochester Press, 2009)," *Music Theory Online* 17, no. 4 (December 2011), par. 23.

course possible to separate that metaphor, with some measure of shared content and format, from the invocation of insect life.

Another widely cited example, again related from a synchronic perspective, is Riepel's comparison of tonal function to feudal status.[14] Now familiar from Leonard Ratner's 1979 excavation, this music-theoretic metaphor retains the notion of social function, a basic ingredient of power dynamics, but mixes it in with a distinct politico-economic system; the end result equates scale-degree harmonies with vocationally identified individuals. [15] From this perspective, there is little to distinguish Halm's anti-bureaucratism or Riepel's feudalism monarchism from the monarchism of, say, Johann Mattheson, who wrote of the leading melody, that "the others (harmony and rhythm) conduct themselves in relation to melody, as in a monarchy."[16] And there is even less to distinguish that line of thought from one espoused by, say, Butler, who likewise wrote, "The Parts of the Fuga are two, the Principal, wich leadeth; the Repli, which followeth." After all, he used precisely the same language in references to the political order of bees.

[14] Riepel's *Grundregeln zur Tonordnung insgemein*, chap. 2 of *Anfangsgründe zur musicalischen Setzkunst* (Frankfurt and Leipzig: Christian Ulrich Wagner, 1755), 65–66: "*Praec*. Es befinden sich bey dem vorigen Allegro freylich nur die einzigen zwey, nämlich der Grundton C, und seine Quinte G. Just als wenn z.Ex. ein Meyer, und sein Knecht auf dem Feld draussen arbeiteten, oder durch beständiges Fragen und Antworten miteinander redeten. C ist gleichsam der Meyer, und G der Knecht. [66] *Disc*. Unser Meyer draussen, der auf dem Landgut von dem gnädigen Herrn Baron über die Hauswirthschaft bestellet ist, hat aber mehrere Leute, nämlich 1) einen Oberknecht, 2) eine Obermagd, 3) eine Untermagd, 4) einen Tagelöhner, 5) eine Unterläufferin, und überdiess noch muss ihm manchmal die schwarze Gredel seine Nachbarin ein klein Stück Landes wegarbeiten helffen. Allein der Herr Meyer ist allezeit der erste und letzte zur Arbeit, und unter allen der fleissigste."

[15] Leonard Ratner, "Ars Combinatoria," in *Studies in Eighteenth-Century Music: A Tribute to Karl Gieringer on his Seventieth Birthday*, ed. H. C. Robbins Landon (New Work: Da Capo, 1979), 343–63, esp. 353–54; *Classic Music: Expression, Form, and Style* (New York: Schirmer, 1980), esp. 49–50.

[16] *Der vollkommene Capellmeister* (Hamburg: Christian Gerold, 1739): 157.

2.3 Modernization of the Hive Mind and Sound

For all the admiration heaped on the hive as a model for social organization in political theory, insect society has also had its fair share of naysayers. For one, we need look to no less an authority on statecraft than Hobbes. Certain aspects of the bee trope served his argumentative aims well: as an overt royalist, the notion of a queen bee, however biologically tendentious, clearly lent credence to his cause; so did the time-honored image of a collective of individuals conjoined in a harmonious order (bear in mind that "Leviathan," according to one etymology, derives from the Hebrew for "to join," לוה *lvh*, emphasized in the well-known frontispiece illustration of a sovereignty composed of subjects). Yet above all he sought to discredit not simply a state of nature but natural law, urging that legitimacy be invested rather in the "artificial covenant" of a social contract.[17] Thus Hobbes took pains again and again—not only in *Leviathan* but also in *Elements of Law* and *De Cive*—to assert that "bees and ants," although "by Aristotle numbered amongst political creatures," make for insufficient social models due to their lack of speech, lack of reason, and lack of "competition for honour and dignity."[18]

A century later Montesquieu famously dubbed the latter set of traits, particularly honor, "the principle of monarchy."[19] As a mode of conduct defined by graceful understatement—as opposed to the willful caprice characteristic of despotism, the rule of one whose chief principle is fear—even liberal thinkers held that monarchy was defined not by the exercise of sanctioned (or "covenanted") violence but rather by merciful restraint. As Butler avers, a queen bee's "speere," "like a Kings sword, is borne rather for shew and authority, then for any other vse."[20] As with the associated categories of governance, namely monarchy and tyranny, this is a sentiment of ancient

[17] Hobbes, *Leviathan* (London: Crooke, 1651), chapter 17.
[18] *Idem*.
[19] *The Spirit of the Laws*, vol. 1 (Ageneve: Barillot, 1748), III, 5–7; IV, 2; V, 9–12.
[20] *The Feminine Monarchie*, B3r.

provenance, well preserved in Butler's citations of Pliny and Aristotle.[21] But it is also a refrain of English royalism through the Restoration, as seen in later glosses on Butler's beekeeping treatise. In 1657, one Samuel Purchas, for example, insisted that "though they have stings, they never use them."[22] For, he continues, "[t]he Queen Bee … transcends in greatness and beauty of body, but which is more praiseworthy in a commander, [also] in mildness and gentleness. … The laws by which the Commonwealth is ordered are natural, not written, but graven in their manners; and so studious are they of peace, that neither willingly nor unwillingly do they offer injury to any of their subjects."[23] Such appeals to natural law may have made later social-contract theorists grimace, though it is instructive to recall that naturalizing the manners of monarchs still remained second nature.

As for said manners, Butler is quick to affirm that the other cornerstones of court etiquette—not only restraint from violence but also an attendant care for hygiene and chastity—are no less foundational. He writes: "But if thou wilt have the favour of thy Bees that they sting thee not, thou must avoid such things as offend them: thou must not be (1) unchaste or (2) uncleanely: for impuritie and sluttishnesse (themselves being most chaste and neat,) they utterly abhorre: thou must not come among them (3) smelling of sweat, or having a stinking breath, caused either through eating of Leekes, Onions, Garleeke, and the like; … In a word [summarizing also (4)–(6)], thou must be chaste, cleanly, sweet, sober, quiet, and familiar."[24]

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[21] *Idem*. See Aristotle, *History of Animals*, 5.21: "Kings have stings but do not use them, wherefore some think that they lack them." *Reges aculeos habent, sed non utuntur. Quocirca carere eos aculeis nonnulli existimant*. Cf. Pliny, *Natural History*, tr. John Bostock (London: Taylor and Francis, 1855), 11.17: "It is not agreed among authors whether or not the king is the only one among them that is provided with no sting, and is possessed of no other arms than those afforded him by his majestic office, or whether Nature has granted him a sting, and has only denied him the power of making use of it."

[22] *A theatre of politicall flying-insects wherein especially the nature, the vvorth, the vvork, the wonder, and the manner of right-ordering of the bee is discovered and described* (London: Thomas Parkhurst, 1657), 33.

[23] *Idem.*

[24] *The Feminine Monarchie*, C2v–r.

Empirical study has recently borne out that bees can indeed, astonishingly enough, recognize human faces;[25] moreover, they are capable of modulating their acute olfactory learning according to threats.[26] Yet as with the notions of governance so deeply entrenched in the modern conception of insect sociality (queens, castes, colonies), the conceits of purity and chastity obviously fall under the province of human affairs, above all etiquette—that artificial covenant of courtesy.

The intertextual web by which these foundational documents of republicanism, liberalism, and apiarism cling together does not quite form a causal chain. Yet there is a case to be made for the broader influence of *The Feminine Monarchie*. Virtually any sustained discussion of the beehive in the seventeenth and eighteenth centuries bears traces of Butler's treatise.[27] Dozens of examples obtain.[28] Perhaps the most notable of these is Mandeville's 1714 *Fable of the Bees*: *or, Private Vices, Public Benefits*, the allegory of a "grumbling hive" that finds the fruits of its industry sapped by Christian charity: "the moment Evil ceases, the Society must be spoiled."[29] While Butler would have no doubt taken issue with such a scandalously secularist deduction, the four orders of his "discret oeconomy" nonetheless support Mandeville's

[25] Elizabeth Tibbetts and Adrian Dyer. “Good with Faces.” *Scientific American* 26, no. 2 (May 2017): 20.
[26] Zhengwei Wang et al., "Honey Bees Modulate Their Olfactory Learning in the Presence of Hornet Predators and Alarm Component," *PLOS One* (Feb. 26, 2016).
[27] See F. R. Prete, "Can Females Rule the Hive? The Controversy Over Honey Bee Gender Roles in British Beekeeping Texts of the Sixteenth–Eighteenth Centuries," *Journal of the History of Biology* 24, vol. 1 (1991): 113–44.
[28] A selection includes Gervase Markham, *Cheape and Good Husbandry for the Well-Ordering of All Beasts and Fowls* (1614); John Levett, *Ordering of Bees, or, The True History of Managing Them* (1634); Richard Remnant, *A Discourse or Historie of Bees: Shewing Their Nature and Usage, and the Great Profit of Them* (1637); Samuel Hartlib, *The Reformed Common-Wealth of Bees* (1655); Samuel Purchas, *A Theatre of Politcall Flying-Insects: Wherein Especially the Nature, the Worth, the Work, the Wonder, and the Manner of Right-Ordering of the Bee, is Discovered and Described* (1657); John Gedde, *A New Discovery of an Excellent Method of Bee-House and Colonies* (1676); John Worlidge, *Apiarium, or, A Discourse of Bees, Tending to the Best Way of Improving Them, and the Discovery of the Fallacies that are Imposed by Some, for Private Lucre, on the Credulous Lovers and Admirers of These Insects* (1676); Moses Rusden, *A Full Discovery of Bees: Treating of the Nature, Government, Generation & Preservation of the Bee* (1679).
[29] Bernard Mandeville, *The Fable of the Bees,* 3rd ed. (London: Tonson, 1724).

account of a division of labor.[30] And as one of the first such modern accounts, this parable in turn influenced later economists from Adam Smith to Friedrich Hayek; the latter was particularly taken with the salutary vice of a "wonderfully greedy" ruling class, whose financial self-interest drives commercial self-organization, much like the "spontaneous order" of apiculture.[31] Mandeville croons approvingly: "This was the State's-Craft, that maintain'd / The Whole, of which each Part complain'd ; / This, as in Musick Harmony, Made Jarrings in the main agree."[32] This, in other words, was a song that sang itself: the invisible hand of the hive mind.

The dark side of self-organization viewed from above is revealed in the enduring fear of ochlocracy or mob rule, with the swarm as an image of the seething masses, the riotous horde.[33]Turning to England's closest continental neighbor, for example, bee symbolism in the wake of the French Revolution came to be associated with mass politics, first as a badge of honor but later as a sign of menace. When taken up by Napoleon, his imperial pretensions led him to assume the same emblem of medieval patrilineal royalty that adorned the mantles of the Capet dynasty.[34] But only a generation later, labor pamphleteers invested the same symbol with overtly democratic ideals through *La Ruche populaire* ("The Hive of the People"), a workers' newspaper in France at the middle of the nineteenth century. Thus it was not simply that the lower classes absorbed a sign of nobility still saturated with royal hierarchy; they in fact inverted its valuation

[30] Butler, *The Feminine Monarchie*.
[31] Mandeville, *The Fable of the Bees*, A4. See also Hayek, "Dr. Bernard Mandeville (1670–1733)," in *The Collected Works of F. A. Hayek*, vol. 3, ed. W. W. Bartley III and Stephen Kresge, *The Trend of Economic Thinking: Essays on Political Economists and Economic History* (Chicago: University of Chicago Press, [1966] 1991), 95; and Emily Skarbek, "F. A. Hayek and the Early Foundations of Spontaneous Order," in *F. A. Hayek and the Modern Economy: Economic Organization and Activity*, ed. Sandra J. Peart and David M. Levy (New York: Palgrave Macmillan, 2013), 101–18.
[32] Mandeville, *The Fable of the Bees*, 10.
[33] In more neutral sociological terms building on Durkheim and Simmel, Margaret Gilbert has called this collective body "the plural subject." *On Social Facts* (Princeton: Princeton University Press, 1992), 2.
[34] See *The Bee and the Eagle: Napoleonic France and the End of the Holy Roman Empire, 1806*, ed. Alan Forrest and Peter Wilson (New York: Palgrave Macmillan, 2009).

by asserting the dignity and value of the drone. Predictably, elite intellectuals reacted with horror. For *fin-de-siècle* anti-Jacobins such as the crowd psychologist Gustave Le Bon and the naturalist critic Hippolyte Taine, for instance, the supposed insect-like character of the plebs was not a colorful slander so much as a scientific given established on the firm principles of social Darwinism.[35]

Yet it was not until the following century that this long-bubbling trend exploded, particularly in light of "the proliferation of negative ideas that have been associated with the beehive since the Second World War."[36] The anthill has likewise suffered a negative revaluation, both because its labor, unlike that of the bee or the silkworm, is nonproductive for humans, and because it resembles that of trench construction, amplifying its associations with warfare.[37] Yet honey counts for increasingly little during this period. Throbbing in the background of this rough sketch of working-class symbology is a history of colonialism: built into the notion of the insect colony is that of the (sub)human colony, even with sugar overtaking honey as the Euro-American sweetener of choice in the sixteenth century.[38] Hives, like slaves, were things to be used, if not used up, and the comparison was often explicit.[39]

But what is now only implicit in, or folded into, our everyday language is a protohistorical trace of associations between song, insect, and servitude. For instance, the Germanic word "drone," imported to English in the early sixteenth century, has a complex derivation: on the one hand, it derives from an onomatopoeic root for "buzz" (PIE *$*d^{h}er$-), hence

[35] Le Bon, *The Crowd: A Study of the Popular Mind*, 2nd ed. (New York: MacMillan, 1897), 25–27; Taine, *Notes on England*, 6th ed., trans. W. F. Rae (London: W. Isbister, 1874), 40: "the crowd is an ant-heap."
[36] Juan Antonio Ramírez, *The Beehive Metaphor: From Gaudí to Le Corbusier* (London: Reaktion, 2000), 174.
[37] Stephan Porombka, "¸Bewundernswert war die Ordnung': Der Ameisenstaat und die biologische Modernisierung," in *Reflexe und Reflexionen von Modernität 1933–1945*, ed. Erhard Schütz and Gregor Strelm, 109–24.
[38] Sidney W. Mintz, *Sweetness and Power: The Place of Sugar in Modern History* (New York: Penguin, 1986).
[39] Karen Ordahl Kupperman, "The Beehive as a Model for Colonial Design," in *America in European Consciousness, 1493–1750*, ed. Kupperman (Chapel Hill: University of North Carolina Press, 1995), 272–94.

the musical sense of a murmur or monotone; on the other hand, it also stems from a more heterological root for "male bee" (PIE **dʰrēn-*), hence not only the direct entomological sense but also the extended figurative sense of (1) an industrious worker, (2) a parasitic loafer, or even (3) an unmanned aerial vehicle (UAV). Regarding (1) and (2), the contradictory connotations of work and sloth reveal a ready alliance between sexism and capitalism in the anthropomorphic imagination, inconveniently driven apart in this case by biological observation: contrary to the gender expectations of human industrial society, male bees have no sting and make no honey [i.e., money]. And an insult to manhood qua livelihood might well prod a loafer toward work. As for (3), it is further revealing that the martial, commercial, and recreational applications of UAVs offer a mechanical corrective to that emasculating organic reality, with the supposed apiological resemblance observed by WWII airmen mediated largely by the steady buzz of plane motors.

The words "buzz" and "hum" furnish similar examples. The first bears a phonetic profile that obviously imitates both bees and "bees," thing and name, concept and sound-image. Upon entering the lexicon in the late fifteenth century, its noise was tied to that of the rumor, giving way to the notion of a buzzword transmitted by the swarming susurration of busybodies. In the industrial era, however, it grew more closely associated with the buzzsaw and all the other whirs of the factory. While exploitation certainly comes in gradations of degradation, there seems to be little distinction drawn between proles and slaves in the repertory of sound effects, possibly as an artifact of classist linguistic propriety; contemporary accounts suggest that the cotton mill buzzed as much as the cotton gin. Toward the end of the nineteenth century, advances in engineering ensured that electricity began to not only buzz but hum. The latter word likewise emerges in the fifteenth century of presumed imitative melittological provenance ("bumblebee" replaced ME *humbul-be*), again connotating busyness and ultimately business in analogy with the hive. One

key difference, however, is that humming is a more conventional musical technique: singing with lips pressed together in order to draw out a voiced bilabial nasal (/m/ as in "hu*mm*ing") is a venerated practice well attested from this period, while retention of the voiced alveolar fricative (/z/ as in "buzzing") remains an extended vocal technique—albeit one often applied to recent performances of Butler's *Bees-Madrigall*.[40] All these terms arose fairly concurrently from the transition from Middle to Modern English, drawn forth by the exigencies of print standardization and maritime trade to make sense of a changing world. Yet in the semiotics of nature and culture, the bee remains a recurrent sign, work its abiding object, and sound their obedient interpretant.

Dispensing with the work motif, however, two final examples will suffice. The term "threnody" is often understood as a lament or "wailing ode" from the Greek *threnos* and *oide*. Yet *threnos* comes from the same Proto-Indo- European etymon as "drone" (**d^{h}er-*), cognate with *tenthrene*, "wasp." Penderecki's familiar *Threnody to the Victims of Hiroshima* (1960) takes on a new cast in this light, giving credence to the common charge from noninitiates that modernist music sounds like insects abuzz: the clouds and clusters of strings vibrating in controlled chaos support comparison with both bomb fallout and bugs in flight—particularly in Qubai Reed Gazala's *Threnody to the New Victims of Hiroshima* (1995) for "insect voice synthesizer." Yet insect music is hardly new or even especially modern. The term for the late-medieval Burgundian harmonization scheme of *fauxbourdon* is often rendered as "false bass," though the etymology in fact runs deeper: the medieval Latin *burdonom* means "bumble bee, drone," giving rise to the concept of a chorus or refrain, a leading idea, and at last a bass

[40] For a complete but occasionally infelicitous reading, see Seth Wenger, Peter Taft, Hillary Foster, Caitlin Alexander, "Charles Butler's Bees Madrigal," YouTube video, 4:37, posted by "PS1videos," March 6, 2012, https://www.youtube.com/watch?v=u6CNybzWwRs. For a polished but regrettably incomplete rendition, see Ann Chen, Courtney Blake, Marco Del Rio, Anuar Chain-Haddad, "Bee Madrigal: The Feminine Monarchy," YouTube video, 1:47, posted by "jasna guy," Oct. 4, 2013, https://www.youtube.com/watch?v=9wksxYDgafg.

accompaniment. Some scholars have even asserted that the drone is foundational to tonality, elevating the import of bees in tonal discourse.[41]

Just as power incites resistance and rule implies violation, every exemplary case is defined in relation to exception or opposition. Thus Butler makes recourse to not only the bees but the beasts.

2.4 Authority and Identity

In the final pages of this chapter, I stretch political musicalization of the bee to its limit by linking underlying notions of monarchism and functionalization with two corresponding ideas of much greater currency, particularly in historical musicology: authority and identity. As a preliminary exercise, consider the proposition that antiauthoritarianism is anti-identitarianism. Never mind, for now, the funhouse gallery of self-referential paradoxes latent in this proposition (a hall of mirrors built around such reflexive questions as how antiauthoritarians still need or hold authority, how one can self-identify as anti-identitarian, and so on). What I want to pursue instead, though it may just lead right back into that same hall of mirrors, is how opposition to authoritarian politics is either revealed or masked by identitarian logics, from liberal egalitarianism to mathematical equivalence to music-theoretic equivocality. Through a brisk survey of roughly twenty-five years of political musicalization, I indicate how such processes have identified authority as well as authorized identity, engendering a complex reciprocity that makes any simple analysis of musical antiauthoritarianism untenable.

[41] Rothenberg, *Bug Music: How Insects Gave Us Rhythm and Noise* (New York: Picador, 2014)*;* Curt Sachs, *The Wellsprings of Music* (New York: McGraw-Hill, 1965), 182–90; Peter Van der Merwe, *Roots of the Classical: The Origins of Western Music* (New York: Oxford University Press, 2004), 68–70.

It might help to start with a couple of provisional definitions. First, "authoritarianism": associated chiefly with dictators, despots, absolute rulers, and totalitarian regimes, common usage over the last century has grafted the meaning of this word onto that of another with even deeper roots in transatlantic liberal thought, namely "tyranny."[42] So even as political theorists and social scientists (notably Arendt and Juan Linz) have taken pains to distinguish between these terms and their correlates, a broader distinction has remained entrenched between tyrannical or authoritarian autocracy and its putative opposite, liberal democracy. Weber's famous analysis of legitimate authority in *Economy and Society*, for instance, follows Friedrich Engels in seeing the "authoritarian principle" as antagonistic to "democratic legitimacy."[43] Karl Mannheim and Carl Schmitt similarly viewed, if from opposing perspectives, the "authoritarian, predemocratic mind" as a psyche driven by its will to order.[44] And that view, in turn, informed the standard Frankfurt diagnosis (by Fromm, Adorno, Marcuse, et al.) of the "authoritarian personality" hyperregulated by an "antidemocratic" superego with pathologically low thresholds for disorder, disobedience, and dissonance.[45]

Yet for all their maintenance of a sharp distinction between the democratic and the authoritarian, these thinkers still generally acknowledged points of contact between the one and the other. Weber's concept of *Führer-demokratie*, Schmitt's insistence on the illiberal basis of democracy, Adorno's critique of "pseudo-democracy": all repeat Tocqueville's warnings against

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[42] The term derives from the Bonapartist journal *L'Autorité*. See Karen M. Offen, *Paul de Cassagnac and the Authoritarian Tradition in Nineteenth-Century France* (New York and London: Garland Publishing, 1991).
[43] Weber, *Economy and Society*, ed. Guenther Roth and Claus Wittich (Los Angeles: University of California Press, 1978), 266–71; Engels, "On Authority," in *Marx-Engels Reader*, 2nd ed., trans. Robert C. Tucker (New York: Norton, 1978), 730–33.
[44] Mannheim, *From Karl Mannheim*, ed. Kurt H. Wolff (New Brunswick, NJ: Transaction Publishers, 1993), 457: "The authoritarian, predemocratic mind shuns the idea of process and genesis in favour of static, hierarchically ordered models of excellence"; Schmitt, *Legality and Legitimacy*, trans. Jeffrey Seitzer (Durham, NC: Duke University Press, 2004), 90: "Plebiscitary legitimacy" derives "from the authoritarian residue of a pre-democratic time."
[45] Adorno et al., *The Authoritarian Personality*, vol. 1 (New York: Harper, 1950), esp. 15 and 228.

a "tyranny of the majority," if not raise fresh concerns regarding what Bourdieu called democratic capitalism's "tyranny of the market."[46] In Marxian thought, democratic capitalism is of course a contradiction in terms, a pseudo-liberal ideology bred by the "dictatorship of the bourgeoisie" (itself the evil older twin of a transitional postcapitalist state Marx prophetically christened the "dictatorship of the proletariat"). Given the aristo-meritocratic and techno-bureaucratic dimensions of not only authoritarianism but democracy, some theorists of political economy have proposed that any presumed line in the sand between these two supposed poles of governance cannot be drawn squarely onto a left–right, progressive–conservative axis.[47] Even Marxism, its revolutionary edge cross-hatched by the polarizing annals of Cold War historiography, has endured associations with authoritarianism: recall, for instance, Isaiah Berlin's biographical sketch of Marx as one of "the great authoritarian founders of new faiths, [those] ruthless subverters and innovators who interpret the world in terms of a single, clear, passionately held principle."[48] Carried to an extreme, it almost seems as if just about any politico-economic model or method, any such theory or rule, however sophisticated or radical, democratic or communist, risks devolution into an authoritarian principle.

Second, "identitarianism": like so many other isms, this one is seldom invoked favorably and often identified with distinct or even competing positions. As a mode of political thought, for starters, its adherents sit on both sides of the aisle. Right identitarian movements in the United States and the European Union (among them the *Front national* in France and *Alternative für Deutschland*, heralded respectively by reactionary theorists such as Guillaume Faye and Markus

[46] Tocqueville, *Democracy in America*, trans. Arthur Goldhammer (New York: Penguin, 2004), chap. 15; Bourdieu, *Acts of Resistance: Against the Tyranny of the Market* (New York: The New Press, 1998).
[47] For a rebuttal that defends Adorno's theory that authoritarianism is inherently conservative, see William Stone, "The Myth of Left-Wing Authoritarianism," *Political Psychology* 2, no. 3 (1980): 3–19, esp. 13: "What I am calling the 'centrist bias' has its roots in the implicit assumption that extremism of any sort is pathological, and the related tendency to accept the status quo as in some sense foreordained."
[48] Berlin, *Karl Marx*, 5th ed. (Princeton, NJ: Princeton University Press, 2013), 19.

Willinger) have acquired momentum in recent decades under the virile banner of white nationalist populism poised against global trade and migration.[49] Yet concurrently the left has of course absorbed its own strain of identity politics, following a midcentury disenchantment with Marxism—laid to rest by such leading lights as C. Wright Mills, who respectfully interred Marx alongside all the other pale bloated cadavers of nineteenth-century "grand theory"[50]—in the wake of a postwar boom that sustained the radical fallout of Black Power and Sexual Revolution. What remains now is a sore subject: while calls to move "beyond identity" have been sounding for decades, albeit most credibly in conjunction with intersectional analyses of material conditions, the synergy between Occupy Wallstreet and Black Lives has suggested anew the potential for collaboration between class-based dissent and other (or Other) forms of strategic essentialism.[51] Across the political spectrum, identity interlocks dialectically with alterity.

Yet identitarianism is more than a political stance. Identity thinking, as critiqued by Adorno and his postmodern expositor Fredric Jameson, ramifies not only through politics, economics, and metaphysics, but also and no less through psychology, sociology, and of course musicology.[52] In psychosocial terms, Jameson reinforces Adorno's contention that logics of identity, whether personal or numerical, encode cognitive bias and ideological ruse, mechanisms that conceal and protect the inner engine of capitalist exploitation: constant exchange valued at

[49] I hesitate to cite these *Kampfschriften* now available in English: Faye, *Archeofuturism: European Visions of the Post-Catastrophic Age* (London: Arktos Media, 2010; Paris: L'Æncre, 1998); Willinger, *Generation Identity: A Declaration of War Against the '68ers* (London: Arktos Media, 2013).
[50] Along with "abstracted empiricism" or positivism, speculative systematics or grand theory is one of the two pillars of sociological faith that Mills seeks to demolish in *The Sociological Imagination* (New York: Oxford University Press, 1959), chapter 2.
[51] See Craig Calhoun, *Social Theory and the Politics of Identity* (Hoboken, NJ: Wiley-Blackwell, 1994); Adolph Reed, Jr., *Without Justice for All: The New Liberalism and Our Retreat from Racial Equality* (Boulder, CO: Westview Press, 2001); Rogers Brubaker and Frederick Cooper, "Beyond 'Identity,'" *Theory and Society* 29 (2000): 1–47.
[52] Cf. In a similar vein, see Leo Strauss's *Natural Right and History* for a parallel explanation of how Heideggerian ontology and Aristotelian political thought are interrelated through principles qua essences.

an inconstant exchange-value.[53] (Cf. repetition particularly in Deleuzian political economy.) And in musical terms, Jameson underscores how mimesis, as the most basic operation of non-identical identity, inflects or even composes both the texture and the content of Adorno's prose: through a kind of reverse tone-painting or transcendental ekphrasis, the twelve-tone philosophy of *Negative Dialectics* (1966) and *Aesthetic Theory* (1970) unfolds not in one-at-a-time combinations but rather in all-at-once permutations, not in scales but in rows;[54] it is a philosophy that generally rejects overflowing vitalist intuitions in favor of exacting logical (or even numerological) structures, strictures, and perhaps even messianic scriptures;[55] and above all it is a philosophy that painstakingly discloses its themes less in terms of classical diegetic principles than in the mimetic mold of Schoenbergian architectonic "models."[56] (As a footnote, recall that Schoenberg was commissioned to draft the didactic program of *Models for Beginners in Composition* in his native tongue but instead drifted naturally toward his adopted one, as he found himself "translating from bad English into worse German"—a suggestive anecdote of second language as second nature, especially for a magisterial cultural critic modeling the rote mimicry of a beginning composition student.[57]) So at last, buried beneath all the rubble of Adorno's deconstructions and negations, Jameson locates a positive music-theoretic foundation

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[53] Jameson argues that one of Adorno's signal achievements was the philosophical reformulation of Marx's concept of *Tauschverhältnis* ("exchange-value") as metaphysical *Identität* in *Negative Dialectics* and *Aesthetic Theory*. See *Late Marxism: Adorno, or The Persistence of the Dialectic* (London and New York: Verso Books, 2007 [1990]), 24.
[54] This distinction between chromatic permutations and diatonic combinations has been mathematically formalized by modernist music theorists such as Milton Babbitt and David Lewin. (Note that Jameson describes the latter process as "climactic," implicitly suggesting that the former state is rather tantric, if not masochistic.)
[55] Jameson coyly observes that *Aesthetic Theory* finally cadences with precisely twelve sections.
[56] These *Modelle*, particularly in *Negative Dialectics*, are meant to refashion pillars of thought such as Kant's concept of freedom and Hegel's history of nature. As for images, Benjamin's own model of history is concerned less with the passage of *Zeit* than with the endurance of *Bild*: "[I]mage is that wherein what has been comes together in a flash with the now to form a constellation. In other words, image is dialectics at a standstill." *The Arcades Project*, trans. Howard Eiland and Kevin McLaughlin (Cambridge, MA: Harvard University Press, 1999), 462 [N2a3]; see also 10.
[57] *Models for Beginners in Composition*, ed. Gordon Root (London and New York: Oxford University Press, 2016), xii. See also Karla L. Schultz, *Mimesis on the Move: Theodor Adorno's Concept of Imitation* (New York: Herbert Lang, 1990).

after all: the main mode(l) or home key of late Marxist criticism, to apply a perverse tonal metaphor, is an enduring homology between part and whole, a titular "persistence of the dialectic" between identity and totality.[58]

This dialectic has figured often in musicology of the last twenty-five years.[59] In their introduction to *Rethinking Difference in Music Scholarship*, for instance, Olivia Bloechl and co-editor Melanie Loewe suggest that "difference has figured in modern music scholarship in two ways: as a relational matrix for musical knowledge and as a discursive topic."[60] Thus their emphatically plural "genealogies of musical difference" share not only a method but a subject: while recognizing the critical turn of the '90s announced in part by Ruth Solie's landmark collection on *Musicology and Difference*, Bloechl emphasizes that social-scientific comparative study more broadly has served as a precedent. In the same volume, Gary Tomlinson identifies a "biological turn" in musicology, toward which this study indeed bends.[61]

Regarding totality, I hope to have highlighted a sociobiological connection between music theory and beekeeping that involves regularities of self-organization conceived in terms of dominance hierarchies. As E. O. Wilson discusses in his classic, if controversial, work *Sociobiology: The New Synthesis*, "rules of order and phrasing" reinforce sociopolitical ceremonies of assembly, especially in *The Insect Societies*.[62] More central to my project, Norbert Elias has likewise located a "sociogenetic" explanation for manners, musical and otherwise, in

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[58] Jameson, *Late Marxism*, 23 and 70; see also Jameson's foreword to Jacques Attali, *Noise: The Political Economy of Music*, trans. Brian Massumi (Minneapolis: University of Minnesota Press, 1985), ix; see also Parkhurst, forthcoming.
[59] Attali [1977] 1985, Subotnik 1991, McClary 1991, Said 1991, Kerman 1999, DeNora 2003.
[60] Bloechl, Lowe, and Kallberg 2015, *Rethinking Difference in Music Scholarship*, ed. Olivia Bloechl, Melanie Lowe, and Jeffrey Kallberg (Cambridge: Cambridge University Press, 2015), 9.
[61] Tomlinson, "Beneath difference; or, humanistic evolutionism," in *Rethinking Difference in Music Scholarship*, ed. Olivia Bloechl, Melanie Lowe, and Jeffrey Kallberg (Cambridge: Cambridge University Press, 2015), 368, 380. See also Tomlinson, *A Million Years of Music: The Emergence of Human Modernity* (Boston: MIT Press, 2015).
[62] Wilson, *Sociobiology* (Cambridge: Harvard University Press, 1975), 564, with "The Social Bees" on 428–32; see also *The Insect Societies* (Cambridge: Harvard University Press, 1971).

the centripetal forces of early modern absolutism: due to the psychosocial management and sublimation of biological drives necessary for advancement in a hierarchical network of warring landholders, communal rules and roles—codes of authority and identity—are ritually crystallized in the royal court. And "from this interdependence of people arises an order *sui generis*"[63]—much like Mandeville's "spontaneous order."[64]

In the following chapter I consider the laws of attraction or affinity at the heart of this self-ordering process of coming together, of this mutual consent for concent. For now, suffice it to say that perhaps the moral of this story is that when we listen to the musicalization of politics in early modern theory and practice, we should not be surprised to hear some not-so-faint humming and buzzing.

[63] On statecraft, see *Power and Civility*, trans. Edmund Jephcott (New York: Pantheon, 1982); on civility per se, see *The History of Manners*, trans. Edmund Jephcott (New York: Pantheon, 1978).
[64] Bernard Mandeville, *The Fable of the Bees,* 3rd ed. (London: Tonson, 1724), 21.

CHAPTER 3. HARMONIC LICENSE IN THE LIBERTINE ENLIGHTENMENT

3.1 Rameau as *Débrouillard*

In cultural historian Robert Darnton's perverse riff on a favorite saying of famed food anthropologist Claude Lévi-Strauss's, the *libres-penseurs* of the French Enlightenment found sex "good to think."[1] Following Darnton's magisterial excavation of a secret literary undercurrent coursing with smut and sacrilege, the intellectual moment once heralded as an Age of Reason has since been reconceived as an era of obscenity;[2] trenchant monographs on Revolutionary gutter presses authored by Lynn Hunt and Chantal Thomas, among others, have revealed a vantage point from which eighteenth-century French culture appears as much shaped by filthy minds as free thinkers.[3] Yet music-theory historiography of the period remains largely PG-13 and implicitly patriarchal, pace the incisive erotics advanced by such New Musicology luminaries as Susan McClary and Suzanne Cusick.[4] As a corrective, in this chapter I develop a riff of my own: troping Thomas Christensen's intellectual biography of the *grand homme,* I propose a revisionist history that might well be titled "[Jean-Philippe] Rameau and Musical Thought in the Libertine Enlightenment."[5]

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[1] Robert Darnton, "Sex for Thought," *New York Review of Books* (December 22, 1994), n. pag.
[2] Robert Darnton, *The Literary Underground of the Old Regime* (Cambridge: Harvard University Press, 1982); *The Forbidden Best-Sellers of Pre-Revolutionary France* (New York: Norton, 1995).
[3] Roger Chartrier, *The Cultural Origins of the French Revolution*, trans. Lydia G. Cochrane (Durham: Duke University Press, 1991); Lynn Hunt, *Family Romance of the French Revolution* (Abingdon: Routledge, 1992); Chantal Thomas, *The Wicked Queen: The Origins of the Myth of Marie-Antoinette*, trans. Julie Rose (New York: Zone Books, 2000).
[4] Some early-'90s touchstones include Susan McClary, *Feminine Endings: Music, Gender and Sexuality* (Minneapolis: University of Minnesota Press, 1991); *Musicology and Difference: Gender and Sexuality in Music Scholarship*, ed. Ruth Solie (Berkeley: University of California Press, 1993); Fred Maus, "Masculine Discourse in Music Theory," *Perspectives of New Music* 31, no. 2 (Summer 1993): 264–93; and Suzanne Cusick, "Feminist Theory, Music Theory, and the Mind-Body Problem," *Perspectives of New Music* 32, no. 1 (Winter 1994): 8–27, repr. in *Music/Ideology: Resisting the Aesthetic*, ed. Adam Krims (Amsterdam: Gordon and Breach, 1998), 37–56.
[5] Thomas Christensen, *Rameau and Musical Thought in the Enlightenment* (Cambridge: Cambridge University Press, 1993).

A risk inherent in this rakish recharacterization is that it runs into a hitch right away: whatever his pretensions to enlightened cultivation, in some key respects Rameau seems to have been less a swashbuckling libertine than a bootlicking prude—rude and competitive with the bourgeois philosophes, but retiringly deferential to royalty. His 1748 opéra-ballet *Zaïs*, with a libretto by dramatist and longtime collaborator Louis de Cahusac, is a good example. Its central dramatic conceit, a regal variant of the "disguise plot," sends an incognito king on a secret mission to test the love and loyalty of a peasant.[6] It is hardly surprising that this trope resurfaced time and again in European absolutist theaters of the period; its frequency in folklore and pop culture (think Eros and Psyche, Gawain and the Green Knight, *Aladdin* and Jasmine, perhaps even *Undercover Boss* and the surveilled worker) may speak moreover to a generic Western fantasy of control without coercion, a desire to captivate someone without taking them captive. Yet the device's centrality to Rameau's operatic oeuvre is likely rooted more specifically in the invidious romance between Louis XV and Madame de Pompadour (AKA Jean-Antoinette Poisson), his favorite haute-bourgeoise mistress. The outrageously bawdy and overtly misogynist street songs of the overtaxed petty bourgeoisie pulled no punches in decrying this "bastard strumpet" who had made an ineffectual "fop" and "ass" of the king.[7] Yet as their angry *poissonades* rang outside the walls of the Royal Academy, inside its pristine auditorium the *pastorales héroïques* of Pompadour's own favorite musician played on, as Rameau dutifully churned out lyrical homages to his patron with royal privilege.

So it is hard to reconcile Rameau's enduring status as Kuhnian revolutionary of musical science with his decidedly royalist orientation as a proto-counter-Revolutionary musician. Again

[6] A classic study is John D. Lyons, *A Theatre of Disguise: Studies in French Baroque Drama*, 1630–1660 (Columbia, SC: French Literature Publications, 1978).
[7] Darnton, *Poetry and the Police*, Appendix III.

Zaïs is instructive, particularly its overture's famous representation of "the unmixing [*débrouillement*] of chaos." Critics have long admired its feat of artfully depicting abyssal irregularity within the strictures of a medium that few musicians have done more to discursively regulate.[8] As the excerpt reproduced in Figure 3.1 shows, this chaotic coup is achieved in the manner of a fantasia: motivic repetition is limited; tonal change is profuse. Regarding the former, an immediately striking feature is the gradual *rhythmic* densification by which the opening measures are populated as if by creation: the first bar marks the landing of a couple downbeats that give way to an offbeat pickup, a motif which the third bar incrementally shifts forward through the underlying sixteenth-note grid (beats 1, 4, 3, 2). As for the latter, the "shock of the [four classical] Elements separating," per Cahusac's stage direction, is manifest in a corresponding *tonal* densification by which F-sharp minor shifts down to F minor and at last to E minor (bars 7, 11, 16), whence the global tonal order of D major reasserts itself.

[8] As English biographer Cuthbert Girdlestone elegantly put it in *Jean-Philippe Rameau: His Life and Work* (New York: Dover, 1969), 301: "The overture is an interesting attempt to render the unrenderable."

Figure 3.1. The Unmixing of Chaos in Rameau's Overture to *Zaïs*, mm. 1–44

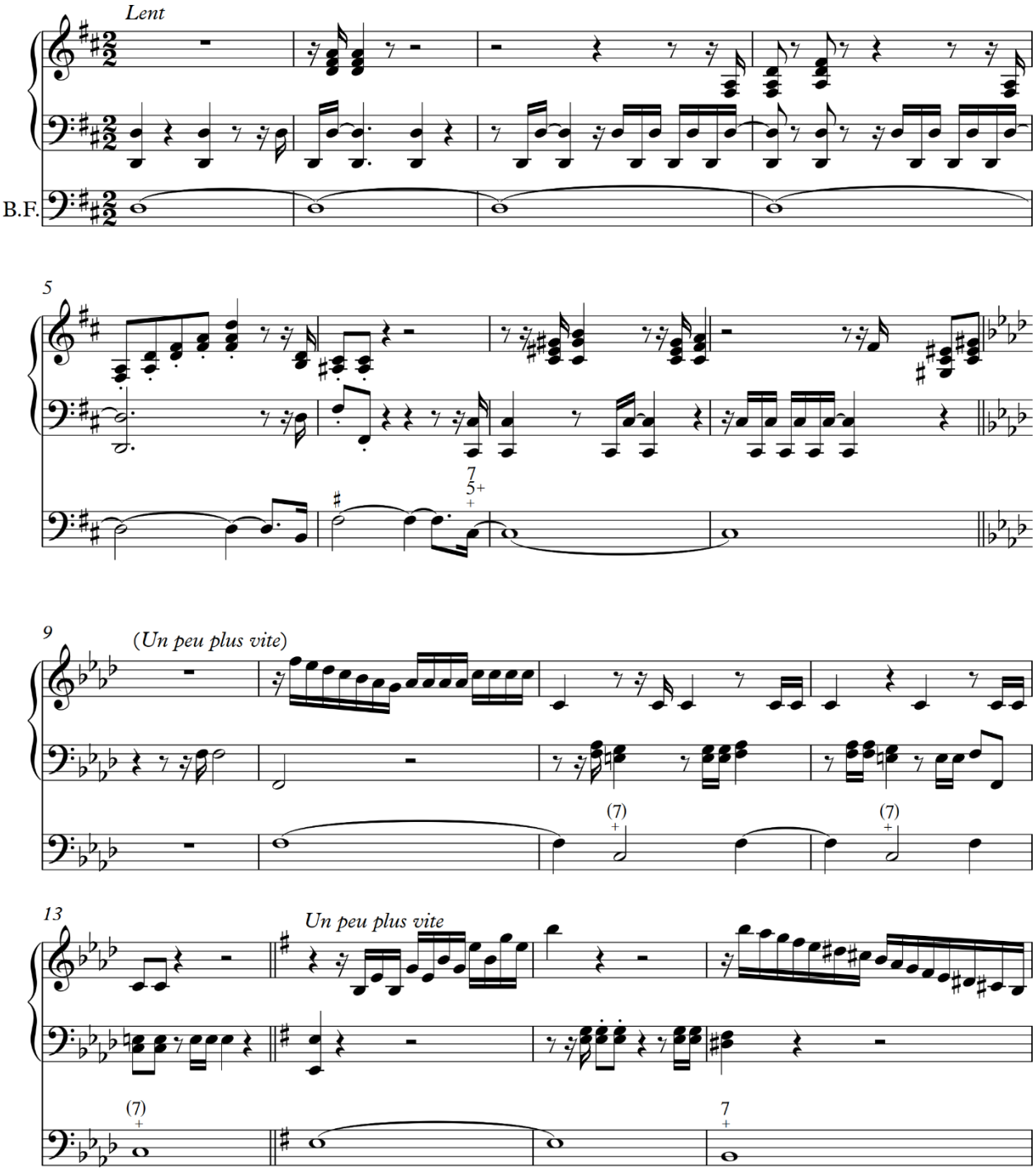


Figure 3.1 (continued). The Unmixing of Chaos in Rameau's Overture to *Zaïs*, mm. 1–44

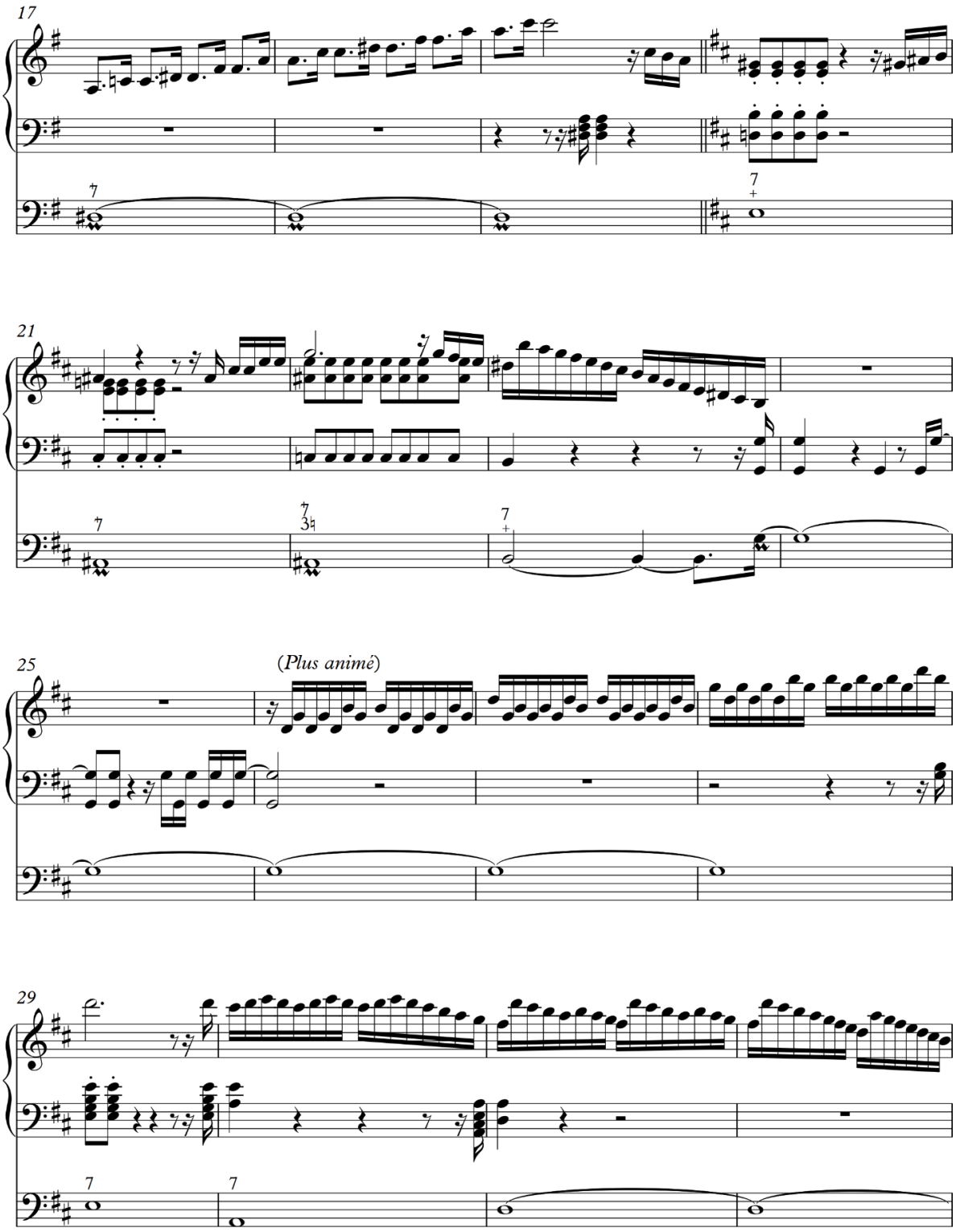


Figure 3.1 (continued). The Unmixing of Chaos in Rameau's Overture to *Zaïs*, mm. 1–44

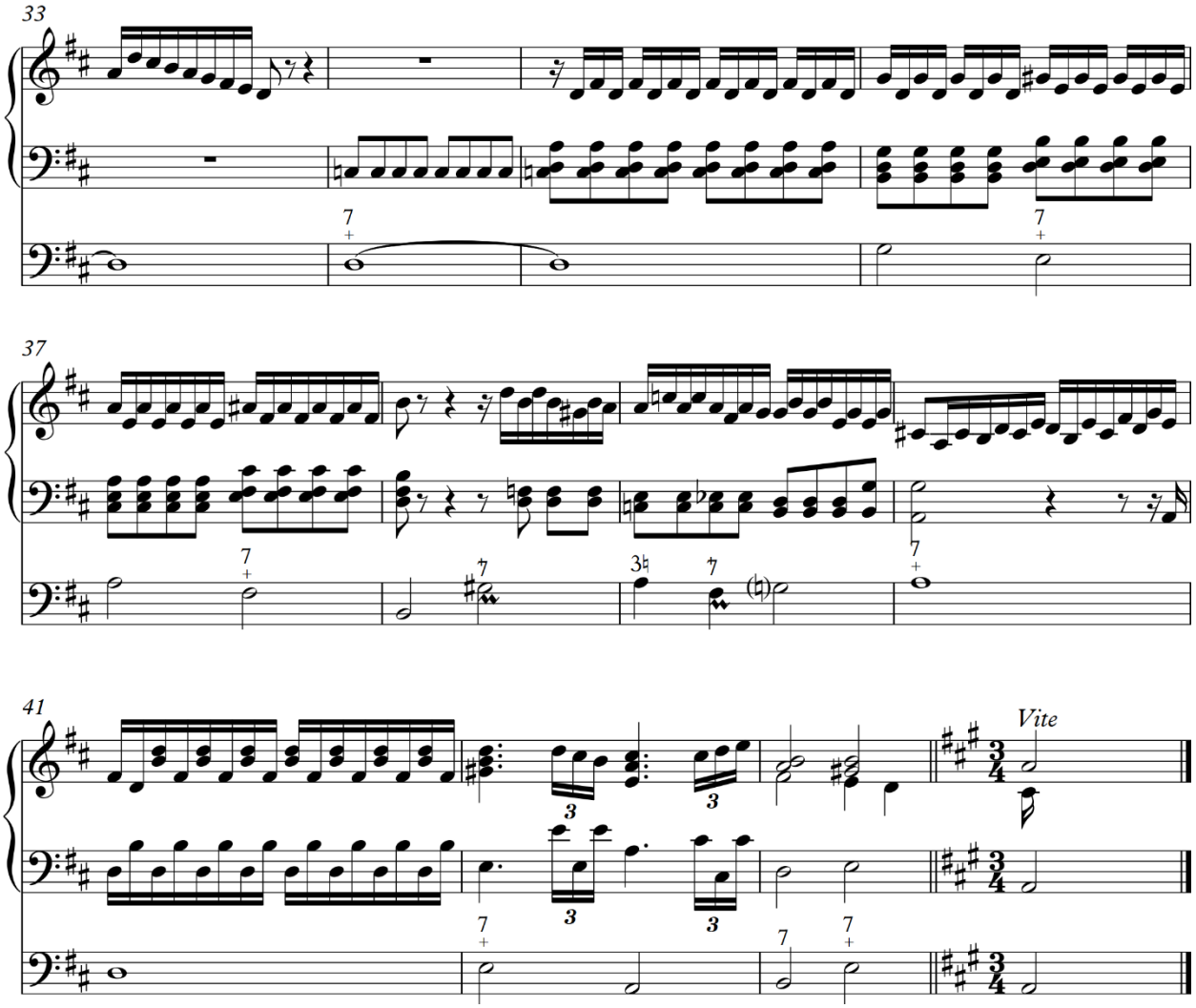
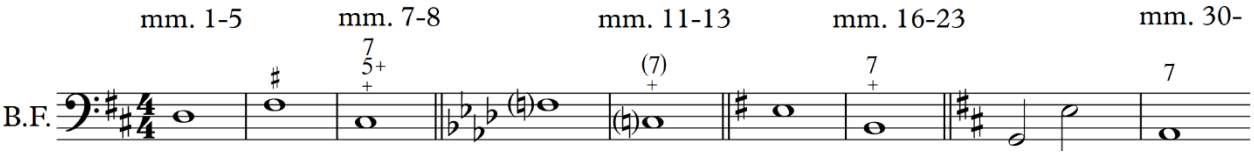


Figure 3.2. Tonal and Elemental Reduction of the Overture to *Zaïs*, mm. 1–30



And perhaps that is what is most shocking, if not revolutionary, about this overture: as suggested in Figure 3.2, in order for a full quaternary complement of elements to be realized tonally, the initial *tonique* of D major must be implicitly retroaudited as D dominant-seventh.[9] Thus there is a much more radical implication afoot here than a mere sequence of diatonic harmonic progressions unraveling a string of descending fourths in the fundamental bass, a hallmark of *cadence irregulière* (F-sharp major to C-sharp dominant-seventh, F minor to C dominant-seventh, and so on—a modulatory scheme first hazarded in the infernal "Trio des Parques" number from the scandalous 1733 version of *Hippolyte et Aricie*).[10] With each modulating tonal liaison formed by the tonicization of a *note sensible* (such as the leading tone E-sharp enharmonically neutralized as F), a terrifying vision lurches into view:[11] in Rameau's harmonic cosmogony, the *corps sonore* claimed as ultimate generator and principle of harmony turns out to be its very opposite, a seventh-chord *dominante-tonique* from which all dissonance springs.[12] This is not just irregular but antiregular music.

To be sure, this overture's scene of Genesis is not altogether sui generis. While Haydn's later yet better-known oratorio remains a towering point of reference for musical evocations of Biblical creation, in fact early-18th-century French Baroque opera offers several precedents,

[9] Rameau brandishes his knowledge of the four elements, as formulated most famously by Empedocles and transmitted through Renaissance humanists such as Gioseffo Zarlino, in his introduction to the harmonies. See *Treatise on Harmony*, trans. Philip Gossett (New York: Dover, 1971), 59.

[10] See *Hippolyte et Aricie*, Act II, Scene 5, at the Fates' final command, "Tremble! Shake with fright!" (*Tremble! Frémis d'effroi!*). I am grateful to Thomas Christensen for identifying this compelling intertextual resonance. For commentary on the enharmonic genre in relation to this scene, see Christensen, *Rameau and Musical Thought*, 205 – 207. For further elucidation of the relationship between the chaotic and the monstrous, see Charles Dill, "Rameau's Imaginary Monsters: Knowledge, Theory, and Chromaticism in *Hippolyte et Aricie*," *Journal of the American Musicological Society* 55, no. 3 (Winter 2002): 433–76, esp. 433–7, 451–52, and 468.

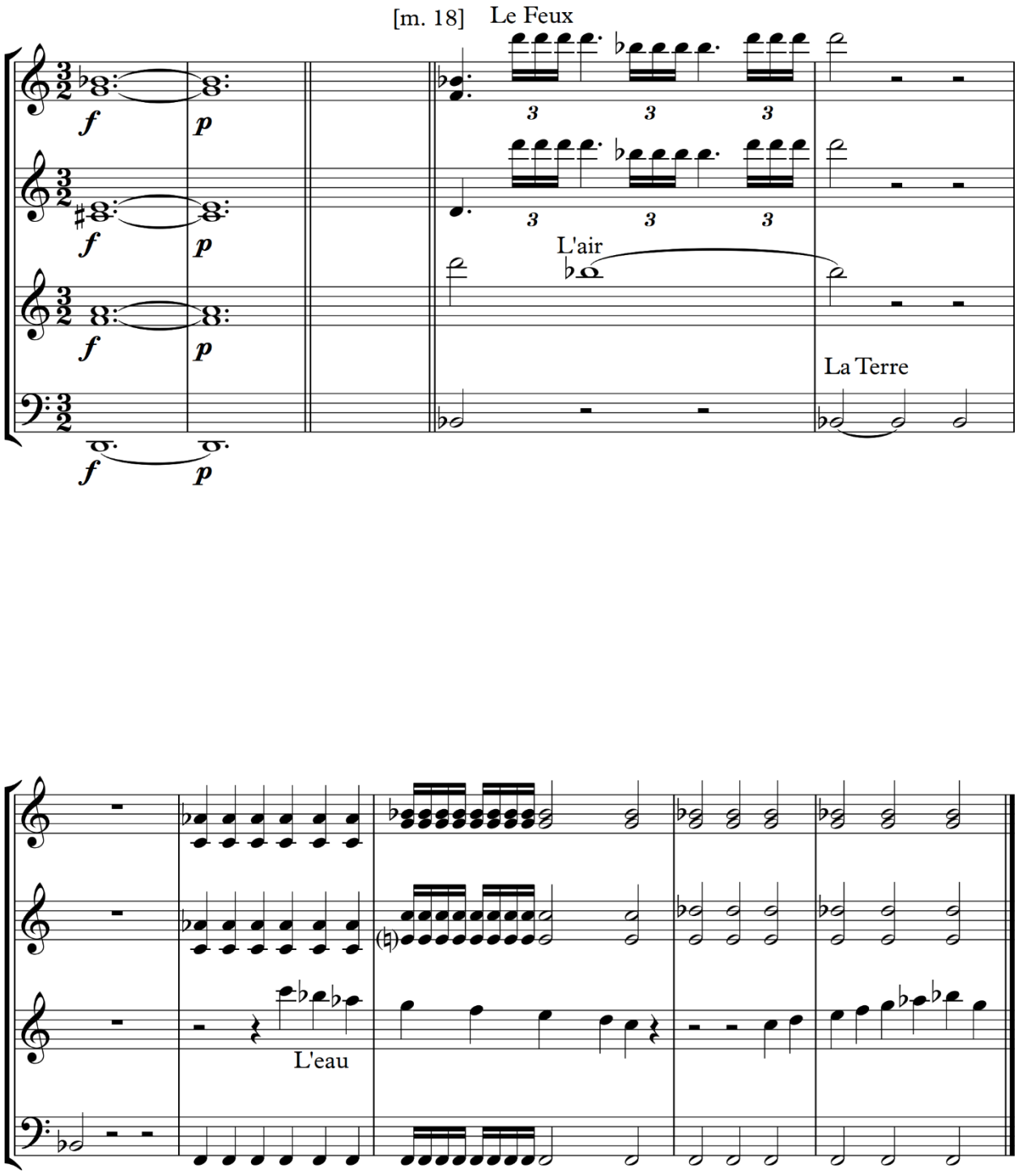
[11] On the "enharmonic shudder," see Alexander Rehding, "Rousseau, Rameau, and the Enharmonic Furies in the French Enlightenment," *Journal of Music Theory* 49, no. 1 (Spring 2005): 141–80, esp. 146–56, with a thrilling analysis of the "Trio des Parques" on 150–55.

[12] That is to say, Rameau's *Traité de l'Harmonie* famously advances the idea that whereas the harmonic triad is the source of all consonance, the dominant-seventh chord is that of all dissonance. To invert this hierarchy is to disrupt the most fundamental logic of his music theory and thus induce chaos.

particularly André Cardinal Destouches's relatively quotidian 1721 *Ballet des élémens* and Jean-Féry Rebel's strident 1737 *Les Élémens* (excerpted in Figure 3.3).[13] Their shared emphasis on primordial elementality as a prelude to Arcadian intrigue might seem to suggest mere rehearsal of a just-so story, but *Zaïs* once more reveals a deeper import. Set in an Oriental Eden, at first glance it delivers a *ballet héroïque* just as billed, the only twist being its title hero's vaguely Islamic coding as king of the sylphs, a mythic clan of air elementals.

[13] Note that Rebel serves as an overdetermined mediating figure in this lineage: he conducted Destouches's opéra-ballet and studied under Jean-Baptiste Lully, Rameau's illustrious predecessor and eventual pamphlet rival.

Figure 3.3. Rebel's *Élémens*: Shock of Chaos (mm. 1–2) and Its Unmixing (mm. 18–25)



Yet the eventual introduction of baron *génies élémentaires* and yeomen *peuples élémentaires* clarifies that the throne of elements on which the opera's potentate sits is made from a mix of colonial biocapital. So the chorus of elementals commends their ruler, "The submissive Elements are in your power; fly, your empire begins where that of chaos ends."[14] In keeping with Joyelle McSweeney's notion of the necropastoral, this call to order betrays a conflicted or even anxious fantasy of dominance:[15] the exotic garden is sublimely attractive precisely because its pleasures reside in an aestheticized political imaginary outside the secure but coercive reach of imperial dominion. *Zaïs* is, in other words, an Eastern idyll that at once recognizes and represses an illicit craving for submission to disorder.

Such cravings for lawlessness were, and are, aroused and satisfied in no small part via a high-culture colonial gaze. (Consider the ongoing Rameau Project, building on the editorial work of fin-de-siècle French nationalists such as Vincent d'Indy and Claude Debussy.) It is well documented that the chauvinist choreography of *Les Indes galantes* (1735), if not *Zaïs*, drew directly on the sensational reportage of Chicagou's visit to the court of Louis XV in the 1720s, coinciding with Rameau's first years in Paris.[16] As those reports attest, the fascination with indigenous American naturalism manifested in an obsessive fixation on nudity, if not free love.[17] Female fashion and propriety were in turn enforced oppositionally, securing one of the chief normative mechanisms by which the exotic was feminized, the feminine exoticized, and both domesticated.[18]

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[14] Prologue, Scene 1, bars 38–83: "Les Élémens soumis / sont en votre puissance. / Volez, votre empire commence / Où finit celui du chaos." As the stage directions reads, "Pendant ce choeur, les Génies des divers Élémens volent vers leurs différentes spheres."
[15] *The Necropastoral: Poetry, Media, Occults* (Ann Arbor: University of Michigan Press, 2011) extends Achille Mbembe's notion of necropolitics, itself an extension of Foucauldian biopolitics.
[16] Roger Savage, "Rameau's American Dancers," *Early Music* (October 1983): 444.
[17] See, e.g., *Mercure de France* (September 1725): 2274–6, for one such recount of "une nouveauté des plus singulieres" (2275), being the spectacle of "le nud du corps" bared by "une assemblée de Sauvages" dancing (2276).
[18] Jennifer van Horn, "The Mask of Civility," *American Art* 23, no. 3 (Fall 2009): 8–35.

Yet what has commonly escaped notice is how that process of dual subjugation was mediated crucially by not just the gaze but the hark. As late-17th-century French dictionaries reveal, the *barbare* and *sauvage* alike were defined as that which "has neither law nor politeness" or "is contrary to rules and taste"—no less than that which "strikes" or "shocks the ear."[19] As Olivia Bloechl has cogently elaborated, French Baroque opera is unfathomable absent the colonial encounters that nourished its abiding taste for exotica partly by licensing dramatically brutal and primitivist sonic effects.[20] Perhaps a second-order history of how such licenses were licensed, as well as how corresponding constraints were constrained, may be delineated by excavating how earlier music theory shaped that praxis.

3.2 License among the *Lumières*

There is a half-forgotten dual sense of "license." Derived from the French *licence* and the Latin *licentia*,[21] in modern English this term's noun and verb forms, while morphologically identical, bear two crucially distinct senses: (1) bourgeois legal privilege, as in I "have license" or am licensed; and (2) bureaucratic legislative power, as in I "give license" or am licensing.[22] It is suggestive in this regard to consider how Latin disintegrates and scatters its grammatical forms. The gerund *licens* ("permitting") likewise overlaps with the adjective *licens* ("permitting, permissive") but is ultimately derived and distinguished from the verb *licet* ("it is permitted"); that verb is cognate with *liceo* ("I sell") and (*pol*)*liceor* ("I bid (for), I appraise"), related to *loisir*

[19] *Dictionnaire de l'Académie française* (Paris: 1694), 82; cf. A. Furetière, *Dictionnaire universel* (1690).
[20] *Native American Song at the Frontiers of Early American Music* (Cambridge: Cambridge University Press, 2008).
[21] This etymology in itself tells a story of imperial link languages self-licensing, as ideas of licensure and licentiousness, or at least the nominal traces of them now archived, propagated themselves by force of civilizing missions and colonial dispossessions. An excellent sociolinguistic monograph in this regard is Françoise Waquet, *Latin, Or, The Empire of a Sign: From the Sixteenth to the Twentieth Centuries*, trans. John Howe (New York: Verso, 2002).
[22] Likewise I "have permit/permission" or am permitted just as "I give permit/permission" or am permitting.

("leisure"). The moral of this origin story is that while the word "license" might appear to be a straightforward technical term, actually it conceals a sedimented cross-section of laws, manners, and money. In a word, you can't have license without leisure. (The better-known history of liberalism, not unlike that of libertarianism, can thus be translated into a history of licensism wherein a leisure class prohibitively regulates the guild mastery of liberal arts.)

This distinction is indeed manifest in contemporary lexicographies. For example, Miege's 1688 *Great French Dictionary* and Richelet's 1694 *Nouveau Dictionnaire françois* both offer two definitions for "licence": "permission, or licence; lewdness, or licentiousness."[23] While the first might therefore seem proper or primary, in this "Sense it is now adays hardly used; except in this Expression, Licence Poëtique, Poetical Licence." In the latter sense, metaphors of submission and supplication moralize the subject, as in "une Licence effrenée, an unbridled Licentiousness"; and "Arreter la Licence par la Terreur du Supplice, to curb Licentiousness by the Terrour of Punishment." The noun's feminine gender seems emphatically naturalized in such expressions, particularly given the tradition of placing shrews in scold's bridles and witches in forced kneeling, as depicted in Figures 3.4 and 3.5.[24] As Silvia Federici's history of patriarchal capitalism suggests, these archetypes of early modern indecency or deviancy, the nag and the hag, departed from their assigned reproductive roles; by thus bestializing or demonizing vulnerable women who veered from polite virtue, often in tandem with ethnicization and vagrancy, order was registered and maintained.[25]

[23] Great French Dictionary (Redmayne, 1688); *Nouveau Dictionnaire françois* (Cologne: Gaillard, 1694). Cf. the latter's 1709 edition for expansive moralizing associations with *digna* and *venia*, as well as later editions of the *Dictionnaire* of the Royal Academy for discussions of repression, youth, and modesty.
[24] The first illustration is taken from "How They Cured Scolds in the Olden Time," *The Yorkshire illustrated Monthly* (May 1884): 350–53, esp. 350; the second is from *Souvenirs d'un aveugle* (Paris, 1839), 119.
[25] Silvia Federici, *Caliban and the Witch* (New York: Autonomedia, 2004).

Figure 3.4. “How They Cured Scolds in the Olden Time”

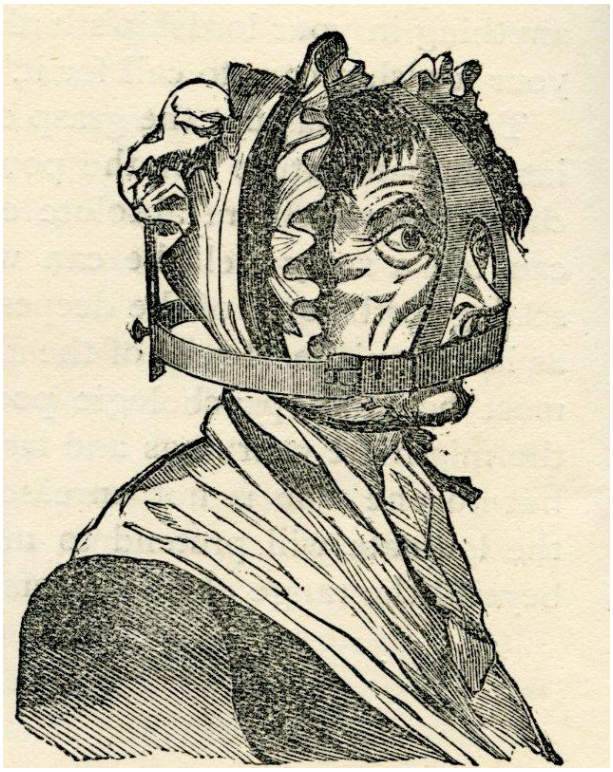

Figure 3.5. Martyr of Brazilian Folklore

As Raymond Williams has also shown, the French "licence" proceeded from basic utilitarian usage of the Middle Ages, expanding from the legal process of credentialization through more abstract notions of "possibility" and "liberty" (specifically what Isaiah Berlin called "positive liberty").[26] But by the late sixteenth century it came to be used moralistically in the sense of an "exaggerated liberty," often sexual in nature and not infrequently described as "unbridled" (*effrénée*).[27] The rather ambivalent notion of creative or "poetic license" arrived with that moralism intact via the rhetorical treatises of Fabri, Ronsard, and Boileau. My argument in a nutshell is that the particularly music-theoretic notion of harmonic license partakes of this moral ambivalence, embedding a broader conflictual attitude toward freedom and restraint on the part of bourgeois liberal subjects.

Yet I recognize that, at least at first blush, these two types of license—poetic and sexual—may seem essentially different or even ethically opposed. After all, poetry is traditionally if not accurately seen as good and innocent, while of course sexuality is guilty and corrupt. Like so many cut-and-dry distinctions, this one has deep linguistic roots. The former term, for one, is by definition active and normatively masculine: a "poet" (from Old French *poete*, Latin *poēta*, and Ancient Greek *ποιητής* or *poiētḗs*) has long been understood as not just a maker, but also a creator and progenitor (maker of heaven and earth), an author and legislator (lawmaker).[28] And the latter term is, on the other hand, historically mythologized as a passive

[26] *Keywords: A Vocabulary of Culture and Society*, rev. ed. (New York: Oxford University Press, 1983 [1976]), "Liberty."

[27] *Guy Miege's* Great French Dictionary (Redmayne, 1688) and Richelet's Nouveau Dictionnaire françois (Cologne: Gaillard, 1694; see also the 1709 edition for helpful Latin associations, *digna* and *venia* especially) both offer two definitions for "*licence*": "permission, or licence; lewdness, or licentiousness." While the first might therefore seem proper or primary, in this "Sense it is now adays hardly used; except in this Expression, *Licence Poëtique*, Poetical Licence." In the latter sense, metaphors of submission and supplication moralize the subject, as in "*une Licence effrenée*, an unbridled Licentiousness"; and "*Arreter la Licence par la Terreur du Supplice*, to curb Licentiousness by the Terrour of Punishment."

[28] Note well translator and commentator Mark Howard's key observation that Rameau's "reviewers granted him the title 'lawgiver of music.'" See *Decoding Rameau: Music as the Sovereign Science,* Teori Musicali 2 (Lucca, Italy:

lack or lust cast in terms of a vicious feminine void: "sex" (from Middle English *sexe*, Old French *sexe*, and Latin *sexus*) ultimately implies section and division, a rift or slit in Mankind and hence an unnatural or even supernatural reduction of His wholeness. Such puritanical binary logic is of course the very stuff of heterosexism, of illicit forbidden fruit no less than the fruit of labor by definition licensed: appraised, bid for, sold.

Perhaps a more palatable entrée to this line of sociolinguistic interpretation is the relatively straightforward proposition that our music-theoretic concept of "license" is inherited from d'Alembert, whose "simplified" scientization of Rameau's harmonic theory excised the term's raw extrarational appeals to taste. By examining his summary of Rameau, particularly set against the backdrop of seventeenth-century French aesthetics, we can recoup the richness of this term both as a cultural index and, ironically enough, as an object of music-scientific inquiry. For "license" has long applied to a welter of musical parameters: not just the cadence chez Rameau, particularly the *rompue* and *irregulière* varieties, but also his theories of chord supposition and seventh resolution; and not just the subordination of counterpoint to tonepainting and rule to feeling, as in the Monteverdi-Artusi controversy that hailed musical modernity, but also more general considerations of prosody, mode, meter, form, and style.

To map out some of the latter terrain, it may help to inventory the term's previous deployments. A search for "licen*" in the corpus of 17th-century French sources archived by Indiana University's *Center for the History of Music Theory and Literature* returns a curious range of matches (given in Figure 3.6).

Libreria Musicale Italiana, 2016), 11; cf. 15, 17, 22, 25. Rameau himself begins the *Code de musique pratique* by referring to the aural character of poetry: "The ear suffices for those who only want to play. The Poet [i.e., Homer, blind by legend] undoubtedly would have profited from it and would know what better suits the Art" (35, ¶3).

Figure 3.6. “License” in the CHMTL Archive

Denis 1601: 1
Maillart 1610: 6
Caus 1615: 5
Mersenne 1634: 2
Mersenne 1636: 11, 2, 1, 1
Maugurs 1639: 3
Parran 1639: 5
Cousu 1658: 1
La Voye-Mignot 1666: 1
Nivers 1667: 3
Ménestrier 1681: 1

Excluding a false positive in the last entry and counting the books of *Harmonie universelle* individually, thirteen of the fifty-five texts in this archive contain some form of *licence*, occasionally inflected as *licentieusement* or *(se) licentier*. At forty-three iterations total, each relevant text contains about three iterations, a distribution that probably reflects not the everyday prevalence of this word so much as its specialized usage, at least in seventeenth-century French music theory. Yet even this restricted usage yields a fascinating range of referents.

Denis's 1601 *Traité de l'accord de l'espinette*, for instance, mentions the license of varying the fugal subject in a middle entry.[29] Maillart's 1610 *Les Tons*, like de Caus's 1615 *Institution harmonique*, considers the license of departing from a given mode. Parran's 1639 *Traité de la musique théorique et pratique* discusses the license of violating Zarlinian precepts of counterpoint. And Mersenne’s 1636 *Harmonie universelle* discusses the rules of syllabification in ancient Greek and then-modern French poetry. This latter example lays bare the political stakes of a related formal division set forth in Pierre Fabri's 1521 *Le grant et vray art de pleine*

[29] *Traité de l'Accord de l'Espinette, Auec la comparaison de son Clauier à la Musique vocale* (Paris: Robert Ballard, 1601; repr. ed. New York: Da Capo Press, 1969): "Licence que l'on peut faire au milieu de la piece et non pas en commençant."

rhétorique, whence the term "poetic license." Written under the reign of Francis I, patron of the arts and "father figure" of the French Renaissance (invoking all the psychoanalytic and patriarchal resonances of that term), Fabri's art descends from a long line of royal lessons in rhetoric (e.g., Molinet).

Yet Fabri's contribution to rhetoric, and thus to a history of the concept of "license," stands out due to its division into two books, of which the latter was novel and influential: first, a collection of rhetorical precepts; second, a declaration of poetic principles, including a formulation of "poetic license." Both books strive to avoid barbarisms, and thus both implicitly bestialize or demonize the exotic, the outsider, the alien, the other. In short, if sexual license is often attributed to the non-male, then poetic lawlessness, if not license, is attributed to the non-white/non-Christian. Mersenne's discussion of disciplining the royal tongue strongly suggests that license was not merely a theoretical convenience by which rules could be relaxed, an occasional escape hatch by which system-building could be upheld even when one has walled oneself in with an embarrassing but pardonable contradiction. License was rather a means of maintaining social order when a categorical imperative *avant la lettre* needed to remain imperative (i.e., of the imperator) but not categorical.

A fascinating case along these lines is André Maugurs, virtuoso violist and royal outcast. For a time he enjoyed the favor of Richelieu, hence his favorable citation by Mersenne in the latter polymath's 1636 magnum opus *Harmonie universelle*. Yet by 1639 Maugurs's fortunes had turned, leading him to pen a groveling Roman epistle as he sought employment in Italy. Here he writes that Italian musicians, "les plus excellens hommes de l'Art," are said to be better at musical instruments than French ones.[30] For on a single *Espinette* or small harpsichord, "one

[30] Maugurs, *Response faite à vn curieux, svr le sentiment de la mvsiqve d'Italie* (Rome, 1639; Geneva: Minkoff, 1993), 4.

man alone can produce more beautiful inventions than a four-voice ensemble"; so naturally Italian men prefer the Art of instrumental music, since "She has charmes and licenses that vocal [music] doesn't."[31] The gender dimension of this remark is telling: men versed in the Art of music are potent, productive, performative; and their Lady Muse, embodied in a passive but sensitive vessel waiting to be impregnated with meaning, is a charmed and licensed thing, a bewitching and seductive object.

Perhaps given this penchant for an instrumentalizing or objectifying gaze, Maugurs as a self-effacing Frenchman doesn't seem to have viewed license in negative terms so much as alteric or exotic ones, in keeping with an evident desire to join a patriarchal tribe outside his own. So he declares that the Italian

> Chapel compositions have more art, science, and variety than ours; but they also have more license. And for me, since I would not be able to reprimand this license when done with discretion and with an artifice that [5] imperceptibly deceives the senses [trompe insensiblement les sens], nor can I approve the obstinacy of our Composers, who too religiously hold themselves constrained by pedantic categories, and who would believe solecisms made against the rules of the Art if they were to make two consecutive fifths or depart however little from their modes. It is without doubt in these agreeable departures where the secret of the Art consists; Music having as many figures as Rhetoric, they [such departures] tender all in charming and imperceptibly deceiving the Listener. That is to say, it is not so necessary to entertain ourselves with observing these rules so rigorously that it makes us lose the succession of a fugue and the beauty of a song, seeing as how these rules were only invented to rein in [*tenir en bride*] young students and to prevent them from emancipating themselves before they have reached the age of judgment.[32]

[31] Maugurs, *Response*, 17.

[32] *Ibid*., 4–6: Ie trouue en premier lieu, que leurs compositions de Chappelle ont beaucoup plus d'art, de science, et de varieté que les nostres; mais aussi elles ont plus de licence. Et pour moy, comme ie ne sçaurois blasmer cette licence, quand elle se fait auec discretion, et auec vn artifice qui [-5-] trompe insensiblement les sens; aussi ne puis-je approuuer l'opiniastreté de nos Compositeurs, qui se tiennent trop religieusement renfermez dans des cathegories pedantesques, et qui croiroient faire des soloecismes contre les regles de l'Art, s'ils faisoient deux quintes de suite, ou s'ils sortoient tant soit peu de leurs modes. C'est sans doute dans ces sorties agreables, où consiste tout le secret de l'Art; la Musique ayant ses figures aussi bien que la Rhetorique, qui ne tendent toutes qu'à charmer et tromper insensiblement l'Auditeur. A vray dire, il n'est pas si necessaire de nous amuser à obseruer si rigoureusement ces regles, que cela nous fasse perdre la suite d'vne fugue, et la beauté d'vn chant; veu que ces regles n'ont esté inuentées que pour tenir en bride les ieunes escoliers, et pour les empescher de s'émanciper auant qu'ils ayent atteint l'aage du iugement.

Maugurs's declaration emphasizes two features: "discretion" versus "deception," sensible "judgment" against imperceptible "charm." Instead of the former faculty for detecting "solecisms made against the rules of the Art," the latter is a sense for locating "agreeable departures where the secret of the Art consists." Given the diplomatic pretext of French-Italian immigration, it seems natural that Maugurs would betray a positive attachment to the promise of "departure." Fittingly, his defense of rhetorical moves or artistic "figures" concludes with a trope of its own: a metaphor for regulation as "reining in" or "keeping in the bridle" (*tenir en bride*). This trope is hardly neutral. Opposite the agreeableness of departing freely, geographically as artistically, is the dysphemism of being chained down or tied up. (To offer my own *figura etymologica*, it seems highly significant that the Latin *tenire*—to have and hold, to retain and restrain—has a specific legal sense: to bind and obligate.)

It is thus fitting that Maugurs closes with reference to the theological conceit of an age of judgment, a phase of intellectual and spiritual development at which one is able to properly adjudicate between right and wrong. In order for a synthetic *gout réunis* to credibly reconcile Italian and French sensibilities, there must be—to switch from the juridical metaphor of good judgment to the gustatory metaphor of good taste—a sense of good and bad, a capacity to discriminate between beautiful and ugly. And to import from positivist law the idea of sovereign command, such a sense of refined or elevated taste (what might be called good "aesthetiquette") is always licensed by a figure of authority: the connoisseur.

The opinions of connoisseurs and experts were essential to issuing and maintaining *bienséance*, a protocol for "sitting well" that informally but significantly regulated courtly conduct.[33] Musical expertise was thus reserved largely for First and Second Estate dilettantes—

[33] Thomas Christensen, "Rules, License and Taste in 17th-century French Music," 89.

clerics of good taste and aristocrats of fine breeding whose concern for the art of singing well or playing properly was invested no less in diverting polite company, whether by means of a refreshing canticle or a graceful contradance, than in demanding that peasants and children refrain from such public indignities as humming aloud in church pews and smacking their lips at the dinner table. Yet as explained in Chapter 1, such distinctions were maintained not merely within hierarchical European kinship communities but against subordinated Orientalist images of lawless barbarity, especially with regard to the tensely allied Ottoman Empire and the wild colonial "middle ground" of New France.[34] In light of the feminized *turquerie* and *sauvagerie* previously discussed, and no less propagated here as well by Rameau's catalogue of primitivist pastoral opéra-ballets, some consideration must be given as well to martial manners and manly comportment. For as we will see, not all is fair in love and war, even when sublimated through the choreography of courtesy.

3.3 Rameau as Diplomat

The history of music theory sometimes veers closer to military history than suspected. Largely defined by controversy and dispute, its narratives are often implicitly cast in terms of discursive struggle. Thus a trail of tracts stretches agonistically across the ages, pitting defenders of Pythagoras against those of Aristoxenus, those of Muris against those of Vitry, Rameauians against Rousseauians, Schenkerians against Schoenbergians, and the odd visionary or maverick (Grocheio, Fludd, Riemann) against the world. (As Chapter 1 also argued, the underlying notions of rulemaking and rulebreaking, whether for or against a consensus authority, are indeed essential to historiographic categorization.) Even or especially to a distinguishing eye, somehow

[34] Regarding the latter, see especially Richard White's classic study, *The Middle Ground: Indians, Empires, and Republics in the Great Lakes Region* (Cambridge, UK: Cambridge University Press, 1991).

the conceptual fronts on which such campaigns have been waged can start to look the same; as familiar topics of debate have resurfaced, some of the most heated intellectual sparring has taken place in surprisingly timeworn arenas of combat.

Perhaps no area of inquiry has seen more ink, or blood, spilled over it than the line in the sand between sense and reason.[35] Precisely where the sensualist-rationalist boundary line ought to fall, or how it is to be crossed, is itself a *ius belli*, a law of war among the foundational rules of engagement for music theorists. This is naturally dangerous territory: for a self-styled theorist or scientist of music, corresponding praxis-theory or art-science distinctions present a mine field of existential crisis.

A fittingly pugnacious guide is Rameau, whose compositional practice dominated the French stage and salon in his own day, and whose landmark harmonic theory continues to hold international sway nearly three hundred years later. No stranger to invective, he found himself besieged on all sides throughout his storied career. His early operas, by virtue of their supposed *goût italien*, were recruited during the *querelle des Anciens et des Modernes* of the 1730s to fend off conservative Lullyists; in the corresponding *guerre des bouffons* of the '50s, however, progressive partisans bombarded his late oeuvre due to a perceived insufficiency of that very same flavor of sensuality. Likewise, his first theoretic work, the 1722 *Traité de l'harmonie*, took aim at Zarlino's alleged hyperrationality; by his final writings of the '60s, however, the *philosophes* had returned a critical fusillade along similarly subjectivist lines. The moral of the story seems simple: live by the pen, die by the pen.

[35] For a broad overview of anti-rationalism in 16th-century Italian sources, see Claude Palisca's "Sense over Reason: The Anti-Theoretical Reaction," in *Music and Ideas in the Sixteenth and Seventeenth Centuries* (Urbana: University of Illinois Press, 2006), 29–48. See also Thomas Christensen's essay on 18th-century German consonance theory advanced by Mattheson against Euler, "Sensus, Ratio, and Phthongos: Mattheson's Theory of Tone Perception," in *Musical Transformation and Musical Intuition: Eleven Essays in Honor of David Lewin*, ed. Raphael Atlas and Michael Cherlin (Roxbury, MA: Ovenbird Press, 1994), 1–22.

Yet the meaning of our hero's rise-and-fall Wheel of Fortune biographical emplotment—a *renversement* or "inversion," to borrow a music-technical term of contemporaneous coinage[36]—remains rather complex. The major treatises in particular preserve a record of encounter and flux, a fitful consolidating process whose now-stable sphere of influence belies an underlying mêlée of rival *mentalités*. His lifelong exertions to reconcile the epistemological tribes of empiricism and rationalism, reflected most directly in his frequent recourse to an alliance of *expérience* and *raison*, betrayed an uneasy détente, if not shifting loyalties. To the embattled harmonist wrestling with his own first principles, intellectual diplomacy called for a mediator: the concept of *licence.*

At least since d'Alembert's sanitizing paraphrase, commentators on the *Traité* have tended to register "license" as a dirty word, an adulterant or appendage of otherwise pure inner logic.[37] Even Rameau links the idea to deviancy.[38] But in a less moralizing account, this value judgment might well be turned inside out and wrong-side up. In Thomas Christensen's reading, the treatise's four constituent books fall into fairly neat methodological halves: the first two books, on proportions and progressions, largely seek to establish systematic rational axioms à la

[36] Cognate with *réversion*, the French *renversement* is literally a "turnback" or "turnover," akin to the "rollback" or "rollover" of *révolution*. In one of the term's earliest recorded applications to harmony and counterpoint, music lexicalist Sébastien de Brossard indeed offers *renversement* as a definition for the Italian *rivolgimento* ("upheaval," cognate with *rivolta* or "revolt"), likening inversion to the overturning of a liquid solution or political state. See Brossard, *Dictionnaire de musique*, 3rd ed. (Amsterdam: Estienne Roger, c. 1708), 117–18. Earlier usage applies likewise to upended lines of imitative polyphony, as in Charles Masson's *Nouveau traité des règles pour la composition de la musique* (Paris: Jacques Collombat, 1697; repr., Paris: Christophe Ballard, 1699), 107. Later adoption of the English analogue "inversion" is attested by the end of the eighteenth century, as in Charles Burney's discussion of Handel's practice in *A General History of Music*, 4 vols. (London: Payne and Son, 1776–89), esp. 4: 260 and 363.

[37] D'Alembert, *Élémens de musique, théorique et pratique, suivant les principes de M. Rameau* (Paris: Charles-Antoine Jombert, 1759). See also Christensen, *Rameau and Musical Thought in the Enlightenment* (Cambridge: Cambridge University Press, 1993), 269.

[38] Rameau, *Traité de l'harmonie reduite à ses principes naturels* (Paris: Ballard, 1722; Rome: American Institute of Musicology, 1967), 110: "En un mot, tout se qui s'écarte de ce principe naturel [de la progression de la basse fondamentale] . . . ne peut être attribué qu'à la Licence." The standard English translation renders *s'écarte de* as "deviates from," in keeping with both longstanding common parlance and, not incidentally, a closely related sociological term of the last century: "déviance : caractère de ce qui s'écarte de la norme," as defined in *Le Grand Larousse*. Cf. *Treatise on Harmony*, trans. Philip Gossett (New York: Dover, 1971), 124.

Descartes; the last two, on composition and accompaniment, are given over to synthesis of empirical observation in an almost Newtonian fashion.[39] (The overall conformity to Zarlino's exemplary *Istitutioni harmoniche* is striking, given the parallel organization of four books paired off in theoretical and practical halves. Several studies situating this text amid epistemic touchstones of cinquecento letters have suggested that Zarlino took pains to negotiate his own line of intellectual diplomacy: for one, architectural historian Rudolf Wittkower proposed that Zarlino's system of ratios mediated between the treatises of polymath perspectivist Leon Battista Alberti and neoclassical categorist Andrea Palladio;[40] for another, Claude Palisca's classic account argued that Zarlino's aesthetics participated in a shift of cognitive models from neoplatonic cosmologist Marsilio Ficino to Aristotelian proto-psychologist Juan Luis Vives.)[41] For his part, Rameau's appeals to license are concentrated around the midpoints of Books 2 and 3, as if binding them together.[42] Far from a mere additive or extremity, the concept is quite literally central to the overall argument.

Insofar as "license" thus enjoys a certain formal centrality due to its status as mediating concept, the *Traité* homologizes its own claim to bipartisan centrism in longstanding international disputes between factions of reason and sensuality, rigor and freedom, or logic and lyric. The French *licence* invoked on behalf of these poetico-aesthetic clans indeed echoed the

[39] Christensen, "Rules, License, and Taste in 17th-Century French Music from Mersenne to Rameau," in *Musikalische Norm um 1700*, ed. Rainer Bayreuther (Berlin: Gruyter, 2010), 81–96, esp. 91.
[40] Wittkower, *Architectural Principles in the Age of Humanism* (New York: Norton, 1971), 27–37 and 132–37.
[41] Palisca, *Music and Ideas in the Sixteenth and Seventeenth Centuries* (Urbana: University of Illinois Press, 2006), 182–87.
[42] A word count illustrates: Book 1 contains 0 uses of "licence" or "licences"; Book 2, 36 (25 singular, 11 plural); Book 3, 10 (2 sing., 8 plur.); and Book 4, 0. To be clear, these figures are relatively modest in relation to those of statistically prominent key terms such as "accord(s)," "harmonie," "dissonance(s)," "basse," "principe(s)," and "regle(s)." As a point of comparison, consider the latter two. The distribution of "principe(s)" in Book 1 is 101 (sing. 90, plur. 11); in Book 2, 103 (95 sing., 8 plur.); in Book 3, 9 (3 sing., 6 plur.); and in Book 4, 6 (all plur.). As for "regle(s)," Book 1 has 51 uses (12 sing., 39 pl.); Book 2, 157 (73 sing., 84 pl.); Book 3, 86 (34 sing., 52 pl.); and Book 4, 37 (14 sing., 23 pl.). N.B.: The more abstract of the two terms, "principe," remains at the fore throughout the first two books but recedes sharply in the last two books—a trend consistent with the overall rational-empirical halving described above.

Italian *licenza* cited in *seconda pratica* squabbles of the previous century. Rameau's voice was hardly alone in this Baroque concord of discords. As Christensen has argued, musicians of the *grand siècle* in turn led a domestic revolt of their own: while the rules of counterpoint forwarded by Zarlino were still reproduced with due allegiance by writers such as Parran and de Cousu through the first half of the seventeenth century, *stile moderno* aftershocks gradually toppled support for the old contrapuntal regime in France during the second half.[43] With the stage thereby set for a spectacular new persona in the theater of pamphlet war, enter Rameau, part Zarlinian crusader and part Monteverdian fabulist, eager to authorize a set of rules at once eternal and novel, subject to universal reason yet responsive to individual experience. Caught between cries of *imperfettioni* and *perfettione della moderna musica*, the harmonic center's charm lay in its promise of *accord parfait*.[44]

The *Traité* advances its most influential cadre of ideas in Book 2, "On the nature and on the property of Chords, and on all that which may serve to render a perfect Music."[45] The title alone speaks volumes, though grasping its subtleties calls for diplomatic interpretation in more than one sense. The French *accord*, even more so than its English cognate, represents in ordinary

[43] Christensen, "Rules, License, and Taste," 89–90. See Antoine Parran, *Traité de la musique théorique et pratique* (Paris: Ballard, 1639), 80–82; and Antoine de Cousu, *La Musique universelle* (Paris: de Cousu, 1658; repr. Geneva: Minkoff, 1972), Book 2, esp. 100–03 and 147–50.

[44] These opposing cries of course articulated into what Claude Palisca dubbed "The Artusi-Monteverdi Controversy," in *The Monteverdi Companion*, ed. Denis Arnold and Nigel Fortune (London: Faber and Faber, 1968), 133–66; this essay was later reprinted in Palisca's *Studies in the History of Italian Music and Music Theory* (Oxford: Clarendon Press, 1994), 54–87. Among the principal source documents are Artusi's *L'Artusi, ouero delle imperfettioni della moderna musica ragionamenti dui* (Venice: Giacomo Vincenti, 1600) and Monteverdi's proposed *Seconda pratica, ouero Perfettione della moderna musica*, announced in the preface to *Il quinto libro de madrigali* (Venice: Ricciardo Amadino, 1605).

[45] Rameau, *Traité*, 49; see also Pi and ij: "De la nature et de la proprieté des Accords, et de tout ce qui peut servir à rendre une Musique parfaite." Cf. *Treatise*, trans. Gossett, 59; see also iii and xxvi. Gossett renders *parfait*e as a postpositive adjective in the object complement, "to make Music perfect." But a more literal translation would leave it as a prepositive in the noun phrase "a perfect Music," emphatically qualifying grammatical object independent of verb; focus thus rests more on what is ultimately given back [*rendre* = *redonner*] than on how it is produced, with perfection thereby idealized as a state rather than a process. As argued below, the more literal translation may not be the more representative one.

usage both "a chord" and "accord," a union of not just musical pitches but military powers. Its steadfast association here with *parfait*, a collocation that recurs nearly three hundred times throughout the text, thus suggests not merely a harmonization of distinct sounds but moreover an entente between the hostile sensibilities of antiquarian and modernist poetics: on the one hand, the term *accord parfait* assents to the primacy of Zarlino's *harmonia perfetta*, if not to his Neopythagorean zeal for the *primo numero perfetto*;[46] on the other hand, this term also affirms a futurist vision of *Musique parfaite*, a second *seconda pratica* alert to Monteverdi's bellicose plea, particularly in the preface to his "Madrigals of War and Love," for *maggior perfettione* or "greater perfection."[47] In order to form a more perfect union, so to speak, the Book's title pledges to bring a more principled theory of chords into accordance with that more progressive practice.

But before turning to that more principled theory of progressive practice, it may prove instructive to linger briefly on the somewhat puzzling notion of greater perfection. Rameau, for his part, declared rather counterintuitively that not all perfections are made equal. For one, *l'accord parfait*, contrary to popular belief, comes in a variety of sizes that can just as well be *majeur* or *mineur*, greater or lesser.[48] For another, in either case an octave doubling "may be added to it in order to increase [i.e., greaten] the perfection."[49] Further examples from the *Traité*

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[46] *Harmonie parfaite* is invoked directly only a handful of times in Book 2 of the *Traité*, e.g., 50 and 160; more revealing in this regard is the definition of *nombre* given in the opening glossary, xv: "All the force of Harmony is attributed to that of Numbers. There are but three accordant Numbers, of which the perfect Chord is formed" (*On a attribué toute la force de l'Harmonie à celle des Nombres. Il n'y a que trois Nombres accordans, dont se forme l'Accord parfait*). As for the conceptual forebear *harmonia perfetta*, it obtains throughout Books 2 and 3 of *Le istitutioni harmoniche* (Venice: Gioseffo Zarlino, 1558), following reflections on *numero perfetto* in Book 1. While tellingly silent on the matter of having a *musica perfetta*, the chapel master is eager to offer pronouncements on being a *musico perfetto*, the *Rinascimento* equivalent of a German Baroque *vollkommene Capellmeister*, in Book 1, 5 and 21.

[47] Monteverdi offered musings on his newfound *genere Guerriero*, a "Warrior genre" putatively drawn from Plato's *Republic* in order to perfect a previously lacking means of representing passions, in the preface to *Madrigali guerreri, et amorosi, ... libro ottavo* (Venice: Claudio Monteverdi, 1638).

[48] See Rameau, *Traité*, 34 and 36: "De l'Accord parfait majeur, et de ses dérivez"; "De l'Accord parfait mineur, et de ses dérivez."

[49] Rameau, *Traité*, 54: "L'Octave qui renferme tous les Sons qui peuvent composer entr'eux des accords fondamentaux, peut y étre ajoûtée pour en augmenter la perfection: Sans elle, l'Accord parfait et ses dérivez

are not hard to come by: at 650 instances, "perfect" is by far the text's most common descriptive adjective; yet in so many instances, the nouns modified appear fully or at least "thoroughly made" (*par-fait*) by relative grades of greatness.

From the vantage point of high-modern ontological hermeneutics, such comparative superlatives may well appear ridiculous or absurd. In the acclaimed 1984 rock mockumentary *This Is Spinal Tap*, for instance, maximalist guitarist Nigel Tufnel shows off a "very, very special" amplifier whose volume knob has "the numbers all go to eleven"—the perfect device for when "you're on ten here, all the way up," but still "need that extra push over the cliff."[50] Yet lest the head-scratching hilarity of this beloved scene be taken as an indication that the modern social imaginary has itself transcended such quixotic transcendence, it bears emphasis that truth is indeed stranger than fiction: by popular request, since the late '80s amplifier companies such as Marshall have manufactured loudspeakers whose knobs go all the way up beyond ten.[51] At the risk of collapsing any number of heuristically necessary dialectics (among them perfection-corruption, truth-fiction, and antiquity-modernity), a perfect riposte to such hybrid cases accords with Bruno Latour's provocation that "we have never been modern":[52] per the Augustinian elegance of 17th-century royal *précepteur* François de La Mothe Le Vayer, "the greater part of

subsistent toûjours; mais avec elle, ils deviennent plus brillans, en ce que les accords naturels et renversez s'y font entendre en même temps."

[50] *This Is Spinal Tap*, directed by Rob Reiner (1984; New York: Criterion Collection, 1994), LaserDisc, 0:22–0:23. The film clip is also widely excerpted online, e.g., "Spinal Tap - 'These go to eleven….,'" YouTube video, 0:49, posted by goto11tv, October 21, 2011, https://www.youtube.com/watch?v=4xgx4k83zzc.

[51] *This Is Spinal Tap*. Actor Christopher Guest bemusedly discussed this phenomenon in an interview under the "Special Features" included in Criterion's 1994 LaserDisc rerelease. Such knobs are indeed readily purchasable to this day, e.g., Allparts Music, "0-11 Knobs," https://www.allparts.com/0-11-knobs (accessed December 12, 2017).

[52] Latour, *Nous n'avons jamais été modernes: Essai d'anthropologie symétrique* (Paris: La Découverte, 1991); *We Have Never Been Modern*, trans. Catherine Porter (Cambridge, MA: Harvard University Press, 1993).

our perfection consists in noting well our imperfections."[53] In other words, maybe we have been going all the way up to eleven for a long time now.

So however logically superfluous or even self-contradictory this notion may seem, perhaps rhetorically it holds not a surplus or a paradox so much as a precondition of enlistment in discourse: an argumentative stance—pro or con, progressive or conservative—on which a sense of direction, if not a sense of self, is predicated. Thus the battle cry for greater perfection boasts an exceedingly broad provenance and influence hardly particular to the *Traité* or even a *stile moderno*. In aesthetics and ethics at large, a dedicated monograph *On Perfection* by the distinguished historian of philosophy Władysław Tatarkiewicz panoramically illustrates related "paradoxes of perfection";[54] among those surveyed is a semantic devaluation in 17th-century French classicism, as leading *beaux esprits*, for all their conservatism and conservatoryism, dissociated perfection from the ancient formal ideal of supple rotundity in a perfect *orbis* and instead aligned it with a neoclassical expectation of conformance to square rectilinearity, a straightlaced standard of boxed-in *bienséance* and perfect *correction*.[55]

Funneled through this geometric model of aesthetic roundness and rightness, an otherwise panoramic philosophy of perfection starts to converge on certain representative vignettes in historic European music theory. One example that comes to mind is Jan Herlinger's critical edition of Marchetto's *Lucidarium*, a trecento treatise containing an influential taxonomy

[53] La Mothe le Vayer, "Lettre LV. De l'examen de conscience des Pythagoriciens, in *Œuvres de François de la Mothe le Vayer*, 2nd ed., vol. 2 (Paris: Augustin Courbé, 1656), 617–22, esp. 618: "La meilleure partie de nostre perfection consiste à bien remarquer nos imperfections." This bon mot echoes a famous dictum from Augustine's *Sermo* 170, par. 8: "quia ipsa est perfectio hominis invenisse se non esse perfectum" (to find that he is not perfect is itself the perfection of man).

[54] Tatarkiewicz, *On Perfection*, trans. Christopher Kasparek (Warsaw: Warsaw University Press, 1992), previously serialized in *Dialectics and Humanism* 6, no. 4 (Autumn 1979)–8, no. 2 (Spring 1981); see esp. "Paradoxes of Perfection," in vol. 7, no. 1 (Winter 1980): 77–80.

[55] Tatarkiewicz, "Aesthetic Perfection," *Dialectics and Humanism* 7, no. 4 (Autumn 1980): 145–53, esp. 150. See especially Roland Freart, sieur de Chambray, *Idee de la perfection de la peinture* (Le Mans: Jacques Ysambart, 1667); *An Idea of the Perfection of Painting*, trans. John Evelyn (London: Henry Herringman, 1668).

of modal ambitus drawn in analogy to the pluperfect grammatical tense.[56] Another example is David Cohen's excellent study of clausulae and cadences tracking a tradition of perfectionist rhetoric right up to and through the *Traité*.[57] These two make an odd couple, to be sure, but an underlying philosophy of history supports their pairing: the fixed cyclicity of modal ambitus (literally "encircled" or "surrounded"), along with but opposite from the causal linearity of cadential progression, rests on a dualist conception of time. In Karol Berger's reading, this dualism is legibly encoded in the very structure of sounding music, whose Enlightenment status as a temporal art *par excellence* saw the privileged simulation of periodic stasis give way to that of directed change.[58] As ethnomusicologist Peter Manuel has clarified from a materialist perspective, such a narrative compresses European macrohistory into a turn from conceptual frameworks reflecting the agricultural cycles of seasonal return to those advancing an industrial telos of stadial progress.[59]

Yet if discourse on music is any match for discourse in it, then perhaps a more perfect reading of the theoretic literature will also recognize an enduring tension in these chronotopes. Developing Mikhail Bahktin's notion of the *carnivalesque*, Martha Feldman has proposed that "festival time" mediated competing sovereign interests. "The standard history of festivity in eighteenth-century Europe," Feldman observes, emphasizes progressive popular emancipation: "as absolutist governments lost ground in the eighteenth century, they were increasingly pressed

[56] *The Lucidarium* of *Marchetto of Padua*, ed. and trans. Jan Herlinger (Chicago: University of Chicago Press, 1985), 10.1.4, 11.2.27–29, and 11.4.172.
[57] Cohen, "'The Imperfect Seeks Its Perfection': Harmonic Progression, Directed Motion, and Aristotelian Physics," *Music Theory Spectrum* 23, no. 2 (Fall 2001): 139–69.
[58] Berger's argument is fittingly diachronic: a premodern outlook founded on the Christian world without end gave way to a modern mindset rooted in secular teleology, hence a European "paradigm shift" across the eighteenth century. See *Bach's Cycle, Mozart's Arrow: An Essay on the Origins of Musical Modernity* (Berkeley: University of California Press, 2007).
[59] Peter Manuel, "Modernity and Musical Structure: Neo-Marxist Perspectives on Song Form and Its Successors," in *Music and Marx: Ideas, Practice, Politics*, ed. Regula Qureshi (New York: Routledge, 2002), 45–62, esp. 49–50.

to reconcile the fundamental paradox of how to display largesse by producing and permitting festivity while still wielding authority in the face of potential license." A significant factor less often noticed, she argues, is that by supplying "the illusion of an eternity" in temporarily licensed suspensions of social hierarchies, "far from suspending the official life through the carnivalesque, the proscriptions [elsewhere "licensing"] gave officialdom ways to sustain it."[60]

Particularly within the French realm, Kate van Orden has argued moreover that spatiotemporality was imprinted on and by the king's physique, as the shaping of (resonating) bodies in time under the *Ancien Régime* likewise presupposed a sort of chronotopic discipline—or perhaps even a chronotypic one less literary than literal. While the divine character of the absolute monarch was associated with the perfectly cyclic stasis of timelessness, his manly comportment was embodied rather in progressive maturity through the gymnastic timing of military exercise, whose rigor conveyed the essence of constraint rather than licentiousness.[61]

As a servant of the crown, Rameau's artistic and scientific practices were hardly independent; they were, after all, sanctioned by royal privilege. Whatever the subversive overtones of his early career, the reactionary skirmishes of his later years amplified his royalism and mysticism. It is through this lens of an intransigently conservative political theology that even his early music theory may be clarified, particularly with respect to the chronotopic or spatiotemporal order on which his science of harmony rested, however fitfully.

[60] Martha Feldman, *Opera and Sovereignty: Transforming Myths in Eighteenth-Century Italy* (Chicago: University of Chicago Press, 2007), 142, 144, and 143.
[61] Kate van Orden, *Music, Discipline, and Arms in Early Modern France* (Berkeley: University of California Press, 2005), 132.

3.4 License against the Encyclopedists

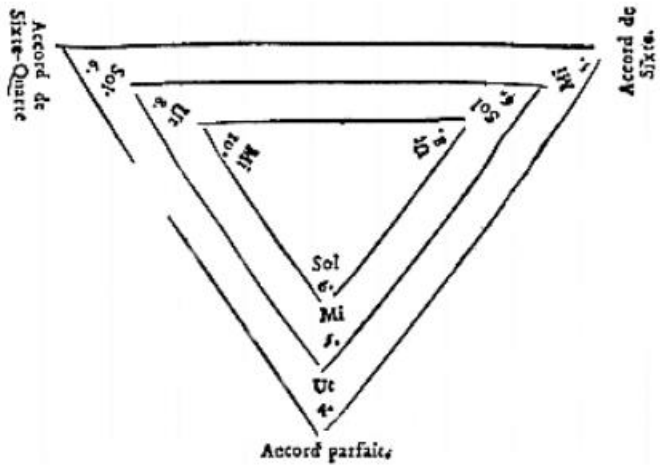
So in returning at last to Rameau's more principled theory of progressive practice, it is suggestive that the Second Book is, in a word, a theory of progression; it sets forth *regles de la Progression des Consonances*, not unlike *regles de Préparer la Dissonance* or simply *regles de l'Harmonie*.[62] But more precisely it theorizes or regulates the progression of cycles. If the First Book provides an account of the chord as periodicity, as a selfsame object whose perdurance wraps around the rotation or return of *renversement* (whose famous depiction is reproduced in Figure 3.7), then it is the Second that accounts for the chord as linearity, as a series of things that stretches with increasing perfection toward the telos or terminus of cadential glory. So as much as the second partakes of the first, quite obviously by their creator's intelligent design, chord progression still seems largely conceived less in terms of global circuitry than as a matter of first-order succession; thus the commonplace of tonal *retourne* is remarkably scarce in the *Traité*.[63] So too is *résoudre*:[64] instead of this false (or at least estranged) friend, here the overwhelmingly favored equivalent for "resolve" is *sauver*, a term as laden with theological freight as its English cognate.

[62] Such rules are referred to variously throughout the *Traité*, with the recurrent forms "regle(s) pour la progression" and "[r]egle(s) de la [p]rogression" recirculating mostly in Book 3, 81 and 323, 256 and 306; "[r]egle(s) de [p]réparer et de sauver la [d]issonance" in Book 2, e.g., 82, 97, 98, and 104; and "[r]egles de l'Harmonie" in Book 2, e.g., 105, 138, and 147.

[63] The lone exception suggests that this locution is not foreign so much as not entrenched (*Traité*, 129, emphasis mine): "Comme de toutes les progressions de la Basse, celle de la Quinte en descendant est la premiere, et la plus parfaite, puisque nous ne somme pleinement satisfaits, que lorsque nous entendons une Cadence finale formée de cette progression, où il semble que la Quinte *retourne* à sa source, en passant à l'un des Sons de l'Octave dont elle est engendrée."

[64] Again but a lone exception stands out (*Traité*, 167): "Si [B] et La [A] ne sont qu'une même touche sur l'Orgue et sur la plûpart des autres Instrumens. L'on pourroit nous faire icy quelques difficultez, que nous ne relevons point pour abreger, et parce qu'elles sont très faciles à *resoudre*."

Figure 3.7. ***Accord en Renversement*** **from Rameau's** ***Traité,*** **36**



A promise of salvation from sin therefore hovers in all but name around the text's almost touchingly fervent introduction to inverted dominant-seventh chords. In an astonishingly forceful resolution of cognitive dissonance, thrice are the praises, or rather the perfections, of this prototypically imperfect sonority sung to the heavens. First, "the chord of the Seventh" somehow manages to augment what is already perfect, being "composed of a minor Third added to the perfect major Chord." Second, the dominant-seventh is itself "the most perfect of all the dissonants," whether as the most consummate instantiation of its kind or simply the least sullied. And third, "it seems to be made [*fait*] for rendering still greater the perfection of consonant chords, because it always precedes them, or rather because the perfect and its derivatives [i.e., inversions] should always follow it."[65] So ultimately this prince of dissonance, so to speak,

[65] *Traité*, 37: "De l'Accord de la septiéme, composé d'une Tierce mineure ajoûtée à l'Accord parfait majeur, et de ses dérivez. Nous ne suivrons point icy l'ordre que nous avons tenu dans le Chapitre précedent; parce qu'il est bon de mettre d'abord sous les yeux l'accord le plus parfait de tous les dissonans, quoique la fausse-Quinte y regne dans l'aigu: il semble être fait pour rendre encore plus grande la perfection des accords consonans, parce qu'il les précede toûjours, ou plûtôt, parce que la parfait ou ses dérivez, doivent toûjours le suivre; cette proprieté étant également affectée à ses dérivez." Cf. *Treatise on Harmony*, trans. Gossett, 42.

improves perfection through its deprivation, per Augustine's doctrine of *privatio boni*:[66] a cornerstone of contrast theodicy (*à la* Saussure *avant la lettre*) and in turn just war theory. But neither Rameau nor anyone else needs a patristic father to remind them that nothing inspires violence quite like religious fervor.

Alongside this quasi-theological appeal to perfection, the Second Book extends—almost like a coordinate line—an architectural metaphor for foundation; thus the treatise's philosophy of time is itself perfected, as if drawing a pact between the perfect ends and fundamental origins of Harmony. But while the quest for *Musique parfaite* or *Harmonie parfaite* follows a dynamic arc from consonance to cadence only to circle back toward the staticity of scale and system (*consonances parfaites–accord parfait–cadence parfaite–systême parfait*), the framework for *Harmonie fondamentale* builds up simply from *Son fondamental* to *Basse fondamentale*. By shifting logical primacy from fundamental Sound to fundamental Bass, in one fell stroke the Second Book sequentializes simultaneity and temporalizes spatiality in a fashion that later tonal theorists found irresistibly modern (cf. Fétis, Schoenberg). As is well known, this Cartesian coup of multidimensional resemblance enacts a harmonic holism whereby chord is taken as epistemologically prior to tone, hence all the infamous anti-melodist invective. Yet perhaps less widely recognized is the extent to which the underlying conceptual container is an ancient discursive rule: the first principle or conceptual primitive, *arche* of epistemic foundationalism. A fundament is a beginning, a basis, a bottom (anatomically, a fundament is a rump or rear; logically, a principle or primitive; militarily, a trench or depth).[67]

[66] Cf. David Cohen, "Metaphysics, Ideology, Discipline: Consonance, Dissonance, and the Foundations of Western Polyphony," *Theoria* 7 (1993): 1–86.
[67] For a history of the *fundamentum* as a genre of practical training, see Thomas Christensen, "*Fundamenta Partiturae*: Thorough Bass and Foundations of 18th-Century Composition Pedagogy," in *The Work of Music Theory* (New York: Routledge, 2016), 77–100, where the term is defined as a "fixed foundation" of practice (80).

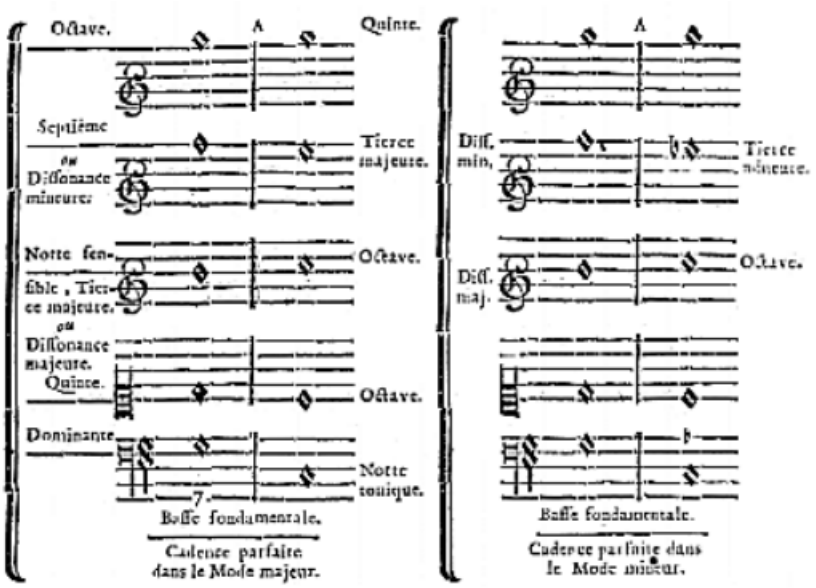
Rameau seems to have been of two minds about rules. At times he was scornful of certain doctrinaires who followed "the rules of their Masters" or the "Rules of the Ancients," and for his part he pointedly mastered if not deposed the "rules of Zarlino," his own sort of Bloomian father figure. Yet whatever *coup d'auteur* he sought was revolutionary rather than anarchist, a campaign to not simply displace but replace the master. So time and again his regard for rules seemed to connote a spirit of respectful inevitability, if not outright reverence. Thus with a whiff of pious deference he invoked "Rules of Music," "Rules of Composition," and above all "Rules of Harmony."[68] Such rules included technical procedures: a "rule of syncopating," a "rule of the Seventh," and so on. Perhaps the most obsessively cited of these is a Zarlinian "Rule of Preparing every Dissonance with a Consonance," a rule that Rameau consistently upheld.[69] Indeed this *prima pratica* decree dictated perhaps the essential rule over which Rameau developed a consummate mastery yet to be dethroned: a "Rule of the consonant progression of the Bass."[70]

This rule of consonant progression, shown in Figure 3.8, is established in the Second Book's chapter "On the perfect Cadence, in which the nature and property of all the Intervals are found." Our author was clearly not bashful about extending this promise of perfection or allness: the opening glossary defines the perfect cadence as that which "is sufficient for giving reason to all the rules of Music," a point later emphasized in the chapter's closing remark that "all our rules are founded on the progression of these two chords," namely the perfect chord and the seventh chord.[71] While the paradigmatic case of this progression is of course the dominant seventh proceeding to the tonic, as in the perfect cadence, the underlying or fundamental rationale of a

[68] Rameau, *Traité*, 105, 138, 147.
[69] Rameau, *Traité*, 53, 82, 97, 98, 104, etc.
[70] Rameau, *Traité*, 256.
[71] Rameau, *Traité*, xj: "La Cadence parfaite suffit pour rendre raison de toutes les regles de la Musique."

chord's temporalization is perfectly extensible to any harmonic succession. Thus consonant progression is the logical axiom that governs the temporal axis of the fundamental bass.

Figure 3.8. The Perfect Cadence as Rule of Harmony in Rameau's *Traité,* 57



Yet while this most basic Rule of Harmony or Principle of Harmony may be fundamental, its applicability is far from perfect. The taxonomy of cadence illustrates: the broken, interrupted, or deceptive cadence was rationalized variously in terms of supposition, a substitution such that apparent descending-third motion is parsed in terms of phantom fifths, and extension of the perfect chord's temporalization to include intermediary third, hence the notion of interruption. Yet the most intriguing case by far from a legal standpoint is the irregular or plagal cadence, a bona fide instance of the Rule of Harmony being not merely bent but broken as its axiomatic unidirectionality is forced to countenance retrograde motion.[72] The crucial question

[72] For further discussion of this concept's trajectory toward gravitational symmetry, see Christensen, *Rameau and Musical Thought,* 184.

arises: how does a dutiful harmonist rationalize the undeniable sensation of pleasure and order that attends this disobedient experience?

The answer is of course *bon goût*: "Even it [the fundamental Bass] is free from constraint as long as good taste guides us." Particularly in light of the Bourdieusian analysis of distinction, this rationale could well be understood as a sort of signaling custom—though it may come as little surprise, however, that Rameau did not speak highly of the customary. His section on the irregular cadence, for instance, notes that "it might be said that we are arguing only about the name of this cadence, and that we would do well to submit to custom. We might do so if this custom were well established, but practical musicians care so little about the terms of their art that they confuse these terms constantly with utmost unconcern. . . . [E]ven those who have written about these terms have followed their fancy rather than their reason."[73] Perhaps this denial of custom is disingenuous or delusional, yet there is nonetheless a question of how fancy differs from taste; while both are suprarational faculties at once social and personal, fancy in this context clearly bears quite another valence from taste. But when and why is it okay to break the rules due to good taste but not a flight of fancy? In other words, when is rule-breaking, particularly in music, licensed?

Perhaps an answer may be discerned among the key contours of Rameau's biography. The first signal uptick in his livelihood followed his widely honored claim, especially from the 1720s onward, to a connoisseurship of the highest order, a status as arch aesthete periodically reinforced with royally privileged publications; the second upturn followed his legendary operatic career, particularly in the '30s and '40s, sanctioned by the *Académie*. Yet in a sense he never quite vaulted his status or standing from Third Estate to Second; his coup qua savant

[73] *Treatise*, trans. Gossett, 77.

ultimately vouchsafed a princely income but hardly the royal treatment, as even with his honorary *noblesse de robe* he lived and died a bourgeois subject. When characterizing his genius relative to the *Philosophes*, Rameau was a monomaniac, not an encyclopedist.

So when it comes to his literary career, even today's most sympathetic scholars tend to agree with the harshest critics of his own day on one thing: the composer-theorist's supposedly secure principles of harmony, for all their scientific and stylistic pretensions, often lapse into stretches of splitting cognitive dissonance. These jarring logical swerves pop up not only from work to work (as in the discrepant origin stories for a *corps sonore* from the 1726 *Nouveau système* to the 1737 *Génération harmonique*), but even within seemingly unitary works (as in the seesaw of rational and experiential justification in the 1722 *Traité de l'harmonie*).[74] Nearly everyone—save of course for Rameau himself—seems to agree that he penned and promoted a brilliant yet less than lucid music theory, if not an outright incoherent mishmash of music theories.

Yet when it comes to whether that swerving obscurity was ingenious or just in error, scholars and critics have of course parted ways. The critically minded *Philosophes*, despite their love of "free thought" and "free discourse," ultimately closed ranks before his intellectual overtures: Rousseau the sentimentalist against his former idol's lack of *sensibilité*; d'Alembert the methodologist against his one-time collaborator's naïve want of *esprit de système*; Diderot the anticlerical materialist against his potential recruit's mystifying abuse of *licences*.[75] The latter encyclopedist in particular, alternately scandalized and idolized as an arch *libre penseur*, has

[74] A classic study along these lines is David Lewin, "Two Interesting Passages in Rameau's *Traité de l'harmonie*, *In Theory Only* 4, no. 3 (1978), 3–11.
[75] For a brilliant argument on the affective turn of Diderot's materialism, particularly as embodied in the satire of *Rameau's Nephew*, see Roger Mathew Grant, *Peculiar Attunements: How Affect Theory Turned Musical* (New York: Fordham University Press, 2020), esp. 81–85.

since held the undisputed title of revolution-whispering vanguardist, chief icon and architect of, in historian René Pintard's influential phrase, *libertinage érudit*.[76]

Yet this ascription is perhaps not quite so straightforward. As Etha Williams has persuasively illustrated, the instrumentalization of femininity in Diderot's 1771 *Leçons de clavecin, et Principes d'harmonie*—with Alsacian composer Anton Bemetzrieder serving in *double-emploi* as subservient collaborator to Monsieur Diderot and domineering tutor to his daughter Marie-Angélique—indeed urges a perverse reading wherein originary intellectual boundlessness and predatory moral dissipation turn out to be two sides of the same long-circulating coin.[77]

As a complement to that reading, consider the following appeal to "license" in the *Lessons*. When the master moves from natural minor to harmonic by following "the same rule as in major,"[78] the pupil objects that the harmony with a raised leading tone on G-sharp [*le sol dièse sensible de la*] intrudes on "a modulation that has all the natural notes":

> Master: I agree; but I call this license, if it is one, to the judgment of your ear. Listen…
> Pupil: Replay that for me, please.
> Master: A–C–E, consonance of the tonic; F–A–C, consonance of the sixth [scale degree]; D–F–A, consonance of the fourth; E–G-sharp–B, consonance of the fifth; A–C–E, consonance of the tonic.
> Pupil: Same order as in major, but more touching effect. It's like in animal species: the force of the male side, the sweetness [*douceur*] of the female side.[79]

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[76] *Le Libertinage érudit dans la première moitié du XVIIe siècle* (Paris: Boivin, 1943).

[77] "La femme clavecin?: Marie-Angélique *Diderot*, the Leçons de Clavecin, and the Engendering of Music Theory" (8 November 2017). See also Williams's "Setting Words to Music: Rameau's Nephew and the Way the Enlightenment Listened," *The Hypocrite Reader* 9 (October 2011), https://hypocritereader.com/9/words-to-music.

[78] Diderot, *Leçons*, 312: "La consonnance de la tonique sera la, ut, mi: toutes les consonnances à introduire ici ont leurs notes naturelles. Donc c'est ici la même règle qu'en majeur; c'est-à-dire qu'on y emploie toutes les harmonies consonnantes d'un dièse ou d'un bémol de plus, avec celles de la modulation relative."

[79] Diderot, *Leçons,* 313–14: "[C]e qui donnera le sol dièse sensible de la la, de même qu'en ut, dans sol, si, ré; si est sensible d'ut.
L'Élève. Mais par ce moyen vous introduisez un dièse dans une modulation qui a toutes ses notes naturelles.
Le Maître. J'en conviens; mais j'en appelle de cette licence, si c'en est une, au jugement de votre oreille ... Écoutez ...
L'Élève. Refaites-moi cela, s'il vous plaît.
Le Maître. La, ut, mi, consonnance de la tonique ... fa, la, ut, consonnance de la sixte ... ré, fa, la, consonnance de la quarte ... mi, sol dièse, si, consonnance de la quinte ... la, ut, mi, consonnance de la tonique.

This biological simile is in certain respects straightforward: following a line of interpretation familiar from feminist music-theory historiography (e.g., Susan McClary on tonality, Suzanne Cusick on counterpoint, Elizabeth Eva Leach on canonics), the minor or lesser mode is sweet rather than strong, touching rather than enacting or maintaining.[80] That same line of interpretation furthermore clarifies the relatively complex matter of how the major side nonetheless controls if not engenders the feminine corruption of nature, however pleasing.

Thus the master recounts a tale of rule and dominion, of baptism and reinforcement: "The gamut is named after 'C' [*ut*], the principal note, the first, that which rules the others, that to which they relate, the tonic or note of the tone."[81] And yet not all tonics or tones are made equal; thus in A minor, for example, it is "for fortifying the consonance of the fifth, E–G–B, and to make it dominate in minor as in major, we raise the G a semitone."[82] However much Diderot may be imagined as a nonconformist, his story of scale-degree harmony takes a page right out of Rameau's book. (As Nathan Martin has argued, the same may well be said of Rousseau's *Leçons de Musique,* quite possibly with Diderot as liaison.)[83] The fascinating irony here is that Diderot's appeals to license, even as transgressions of a supposed extreme (not unlike "greater perfection"), are likewise rationalized in accordance with hypothetical pre-principles or second-order principles. This chapter proposes moreover that Rameau, for all his monotheistic piety,

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L'Élève. Même ordre qu'en majeur; mais effet plus touchant, c'est [314] comme dans les espèces animales, la force du côté du mâle, la douceur du côté de la femelle."

[80] McClary, "The Blasphemy of Talking Politics during Bach Year," in *Music and Society: The Politics of Composition, Performance and Reception*, ed. Richard Leppert and Susan McClary (Cambridge, UK: Cambridge University Press, 1987), 13–62; Cusick, "Gendering Modern Music: Thoughts on the Monteverdi-Artusi Controversy," *Journal of the American Musicological Society* 46, no. 1 (spring 1993): 1–25; Leach, "Gendering the Semitone, Sexing the Leading Tone: Fourteenth-Century Music Theory and the Directed Progression," *Music Theory Spectrum* 28, no. 1 (2006): 1–21.

[81] Diderot, *Leçons*, 200: "On appelle dans la gamme d'ut, la note principale, la première, celle qui règle les autres, celle à laquelle on les rapporte, tonique ou note du ton."

[82] Diderot, *Leçons*, 313.

[83] Nathan Martin, "Rousseau, Rameau, and the 'Leçons de Musique,'" *Theoria* 23 (2016): 5–82, esp. 30–36 and 79–80, among whose fascinating insights include consideration of the *cadence irregulière evitée* (36).

partook of a common project marked by pluralist assumptions of privilege and taking of license, hence his curious status as a revolutionary reactionary.

As Charles Burney wrote in 1771, at a time now primarily associated in Western memory with the bending of colonial rule in his native England, "I shall detain my reader no longer with observations upon French music." In closing, he sums up:

> [I]t is but just to own, that the French have as long known the mechanical laws of counter-point as any nation in Europe ; and, that at present, by means of M. Rameau's system and rules for a fundamental base, they are very good judges of harmony. It must likewise be allowed that they have long been in possession of simple and agreeable Provençale and Langue-docian melodies, to which they continue to adapt the prettiest words, for social purposes, of any people on the globe ; and that they have now the merit of imitating very successfully the music of the Italian burlettas, in their comic operas, and of greatly surpassing the Italians, and, perhaps, every other nation, in the poetical composition of those dramas.[84]

It may seem like a telling resonance that elsewhere Burney praises Diderot and Rousseau for their "openness and politeness" in hosting him, whereas he found Rameau—not unlike a pretty Provençale melodie—"very sweet and agreeable."[85] Even then, these urbane bohemians stood apart from Rameau, the provincial bumpkin from Burgundy.

The notion of license as privilege laid to rest by the bourgeois Encyclopedists has since suffered a zombifying fate. Although not quite dead, it has survived into modern usage only in a benumbed bureaucratic sense: today it is simply a contract guaranteeing certain rights and privileges, as in a driver's license, a marriage license, or a software license. Especially since d'Alembert's influential paraphrase of Rameau's *Traité*, in general the discursive impact of music-theoretic license has dissipated considerably, blunted by the Romantic conception of eccentric individual genius as exemplary liberal subject. But if *licentia* and its derivatives once meant something far richer and racier than we now care to remember in this post-Revolutionary

[84] Burney, *The Present State of Music in France and Italy* (London: Becket, 1771), 390–391.
[85] *The Present State of Music in France and Italy*, 392 and 38.

age, perhaps we may also take the liberty of wondering about the longevity of its root word *licere*—the source of our “leisure.”

CONCLUSION: ZERO CADENCE

In tracking a curriculum of regulative music theory in early European modernity, at turns this dissertation cuts across familiar thoroughfares and tarries in obscure passages. Conclusions may be drawn in both directions. From the humanist recantations of Faber's day to the bourgeois revolutions bearing upon Rameau's, time and again cultural elites took pains to curate the soundtrack of primitive accumulation in terms of debt and forgiveness, duty and freedom; as a rule of thumb, then, the foregoing history has often accorded closely with the well-worn interpretive heuristic of political theology, whereby the scarcely bearable contradictions of life under *lex humana* are promised redemption through assimilation into privileged individual sovereignty.

By way of review, Chapter 1 suggests that the mass pedagogical reforms of early Lutheranism oversaw disciplined coordination of schoolchildren's little Guidonian hands and metrical feet, with the patriarchal tutelage of provincial *Kleinmeistern* entraining a nascent body politic through choruses of catechisms and canons. Chapter 2 further attends to power in miniature by dissecting the post-scholastic imagination of beesong in Caroline arts and letters, a curiosity that opens onto larger concerns around liberal humanism's articulations of natural authority and creaturely identity amid the Leviathan's incorporation of transatlantic empire. And Chapter 3 at last perfects the arc of progressive esprit from rebirth to revolt by disentangling anew the chaotic churn of psychobiographic elements in one particularly brilliant baroque *lumière* characterized variously as an enlightened wit and savage libertine.

The exploratory complementarity of these case studies gestures toward yet never quite holds fast a typology of musical rules and their violations. From the monomaniacal guild law of one *homo faber*, through the spontaneous order of an unruly bee in a bottle, and at last to the

willfully anomalous orientalist arcadia of encyclopedic ramifications, each stage is set with a distinct proscenium of noises and signals to be hazarded and algorithmized. To arrest this process with a provisional cadence, perhaps a parting moral for all the preceding genealogy of aurality is that cultural studies under regimes of capital circulation must ultimately tend toward either infinitism or nihilism, Ones or zeroes.

The music-theoretic doctrine of return anxiously expressed in modernist accounts of monotonality finds an analogue in the narrative principle that a proper conclusion at last desublimates some lingering ghost in the machine; the punchline is to come not from any old *deus ex machina* but rather from an immanent *démon* of modern mechanics, a Chekhov's gun poised to report emancipation from latency. An impertinent example is the widely anthologized tale *The Bet*, in which a neurotic lawyer wagers on their capacity to endure fifteen years of self-imposed hermetic leisure; yet after passing this lonely indiction amid stacks of musical scores and literary tomes, the scholarly Robinsonade closes with its protagonist willfully violating and voiding their contract in an ironic zero ending. Where the muses carried that rulebreaker next is anyone's guess, but an interested reader might well speculate on their life course finding some vocation in the figure of *correctio*.

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