

## Source Studies as source of inspiration: what can performers learn from Bach's autograph manuscript of *The Well-Tempered Clavier I*?

**B**ach's fair copy of the *Well-Tempered Clavier*, Book 1 (hereafter WTC I), which is presently held at the Staatsbibliothek zu Berlin – Preußischer Kulturbesitz, bears the year 1722 at the bottom of its title-page, indicating that it was made that year.<sup>1</sup> This does not mean that the work was completely finished, however. Scholars have learned that the composer occasionally reviewed its contents and changed details in the musical text over the course of two decades.<sup>2</sup> They also found that in 1722 Bach did not just make a fair copy; he also made minor changes, suggesting that the act of copying for him was another opportunity to re-engage with his artistic creation. A close examination of the changes Bach considered necessary then informs us of his artistic desire, which can in turn offer ideas and inspiration to performers for their own renditions.

As with any manuscript, Bach's autographs can also tell their own stories about their origin and circumstances – for example, why they were needed and how they took the shape in which they appear today – by means of a careful and systematic examination. Moreover, they contain information related to the broader conventions of Bach's time that conditioned the way in which he notated music on paper, although this may not always be transparent to us. What were Bach's priorities while scripting his compositions on paper?

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\* This article is a revised version of the keynote address given at the International Conference “*Il Clavicembalo ben temperato trecento anni dopo*” held at Villa La Tesoriera, Torino, 20-22 June 2022. I wish to thank Sae Tahara and Sebestyén Nyíró for their helpful comments on an earlier version of this article.

<sup>1</sup> D-B, Mus. ms. Bach P 415. For a high-resolution images of the manuscript, see Bach-Digital [https://www.bach-digital.de/receive/BachDigitalSource\\_source\\_00001361](https://www.bach-digital.de/receive/BachDigitalSource_source_00001361) (accessed 23 March 2023). It is also available in colour facsimile: *Das Wohltemperierte Klavier, Part 1. BWV 846–869*, autograph, Staatsbibliothek zu Berlin – Preußischer Kulturbesitz, commentary by Christoph Wolff and Martina Rebmann, Kassel, Bärenreiter, 2015.

<sup>2</sup> This account is discussed in depth in ALFRED DÜRR, *Johann Sebastian Bach. Neue Ausgabe Sämtlicher Werke. Serie V, Band 6.1. Das Wohltemperierte Klavier I. Kritischer Bericht*, Leipzig, VEB Deutscher Verlag für Musik – Kassel, Bärenreiter, 1989, p. 187f (abbreviated hereafter as *NBA V/6.1 Kritischer Bericht*).

How can we discover them? While searching for answers, we also need to bear in mind that part of what was being written could have bypassed the process of conscious decision-making as it could have come so naturally to his hand and arm as his training allowed. Recently, I proposed a new methodology which enables us to gain access to this hitherto inaccessible area of Bach's habits of writing his music, hidden in quaver beaming.<sup>3</sup> By focusing on Bach's notational choices, we begin to see Bach's compositional strategies as well as his ideas about articulation, tempi, and the character of the piece he was feeling while writing it out on paper. This could be another source of information for performers to gain intimacy with Bach's way of thinking. The aim of this article is to elucidate the above-mentioned two ideas – Bach's revisions and notational habits – and to suggest how performers might explore and find information that is useful for their own performances.

### Source Study in Context

Before exploring Bach's autograph itself, let us pause for a moment to reflect on why we love the WTC; why are we so attracted to it? My personal opinion is that the attractiveness of the work hinges on the exceptional quality of the music itself; not only does each piece have a distinct character of its own, but the work as a whole also displays a wide range of variety in moods and styles. Thus, I feel there is a fine balance of coherence (e.g. consisting solely of pairs of preludes and fugues; a group of preludes sharing the same structural shape) and varieties within (e.g. exploring all 24 keys and a wide range of fugal techniques). Altogether, it presents a compendium of choice musical ideas of the high Baroque.

Let us then consider how Bach managed to achieve this. What did Bach do and learn in his education and upbringing to become the composer of the WTC? How can we learn about this? How can our own interpretation reflect what Bach himself imagined? What can we do to get the right kind of inspiration?

There are two types of approaches: direct and holistic. The former attempts to discover ideas from within the written score itself, while the latter draws on information from historical studies including the works of other composers. For most performers, the primary method of gaining inspiration for their own interpretation of a piece would be through the music itself. They might take an "analytical" approach to penetrate into the

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<sup>3</sup> See YO TOMITA, *Reading Soul from Manuscripts. Some Observations on Performance Issues in J. S. Bach's Habits of Writing His Music*, in *Essays in Honor of Christopher Hogwood. The Maestro's Direction*, ed. by Thomas Donahue, Lanham, The Scarecrow Press, 2011, pp. 13-40, and Id., *Deciphering the Performance Hints hidden in J. S. Bach's Quaver Beams*, «Early Music», XLIV, 1 (February 2016), pp. 89-104.

composer's technique and style; for instance, by identifying some salient features of harmony and counterpoint; tracing the origin of rhythm and its character with particular reference to Baroque dance, a broader framework for the piece in relation to the genre, form and style of the time; or even by trying to identify more specific ideas and references in Bach's life that may have had an impact on his composition of the piece.<sup>4</sup>

They might also turn to the work of historical musicologists who look into a broader musical tradition that existed before his time such as *Figurenlehre* and *Affektenlehre*, how Bach lived and worked in his time, and how and where his works were originally performed. More recently, an increasing number of scholars have been exploring the reception history of Bach's works at specific timeframes and in certain regions. For example, this could include examining annotations in the scores owned by then influential figures,<sup>5</sup> recorded performances or reviews, transcriptions, new compositions inspired by Bach, etc., so as to identify Bach's influence on composers, performers, and audiences within their own societies.<sup>6</sup> Such explorations might enable us to identify and appreciate specific musical features against the tides of history, and to comprehend how our own foundation for appreciating Bach's works was laid down before us.

In this article I advocate two additional approaches from the perspective of manuscript studies, first considering *Bach's revisions* of his own works as attested to in his own manuscripts. By taking this approach, we will learn what Bach considered 'weak' and how he improved it. Being aware of what steps the composition has taken, we hope to gain a richer nuance of the passages in question both within the musical context and from Bach's aesthetic criteria. I shall then turn to the subject of *Bach's notational practices and habits*, focusing particularly on quavers and smaller note-values that can be notated with either flags or beams, and in the case of the latter, how notes are differently grouped together. The choices available to composers would allow them to add extra nuances to imply, for example, articulation, tempi, and mood/character of the piece or local passages.

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<sup>4</sup> A good example from the timeframe of the WTC I is Helga Thoene's theory that the composition of *Ciaccona* (BWV 1004/5) is related to the death of Bach's first wife, Maria Barbara Bach. See HELGA THOENE, *Johann Sebastian Bach, Ciaccona – Tanz oder Tombeau? Eine analytische Studie*, Oschersleben, Ziethen, [2002].

<sup>5</sup> See, for example, the discussion of Chopin's annotations in JEAN-JACQUES EIGELDINGER, *Commentary*, in JOHANN SEBASTIAN BACH, *Vingt-quatre préludes et fugues (Le Clavier bien tempéré, Livre I). Annoté par Frédéric Chopin*, commented by Jean-Jacques Eigeldinger, Eng. transl. by Vincent Giroud, Paris, Société française de musicologie, 2010, pp. XXXI–XLVI.

<sup>6</sup> A good selection of papers was read at the International Conference "Il Clavicembalo ben temperato trecento anni dopo", cit. See its programme for details.

## Bach's revisions as a source of inspiration

When it comes to revisions, we consider the following two situations:

1. Those which we can study directly through evidence on the paper in the form of crossed out, scratched out, squeezed in or amended symbols;
2. Those which can be judged as such by comparing the contents in two or more sources, in cases where the revision appears to have taken place sometime in between.

While Alfred Dürr studied 78 manuscript sources to compile his text for the Neue Bach Ausgabe (NBA) edition of WTC I,<sup>7</sup> I have reduced the number of sources for this study to the following:

Source A: Bach's autograph fair copy of the WTC I into which Bach subsequently entered revisions that can be distinguished in four stages:

A1 (1722): initial state of the autograph, with a few notable revisions made while making a fair copy (e.g. Fugue No. 22 in B flat minor);<sup>8</sup>

A2 (1732): extensive revisions to Prelude No. 3 in C sharp major (shape of the opening arpeggio) and Fugue No. 6 in D minor (the subject entry at m. 35);<sup>9</sup>

A3 (1736 or later): extensive revisions to Fugue No. 1 in C major (subject) and minor revisions to Fugues No. 6 in D minor, No. 9 in E major and No. 15 in G major and Prelude No. 24 in B minor;

A4 (after 1740): numerous but small revisions to many movements.

Source B: *Clavierbüchlein* for Wilhelm Friedemann Bach (1720-22), a small bound notebook which includes an early version of 11 preludes from WTC I, from the 14<sup>th</sup> to 24<sup>th</sup> pieces in the collection.<sup>10</sup> They can be grouped into two parts from both the state of musical text and the shape of the cycle: C major – C minor – D minor – D major – E minor – E major – F major and C sharp major – C sharp minor – E flat minor – F minor (see Table 1).

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<sup>7</sup> JOHANN SEBASTIAN BACH, *Das Wohltemperierte Klavier I. BWV 846–869*, ed. by Alfred Dürr, Neue Ausgabe Sämtlicher Werke V/6.1, Leipzig, VEB Deutscher Verlag für Musik – Kassel, Bärenreiter, 1989, and A. DÜRR, *NBA V/6.1 Kritischer Bericht*, cit.

<sup>8</sup> For a full list, see A. DÜRR, *NBA V/6.1 Kritischer Bericht*, cit., pp. 25-29.

<sup>9</sup> See A. DÜRR, *NBA V/6.1 Kritischer Bericht*, cit., p. 193 for a fuller listing of Bach's subsequent revisions found in his fair copy.

<sup>10</sup> This *Clavierbüchlein* is held at the Beinecke Rare Book and Manuscript Library, Yale University, New Haven, Connecticut, USA under the shelfmark: Music Deposit 31. Digital scan is available at <https://collections.library.yale.edu/catalog/10991080> (last accessed 30 March 2023).

Source C: A manuscript copy made around 1800 that appears to have come from Johann Nikolaus Forkel's circle.<sup>11</sup> Its text is thought to have derived from a copy that contained the earliest shape of the work.

Source α: Early drafts (lost): probably consisted of a set of drafts in *Auflagebögen*<sup>12</sup> (1720-22) that must have been kept in a folder: It predates Source B, but its contents were presumably updated before Bach made the fair copy (possibly via a further lost intermediate copy).<sup>13</sup>

The relationship of these sources is described in Fig. 1. The numerous other copies that are not included in this study were ultimately derived from either α or A, directly or indirectly.

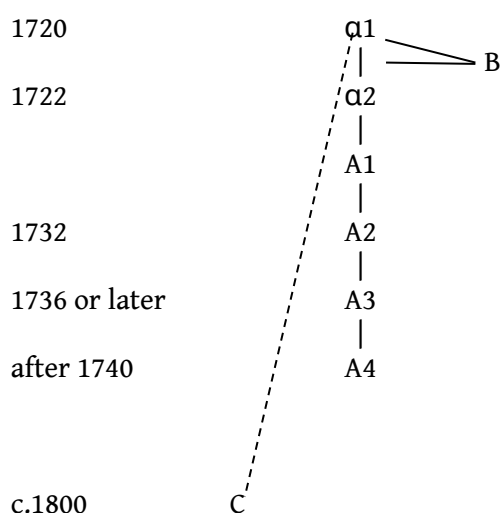


Fig. 1: Simplified Source Diagram of WTC I together with the stages of revision.

<sup>11</sup> Source B0.1 as described in A. DÜRR, *NBA V/6.1 Kritischer Bericht*, cit., p. 30f. The manuscript disappeared shortly after the death of its then owner Franz Konwitschny (1901-1962), and survives only in its microfilm version that is kept at the Bach-Archiv Leipzig. Its musical text can also be studied from Forkel's edition of the WTC I: *Le Clavecin bien tempéré ou PRELUDES ET FUGUES dans tous les Tons et Demitons du Mode majeur et mineur* PAR J. SEB. BACH. I PARTHIE, Vienna, Hoffmeister & Comp. – Leipzig, Bureau de Musique, [1802], Plate Number 53.

<sup>12</sup> *Auflagebogen* is a bifolio manuscript whose layout is ideal for performance from an opened individual sheet. See Yo TOMITA, *Manuscript*, in *The Routledge Research Companion to Johann Sebastian Bach*, ed. by Robin Leaver, Abingdon, Routledge, 2017, p. 63 fn. 53.

<sup>13</sup> For a detailed discussion of its development, see A. DÜRR, *NBA V/6.1 Kritischer Bericht*, cit., p. 191f.

S/N	BWV <sup>3</sup>	Header	Key	Metre	Misures	Notes
14	846.1/1	<i>Præludium 1.</i>	C maj.	c	27 (A = 35)	worked out figuration to m. 6
15	847.1/1	<i>Præludium 2.</i>	C min.	c	27 (A = 38)	
16	851.1/1	<i>Præludium 3.</i>	D min.	c	15 (A = 26)	
17	850.1/1	<i>Præludium 4.</i>	D maj.	c	[22] (A = 35)	written up to m. 19,1
18	855.1/1	<i>Præludium 5.</i>	E min.	c	23 (A = 41)	
19	854.1/1	<i>Præludium 6.</i>	E maj.	$\frac{1\ 2}{8}$	24 (= A)	
20	856.1/1	<i>Præludium 7.</i>	F maj.	$\frac{2\ 4}{16}$	[18] (= A)	written up to m. 14, 1
21	848.2/1	<i>Præludium.</i>	C# maj.	$\frac{3}{8}$	104 (= A)	
22	849.2/1	<i>Præludium.</i>	C# min.	$\frac{6}{4}$	39 (= A)	
23	853.2/1	<i>Præludium.</i>	E $\flat$ min.	$\frac{3}{2}$	40 (= A)	written up to m. 35
24	857.2/1	<i>Præludium.</i>	F min.	c	[22] (= A)	written up to m. 18, 2

Table 1: Early versions of the preludes of WTC I as found in *Clavierbüchlein* for W. F. Bach (Source B).

For the sake of argument, I shall take the Prelude No. 1 in C major as example of Bach's revision to demonstrate what we can learn from this type of study. The revisions we deal with for this study supposedly took place between 1720 and 1722. Extracted in Ex. 1 is the first system of the prelude in Bach's fair copy, Source A. Note that the right-hand part uses the soprano clef, rather than the treble clef that we normally use today. The movement is 35 mm. long and virtually error free.<sup>14</sup> This is the version that we find in all modern editions.<sup>15</sup> The following discussion assumes that readers have access to their own copy. Reproduced in Ex. 2 are folios 14r and 14v of Source B containing an early version of the same prelude, which is 27 mm. long, that is, 8 measures shorter than the final version. It is copied by Wilhelm Friedemann Bach except for the added mm. 5 and 7, which appear squeezed in afterwards, in Johann Sebastian Bach's handwriting. From this observation, one may conclude that the model Wilhelm Friedemann Bach used was the 25-mm. version of the movement. Note, however, that mm. 8-11 including the custodes at the end of system clearly show heavy traces of revision.<sup>16</sup> Thus the state of Wilhelm Friedemann's model

<sup>14</sup> In A. DÜRR, *NBA V/6.1 Kritischer Bericht*, cit., p. 25, Dürr reports one possible correction by Bach in the second minim in the bass in m. 20, possibly amending the note-head from B to C.

<sup>15</sup> For the full image, see the online source given in note 1. Note that some early editions including those issued by Simrock and Nägeli contain an extra measure (six four chord of C minor) between two diminished seventh chords in mm. 22 and 23 which cannot be traced to J. S. Bach, but possibly to C. G. Neefe, whose manuscript became the basis of the Simrock edition.

<sup>16</sup> The revision involved scratching out the surface of the paper, and hence it is impossible to reconstruct the reading of the *ante revisionem*. Cf. WOLFGANG PLATH, *Johann Sebastian Bach. Neue Ausgabe Sämtlicher Werke. Serie V, Band 5. Klavierbüchlein für Wilhelm Friedemann. Kritischer Bericht*, Leipzig, VEB Deutscher Verlag für Musik – Kassel, Bärenreiter, 1963, p. 86.

remains obscure. Reproduced in Ex. 3 is the first musical page from Source C. Being 24-mm. long, it is the shortest-known version of the movement that can also be considered to represent its earliest shape.



Ex. 1: J. S. Bach, Prelude No.1 in C major in Source A, opening.



Ex. 2: J. S. Bach, Prelude in C major in Source B.



Ex. 3: J. S. Bach, Prelude in C major in Source C

First, we examine what we can learn from the notational features of each source. Perhaps the most eye-catching is the use of abbreviated notation in the early versions (Sources B and C), where only in the first five measures are the arpeggiated chords written out fully, whereas in Bach's final version, he writes these out throughout the entire movement. Moving on to see the differences among the sources, we find that the notation of the figuration itself becomes more sophisticated as the movement undergoes revision. In the



earliest version (Source C), every second note of the arpeggiated chord is written as a flagged semiquaver ♪ (Ex. 3). In the next version (Source B), the note-value is lengthened for the duration of the beat: first time ♪♪ then ♪ presumably to make the sound more resonant (Ex. 2). And in the final version (Source A), Bach lengthens this note even further for another crotchet beat ♪♪ to make both notes played by the left hand to last for the remaining duration of the arpeggiated eight-note figuration (Ex. 1). This not only makes it clear that the two lowest notes were to be played by the left hand (which was somewhat vague in the earliest version), but also that the concept of *style brisé* is gradually refined. It seems to show Bach's desire to ensure that the piece should sound rich and sonorous, a point with which Bach was not really concerned at an earlier stage of the piece's development.<sup>17</sup>

Revisions that concern musical content also indicate what Bach may have considered important when teaching his son. The most conspicuous are the two added measures in Wilhelm Friedemann's copy (Source B), both of which contain open chords as well as large melodic leaps. They add fresh and exciting sonority to the second phrase (mm. 5-11) – modulating to the dominant – that originally was made entirely of closed chords. To make the following discussion more accessible, harmonic contents of all three versions are gathered and aligned in Ex. 4 in modern notation.

While the addition of the two measures in Source B colourfully invigorates the process of modulation, this revision fixes, at the same time, consecutive octaves that exist between the tenor and soprano parts: e'-d' against e''-d'' in mm. 4-5 of the first version (now mm. 4 and 6 in Ex. 4), and again d'-c' against d''-c'' in mm. 5-6 (now mm. 6 and 8 in Ex. 4).<sup>18</sup> Considering the educational context in which this score was used, fixing such grammatical errors may have been an initial motivation for the revision, which consequently resulted in an artistically superior text.

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<sup>17</sup> It also implies that with the passing of time as well as the actual use of the piece in an educational setting, Bach's concern may have grown that his way of writing was not understood correctly; so he made it abundantly clear by writing out the desired duration of the notes in the left hand.

<sup>18</sup> Note that the second consecutive octaves are not found in Source C. It is thus possible that this error was introduced during the revision of mm. 8-11 (see below), before Bach added the two new measures in his son's copy.

The image displays a musical score for three sources (Source C, Source B, and Source A) showing harmonic reduction of the three versions of Prelude in C major. The score is presented in two systems. Source C (measures 1-13) and Source A (measures 1-15) are aligned. Source B (measures 1-16) includes annotations: 'added' in measures 5 and 7, 'scratched out and renotated' (erased) in measures 8-11, and 'Custodes' in measure 11. The score is presented in two systems, with Source C and Source A in the first system, and Source B in the second system.

Ex. 4: Harmonic reduction of the three versions of Prelude in C major aligned.

The following four measures of musical text in mm. 8-11 in Source B were scratched out and re-notated by Friedemann, now providing a text virtually identical with Bach's final version.<sup>19</sup> Considering the presence of further consecutive octaves in the earliest version in mm. 6-7 between the bass and second soprano parts (b-a / b'-a'), it is possible that the reading of the *ante correcturam* in Friedemann's text was the same as the reading found in the shortest version that avoids a clear tonal arrival in the dominant at m. 9 (as it includes f natural'). The piece continues to wander chromatically, heading towards the temporary

<sup>19</sup> This includes the chord indicated by custos at the end of the system (reproduced as a separate chord in Ex. 4). Note that there was an erasure around the second lowest custos, which looks like  $\flat$  being scratched out. Note that the actual chord we find on the new page is different, hinting that Bach decided not to revise the musical text in his son's copy from this point onwards.

return to the tonic in m. 13 (NB. m. 16 in Source B; m. 15 in Source A) via a spicily flavoured supertonic ( $\text{vii}^{\circ 4}_3/\text{ii}-\text{ii}^7_6$ ) in mm. 10-11 (NB. mm. 13-14 in Source B) that still contained further parallel octaves ( $g-f / g'-f'$ ). This is later resolved by using an open chord and purified in the final version ( $\text{vii}^{\circ 4}_3/\text{ii}-\text{ii}^6_6$ ) in mm. 12-13 while adding softness and elegance in mm. 14-15 with  $\text{vii}^{\circ 4}_3-\text{I}^6_3$  in place of a quite blunt  $\text{V}^4_2-\text{I}^6_2$  cadence in the two early versions (mm. 12-13 in Source C; mm. 15-16 in Source B). In this way the third phrase (mm. 12-19) gains a clearer sense of flow and directionality (see below). Note that alteration of closed and open chords in mm. 12-15 of the final version has a compositional reference to mm. 5-8, which further enhances the structural unity in the movement. Since these improved readings are only communicated in his autograph fair copy, it is likely that Bach worked out these revisions on his early draft  $\alpha$  after teaching Friedemann.

To recap the main points discussed thus far, we found evidence of Bach's attentive re-examination of the characters of both the second and third phrases that are manifested in his final version – first modulating to dominant with increased vigour (mm. 5-11), and then returning temporarily to the tonic with added calmness (mm. 12-15) – by fine tuning textural and harmonic colours as appropriate, while at the same time clarifying the cadential gestures.

From this point onward, the music turns momentarily to the darker side of the musical journey by touching on subdominant, then heads towards the final cadence. While two early versions provide basically identical text,<sup>20</sup> the final version gives a markedly different text in three areas that hint at Bach's continued interest in making the piece more eloquent and eventful. The first is the insertion of m. 18, which is  $\text{V}^7$  to make the cadential gesture more prominent (cf. m. 15), allowing the performer to take a breath and resume afresh the musical journey into subdominant from m. 20. The second is the replacement of  $\text{ii}^6_5$  (m. 22 of Source B) with two diminished seventh chords ( $\text{vii}^{\circ}/\text{V}$  and  $\text{vii}^{\circ 4}_2$ ) occupying mm. 22-23 that precedes  $\text{V}$  which prepares us – with a hint of hesitation – for the final phase of the piece. The third and last is the insertion of seven measures (mm. 28-34) of a

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<sup>20</sup> The pitch variants between  $b$  in Source C (mm. 21-22) and  $g$  in Source B (mm. 24-25) most likely resulted from a copying error on the part of a scribe of Source C (or one of its models) who wrote the note in question in the lower staff rather than in the upper staff as seen in Source B. See ALFRED DÜRR, *Zur Frühgeschichte des Wohltemperierten Klaviers I von Johann Sebastian Bach. Nachrichten der Akademie der Wissenschaften in Göttingen, I. Philologisch-historische Klasse*, Göttingen, Vandenhoeck & Ruprecht, 1984, p. [15].

new passage to completely renovate the cadential section with long dominant and tonic pedals to achieve a grand finale.

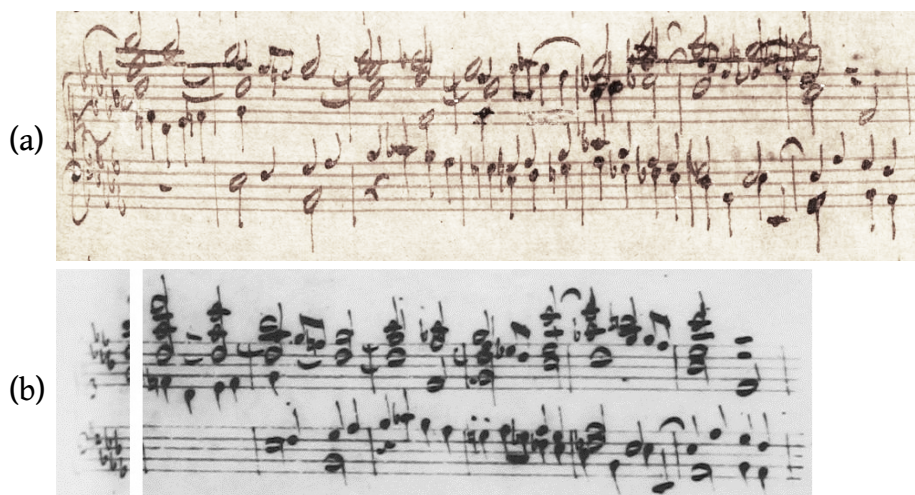
Our observation on the revisions Bach made to the Prelude in C major has shown how this little figuration exercise on an improvisatory harmonic sequence was gradually polished with the aim of enhancing the quality of the musical trajectory by fine tuning both clarity and obscurity of harmonic gestures at the local phrase level. Having this knowledge of Bach's considerations may be useful for arriving at our own rendition of the piece.

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Even after producing the fair copy in 1722, Bach continued to enter revisions in his reference copy at various times. We now turn to some examples that appear to reveal Bach's desire for "more" effective musical discourse.

Extracted in Ex. 5a are mm. 31-37 of Fugue No. 22 in B flat minor. At m. 32, the subject enters in the bass in the subdominant (e flat) and reaches an early climax in a powerfully articulated perfect authentic cadence in the subtonic (a flat minor:  $ii^{\circ 6}_5 - V^7 - I$ ) in full five parts before moving on to the relative calm of reduced texture in the relative major (d flat major) from m. 37. A closer inspection of Bach's autograph here shows several unmistakable traces of revision: the scratching out of paper in m. 34 in the lower part of the upper staff; hesitantly written note-heads in m. 35 in the middle of the upper system; and uncomfortably accommodated beamed quavers in m. 36 in the second soprano. By comparing them against the musical text of Source C (Ex. 5b), all these revisions begin to make sense; it seems that Bach found this cadential passage to be in need of greater energy.<sup>21</sup> Bach's motivation can be deduced from studying the musical context of this subject entry – so far the fugue had not been exploring entries in keys beyond the ordinary choice of tonic and dominant in the exposition. After an episode from mm. 17 to 24, the entries in the subdominant open up the sphere of variety, and here with this very entry, the fugue discovers the dominant of the relative major, which is depicted as a major achievement as manifested in the musical texture. What was sought here appears to be a dramatic musical discourse by expanding the passage and using an extra measure to justify the modulation and prepare the cadential passage more cautiously – by prolonging  $V^6_5$  of a flat minor in m. 34 and inserting *i* on the first beat of m. 35.

<sup>21</sup> It is also possible that Bach's model already contained the revision, although not fully finalised, resulting in this mess.



Ex. 5: J. S. Bach, Fugue No. 22 in B flat minor BWV 867, mm. 31-37: (a) Source A; (b) Source B.

Our next example is the Prelude No. 3 in C sharp major, which contains Bach's "Stage A2" revisions. This prelude is also included in Source B (see Table 1), but unlike the Prelude No. 1 in C major discussed above, this piece is essentially the same version as that found in Source A.<sup>22</sup>



Ex. 6: J. S. Bach, Prelude No. 3 in C sharp major BWV 848, mm. 1-17, Source A.

Written in two-part invertible counterpoint, this Prelude is conceived as an exercise for both the independence and coordination of two hands. Bach's revisions, which can be

<sup>22</sup> Textual differences are all minor, but still worth studying: m. 74 Bass f# (g# in Source B); m. 99 Bass  $\text{♩} \text{ } \text{G}\sharp$  (single-line texture in Source B); m. 101  $\text{♩} \text{ } \text{g}\sharp$  (single-line texture in Source B); m. 104 r.h. chord  $\text{c}\sharp''/\text{g}\sharp'/\text{c}\sharp'$  ( $\text{c}\sharp''/\text{g}\sharp'/\text{e}\sharp'$  in Source B).



or fluency, and herein lies Bach's priority: expressivity is more important than maintaining "consistency".<sup>23</sup>



Ex. 7: J. S. Bach, Fugue No. 6 in D minor BWV 851, mm. 323–37, Source A.

Our last example of Bach's revision is Fugue No. 1 in C major, which is an A3 revision (1736 or later). In terms of its motive and application, it is similar to those we have already seen in the Prelude No. 3 in C sharp major in that the revision concerns the thematic characters of the composition. Here Bach touches on a specific rhythm: changing  $\text{♪♪♪}$  to  $\text{♪♪♪}$  by adding a dot and one extra beam at every subject entry. In Ex. 8, we find four such instances: alto (m. 1<sup>3</sup>), soprano (m. 3<sup>1</sup>), tenor (m. 4<sup>3</sup>) and bass (m. 6<sup>1</sup>). Since the note-heads are not modified, it is not easy to spot the revisions; but from the high-resolution colour scan of the manuscript, the difference in the shade of ink used is clear. Moreover, the note-alignment between parts becomes erroneous (see, for example, m. 3, 1<sup>st</sup> beat), and in other places, Bach had to change the pitch of some notes themselves to hide the newly emerged parallel octaves (m. 9<sup>3</sup> between alto and tenor) and sevenths (m. 12<sup>3</sup> between soprano and tenor), in the work which he continued in the A4 revision.<sup>24</sup> Despite all these blemishes and inconveniences that could have been predicted, Bach went ahead and made the changes to all 24 subjects in his fair copy.<sup>25</sup> One may guess how important the musical gain must have been for him. Performers might seek to experiment with the significance of the added weight of the prolonged note and its influence on surrounding notes.<sup>26</sup>

<sup>23</sup> There are many such instances that are not traceable to Bach's revisions. See FRANCIS KNIGHTS, *Fugue Subject Mutation in Bach's "Well-Tempered Clavier"*, «National Early Music Association Newsletter», VI, 2 (Autumn 2022), pp. 31-37.

<sup>24</sup> According to Jones, the revision of the bass in m. 15, from  $\text{♪♪♪}$  to  $\text{♪♪♪}$  was to improve the harmony. See JOHANN SEBASTIAN BACH, *The Well-Tempered Clavier, Part I. BWV 846-869*, ed. by Richard D. P. Jones, London, The Associated Board of the Royal Schools of Music, 1994, p. 137.

<sup>25</sup> Note that Bach did not make changes to the two incomplete subject entries at m. 21 (bass) and mm. 24-25 (soprano).



Ex. 8: J. S. Bach, Fugue No. 1 in C major BWV 846, mm. 1-7, Source A

### **Bach's notational practice and habits as a source of inspiration**

The last point to discuss is a new approach to Bach source studies I discovered just over a decade ago.<sup>27</sup> It concerns the theory that from the notational anomalies found in Bach's quaver-beam notation, one can sometimes sense what he was thinking as he notated the music on paper. This information is potentially very important for both performers who seek fresh insights into the composers' thought process, and for editors of music who do not want to ignore messages from the composers when preparing a new edition of their work.

I used the word "sometimes" intentionally – one can *sometimes* learn what Bach was feeling as he engaged in writing down the music on paper, but not *all the time* or *every time*. From collecting samples of Bach's notational anomalies in quaver beaming and analysing their implications, I am convinced that his intention is obvious in *some* instances, but in others it is *not* very clear. The lack of clarity and consistency may be due to my unawareness of the composer's intentions (which can be overcome with further research) or due to his lapse of attention to this level of notational detail that is certainly of lower priority compared to other areas of notation such as accurately writing the pitch or note-value. When notating music there are also many other things to think about, for instance, the spacing of notes and vertical aligning with other voices in polyphonic texture, to name just

<sup>26</sup> How to render a dotted note is one of many important topics in the discussion of historically informed performance practice today. See, for example, FREDERICK NEUMANN, *The Dotted Note and the So-called French Style*, «Early Music», V, 3 (July 1977), pp. 310–324; DOROTTYA FÁBIÁN and EMERY SCHUBERT, *A New Perspective on the Performance of Dotted Rhythms*, «Early Music», XXXVIII, 4 (November 2010), pp. 585–588.

<sup>27</sup> See note 3.



two. One also needs to be aware of the importance of freedom and the spirit of improvisation in Baroque performance practice. Exploration of refreshing variety and colours is an essential ingredient for an engaging performance where a predictable choice of embellishment or ornaments would sometimes be considered banal.<sup>28</sup> The lack of consistency in Bach's quaver beaming may be part of such underlying principles.

The investigation therefore needs to seek both the evidence for Bach's intention to make *good* use of the notational flexibility as regards the quaver beaming and the evidence to the contrary, his lack of attention for whatever reasons. In the remaining space of this article, I will summarise my main findings and their implications by using a few selected examples.

Bach and his fellow musicians in the eighteenth century commonly beamed quavers beyond the 'beat-unit' indicated by the time-signature.<sup>29</sup> Two kinds of beaming were available under some time-signatures: long (extended form, which is his norm) and short (default form, which he used less frequently), as summarised in Table 2:











Time-signature	Extended (i.e. long) beaming: Bach's normal practice	Default (i.e. short) beaming: Bach's exceptional practice
$\frac{2}{4}$		
$\frac{3}{4}$		
<b>C</b> ( $\frac{4}{4}$ )		
$\frac{6}{16}$		
$\frac{12}{16}$		

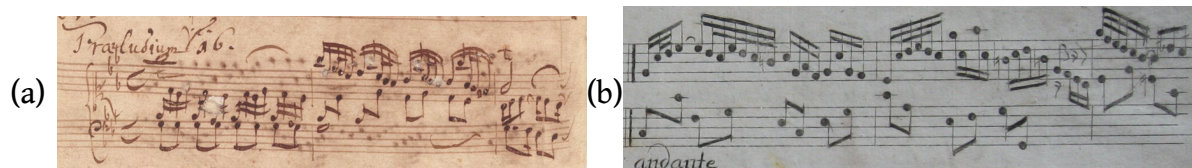
Table 2: Bach's convention of quaver beaming

A broad survey of Bach's autograph manuscripts indicates that it is rare for Bach to use the short beam exclusively in a single movement, but when he does, his intentions seem clear: it signals that it is an exceptional case, as if to highlight the musical character (tempo) being outside of his normal range, i.e. either plodding mood (see Ex. 9) or lively (see Ex. 10)

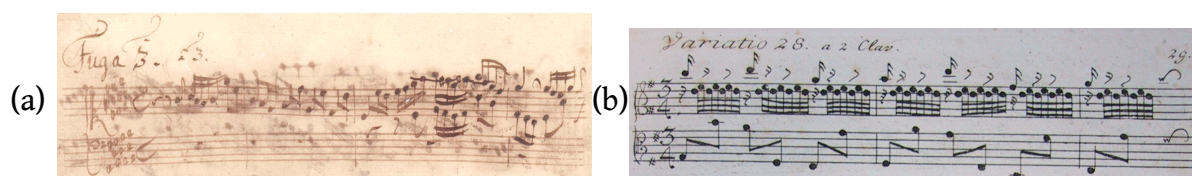
<sup>28</sup> See, for example, how Bach chose different compound sign ornaments in Praeambulum No. 1 in C major, BWV 924 in Source B (2<sup>nd</sup> piece in the collection) in mm. 3-5, presumably to show Wilhelm Friedemann how and when to use alternative sign ornaments in a cadential context.

<sup>29</sup> For the concept of 'beat-unit' and problems associated with this notion, see DAVID SCHULENBERG, *Bach and the Beaming of Small Note Values*, 28 May 2018, p. 8, <http://faculty.wagner.edu/david-schulenberg/files/2018/05/beaming.pdf> (last accessed 30 March 2023).

as if they refer to the two extremes of Bach’s musical norms, e.g. indicating “exceptions” from his *tempo ordinario*.



Ex. 9: plodding mood: (a) Prelude No. 16 in G minor (Source A), opening; (b) *Sinfonia* from Partita No. 2 in C minor (original print of 1727), opening of the Andante section.



Ex. 10: lively mood: (a) Fugue No. 3 in C sharp major (Source A), opening, (b) Variation No. 28 from the *Goldberg Variations* (original print of 1741), opening

In the majority of cases, however, Bach uses both types of quavers in a piece; in many instances Bach’s choice appears rational, being made for reasons of musical emphasis, often indicating the way the melodic lines were perceived, phrased, or articulated, which is summarised in Table 3.

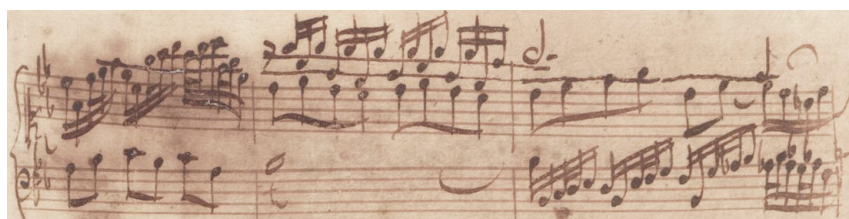
<i>Reason</i>	<i>Bach’s norm (extended beams)</i>	<i>Exceptions (default beams)</i>
Musical attention	horizontal (i.e. melodic interest)	vertical (i.e. harmonic shifts)
Musical material	motifs	cadential figures
Texture	thin	thick (and congested)
Position within the piece	early	late

Table 3: Possible reasons behind Bach’s use of two types of quaver beaming.

When examining them from the perspective of musical genre, form, and style, a new picture of what Bach may have been thinking emerges. Using two types of quaver beaming were considered under the following situations:

- ◆ To distinguish between subjects (long beaming) and episodes (short beaming) in fugues: Fugue No. 24 in B minor (though not very consistently) and Fugue No. 16 in G minor of WTC II (fairly consistently);
- ◆ To distinguish contrasting motifs within fugue subjects: Fugue No. 1 in C major (the head motifs ♪♪♪ vs the tail motifs ♪♪♪);
- ◆ To distinguish contrasting motifs in subjects and countersubjects: Fugue No. 16 in G minor (the head motif of the subject ♪♪♪ vs the tail of the countersubject ♪♪♪);
- ◆ To mark and articulate cadential passages with short beams: Fugue No. 2 in C minor (m. 29) and *passim*;
- ◆ To reflect the change of mood / mode: Prelude No. 16 in G minor (using a long beam in mm. 7-8 where the piece is modulated to the relative major – see Ex. 11) and *passim*.

For performers, the most interesting of these possibilities would be the last one, which can be illustrated through a brief example. The Prelude No. 16 in G minor has already been discussed in the context of using short beaming to convey a ‘plodding’ mood (see Ex. 9a). However, Bach also used long beaming in two isolated places: in m. 4<sup>1-2</sup> in the tenor ♪♪♪ and mm. 7-8 in the alto (see Ex. 11). There Bach appears to have redirected his attention from the harmonic shifts of each crotchet beat to the exploration of melodic freedom at these moments. More striking must be the latter, the longest spell of extended beams: this is where the piece modulates to the relative major. From these long and calligraphic wavy beams in the alto one might be able to read some exceptional emotional content Bach may have been appreciating.



Ex. 11: J. S. Bach, Prelude No. 16 in G minor (Source A), mm. 6<sup>2</sup>-8.

The availability of the optional notation of quaver beaming allowed Bach to exploit the concept of subtle emphasis in his notation, which was used to capture at least some of

his compositional decisions and priorities. By carefully deciphering his intentions, we may be able not only to untangle a complex web of thoughts Bach was experiencing while writing down his music, but we may also be able to appreciate from a fresh context how Bach and his contemporaries responded to such needs through variations in beaming, and how the next generations would discover new ways to express finer nuances with a host of expression marks.

Performers need new ideas to spark their imagination – not a faint and illusive notion, but something that has clear potential to open up a new world of interpretative opportunities. This quaver-beam theory hopefully provides an attractive proposition.

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