

PATTERNS OF PLAY: ORLANDO GIBBONS, SIMON LOHET, AND J.S. BACH'S FUGUE IN E MAJOR (BWV 878/2)

PART II

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In the second part of this exploration of the family of themes related to Bach's E major fugue (BWV 878/2), I assess Bach's fugue in closer detail and consider its interpretation through analysis and musical observation. Part I¹ traced its historical roots beyond the well-known uses of its subject in fugues by Johann Jacob Froberger and Johann Caspar Ferdinand Fischer by examining the motivic and technical similarities of two seventeenth-century fugues, a fantasia by Orlando Gibbons and a fugue by Simon Lohet. The short fugue by Lohet prefigures BWV 878/2 in a number of important ways and represents Bach's received compositional inheritance; Lohet worked at the Württemberg court at Stuttgart from 1571 until his death in 1611, overlapping with Froberger's father, Basilius, who sang in the choir of the ducal chapel from 1575, while the Gibbons demonstrates parallel, contrapuntal developments across the channel in England. As models of contrapuntal thought and performance using the same polyphonic patterns as BWV 878/2, they highlight the importance of improvised counterpoint, a practical skill connected with the clavichord. I return to the E major fugue in Fischer's *Ariadne musica* as the primary exemplar for Bach's E major fugue to make a fuller comparison. My approach is both analytical and descriptive. By illustrating Bach's methods of composition

and control of form, and by scratching the surface of its endless motivic unities, I hope to illuminate some useful pointers for performers and to advocate the clavichord as a feasible and historical choice to convey this particular fugue and counterpoint more generally.

An open-score transcription of BWV 878/2 and Fischer's E major fugue is included with this issue. This format provides a clear delineation of the contrapuntal voices and is playable at the keyboard. Historically, open-scores were used to study counterpoint, and contemporary open-score copies of this fugue survive, for example by the Berlin copyist Johann Nicolaus Schober (ca. 1721–1807), dating from the middle of the eighteenth century,² as well as Mozart's string quartet arrangement of 1782 (K. 405, No. 3).³

BWV 878/2: Form and structure

Bach appears to have written BWV 878/2 without any major revision close to the completion of the second book of the Well-Tempered Clavier (WTC II) in about 1742. Unlike many of its companion pieces, no early version survives, suggesting that it was composed over a short period of time. Its form is seamless and gives the

Table 1. The Form of BWV 878/2

Location (bar/beat)	Number of bars.	Description		Key/cadence
1–9 ¹	9	Exposition		E --> dominant of E
9 ² –16 ¹	8	Stretto 1		E --> c sharp
16 ¹ –23 ¹	8	Stretto 2	With chromatic steps	E --> f sharp
23 ¹ –26 ⁴	4	Stretto 3	Varied subject	--> dominant of c sharp
26 ⁴ –35 ¹	9	Stretto 4	Diminished subject	--> g sharp
35 ² –43	9	Stretto 5	Return of stretto 1	E

impression of having been written as a single gesture, perhaps as a worked-out extemporization. Nevertheless, it contains several sections, or fugues within a fugue, although not all of the divisions are clearly demarcated. An outline of its generally agreed form—six sections comprising an exposition and five *stretti*—is given in Table 1. Joseph Kerman proposes an elegant structure of five phrases with third and fourth *stretti* forming a single, long phrase.⁴

Stretto

Stretto refers to the overlapping of two or more entries of the subject and answer. An episode is a section without a

complete statement of the subject. Bach's fugues divide into two basic types: *stretto* fugues without episodes and episodic fugues without *stretto*.⁵

BWV 878/2 is a *stretto* fugue based on one theme or root, the subject (1–2³).⁶ Bach applies a number of different devices to achieve “the maximum of variety by simple means”⁷ and advances a new aspect of the theme in each *stretto*. The subject is seldom absent. On the two occasions when the subject is not clearly stated (bars 13–15 and 32–35), its motivic material is still very much present. The countersubject (bass, bars 2³–4) contains a handful of musical ideas. These motives or motifs permeate the fabric of the fugue, interweaving with the subject clearly stated or partially obscured through evolution and transformation.

(a) Stretto 1

bars 9–12

(b) Stretto 2

bars 16–21

(c) Stretto 3

bars 23–26

(d) Stretto 4

bars 26–32

(e) Stretto 5

bars 35–end

Example 1: Stretti in J.S. Bach, Fugue in E major (BWV 878).

The *stretti* are shown in Example 1. In the exposition, the entries of the subject and answer are six half notes apart. The first *stretto* reduces this distance to two half notes and precedes the first absence of the subject (bars 13–15) and the first clear perfect cadence (in the relative minor, C-sharp minor, at bar 16). *Stretto* 2 uses a distance of four half notes and introduces two new countersubjects in triple counterpoint to the theme, one derived from the syncopated countersubject first heard in the bass in bars 3 and 4, the other a chromatic idea, first heard in the bass. *Stretto* 3 separates the voices into pairs one half note apart. Bach increases the chromatic intensity introduced in *Stretto* 2 and varies the subject with dotted rhythms and by filling out the leap of a third with quarter-note passing tones. In so doing, it anticipates the diminution of the subject in the fourth *stretto*, where its rhythm is diminished, and its intervals mutated. The fifth and final *stretto* marks the return to the tonic key beginning with a recapitulation of *Stretto* 1 and followed by the final transformation of the exposition material. Bach redeploys the downward order of entries from *Stretto* 1 (A, T, B and then S, B) with the crowning soprano entry one octave higher and delayed by two half notes for dramatic effect.

Choosing the distance between the subject entries in a *stretto* and the order of voices was an important part of earlier fugal practice and is determined by the nature of the subject. Bach understood the potential of any fugue subject as soon as he heard it (his excitement when it was realized in performance was recorded by C.P.E. Bach⁸) and he was well versed in the theory of writing fugues. He appears to have been familiar with many of the older counterpoint treatises, and he possessed a copy of the first Latin edition of Johann Joseph Fux's *Gradus ad Parnassum* (1725).⁹

Fux uses the same fugue subject as BWV 878/2—in both major and minor modes—in several two- and three-part examples in *Gradus ad Parnassum*.¹⁰ In his examples, Fux varies the *stretto* distance by starting with six half notes between subject and answer in the exposition and then reducing by stages to four and then two half notes. Bach and Fischer have similar schemes in their E major fugues, but only Bach and Lohet reduce to one half note.

It is interesting to note that Bach's third *stretto*, at a distance of one half note, forms the start of the midway point of the composition. The variation of the subject at this point (first appearance in F-sharp minor, bar 23) has some similarities to other melodies, for examples the chorales "Vor deinen Thron tret ich hiermit," "Gelobet seist du, Jesu Christ," and especially "Der Tag, der ist so freudenreich"—see Example 2 (b). This variation makes its last (concealed) appearance in the tonic major (alto, bar 29, from the second note), a pre-echo of the solitary,

cantus firmus entry of the subject, also in the alto (bar 29³–32¹).¹¹

Bach's fugue extends not only the diversity of contrapuntal devices, but also the tonal range of any putative model. His greater range of modulation enables him to represent both the minor and the major mode tradition of this "primitive"¹² melody within a single fugue: a double perfection. If Bach was striving in BWV 878/2 to write a *fuga perfecta* (and he does seem to have achieved it), a clue might be found in the inherent triple meter of his chosen subject—an acknowledgment, perhaps, of the *tempus perfectum* of the late middle ages. The triple hypermeter of the subject creates phrasing units of six half notes (and six quarter notes, when diminished) that stand above the prosaic cut-C time signature and duple-meter barring.¹³

Subject and Countersubject

BWV 878/2 is built out of a small pool or network of closely related melodic and rhythmic ideas that Bach transforms in a startling variety of ways. These ideas or motives are heard at the outset in the bass, namely, the subject (bars 1–2³) and its continuation, the countersubject (bars 2³–4). The subject and the countersubject are two aspects of a single six-note idea: the true "theme" of BWV 878/2. Bach ensures that a resemblance of this theme is also heard at the beginning of the companion prelude in E major, BWV 878/1, a practice he had already exploited in WTC I (1722), for example, in the E major and B major pairs, BWV 854 and 868. See Example 2 (a).

The countersubject is "a powerful and arresting theme,"¹⁴ and its first appearance is so strong that it masks the entry of the answer in the tenor. As Joseph Kerman puts it, "Bach's strategy is to stress the countersubject at the beginning of the fugue, drop it out of the middle, and restore it in its integral form at the end."¹⁵ By drawing attention to the countersubject and then not deploying it as a "regular countersubject" beyond the exposition, Bach highlights its potential for motivic mutation.¹⁶ This important aspect of Baroque keyboard fugue was thoroughly exploited by Froberger and his teacher, Frescobaldi: The theme of Froberger's first *ricercar* (FbWV 401) in his *Libro di capricci e ricercate* (c. 1658), for example, fulfills a similar function as both subject and countersubject. The compositional interest in Froberger's fugues often lies in the non-subject material and its potential for variation and standard contrapuntal devices, as well as its motivic relationship to the primary subject or theme.¹⁷ In this respect, BWV 878/2 is closer to Froberger than to Fischer. In BWV 878/2, a *stretto* fugue largely without episodes, Bach demonstrates his

(a) Subject, countersubject and derivations

Prelude in E major, BWV 878/1

Fugue in E major, BWV 878/2

Subject Answer Countersubject

Inversion

(b)

Variation
Soprano, bars 23–24

Diminution
Soprano, bars 26–27

Retrograde
Alto, bars 29–30

Der Tag, der ist so freu-den-reich

(c) Augmentation

Soprano, bar 12

(d) Syncopation

Alto, bars 10–11

(e) Chromaticism

Bass, bars 16–17

J.C.F. Fischer, Fugue in E major
Soprano, bars 45–48

(f) Motivic extension

Bass, bars 17–18

Soprano, bars 38–40

Soprano, bar 29

Soprano, bars 35–36

(g) Hexachordal inversion (inversion at the sixth)

Subject Soprano, bars 31–32 Tenor, bar 31
Bass, bars 6–9

Example 2: Subject and transformations in J.S. Bach, Fugue in E major (BWV 878)

“supremely artistic and perhaps slightly ironic”¹⁸ response to this type of keyboard counterpoint by writing an eventful yet “perfectly beautiful”¹⁹ fugue using the minimum of material (six notes and three types of interval) and occupying a relatively short space of musical time (43 bars or 86 whole notes).

Example 2 (a) and (b) show how the countersubject is derived from the subject by inversion, and the basic manipulations of variation, diminution, and retrograde, while Example 2 (c), (d) and (f) give examples of augmentation, syncopation, further diminution, and motivic extension. Example 2 (e) shows the chromatic inflections of *Stretto* 2. These rising and falling chromatic notes gain significance for tonality and modulation far beyond their incidental and undeveloped appearance in Fischer’s E major fugue.²⁰ Example 2 (g) shows the hexachordal inversion and the manipulation of the first note of the subject according to the principles of solmization²¹ and *inganno*.²² Hexachordal inversion neatly places the major and minor modes in direct relationship. This time-honored technique can be seen in Gregorian chant and in Lohet’s fugue (see Part I).²³

Fischer’s Fugue in E major

The idea of analyzing fugal devices is, of course, not new. Mattheson, in his *Der vollkommene Capellmeister* (1739), for example, categorizes fugues into genres and subgenres of counterpoint according to their technique rather than the style of music that results.²⁴ Mattheson’s eighteenth-century approach contrasts strongly and usefully with the formal analysis of academic fugue writing adopted since the nineteenth century. Bach was conscious of his position as a pioneering composer situated between his inherited contrapuntal tradition and the rapid changes current in musical style. The E major prelude and fugue (BWV 878) reconciles these seemingly opposing poles by aligning two stylistically contrasted pieces: galant modernity alongside the “purest example of *the stile antico* in WTC.”²⁵ Nevertheless, BWV 878/2 is a progressive work that conceals its radical agenda within a serene, non-instrumental exterior. In doing so, Bach was critically assimilating recent models as well as older ancestors. His eighteenth-century models include Fux’s demonstration fugues and Fischer’s *Ariadne musica*. The latter was an important source of building materials for many of the preludes and fugues in Bach’s two WTC projects.

BWV 878/2 is closely modeled on Fischer’s E major fugue and “the relation of the two in fact goes much deeper than mere identity of subject and key.”²⁶ However, beyond the similarities, Bach transforms Fischer in every case. Fischer’s version of the subject (ten half notes

long) is less adaptable to varied *stretti*. His fugue is locked into a rigid duple meter by its whole notes and limiting the *stretto* between paired voices to a distance of four half notes. By reverting to the older (six-half-note-long) theme, Bach avoids Fischer’s dull foursquareness. Bach, Lohet, and Fux adopt the shortened form of the subject (six half notes), which enables them to reduce the *stretto* distance, and for Bach to deploy even more options, including diminution and continuous motivic evolution.²⁷ Bach’s fugue is nearly twice the length of Fischer’s with twice as many entries, and Bach reverts to a larger, antiquated bar size.²⁸

Some ideas central to BWV 878/2 are suggested but not developed in Fischer’s fugue:

- » Ascending order of voices in the exposition.
- » Quarter-note countersubject (tenor, bars 35–37).
- » Rising and falling chromatic notes (bars 18–20 and 46 to the end).
- » Upward and downward steps, and scale-building based on the tetrachord.
- » Subject in parallel thirds and therefore in both major and minor modes simultaneously.
- » High soprano entry (bars 32–36).

Fischer fails to develop the traditional polyphonic two-part unit explored by Lohet, Gibbons, and Bach, and lacks a regular countersubject, triple counterpoint, variation, or diminution, while these traditional elements come to the fore in BWV 878/2.²⁹ Like Lohet, however, Fischer achieves a final hidden/improvisers statement of the theme between the alto, bass, and tenor from bar 45 (alto e¹–bass F-sharp–tenor a to the end).

Performing BWV 878/2

The character of BWV 878/2 is defined by its musical ideas and vocal texture. The choice of key resonates with Bach’s other E major pieces, from the Inventions and Sinfonias and WTC I to the closing chorus of the first part of the Matthew Passion. In the eighteenth century, the characteristics of the key of E major were understood to be wide-ranging, even contradictory. About E major, Johann Mattheson in *Das neu-eröffnete Orchestre* (1713) says:

Expresses a desperate or wholly fatal madness incomparably well; it is most suited for the extremes of helpless and hopeless love, and under certain circumstances is so biting, severing, sorrowful, and penetrating that it can be compared with nothing but the fatal separation of the body and soul.

Jean-Philippe Rameau notes its “grandeur and magnificence” and suitability for “tender and gay songs” (*Traité de l’harmonie*, 1722).³⁰ The contrast between the prelude and fugue pair, BWV 878, exemplifies that range.

Albert Schweitzer sought to explain the character of Bach's text-less instrumental pieces in his sacred music. His method involved defining the character of vocal movements from their texts and musical material, and then applying those specific expressive meanings to non-vocal music that shares the same or similar musical themes.³¹ He was also sensitive to motivic articulation and large-scale structure. Regarding the formal shape of BWV 878/2, Schweitzer suggests that the middle section (bars 23 to 34) be played *piano* and the outer parts *forte*,³² while Donald Francis Tovey prefers a cumulative crescendo such as he could hear in the "Gratias agimus" and "Dona nobis pacem" fugues of the Mass in B minor BWV 232.³³ Paul Badura-Skoda sees parallels with the *stile antico* counterpoint of the opening "Credo" of the Mass in B minor,³⁴ a movement that amalgamates tradition with modernity just as the Prelude and Fugue in E major BWV 878 keeps them separate. Samuel Wesley (1766–1837), in a letter dated 1808 defending Bach against Handel, refers to BWV 878/2 as the "Saints in glory" fugue.³⁵

Interpretative clues may be found in the style, sources, and internal evidence of BWV 878/2. Its vocal style is connected to the motet and the *gebundener Stil* (tied, or bound style) of certain liturgical organ music. Organ performance is, of course, possible, and some sources indicate limited use of the pedals.³⁶ A few scribes subdivided the bars into whole-note units because they presumably found it difficult to align the parts vertically. However, the bar size seems to be a specific indicator of the motet style (just as Fischer's 2/2 notation is instrumental). Bach used it in several late keyboard pieces, for example in the E-flat major organ fugue BWV 552/2, which concludes the third part of the *Clavier-Übung* (1739), as well as in a number of organ chorales. The almost complete absence of ornamentation in BWV 878/2 (just one trill, in the tenor, bar 15, possibly an afterthought) adds to the motet-like appearance of the score. Contemporary players may well have added ornaments in performance, however. Gottlieb Muffat's own *ricercatas* and his copies of fugues by Froberger provide direct evidence in German sources, and exemplars of advanced ornamentation in *stile antico* fugue.³⁷ Regarding tempo, projection of the very large hypermeter rather than metronomic divisions of pulse will best convey the polyphonic weave. In April 1782, when W.A. Mozart was making string arrangements of WTC fugues for Baron von Swieten's Sunday concerts, he stipulated that his own fugues should "not be played too fast."³⁸

BWV 878/2 had a strong presence in the later eighteenth century, thanks to Bach's pupils and an international circle of devotees. Beethoven's first teacher, Christian Gottlob Neefe (1748–1798), a composer who wrote in the clavichord style pioneered by C.P.E. Bach,³⁹

published an account of placing WTC in front of his eleven-year-old pupil. Beethoven's biographer, Anton Schindler, recounts Beethoven's playing WTC at one of Baron von Swieten's concerts in Vienna "by way of final prayer."⁴⁰ Beethoven was introduced to Froberger's contrapuntal works by his counterpoint teacher, Johann Georg Albrechtsberger (1736–1798).⁴¹ Later, Beethoven copied the subject-and-variation technique (bars 23–27) of BWV 878/2 in a sketchbook from 1809 in preparation for teaching Archduke Rudolph.⁴² Echoes of Bach's fugue can be heard in the opening-movement fugue of his String Quartet No. 14 in C-sharp minor, Op. 131.

BWV 878/2 and the Clavichord

The clavichord's strong connections to contrapuntal teaching and performance make it very likely that BWV 878/2 and many of Bach's other polyphonic fugues were performed on the clavichord in the eighteenth century.⁴³ The type of clavichord that suits this fugue best is, essentially, any clavichord that allows vocal counterpoint to be shaped and sustained. Smaller instruments often do this better than larger ones and, paradoxically, can have a more singing and brighter tone, which can be musically very satisfying for counterpoint. There is only one place in BWV 878/2 that cannot be played on a diatonically fretted instrument with Ds and As unfretted—the suspension between treble d¹ sharp and e¹ in the soprano and alto voices at the start of bar 11.⁴⁴ The clavichord by Johann Jacob Donat dated 1700 is an early example of this type of instrument. It has a compass of C to c³.⁴⁵ Unfretted clavichords avoid the technical limitations of fretted instruments. As early as 1693, Fischer's friend, Johannes Speth, stipulated an unfretted instrument for clavichord performance of his *Ars magna Consoni et Dissoni* (Augsburg, 1693). No witness of his instrument survives, however, and the oldest surviving unfretted clavichord is the Michael Heinitz of 1716.⁴⁶ The larger, unfretted clavichords of the later eighteenth century often have a longer sustain and fuller tone, although their key geometry can make the control of complex counterpoint very difficult.⁴⁷ Joris Potvlieghe has trawled the eighteenth-century sources to reconstruct the importance of the clavichord—especially the unfretted clavichord—in Bach's life.⁴⁸

Bach engaged with the past "in a manner that was both mindful of tradition and transforming of its expressive capacity."⁴⁹ One consequence of his acute historical awareness—Theodor Adorno called it his "genius of meditation"⁵⁰—is that the music of the past (Froberger, for example) can sometimes sound similar to Bach.⁵¹ Scholars of counterpoint have noted the stylistic similarities between Bach and Cabezón,⁵² and I have proposed

that Gibbons and Lohet share the same nexus of polyphonic art.

The clavichord also straddles these historically discrete but stylistically related repertoires. Of nineteenth-century keyboard music, Paul Simmonds makes the interesting point about performing Mendelssohn's piano music on the clavichord, which he finds idiomatic even though "it is highly improbable that it was his [Mendelssohn's] chosen performance medium."⁵³ Convincing arguments can be proposed for the performance of BWV 878/2 on the clavichord, but the proof of any musical success in so doing—be it serene or glorious, or both—lies, ultimately, in the performance, the performer, and the instrument.

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NOTES

- 1 Terence Charlston, "Patterns of Play: Orlando Gibbons, Simon Lohet, and J.S. Bach's Fugue in E Major (BWV 878/2): Part I," *Clavichord International* 23, no. 2 (November 2019), 39–48.
- 2 Staatsbibliothek zu Berlin (Amalienbibliothek), Am.B 55, Faszikel 2, 38–41. Scribe: Anon. 402 (Kast) = Schober (Berliner Kopist). It can be viewed online at <https://digital.staatsbibliothek-berlin.de/werkansicht/?PPN=PPN835133761>.
- 3 Mozart makes only one fundamental change to Bach's counterpoint: He replaces the last three notes in the bass part of bar 24 (F-sharp–G-sharp–A) with a G-sharp whole note sounding one octave higher above the tenor (viola). Perhaps surprisingly, in the tenor part between bars 37 and 38, Mozart copies his exemplar exactly, and does not move the first two notes of the diminished theme (E–D-sharp) an octave higher to restore melodic integrity and remove the octave displacement required by keyboard performance.
- 4 I have taken Kerman's description of BWV 878/2 as my starting point. Joseph Kerman, *Art of Fugue: Bach Fugues for Keyboard, 1715–1750* (Berkeley: University of California Press, 2005), 75–84. It is freely available online at <https://www.luminosoa.org/site/books/10.1525/luminos.1/>. Equally useful are David Ledbetter, *Bach's Well-tempered Clavier: The 48 Preludes and Fugues* (New Haven, CT: Yale University Press, 2002), especially 278–281 (to fill in the historical detail) and Joseph Groocock, "Fugal Composition: A Guide to the Study of Bach's '48,'" in Yo Tomita, ed., *Contributions to the Study of Music and Dance* 65 (Westport, Connecticut/London: Greenwood Press, 2002), 111–114 and 210–211, footnotes 9–20.
- 5 Groocock, 2–3 and Ulrich Siegele, "On J. S. Bach's Composition Technique," *Understanding Bach* 11 (2016), 72–73, available at <https://bachnetwork.co.uk/ub11/ub11-siegele.pdf>.
- 6 See Groocock, 109–130.
- 7 Groocock, 113.
- 8 C.P.E. Bach writing to Forkel. Hans T. David and Arthur Mendell, *The New Bach Reader*, rev. and expanded by Christoph Wolff (New York and London: Norton, 1998), 397; Alfred Mann, *The Study of Fugue* (New Brunswick, NJ: Rutgers University Press, 1958), 141.
- 9 Ledbetter, 46 and 73f.
- 10 Mann, 86f, ex. 48; 89f, ex. 53; 97f, ex. 65; 102, ex. 69; 105f, ex. 71; 114, ex. 83.
- 11 Compare the second section of Froberger's Ricercar (FbWV 404).
- 12 Kerman, 83.
- 13 Kerman, 77.
- 14 Cecil Gray, *The Forty-Eight Preludes and Fugues of J. S. Bach* (London: Oxford University Press, 1938), 105.
- 15 Kerman, 77.
- 16 Donald Francis Tovey, "Commentary" in Richard Jones, ed., *The Well-Tempered Clavier* (London: Associated Board of the Royal Schools of Music, 1994), 2:74f and other commentators find a recognizable countersubject (43–5 and 6) with resemblances later on.
- 17 Compare Fantasia II (FbWV 202) and Ricercar IV (FbWV 404). Terence Charlston, "Searching Fantasy: Froberger's Fantasias and Ricercars Four Centuries on," *Journal of the Royal College of Organists* 10 (December 2016), 13.
- 18 Kerman, 87.
- 19 C. Hubert Parry, *Johann Sebastian Bach: The Story of the Development of a Great Personality* (New York: Putnam, 1909), 491.
- 20 Groocock, 112. About the "mi/fa" idea, see Eric Chafe, *Analyzing Bach Cantatas* (Oxford: Oxford University Press, 2000), 80–82.
- 21 Solmization symbols are an early form of tonic-sol-fa: a method for sight-reading attributed to the tenth-century monk Guido of Arezzo. The hexachord was the foundation of all contrapuntal melody. In addition to the "Guidonian Hand," Guido's sight-reading method employed the monochord, an ancient mathematical instrument and forerunner of the clavichord. Guido's *Micrologus* (no longer extant) does not mention the natural hexachord by name. Information about it is derived from eleventh-century commentaries of Aribo and Johannes Cotto, and later writers, including Hieronymus de Moravia, Elias Salomo, and Engelbert of Admont. Robert W. Wason, "Musica practica: Music Theory as Pedagogy," in Thomas Christensen, ed., *The Cambridge History of Western Music Theory* (Cambridge: Cambridge University Press, 2002), 46–77; David Cohen, "Notes, Scales, and Modes in the Earlier Middle Ages," in Thomas Christensen, ed., *The Cambridge History of Western Music Theory* (Cambridge: Cambridge University Press, 2002), 341–6; Stefano Mengozzi, *The Renaissance Reform of Medieval Music Theory: Guido of Arezzo between Myth and*

- History (Cambridge: Cambridge University Press, 2010), 87–90.
- 22 Defined by Artusi in 1603, “The *inganno* occurs whenever one voice part, beginning a subject, is succeeded by another that does not use the same melodic intervals, but nevertheless retains the same names of hexachord syllables....” Giovanni Maria Artusi, *Seconda parte Dell’Artusi* (Venice, 1603), 45, as cited in Roland Jackson, “The Inganni and the Keyboard Music of Trabaci,” *Journal of the American Musicological Society* 21 (1968), 204.
 - 23 The theme of Fuga Undecima is the hexachord inversion of the theme of his Prima Fuga (a–g–e–f–g–a).
 - 24 Laurence Dreyfus, *Bach and the Patterns of Invention* (Cambridge: Harvard University Press, 1996), 141.
 - 25 David Schulenberg, *The Keyboard Music of J.S. Bach* (New York: Schirmer Books, 1992/2006), 255.
 - 26 Ledbetter, 280.
 - 27 Lohet uses Fischer’s form of the theme once in the alto voice of his fugue (bars 2–3), and Bach uses it his *Kanon zu sechs Stimmen* (BWV 1076).
 - 28 Fischer notates his fugue in 2/2, Bach in 4/2. Some scribes of BWV 878/2 subdivided the bars in order to help align notes and rhythms.
 - 29 Fischer avoids diminutions and inversion, except perhaps for an (accidental) occurrence in the tenor in bars 26 to 30, while Bach develops them to a much greater extent in the second half of BWV 878/2.
 - 30 Rita Steblin, *A History of Key Characteristics in the Eighteenth and Early Nineteenth Centuries* (Rochester: University of Rochester Press, 1983/2002), 251.
 - 31 Albert Schweitzer, *J. S. Bach*, Ernest Newman, trans. (London: Breitkopf & Härtel, 1911), 1:338–9 and 2:52.
 - 32 Schweitzer, 1:360.
 - 33 And in its early version, BWV 27. Tovey, 2:74f.
 - 34 Paul Badura-Skoda, *Interpreting Bach at the Keyboard* (Oxford: Oxford University Press, 2001), 33.
 - 35 Letter to Benjamin Jacob, dated “Camden Town, 19 October [1808].” Philip Olleson, *The Letters of Samuel Wesley: Professional and Social Correspondence, 1797–1837* (Oxford: Oxford University Press, 2001), 82.
 - 36 Ledbetter, 86.
 - 37 Staatsbibliothek zu Berlin, Preußischer Kulturbesitz, Musikabteilung, D-B Mus. ms. 6712, the organ book of Elias de Silva (Innsbruck, private collection, written after 1702) and *ricercatas I–III* in Erich Benedikt, ed., *Gottlieb Muffat, 32 Ricercatas & 19 Canzonas: Vol. 1: Ricercatas I–XIX* (Wien: Doblinger, 2003). Alison Dunlop, *The Life and Works of Gottlieb Muffat (1690–1770): Part I: A Documentary Biography. Part II: Catalogue of Works and Sources* (Wien: Hollitzer Verlag, 2013), 523. Charlston, “Searching Fantasy,” 15; Ledbetter, 87.
 - 38 Letter to his sister dated 20 April 1782, *The New Bach Reader*, 489; Yo Tomita, “A New Light Shed on the Origin of Mozart’s KV 404a and 405 through the Recent Source Study of J.S. Bach’s Well-Tempered Clavier II,” <http://www.music.qub.ac.uk/tomita/bmc1996/KV405.html>.
 - 39 Bernard Brauchli, *The Clavichord* (Cambridge: Cambridge University Press, 1998), 221.
 - 40 *The New Bach Reader*, 489–490.
 - 41 Mann, 214–219.
 - 42 Beethoven-Haus Bonn, Sammlung H. C. Bodmer, HCB Mh 46d, 2. The sketch is available online at https://da.beethoven.de/sixcms/detail.php?&template=dokseite_digitaales_archiv_de&_dokid=ha:wm373&_seite=1-2.
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 - 44 Richard Loucks, “Was the ‘Well-Tempered Clavier’ Performable on a Fretted Clavichord?” *Performance Practice Review* 5, no. 1 (Spring 1992), available at <https://scholarship.claremont.edu/cgi/viewcontent.cgi?referer=https://www.google.com/&httpsredir=1&article=1081&context=ppr>.
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 - 46 Dresdener Akademie für Alte Musik, Kloster Marienthal, Ostritz.
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 - 50 Ibid.
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