Patterns of Play: Orlando Gibbons, Simon Lohet, and J.S. Bach's Fugue in E Major (BWV 878/2)

Part I

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Among the many crowning achievements of the Book II of the *Well-Tempered Clavier* (WTC), the Fugue in E major, BWV 878/2, has often been singled out for its *stile antico* counterpoint, concision, clarity of intent, and seamless formal perfection.[1] A select list of epithets might include "singable" (Donald Tovey, 1924), "powerful and arresting" (Cecil Gray, 1938), "unique among Bach's whole life's work" and Raphael-like "purity and beauty" (Hermann Keller, 1965), "immutable purpose," "one of the clearest [fugues] in intention ever written," and "the haunting quality of the fugue possesses the mind when the concrete steps of Bach's high argument remain imperfectly grasped" (A.E.F. Dickinson, 1956).[2] The last comment ends where I would like to begin, by questioning what we may have missed, and continue to miss, in such a singular piece that can overwhelm us by its beauty, completeness, and plain over-familiarity. This is the first part of a two-part article that will probe the musical and historical detail of this remarkable and unquantifiable fugue, reconsider it against the contrapuntal and performance traditions leading up to Bach's time, and relate the insights gained to our own performing and listening experience, particularly regarding the clavichord.

The author's transcription of the *Undecima fuga* by Simon Lohet and the Fantasia in C by Orlando Gibbons can be found on the accompanying music insert.

The Clavichord and Counterpoint

The clavichord is a very appropriate and successful vehicle for the performance of counterpoint. Its sound and touch encourage attention to dynamic shaping and the interplay of lines, and the difficulties encountered extend the technical limits of both instrument and player. The vocal qualities of the older polyphonic-style fugues (the fantasia and ricercar) and the more overtly instrumental-style fugues (canzona and capriccio) suit its dynamic range, articulation, and potential for *cantabile* playing. While individual clavichords vary greatly according to type, design, set-up, and voicing, the possibility for dynamic variety in performance holds for all.

How, then, might historical players have phrased and nuanced their melodies? What qualities might they have prized when playing counterpoint on the clavichord? Since the historical treatises about keyboard playing (concerned mainly with technical issues) remain silent about this fundamental aspect of musical performance, we must look elsewhere for guidance.

Evidence of instrumental and vocal phrasing first begins to appear in keyboard music in the early seventeenth century, for example with Frescobaldi's exhortation to breathe and take time in his toccatas,[3] and Scheidt's adoption of slurs as in string bowing.[4] Similarly, changes of dynamic were occasionally indicated by words[5] and later by hairpins (from 1712), but these were exceptional.[6] About the subtleties of actual performances, remarks such as Roger North's recommendation "to fill, and soften a sound, as shades in needlework"[7] and Carl Friedrich Cramer's "[a]ll who have heard [C.P.E.] Bach playing the clavichord must have been struck by the continual refinement"[8] merely underline the paucity of hard evidence of what this meant in practice.

From its early history, the clavichord was used to teach performance and composition side by side as a guiding-light to instruct extemporization, particularly the improvisation of fugues. Tomás de Santa María's *Arte de Tañer Fantasia* (Valladollid, 1565) is a classic text in this regard. From it we may conclude that in the armory of keyboard instruments available to the Renaissance performer, the clavichord was considered particularly well suited to guide and instruct the correct playing of fugue. Many historical studies of counterpoint, including ones written in the Baroque period, combine observations about contrapuntal practice with instrumental technique and improvisation.[9] Today, these books are often viewed as theoretical rather than practical treatises, and their usefulness to the performer is easily overlooked. Not only do they supplement the scant information in the keyboard treatises of the period, they form a series of progressive tutors, with each generation adding new knowledge. By examining the theoretical basis of counterpoint alongside a representative sample of contemporary fugues selected for their specific melodic or motivic similarity we can begin to infer the interpretative questions surrounding fugue performance in general.

Orlando Gibbons's Fantasia

BWV 878/2 is an eighteenth-century version of the seventeenth-century ricercar. To illustrate its contrapuntal milieu, I discuss two much earlier fugues: the Fantasia in C by Orlando Gibbons (found in sources probably dating from the 1620s to the 1650s) and a fugue by Simon Lohet, which was published in German organ tablature in 1617.[10]

The Gibbons fantasia is an excellent example of how the tradition of improvisation was firmly rooted in contrapuntal thought and vice versa. It demonstrates the development of the fugue to the early seventeenth century and what could be achieved in the hands of a great composer in England. There is no evidence that Johann Sebastian Bach knew this piece or any of Gibbons's music, although other keyboard music by Gibbons was copied into at least one seventeenth-century continental source, perhaps via John Bull.[11] I would like to suggest, however, that had Bach's German predecessors and contemporaries come across it, they would have recognized and admired its subtle combination of knowingly concealed contrapuntal artifice and continuous forward momentum. The dovetailing of entries, variation techniques, diminution, close imitation, stretto, and the use of interrupted cadences all ensure a powerful, single arch of construction prolonging the expectation of resolution until the final C major chord.

(a) Opening

(b) Ornamentation, inversion and diminution

Cambiata figure

Example 1.

The Fantasia in C is built from the three ideas heard at the outset in the first two bars (see Example 1a). These are a rising tetrachord, which omits the third note (x), a complete falling tetrachord (y), and a suspension figure (z). These ideas combine vertically in invertible counterpoint and horizontally such that x + y also happens to be the same as the subject of BWV 878, but in the rhythmic form used in the *Ariadne Musica* of Johann Caspar Ferdinand Fischer, the assumed precursor of Bach's Fugue in E

major.[12] Gibbons conceals the primacy of the x + y motive by beginning as a double fugue and then disguising the three-note x within continuous figuration.

I have divided Gibbons's fantasia into two sections (see Table 1). The opening exposition is succeeded by two stretti with pairs of voices in close imitation, each leading off with the x + y theme, and the second stretto ornamenting it by filling in the third (see Example 1b). The second section develops sequentially and in such an improvisatory manner that I have chosen to call these passages improvisations. They might also be called episodes, except that they fail to lead to a restatement of the x + y theme or a recapitulation of stretti from section 1 in their original, longer note values. The first improvisation (bars 20 to 26) reduces the texture and tessitura, suggesting it should begin more quietly. It develops the eighth-note motion and melodic patterns initiated by the cambiata figure first heard in stretto 1—an inversion of x + y (see Example 1b)—and these are maintained to the end of the piece invigorated with sixteenth notes. The start of the second improvisation is announced by the first of two dramatic interrupted cadences, a rising phrase (left hand, bar 26), which is immediately taken up in the right and a repeat of this process up a perfect fifth. The music ascends to the top note, a^2, in bar 32, the top note of many instruments at the time (and also the highest note of BWV 878/2), implying a crescendo. This high note is reiterated in the third improvisation (bar 38) to signal the highest point of tension and the start of a gradual melodic descent towards the conclusion (the fourth improvisation). A dynamically and vocally nuanced performance will best convey the broad arch of the improvisatory second section. The overall bipartite scheme we might term a fugue and prelude.

I have described this process at length to highlight Gibbons's economic use of his already minimal material, particularly in his second section. The principle behind his strategically planned *faux*-extemporization as well as some of the textures (the harmonization of scales in the concluding passages, for example) stem from the tradition of improvised counterpoint in ecclesiastical vocal training in England, and keyboard playing as documented by Santa María.[13] Gibbons's fantasia demonstrates how to display a particular family of melodic motives using the contrapuntal techniques that suit them best. The devices deployed can be summed up as follows:
» maintaining a close, sometimes indistinguishable relationship between subject and answer
» ensuring that all material is derived from the three main motives
» invertible counterpoint
» stretti between all voices, usually in pairs
» reduction of distance between pairs of voices in

Location (bar/beat)	Description	Key/cadence	
1–8^1	Section 1	Exposition	C
7^3–15^3		Stretto 1	C --> G
15^2–20^3		Stretto 2	G --> C
20^3–26^3	Section 2	Improvisation 1	C --> a
26^3–36^1		Improvisation 2	F --> C --> G --> a
36^1–41^3		Improvisation 3	a --> C
41^3–46		Improvisation 4	C --> F --> a --> C

Table 1. The Form of the Fantasia in C by Orlando Gibbons.

stretto/imitation over the course of the piece, from four half notes to two and then one half note
» melodic inversion (e.g., the cambiata figure, see Example 1b), and tetrachords, generally
» diminution of note duration
» variation by ornamentation (see Example 1b)
» extending the tetrachord into the hexachord (and ultimately the eight-note diatonic scale)
» voice overlap at perfect cadences
» avoidance of perfect cadences to add tension
» free episodes or "improvisations"

These devices were widely used from at least the sixteenth century onwards and were ubiquitous in the generality of keyboard composition and improvised performance. They would have been expected by theoretical practice and good compositional taste, and we will encounter them again in Lohet's *Undecima fuga* and BWV 878/2. Perhaps the fantasia is a written-down improvisation. Certainly, the fluidity of Gibbons's counterpoint and his economy of material and means suggest a fluent improviser. This would be quite consistent with what we know about the man and the high esteem in which his contemporaries held his playing.[14] But how might this connect with the clavichord?

The clavichord was known and played in England for at least two centuries before Gibbons wrote his Fantasia in C.[15] At least one major figure of the sixteenth century, Santa María, specifically taught polyphonic performance on the clavichord and, if such ideas did not already flourish in England, his contemporary, the celebrated Spanish keyboardist Antonio de Cabezón, might have brought them to England when he came to London on the occasion of the marriage of Mary Tudor in 1554. Historically, then, the clavichord was closely associated with contrapuntal music and is a plausible instrument for the English Virginalists' repertoire, particularly for the types of polyphonic music often presumed to be for the organ.

Interestingly, Santa María expected the clavichordist to be able to sustain every line of counterpoint in a fugue. His method pays particular attention to tied notes and suspensions, which must continue to sound when notes around them are being struck.[16] Gibbons's fantasia is full of such moments, in which the skill of maintaining a sustained tone described at length by Santa María can be attempted on the clavichord. By being alert to the shaping and articulation of the three motives x, y, and z, the lines of the polyphonic fabric emerge with more coherence, and the broader architecture gains space and its true proportion.

The interpretation of the two ornament symbols—the single and double stroke—remains unclear. They occur in profusion in the early source given here and include a possible third form—a single stroke preceded by a small direct (squiggle)—which can be seen in the first tenor note of bar 9, although this may be a scribal error. In the early seventeenth century, the single stroke perhaps indicated an approach to the written note, either from above or below, usually by one note stepwise from above, but also by several stepwise notes from below.[17] The double-stroke symbol invites a spectrum of interpretations, from short single grace notes to trills of

variable length beginning on the main note or the chosen (upper or lower) auxiliary.[18] However, these ornament symbols have important implications for performance beyond their interpretation as embellishments. They often appear to highlight the main contrapuntal voice, as in the left hand in bars 31 to 33 and the right hand in 42 to 44, and might also indicate patterns of accentuation to be maintained in subsequent unornamented passages (LH bars 19³– 25³) or in connection with strong and weak beats (good and bad notes), implying perhaps some special shaping effect by softening or accentuation (bars 28–30).

The subject of BWV 878/2

The subject of BWV 878/2 consists of six notes. It is a ricercar-type subject and "the simplest possible kind of theme" (Roger Bullivant).[19] Bach most likely had the seventh fugue from *Ariadne musica neo-organoedum* (1702) by J.C.F. Fischer in mind when writing it. By shortening the length of the fourth and fifth notes of Fischer's subject from whole notes into half notes, Bach returns to an older form used in many fugues, including two by Johann Jacob Froberger (see Example 2). The reduction of the subject length by two half notes, however, renders comparison with Fischer's stretto types (i.e., the time distance between pairs of entries) more difficult.

The roots of this melody, however, are much older than Fischer's collection and can be found in several

(a) J.S. Bach, Fugue in E major, BWV 878/2, opening

WTC, no. 9

(b) J.C.F. Fischer, Fugue in E major, opening

Alla breve

*Ariadne musica* (1702), no. 7

Example 2.

Gregorian plainsong melodies (see Example 3). The hymn "Lucis Creator optime" contains the same pitch profile. It was sung regularly in the Roman Office and organists frequently improvised upon it. Not surprisingly, many liturgical organ settings were composed and examples of these have survived. "Ad regias Agni dapes" is another hymn that shares the same opening profile, as does the second phrase of "A solis ortus cardine." The latter, a third-mode hymn melody, found its way into protestant

worship in Luther's translation "Christum wir sollen loben schon."[20]

The offspring of these ancient melodies constitute a family of subjects or resemblances. When they occur in

(a) Lucis Creator optime (mode 8)
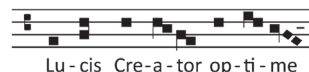
Lu - cis Cre - a - tor op - ti - me

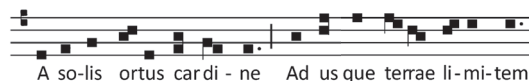*Antiphonale monasticum*, Tournai: Desclée & Com 1934, p. 128

(b) Ad regias Agni dapes (mode 8)

Ad re - gi - as Ag ni dapes, Sto-lis a - mi-cti can di dis,

Liber usualis, Tournai: Desclée & Com 1934, p. 812

(c) A solus ortus cardine (mode 3)

A so-lis ortus car di - ne   Ad us que terrae li - mi-tem,

Liber usualis, Tournai: Desclée & Com 1934, p. 400

(d) A solus ortus cardine/Christum wir sollen loben schon, Luther (1524)

Christum wir sol - len lo - ben_ schon, der rei - nen Magd Ma - ri - en_ Sohn,

Lohr, Ina. Solmization und Kirchentonarten. Zürick: Huf & Co., 1948. 4/1981, p. 59

Example 3.

fugues, they do so in contrapuntal combinations with other motives, forming what have been called polyphonic melodies in two or more parts.[21] We have already seen this combinative characteristic in the fantasia by Gibbons. Tracing the progress of a particular family of polyphonic melodies through the surviving music and theoretical writings reveals a fascinating network of common practice and influence. Johann Jacob Froberger and Johann Joseph Fux are probably the most important figures after Fischer to have potentially influenced BWV 878/2—Froberger through his Fantasia II (FbWV 202) and Ricercar IV (FbWV 404), and Fux through his monumental counterpoint treatise *Gradus ad Parnassum* first published in 1725, which Bach owned (see Example 4).[22] Froberger's fugues follow the example of previous generations, most likely via Frescobaldi, with whom he probably studied, and potentially through works like Fasolo's *Annuale* of 1645, which was widely used and copied in Austria and southern Germany. In the sixteenth century, the

composer Girolamo Cavazzoni and the theorist Zarlino worked out these polyphonic melodies in their own style.[23] Notice how the opening two voices of Cavazzoni's "Hymnus Lucis Creator optime" interchange the contrapuntal melodies that begin Gibbons's fantasia, and that

Zarlino's "Vexilla Regis prodeunt" uses a version of the Gregorian hymn tune which matches the profile of Bach's fugue subject.

The counterfugues by Froberger (Ricercar IV, FbWV 404), Zarlino, and the Cavazzoni Recercar (Examples 4b,

(a) J.J. Froberger, Fantasia II, FbWV 202, opening

Libro Secondo (1649). A-Wn Mus. Hs. 18706, fol. 29v

(b) J.J. Froberger, Ricercar IV, FbWV 404, opening

Libro di Capricci, e ricercati (c. 1658). A-Wn Mus. Hs. 16560, fol.37v

(c) G. Frescobaldi, Hinno della Domenica, Terzo Verso, opening

(RH)

(LH)

Toccatas II (1627)

(d) G. Cavazzoni, Recercar Quintodecimo [à 3], opening

(Tenor)   (Cantus)

(Bass)

Fantasie ... (Venice: Gardano, 1559)

(e) G. Cavazzoni, Hymnus Lucis Creator optime, opening

Intavolatura... (Venice, 1543). Ed. Mischiati. (Schott, 1961), Vol. 1, p. 23

(f) G. Cavazzoni, Hymnus Pange lingua gloriosi, bars 17–19

Intabulatura... (?1543). Ed. Mischiati. (Schott, 1961), Vol. 2, p. 42

(g) G. Zarlino, Vexilla Regis prodeunt, opening

Canto

Alto

[Cantus firmus]

Basso

Le Istitutioni harmoniche... (1558), chapter 65, p. 322

(h) G. Zarlino, Essemplio delle Imitationi Sciolte (free imitation), opening

Parte acuta

Parte grave

Le Istitutioni harmoniche... (1558), chapter 52, p. 263

(i) J.J. Fux, [Example of double counterpoint for completion by the student]
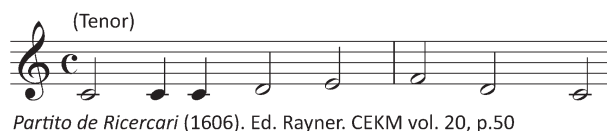
Gradus ad parnassum (1725), p. 183

Example 4.

h, and d) illustrate the importance of melodic manipulation by inversion.[24] The inversion of the first four notes of our theme and a complete retrograde of all six notes were known as fugue subjects in their own right, as in Cima's "La scabrosa, canzon 15" and "La doppia, canzon 12," respectively (Example 5). Transformations of motives by inversion and retrograde motion were also common contrapuntal devices within a single piece. Bach, writing at the end of the *stile antico* period, choses a conventional, single-subject exposition for the opening of BWV 878/2 and reserves the inverted form of the subject for the second half, where it appears with diminished notes values.
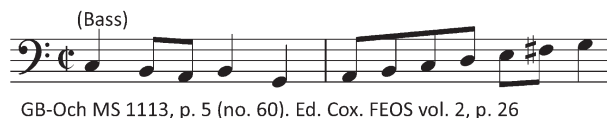
(a) G.P. Cima, La scabrosa, canzon 15, opening

Partito de Ricercari (1606). Ed. Rayner. CEKM vol. 20, p.57

(b) G.P. Cima, La doppia, canzon 12, opening

Partito de Ricercari (1606). Ed. Rayner. CEKM vol. 20, p.50

(c) T. Tallis, Alleluia: Per te Dei Genitrix, opening

GB-Och MS 371, fol. 5. Ed. Cox. FEOS vol. 1, p. 28

(d) Anonymous, Voluntary, opening

GB-Och MS 1113, p. 5 (no. 60). Ed. Cox. FEOS vol. 2, p. 26

Example 5. Variation, inversion and retrograde.

Students of motivic resemblance await a comprehensive thematic database of keyboard music from the sixteenth to eighteenth centuries, which would allow fast cross referencing of fugue subjects. Virginia Brookes's thematic catalogue of *British Keyboard Music to c. 1660* shows twenty-one pieces with the same profile as the six-note subject of BWV 878/2 and eight with its inversion.[25] The prime and inverted form feature in some very fine English fugues, including works by Benjamin Cosyn, Orlando Gibbons, James Harding, Nicholas Strowgers, Thomas Tallis, and Thomas Tomkins. Five of the pieces are contained in the second volume of the *Faber Early Organ Series*, edited by Geoffrey Cox. The opening themes of "Alleluia: Per te Dei Genetrix" by Tallis and an anonymous

voluntary are shown as an example of each type (see Example 5c and d).

Resemblances between melodies are an inevitable consequence of the limited number of note combinations possible from the hexachord or scale. Gregorian chant is full of them. Notice, for example the inversion of the initial five notes of the hymn "Ad regias Agni dapes" in the second to sixth notes of its second phrase (see Example 3d). Melodic resemblance is, however, fundamental to the repetition of the subject in fugal composition and much more significant when it appears to dictate the thematic transformations of non-subject material. In fugues where this occurs, a single idea can generate both primary themes (initial and later subjects) and secondary material (episodes and free counterpoint) and provide ideas for a continuous evolution of motives influencing tonality and structure. Whether these observable features are the result of a conscious decision on the part of the composer, or a subconscious event, as might occur in improvisation, is debatable. They are, however, perfectly audible and therefore to be interpreted and performed.

Simon Lohet's fuga

The Flemish organist Simon Lohet was born before about 1550. He worked for the Württemberg court at Stuttgart from 1571 until his death in 1611 and traveled widely in the Low Countries and Italy.[26] His *Undecima Fuga* is one of a collection of twenty short fugues written some time before its posthumous publication in the third section of *Nova musices organicae tabulatura* by Johann Woltz in Basel in 1617.[27] Woltz announces Lohet's fugues (nos. 51–70 in his publication) in warm terms to his "Musices amatory."

> It is a pleasure to append hereto the following fugues, which music lovers will enjoy, communicated some time ago by the famous Mr. Simon Lohet, once the very celebrated court organist at Würtemberg, to honor his memory.[28]

They appear alongside fifty *canzoni alla francese by* Italian musicians including Antegnati, Merulo, Banchieri and the two Gabrielis and six of his fugues (nos. 1–4, 7 and 18) also survive in manuscript.[29]

Lohet's fugues provide a variety of different imitative models using standard ricercar and canzona subject types (including our theme, the falling tetrachord and the six-note hexachord), usually within a single section, and including stretto, diminution, and counterfugue. All eight monothematic fugues are based on ricercar-like themes. In a lecture entitled "The Evolution of Fugue" delivered in 1898, J.S. Shedlock drew attention to the

thematic resemblance with BWV 878/2 and the "breadth and dignity" of Lohet's eleventh fugue.[30] The similarities are indeed close. Each is in four parts and develops its single theme with stretti and diminution. Each has only one section of continuous music and is thus atypical of the general multi-sectional ricercar and canzona types, and each mutates the theme to adjacent diatonic notes. As a study in transformation, Lohet's fugue appears far closer to Bach than Fischer's deliberately non-developmental and non-episodic E major fugue.

Lohet begins with a top-down exposition and varies the time duration distance between pairs of entries in his stretti: We find two half notes between the opening pair of voices (soprano/alto; counting from the first note as if it were a half note); then six half notes (alto/tenor, bars 1⁴–4³); then four half notes (bass/soprano, bars 6⁴–9¹) and so forth. A selection of similar procedures for the overlapping of stretto entries can be found in Example 4. More characteristic of later composers is to begin with a distance of six half notes and reduce by stages, as shown in Fux's two- and three-part examples using this theme and its minor-mode form.[31]

(a) Modal transpositions of the theme

on C   on E   on D

(b) Theme shared between two voices

(c) Inversion   (d) Retrograde inversion

Example 6. Example 6 Lohet, Undecima Fuga.

There are fifteen statements of the theme in the major mode starting on C or G, six in the bass, five in the soprano, three in the alto (including the diminution at bar 13) and one in the tenor. The theme is modally transposed to a "minor" form, using diatonic notes beginning on E—three clear instances, one each in the alto, bass (partial) and soprano (bars 5, 22 and 24)—and once beginning on D in the bass (bar 18) (see Example 6a). Lohet ends his fugue conspicuously with the version on E in the top voice. The other two occurrences highlight a particular

contrapuntal feature (both between alto and bass): the theme in tenths (bars 52–63) and the combination of prime order and inversion (*rectus et inversus*) with retrograde inversion (bars 182–19). Diminution of the prime order occurs once in the alto (bars 13–14¹).

Two further resemblances to the theme are of special interest. Both are in the alto but lack the first note of the theme. Each, however, is immediately preceded by the missing note in an adjoining voice. The first instance is between tenor and alto (bars 6³–7) and the other has the first note in the soprano (b. 11⁴–13, see Example 6b). This subtle device may arise as a consequence of fugal improvisation being easy to generate and comprehend in performance, but perhaps less satisfactory as strict polyphony when written down. As far as I am aware, mixed-voice appearances of the subject are not described in the theoretical treatises.

The tenor part contains the majority of this fugue's free material and thematic mutations (it is given only one clear statement of the theme). In three places the texture admits parallel fifths and octaves—bars 83–91 (between soprano and tenor, and alto and bass), bars 152–3 and barz 181–2 (tenor and bass)—and I have attempted to remove them in bars 8–9 and 15 of my transcription by omitting or changing one note. These errors may have been forced by the attempts at thematic mutation, or they may stem from freedoms permissible in extemporization but starkly revealed as infelicitous when committed to paper (see Example 6 c and d). The use of solmization and *inganni* will be discussed in the second part of this article.

Willi Apel observed that the novelty of Lohet's fugues "lies above all in their brevity … and concept" and the monothematic fugues "come much closer to the later idea of the fugue than one would think possible one hundred and fifty years before Bach."[32] Bach is indeed prefigured in a number of details, not least the descending soprano scale before the first major cadence (bars 8–10). In performance, small-scale phrasing and overarching dynamic shapes best reflect the motivic interplay and clear structure of this fugue: a series of natural crescendos and diminuendos such as a good vocal consort would instinctively fashion. The opening and closing sections end with strongly shaped-off cadences (bars 11–12 and 25–26). The phrases in between are marked out by the rests in the soprano, and by the consequent reduction to three parts, all encouraging a lower dynamic and a crescendo/diminuendo profile for each phrase (bars 12–16, 16–20). This pattern is broken by the final phrase, initiated in the soprano and the return to the top-down stretto of the opening, suggesting the opposite, diminuendo then crescendo (bars 20 to the end).

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Notes

1   I am very grateful to Margaret Glendining, Heather Windram, and John Collins for their comments on earlier versions of this article.

2   Donald Francis Tovey, ed., *J. S. Bach: The Well-Tempered Clavier* (London: Associated Board of the Royal Schools of Music, 1924/1951), vol. 2, 74–5; Cecil Gray, *The Forty-Eight Preludes and Fugues of J. S. Bach* (London: Oxford University Press, 1938), 105; Hermann Keller, *The Well-Tempered Clavier by Johann Sebastian Bach*, translated by Leigh Garden (New York: Norton, 1976), 158; A.E.F. Dickinson, *Bach's Fugal Works* (London: Pitman, 1956), 88.

3   Girolamo Frescobaldi, *Toccatas* (Rome, 1614), preface, 4. Signs "to serve for taking breath and to give time for making some gestures" introduced by Emilio de' Cavalieri (*Rappresentatione di Anima e di Corpo*, Rome, 1600). Commas are familiar from François Couperin's harpsichord music. See Robert Donington, *The Interpretation of Early Music*, 4ᵗʰ ed. (London: Faber, 1989), 405–6.

4   Samuel Scheidt, *Tabulatura nova* (1624); G. Chew, "Articulation and phrasing," *Grove Music Online*.

5   Claudio Monteverdi, *Combattimento* (first performance Venice, 1624): "questa ultima nota va in arcata morendo;" Domenico Mazzocchi, *Dialoghi e sonetti*, 1638 (No. 18); Matthew Locke, *The Tempest* (London, 1675); *Fort* (F) and *Doux* (D) in Lully. See Donington, 416–23 and See Mary Cyr, *Performing Baroque Music* (Aldershot: Scholar Press, 1992), 49–56.

6   Giovanni Antonio Piani, *Violin Sonatas* (Paris, 1712); Francesco Geminiani, *Violin Sonatas* (London, 1739); Francesco Veracini, *Sonate accademiche a violino solo* (London and Florence [1744]). See Donington, 416–23 and Cyr, 49–56.

7   Roger North, *Autobiography* [ca. 1695], (London: Jessopp, 1887), sect. 106. See Donington, 416–23 and Cyr, 49–56.

8   Carl Friedrich Cramer, *Magazin der Musik* (Hamburg, 1783), 1217. See Donington, 416–23 and See Cyr, 49–56.

9   See Alfred Mann, *The Study of Fugue* (New Brunswick, NJ: Rutgers University Press, 1958), Part One, 3–7.

10 The fantasia is edited with note values halved in Gerald Hendrie, ed., *Orlando Gibbons: Keyboard Music* in *Musica Britannica* 20 (London: Stainer & Bell, 1962), no. 14, 27–8.

11 The Lynar manuscripts. See Siegbert Rampe, ed., *Matthias Weckmann: Complete Free Organ and Keyboard Works* (Kassel: Bärenreiter, 1991) and Pieter Dirksen, ed., *The "Lynar" Virginal Book.* (London: Stainer & Bell, 2002).

12 Johann Caspar Ferdinand Fischer, "Fuga 7," *Ariadne musica neo-organoedum* (Augsburg: Joseph Friedrich Leopold, 1715), 16; https://uurl.kbr.be/1561786.

13 Compare the two anonymous settings of the hymn "Lucis Creator optime" in John Caldwell, ed., *Early Tudor Organ Music I: Music for the Office* (London: Stainer & Bell, 1966), vol. 6, 8–9. A.C. Howell and W.E. Hultberg, eds. *The Art of Playing the Fantasia by Fray Thomás de Sancta María* (Pittsburgh, 1991). See, for example, "The ten formulas to play ascending and descending harmonic sequences," Book II, Chapter XI, 69–82.

14 Writing about John Williams, Dean of Westminster from 1620, John Hacket (1592–1670), Bishop of Coventry and Lichfield, described Gibbons as "the best finger of that age" in "Scrinia Reserata: A Memorial Offer'd to the Great Deservings of John Williams, D.D. [London]" in the *Savoy* (Edward Jones for Samuel Lowndes, 1693), Part 1, 210.

15 See Bernard Brauchli, *The Clavichord* (Cambridge: Cambridge University Press, 1998). Maria Boxall, "Brynginge about a Monacorde: The Monacorde in England and Scotland 1407–1548," *British Clavichord Society Newsletter* 14 (June 1999), 15–17; Judith Wardman, "Early Clavichords in England: More Information from Michael Fleming," *British Clavichord Society Newsletter* 16 (February 2000), 16–17 and "More about Clavichords in England and Ireland," *British Clavichord Society Newsletter* 43 (February 2009), 9–11; Derek Adlam, "More Evidence of Clavichords in England," *British Clavichord Society Newsletter* 49 (February 2011), 37–8.

16 Howell and Hultberg, *The Art of Playing the Fantasia*, "Concerning some brief and simple instructions for performing polyphonic works on the clavichord," Book I, Chapter XX, 140.

17 See the examples of graces attributed to Edward Bevin, ca.

1630, in GB-Lbl Add.31403, f.5, which also contains a concordance of the Fantasia in C.

18 Terence Charlston and Heather Windram, *Albertus Bryne: Keyboard Music for Harpsichord and Organ* (Oslo: Norsk Musikforlag, 2008), xx–xxiii.

19 Roger Bullivant, *Fugue* (London: Hutchinson, 1971), 59.

20 *Liber usualis* (Tournai: Desclée & Co, 1934), 256, 812 and 400. Ina Lohr, *Solmisation und Kirchentonarten* (Zürich: Huf & Co., 1948, 4th ed., 1981), 57–63.

21 William Renwick, *Analyzing Fugue: A Schenkerian Approach* (Stuyvesant, NY: Pendragon Press, 1995), 39.

22 The relevant examples in Mann are ex. 48 (86–7), ex. 53 (89–90), ex. 65 (97–8), ex. 69 (102), ex. 71 (105–6) and ex. 83 (114).

23 Susan Wollenberg, "The Jupiter Theme: New Light on Its Creation," *The Musical Times* 116, no. 1591 (September 1975), 781–783. I am very grateful to John Collins for his help in locating modern editions of the music.

24 A counterfugue (*Gegenfuge* or *fuga contraria*) is a fugue in which the answer is an inversion (*inversus*) of the subject (*rectus*). It is called *per arsi et thesin* by Zarlino and Morley. See also the opening exposition of Froberger's Fantasia, FbWV 207. Gioseffo Zarlino, *Le istitutioni harmoniche* (Venice, 1558), and Thomas Morley, *A Plaine and Easie Introduction to Practicall Musicke* (London: Peter Short, 1597), 162. This technique is also used by Andrea Gabrieli and Merulo. Apel calls it "inversion fugue." Willi Apel, *The History of Keyboard Music to 1700*, translated by Hans Tischler (Bloomington: Indiana University Press, 1972), 122, 181 and 183–4.

25 Virginia Brookes, *British Keyboard Music to ca. 1660: Sources and Thematic Index* (Oxford: Clarendon Press, 1996).

26 J. Quitin and H. Vanhulst, "Lohet [Loxhay], Simon," *Grove Music Online.*

27 The facsimile can be consulted online at http://daten.digitale-sammlungen.de/0005/bsb00050860/images/index.html?id=00050860&groesser=&fip=193.174.98.30&no=&seite=344, images nos. 344–5. Modern editions on two staves can be found in Larry W. Peterson, ed., *Simon Lohet: Compositions for Organ* in *Corpus of Early Keyboard Music* 25 (American Institute of Musicology, 1976); *Orgel-Tabulatur von Johann Woltz Heft 4: Simon Lohet, Sämtliche Werke für Tasteninstrumente* (Cornetto Verlag, CP14).

28 "Fugas sequentes à Clarissimo Viro, Aulae Wirtembergicae quondam Organoedo celeberrimo, Domine SIMONE LOHET, cum quo mihi non nulla intercessit familiaritas, olim communicatas, in honorificam ipsius memoriam, aliis gratiosé inserviendo, hûc [hic] apponere placuit, quae Musices amatori non displicebunt." Translation from Apel, 203.

29 D-Mbs Mus.ms.1581. C. Young, "Woltz, Johann," *Grove Music Online.*

30 J.S. Shedlock, "The Evolution of Fugue," *Proceedings of the Musical Association* 24 (1898), 111. See also A.E.F. Dickinson, *Bach's Fugal Works* (London: Pitman, 1956), 217 and Georg Reichert and Leonhardt Lechner, "Martin Crusius und die Musik in Tübingen um 1590," *Archiv für Musikwissenschaft* 10, no. 3 (1953), 191 and 206.

31 Mann, ex. 48 (86–7), ex. 53 (89–90), ex. 65 (97–8), ex. 69 (102).

32 Apel, 203.

Facsimile Illustration: The first page of Orlando Gibbons, Fantasia in C from Benjamin Cosyn's Virginal Book, where it was indexed by Cosyn in 1620 as "Another Fancy in C.fa.ut." © British Library Board (GB-Lbl R.M. 23.l.4, folio 105v).