

J. S. Bach's

Well-Tempered Clavier, Book II

A Study of its Aim, Historical Significance and Compiling Process

Yo Tomita

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SOME OF THE SHEET MUSIC
HAS SILVER NOTES ADDED
AFTER THE PRINTING OF THE
THESIS

UNSURE IF THIS HAS BEEN
DONE BY THE AUTHOR

THE ADDED NOTES SHOW UP
AS GREY ONCE DIGITISED

Das Wohltemperirten Claviers
Zweiter Theil,
bestehend
in
Praeludien und Fugen
durch
alle
Tone und Semitonen
verfertigt
von
Johann Sebastian Bach,
Königlich Sächsisch und Churfürstl. Sächs.
Hof-Compositour, Capellmeister
und Director deri Musici
in Leipzig.

[B. W. 14, 91]

Mus. ms. Bach P 430

Berlin, Staatsbibliothek Preußischer Kulturbesitz, Musikabteilung

ABSTRACT

J. S. Bach's Well-tempered Clavier, Book II (WTC II) is one of his works whose authoritative text is yet to be established. For this kind of popular composition one may find it particularly strange that no two editions give identical texts. Apart from the interest of publishers, there has been no further exhaustive survey of this issue since the work of Franz Kroll (1866) and Hans Bischoff (1884) in their respective editions.

It appears that Bach's autograph in the British Library, Add.35021 does not contain Bach's final authoritative text in every detail. From the evidence in some of Bach's students' copies, it has been generally assumed that Bach made a subsequent fair copy, which is now lost.

My study of the manuscript copies, printed editions and other scholars' treatises in the past suggests that the lack of our understanding could be ascribed partly to the complexity in Bach's compiling and copying process, but especially to the lack of thorough and objective scholarship in manuscript study.

This study focuses on Add. 35021. The aim was to reconstruct Bach's compositional activities and habits, how he drew his staves with a rastrum based on his plan of layout, how he repeatedly revised his original text, and how, when he found it impossible to make further revisions on the same sheet, he prepared a new sheet and made out his revision on it. This process went on until he was satisfied or until he thought he would leave it for the time for future amendments. It is especially important to distinguish Bach's initial entries from his later additions, because this is normally the only evidence of the previous state of the work. One way of doing this is to classify the types of ink and pen used by Bach at the time. The other possible method is to note the calligraphic distinction between Bach's fair copies and his composing scores, and also the way Bach planned his layout with care from the beginning or he compressed his notations into smaller spaces when he came towards the end.

When compared with Add.35021, some of the non-autograph ^{sources} represent a unique reading of Add.35021 at a particular moment in time. By referring to such secondary sources, we can see clearly Bach's continuous revision activities on Add.35021. In other words, we can reconstruct a time-table of the order of compositions in the compilation and the multiple layers of later revisions. From the study, I have found that long before the presumed lost authoritative version would have been completed, Bach had already shown to his pupils his continually revised autograph as if it were the final revision.

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ABBREVIATIONS

GENERAL TERMS

Anon.	Anonymous
MS, MSS	manuscript, manuscripts.
WTC (vol.)	The Well-tempered Clavier. Book (vol.)
Cb-WFB	Clavierbüchlein für Wilhelm Friedemann Bach.
Cb-AMB	Clavierbüchlein für Anna Magdalena Bach
CU (no.)	Clavierübung (no.)
BWV	Bach-Werke-Verzeichnis. - Wolfgang Schmieder: Thematisch-systematisches Verzeichnis der musikalischen Werke von Johann Sebastian Bach. (Leipzig, 1950f).
Fk	Martin Falck: Wilhelm Friedemann Bach. Sein Leben und seine Werke (Leipzig, 1913; Lindau, R/1956)
Wq	Alfred Wotquenne: Thematisches Verzeichnis der Werke von C. P. E. Bach. (Leipzig, 1905)
Pr.(key)	Prelude (key) from WTC II unless specified otherwise. Upper case for major key, lower case for minor key.
Fg.(key)	Fugue (key) from WTC II unless specified otherwise.
PrFg.(key)	Prelude and Fugue (key) from WTC II unless specified otherwise.

LIBRARIES, MUSEUMS

Am.B.	Amalienbibliothek (Originally the collection of Princess Anna Amalia of Preußen)
DSt	Deutsche Staatsbibliothek, Berlin (East) [formerly Preußische Staatsbibliothek (and earlier as 'Königliche Bibliothek') Berlin].
BL	The British Library, London
BM	The British Museum, London
Go.S.	Sammlung Manfred Gorke, Bach-Archiv Leipzig.
MB Lpz.	Musikbibliothek der Stadt Leipzig.
SPK	Staatsbibliothek Preussischer Kulturbesitz, Berlin (West)

MANUSCRIPT SOURCES, ABBREVIATED

A	Altnikol Tradition
A1	Altnikol Group 1 MSS (represented by P 430)
A2	Altnikol Group 2 MSS (represented by P 402)
B	Bach's Autograph Tradition
Bn	Berlin Autograph, P 274
F	Fürstenau MS (P 416, Add. 38068, Chicago and Fürstenau)
H	Hamburg MS (presumably in C. P. E. Bach estate, now lost)
H1	Hamburg Group 1 (represented by M B/1974)

H2	Hamburg Group 2 (represented by P 209)
K	Kirnberger Tradition
K1	Kirnberger Group 1 MSS (represented by Am.B.57)
K2	Kirnberger Group 2 MSS
K3	Kirnberger Group 3 MSS
K4	Kirnberger Group 4 MSS
L	London Autograph, Add. 35021.
S	Second collection of WTC II presumably in Bach's hand (now lost)

CONVENTION OF MSS DESCRIPTION

f., ff.	folio, folia
MS Pos	Reference of position in the manuscript in the following manner: Column (Left or Right) system number, bar number. The counting of bar number begins regardless of a bar-split from the preceding system.
r	recto
v	verso
I,II,etc.	Fascicle structure: Unio, Binio, etc.

MUSICAL SYMBOLS AND CONVENTIONS

S	Soprano; (S1 = First Soprano, S2 = Second ... etc.)
A	Alto
T	Tenor
B	Bass
b., bb.	bar, bars
(Pitch)	Pitch is referred to by special fonts (e.g., C#, A ^b)
(Location)	b.Bar number(:Voice(/2nd voice)),beat(/[n]th symbol) e.g., b.7:S,3/4 = bar 7, in the soprano, on the 3rd beat, the 4th symbol.
t-s	Time-signature
k-s	Key-signature

BOOKS / PERIODICALS / YEARBOOKS

AMw	Archiv für Musikwissenschaft
BachJb	Bach Jahrbuch
BDok	Bach-Dokumente. Edited by Bach-Archiv Leipzig.
BR	David, Hans Theodor; Mendel, Arthur: The Bach Reader. A Life of Johann Sebastian Bach in Letters and Documents. (1966) 474p N.Y.: W.W. Norton, 1/1945. R/1966, 474p.
CurMcol	Current Musicology
EarlyM	Early Music (London)
JAMSoc	Journal of the American Musicological Society
Mf	Die Musikforschung.

MGG	Die Musik in Geschichte und Gegenwart. Allgemeine Enzyklopädie der Musik. Kassel 1949-1979.
MKirche	Musik und Kirche
MLetters	Music & Letters
MQ	The Musical Quarterly.
MTimes	The Musical Times
NBA [KB]	Neue Bach –Ausgabe: Johann Sebastian Bach. Neue Ausgabe sämtlicher Werke. Herausgegeben vom Johann-Sebastian-Bach-Institut Göttingen und vom Bach-Archiv Leipzig. [Kritischer Bericht] (Kassel etc. and Leipzig, 1954ff).
OrganYb	The Organ Yearbook

ABBREVIATED REFERENCES

BDok

- I *Schriftstücke von der Hand Johann Sebastian Bachs*. Vorgelegt und erläutert von Werner Neumann und Hans-Joachim Schulze, (Kassel etc. and Leipzig, 1963).
- II *Fremdschriftliche und gedruckte Dokumente zur Lebensgeschichte Johann Sebastian Bachs 1685-1750*. Vorgelegt und erläutert von Werner Neumann und Hans-Joachim Schulze, (Kassel etc. and Leipzig, 1969)
- III *Dokumente zum Nachwirken Johann Sebastian Bachs 1750-1800*. Vorgelegt und erläutert von Hans-Joachim Schulze, (Kassel etc. and Leipzig, 1972).

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- Ornaments *Bach's Ornaments*. (London: Novello, 1953) 164p.
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NBA KB (see abbreviation on books, etc.)

II/4 Johannes Passion (1974) von Arthur Mendel

II/5 Matthäus Passion (1974) von Alfred Dürr

IV/5+6 Präludien, Toccaten, Fantasia und Fugen für Orgel (1978-1979) von Dietrich Kilian

V/4 CbAMB (1957) von Georg von Dadelsen

- V/5 CbWFB (1963) von Hans Klotz
 V/6.1 WTC I (1989) von Alfred Dürr
 IX ,1 Wasserzeichen (1989) von Wisso Weiss und Yoshitake Kobayashi
 IX ,2 Bachs Notenschrift Johann Sebastian Bachs. Dokumentation ihrer Entwicklung
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INTRODUCTION

Among more than ten thousand scholarly works concerning the compositions and the life of Johann Sebastian Bach (1685-1750), there are few which seriously inquire into the historical aspects of WTC II.¹ It is certainly a strange truth for as famous and important a work as WTC II, which had been exceptionally cherished among musicians, right through Bach's students, Beethoven, and Chopin until now. The reason for our scholars' reluctance to undertake historical research was not that they already knew sufficient details about it. Since they could not obtain conclusive, significant results from the information they had, they felt that serious work in this area was not justified. Nonetheless, this state of historical research became, for some time in the past, the basis of interpreting other aspects of the work. But recently, the situation has improved. Dehnhard, in his Wiener Urtext Edition (1983), showed a significant advance on previous Bach research. He contributed especially to our historical understanding of WTC II, showing how one version is related to others. Due to the space limit, his study could not fully justify certain hypotheses with sufficient arguments. Presently, therefore, we look forward to the publication of the critical edition of NBA V/6ii by Alfred Dürr, which is due to appear within a couple of years' time.

In the past, WTC II was frequently regarded less highly, or was thought less attractive, than WTC I. This may still be true. As a result, we have seen significantly fewer esoteric approaches to the work than to WTC I.² This attitude of our scholars was often related directly to Bach's supposed attitude to the work. This was sometimes supported historically: considering that there survives neither the authentic title of WTC II nor a complete bound volume, scholars such as Fuller-Maitland and Dickinson tended to think that WTC II was written with no very strong motive beyond a possible use as teaching material.³ Ittenberg goes so far as to say that a "major creative impulse is not found in the second book".⁴ It is hardly conceivable, however, that while composing several important large scale works, viz., CU3 (-1739), CU4 (-1742) and the Art of Fugue (ca.1740-), Bach would allow himself a significant

¹ I have been compiling for some years a bibliography related to Bach literature, printed editions and research, which now includes just above 10,000 references. It may be surprising, if I put in this way, that I have so far managed to include in it 38 references only specifically for WTC II, and this is only about 10% of WTC references as a whole.

² Werker (1924) and Hahn (1973) approached WTC I from numerological and theological view. On WTC II, Nissen (1952) is the only work, but his theological approach is unfortunately neither as thorough as those scholars' of WTC I, nor based on reliable scholarly ground.

³ Fuller-Maitland (1948), p. 3; Dickinson (1950), p. 42. Gray (1938), p. 5, says Bach designated the title as "Twenty-four new Preludes and Fugues". I find no such title in the extant MSS, and suspect that he mistook the Ms. Am.B.57 as Bach's autograph.

⁴ Ittenberg's arguments are on pp. 167-169.

amount of time in compiling such a large scale composition as WTC II without a "major creative impulse". We should also remember that WTC II was not a commissioned work, with no payment or attached obligation. In addition, it is dangerous to assume that the lack of a title page or a binding were the evidence of Bach's low spirit towards WTC II. Those could have existed and be now missing; or Bach could have asked his copyist to write a title page. At any rate, it is reasonable to assume that in preparing WTC II Bach needed no incentive in advertising a concept of employing all twenty-four keys, for this was no longer innovative by 1740.⁵

Another unfavourable attack on WTC II was made against its structure as a collection of pieces. It is said more or less unanimously that as a collection WTC II is "less unified than WTC I".⁶ The unity to which we refer is about three factors of relations between the collection as a whole and the individual pieces within, viz., sequence, size and style. The first factor Gray describes as follows:

... the keys, moreover, are sometimes felt to be arbitrary in comparison with those of the first book - one can perfectly well imagine some of them in other keys than those in which they appear. Transposition does not affect their essence; the sequence of moods, too, has not the same logic and necessity as in the earlier collection.⁷

Related to this are discussions about the stylistic diversity in the preludes and the use of diverse fugal techniques (fairly free to extremely elaborate). This was regarded partly as a result of the re-use of older compositions.

Such apparent lack of unity is normally attributed to the way the work was compiled. Kirkpatrick assumes it to be accidental, and compares the inconsistent order and sequence of WTC II to that of "excerpts from a poet's diary or an artist's sketch-book, put in posterior order". He explains further:

Yet there are no duplications, and the massive, scarcely assimilable impact of the collection confronted as a whole reveals the variety and richness of its contents.⁸

⁵ There are at least three compositions of WTC fashion by other composers which predate WTC II: 1) Johann Gottfried Kirchoff: *L'A.B.C.-musical: Präludia und Fugen aus allen Tönen* (Amsterdam?, 1738?); 2) Georg Andreas Sorge: *Clavier Übung, in sich haltend das I. und II. habe Detzend Von 24. melodieusen, vollstimmigen und nach modernen Gustu durch den gantzen Circulum Modorum Musicorum gesetzten Praeludiis* (Nürnberg, ca.1738) - this composition continued towards the completion of 24 pieces, and the third part was dedicated to Bach. See BDok II/526 and BR, p. 235 f.; 3) Georg von Bertuch: *XXIV Sonates composée par le Canons, Fugues, Cantre points & parties, selon le sisteme de 24 modes & les preceptes du fameux Musicien, componiste & Polihistor Jean Mattheson, a3, avec la Basse continüe par George de Bertouch*. See BDok II/421.

⁶ Wolff (1980) pp. 153-154.

⁷ Gray, pp. 5-6.

⁸ Kirkpatrick (1984), p.14. See also Gray, pp. 5-6.

Spitta, while recognizing a lack of unified structure in WTC II, justifies Bach's strategy of compilation by emphasising the significant advance of formative power and rich imagination in the individual pieces.⁹ If our commentators were correct, we should come to the following conclusion: that Bach intended to write 24 individual pieces, and made no concession at a musical level to unify them as a part of the whole. I suspect that the true answer is something different. For if we turn to recent studies on Bach's contemporary large-scale works, viz., CU3, CU4, Musical Offering and the Art of Fugue, they all indicate that in these works the structural, unifying element was the central pillar.¹⁰ Is there any undiscovered aspect of WTC II which unifies the work as a whole?

Finding the unknown is adventure. To bring any adventure to success, one needs two basic things - wisdom and inspiration, or in our case, historical knowledge about WTC II and relevant hypothetical insight into the work. Originally, this thesis was aimed to cover both, and divided my argument into three parts. In Part One, I studied the stylistic aspects of individual pieces and the biographical details of Bach's activity in 1730-1745; in Part Two, I concentrated on the source studies - inception of the piece, compilation, and the revision of the work; and in Part Three, I explored the question of the unifying power behind the structure of WTC II. Of course, I had the "inspiration" first. What I considered as possible unifying agents in WTC II were: 1) a numerological link; and 2) key characteristics and affections. In either case, the unity will not be musical but symbolic and monumental.

One way to link the movements of WTC might be by number symbolism, as is the case with CU3. To begin with, the number "24" was considered as one of the special numbers for Bach. Werker held this view, and showed an interesting numerical analysis of WTC I.¹¹ Prautzsch explains it as the sacred number of elders at the throne of God.¹² Hirsch, however, links the number with the hours of a day.¹³ In any case it may not simply be a coincidence that when Bach compiled a Genealogy of the Bach Family in 1735, he placed himself as twenty-fourth.¹⁴ In proving the hypothetical numerological foundation of a piece of music, scholars

⁹ Spitta III, p. 185

¹⁰ CU3 - G. A. Trumpff: "Der Rahmen zu Bachs drittem Teil der Klavierübung. *NZs/M CXXIV* (1963) 466-470; David Humphreys: *The Esoteric Structure of Bach's Clavierübung III* (1983); CU4 - David Humphreys: "More on the Cosmological Allegory in Bach's Goldberg Variations" *Soundings* Vol.12 (1984); Ursula Kirkendale: "The Source for Bach's Musical Offering: The Institutio Oratoria of Quintilian. *JAMSoc XXXIII* (1980) 88-141; Alan Street: "The Rhetorico-Musical structure of the 'Goldberg' Variations: Bach's Clavierübung IV and the INSTITUTIO ORATORIA of Quintilian. *MAnalysis. VI/1-2* (1987) 89-131; Musical Offering - Rudolf, Gerber: Sinn und Ordnung in Bachs 'Musikalischem Opfer': *Musikleben I* (1948) 65-72; The Art of Fugue - Bernhard Martin: *Untersuchungen zur Struktur der 'Kunst der Fuge' Bachs.* (diss. Köln 1940; Regensburg 1941).

¹¹ Werker (1922), pp.5-15, 215, 228 ff.

¹² Prautzsch (1984), p. 12.

¹³ Hirsch (1986), p. 54.

¹⁴ See BR, p. 208.

usually count number of bars or notes. But to do this for WTC II, we encounter great problems, for we do not have Bach's final text. Moreover, there are sometimes four different versions of a single movement. Had he such a concept, Bach would have revised his compositions solely to adjust the number of notes or bars according to the number symbolism. There is another level of number symbolism, however: the number of the piece within the cycle-order. Here I give two possible examples showing the relations between a Psalm and a prelude.¹⁵ The twenty-second prelude, Pr.b^b, can be considered as the musical depiction of Psalm 22.¹⁶ This rarely-used key, B^b minor, is also used where Psalm 22 was quoted by Jesus in the St. Matthew Passion (recitative 61a *Adagio*), "Eli, Eli, lama, lama asabthani!".¹⁷ More significant perhaps is the close resemblance in melodic structure between the theme of Pr.b^b and the recitative just mentioned. This can be made clear if we look into them with a J.N.David-style synoptic approach.¹⁸ Another example is found in the following twenty-third prelude, Pr.B, where Bach seems to have translated Psalm 23 into music verse by verse in his symbolic language.¹⁹

Another way to unite the twenty-four pieces may be to exhaust the possible ways of expressing individual key characteristics, a method which was not accomplished thoroughly in WTC I. Some keys certainly give rise to similar motives in the two volumes of WTC (in the B^b minor preludes, for instance), whereas others show quite different Affekten (such as those of the A minor preludes). This seems to indicate that Bach replaced his earlier image of the key with a later one. An interesting example is Pr.g, which in many respects resembles the opening movement of the St. John Passion.²⁰ But to prove this kind of hypothesis, we require a huge statistical and chronological survey of Bach's use of keys and motives.

To proceed with these hypotheses, I needed to study the historical evidence of Bach's incentive as well as his activity in the compilation and revision of WTC II. Therefore it was essential to exhaust the historical study of each individual movement first - i.e., to decide when each movement was first composed, how it was used and how it was repeatedly revised - all in the light of the particular historical position Bach held in his time. During my research into this

¹⁵ Prautzsch (1984), p. 13, considers certain number symbols can be related to Psalms. He lists 22, 23, 24, 35, 51, 69, 89 and 97.

¹⁶ Nissen (1951-52), p. 76, describes the prelude as "the death of Jesus" although he does not mention the relation to Psalm 22. He assigns to the tune of the prelude an interesting text "Jesus starb am Kreuz für mich den Tod".

¹⁷ This numbering is NBA's. BWV gives number 71.

¹⁸ See my unpublished MMus dissertation *The Well-Tempered Clavier II and Pianoforte Performance. Appreciation of Bach's Profound Compositional Level - Theological and Philosophical Speculation* (Leeds University, 1986), esp. performance note, p. 6.

¹⁹ *ibid*, performance note, pp. 6-7. However, Nissen (1951-52), p. 78, says that the prelude depicts "Resurrection and Ascension" and that it is related with Psalm 46, coinciding with the number of bars in the prelude.

²⁰ *ibid*, p. 27 ff.

part of the project, it became apparent that the initial plan of the thesis could ^{not} be accomplished within the time available. Thus for this thesis, I shall present Part Two of my project only.

Our present discussion is divided into four chapters for this purpose: Chapter 1 - Early Models for WTC II, where I discuss how these models were used, revised and developed; Chapter 2 - The London Autograph, where I discuss how Bach compiled WTC II; Chapter 3 - Evidence for the Completed Compilation of WTC II, where I view the compilation of WTC II outside the autograph, and discuss the origin of variant readings and the possible existence and state of lost autographs; and Chapter 4 - Revision Process of The London Autograph, where I discuss Bach's revision activity by projecting it into larger historical perspective.

CHAPTER 1

EARLY MODELS FOR WTC II

INTRODUCTION

The genesis of WTC II was first fully examined by Breckoff in 1965.²¹ Among sixty-eight MS sources he examined, Breckoff classified and described briefly the twelve MSS as early model tradition. These MSS contain, among various other pieces, the early versions of WTC II, which were not originally intended for WTC II, but which later found their way into it. In his study, however, Breckoff did not go beyond the basic description of the MSS. It is twenty years later that its historical significance is brought into light by Brokaw.²² He, in addition to already known twelve, also examined newly discovered MS.N.10490 and increased our understanding of these early models.

The aim of this chapter is to pursue certain important aspects of the MSS which our previous scholars did not touch: the background of the MSS, how they were made, and what they were made for. To do this, it will be essential to look in detail at each MS.

In discussing the early models of WTC II, one has to bear in mind the limitation of the study: the whole argument will be based on a hypothesis that cannot be proved but can only be deduced from a limited amount of evidence. For example, all the sources which are to be dealt with are not holographs, but copies, or maybe copies of copies, from lost autographs of Bach's. It is assumed that there must be many MSS, lost or still undiscovered, which would assist our study greatly or will possibly give us a different picture from what we are now going to see.

Unlike Breckoff, I shall concentrate my discussion on those MSS seen the most authentic in the sense that they are thought to derive directly from the autographs. The majority of other MSS, which were evidently made after Bach's death, and are clearly of secondary importance, are not dealt with in detail here.

²¹ Breckoff (1965).

²² Brokaw (1985). According to Brokaw, Klaus Hofmann studied the certain MSS of the early models and read his paper "Fünf Präludien und fünf Fugen." Über ein unbeachtetes Sammelwerk Johann Sebastian Bach," at the 1985 Bach Conference at Leipzig. I have so far been unsuccessful to obtain this article.

DESCRIPTION OF MSS IN TWO INDEPENDENT MOVEMENTS

In some pieces of WTC II the origin of the musical ideas can be traced as far as back as Bach's Cöthen years (1717-1723). The re-use of musical materials from his old works is not unusual for Bach, but is a part of his normal working procedure. The same process can be seen, for instance, in WTC I, which was derived from Cb-WFB, the collection made for Wilhelm Friedemann. By contrast with the case of WTC I, however, we know very little about the original form and purpose of the early models of WTC II, for Bach's autographs of these early models are not extant. Thus we have to rely on the copies made by Bach's pupils to see how they were made and used. These copies are found to have been made at two different times, and probably used for a specific purpose as WTC I. When we explore these questions, we shall see for what Bach's pupils' copies were meant in historical terms and how they contributed to the motivation and the compilation of WTC II in Bach's late years.

Table 1: *Early models of WTC II classified in two stages according to the approximate date of origin of primary-sources.*

Sources	Origin of text	Hand	Date
Embryonic stage			
P 804	from lost autograph?	J.P.Kellner ²³	1725-50
MS. Nr.4	copy of P 804	unknown	1st half 18c
P 1089	from lost autograph?	J.C.Vogler. ²⁴	1729
P 575	from same exemplar as P 1089	Kaufmann?	late 18c
MS. Nr.8	related with P 1089	J.G.Preller	1780s?
Go.S.19	from same exemplar as P 1089	unknown	1750-60 ²⁵
P 561	copy of P 1089	unknown	mid 19c
N.10490	from lost autograph?	Michel	1780s?
P 563*	from lost autograph?	Michel	1780s?
Pupal stage			
P 595	from lost autograph?	J.F.Agricola	ca.1738
P 549	copy of P 595	F.A.Grasnick	early 19c
P 226	from lost autograph?	A.M.Bach	ca.1738
P 550	copy of P 226	Michel	1780

NB, Sources in BOLD are primary source to distinguish them from the secondary sources.

** - P 563 can be listed in SECONDARY level.*

From the way the MSS were made and used, it can be deduced that the earliest models were perhaps prepared to meet the specific demand for teaching materials for his less advanced pupils in Bach's early Leipzig period (1723-1730). These MSS are listed in Table 1 as

²³ NBA KB V/5, pp24 f.

²⁴ Schulze Goldpabler, p. 31.

²⁵ Schulze (1977), p.17.

the "Embryonic Stage". All the pieces are written in commonly-used keys, are fairly short, are less demanding in technical skills, and are less complex compositional structures.

The other models (see the pieces listed in the MSS in Table 1, Pupal Stage) were perhaps related to the positive attitude Bach began to adopt in the late 1730s - the revision work of his earlier pieces. It is this trend itself which may have caused the compilation of WTC II. In the following sections, I shall refer to these two parts respectively as THE HERALD and THE PROLOGUE.

THE HERALD: WTC II IN EMBRYO

Among nine extant sources in this group, I shall concentrate on the four most important primary source MSS (see Table 1, Embryonic Stage, Primary Source), which, I think, present the earliest historical records in relation to the compilation of WTC II. The first two MSS, P 804 and P 1089, are Bach-circle copies from ca.1725-1730. The third and fourth, N.10490 and P 563, were made ca.1780 by C. P. E. Bach's copyist but are thought to be copied directly from Bach's autograph. It is deemed by some scholars that all four were based on autograph now lost but formerly in the possession of C. P. E. Bach in Hamburg.²⁶

These early models of Bach's were considered to be made much earlier than Bach's pupils' copies. Brokaw considers that these early models even pre-date WTC I, as early as before 1713.²⁷ I shall return to this point after I have discussed individual MSS.

P 804

MS P 804, generally known as Kellner's miscellaneous volume, is a large, 5 cm thick, bound manuscript composed of 396 pages in 57 fascicles.²⁸ Partly due to its impractical huge size, the MS is damaged considerably. This can be confirmed from many pages restored with gauzing. Most of the pages contains J. S. Bach's keyboard music. Fascicle 5 (pp. 21-24), fascicle 11 (pp. 57-60) and fascicle 38 (pp. 233-244) are our main interest in the present study.

No firm date has yet been assigned to this manuscript, and no one has so far made any serious attempt to examine the watermarks. Breckoff reported that it does not bear watermarks at all. W. Plath, however, gives the date of the MS as between 1725 and 1750, for there he finds several pages giving original dates, viz., fascicle 22 (1726), fascicle 29 (1725) and

²⁶ Brokaw (1985), p.25, agrees with this hypothesis.

²⁷ Brokaw (1986), p.310.

²⁸ This MS contains penciled fascicle number as well as page number. That of fascicle number is incompletely given: thus it does not give the same number as the actual. As Plath has made careful study of the MS, I shall maintain the number confirming to his. Plath assumes that the binding was carried out after Kellner's death considering its impractically huge size. See NBA KB V/5, pp. 24-34.

fascicle 41 (1725).²⁹ The dates given here seem to be quite reliable, for they appear not as the date reference for the composition, but that for the copy of the copyist, Kellner, by whom these pieces were entirely copied.³⁰ Although no date reference is found in fascicles 5, 11 and 38, with which we are concerned here, some scholars assume that they are from the same period.³¹

The scribe of the greater part of the MS is attested as Johann Peter Kellner (1705-1782).³² The other known scribe, who has written a clear signature, is Wolfgang Nicolaus Mey. There are, however, many unidentified scribes: Plath counts as many as sixteen.³³

FASCICLE 5: PP.21-24

Fascicle 5 is a single bifolium, measured 32.7 x 20 cm.³⁴ Staves were prepared with a rastrum 8.5 mm (-1.8-2.2-2.3-2.2-) high.³⁵ With this rastrum the first three pages were formatted in seven piano systems, the last page in four. This unique layout must have been well planned in advance; however we find that the scribe could not fit the last bar of the piece (BWV 953) within the room pre-prepared. A thin brown ink was used for ruling staves, in contrast to the ink used for notes in darker brown. The music listed below was copied by Kellner:

CONTENTS:

Page	BWV	Key	t-s	Bars	Movement heading and Description
21	902a	G	3/4	33	<i>Præludium. di J.S.B.</i> The surface is gauzed. It ends with <i>Verte Fuga</i> . ³⁶
22	902,2	G	3/8	60	<i>Fugetta.</i> The early model of Fg.G. ³⁷
23-24	953	C	C	36	<i>Fuga.</i> Whole surface of p. 24 is gauzed.

²⁹ In fascicle 22 (p.121, title page for BWV 1001, 1003-1006) we find *Scripts. Johann Peter Kellner Anno 1726. Frankenhayn*, and in the end of the fascicle (p.146), we find *Frankenhayn. den 3. Juli 1726*. In fascicle 29 (p.175, title page for BWV 894) we find *Scripts: Johann Peter Kellner. Anno 1725*. And in fascicle 41 (p.308, at the end of the fascicle for BWV 722-801) we find *Johann Peter Kellner 1725*.

³⁰ Compare KB V/5, p.25.

³¹ Breckoff, p.17-18

³² Löffler (1953), p. 16. No.32.

³³ More recently Dietrich Killian identifies some of those unknown scripts: J. G. Walter^h? (p.25-32), J. N. Mempel (p.46-56; after TBSt 2/3 and NBA KB V/5, p.31: unknown script XII), von L. Frischmuth (Possessor, p.37-39), W. N. Mey (p.341-344, 389-392 ff), J. Ringk (p.365-372; after TBSt 2/3 and NBA KB V/5, p.33: J. P. Kellner), letters 'CA' signed by the copyist (p.14-18, 393-396; after TBSt 2/3 and NBA KB V/5, p.26-31: unknown scribe 2). See NBA KB IV/5+6 (1), p.195. Unfortunately none of these concerns our immediate interest.

³⁴ 33.5 x 21.5 by NBA KB V/5, p. 25

³⁵ Number is the width of space in millimetres, working from bottom to top; - and = show thickness of the pen for each line, viz., ca. 0.4 mm and ca. 0.6 mm respectively. This detailed measurement of rastrum is given only to primary source MSS.

³⁶ Printed music is found in Bischoff, p.124-125.

³⁷ Printed music is found in Bischoff, p.126-127; BG XXXVI, p.116-117.

The *Fugetta* in G is an early model of Fg.G. Kellner's copy shows the trace of amendments entered with black ink as well as with pencil. There are as many as six corrections of pitch by lettering, e.g., `g', `fis', etc, and less frequently the addition of sharps. These amendments have not yet been attributed to a particular hand.

Another interesting feature of this piece is the accompanying *Præludium* (BWV 902a), which is markedly a different piece from the one presented in P 1089 and N.10490 (BWV 902,1).³⁸ From this evidence alone, we may speculate that within ca. 1725-29 Bach changed the partner for the G major fughetta. It is significant that for WTC II Bach rearranges the pair, for the second time, by making a new prelude, which inherited features from both of the earlier preludes.

Breckoff considers that this copy may be dated in the region of ca.1725-1729;³⁹ but it possibly pre-dates the copy of the same piece contained in P 1089, discussed on p. 14 below.

FASCICLE 11: PP.57-60

Fascicle 11 is also a single bifolium. The folded sheet measures 32.4 x 20 cm. The watermark and paper type are still to be studied. Staves were prepared with a rastrum 8.5 mm high (-2.0=2.2=2.2=2.2-), the same height as that of fascicle 5 but in a different composition in gauges. They are arranged in eight piano systems per page. Staves are in brown ink, giving good contrast with the black ink used for notes. The music was copied by unknown scribe VI.⁴⁰

CONTENTS:

<u>Page</u>	<u>BWV</u>	<u>Key t-s</u>	<u>Bars</u>	<u>Movement heading and Description</u>
57	873,2	c	12/16	71 <i>Fuga a 3</i> . [bb. 1-28,3] The whole surface of paper is gauzed.
58				cont. [bb.28,4-56]
59				cont. [bb.57-71] Three systems left unused.
60				unused. Some keyboard music was written in the first system, but carefully crossed out with pen. Only 'pedal' in b.1 is visible. The whole surface of paper is gauzed.

The *Fuga a 3* is the only known early copy of Fg.c#. The upper staff of the score is written in the treble clef rather than in the soprano clef. I found no particular later amendments to the text. The score is well written, with steady, neat calligraphic features. From the way the scribe started copying, i.e., started from page 1 of the fascicle, we can be sure of the copyist's tactics

³⁸ BWV 902a is a 33 bar toccata style movement in 3/4 time; BWV 902,1 is a 56 bar dance movement in binary structure.

³⁹ Breckoff, pp.17-18.

⁴⁰ NBA KB V/5, p. 28.

in the layout of the fugue: he obviously preferred to use his music in paginated format rather than in open format as will be seen in L.⁴¹

An exceptional quality of the piece among all the other early models is its maturity; in fact, its musical text is almost identical with Altnikol's version (A), though the Altnikol version is in C# minor.⁴² In this score we find no evidence which indicates the creation date of the MS. For this we still need to investigate further into watermarks and rastra.⁴³ As far as the dating of the piece is concerned, I suggest a period very close to the actual compilation of WTC II, i.e., 1735-1738.

FASCICLE 38: PP.233-244

Fascicle 38 is a *ternio*. The sheets in its folded state are measured 32.7 x 20.5 cm. Watermark is not known. Staves were prepared with a rastrum 8.2 mm high (-2.1=2.0-2.1-2.0-). They were certainly arranged for keyboard music, but arranged in varying layouts as shown below:

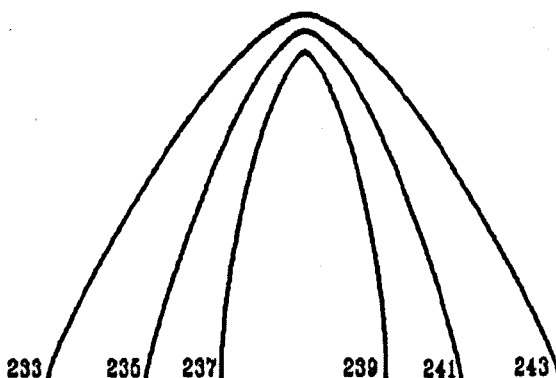


Fig. 1: *Fascicle structure of P 804, fascicle 38*

STAVE LAYOUT:

12 staves (6 systems) - pp. 236-237.⁴⁴

14 staves (7 systems) - pp. 235, 238-239, 241-242.

16 staves (8 systems) - pp. 240, 243.

Staves were drawn with thin brown ink, while notes and other symbols were written in thicker brown ink. Music was copied by Johann Peter Kellner. Some symbols appearing in dark black ink and in red pencil are thought to have been added at a later date.

⁴¹ In L the most of leaves started from page 2 of *Unio* fascicle. There is, however, one exceptional instance in L, which follows the format used in this *fuga a 3*. This is Fg.A^b (f.14). See Chapter 2, pp. 56 ff and 94 ff for more details.

⁴² The detailed textual differences are listed in Supplement B under Fg.c#.

⁴³ Kast, p.49, considers it vaguely as the first half of the 18th century.

⁴⁴ In p.236, however, an additional system was drawn freehand to accommodate the last two bars.

CONTENTS:

Title page: p. 233

Præludia, und Fugen.

*Zum Nutzen und Gebrauch
der Lehrbegierigen Musicalischen
Jugend, als auch derer in diesem
Studio schon habil seyenden
Besondern Zeit Vertreib
aufgesetzt und verfertiget
Von
Johann Sebastian Bachen.*

(J.P.Kellner.)

Page	BWV	Key	t-s	Bars	Movement heading and Description
234					Blank.
235	870a,1	C	c	17	<i>Prælude</i> . At the end, we find: <i>Volti / Fugetta in C.</i> The expected fughetta, however, does not appear until page 238. Entire page is gauzed.
236	899,1	d	3/4	27	<i>Prælude. in D. b.</i>
237	899,2	d	3/8	55	<i>Fugetta</i> .
238-9	870a,2	C	c	34	<i>Fugetta</i> . Entire pages are gauzed. At the end of p. 239, we find <i>Segue</i> ; <i>Prælud: in D.b.</i> The suggested sequence of piece does not follow, however.
240	900,1	e	C	18	<i>Præludium</i> .
241					Unused.
242-3	900,2	e	3/4	104	<i>Fuga</i> . Entire page of p.242 and part of p. 243 are gauzed.
244					Blank. Entire page is gauzed.

From the marginal instructions on pages 235 and 239,⁴⁵ the intention of the copyist is clear: the order of the pieces is to be followed in the way implied by the WTC style title page. Then why were these marginal instructions necessary? Why did not Kellner copy the piece in his desired sequence from the outset? It seems the arrangement of pieces was not an afterthought. I tend to consider that Kellner planned the fascicle for practical use, i.e., for performance. It can be seen that in two-page movements, viz., the *Fugetta* in C major and the *Fuga* in E minor, Kellner deliberately avoided making a page turn within the movement. This can be the only reason why p. 241 is unused. Furthermore, he exercised three different stave layouts probably according to the length of each movement: in this, however, he failed to get much out of its concept. It is possible to see that Kellner was ambitious. He might have

⁴⁵ This kind of marginal instruction is only found here in the entire MS. Due to the gauzing carried out on pp. 235 and 238, I could not distinguish the shade of the ink used either the notation or for the instructions.

intended to compile a cycle of pieces similar to WTC I in its early form as seen in Cb-WFB, though Kellner's case is much too small scale. From the uniform short lengths of these movements, and from the less demanding technical difficulties in both performance and compositional structures, one may assume that Kellner's collection, arranged in this way, was a sensible production for a member of the Bach circle. The last page, p. 244, remains blank: it can be assumed that the copyist had the intention to continue a small cycle here.⁴⁶ If so, it is likely to be the pair of F major (BWV 901) and G major (BWV 902) which have found their way into the other fascicles and MSS. It is significant to observe the order of arrangement in the newly-discovered N.10490, discussed on pp. 22 ff.

The musical text represented in this fascicle is also of interest. Here we find the early models of PrFg.C. Both movements were written in ϵ metre and are considerably shorter than the WTC II versions.⁴⁷ The Prælude in C major (BWV 870a,1) contains several variant readings that are likely to be orthographic errors by Kellner. I list them in Table 2 below.

Table 2: *Prelude in C major (BWV 870a,1) - Errors contained in the MS copy of P 804*

Location	Description of errors
b.3:AT,3-4	Note-value of c'/g was in dotted minims. These notes should be minims without dots.
b.11:S,2/1	a semiquaver rest is missing.
b.15:T,3/4	The pitch e' was falsely written as c' .
b.16:A1/A2,4	These two voices were exchanged, probably caused by the shortage of room to write A1 stemmed up.

Another exciting finding is the presence of two different C clefs, shown in Fig. 2 below, which is used in p. 235 in a unique manner: the type (a) is used three times at odd number systems (1st, 3rd and 5th), while the type (b) is used for the rest (2nd, 4th, 6th and 7th).



(a) 1st system (b) 2nd system

Fig 2: *P 804 - Two distinguishable C-clefs in p. 235*

Clef (a) is not found elsewhere in fascicle 38, but it does occur in fascicle 5. On the other hand, clef (b) was used throughout in fascicle 38, while never found in fascicle 5. Both must be of Kellner's handwriting, for we find the identical bass clef for both cases. This can be the

⁴⁶ Compare Breckoff, p 17.

⁴⁷ Printed music in Bischoff, p.122 (prelude only), and in BG XXXVI, p.224-225, xciv, give C metre, however. These editions are not precisely the same.

transition of his clef type during the years; but to understand it better, we need further studies of Kellner's habit and copying practice.

MS. Nr.4

Unfortunately, the reproduction of MS. Nr.4 of MB Lpz., Scheibner Sammlung, was not available for my study. According to P. Krause, the MS. Nr. 4 is unbound and has 32 leaves in 13 fascicles.⁴⁸ This MS is said to be a miscellaneous volume containing a wide range of pieces by various composers, including Bach, Handel, J. P. Kellner and J. L. Krebs. The early model of PrFg.C (BWV 870a) is found on pp. 5-6.

CONTENTS:

Page	BWV	Key	Movement heading and Description
5?	870a,1	C	<i>Prælude</i> . At the end, we find an instruction <i>Volti</i> .
6?	870a,2	C	<i>Fugetta</i> .

The scribe is not known. Breckoff suggests that the piece is copied from P 804, fascicle 38, and that the MS dates from the first half of the eighteenth century.

P 1089

MS. P 1089 from the "*Hauser Collection*"⁴⁹ is a miscellaneous collection consisting of two fascicles. The MS was once thought to be in Bach's hand.⁵⁰ According to Schulze, Dadelsen was the first person to show that it is not an autograph.⁵¹ Walter Emery assumed that it was "probably written by Kellner or some member of his circle".⁵² More recently, H.-J. Schulze identified the scribe of the MS as Johann Caspar Vogler, who was Bach's finest pupil in his Weimar period, ca.1710.⁵³ Schulze relates the creation of the manuscript to the occasion of Vogler's visit to Leipzig at Christmas 1729.⁵⁴

⁴⁸ Krause (1964), pp. 27-28. See also Brokaw (1985), p. 27.

⁴⁹ BG, XXXVI, p.lvi; Further information may be acquired from - Kobayashi, Yoshitake: *Franz Hauser und seine Bach-Handschriftensammlung*. (Göttingen, 1973) PhD dissertation.

⁵⁰ It originates from Friedrich Konrad Griepenkerl, who edited the first edition of the Preludes in D minor and E minor (BWV 899 and 900) in 1843. Further information can be obtained from - Kinsky, Georg: "Verzeichnis der bis 1850 gedruckten Werke Joh. Seb. Bachs." *BachJb* III (1906). Compare Schulze 18c p.64.

⁵¹ Schulze 18c. p. 64.

⁵² Emery (1953), p. 119.

⁵³ Löffler, p. 7.

⁵⁴ Schulze Goldpapier, p. 31. See also Löffler, p. 7, for more detail about Vogler's visit.

FASCICLE 1: PP.1-16

Fascicle 1 is a quaternio (IV x 1), as illustrated in Fig. 3 below.

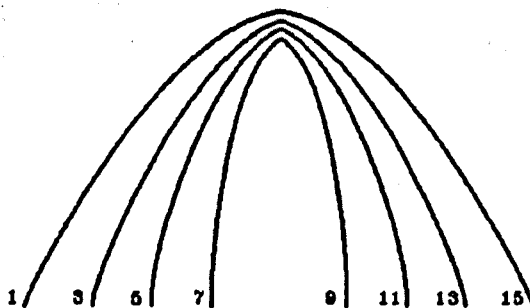


Fig. 3: Fascicle Structure of P 1089, fascicle 1

The paper used in fascicle 1 is brownish, thin and flexible. Its watermark is 'MA middle form' and dates between 1727 and 1731.⁵⁵ The folded sheet is measured 34.5 x 22.3 cm. Its top and bottom sides appear to have been trimmed. The paper itself is in good condition; unfortunately, however, it has suffered from the acid contained in the ink. This chemical reaction made almost every page full of ink stains from the other side of the paper. In this fascicle I find four distinguishable qualities of ink: 1) Brown ink - for staves; 2) Darker black ink - titles, notes, t-s, k-s, clefs; 3) light brown ink with thin pen - fingering and ornaments on pp. 8-9.; 4) Lighter black ink with thin pen - 1.5 bars sketch of A major piece found following the cadence of the C major Fugetta in p. 9.

Staves were ruled with a rastrum 8.9 mm high (-2.3=2.3=2.1-2.3-), and arranged in two types of format: seven piano systems (pp.2-10, 12, 14-15) and eight (pp. 11 and 13).

CONTENTS:

Title page: p. 1

*Præludia et Fugen. ex D. moll. E.moll. C.dur
et F.dur. item Trio. à 2 Clavier
et Pedal. ex D.moll
di J. Sebast: Bach.*

Page	BWV	Key	t-s	Bars	Movement heading and Description
2	899,1	d	3/4	27	<i>Prælude di J. S. Bach</i>
3	899,2	d	3/8	55	<i>Fugetta.</i>
4	900,1	e	C	18	<i>Præludium</i>
5-7	900,2	e	3/4	104	<i>Fugetta.</i>
8	870a,1	C	c	17	<i>Prelude composeè par J.S.Bach ends at 6th system.</i>
8-9	870a,2	C	c	34	<i>Fugetta immediately follows the prelude on the same system and ends in the 6th system of the next page.</i>

⁵⁵ Dürr Chr, p. 138f., 172. See also Schulze 18c, p. 65.

9	???	b	no	1.5	Untitled fragment follows immediately after the fugue in C major: see Example 1 below. The last (7th) system is left unused.
10	901,1	F	12/8	16	<i>Præludium</i> . ⁵⁶
11	901,2	F	c	24	<i>Fuga</i> . ⁵⁷ The last (8th) system is left unused.
12-14	527	d	2/4	112	Organ Sonata <i>Trio à 2 Clav: ex Pedal. di J. S. Bach</i> . This is the only piece which uses the treble clef for R.H. staff. The rest use soprano clef. At the end, <i>Da Capo</i> . is found.
14-15	875a	d	3/4	43	<i>Præambulum</i> starts from the 5th system. ⁵⁸ In p. 15, four systems left unused.
16					blank.

When we look into how the gathering was formed, we may find that the C major pair located in the inner-most pages (pp. 8-9) could have been initially made independently as a single bifolium. This side of the sheet contains several unusual features, such as extensive application of ornamentation, fingering and draft material, which will be discussed shortly. From these facts I tend to believe that the present fascicle (quaternio) was made after Vogler had copied the C major pair, and that the bifolium was placed into the centre of the fascicle to avoid separating the Prelude-Fughetta pair. This would explain the arrangement of pieces in an inconsistent key-order, viz, d - e - C - F, rather than the order found in P 804, C - d - e (-F).⁵⁹ Another aspect of the fascicle which supports my hypothetical reconstruction is Vogler's inclusion of "*di. J. S. Bach*" in certain movement headings. Among the prelude-fughetta pairs, Vogler wrote the movement-titles with Bach's name at the initial movement only (i.e., the prelude in D minor) and not for the following ones, i.e., in E minor (pp. 4-7) and in F major (pp. 10-11). The C major pair, which contains a fully written movement heading in rather extravagant fashion, is located between these last two. Its title would have been redundant if the C major pair had been copied with the others in this page order. The rest of the pieces, a Trio movement from Bach's organ sonata (BWV 527) and the *Præambulum* in D minor, were probably copied so as to fill the remaining empty pages.

Now let us come back to examine the C major pair (BWV 870a). As mentioned earlier, one interesting feature of P 1089 is the inclusion of fingering and the rather excessive application of ornamentation in the C major pair (BWV 870a). Probably all this was done by Vogler. Judging by the different types of ink used, the fingering and ornamentation were entered on a later

⁵⁶ Printed music is found in Bischoff p.132-133; BG, XXXVI, p.112.

⁵⁷ Printed music is found in BG XXXVI, p.113.

⁵⁸ Printed music is found in BG XXXVI, p.226.

⁵⁹ Brokaw (1986), p. 126, takes the same view.

occasion after the copying was done.⁶⁰ Noteworthy is the fact that fingering is found only here. Also curious is the 1.5-bar sketch in B minor, copied after the fugetta on p. 9, which I reconstruct in Example 1 below:

Example 1: *Untitled fragment in B minor found in P 1089, p. 9*



This is an addition, judging from the different ink colour. This musical text, the source of which I have so far failed to identify, shows a strong motivic relationship to the prelude in C major. There is a possibility that Vogler copied this draft material from Bach's autograph.

These peculiar features of pp. 8-9 suggest that the C major pair could have been copied and used in practice much earlier than the rest of the pieces in the fascicle. Contrary to this, the identity of the rastrum used in stave-ruling throughout the 16-page fascicle suggests that all pieces in this fascicle could have been prepared within a very short period of time. But there are some elements which reduce the significance of rastrology in this particular respect. Among the most important is the fact that neither the stave-ruling nor the planning of the stave layout was carefully done: the use of 7- or 8- system layouts does not reflect a consistent or carefully-considered copying policy.

The *Fuga* (not *Fughetta*)⁶¹ in F is the early model for Fg.A^b. It is in ϵ metre and only 24 bars long, but for WTC II Bach extended it to 50 bars, and adopted the C metre.

The last and yet probably the most important piece in this fascicle, the *Præambulum* in D minor (BWV 875a,1), represents the earliest known model of Pr.d. It consists of 43 bars only, which Bach expanded into 53 bars for WTC II and to 61 bars for his later revisions. We cannot ignore the possibility that the inclusion of this piece in this fascicle is accidental. This is the only movement in the fascicle which did not start from a fresh page as a single piece. Since Vogler squeezed in the *Præambulum*, it is possible that he planned to include another piece after the *Præambulum* in the four unused systems on p. 15 and on p. 16. This suggests that the

⁶⁰ Lindley (1989) in his most severe criticism of recent printed editions takes Vogler's ornamentations and fingering so seriously that he seems to disregard the authenticity of the reading given by P 804 and other MSS, which simply leave out such arbitrary ideas. In my view, the application of ornamentation in those days was largely left to the decision of the performer, who would have to adjust or adapt his performance to the various factors which presented themselves, e.g., instrument, resonance of hall, tempi, etc. I am therefore inclined to believe that Vogler's fingering and ornamentation were for his own personal reference in a particular performing environment.

⁶¹ Brokaw (1985), p. 28, is incorrect in this account.

Præambulum was not part of the early model cycle. There is even room to doubt the origin and authenticity of the work in this particular version.

FASCICLE 2: PP.17-20

Fascicle 2 is a single bifolium. It measures approximately 33.5 x 20.4 cm, but is not precisely rectangular. The watermark is the letters "MKW", believed to be from the Brankenburg's paper-mill.⁶² The brownish paper used in fascicle 2 is much thinner than that of fascicle 1. Like the latter, it has suffered from ink-acid. The ink is basically brown, but the shade varies considerably with every page.⁶³ This could be caused by the storage environment, combined factor of acid and moisture damage.

Staves were drawn with a rastrum 9.9 mm high (-2.3-2.55-2.55-2.5-), and arranged in uniform seven piano system format on pp.18-20. The first page, p.17, is unruled.

CONTENTS:

Title page: p. 17

*Praeludium 1. con Fuga,
ex G dur,
manualiter
di
Bach.*

Page	BWV	Key	t-s	Bars	Movement heading and Description
18-19	902,1	G	C	56	<i>Praeludium 1. con Fuga. di Bach.</i> ⁶⁴ At the end, we find a catch word <i>Fuga 3/8</i> , for the following movement, located on the other side of the leaf.
20	902,2	G	3/8	60	<i>Fuga</i>

The most unexpected finding in the title page is perhaps the number '1' given to the title of this G major pair. Among many possible interpretations, it seems to me that the number '1' probably designated the first piece for a pupil to study: for, in my view as a performer, this piece demands the least technical ability among the entire '48'.⁶⁵ This idea is not invalidated by how it was copied, at least, for the piece was not placed somewhere in the middle, bundled together with other pieces.

Taking both fascicles into account, we find a significant overlap in the selection of pieces with Kellner's MS (P 804): here we find not only the four preludes and fuguetas (C major (BWV 870a), D minor (BWV 899), E minor (BWV 900) and G major (BWV 902)) already discussed in

⁶² Schulze 18c, pp.61, 66.

⁶³ In p.18, the movement heading and the beginning of the first clef is dark black, while the rest is brown; In p. 19, notes are a dark brown shade while clefs and k-s are light brown; In p.20, all parts of notation but staff-colour are very dark brown shade.

⁶⁴ BG XXXVI, p.114-116; Bischoff, p.128-129.

⁶⁵ Béla Bartók rearranged the entire '48' in order of technical difficulty, this PrFg.G coming first. (Budapest: Editio Musica, 1908).

P 804, but also the F major pair (BWV 901). Thus P 1089 has all of the five tonalities from C to G inclusive. It is significant, too, that in both MSS the G major pair forms a separate entity. This seems to suggest that the G major pair was distinguished by Bach from the rest of the set for the benefit of the learners who, under his systematic instruction, studied his pieces in a certain order.

Unlike Kellner, Vogler did not specify the succession of keys, e.g., C-d-e..., neither in the title page, nor by marginal instruction. But as has been discussed, it is significant that Vogler seems to have recognised the four prelude-fughetta pairs in C, d, e and F as a group, following that order in his copying.

P 575

MS. P 575 is a single bifolium containing a single movement only, the prelude in G major (BWV 902,1) which is paired with the early model of Fg.G. The brownish paper is flexible, and is in good condition. The MS measures 34.8 x 22.7 cm. Staves were drawn with a rastrum of 9.2 mm high, and arranged in seven piano systems on pp. 2-3. The ink used for the staves appear in thin dark brown, while that for notes is thick and very dark brown, almost black. Very faintly one can see the ink come through from the other side. The scribe of this MS is thought to be Kauffmann as stated in the title page. Kast considers P 596, P 605 and P 686 are also in his hand, but no firm dating is yet to be assigned.⁶⁶ Breckoff suggests, however, that it is from the late eighteenth century.⁶⁷

CONTENTS:

Title page: p. 1

*Prelude
pour
le
Clavecin
par
J. S. Bach
N^o 346.
Kauffmann⁶⁸*

Page	BWV	Key t-s	Bars	Movement heading and Description
2-3	902,1	G C	56	<i>Prelude.</i> (bb. 1 - 30)
3				cont. (bb. 31 - 56)
4				blank.

⁶⁶ Kast, p. 135.

⁶⁷ Breckoff, p. 20. This statement by Breckoff is doubtful as he confused the contents of the MS.

⁶⁸ Title page (p. 1) is written in thin dark brown colour ink except "N^o 346" which is written in much darker shade of ink. Breckoff (1965), p. 20, and Brokaw (1985), p. 27-28, describe this title page totally wrongly. I assume that they confused it with that of some other MS.

The piece was very neatly presented as a fair copy, in which I found two amendments only.⁶⁹ Breckoff says that the MS was copied from the same exemplar as used by Kellner for P 804. But his statement is invalid, because the piece is not found in P 804. I suspect that Breckoff in fact meant P 1089, for if we compare the format of the score between these MSS, we would find a close resemblance between them.

MS. Nr.8

MS. Nr.8 of MB Lpz., Mempell-Preller Sammlung, is also one of the MSS which was not available for my study. According to Brokaw, it is a large miscellany of 294 pages in 30 fascicles of various sizes.

CONTENTS:

Page	BWV	Key	Movement heading and Description
187-9	870a	C	<i>Præludium con Fuga ex C dur</i>
255-7	901	F	Prelude and Fugue in F major

Breckoff thinks that the scribe was Johann Gottlieb Preller.⁷⁰ He considers that BWV 870a is copied from the same model as P 1089.⁷¹

Go.S.19

MS Go.S.19 of Bach-Archiv, Leipzig, is also one of the MSS which was not available for my study. According to Brokaw, it is a binio fascicle. It contains the title page (p. 1): "*PRELUDES / pour le clavecin par Mr. / Jean Sebastien / Bach.*" It contains the following works:

CONTENTS:

Page	BWV	Key	Movement heading and Description
2-3	875a,1	d	<i>Prelude I</i>
3-4	884,1	G	<i>Prelude II</i>
6	988,6	G	<i>Prelude III</i>
7	-----	G	<i>Polonaise. 14 bars. Not by Bach: composer anonymous.</i>

⁶⁹ The one in p. 2 locates in b.22 (L6,b.1), S,2/2-4, where three N-Hs were sunk in 3rds, from *a b g* to *f# g e*; the other in p. 3 locates in b.36,4- (R2,b.2-), where a tie on *e'* in the soprano is scraped off from the score. This tie is retained in P 1089.

⁷⁰ He is a Bach student described by Löffler (1953) as No.14.

⁷¹ Breckoff, p.19.

The scribe of the MS is unknown. Schulze considers that the date of this MS falls in the period of 1750-1760.⁷² Breckoff considers that D minor prelude was modelled from the same exemplar as was used for P 1089.⁷³

P 561

MS P 561 is a twenty-page MS, generally considered to be a copy of P 1089.⁷⁴ The pages measure 32.5 x 25.9 cm, and are structured in two binios plus a unio, as illustrated in Fig. 4 below. The MS is in very good condition: flexible, thick paper does not show the trace of ink coming from the other side. The long edges have been affected by moisture, and have crinkled slightly. The paper is light grey, the two outermost pages (i.e. pp. 1 and 20) being browned by exposure to ultraviolet rays from sunlight. The paper could have been trimmed at the top and bottom.

The staves were prepared neatly with a ruler, the rastrum being 9.4 mm high, and arranged in uniform twelve-staff format in equal spacing; there is no specific provision for keyboard music to copy.

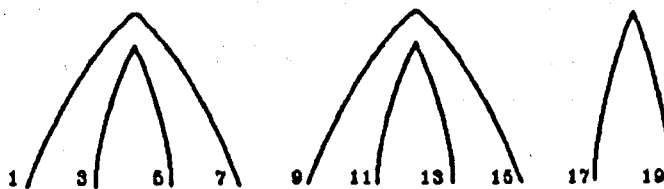


Fig. 4: Fascicle structure of P 561

CONTENTS:

Title page: p. 1

Préludes et Fugues de J. S. Bach.

followed by the list of contents with musical examples of a few bars.

Page	BWV	Key	t-s	Bars	Movement heading and Description
2-3	899,1	d	3/4	27	<i>Prælude</i> . It ends on the second system of p. 3, and from the 3rd system, we find:
3-4	899,2	d	3/8	55	<i>Fugetta</i> . It ends on the 4th system of p. 4, with two unused systems below.
5-6	900,1	e	C	18	<i>Præludium</i> . It ends on the 2nd system of p. 6, and from the 3rd system, we find:
6-9	900,2	e	3/2	104	<i>Fugetta</i> . It ends exactly at the end of p. 9.

⁷² Schulze (1977), p. 17; Brokaw(1985), p. 29.

⁷³ Breckoff, p. 20.

⁷⁴ Breckoff, p. 20.

10-11	901,1	F	12/8	16	<i>Præludium</i> . It ends on the 1st system of p. 11, and from the 2nd system, we find:
11-12	901,2	F	♩	24	<i>Fuga</i> . It ends on the 3rd system of p. 12, and from the 4th system, we find:
12-15	902,1	G	C	56	<i>Præludium</i> . It ends on the 4th system of p. 15, with two unused systems below.
16					12 staves unused.
17	870a,1	C	♩	17	<i>Prelude</i> . <i>J. S. Bach</i> . There follow the catch words <i>Fugetta ze</i> [sic].
18-19	870a,2	C	♩	34	<i>Fugetta</i> . It ends on the 5th system of p.19, leaving one unused system below.
20	902,2	G	3/8	60	<i>Fuga</i> .

The MS was made by Anton Werner, the copyist of Joseph Fischhof, Professor at the Conservatoire in Vienna in the mid-nineteenth century.⁷⁵ It was organized and copied in an unusual manner. In fact, closer examination of how the fascicle was organized suggests that it was made quite in the same way as P 1089. The C major pair was, as in P 1089, probably written as a separate bifolium, and the three prelude-fughetta pairs in d, e and F were copied into two binio fascicles continuously. At this stage, I find no evidence which suggests that these two groups of copies were to be put together. Such an intention becomes plausible only when the remaining G major pair was copied into two unused pages, one page each from the two originally separate entities - the prelude into the end of the latter (two binios), and the fugue into the end of the former (single unio). Since this was the most probable background of the MS making, the scribe must have used an exemplar which distinguished three separate groups of prelude-fughetta pairs: 1) C major; 2) D minor, E minor and F major; and 3) G major.

The musical text was edited with blue pencil, mainly for pitch emendation and the addition of ties. With little doubt, it was derived from P 1089, for it not only retains many unique qualities of P 1089 (such as identical fingering for the C major pair), but also many other variant readings and errors that can be traced back to P 1089.⁷⁶

N.10490

The recently unearthed MS N.10490 is a single quaternio fascicle manuscript, measuring 33.9 x 20.8.⁷⁷ The paper is thick, and not very flexible. Its colour is cream or light brown. The MS is in good condition, but the outermost leaves have been reinforced along the centre fold.

⁷⁵ Breckoff, p. 20 and NBA KB IV/2, p. 45.

⁷⁶ The best example is the correction of incorrectly supplied bar lines in b.16 of the Prelude in C major, which is located at the change of system in P 1089. See Supplement B for musical variants.

⁷⁷ It is acquired by SPK from the Spitta estate in 1981. It was first described by Hoffmann in 60 Bachfest in Leipzig 1985. The fascicle structure of a quaternio fascicle is the same as the fascicle 1 of P 1089. See Fig. 3, p. 15.

Staves were carefully drawn on pp. 2-15 with a rastrum 9.6 mm high (-2.4-2.3-2.3-2.6-), and arranged in seven piano systems per page. They were written with light watery ink of brown shade, giving good contrast with the black ink used for notes and other symbols. The music was copied by Michel, one of C. P. E. Bach's copyists at Hamburg in the second half of the eighteenth century. Although it appears to be only a secondary source, the MS is important for interpreting the development of the music it contains. It is however possible that this MS was copied directly from Bach's autographs that might have gone into C. P. E. Bach's estate. If so, this MS, which should therefore be regarded as a primary source, may contain some revised texts that show an intermediate stage between the pre-1730 copies and WTC II.

Here for the first time we have the five prelude-fughetta pairs arranged in a complete modal succession in ascending order C-d-e-F-G, although part of this arrangement (C-d-e) was seen in Kellner's copy (P 804).

CONTENTS

Title page: p. 1

*V. Præludien
und
V. Fugen von
J. S. Bach.*

Page	BWV	Key	t-s	Bars	Movement heading and Description
2	870a,1	C	C	17	<i>Præludio con Fuga.</i>
2-3	870a,2	C	C	31!	<i>Fuga</i> begins from the 6th system, directly below the end of the prelude.
4	899,1	d	3/4	27	<i>Præludio con Fuga.</i>
5	899,2	d	3/8	55	<i>Fuga</i>
6	900,1	e	C	18	<i>Præludio con Fuga.</i>
7-9	900,2	e	3/4	104	<i>Fuga.</i> At the end of p. 7, we find the instruction V.S.
10	901,1	F	12/8	16	<i>Præludio con Fuga.</i>
11	901,2	F	C	24	<i>Fuga</i>
12-14	902,1	G	C	56	<i>Præludio con Fuga.</i> At the end of the prelude, we find the instruction V.S.
14-15	902,2	G	3/8	59!	<i>Fuga.</i> At the end, we find <i>Volti</i> , but in the following page, we find no music.
16					blank.

From the way in which the fascicle was organized, we may deduce that the copyist intended from the outset that the five pairs be arranged in this way: there is however no mention of such a plan in the title page. One interesting discovery is the page turn instruction '*Volti*' in the last piece (p.15). It is suggestive of one or more pieces to be added to complete a cycle of pieces similar to Cb-WFB.

Some musical texts represented in N.10490 are, however, not exactly identical with those we have examined so far. In fact a closer examination suggests that many variant readings are

either orthographic errors or revisions carried out by Bach after the creation of P 804 and P 1089.

The *Præludiv* in C major (BWV 870a,1) is written in C metre, instead of the ϵ found in both P 804 and P 1089. Unlike Vogler's copy, Michel's has virtually no embellishments in the text.⁷⁸ For this reason we may say that it is related to P 804. But the musical text itself represents its own unique reading. Most outstanding is perhaps the frequent omission of ties: it has 13 fewer, listed in Table 3 below, than the other two.

Table 3: *Variant texts in N.10490 of BWV 870a,1 (1) - Application of ties*

Location	Position	Location	Position
bb.1-2:B	semibreve <i>c</i>	b.12:S,1-	crotchet <i>c</i> "
bb.2-3:B	semibreve <i>c</i>	b.12:A,3-	crotchet <i>a</i> '
bb.3-4:S	semibreve <i>e</i> '	b.12:S,4-	quaver <i>e</i> "
b.6:A,3-	minim <i>a</i>	b.12:B,4-	quaver <i>a</i>
b.6:T,4/2-	quaver <i>d</i>	b.14:S,3-	crotchet <i>a</i> "
b.7:B,1-	crotchet <i>G</i>	b.16:A,2-	crotchet <i>g</i> '
b.10:T,3-	semiquaver <i>g</i>		

NB. The position indicates the note preceding the missing tie.

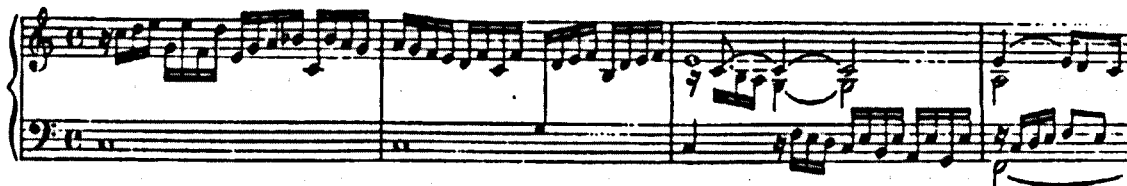
This can be, in some instances, considered as deliberate when we notice that most of the omitted ties are associated with long held notes. This alteration can be effective if the music is played on the harpsichord (see Example 2).

⁷⁸ The only ornament, a mordent, is found in b.5 in the alto. In contrast, Vogler's version (P 1089) gives altogether 16 of these.

Example 2: *Prelude (BWV 870a,1), bb. 1 - 4,2.*
Variant interpretations among MSS P 804, P 1089 and N.10490



(a) Prelude (BWV 870a) in P 804 and P 1089⁷⁹.



(b) Præludio (BWV 870a) in N.10490

There are several other minor textual differences between N.10490 and the other two MSS, listed in Table 4 below.

Table 4: *Variant Texts in N.10490 of BWV 870a,1 (2)*
Pitch and note-value

Location	Variant of N.10490	Text in P 804, P 1089	Status
2:S,3	semiquaver <i>g</i>	<i>b</i>	E?
2:S,4	4 semiquavers <i>b d' e' f'</i>	<i>g f' e' d'</i>	E?
3:B,1	crotchet <i>c</i>	minim	I
5:B,4/4	semiquaver <i>F?</i>	<i>E</i>	E
6:B,4	2 quavers <i>F#</i>	crotchet <i>F#</i>	E?
8:B,4/2	quaver <i>g^b</i>	<i>g[♯]</i>	E
7:A,2	quaver <i>g</i>	crotchet	I
12:B	dotted minim + quaver <i>A A</i>	semibreve <i>A</i>	I
15:T,2	crotchet <i>g</i>	quaver + quaver rest	E?

Status: E - error; I - later improvement by Bach.

While some of these can be seriously considered as orthographic errors, three of them (indicated as "I" in the Status column of Table 4 above) seem to be related to Bach's later revision as they are the readings of Pr.C.

The *Fuga* in C major is not quite the same version as in the two earlier copies. It is written in C metre, instead of ϵ . The most significant difference is the inclusion of a new reading, which

⁷⁹ The R. H. staff of the original is written in soprano clef. It is interesting to note that both P 804 and P 1089 have the same error in note-value in the bass, b. 3,1. The orthographic error in P 804 that is not reconstructed here is the note-value of the alto/tenor at b.3,3. In P 804 the minims are written as dotted minims. All the fingering found in P 1089 is likewise not included here.

is one of a few changes made in the compilation of WTC II. This is 4 semiquavers *g f# g e* instead of 2 quavers *a g* in the alto, b. 21,3. This seems to suggest that the exemplar Michel used could have been Bach's autograph, containing his revised text. Another such difference is the inclusion of the text which is a variant reading found only in the version of L and K in WTC II. This is located in the cadence at the end of the exposition, b. 7,1 in the alto. N.10490, L and K give a crotchet *g'*, while all the other MSS give a quaver *c'* plus a quaver rest.⁸⁰ These two variants are not errors. But this copy seems to contain many errors elsewhere. For example, three ties are consecutively omitted in the alto, b. 20. And among the most strange and fascinating is a complete structural collapse, which gives the musical text as: bb. 1-7,2; 10,3-13,2; 7,3-10,2; 16,3-34. Since bb. 13,3-16,2 is missing, the fugetta is 31 bars long, three bars short.⁸¹ This structural clutter can hardly be intentional. And because the clutter occurs at regular, three-bar passage (or rather chunk), this must have been an accident. The most suitable explanation would be that having copied one complete system at a time (probably staff by staff), Michel resumed copying a new line at a wrong system. This Michel's activity can be summarised in Table 5 below.

Table 5: *The format of Michel's exemplar BWV 870a,2 and his copying order*

System	bars	Michel's copying order
1	bb.1-3,2	1
2	bb.3,3-7,2	2
3	bb.7,3-10,2	4
4	bb.10,3-13,2	3
5	bb.13,3-16,2	skipped
6	bb.16,3-..	5

This sort of accident is certainly possible, for this fugue is built on limited motivic ideas resulting in confusing resemblance of musical texture in these sections.

The *Fuga* in F major is also written in C metre instead of ϕ . As in the other pieces in the MS, there are many variant readings, shown in Table 6 below.

⁸⁰ One exception, No.543 gives *e'*. This reading is suspicious, since the text is heavily corrupted.

⁸¹ It seems strange that this error had never been rectified. The clean appearance of this MS seems to suggest that it was never used in practice by a professional musician.

Table 6 Variant Texts in N.10490 of BWV 901,2

Bar	Variant of N.10490	Text in P 1089	Status
3:A,1/4	semiquaver $b^{(b)}$	$b\grave{a}$	E?
6:A,2/1	semiquaver $a^{b'}$	f'	I?
7:A,3/1	quaver g'	$e\grave{a}$	E?
8:S,2-4	corrupted	crotchet rest only	E
9:A,3/2	corrupted	crotchet c'	E
11:B,3/1	semiquaver g	f	E
12:A,4	corrupted	crotchet rest	E
13:A,4	2 semiq.+ quaver $f' e' f'$	crotchet f'	I
13:T,4	corrupted	crotchet c'	E
14:T,2	corrupted	crotchet b^b	E
14:A,4/4	semiquaver $e^{b'}$	f'	E?
15:A,1	quaver $e^{(b)'}$	$e\grave{a}$	E
16:T,1-2	corrupted	minim e^b	E
16:T,3-4	quaver f' only	quav+quav.rest+crot.rest	E
17:B,4/3	semiquaver $B^{(b)}$	$B\grave{a}$	E?
18:B,2-3	no tie on B^b	tie	E
19:B,4/3	semiquaver A^b	G	E
20:A,3/4	semiquaver $e\grave{a}$	e^b	E
22:A,1	crotchet e' only	dotted crotchet	E
22:A,3-4	corrupted	crot.+quav.rest+quav. $e^{b'} f'$	E
23:A,1	quaver rest only	crotchet f'	E
23:B,2	corrupted	crotchet d^b	E

Status: E - error; I - later improvement by Bach.

NB. Accidentals given in brackets are not specified by accidentals but implied in the key signature. This manner is only used where the application of accidentals causes an error or a variant reading.

Among twenty-two variant readings, only one at b.13:A,4 is positively identified as a later revision, which is taken into WTC II. All the others seem to be errors. Among the most common are the omission of notes themselves, among which three are in countersubjects. As in the C major prelude and fugue, no amendment was made in the MS.

The *Fuga* in G major (BWV 902,2) is also very poorly represented, due to the numerous orthographic errors, listed in Table 7 below.

Table 7: Variant Texts in N.10490 of BWV 902,2

Bar	Variant of N.10490	Text in P 804 + P 1089	Status
12-13:S	tie corrupted on e"	tie in (P 804 only)	E?
17:A/1	quaver a'	b'	E
20:A	3 quavs. e' d' d'	f#' e' e'	E
21:A/2	semiquaver c'	c#'	E
22:A/2	quaver c'	c#'	E
24:A1/3	quaver f#"	d"	E/O?
27:A/2-3	corrupted	2 quav.rests	E
28:A/1	corrupted	quaver rest	E
29:A1/1	corrupted	semiquaver e"	E
30:B/1	corrupted	quaver rest	E
31:A/2-3	corrupted	2 quav.rests	E
32:A/1	corrupted	quaver rest	E
34:A2/2	quaver c"	b'	E?
37:S/1	quaver f#"	2 semiquavers d#" e"	O?
40:B/2	semiquaver c'	c#'	E
44:S/4	semiquaver e"	c#"	E
48:S/6	semiquaver e'	d'	E/O?
52/3	semiquaver G	A	E
53:S/2	quaver f(#)"	g"	E
56*	R.H. corrupted	see below	E
57* (56)	L.H. corrupted	see below	E
58:A2* (57)	quaver b	crotchet+q.rest	E?

Status: E - error; O - old reading

nb. * missing text in bb. 56-57 causes one bar shortage: bar number in bracket indicates that of N.10490.

The errors are probably caused by similar musical textures in neighbouring bars, for most of the errors represent the text of the following bars. This is most clearly seen in bb. 17-20 where we find the pitch emendations, which are the only example in the whole MS where errors were rectified. This *Fuga* is one bar shorter than the version represented by P 804 and P 1089. This is because the R.H. part of b. 56 and the L.H. part of b.57 are omitted. There are, however, three places where one might consider the version to predate that of P 1089 or P 804.

On the whole, even limiting our examination to the early models of WTC II, N.10490 is in a fairly confused state. On the one hand, the MS may present Bach's revisions of text (the C major pair and the F major fugue) found in two earlier MSS (P 804 and P 1089). On the other hand, it may also contain an even older version, viz., the G major fugue. This fact may appear to be significant when we compare this particular feature of N.10490 with the fascicle division in P 1089, where the prelude-fugue pairs in C major (BWV 870a) and F major (BWV 901) were copied in the same fascicle, while the G major pair (BWV 902) was copied in a separate fascicle. Assembling these facts, we may be permitted to deduce that the early model cycle

was gathered by Bach in two separate collections in the same group as those of P 1089, i.e., 1) prelude-fughetta pairs in C, d, e and F and 2) prelude-fughetta in G. And because in N.10490 the only corrections are made in the fugue in G major, we may speculate that the circle of C. P. E. Bach knew that the G major fugue required corrective revision. If it be true, this G major piece could have been copied from an unauthentic exemplar.

P 563

MS P 563 is a miscellaneous collection of pieces. It consists of a single fascicle of 6 pages, organized by a bifolium interposing a single sheet in its fold. The MS measures 33.8 x 21.2 cm. The light brown paper is thick yet flexible; the watermark is yet to be examined. Staves were drawn with a rastrum 9.6 mm high (2.45-2.3-2.35-2.5), possibly the same instrument as we have just seen. The staves were arranged in seven piano systems for p. 1 and in six piano systems for pp. 2-5. The ink used for drawing staves was the same black ink as for notes.

The MS is in the hand of Michel, as N.10490 described above. As with so much that seems obviously true about the inheritance of Bach's autographs by C. P. E. Bach, we can be reasonably sure that the musical text presented here in P 563 was based on authentic copies of Bach's, though the other aspects in the presentation of the MS, i.e., selection of pieces and the order of arrangement, are to be re-examined in our present discussion.

CONTENTS:

<u>Page</u>	<u>BWV</u>	<u>Key</u>	<u>t-s</u>	<u>Bars</u>	<u>Movement heading and Description</u>
1	844a	e	2/4	42	<i>Scherzno Suite pour le Clavecin par J. S. Bach.</i> ⁸² R.H. was written in the treble clef.
2	933	C	C	16	<i>Præludium.</i> The first of Six 'kleinen Præludien'. ⁸³ It ends on the 5th system, and directly below starts:
2-3	872a,2	C	C	19	<i>Fugetta.</i> (the earliest model of Fg.C#) ⁸⁴ It ends at 5th system of p. 3, leaving one unused system below.
4-5	901,1	F	12/8	16	<i>Præludium</i> ⁸⁵ It ends on the 1st system of p.5, and directly below starts:
5	Wq 111	C	3/4	44	<i>Menuet C. P. E. Bach.</i> This is another example the R.H. staff of which was written on the treble clef instead of the soprano clef. At the end, we find written the total number of bars "44".
6					blank.

From the particular way in which the five pieces are chosen and arranged, we may well wonder how it is possible that those five pieces, including a minuet by C. P. E. Bach, are

⁸² See printed music BG XLVII, p.281

⁸³ See printed music BG XXXVI, p.128

⁸⁴ See printed music BG XXXVI, p.225

⁸⁵ See printed music BG XXXVI, p.112

considered as a set. Our first approach to such selection and arrangement should be not to seek a strained interpretation of such plans, but rather, to look into the plausible requirement of such copies in the environment in which Bach and his sons had lived and taken an active part. Based on this view, Breckoff's explanation that 'the pieces were selected at random for teaching purpose' seems likely to be correct.⁸⁶ It should be added, however, that such selection must have been based on certain criteria, i.e., the level of learners' skills. Let us see a clear example from one of Bach's well-known works - the second book of Cb-AMB (1725). Here Bach not only considered the selection of the pieces with the view to the technical skills of his new wife, but also the stylistic features of the work (dance, songs, etc.). For the sake of the latter, Bach cited the works of various composers including C. P. E. Bach.⁸⁷

Taking this step, the succession of the C major prelude (BWV 933) and fughetta (BWV 872a,2) should perhaps be considered coincidental, and not as a pairing intended by Bach. However there is no firm evidence to prove this hypothesis. Indeed, the difficulty of our question resides largely in the lack of evidence, and the only reference to the early model of Fg.C#, presented here, stands against our main stream hypothesis. The musical text of the C major fugetta (BWV 872a,2) represents the earliest known model (19 bars) for the Fg.C# of WTC II. Apart from a minor revision in the final bar with blue pencil, there is no marked revision or addition found in the text.⁸⁸

The F major prelude (BWV 901,1) is also considered to have been influenced by random selection: it appears as a pair with the accompanying fughetta in both P 1089 and N.10490. The missing fughetta is, as has already been mentioned under P 1089, later re-worked, transposed, extended and included as Fg.A^b in WTC II.

The chronological reference to the origin of those pieces cannot be established, for we cannot know whether the arrangement is Bach's or his son's. If the former, we may perhaps consider the plausible historical position of this arrangement against Cb-AMB2, and, most importantly, against the origin of the "6 small preludes".⁸⁹ But it is at least possible that the collection was developed by C. P. E. Bach.

Summary

In the long history of Bach's keyboard teaching existed the embryo of WTC II, quite independent from that of WTC I. From the discussion of the above MSS, it becomes clear that the constant appearance of the five prelude-fughetta pairs in C major (BWV 870a), D minor

⁸⁶ Breckoff, p. 22.

⁸⁷ See NBA KB V/4, p.67.

⁸⁸ This is an addition of a tie on *f* at b.19,2- in the alto.

⁸⁹ Breckoff assumes that the "6 small preludes" were developed during Bach's Cöthen period. See BG, XXXVI, p.128. NBA KB is planning to publish it in vol. V/ix in the near future.

(BWV 899), E minor (BWV 900), F major (BWV 901) and G major (BWV 902) was suggestive of the pieces as an authentic set prepared for the purpose of teaching. The inconsistent arrangement of those pieces in various MSS might have originated from the state of the lost holograph and from the way these pieces were used: the lost holograph was probably preserved by Bach in an unbound state, and given to his pupils leaf by leaf.

The other three pieces for clavier, i.e., the C major fugue (BWV 953), the C minor Fugue (BWV 873,2) and the D minor *præambulum* (BWV 875a.), may also be teaching materials. However, it is doubtful that Bach intended to make them part of the pedagogical collection, for none of them appeared regularly in other MSS.

Apart from the demand for teaching purposes, the selection of pieces was perhaps influenced by Bach's aspiration of structural beauty and coherence in the arrangement as a set of pieces. This was first clearly reflected in N.10490, in which the five preludes and fugues were arranged in the ascending order of modes, C-d-e-F-G. This method of arrangement is also found in Cb-WFB. In Cb-WFB, however, there are more than the succession of five pieces: the *Præambula* and *Fantasias* (early versions of *Inventions* and *Sinfonias*) were organized in an ascending order of modes: C d e F G a b, then descending from B^b A g f E E^b D to c. Also *Præludia* (early versions of *Preludes* in WTC I) were initially arranged according to the same principle, but in a slightly varied order: C c d D e E F C# c# e^b f. Here Bach began with pieces in both major and minor keys on the scale from C to F while the priority of major/minor was given to the mode applied to the pitch on the scale. After F, when Bach was perhaps enlightened by the idea of a new systematic arrangement for WTC, the scheme was abandoned to bring in chromatic keys.

If we consider in general historical perspective the fact that the arrangement in our five preludes and fugues is incomplete and less mature, an answer to the problem of dating these pieces may be found. The original date is likely to be before Cb-WFB, and therefore before 1720.

Among these five pairs of preludes and fuguetas, the separation of a pair should be seen as a significant event in the compiling process of WTC II. In two such pairs, viz., F major (BWV 901) and G major (BWV 902), the fugues are re-written as Fg.A^b and Fg.G in WTC II respectively, while the preludes were abandoned. This event has to be evaluated historically and musically in terms of the changing taste and the function of 'Prelude' as a form. Though every pair of prelude and fugue was bound to be re-evaluated according to the new criteria, there is a survivor - the C major pair (BWV 870a). This appeared to be the most significant, as this piece has been the most favourite among members of the Bach circle.⁹⁰

⁹⁰ It appears in five MSS, while the others do four at most. The affection can be felt through Vogler's exuberant application of ornamentation and fingering: he only does it in this piece in P 1089.

THE PROLOGUE: WTC II IN THE PUPAL STAGE

The later cycle among these early models of WTC II seems to come from four known sources. Two of them, however, are of secondary importance and I shall describe them only briefly. What I will do here is to concentrate on the two MSS, P 595 and P 226, which appear to me to be more authentic. They have one significant feature in common: the date of their creation is estimated to be very close indeed to the actual compilation of WTC II. And if it should prove to be so, we can probably decide the importance of Anna Magdalena's role as copyist at two crucial stages: the early model cycle and the compilation of WTC II.

P 595, 4 an

MS. P 595 is a miscellaneous collection of pieces comprised of ten fascicles. I found no particular order or arrangement in this manuscript. All pieces for our interest are found in Fascicle 5 (pp. 41-44), a brownish single bifolium, which is now folded and stitched down the middle with other fascicles. It measures 32.3 x 20.2 cm. Dürer identified its watermark as: a) Letters WGR or WCR, b) small coat of arms.⁹¹

Fascicle 5 contains four fuguetas copied entirely by Johann Friedrich Agricola (1720-1774), all entitled "*Fugetta del S. Giov. Seb. Bach*". Each of them is neatly copied within a single page of eight piano systems, prepared by a rastrum 9.1 mm high (-2.1-2.5-2.6-2.0-). This fascicle was heavily edited obviously later to judge from the evidence of ink shade, and presumably by one or more successive owners. The MS probably dates from the earliest years of Agricola's lessons with Bach - ca.1738.⁹²

CONTENTS:

Page	BWV	Key	t-s	Bars	Movement heading and Description
41	875 <i>a</i> ,2	d	C	27	<i>Fugetta del S. Giov. Seb: Bach.</i>
42	872 <i>b</i> ,2	C	C	30	<i>Fugetta del S. Giov. Seb. Bach.</i> (transposed to C# Major in WTC II)
43	871,2	c	C	28	<i>Fugetta del S. Giov. S. Bach.</i>
44	876,2	D	c	70	<i>Fugetta del S. Giov. Seb. Bach.</i> (transposed to E ^b Major in WTC II)

This MS presents one of the most important variant readings of the four fugues of WTC II. It is therefore strange that the musical text represented in this MS was little known.⁹³ Although the textual differences with L and various amendments are described in detail in Supplement B under P 595, I shall summarise them here.

⁹¹ Dürer (1970), p. 49.

⁹² Agricola was a student of Bach from Easter 1738 to 1741. See Löffler (1953), No.57, p.22.

⁹³ I found no printed edition which gives these variant versions. I believe this will be surely included in the forthcoming publication by Dürer, NBA IV/6ii.

The *Fugetta* in D minor (BWV 875a,2)⁹⁴ appears as the oldest known sketch of Fg.d. Though the length of this piece is the same as that of the later version (27 bars), there are several noteworthy differences between them in detailed figuration, especially in the use of triplets in the soprano, bb. 17-18.⁹⁵ Traces of red crayon or pencil marks can be seen in places where improvements are found in later versions such as L.

The *Fugetta* in C Major (BWV 872b,2),⁹⁶ which is transposed to C# major in WTC II, expands the nineteen-bar earliest version, found in P 563, to thirty bars. Yet bb. 25-29 of the later versions, where two augmentations of the initial figure are found in L and A, are absent from this version. In fact this version is likely to be the one used by Bach for the exemplar of L. As it would be quite impossible here to give an adequate account of the revision process in L, I shall come back to this topic on pp. 224 ff.

The *Fugetta* in C minor (BWV 871,2) is the only known early model of Fg.c. In contrast to the *Fugetta* in C, there is no marked structural overhaul in the later version found in L and elsewhere. The revisions are all minor improvements, such as the refining of the rhythm in cadential passages (bb. 9 and 10) and the colouring of melodic interest by employing a chromatic scale (b. 21).⁹⁷ The analysis of the revision process, which I shall discuss in p. 222 ff., will provide us an evidence that the piece had already come to its maturity.

The *Fugetta* in D major, transposed to E^b major in WTC II, shows a number of interesting details in comparison with L. For one thing, it appears that Agricola originally gave it the time-signature 'C', and not 'c' as it now is.⁹⁸ The text is structurally maintained in L. The later revision is, as in the c minor *Fugetta*, apparently intended as an aesthetic improvement. The revision had mainly occurred in a concentrated area - bb. 47-53, where Bach decided to replace the thematic element with thematically unrelated flowing quaver figuration.

The most unusual finding in this piece is the pedal/manual instructions for the bass written in pencil, red and dark black ink, which occurs five times (bb. 1, 7, 31, 38 and 60). Dark black ink is used to overlay the pencil marking "*Ped.*" (bb.1, see Fig 5, and 60) and "*-tas.*" (bb. 7 and 60), although in one instance the original pencil annotation "*-tas [?]*" (b. 38) is left untouched.⁹⁹ Red ink was used for the instruction "*Pedale*" (b.31, see Fig 5) which was

⁹⁴ There is no entry of this version in Schmieder's BWV. Since this is the earliest version of all, we may distinguish it by variant *a*. And another intermediate reading, the ante correcturam of L, can be called variant *b*.

⁹⁵ See Supplement B under Fg.d for detailed listing of variant reading.

⁹⁶ There is no entry of this version in Schmieder's BWV. Hence the shortest version (19 bars as in P 563) is called BWV 875a,2, let us assume that this version here is a variant *b*, and the version represented in L as *c*. I consider that the version represented in Altnikol's tradition is the final reading. See p. 229 ff.

⁹⁷ See Supplement B for the details.

⁹⁸ Breckoff observed the same.

⁹⁹ I interpret this "*-tas.*" as "keyboard" from *tasto* (Italian) or *Taste* (German), but not certain why a hyphen precede the instruction.

probably added later by a different hand to supplement the overlooked instruction. One may judge from the calligraphic features of these instructions that those in dark black or red ink are neither Agricola's nor Bach's.

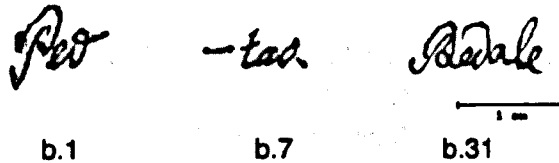


Fig. 5: P 595, p.44 - Pedal/Manual instructions in two later hands.

The authenticity of these instructions must therefore remain doubtful.

To evaluate this fascicle as a set of pieces, we may have to consider several other factors in conjunction with the role played by Agricola in the transmission of the pieces. Among the most important of those is the discussion of how the selection of pieces was made. The four pieces, which Agricola was perhaps learning at the time, share certain common features: all are written in common-time and are fairly uniformly short - all are accommodated within a single page. To these simple distinctions, we can add that all four pieces were written in commonly-used keys, yet without duplication. The selection of the four keys, d, C, c and D, may also appear significant when we notice that they can be grouped as two tonic major/minor pairs, and that these two tonic keys come very early in WTC's order. For this reason, I consider that the original order of the four pieces might have been C - c - D - d, the order obtained if the fascicle is considered as a single (double-column) sheet.

Another important question yet to be discussed, of course, is how we should interpret the four pieces against the compilation of WTC II. A vital piece of evidence in this argument is the title the four pieces bear - "*Fugetta*" not "*Fuga*". And of course, the numbering system found in WTC II is totally absent in P 595. This seems to show that the pieces had not yet come to their maturity, and Bach had not decided to incorporate them in WTC II. Indeed, as we shall see, examination of L indicates that Bach made further revisions when these fughettas were seriously considered as a part of WTC II. And this study will show that all four pieces contained in the sheet are related directly to the early compilation of WTC II. Within this single sheet, we also find a unique, self-contained, systematic selection of pieces, being suggestive of WTC. And it might well be the case that the compilation of the work was already in progress.

P 549

MS P 549 is a single bifolium, measuring 34.5 x 22.8 cm. The brownish paper is thick and hard. Along side the centre fold the paper is crinkled. The MS itself is kept in good condition, and the paper has suffered little from the acid contained in the ink of brown shade: only very

faintly the ink penetrates to the other side of paper. Staves were ruled with a rastrum 7.25 mm high, and arranged uniformly in eight piano systems, just like P 595.

The bifolium is a replica of P 595 made by Friedrich August Grasnick (d. 1877).¹⁰⁰

CONTENTS:

Page	BWV	Key	t-s	Bars	Movement heading and Description
1	875a,2	d	C	27	Fugetta del Sigl Giov. Seb. Bach.
2	872b,2	C	C	30	Fugetta del Sigl Giov. Seb. Bach.
3	871,2	c	C	28	Fugetta del Sigl Giov. Seb. Bach.
4	876,2	D	c	70	Fugetta del Sigr Giov. Seb. Bach.

Musical text is almost identical in most significant details with that of P 595, including the pedal instructions in *Fughetta* in D major.

P 226

The so-called "Bückeburger Bach Manuscript" is a 68-page miscellaneous volume.¹⁰¹ It is rather special among other MSS that we have so far dealt with from a number of points. For one thing, the MS contains two autographic scores of Bach, viz., the six part Ricercar from the Musical Offering (BWV 1079) on pp. 1 - 4 and the Sonata for Viola da Gamba in G major (BWV 1027) on pp. 5 - 17.¹⁰²

The pieces of our interest are found next to these autographs. The early versions of Pr.C# and the earlier version of PrFg.d are put together with two pieces by W. F. Bach. Another unique feature is the way in which the fascicle is organized: three sheets are not arranged in Ternio but in unio x 3 as illustrated in Fig. 6 below. The reason for such arrangement or organisation seems to hold the key to the original purpose of the MS. However, I will come back to this point after detailed discussion of individual musical texts.

The fascicle measures 33 x 20.2 cm. According to Weiß, the watermark of this fascicle is "Large heraldic Schönburg coat of arms",¹⁰³ which is identical with WM-II of L.¹⁰⁴ Staves were ruled with the rastrum of 9.5 mm high (-2.4-2.5-2.4-2.4), which is possibly the same instrument as R-Ca in L.¹⁰⁵ The staves are arranged in seven piano systems on pp. 21-32. If Weiß's

¹⁰⁰ Breckoff, p. 24.

¹⁰¹ Brokaw (1985) says it is 60-page MS, but he is incorrect.

¹⁰² Because BWV 1027, including part score, was bound regardless of original pagination, I cannot regard this as a fascicle. Therefore I shall not number each gathering in P 226.

¹⁰³ NBA KB IX, p.72 and Kobayashi (1988) pp.45-46. However, Breckoff, p.21, says it is the "letters 'MA' in straps". I tend to believe that Weiß's identification is more likely to be correct, because the work of Weiß and Kobayashi elsewhere is clearly a thorough and systematic study that seems credible.

¹⁰⁴ See p. 59 ff.

¹⁰⁵ See p. 72 ff.

identification of the watermark is correct, then it is significant that the leaves of P 226 and L that share this watermark also share the rastrum used to draw their staves.¹⁰⁶

The copyist of this fascicle has been identified in various ways. Spitta claims that the music was copied by Johann Christoph ^{Friedrich} Bach as it is written so by C. P. E. Bach on the title page of the fascicle (p. 19).¹⁰⁷ Hermann Keller says the scribe was (J. P.) Kellner.¹⁰⁸ It is only recently that the scribe has been identified as Anna Magdalena Bach.¹⁰⁹ She copied the music on pp. 21-29. Interestingly, the last piece by W. F. Bach in the same fascicle (pp.30-31) was copied by Johann Friedrich Agricola, whom we have already seen in P 595.¹¹⁰ The cooperation of these two copyists is not in fact unexpected. During Agricola's period of study in Leipzig between 1738 and 1741, he also made a copy of WTC I (P 202) in partnership with Anna Magdalena.¹¹¹



Fig. 6: Fascicle structure of P 226, pp.21-32.

CONTENTS:

Title page: p. 19 (written by C. P. E. Bach)

*Einiger Klavierstücke und Fugen
von
J. S. Bach
u.
W. F. Bach*

von der Hand der Bückeburger Bach.

¹⁰⁶ The discussion related with the usage of Rastrum is given in greater detail in p. 65 ff.

¹⁰⁷ Spitta III. p.184 footnote 347; BG XIV, p.xviii (Nr.17); Carrell, p.46.

¹⁰⁸ Keller (1976), p.141 (The original edition is in German, published in 1965).

¹⁰⁹ Dadelsen, TBS/1, p.35; Breckoff, p.21.

¹¹⁰ F.Blume, MGG Bd.1, p.160; Breckoff, p.21.

¹¹¹ According to Dadelsen, TBS/1, p.34, Anna Magdalena's hand is found in pp. 13-63 (Fg.c#, b.50,2 to Fg.a, b.68). Kast, p. 12, says, however, Anna Magdalena copied pp. 13-64, and Agricola did p.65-75 (to the end of Fg.b). The pp. 1-12, which is in the hand of Müller, an organist at Braunschweig in the end of 18th century - 19th century, was obviously supplemented. This part could have originally been copied by Anna Magdalena. See Dehnhard (1977), p. xvii.

Page	BWV	Key	t-s	Bars	Movement heading and Description
20					blank (a notice faintly written in pencil is illegible.)
21	872a,1	C	C	50	<i>Præludium</i> [von J. S. Bach]. (Transposed to C# major in WTC II) ¹¹²
22-23	Fk 27	C	♯	39	<i>Reveille</i> [von W. F. Bach]. At the end of p. 23, we find the instruction <i>Volti cito</i> .
24-25	Fk 28	C	6/8	60	<i>Gigue</i> .
26-28	875b,1	d	3/4	53	<i>Præludium</i> [von J. S. B.] ¹¹³ At the end of p.27, we find the instruction <i>volti cito</i> . It ends at the first system of p. 28, and immediately below follows:
28-29	875,2	d	C	27	<i>Fuga</i>
30-31	Fk 26	C	3/4	59	<i>L'Imitation de la Chasse</i> [von W. F. Bach].
32					unused.

NB, [] - later added words with light brown ink with a thick pen.

Found in the first page of the fascicle (p.21) is the *Præludium* in C major, which is the only surviving early model of Pr.C#. Though the length of the piece is the same as the later version, the first half of the piece is written in the form of a succession of chords with the instruction '*Arpeggio*'.¹¹⁴ From its solid resemblance with the first prelude of WTC I, we may learn two things: firstly, because its texture closely resembles that of the earlier piece, this C major prelude would seem to date from Bach's Cöthen years; secondly, from the role that the Prelude No.1 of WTC I had played, we may assume that this prelude could also be intended as the first piece to be played or studied in the collection, and that all the pieces in this fascicle could have therefore been specially intended for educational purposes.

The other Early Model of WTC II, *Præludium* and *Fuga* in D minor, is the earlier version of PrFg.d. This model provides us with further crucial information in interpreting the purpose of this fascicle and the stage of progress in the compilation of WTC II.¹¹⁵

First of all, both movements (i.e., PrFg.d) are the identical musical text with the ante correcturam of L copied by the same assistant copyist - Anna Magdalena. Predecessors of these movements have been, in fact, described under P 1089 (the prelude) and P 595 (the fugue). The earlier prelude is a shorter version (43 bars) than the present version (53 bars). We can, therefore, say that Bach probably revised the prelude in the period ca.1730 - 1738. The same can be said for the fugue: The earlier version appearing in P 595 is the same length (27 bars) as the present version, but is seen to be in an under-developed form as far as musical

¹¹² See printed music in BG, XIV, p.243; Bischoff, p.123. The title reconstructed in Breckoff, p.21, as "Prael.v.J.S.Bach" and Brokaw (1985), p. 29, as "Prae.v.J.S.Bach" is inaccurate.

¹¹³ See Footnote 112.

¹¹⁴ This is written with thinner tip of the pen, and certainly not with music pen that used for musical notation. However, the shade of ink, brownish colour, does not show any distinctive disparity with general appearance of the manuscript.

¹¹⁵ The detailed description of D minor pair, including the amendments, is described in the Supplement B under PrFg.d

details are concerned. From this, we may also deduce that, P 595 dating from after 1738, Bach probably revised the fugue soon after he gave it to Agricola. We can, therefore fairly conclude that both of the movements had already been brought to their maturity by Bach's intensive revision work when Anna Magdalena copied PrFg.d into P 226.

The next thing to note is a marked change in the presentation of the title in these two movements (PrFg.d). The earlier model of the prelude in P 1089 was previously designated as *Præambulum*, while the fugue in P 595 as *Fugetta*. In P 226, they are entitled *Præludium* and *Fuga*. This seems to be significant in terms of the extended length of the pieces, which have now acquired the identical designations given to them in L.

It is interesting to find that the musical text of the fugue in this fascicle is modified according to Bach's revisions in L (viz., soprano, bb. 13,3 - 14,1), whereas that of the prelude is left intact from such revisions apart from minor corrections.¹¹⁶ The updated minor modifications found in the fugue, however, appear to have been entered by an unsure hand, displaying its unskillfulness and its unfamiliarity with musical notations. It is therefore sensible to assume that Bach did not enter these revisions here himself as he did in L, and the updated entries were perhaps made by someone else at a later date.

From the obvious close relationship PrFg.d holds with L in its musical text and the title with L, though one may suggest to the contrary that the opposite could be true as there is neither the numbering system of the work order in WTC II, nor any suggestion of its quotation from WTC II, the manuscript may be a draft or even an unsuccessfully produced fair copy of L because it contains an excessive number of Anna Magdalena's slips of the pen and also unacceptably rough practices for a fair copy.¹¹⁷

A study of the organization of this fascicle shows its real purpose. Suppose that this PrFg.d were the copy unsuccessfully made for L. The prelude, for instance, violates "the single side of a bifolium for a single movement" policy of L, which I shall discuss in greater detail on pp. 65 ff. This may seem to support the hypothesis that Anna Magdalena failed to squeeze the movement into the two pages she allocated to it, which she did successfully in L. But this fragile hypothesis will immediately be shaken when we look into the fugue. Here Anna Magdalena had to copy the movement into a two-page space, which she did. But instead of copying it all down into the other side of the bifolium as she would have done in L, she only made use of one side of the bifolium, and did the remaining part onto a fresh sheet. If we put together all the evidences considered so far, it is most natural to conclude that all four pieces were intended as a set of works; and the present pagination, i.e., the organization of the fascicle, seems to reflect the intended sequence of the copyist.

¹¹⁶ P 550, the copy of P 226 by Michel, also gives post correcturam. From this fact, we can set the date of revision between the correction took place on L (ca.1742?) and 1780.

¹¹⁷ Among the most outstanding is the crossed out system for about 2 cm containing 4 semiquavers at R5,b.1 (orthographic error).

Yet so far we have no conclusive evidence to judge that the D minor pair was written prior to the fair copy in L.¹¹⁸ In fact, it is possible to pursue an antithetical approach. For this we have two clues. Firstly, the sheet and rastrum were dated after the fair copy of the same piece in L, which shall be discussed in detail on pp. 60 ff. Secondly, we cannot ignore the possibility that pieces in this fascicle were so ordered as to comply with the plan for a specific purpose, e.g., for the preparation of a textbook, and therefore, there should be no particular reason that such an order should be affected one way or the other by the compilation of WTC II.

Considering all the possibilities discussed above, we can still see that PrFg.d in P 226, at least, was made after Anna Magdalena's fair copy in L, however unlikely it may seem. We may therefore conclude that the date of creation of the fascicle falls between late 1738 and 1740, from right after the creation of P 595 and before the PrFg.C# of WTC II.

P 550

MS P 550 is a single fascicle in 14 pages. The paper is thick and hard, and in good order. The sheets appears to have been trimmed probably after the fascicle was formed in a unique fashion, which I illustrate in Fig. 7 below. It now measures 30.8 x 19.8 cm. The paper unfortunately suffers slightly from ink acid: despite the thickness of paper, note-heads and beams, where ink was placed on paper in large amount, show on the other side of the paper clearly.

Staves were prepared with a rastrum 8 mm high, and arranged in six piano systems (pp. 2-7,10-11) and seven (pp. 8-9,12-13). The staves were written in thin ink of dark brown shade. With this ink the title page was possibly written also. Main notation appears in different shade - relatively thick ink of very dark brown shade.

The scribe is Michel, the scribe of C. P. E. Bach in Hamburg. From the close resemblance of title and selection of pieces, one can judge that Michel probably copied from P 226 directly.

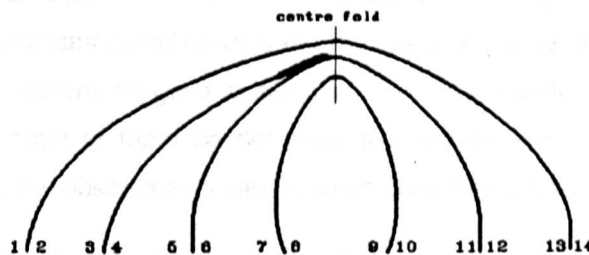


Fig. 7: *Fascicle Structure of P 550*

¹¹⁸ Breckoff claims from the evidence as no numbering system of WTC II found here that this fascicle was therefore made before L. This, in my view, cannot be used as evidence to see the absence of WTC II, for we can find the example in French Suites which was included without any reference to the previous use in the MSS from when it was first seen in Cb-AMB1 to when it was compiled as the final.

CONTENTS:

Title page: p. 1

108*Einige Klavierstücke und Fugen*

von

J. S. Bach

und

W. F. Bach

№8. The number '108' appearing above title was amended with dark black ink from '118'.

Page	BWV	Key	t-s	Bars	Movement heading and Description
2-3	872a,1	C	C	50	<i>Præludium von J. S. Bach.</i> It ends on the 1st system of p.3. From directly below begins:
3-5	Fk 27	C	4	39	<i>Reveille von W. F. Bach.</i> At the end of p.3, we are reminded by the instruction <i>V. subito</i> .
6-7	Fk 28	G	6/8	60	<i>Gigue.</i> At the end of p.7, one system left unused.
8-9	875a,1	d	3/4	53	<i>Præludium von J. S. Bach.</i>
10-11	875,2	d	C	27	<i>Fuga</i>
12-13	Fk 26	C	2/4	59	<i>L' Imitation de la Chasse von W. F. Bach.</i>
14					blank.

Musical texts give almost identical with those in P 226. The only noteworthy amendment made to P 550 is the replacement of a tie from the soprano to the alto, b.27,1-2. It is originated from the ambiguous notation in the exemplar, P 226, as well as L.

INDIRECT SOURCES

Apart from the plainly recognisable musical sources for the models of WTC II, Roger Gustafson extended his survey to find out the potential musical identity in all 74 minor clavier pieces listed in BWV 894-962, most of which in this group are thought to have been composed before 1720.¹¹⁹ His significant contribution is the discovery of the general trend of Bach's early clavier pieces and the reasons he gave to establish some disregarded as candidates for WTC II. He concluded that most of them do not meet the requirements of sufficient quality and suitable size in WTC II. His observations can be summarised as follows:

- 1) Structure - Many fugues are mostly monothematic, lacking musical interest.
- 2) Style - Many fugues are freely constructed. Many reflect the older toccata-like form used by Buxtehude and his contemporaries.
- 3) Size - Most of them are too short, but some good ones are too large and *self-subsistent* in a collection.¹²⁰

¹¹⁹ See Gustafson, pp.17 f.

¹²⁰ *Italics* is by Geiringer (1966) p.216.

Nonetheless he finds BWV 896, the Prelude in A major, as one of the possible drafts or models for Pr.G of WTC II.¹²¹ In the successful candidates, the F major fugetta (BWV 901) and the G major fugetta (BWV 902), Gustafson finds latent, inherent sufficient potential. It would be more interesting if one could explore such systematic analyses. This type of investigation has yet to be carried out in all Bach's works to give a clearer idea of Bach's working strategy and its historical significance.

SUMMARY

We have looked through two main streams in the genesis of WTC II. One of the most significant points in light of practical use of the work is that those models were used for teaching purposes, as with WTC I, which was developed from Cb-WFB. The order of pieces in the extant MSS appears authentic in the sense that both main streams are suggestive of WTC: In the Herald, we have seen that BWV 870a was perhaps placed in the important position of representing the first piece of the set; in the Prologue, we have seen in P 226 that the quality of the prelude in C major of WTC I, which is inherited in Pr.C# of WTC II, was represented in the same way. Thus one may proceed from here to give an account of the genesis of WTC II already present in those MSS. But the total absence of Bach's holographs as well as the lack of intermediate sources to fill the gap between the two main streams offer us a subject for much more involved studies in future.

¹²¹ Gustafson, p. 19.

CHAPTER 2

THE LONDON AUTOGRAPH: ADD.MS 35021

INTRODUCTION

Among over sixty extant MSS of WTC II, only two are autographs. Add.MS 35021 in the BL, London (abbreviated as L), is one of these, containing twenty-one preludes and fugues. The three pairs missing from this collection are PrFg.C#, PrFg.D and PrFg.f. These missing movements once existed, for they are included in F, the direct copy of L.¹²² The other known autograph of WTC II is P 274 (abbreviated as Bn) in SPK, containing Fg.A^b only.¹²³ Thus the importance of L is self-evident.

The MS consists of twenty-two sheets of paper. Originally each sheet was folded vertically down the centre, i.e., between two columns, to form a single bifolium. There is sometimes extensive damage along this centre line as well as at the edge of the sheet. Most of these damaged sheets are now restored with something like glue-based filler to prevent them from falling apart. The method of restoration is discussed in more detail on pp. 56 ff.

Twenty of the sheets accommodate a single prelude-fugue pair each; these sheets are bound by the BM. The other two sheets are occupied by PrFg.A^b. That containing the prelude is numbered as f.13, and that containing the fugue as f.14. These sheets are not bound with the others, however. They were pasted together, probably by Bach and probably for a particular reason. I shall explore this aspect further on pp. 56 ff, 93 ff.

This MS bears no title page. Instead, each individual movement bears its own title. In the case of a prelude the title usually consists of the movement name with the work order number of WTC II together with "*di J. S. Bach*": for example "*Prelude 18 di J. S. Bach*" (f.15r). The numbers are arranged in the same way as in WTC I by keys in ascending chromatic order from C to B, while each note of the chromatic scale contains the piece in major and minor in fixed order. Judging by the ink and calligraphy, most of these superscriptions were written by Bach himself when the music was being copied or soon after the copy was completed.¹²⁴ So there is

¹²² See pp. 115 ff.

¹²³ See pp. 111 ff.

¹²⁴ There are 3 obvious exceptions associated with the numbering: 1) the numbering of Pr.C (1) was possibly added later; 2) the numbering of PrFg.d, 6, was originally written as 5 and later modified to 6 on both sides (see Fig. 12, p. 82); and 3) in some pieces the numbering

no doubt about Bach's intention to make another set of twenty four preludes and fugues when they were being copied.

The earlier MSS that contain the movements from WTC II, viz., P 595 and P 226 (see pp. 32 and 35 ff, respectively) are dated ca. 1738, and they do not bear numbers as part of their individual titles. Thus so far as we know, the numbering system is first found in L. There are, however, quite distinct variations in titles in L, as listed and classified into three groups in Table 8. This is discussed in more detail on pp. 45 ff.

Each sheet of the MS is approximately A3 size. The sizes of the sheets vary slightly, however: this I will discuss in detail in the subsection "Paper Size", p. 64.

Each open leaf is ruled on both sides by a rastrum in two columns of fourteen staves. There are a few exceptions which have sixteen staves. This information can also be found in Table 8, p. 45. A detailed description of the rastrum and staff ruling is given under "Rastra", pp. 65 ff.

On each sheet is accommodated one complete piece of music, i.e., one prelude with its accompanying fugue (except in the case of the PrFg.A^b, already mentioned). On one side in most cases is copied a complete prelude (pages 4 + 1 of the sheet as originally folded), while on the other side is the accompanying fugue (pages 2 + 3).¹²⁵ This enables a player to perform a single movement without turning a page.¹²⁶ There are some exceptions, however. Most of these are cases where the fugue is too long to be accommodated on the side provided for it. The usual solution is to copy the remaining part into staves drawn at the bottom of the sheet. When this extra space was insufficient, Bach was obliged to go to the other side to find any unused staves or to draw a further stave in the bottom margin. In two instances, F major and B^b major, it is the prelude that is too long, so the preludes go over to the other side of the sheet, occupying page 2 of the bifolium. The fugues then have to be accommodated within the other

is probably not Bach's. In such a case, the different quality of ink shows that a part of the title was added or changed after a long time interval. In the case of Fg.F#, B^b, b^b, and B, the numbers are thought to have been made by Wilhelm Friedemann (see Fig. 8, p. 47 and Footnote 144). See also the detailed discussion under individual pieces in Chapter 4 "Outlines of Revision Process", pp. 208 ff, and Supplement A.

¹²⁵ See Prout (1896), p. 50. Prout testified that the prelude was written on the two outside pages of the sheet, and the fugue on the two inside ones. My examination of the MS confirms that all but f.12 fold in this direction, though it was not always obvious. The exception, f.12 (PrFg.g), appears to be quite different - the fugue occupies pages 4 + 1 + 2, and the prelude occupies page 3 + the bottom system of page 2: thus this sheet seems to be folded the other way. Bach perhaps stored the sheets in his library in a folded state, with the page containing the superscriptions (page 4 except f.12) uppermost. The different folding of f.12 might have been decided for this reason so as to have the title of the prelude facing upwards (f.12r, L.H.col [page 1]). Thus Dehnhard's comment (the prelude on pages 2 + 3, the fugue pages 1 + 4) is considered to be incorrect in this case. See Dehnhard (1983) p. xxii.

¹²⁶ See Prout (1896), p. 50.

half of the sheet (i.e., page 3) with the addition of a few more staves drawn in the margins. Thus some scores were unsuitable for use in performance because of a page-turn.

In L we find two copyists: J. S. Bach himself for the majority, and his second wife, Anna Magdalena.¹²⁷ The following are the Anna Magdalena's hand: PrFg.c, d (before revision), E (except perhaps the last bars of the Prelude), G and Pr.F (first page only).¹²⁸

According to Werner Breckoff,¹²⁹ D. Franklin and S. Daw¹³⁰ and Kobayashi,¹³¹ the creation date of this MS falls in the period from late 1738 to 1742. This matter will be discussed on pp. 60 ff.

Some features of the MS seem to point to scribal variations over a period of time. Because the classifiable variations of the title designation (e.g., *Præludium* and *Prelude*) coincide with those of watermarks and rastra, one may be tempted to interpret L as the gathering of pieces copied at different times. Table 8(a) and (b), below, shows the grouping of leaves according to watermarks, rastra and Bach's notational conventions, so that one can at a glance recognize three distinctive groups in L.

¹²⁷ See Emery (1953), pp. 114 ff, esp. 118. Emery is the first scholar to testify with evidence the participation of Anna Magdalena in making this MS. He classifies L into two groups as A (for Anna Magdalena's copies) and B (for Bach's). Actually in the issue of *MLetters* before Emery's article appeared, there is an article by Constance Richardson, who suggests, "As well as Mendelssohn, Sterndale Bennett declared the writing to be Bach's; but it is well known that Anna Magdalena wrote a script hardly distinguishable from her husband's." See C. Richardson: "The London Autograph of 'The 48'". *MLetters* 34 (1953), p. 39.

¹²⁸ Emery (1953), p. 120.

¹²⁹ Breckoff, pp. 26 ff.

¹³⁰ Franklin/Daw, p. v.

¹³¹ Kobayashi (1988), pp. 45 ff.

Table 8 (a): Three positive groups in L: Group 1 according to scribal variations in watermarks, rastra, titles and other notational indications

Fol	Hd	Ky	WM	R	Title	Additional Instruction	FM	Add Staves	16
2r	AM	c	I	B1	Præludium ^f 2.	di J.S.Bach		U	
2v					Fuga ^f 2				
4r	AM	d	I	B1	Præludium ^f 6.	di J.S.Bach		U	R:39.2/rev
4v					Fuga ^f 6.		UV		
22r	AM	E	I	B1	Præludium ^f 9.	di J.S.Bach		U	H: 8.5/cop
22v					Fuga ^f 9		U	H: 5.8/cop	
11r	AM	G	I	B1	Præludium ^f 15.	di J.S.Bach		U	
11v					Fuga ^f 15		UV		
8r	A+J	F	I	B1	Præludium ^f 11.	di J.S.Bach	(Final zur folgend. Fuga)	U	H:27.2/cop
8v	JS				Fuga ^f 11		(Volti)	U	H:19.5/cop x 2
7r	JS	e	I	B1	Præludium ^f 10	di J.S.Bach		U	H: 2.6/cop
7v					Fuga ^f 10			U	
10r	JS	f#	I	B1	Præludium ^f 14	di J.S.Bach		V	
10v					Fuga ^f 14		(NB)	U	H:35.6/cop
12r	JS	g	I	B1	Præludium ^f 16	di J.S.Bach	(NB)	U	
12v					Fuga ^f 16			U	
16r	JS	A	I	B1	Præludium ^f 19.	di J.S.Bach		U	
16v					Fuga ^f 19			U	
17r	JS	a	I	B1	Præludium ^f 20	di J.S.Bach		V	
17v					Fuga ^f 20			U	
21r	JS	b	I	B1	Præludium ^f 24	di J.S.Bach		U	
21v					Fuga ^f 24		(Fine) - large	V	
5r	JS	E ^b	I	B1	Præludium ^f 7.	di Joh.Seb: Bach		U	H:15.3/cop
5v					Fuga ^f 7			V	

Hand: JS Johann Sebastian; AM - Anna Magdalena

Title variation: ^f - wave mark on number ; · - dot on number;

Italics: Emendation or addition [by Bach or WFB] - See Supplement A for detail.

Watermark: See Table 11, p. 59 for detail.

Rastrum: See Table 14, p. 72 for detail.

Fermata: U· - normal round symbol; V· - wedge shaped symbol.

Add.System: <Rastrum, Hand, Liner>:<measurement in centimetre>/<at Revision, at Copying>

16: * indicates 16 staves format instead of usual 14.

The distinguishing feature of Group 1 is its clearly distinguishable titles. Preludes are written as *Præludium* [works order number] *di J. S. Bach* with the exception of f.5, where Bach's name is written as *Joh. Seb: Bach*.¹³² All fugues are titled in the same manner, as *Fuga* [works order number]. Also notable is the constant use of a fermata at the end of a movement. Neither the page-turn instruction, *Volti*, at the end of a prelude nor *Fine* at the end of a fugue is found except in Fg.b, placed at the very end of the collection. This exception I tend to regard as a special case, for it seems to refer not to end of the movement but to that of the entire collection.¹³³ Again, in Group 1 the manner of using additional systems is different from that of Group 2. Six movements in Group 1 are concerned: none of these six was drawn by rastrum,

¹³² Bach perhaps used his numerical signature 70 [JOH.SEB:BACH] because this fugue is 70 bars long. In the commentary of the prelude in E^b major of WTC I, Hary Hahn speculates that the same number of bars (70) is related to the name of JESUS. See Hahn (1973), p. 137.

¹³³ This *Fine* in Fg.b (f.21v) is exceptionally large - 4.5 cm. The largest one in other groups, the one in Fg.C# (f.3v), is only 2.7 cm wide.

but free-hand, line by line. Finally, the unique instance of two sets of fermatas, found in two fugues of this group, is restricted to the copies made by Anna Magdalena.¹³⁴

Table 8 (b): *Three positive groups in L: Group 2 - Group 3. with missing pieces (P 416) according to scribal variations in watermarks, rastra, titles and other notational indications*

Fol	Hd	Ky	WM	R	Title	Additional Instruction	FM	Add.Staves	16
Group 2									
20r	JS	B	VI	B2	Prelude $\sqrt{23}$. di J.S.Bach	(volti seq. la Fuga)			
20v					Fuga à 4. $\sqrt{23}$	(NB) {fine - trimmed?}		H:42/cop	
3r	JS	C#	II	Ca	Prelude $\sqrt{3}$. di J.S.Bach	(Volti)	U		
3v					Fuga	(Fine)	V		
9r	JS	F#	II	Ca	Prelude $\sqrt{13}$ di J.S.Bach	(Volti)		H: 7.5/cop	
9v					Fuga à 3. $\sqrt{3}$	(Fine)	U		
19r	JS	b ^b	II	Ca	Prelude $\sqrt{2}$. 2 di J.S.Bach	(Appendix Fuga) (NB)	U	L:38.2/cop	
19v					Fuga à 4. $\sqrt{22}$	(Volti)	U		
6r	JS	d#	II	Cb	Prelude $\sqrt{8}$ di J.S.Bach	(Volti)	U	H: 5.0/cop	
6v					Fuga. a $\sqrt{4}$				
18r	JS	B ^b	II	Cd	Prelude 2i. di J.S.Bach	(Appendix Fuga) (Fine)	U	R:35.5/cop	
18v					Fuga 2 ^r			R:39.6/cop	
15r	JS	g#	V	Cc	Prelude i8. di J.S.Bach	(Fuga)	U		
15v					Fuga.	(NB) (Fine)		H:38.6/cop	
missing		c#			Prelude $\sqrt{4}$ di J.S.Bach				
					Fuga	(Fine)			
missing		D			Prelude $\sqrt{5}$. di J.S.Bach				
					Fuga		UV		
Uncertain (replaced)¹³⁵									
missing		f			Prelude $\sqrt{12}$ ex F b. +		V		
					Fuga		U		
Group 3									
13	JS	A ^b	IV	D	Prelude i7 è Fugue par J.S.Bach				
1r	JS	C	III	A	Prælude et Fugue $\sqrt{1}$. par J.S.Bach	(V S: volti)			
1v					Fuga à 3	(Fine)			
14	JS	A ^b	III	A	Fuga. ex $\sqrt{15}$ dur. $\sqrt{1}$? di J.S.Bach				

see Table 8 (a) for keys.

Group 2 differs greatly from Group 1 in its use of titles and other instructions. All preludes of Group 2 are entitled *Prelude* [works order] *di J. S. Bach* instead of *Præludium*.... The titles of the fugues are also different, written as *Fuga à* [number of voices] instead of *Fuga* [works order]. It should be noted however that works order numbers occasionally found after the title of

¹³⁴ It is plausible that the second set of fermatas, of which one in L.H. staff is wedge shaped, are added by Bach when, after Anna Magdalena completed copying, he proof read the score.

¹³⁵ See Chapter 4, pp. 258 ff.

a fugue (see Fig. 8 below) were entered by Wilhelm Friedemann after the MS was in his possession.¹³⁶

Fuga à 3. 13. Fuga à 1.
 Fuga. ex. Fischer: 17. ex. L. B. Bach.
 Fuga à 4. 22. Fuga à 4. 23.

1.9v	1.18v
1.14r	
1.19v	1.20v

Fig. 8: Wilhelm Friedemann's Addition of Works Order Number

Also common is the page turn instruction *Volti* after the end of preludes, which is absent from the *Præludium* group. Further, *Fine* after the end of fugues occurs as many as six times, in contrast to the single instance in the *Præludium* group marking the end of WTC II. However it may be noticed generally that many such features in Group 2 are not well-established. For example, the last part of the title, viz., voice specification, is often omitted from the title, and likewise *Fine* and *Volti* are often omitted.

Group 3 shows similar features to Group 2 in its usage of *Volti* and *Fine*, but there are observable differences between them. Titles given to the movements in this group vary much more widely than in Group 2. Also, no fermata is found in Group 3. Perhaps the most remarkable dissimilarity is the clef for R.H. staves. In Group 3 treble (G) clefs are employed instead of soprano (C) clefs. All the evidence for this grouping will be reconsidered together with other elements to reconstruct the compilation of WTC II in the sub-section "Process and Distinctive stages in compilation", pp. 81 ff.

Most of the scores are generally described as fair copies by commentators. For example, Prout says,

"I am perfectly convinced that the manuscript I have seen is not only autograph, but also that it is a fair copy, and not a first draft."¹³⁷

Emery says,

¹³⁶ See Footnote 144.

¹³⁷ Prout (1896), p. 50.

"these manuscripts [that were written by Bach himself] show all the characteristics of fair copies."¹³⁸

This view was considerably modified by Breckoff, who made a clear distinction between Bach's writing in his Group A (my Group 1) and Group B (= my Group 2 and 3). Of Group A he noted that "the papers do not bear the calligraphic features of a fair copy as the remaining sheets [Group B = my Group 2 and 3] do," whereas, he said, "the items in Group B bear the characteristics of calligraphic, well-rounded fair copy."¹³⁹

Franklin goes one step further by classifying L into three "layers", a term which he prefers to **Groups**. His layers are almost identical with my classification of groups shown in Table 8.¹⁴⁰ Franklin's interpretation of MSS in terms of both handwriting and composing criteria is, however, acutely dissimilar from those of Breckoff. Franklin's classification of the three groups is as follows:

- Group 1 - Fair copies and revising scores, the most calligraphic.
- Group 2 - Revising scores and intermediate copies
- Group 3 - Composing score and copies of drafts.¹⁴¹

These terms used by Franklin are, however, only to describe some general characteristics of scores in L. And, as he states, the purpose of such classification by Bach was to distinguish the working stages of his compilation, which I shall discuss below. It is apparent that this particular issue has been discussed too generally to make any contributions to our understanding of the compilation of WTC II. I shall, therefore, cover this issue fully on pp. 196 ff.

From the evidence in WTC I, one may speculate that Bach also compiled WTC II in the same way, in three distinct stages:¹⁴²

- 1) set of composing scores and drafts;
- 2) intermediate copies on which the composer made revisions until the work came to maturity [*Urpartitur*]; and
- 3) final authoritative text (preferably made for binding) with the addition of a title page and may be also the inscription "S.D.G." at the end of the collection [*Fassung letzter Hand*].

¹³⁸ Emery (1953), p. 114. Also see Footnote 127. Dehnhard (1983, p. xxii) gives a similar interpretation. He says, "Most of the sheets collected in A [Add.MS 35021] appear to be fair copies, although there is evidence of emendations."

¹³⁹ Breckoff, p. 27. It should be noted that Emery's Groups A and B are not the same as Breckoff's, the groups being identified on different criteria. (see footnote 127).

¹⁴⁰ The only difference is the interpretation of PrFg.f, one of the missing pairs from L. While Franklin maintains all the three missing pairs from L to be in Group 2, I place PrFg.f in specific independent place between Groups 2 and 3. See p. 94.

¹⁴¹ Franklin (1989), pp. 252-254.

¹⁴² See Dürr (1984)¹ pp. 10-13. In WTC I, 3 layers can be seen in the following MSS: 1) Cb-WFB; 2) P 401; and 3) P 415.

Franklin concludes that L was mostly in the second stage, *Urpertitur*, and that within that stage Bach further distinguished the scores by assigning the titles differently.

- Group 1 - bears the title *Præludium* for an intermediate copy, but the text is finalised, ready to be written in complete bound copy (though some of them go through extensive revision later)
- Group 2 - bears the title *Prelude* for "working-scores" in an intermediate copy, which require further refinement (though some of them appear to be the final text and in good calligraphy)
- Group 3 - bears titles in various forms (which originated from the exemplars) not in intermediate stage, but in primary working stage.¹⁴³

Inevitably this theory raises some difficulties due to the complex source situation of WTC II. For example, there is neither a Bach autograph nor any manuscript copy which exclusively contains composing scores or *Fassung letzter Hand*, and which can therefore be used to identify these types of score in L. The only examples are found in limited parts of a collection in Bach's pupils' copies or his assistant copyists'. Their musical texts are so varied that a thorough genealogical study is essential. For the composing scores, the possible state of the exemplar of L is fairly clearly reflected in P 595 and P 226, already discussed on pp. 32 ff and 35 ff. A careful comparison of the text of those historically related MSS and L reveals various degrees of progress ranging from virtually no difference to structural overhauls of the piece, which I shall discuss in detail on pp. 224 ff and 233 ff.

One of the most neglected yet the most powerful tools is the study of L itself. The scrutiny of this MS enabled me to reconstruct Bach's compositional activities and habits, how he drew his staves according to a specific plan of layout, how he repeatedly revised his original text, and how, when he found it impossible to make further revisions on the same sheet, he probably prepared a new sheet and made out his improved revision on it. It is especially important, in relation to any particular prelude-fugue pair, to isolate Bach's initial entries from his later amendments. This provides our only real information (unless more sources can be discovered) on the state of the composition as represented by L and by its exemplar. The preparation of layout is covered under "Rastra", pp. 65 ff. The revision process is discussed in Chapter 4, "Outline of Revision Process", pp. 208 ff.

ASSOCIATED INFORMATION

The history of L

H.-J. Schulze considers that the MS may have been inherited by Wilhelm Friedemann on Bach's death in July 1750. He ascribes to Wilhelm Friedemann particular additional notations

¹⁴³ Franklin (1989), pp. 261-273.

which appear on many sheets, mainly around the titles.¹⁴⁴ Ownership of the MS has not been definitely established until it came into the possession of Muzio Clementi.¹⁴⁵ Clementi included 'Two Masterly Fugues of Sebastian Bach' (i.e., Fg.C and c#, pp. 120-125) in his *Second Part of Clementi's Introduction to the Art of playing on the Piano Forte*, published c.1820-1821.¹⁴⁶ Clementi's possession of the MS can be confirmed by the heading of Fg.C in his publication: 'Fuga / by J.S.Bach; / from an Origi- / nal MS: / of the author'. The text given by Clementi agrees with that of L in almost all details.¹⁴⁷

Though the authenticity of text represented in Fg.c# in Clementi's book cannot be fully established until we discover Bach's copy itself, it can still be estimated to some degree from various approaches. One way of doing this is to compare the text with that in F.¹⁴⁸ Another way of proceeding may be to compare Clementi's presentation of the piece with that of Fg.C in the same book. This immediately reveals a striking fact, namely that he does not offer authentication by reference to the autograph: he merely writes 'Fuga by J. S. BACH'.¹⁴⁹

This is important, for it suggests strongly that the C# minor pair was already missing from the collection c. 1821. Otherwise, the first indication of the absence of any pairs is 1879.

After this MS came into Emert's hand, most of the information about the history of the MS can be obtained from Add.MS 35022, a series of letters and memoranda put together by Eliza

¹⁴⁴ Quoted in Franklin/Daw, p. v. I have not found the primary source of information. See also Footnote 124 and Fig. 8, p. 47. Because these numbers are not found in subsequent copies of L (e.g., F), Franklin/Daw consider that such additions were entered after L had been in Wilhelm Friedemann's possession following Bach's death. See also Franklin (1989), p. 267, footnote 49.

¹⁴⁵ See Franklin (1989), p. 240, footnote 1. Franklin assumes that Clementi may have received the MS from his father-in-law, Johann Gottfried Lehmann (1745/46 - 1816), who was a cantor in Berlin. Lehmann may have had a close contact with Bach's student, Agricola, and also with Wilhelm Friedemann. Both were active musicians in Berlin during the period. See also Schulze 18c, pp. 59, 150-151.

¹⁴⁶ This approximate dating is given by Franklin/Daw, p. v. According to Emery (1953), the imprint of this book (Clementi, Collard, Davis and Collard) implies a date between 1819 and 1823 (Frank Kidson: *British Music Publishers* (1900), p. 19); and the watermark date of the Sarah H. Emert copy of Clementi's work (the BL h.319.e) is 1822. See Add.MS 35022, f.25.

¹⁴⁷ The fingering penciled in L also resembles very closely to Clementi's publication cited in Footnote 146. The only difference I have found is bars 43-44 (R.H.) and 75 (L.H.), which is too little to be significant among the great majority of matching fingering. Emery (1953) also confirms that "the English fingering that has been penciled into the MS may well be his." and "Clementi's text agrees with that of 35021 [L] in every significant detail", p. 108.

¹⁴⁸ See pp. 115 ff, 232 ff.

¹⁴⁹ See Emery (1953), p. 108, esp. footnote 2. Emery also agrees with this by saying "Its source is not specified, and will not be easy to determine. ...". Franklin (1989, p. 240, footnote 1) assumes on the contrary that Clementi possessed the three pairs missing from L.

Wesley,¹⁵⁰ which were bequeathed by her to the BM together with Bach's autograph (L).¹⁵¹ From this document we learn that Emett bought the MS at the sale of Clementi's effects without knowing that it was the autograph, though, significantly, Clementi himself knew it. The truth about its authenticity came to the knowledge of Emett only ten years after its purchase. It was then in June 1842 that he took the MS to Mendelssohn for evaluation.¹⁵²

Change of ownership of the MS probably took place six times after Emett's death in 1847. The whole procedure of ownership was tangled due to the complexity of Emett's family structure, friendship and family affairs. To clarify the situation, I show in Table 9 below part of the Emett family tree, with all the events up to the time when the MS was bequeathed to the BM.

¹⁵⁰ See Emery (1953), p. 109. Eliza Wesley was a daughter of Samuel Wesley, the Bach specialist, and sister of Samuel Sebastian Wesley. The Emett family and the Wesley family are said to have been in a very close relationship.

¹⁵¹ See Emery (1953), pp. 107-112. This MS reveals many different stories about the history of the autograph due to what Emery calls "agreeable bit of scandal" (p. 110). Some pages of MS is torn, and Emery assumes that it was the result of such an affair.

¹⁵² Add.MS 35022, f.3-6 and f.16-19. Sarah Emett's copy of Clementi's book in the BL (h.319.e) is marked in ink to draw attention to the heading of Fg.C together with pencil mark at bar 66, the different reading from Wesley-Horn edition. See Emett's authenticating remarks of these additions in her letter in Add.MS 35022, ff.14-15.

Table 9: History of Bach's autograph from Emett family to the BM

Date	Owners of the Autograph -events relative to the owner-	Episodes
	<p>----- 1st Wife ----- John George EMETT ----- 2nd Wife ----- (1787-1847) -bought-</p>	
1832		Bought at the sale of Clementi's effects.
c.1835?	<p>Eliza WESLEY (1819-14 May 1895) -given?-</p>	see Footnote 156.
	<p>J. G. EMETT -temporary returned-</p>	Temporary returned for Emett's visit to Mendelssohn?
June 1842		Took the MS to Mendelssohn for evaluation.
c.1843?	<p>-permanently returned-</p>	Permanently returned after visit to Mendelssohn. See Footnote 156
1847	<p>John Sebastian Wilmot EMETT (1838-?) -inherited-</p>	
c.1861-62	<p>Clarissa Sarah CLARKE (? - ?) -bought [£5]-</p>	Sold at Christie's. ¹⁵⁴
19 June 1879	<p>Sarah Harriet EMETT (1822? - 1891?) -bought [£8]-</p>	She promised S.H. EMETT not to part with it without letting her know.
c.1891?	<p>Eliza WESLEY -bequeathed-</p>	CLARKE said she would sell it for the same price that she had paid: but she made the condition that she should retain one piece.
5 May 1896	<p>BM (20 PrFg) -bequeathed-</p>	Eliza WESLEY undertook to buy and keep the MS on behalf of Emett, as Emett was then in Torquay. ¹⁵⁵
5 Oct 1896		BM (1 PrFg) -bought- ¹⁵³

¹⁵³ "Bequeathed by / Miss Eliza Wesley, / 5 May, 1896. / (except f.22 purchased of / Mrs. Clarissa Sarah Clarke / 5. Oct. 1896)." This remark, written in ink, is found in one of the additional sheets inserted at the front of the bound MS.

¹⁵⁴ See Emery (1953), p. 110, esp. footnote 5. According to Sarah Emett's account of the history of the MS. See MS. 35022, ff. 3-6. Emery, however, says it was not at Christie's.

¹⁵⁵ NB. W. S. Rockstro, who went to Mendelssohn with J. G. Emett for the evaluation of Bach MS (L) in 1842, lived in Torquay from early 1860s until 1891. There may be connection between him and Sarah Emett.

It may be noted that while Eliza Wesley, who probably happened to possess the Bach autograph twice in her life time,¹⁵⁶ always acted humbly and generously, Clarissa Clarke showed her covetousness throughout. Clarke's action at the auction of c.1861 and her plan of subsequent re-sale of Bach autograph in early 1879 must have enraged Sarah Emmet, since she believed she should have inherited the MS herself.¹⁵⁷

It is mysterious, however, that the actual number of folia in the collection was not noted at all in the extant contemporary documents until the receipt of the sale of twenty preludes and fugues by Clarissa Clarke to Sarah Emmet dated 19 June 1879.¹⁵⁸ In 1892, Eliza Wesley, who acted a mediator for the transaction between them, stated;

Unfortunately when they came into Miss Emmet[']s possession Numbers 4-5- and 12 were missing[,] also a letter from Mendelssohn vouching for their auth[en]ticity - this letter I have seen during Mr Emmet's life time.¹⁵⁹

This statement of Eliza Wesley together with her other remark (see footnote 156) implies that the missing pieces were present when Eliza Wesley possessed them for the first time, and lost or likely to have been sold by either Clarissa Clarke or John Sebastian Wilmot Emmet without any notice to Sarah Emmet. This suggests that the missing pairs were lost during the period 1847 - 1879.¹⁶⁰

¹⁵⁶ See Add.MS 35022, f.25.; Transcribed in Emery (1953), p. 113. According to Eliza Wesley, she was once given the Bach scores by J. G. Emmet, but she returned it, for she says "Mendelssohn's un-hesitating opinion of their authenticity rendered them no longer mine." This statement by Eliza is the only evidence for her first possession of the MS upto 1842. Also see Table 9.

¹⁵⁷ See Sarah's letter to Eliza dated 15 June 1879 in Add.MS 35022, f.8; transcribed in Emery (1953), p. 111. This feud was perhaps the reason for Sarah Emmet's paying £8 instead of the £5 that Clarke had paid. The purchase of the MS at £5 by Clarke was attested by Samuel Sebastian Wesley, who was at the Emmet sale. See Emery (1953), p. 113.

¹⁵⁸ Add.MS 35022, f.10. See Emery (1953), p. 111.

¹⁵⁹ Add.MS 35022, f.7. Transcribed in Emery (1953), p. 110. Bracketed amendments are Emery's. Eliza Wesley's remark is slightly incorrect, as Emery says, because No.9 (E major), which Mrs. Clarke "stipulated on retaining" was also missing.

¹⁶⁰ This date is controversial, as Eliza Wesley's remarks could have been influenced emotionally by Sarah Emmet. There are two further remarks to my present knowledge about the state of Bach's autograph in different times. W. S. Rockstro, who accompanied J. G. Emmet to visit Mendelssohn for the evaluation of the Bach MS in 1842, recalls the occasion (in 1886 according to Emery (1953), p. 112) and says of the MS that "it was complete, or nearly so". See Add.MS 35022, ff.16-19. In 1926, C. W. Pearce, who was a friend of Eliza Wesley, writes to *MTimes* (Vol.67, No.1000 (June, 1926), p. 544) that "Miss Wesley had in her possession Bach's autograph MS. of the whole of the second volume of the '48'. ... Early in the eighties of the last century this precious Bach MS. was exhibited by my old friend and R. C. O. predecessor, Mr. Matthias Wesley...". If the latter remark was true, we have no choice but to think that Eliza Wesley secreted the missing pieces in the 1830s when the MS was first given to her, however unlikely it seems.

The musical contents of the MS containing twenty-one pairs (including PrFg.E in Clarke's possession) was first examined by Frederick Westlake for Grove's Dictionary in 1887.¹⁶¹ During the time when the MS was promised to be bequeathed by Eliza Wesley, Ebenezer Prout scrutinized the MS for the last time before it was bound by the BM. He examined, however, only the twenty prelude-fugue pairs in Wesley's possession. Though his article shows excellent textual comparison with BG edition, it contains several incorrect remarks about the history of the acquisition of the MS.¹⁶²

The history of the MS in the care of the BM and BL is listed in Table 10 below.

Table 10: *L's History of Binding and Restoration under the BM.*

Date of events	Remarks
5 May 1896	20 Preludes and Fugues in 21 folia were bequeathed by Eliza Wesley.
5 Oct.1896	1 leaf, E major Prelude and Fugue, was purchased from Clarissa Clarke.
27 Oct.1896	All folia from Wesley's part were sent to the binder for volume bound as oblong open demy folio 1/2 morocco corners, inlaying, etc.
24 Dec.1896	Returned to the BM.
3 Feb.1897	The leaf acquired later from Clarke was sent to the binder together with the bound 21 leaves to be inserted as f.22. The volume was lettered.
8 Feb.1897	Returned to the BM.
26 Jan.1906	Folia 13-14 were removed from the binding for exhibition.
30 Oct.1910	The G major prelude-fugue pair (Add.MS 38068) was presented by Clara Morton. ¹⁶³
16 Jan.1911	Bound part of 35021 and 38068 were sent to the binder to have the latter inserted into the volume.
24 Jan.1911	Returned to the BM.
30 Jun.1953	Sent to binder for minor repairs with gauze, and put on guard (38068).
3 Jul.1953	Returned to the BM.
24 Sep.1953	F.8 was taken for internal exhibition in the King's Library, the BM. ¹⁶⁴
13 Nov.1953	F.8 was re-inserted into the volume.
Jun.1962	The BM made an archival negative microfilm of L. (Subsequent copies are reproduced from this copy).
1 Jul.1973	Transferred, with all the BM MSS, to the BL, Reference Division.
1980	The BL published the facsimile of L.
Apr.1985	f.13v was laminated (lined with lamatec). ¹⁶⁵

¹⁶¹ His letter is contained in Add.MS 35022, f.24, which is dated 30 July 1887. Also see his article "Das Wohltemperierte Klavier" in *A Dictionary of Music and Musicians*, ed. G. Grove (London, 1893), Vol. 4, pp. 482-485.

¹⁶² Prout (1896) [Monthly Musical Record, XXVI (1896), pp. 49-52, 73-76.] See also Emery (1953), p. 113.

¹⁶³ See pp. 119 ff.

¹⁶⁴ This exhibition, held in October 1953, was to commemorate the bicentenary of the foundation of the Museum. F.8 of L was catalogued as no. 142 in the exhibition.

¹⁶⁵ I am grateful to Mr. J. Conway, the Superintendent of Students' Room, Department of MS of the BL, and Miss Janet Benoy of the Binding and Exhibitions section in the BL, who kindly provided me with the information of the history of L under the care of the BM and the BL.

Currently the bound part of the MS is sound in comparison with Bn or P 416. However, the separate leaves, ff.13 and 14, are not in such good condition, and the gauzing on f.13v had made it almost impossible to read the musical text on that side.¹⁶⁶

The evaluation of L by Publishers.

In the past, the evaluation of this MS tended to be overlooked by many editors of printed editions. It was unfortunate that Franz Kroll (1866) and Hans Bischoff (1884) did not know of the presence of Bach's autograph in England at the time when they carried out most exhaustive surveys of the text of WTC II and made their respective editions.

Even after L was publicly recognized, scholars changed their attitude very little. This can perhaps be ascribed to the fact that L was not considered to contain Bach's final authoritative text in every detail.¹⁶⁷ From the evidence in some of Bach's students' copies, it has been generally thought that Bach made a subsequent complete fair copy, now lost. As far as I have managed to trace, only a single printed edition of WTC II reflected the text of L exclusively in the past.¹⁶⁸ Only recently (1983), Walter Dehnhard published an excellent edition of WTC II, which includes extensive research on the compilation and hypothetical links between various MSS.¹⁶⁹ There are, however, bound to be three problematic facts in establishing Bach's final version that always confuse the issue:

- 1) The difficulty in identifying Bach's final versions as they seem to be mixed fairly randomly in various MSS;
- 2) The difficulty in determining Bach's final version as each version has its own aesthetic emphasis. It is possible that Bach pursued revision work on each score independently, which made several equally valid final readings among various MSS;
- 3) The texts which differ from autographs can neither be thoroughly trusted nor proved as Bach's, though they might have been copied from authentic autographs.

The true value of L lies in the fact that it reflects the history of Bach himself in the most important process of such a large scale work, i.e., the compilation and revision. The information packed within L is so vast and complex that it must be discussed in great depth. By scrutinizing the revision process of L in Chapter 4, I hope that a firmer basis for judging the authenticity of various readings may be established.

¹⁶⁶ The texts given in the facsimile are better presented than one can see from the original. The microfilm provided by the BL gives even better quality, for it was made much earlier (see Table 10).

¹⁶⁷ Franklin (1989) points out two more reasons for this trend: 1) Including no dated title page; 2) S.D.G. [Soli Deo Gloria], which Bach uses to indicate for the completion of a work, is not found.

¹⁶⁸ MORGAN (1926). This edition, however, seems to be little known.

¹⁶⁹ See Dehnhard (1983), "Critical Notes", pp. xx ff.

In the following sub-sections, I am first going to proceed with further detailed examination of each physical element: "Binding Method", "Watermarks", "Paper Size" and "Rastra". Next I shall move on to "The Process and Distinctive Stages in Compilation", where I deal with the various factors at work in the compilation of WTC II.

PHYSICAL APPEARANCE OF THE MS

BINDING METHOD

The originally separate leaves of L are, as has been mentioned above, bound by the BM (see Table 10). As is apparent from the appearance of the MS, the binding was extremely carefully done: the MS currently shows that extensive repair work has been done on most of the leaves. Physically damaged parts were restored with glue-based filler for several layers. The way in which the repair was carried out tells us something about the previous state of the MS: most leaves must have been partly damaged or had become too fragile, and there was perhaps anxiety that leaves would be torn into halves due to the constant handling of the sheets in a folded manner.

In order to bind together those sheets in this condition, the BM decided to mount them in open state onto flexible paper frames. Each sheet is now mounted on a large sheet of carefully measured paper frame, so that the music can be read from both sides without any of Bach's writing being obscured. The frame extends approximately 3 mm inwards from all the four edges of the verso of the sheet. Only f.20 is mounted with the frame attached to the recto.¹⁷⁰ Though the measurement of the frame and its subsequent adjustment must have been done extremely carefully, the binders could not avoid concealing some part of Bach's notation. In order to see what is hidden, one would have to remove the paper frame or else use sophisticated radiographic equipment.¹⁷¹

¹⁷⁰ On this sheet Bach used extreme sides of the verso which would then be concealed by the frame mounting.

¹⁷¹ Those hidden parts are, however, still indistinctly recognizable through the paper frames on the original though it is no longer possible through the facsimile edition.

Repair work was carried out either subsequently or simultaneously. Due to the method of restoration chosen, the sheet is no longer folded. All leaves were thus preserved in a format accessible from both sides, protected from further deterioration due to the original method of storing them in a folded manner. The mounting frames themselves were then bound together on the left hand side of the preludes, while an extra thin, blank sheet was inserted between the folia so that the facing pages can be prevented from further deterioration caused by acid reaction of ink. Thus all preludes become the recto of the folio and the accompanying fugues become the verso. The method of binding chosen by the BM must have been considered to be the best way not only to prevent such fragile MSS from further deterioration without gauzing the surface, but also to preserve the sequence of pagination as it was originally intended by Bach.¹⁷²

Now let us come back to ff. 13-14, containing PrFg.A^b. The BM's decision to remove the two leaves from the bound volume was perhaps due to the way they were originally pasted, shown in Fig. 9 below.

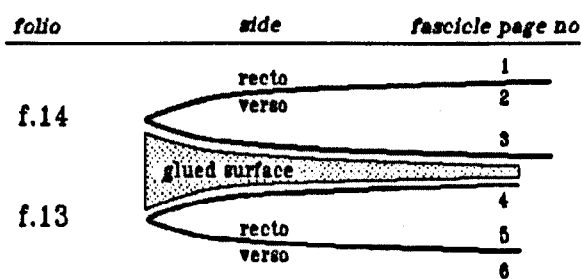


Fig 9: Fascicle structure of ff.13-14 viewing from the bottom edge.

CONTENTS:

Page	Folio	Column	Movement heading and Description
1	f.14r	r.h.	^a <i>Fuga. ex As dur.1.7. di J.S.Bach.</i>
2	f.14v	l.h.	cont.
3		r.h.	cont. Only 3 systems were prepared, the amount that were required by the movement. Large space below is left blank.
(hidden)	f.14r	l.h.	Glued page. Sheet is blank.
(hidden)	f.13v	r.h.	Glued page. 14 staves were ruled out, but no music is written.
4	f.13r	l.h.	^a <i>Prelude 17 è Fugue par J.S.Bach.</i> 14 stave format.
5		r.h.	cont.
6	f.13v	l.h.	cont. Last system is unused.

As can be seen in the pasting and different size of these two sheets, they could not be bound individually to the volume unless the glued pages were separated. And from the present

¹⁷² For example, F, the duplicate of L, is bound in folded state, which violates originally intended pagination. See pp. 115 ff.

appearance of these folia, I consider that they had never been separated. According to the BL, these folia were initially bound with the rest of folia (see Table 10). The hardened, darker brown-coloured edges of f.14 suggest that they were affected as a result of glueing the paper frame to f.14v.¹⁷³ F.13 was not bound to a frame, but hung loose from its centre fold. This insecure state of binding was perhaps the chief reason for its selection for exhibition from 1906 onwards.

Each movement of PrFg.A^b occupies three pages of a single bifolium. In L, the same is true of three other movements, viz., Pr.F, Pr.B^b and Fg.g. In those cases Bach wrote the remaining movements with smaller notation so as to copy them onto the remaining page. But as a pair, PrFg.A^b is exceptional, for the movements occupy three pages each. And they were written at different times.¹⁷⁴ The two sheets were then glued together, possibly by Bach, on the unused pages, i.e., page 1 of the prelude and page 4 of the fugue.¹⁷⁵ Due to the way in which the glueing was done and the direction of the fold was decided, the fugue became pages 1 - 3, and the prelude became pages 4 - 6 in this unique gathering.¹⁷⁶

This method of glueing is, to my knowledge, exceptional. If it really was done by Bach, one can perhaps fathom his firm, consistent philosophy in compiling WTC II. Can it be the case that each prelude and fugue was to be put together, while each pair of movements was to be a separate entity? Further discussion of this matter is on pp. 94 ff.

WATERMARKS

In any study of MSS, the watermarks are a most important factor, for they give information on the dating of the paper's manufacture. By identifying watermarks, it is often possible to classify the MSS into chronological order irrespective of their present condition or the musical contents.

Due to the thickness of the paper in L, the identification of watermarks was extremely difficult.¹⁷⁷ The task was virtually impossible by simply holding the MSS to the light or by using

¹⁷³ These edges are not included in the facsimile edition, probably due to the use of a frame so as to hold the sides of loose folia in the process of photography.

¹⁷⁴ See pp. 60 ff, 94 ff for chronological data.

¹⁷⁵ Franklin (1989), p. 250, assumes, contrary to my interpretation, that they were pasted in the late 19th century to avoid being lost or separated. The earliest record which confirms the glueing in my knowledge is Prout (1896), p. 50, who says, "... [PrFg.A^b] required an additional half-sheet ..."

¹⁷⁶ See Emery (1953), p. 107, footnote 1. Emery explains how this pagination can be understood by re-assigning page numbers: "...write the prelude on pp. 2-4, and the fugue on pp. 5-7". Unfortunately his explanation may be confusing, for it seems to suggest that the glueing preceded the copying of the music.

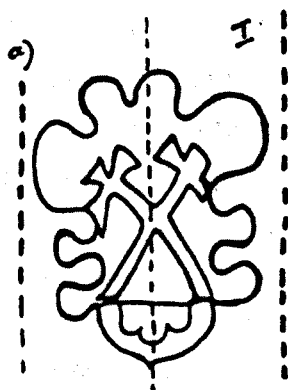
¹⁷⁷ See Emery (1953), p. 107.; Breckoff, p. 26. Emery could only vaguely distinguish 4 watermarks, but he suspected that there may be more. Breckoff could only tentatively identify two types. In my examination I found that the paper bearing Franklin/Daw's Wm-I

an infra-red based watermark reader. Some of them were only recently identified by Weiß and Kobayashi using radio-graphic equipment.¹⁷⁸ It appears that the watermarks in L are of various types: there are six different watermarks as shown in Table 11 below.¹⁷⁹

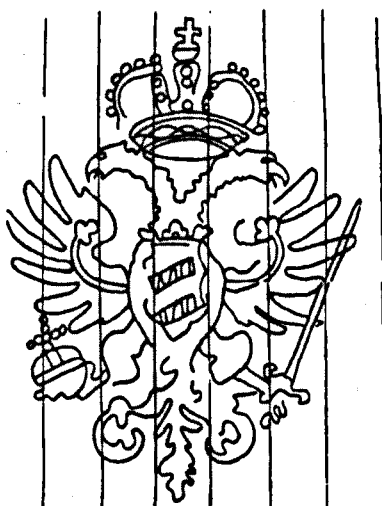
Table 11: *Six types of watermark in L*

WM	Weiß	Description	folia
I	105	Hammer and anvil	2,4-5,7-8,10-12,16-17,21-22
II	72	Schönburg coat of arms	3,6,9,18-19
III	67	Two-headed eagle	1,14
IV	17	Three heraldic lilies	13
V	70	Two-headed eagle with sceptre	15
VI	60	Two-headed eagle with 'HR'	20

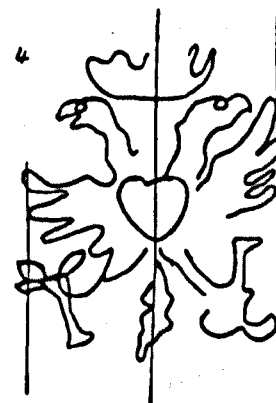
Wm-I (Weiß 105)



Wm-II (Weiß 72)



Wm-III (Weiß 67)

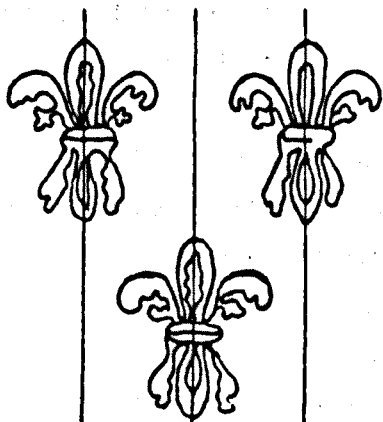


and Wm-IV is relatively thin, and therefore the watermark is easily identified, while the paper bearing Wm-II is too thick to look through.

¹⁷⁸ See NBA KB IX, p. 86 (I [105]), p. 72 f (II [72]), p. 60 (III [67]), p. 36 (IV [17]), p. 61 (V [70]), p. 56 (VI [60]). Numbers in square brackets are Weiß's watermark catalogue numbers. See also Franklin/Daw, p. v.

¹⁷⁹ Roman numbering is given by Franklin/Daw in this order. The priority of order is probably basically given to the number of folia and folio number regardless of chronological order. Weiß's numbering classified by the types of various patterns of watermarks.

Wm-IV (Weiß 17)



Wm-V (Weiß 70)



Wm-VI (Weiß 60)



The classification of folia by watermark immediately reveals that the number of folia using paper bearing certain types of watermark seems to vary greatly. Wm-I (Hammer and anvil) stands out most, with 12 leaves out of the 22. Wm-II (Schönburg coat of arms) appears 5 times. The rest of the watermarks account for only a small proportion of the folia.

Though the dating of all the watermarks has not yet been given conclusively, the extent of evidence may be sufficient for us to reconstruct the order of 3 groups in L.

Weiß and Kobayashi give Wm-I (Weiß 105) the earliest dating among the six, in the region of 1738-1740.¹⁸⁰ As the number of Bach's other works that made use of this type of sheet is limited,¹⁸¹ the dating is established on a firm basis. The sheets bearing Wm-I in L constitute Group 1 (entitled *Præludium* [work order] *di J. S. Bach* and *Fuga* [work order] (see Table 8 (a), pp. 45 ff).

The rest of the folia, which bear the titles *Prelude* (or *Prælude* [f.1 only]) [work order] *di J. S. Bach* and *Fuga a* [voice spec.], are usually dated later, between 1740 and 1742.¹⁸² The dating of paper bearing Wm-II has not been firmly established, for there are many MSS bearing Wm-II which are thought to have been produced over the whole of Bach's Leipzig period (1723-1750).¹⁸³

¹⁸⁰ See NBA KB IX/1, p. 86.; Kobayashi (1988), p. 11. Kobayashi, more recently, specifies the dating of the usage for this particular type of sheet from May 1739 to January 1740. This type of sheet was also used by Bach for his writing of a document dated 18 January 1740 (see BDok I/76).

¹⁸¹ See NBA KB IX/1, p. 86 and Kobayashi (1988), p. 11. This type of sheet was also used in BWV 245 (P 28), BWV 1055 (Bibl. Jagiell. St 127), BWV 1057 (DSt St 129) and BWV 1067 (DSt St 154) apart from L.

¹⁸² Franklin/Daw. p. v.

¹⁸³ See NBA KB IX/1, p. 72 f.

There are several instances where the papers bearing Wm-I and Wm-II were used in this order. In the full score of the St. John Passion (P 28), which Kobayashi dated slightly earlier than L, Bach and his principal copyist H [*Hauptkopiisten H*] copied music onto three types of paper, including sheets bearing Wm-I and Wm-II in this very order.¹⁸⁴

The other fact suggests, however, that the order of paper usage between Wm-I and Wm-II should not be taken too seriously. Anna Magdalena's other copies of Pr.C# (written in C) and PrFg.d in P 226, usually considered to pre-date L, actually bear Wm-II.¹⁸⁵ Pr.C# (copied in C major with simple chords marked *arpeggio*) is particularly interesting, for Bach's own copy in L also bears this watermark. Her copy of PrFg.d would give, surprisingly, the reverse chronological reference to the same piece she copied for L if we interpret Wm-I to be earlier. It must be added that Anna Magdalena's copies in P 226 bear the title *Præludium*, and not *Prelude*. It seems to suggest the co-existence of these two different types of paper in 1738-1740, and that they are possibly distinguished by Bach for a particular reason, which I shall now explore.

The way Bach chose sheets of distinct paper-types immediately reminds me of his proclivity in organizing gatherings [*Lagen*] of his monumental sacred works. In such cases he would select a different type of sheet to form a pair, which is then considered as a unit among symmetrically organized units, i.e., gatherings.¹⁸⁶ The purpose of this procedure is not properly understood. I consider that it may either for practical or for theological reasons. For a practical reason, Bach might have considered the well-balanced mixture of different types of sheet, which would then be more durable and robust if the sheets were bound in this way. A theological reasoning is perhaps easier to grasp for Bach, as his concept of symmetry seems to have penetrated deeply in various levels of his works. Though there are three pieces missing from L, we can still explore this possibility. The titles and watermarks of missing pieces (indicated in *Italics* in Table 12) were given here as a hypothesis through the study of P 416.¹⁸⁷ One thing emerged from this study: it appeared that the MSS could be divided into two groups, *Præludium* and *Prelude* exactly equal in number, i.e., twelve. In Table 12 below I suggest two possible ways in which Bach might have intended the two symmetrical gatherings in L.

¹⁸⁴ See NBA KB II/4, p. 14; Kobayashi (1988), pp. 11, 16, 44. Wm-I is in the second fascicle - 4 double sheets (folia 5-12 [pages 9-24]) and Wm-II in the third fascicle - 4 quaternios + 1 sheet (folia 13-46 [pages 25-92]). Bach copied only the first 20 pages. This score was prepared by May 1739.

¹⁸⁵ See NBA KB IX/1, p. 63. Watermark No.72 in Weiß's catalogue.

¹⁸⁶ See, for example, a facsimile edition of Mass in B minor (1983), p. 15 and NBA KB II/5, p. 17.

¹⁸⁷ see Footnotes 148 and 172, and also pp. 115 ff.

Table 12: *Symmetrical gathering in L*

Title	Wm	Pair	Title	Wm	Pair
Suggestion (1)					
Prælude 1	(III)		Prelude 13	(II)	
Præludium 2	(I)		Praeludium 14	(I)	
Prelude 3	(II)		Praeludium 15	(I)	
<i>Prelude</i> 4	(II)		Praeludium 16	(I)	
<i>Prelude</i> 5	(II)		Prelude 17	(V)	
Præludium 6	(I)		Prelude 18	(V)	
Præludium 7	(I)		Praeludium 19	(I)	
Prelude 8	(II)		Praeludium 20	(I)	
Præludium 9	(I)		Prelude 21	(II)	
Præludium 10	(I)		Prelude 22	(II)	
Præludium 11	(I)		Prelude 23	(VI)	
<i>Prelude</i> 12	(II)		Praeludium 24	(I)	
Suggestion (2)					
Prælude 1	(III)		Prelude 13	(II)	
Præludium 2	(I)		Praeludium 14	(I)	
Prelude 3	(II)		Praeludium 15	(I)	
<i>Prelude</i> 4	(II)		Praeludium 16	(I)	
<i>Prelude</i> 5	(II)		Prelude 17	(IV)	
Præludium 6	(I)		Prelude 18	(V)	
Præludium 7	(I)		Praeludium 19	(I)	
Prelude 8	(II)		Praeludium 20	(I)	
Præludium 9	(I)		Prelude 21	(II)	
Præludium 10	(I)		Prelude 22	(II)	
Præludium 11	(I)		Prelude 23	(VI)	
<i>Prelude</i> 12	(II)		Praeludium 24	(I)	

Italics - missing pieces from L.

(I) Indicates watermark

In contrast to the explicit symmetrical form shown in the second half of the 24 pieces (nos.13-24), I found no comparable positive symmetrical gatherings in the first half. There are, however, a few possible ways to form perhaps acceptable "symmetrical gatherings". One is to exclude nos. 7 and 12 from the first half as is shown in Table 12 (1), for they are distinguished from the rest by their titles, *Præludium 7 di Joh. Seb. Bach* and *Prelude 12 ex F b +* (cited from P 416) respectively. So the gatherings form a fairly credibly symmetrical form. The second possibility is to include them in the analysis by changing my tactics to see the smaller organization of gatherings. This would give very unusual, but perfectly symmetrical gatherings as is shown in Table 12 (2).

From these fascinating results, we cannot dismiss the possibility that Bach intended his arrangement of pieces from the outset to be symmetrical.¹⁸⁸

The dating of Wm-III was affirmed only recently by Kobayashi - ca.1742.¹⁸⁹ He found Bach's usage of this type of sheets in a limited period including the Art of Fugue.¹⁹⁰ An interesting overlap of watermarks with the previous groups is found in Bach's instrumental music. The part score of the concerto in A major for a Clavier and Orchestra (BWV 1055), Bibl. Jagiell St.127, shares Wm-I and Wm-III with L. Another interesting overlap is found in P 226 between Wm-II (early models of WTC II copied by AMB) and Wm-III (BWV 1027).¹⁹¹ But the most important, though the MS is not in Bach's hand, is P 416, which uses Wm-III.¹⁹² This duplicate of L serves as evidence to judge the particular reading of L at the time when this MS was made.

The type of sheet bearing Wm-IV is also convincingly registered by Kobayashi - in the period January to August 1741. Apart from its use in L, this paper was used in the Bach household only for letters: and it is the dated drafts of letters written by Bach's personal secretary, Johann Elias Bach.¹⁹³ Concerning Wm-V and Wm-VI, we know of no use of this paper in other works by Bach.

From the evidence that the sheets bearing Wm-I, Wm-II and Wm-III were commonly used in this order, we may also apply the order to L, though the mystery concerning Wm-II still remains. Wm-IV, Wm-V and Wm-VI are so far not found in other works of Bach (although Wm-IV is datable),¹⁹⁴ and therefore no definite conclusion can be drawn from a study of watermarks alone.

¹⁸⁸ One point has to be noted however. As far as the full score of the St. John Passion (P 28) is concerned, papers bearing Wm-I and Wm-II are not specially arranged to show symmetric gatherings. See Footnote 184.

¹⁸⁹ See Kobayashi (1988), p. 11. Kobayashi's strongest reason for his conclusion the date written in Bach's testimonial for Johann Georg Heinrich (BDok I/79). It gives the date "den 13 Maji 1744", but Kobayashi showed that the date was subsequently changed from the original "1742".

¹⁹⁰ See Kobayashi (1988), p. 11. In P 200 there are six known watermarks, and Wm-III is found in first 24 pages. The same paper is also found in St 110 (BWV 195), P 13, adn.1 (BWV 240), P 226 (BWV 1027), St 127 (BWV 1055) and P 195 (BWV Anh.30).

¹⁹¹ See Chapter 1, "P 226", p. 35. Although their occurrences in the MS were reversed, this fact cannot be used as a reliable evidence, for this MS appears to be a collection of fascicles presumably bound after Bach's death.

¹⁹² While Dehnhard (1983, p. xxii) says P 416 bears Wm-V, Franklin (1989, p. 251) says it is Wm-III with whom Kobayashi (1988, p. 30) agrees. I consider that Dehnhard confused it due to the close resemblance of watermarks between Wm-III and Wm-V.

¹⁹³ See Kobayashi (1988), p. 12.

¹⁹⁴ See Footnote 192.

PAPER SIZE

As with all handmade paper, the sheets of L are not precisely rectangular: in some cases the deviation is quite visible. It is not easy to know how to measure a large and slightly irregular sheet: I measured the height and width in three places each - top edge, centre, bottom edge; and left edge, centre, right edge respectively. The comparison between the watermarks and the size and irregularity of the paper reveals certain physical features of the leaves as shown in Table 13 below.

Table 13: *Paper Width - Height: Sorted by Watermarks, Width and Height*

FOLIO	WM	WORD	WS	HORD	HS	WMAX	HMAX	M-T	M-B	M-L	M-R	HTRIM	WTRIM
8r	I	W 2	>	H17	^	39.9	33.8	-0.3	-0.3	0.3	0.2		
22r	I	W 3	>	H15	^	40.2	33.6	-0.4	-0.3	0.5	0.5		
4r	I	W 3	/	H16	^	40.2	33.7	0.1	-0.5	0.4	0.5		
11r	I	W 3	/	H19	^	40.2	33.9	0.1	-0.7	0.4	0.5		
16r	I	W 3	>	H22	\	40.2	34.3	-0.2	-0.2	-0.3	0.2		
5r	I	W 7	>	H 9	^	40.3	33.3	-0.3	-0.2	0.3	0.3		
10r	I	W 7	>	H12	\	40.3	33.5	-0.1	-0.4	0	0.3		
7r	I	W 7	\	H17	^	40.3	33.8	-0.1	0	0.1	0.2		
17r	I	W11	>	H 3	\	40.4	32	-0.2	-0.3	0	0.1		
2r	I	W13	>	H12	^	40.6	33.5	-0.2	-0.6	0.7	0.7	trim	
21r	I	W13	>	H19	\	40.6	33.9	-0.3	-0.5	0	0.1		
12r	I	W17	\	H 3	\	40.7	32	-0.3	0	-0.2	0.1		
9r	II	W12	>	H12	\	40.5	33.5	-0.2	-0.3	-0.2	0.1		
19r	II	W13	>	H 6	^	40.6	33	-0.1	-0.3	0.1	0.2		trim
3r	II	W13	\	H10	v	40.6	33.4	-0.4	0.1	-0.1	-0.1		
18r	II	W17	>	H 8	v	40.7	33.2	-0.1	-0.2	-0.1	-0.1		
6r	II	W20	\	H 7	\	40.9	33.1	-0.4	0.5	-0.1	0		
1r	III	W19	\	H 2	v	40.8	31.3	-0.5	0.4	-0.2	-0.1	trim	
14r	III	W21	/	H 5	\	41.4	32.7	n/a	--	n/a	--		
13r	IV	W 1	>	H 1	/	39.4	28.6	-0.1	-0.2	0.1	-0.3	tr.B	
15r	V	W 7	>	H21	v	40.3	34.1	-0.1	-0.3	-0.6	-0.1		trim
20v	VI	W22		H10	v	41.7	33.4	0	0	-0.2	-0.3		trim

Measurement is given in centimetres.

WORDER - Width in ascending order; HORDER - Height in ascending order; (e.g., f.13 is shortest and narrowest (W1, H1)

WSHAPE: pointing the widest

\ top
> top & bottom
/ bottom
| equal

IRREGULARITY RATE - Width

M-t: Mid - Top
M-b: Mid - Btm

HSHAPE: pointing the longest

\ left side
^ middle
/ right side
v edges

IRREGULARITY RATE - Height

M-l: Mid - Left
M-r: Mid - Right

For example the leaves bearing Wm-I can be described as increasing in height (from the bottom upwards) but shrunken in width (from the "spine" outwards). The result of the study does not particularly coincide with the watermarks, probably because the sheets are so close to each other in size, and perhaps also because some of the sheets were trimmed off.¹⁹⁵ Therefore our study of paper size cannot be used for establishing chronological criteria. It should be noted, however, that the study can provide vital information for other purposes. For

¹⁹⁵ This can be judged from the notation cut off from the sides. The obvious cases in L are ff.1, 2, 13 and 20.

example, when combined with the careful identification of watermarks, it may provide evidence to identify its paper mould, and subsequently the original size of the sheets. The correct estimate of the original size may also provide vital information when we reconstruct Bach's copying process, especially Bach's peculiar way of using sides. Without knowing it, we would have few clues by which to judge the background of Bach's notation cut off from the edge of the sheet, such as f.20v in L.

RASTRA

The first impression, good or bad, which one receives from any MS would predominantly depend on its degree of neatness. We seem to respond aesthetically to two major factors, viz., calligraphic clarity and staff layout.

It seemed extremely important that each MS was made and handled with great care in Bach's time, not only because the price of paper was relatively ^{more} expensive than in the present day,¹⁹⁶ but also because copy production by hand was laborious and time-consuming.¹⁹⁷

At the first stage of composing or making fair or revision copies, the musician in those days would either have to prepare staves himself or have them prepared by someone else.¹⁹⁸ No matter how vexatious the task may appear to us, it could sometimes give him greater freedom in achieving a varied format while using the available space economically.

It is well-known among Bach scholars that Bach used two distinctive calligraphic hands, usually depending on the purpose of the MS.¹⁹⁹ It should be noted, however, that the distinction is not so apparent that anyone could tell the difference at a glance. His unceremonious writing was not as slovenly, for example, as that of Beethoven's sketches. Being a busy teacher as well as *Director musices* of the town, Bach presumably paid great

¹⁹⁶ In Bach's Weimar period, the price of 480 thick sheets (1 Ries Doppel-Papier) was 2 fl. 6 gr. See BDok II/71. This figure may be compared to Bach's basic salary 250 fl. per annum at the time.

¹⁹⁷ From letters written by Johann Elias Bach (who was at the time Bach's private secretary) dated 2nd and 28th January 1741, we learn that Bach was unwilling to lend his scores to his good friend J. W. Koch, for fear of their accidental loss or damage. See BDok II/484.

¹⁹⁸ There is no definite proof that Bach prepared all his music sheets himself. Bach's own staff ruling is only apparent in the MSS which reflect his explicit plan of layout. Instead, it is probably the case that one of Bach's assistants was responsible for this duty especially when a bulk of sheets was to be ruled in uniform layout. On the contrary, it is possible that paper makers or dealers in Bach's time provided such service as ruling staves. This conjecture may be strengthened if staves of the same size can be found in the MSS of other contemporary musicians in Leipzig. But we know from certain watermarks that Bach used the same paper for writing both music and letters (e.g., Wm-III is found in testimonial for J.G.Heinrich dated 13 May 1744. See BDok I/79). Thus it is more likely that Bach purchased plain paper. In the following discussion, I assume that all staves were prepared by Bach or his assistant in order to avoid repetitive explanation of these possibilities and hypotheses.

¹⁹⁹ See pp. 199 ff.

attention to his handwriting so that his scores could at least be of ready use in practice. His fair copy, however, differed greatly from his composing scores. The difference lies not only in even more careful planning of his notational presentation, but also in sheer calligraphic beauty emanating from his love and respect for the art he created.

The layout of staves follows the same principle. On Bach's composing sheets, both the neatness of calligraphy and pleasantness of staff layout were less important matters. What was more important to him at this stage was perhaps to exhaust his artistic desire without constraint. A pile of pre-ruled sheets should have been at hand, so that the composer was not restricted in any way in putting down his gushing musical ideas, while simultaneously expanding them. Any unnecessary tasks, such as the ruling of staves, should not occur in the midst of this main pursuit. That being the case, the composing scores may not, therefore, reflect too particular a concern with the proper arrangement of staves specifying the number of voices and instrumentations in the piece.²⁰⁰

For the fair copies, on the other hand, the composer was not only aware of the features that might affect the look of the whole piece, but also took into account the length of the work to be copied. The choice of the rastrum, which might affect the staff-heights and the spaces between the staves, would, therefore, have to be thought out carefully in advance. Between the planning of a fair copy and its execution, the lining of the staves became a major operation.

The staves in L, like those of other MSS so far dealt with, were prepared with rastra. But occasionally there were reduced-height staves found in foot margins which, apart from a few, were drawn by hand extemporaneously during the copying process. I will not go into details about these reduced-height staves at this stage as my basic concern is with staves prepared by rastra.

We could probably say that Bach's rastra were only capable of lining one staff at a time judging from the fact that adjacent staves are not usually exactly parallel. There is little evidence to show that the rastra were used together with other instruments, such as a ruler, to make a staff absolutely straight. Some staves seemed to have been prepared quite hastily. Even within a pair of staves, one may be as much as 3 mm longer than the other.²⁰¹ In those unusual cases one can often detect certain elements which disclose the copyists' psychology and also the purpose of making such a copy.

²⁰⁰ See, for example, Bach's Magnificat in E^b major BWV 243a (P 38) [non-calligraphic score] dated Dec. 1723 and the D major version BWV 243 (P 39) [calligraphic fair copy] dated in the period 1728-1731. See Marshall (1972) pp. 16, 47 ff.

²⁰¹ For example, see 10th and 11th staves of the first column of f.5r.

The arrangement of the staves also reveals Bach's initial plans. One can see, at a glance, that every first two staves are found to be closer to each other than to the third staff: it is thus evident that the sheet was specially prepared for keyboard music, and possibly for a keyboard piece which was about to be copied on to it. For those who are more used to the short-height staves in Bach's full scores, the rastra used may seem to be fairly high. It is possible that the score was designed to enable one to read it comfortably when it was placed on the clavier.

From a general survey of the MSS I also found other aspects which are relevant to my investigations: e.g., 1) types of ink used, 2) number of staves in a sheet, 3) extra staves in margins, and 4) heights of the staves. I shall come back to these issues in detail later on.

Rastrology in General

The aim of rastrology is to deduce from certain evidence left by the use of rastra the historical events and environments in which the scores were made. It is usually concerned with three separate aspects: 1) the time when staves were drawn; 2) possible places where they were drawn and; 3) the psychology behind the choice of particular rastra and of a specific layout.

TEMPORAL FACTORS

The examination of various Bach MSS reveals that the staves drawn by rastra were of various heights, though the range of the variation appeared to be very small: it is often within the region of 7.25-10.5 mm. The variation is not limited to the height of a staff, however, but extends to that of each space and line, each of which is respectively affected mainly by the gauge of the individual pen mounted on the body of the apparatus and by the characteristics of individual pen tips. From the evidence of the frequent replacement of rastra, it may be estimated that the apparatus was not accurately mass-produced by machinery, but possibly hand-made (or home-made?) and less durable. But, on the contrary, when a particular batch of MSS that bears the same watermark is examined, the discovery of a continuous use of a particular rastrum is not uncommon. In fact I become aware after observation that mismatches between watermarks and rastra are infrequent.

Hence one would expect that a statistical approach to rastrology could contribute to the chronological study of Bach's MSS. For example, if change of rastrum is detected in an apparently continuous working process, or if any change of gauge in Bach's rastrum be successfully traced, it might possibly serve as evidence to tell the order of MS production. This was not possible within the study of watermarks alone.

Rastrology is, regrettably, one of the least explored areas in Bach MS studies due to certain difficulties surrounding it. Alfred Dürr explains that the accurate measurement of staves is difficult, for it can be influenced by various factors, such as the flow of ink, disposition of hand, the surface on which the paper is placed, pressure, direction and the condition of the

sheets.²⁰² The most difficult task is probably to find out the points where one CAN measure. The spot, which is normally the centre of the drawing pen tip, is particularly vague under normal circumstances. There is no easy way to prove that the centre measured from the width of a drawn line is that of the pen tip, for information about the tip of the pen is seldom recorded on paper. Therefore my temporary solution is to find a healthy part of a staff, to define the centre of lines with the supposition that they are the centre of the pen tips, to measure them, and finally to make a descriptive model of the rastrum for further testing on various places of the MS.

Such information has to be cited with caution, because the data cannot be established unequivocally: they merely consist of figures in limited variations that are at the same time likely to have been influenced by various unknown factors. They should never be treated as ultimate proof of any kind. An enthusiastic exploration without caution would easily lead to misinterpretation. The number of such potential errors and risks would be significantly reduced if one could introduce a Hi-tec electronic Rastrum Reader to this study for the purpose of fuller statistical analysis. Even with such a Rastrum Reader, we cannot expect rastrology alone to yield as powerful results as other chronological studies, such as the studies of watermarks and calligraphy. Rastrology should remain a branch of a systematic MS study to provide an additional temporal evidence within a small period of time pre-defined by the study of watermarks.

LOCATIONAL POSSIBILITIES

Some musicologists, especially those studying the works of unidentified composers, have employed rastrology to find out the places (cities and countries) where MSS were made. This is normally done by examining the characteristic features of the lines and staves left by the apparatus on paper.²⁰³ In those cases, staves were usually drawn by the paper maker or the dealer, and they were often drawn with rastra capable of lining more than one staff at a time.

In Bach's MSS, on the contrary, the rastra employed for the purpose seemed, as far as I can gather, to be capable of lining only one staff at a time. And all the tasks of preparing music sheets probably fell on the shoulder of the musicians. Moreover, as we usually know the crucial attributions to the MSS, such as the name of the copyists, the dating and the place of making the MSS, etc., there is no need to pin down where they were made from the study of rastrology. When this is the case, rastrology seems to be of no help to us. Yet in my opinion it is still desirable to identify the location of stave ruling, in Bach's house or in the town's paper dealer's. Some musical sheets, especially those for general purpose scores, do not reflect the plan of

²⁰² See NBA KB II/5, p. 23. "Eine genaue Bestimmung der Rastrale ließe sich höchstens mit feinen Meßgeräten durchführen und bliebe selbst dann noch unsicher, da Tintenfluß, Handhaltung, Unterlage, Druck, Zugrichtung, Papierbeschaffenheit, Restaurierung der Hs. und ähnliche Umstände die Rastralbreite beeinflussen können."

²⁰³ See Jander, Owen: Staff-liner Identification, A Technique for the Age of Microfilm. *JAMSoc* 20 (1967) pp. 113 ff.

layout, and could have been prepared in advance by anyone. In order to identify locational factors, rastrology has to be approached from two remote observations of the staves: 1) the habits of a particular user and; 2) the characteristic features of the instrument. The habits of the user can be seen in the following seven aspects:

- 1) direction of lining
- 2) left [beginning] margin
- 3) manner of setting down a rastrum
- 4) speed of lining
- 5) pressure of lining
- 6) lifting of the apparatus
- 7) right [ending] margins

The features of the instrument can be seen in the following three aspects:

- 1) thickness of pens and widths of gauges
- 2) failure of lining
- 3) wobble found in particular pens

From the nature of the observations, the former study can be fairly easily attained by a simple method cataloguing of staves,²⁰⁴ while the latter has to be done with a specially designed Rastrum Reader. The study has also to be extended to the MSS of Bach's fellow musicians so as to authenticate the location of staff ruling.

PSYCHOLOGICAL FACTORS

Decisions concerning the plan of a layout and its execution are governed by the copyists' psychological factors in the earliest stage of MS making. Two important factors were: 1) the purpose for which the MS was intended and; 2) the types of music which were about to be copied. Based on these factors, every MS production, like any other product, has its own practical and aesthetic emphases, though they are not always apparent. For example, in composing scores, some staves are often left unused, giving an untidy impression to the whole MS. That is precisely because the composer, from the outset, had the need for more flexibility as his practical consideration, and did not want to be confined to a limited space when writing a piece of music. His aesthetic concern was not with the appearance of the MS but the musical contents. Again, with a view to improving the musical contents on an original score, practicality may be found in an easy, effective revision process at the expense of practicality for performance. The aesthetic consideration will be, as in a composing score, transferred from the look of the score to the musical contents. Therefore, both practical and aesthetic emphases will not disappear but be transformed from visual virtue into invisible musical quality. Therefore we may understand that any visual appeal we receive from a MS, pleasant or not, originates from

²⁰⁴ See Jander, p. 114 f.

Bach's wholehearted artistry. And as musical content is the most important of all for Bach, it is often the case that Bach's emphasis is on the invisible. In such cases we may have to discover it by identifying the sacrificed visible aspects. This particular argument is, in fact, not restricted to rastrology; it is also valid in the study of calligraphy. Though the theory is clear and logical, the complexity of these emphases in Bach's MS making at work is not always grasped as manifestly as the relationship between light and shadow. Such activity is often seen as a cyclic process from fair copy to revision copy - an endless cycle towards ultimate perfection. Bearing this in mind, we can still apply this explicit logic to understand the complex state of Bach's MS.

In general the following seven elements may have to be taken into consideration before lining staves:

- 1) width of each staff (psychological / strategical);
- 2) colour of ink for staves (casual, but can be psychological / strategical).
- 3) length of each staff (habitual, but can be psychological);
- 4) margins (as above);
- 5) spacing of each staff (as above);
- 6) number of staves in a sheet (strategical); and
- 7) length of the pieces and number of sheets (strategical)

As far as Bach's MSS of his late Leipzig period are concerned, they were made by Bach in a certain consistent way where one may find his general tactics in planning. Amid many possible sequences in planning layout, I believe Bach would normally begin with selecting a suitable staff for the particular piece to be copied. The choice of rastra was not as flexible as one might imagine. As far as I can gather, he basically distinguished only two sizes, a small rastrum (ca. 7.5 mm) and a large rastrum (ca. 10 mm). The small one is normally used only in a carefully prepared full score where more than twenty staves were to be drawn. Under such circumstances, the top priority may be given to deciding the number of staves. The large one is preferred in most cases if at all possible. It was best suited for him to write and read with comfort.²⁰⁵ In some pieces, two sizes of staves were deliberately mixed. For example, in Bach's meticulous fair copy of the St. Matthew Passion (P 25), he frequently alternated the two, using narrow staves for orchestral music and wider staves for recitatives. Under such circumstances, Bach used wider staves for important part writing, while he used the device as aesthetic accentuation to the layout.²⁰⁶ In many other cases, however, we find no definite reason for Bach's choice of a particular size of rastrum. We often fail to pin down the aesthetic element in layout which was sacrificed not for the sake of practical consideration, but for non-

²⁰⁵ See Marshall (1972) p. 47. Marshall suggests that Bach could have been near-sighted and therefore preferred the larger staff for the sake of legibility.

²⁰⁶ Not only by the layout, but also by using red ink Bach distinguished the verse sung by Evangelist.

apparent reasons.²⁰⁷ It appears to me that the particular size of rastrum, especially the small one, was sometimes not available to Bach when he needed it, and therefore unnecessary sacrifice was often inevitable. In one instance in L (f.19r), Bach was obliged to use a ruler to prepare small-height staves line by line in the foot margin.

The order that is to be considered among all other elements of layout, e.g., length, spacing, margins of staves, etc., is strictly dependent on the types of scores, fair copies or otherwise. For composing and revising scores, Bach generally prepared many sheets at once. But for keyboard music in general, spacing of staves is often calculated within the planned number of staves in a page. For other works in which more than four staves were to be braced, the order of consideration can be reversed. For those pieces where a change of instrumentation is expected, e.g., large scale vocal works with orchestra such as the B minor Mass (P 180), Bach kept the largest number of staves.²⁰⁸

Even for fair copies, an intricate design, such as that of the St. Matthew Passion (P 25), is exceptional. Such a diligent stave-ruling policy - where each individual sheet is prepared with its own layout - is impractical. This requires much patience, allocating extra time for non-musical purpose. For another, it was sometimes not so easy to diagnose the length of the piece and number of sheets. Especially for keyboard music, where occasionally more than 50 bars are estimated within a page, accurate prognosis was often not realistic. In such cases it is assumed that Bach did not take it too seriously, for he must have known it was by all means possible to re-adjust the length of it by careful distribution of note-spacing. It is, however, often the case in L that Bach spoiled his plan in this very process. He could not help deviating from such a simple task, and preferred to spend his time for more exhilarating musical purposes.

Human psychology is not all the time simple and permanent. Especially in Bach's MSS, which record a long history of a highly inventive artist, it is perhaps wrong for us to expect such rigidity in them. However complex it may be, the most important point in rastrology is neither impossible nor invalidated. We are only to reveal the single historical moment, viz., the moment just before the initial entry was made. At this point, a significant stage is marked in the history of a MS.

Observation of Various Rastra in Usage

VARIOUS WIDTHS OF RASTRA

In L are found seven different heights of staff drawn with rastra as listed in Table 14 below. Classification is considered in the following three levels:

²⁰⁷ Alfred Dürr gives his opinion that the choice and use of various rastra is not always supported by a conclusive reason. NBA KB II/5, p. 23 f.

²⁰⁸ See, for example, *Agnus Dei*, the last fascicle of P 180, (f.96r-f.99v). From f. 97r onwards, Bach left the bottom four staves unused. Staves were prepared with 18 system format beforehand.

- 1) The height of rastra, given as upper-case alphabet, A-F, was measured in the usual way between the outermost lines, from the centre of the 1st line to that of the 5th line. Larger rastra, viz., A-D, were used for main notation and smaller rastra, viz., E and F, for marginal use.²⁰⁹
- 2) The accurate measurement of gauge is extremely difficult and delicate, yet desirable and the most crucial. This enabled me to validate attributable features in identifying several groups of rastra within 9.5 mm instruments. The result of this grouping is indicated by Arabic numerals.
- 3) Still further I ventured to isolate the habitual use of rastra by the appearance of drawn staves, viz., thickness of ink, thickness of pen, features of lining failure, pressure, speed, etc. This level of grouping is indicated by lower-case letters.

Table 14: *Rastra in L and Classification*

R	SIZE	GAUGE (1/100 mm)	FAILURE	PRESSURE	INK	FOLIA	WM HAND
Standard Size							
A	10.25	= 267 - 269 - 262 - 227 - 2,(3)	---		thin	1,14	III A?
B1	9.75	= 250 - 246 - 243 - 234 - 2	>><		dark	2,4,5,7,8,10-12,16,17,21,22	I A
B2	9.76	- 238 - 244 - 250 - 244 - 2,(4)	---		thin	20	VI B
Ca	9.50	- 234 - 245 - 245 - 233 - (2),4	>><		dark	3,9,19	II A
Cb	9.50	- 233 - 240 - 243 - 236 - none	---		thin	6	II B
Cc	9.50	- 237 = 234 - 246 - 234 - 2	---		dark	15	V B
Cd	9.50	- 236 - 236 \ 241 \ 236 \ 2	---		thin	18	II B
D	9.00	- 225 = 221 = 234 = 218 - none	---	*	thin	13	IV C
Reduced size							
E	7.50	- 197 - 188 - 193 - 182 - none	---		thin	18r (f.m.)	II B
F	7.25	= 193 - 187 - 176 - 171 = none	---		thin	4r (f.m.)	I B

Gauge: Thickness of pen is represented as:

\ thin line. (< 0.4 mm); - normal line. (> 0.4 and < 0.5 mm); = thick line. (> 0.6 mm)

Fail: lines frequently missing from a staff. () - less frequent.

Pressure: indicated in three areas of a line; beginning, middle and ending by the following symbols:²¹⁰
- even; > decreasing; < increasing; * acute bend is found where the apparatus was lifted.

Ink: dark: same darkness (black) as the rest of notation; thin: thinner ink, or lighter than the rest of symbols.

Hand: see discussion of "Classification of Habitual Features", p.75, and "Conclusive Remarks on Stave Layout", pp. 79 ff.

²⁰⁹ The reference, A-D, follows Franklin/Daw, arranged by the stave-height.

²¹⁰ The criteria for the judgement is my general impression. Due to many factors involved (see footnote 202), I was unable to make them more scientifically rational.

R-A (10.25 mm) is the tallest rastrum of all. It is marked by a noticeably narrower fourth (top) space. The thickness of the first (bottom) pen is also outstanding. The second line, and less often, the third line tended to be missed out when staves were drawn.²¹¹ Apart from a few exceptional cases, staves seem to have been lined with care, with fairly even pressure throughout the drawing procedure. With this rastrum is always used thinner brownish ink. Evidence found in both ff. 1 and 14 suggests that their staff-ruling was closely related in time.

Until now the distinction among 9.75 mm rastra has not been discussed.²¹² A systematic study of rastra enabled me to classify these into two distinct rastra by examining their structural features and habitual usage.

R-B1 (9.75 mm) has similar structural features to R-A: a narrow fourth space,²¹³ thick outer lines, especially the 1st, and common lining failure with the second line.²¹⁴ Its habitual usage, however, gives clear contrast between R-A and R-B1. In the case of the latter, the pressure, and perhaps speed, of lining given to the apparatus is not constant. From the appearance of the staves, it seems that the user of the rastrum R-B1 set down slowly and heavily, then speeded up and released the pressure in the middle, and finally slowed down with increasing pressure before he lifted it up. With this rastrum is always used black thick ink, a similar ink used for clefs and notes.

R-B2 is almost the same height (9.76 mm) as R-B1, but the gauges among the five pens are different. They are arranged fairly symmetrically: the outer spaces (1 and 4) are fractionally narrower than the inner ones (2 and 3). All five pens are of fairly equal thickness. Occasionally the second, and less often the fourth line, tended to be missed out as with R-B1.²¹⁵ The habitual features of the user are different from those of R-B1. Pressure to the apparatus is given fairly evenly throughout the lining, and the ink used for lining is thinner than the rest of the notation.

The R-C (9.5 mm) group look, at a glance, all alike as if they are of a single identity, a well spaced out symmetric instrument. The third pen is placed almost exactly in the middle, 4.8 mm from the outermost pens. A closer examination suggests, however, that R-C can be divided into four dissimilar rastra. From the habitual point of view, only R-Ca is handled in a similar way to R-B1, showing variable pressure in lining. All the other three, viz., R-Cb, R-Cc and R-Cd, are

²¹¹ See f.1r - L7, R6; f.1v - L3, L5, L6, R2, R6; f.14v - L7, R3.

²¹² See Franklin/Daw, p. vi. Franklin (1989), p. 247, however, gives ? mark with his classification B.

²¹³ Among the sheets which are drawn by this rastrum, f.4v is the only instance that the sheet was turned around after staves are drawn. It is unlikely that staves are drawn from right to left. See further discussion under "Direction of Staff-lining", p. 76.

²¹⁴ f.2v - R4, R7; f.4v (4th line as the rastrum was held wrong way around to draw staves or sheet was turned around after the recto had been ruled out) R2; f.5r - L1, f.7v - L4; f.8v - L6, R6; f.10v - L4, R6; f.12r - L4; f.17r - L3, f.17v - R7, L5; f.21 - L5, R7; f.22v - R7.

²¹⁵ f.20r - L5, R1, R7; f.20v - L3, L5 and R4.

handled with greater care and with steady even pressure. Only R-Cb and R-Cd are used with thinner ink than the rest of the notation. R-Cc has a unique structural defect with the second pen, which produced so thick a line that the ink held in the pen was often depleted before it had reached the finishing point.

R-D (9.0 mm) has an unique structural feature: two of the inner pens draw thicker lines than the outer ones do. It should be noted that f. 13, which is ruled out with R-D, was apparently first lined with the rastrum from left to right on both sides, and then turned upside down before the music was copied. But it is also possible that the rastrum was handled with the left hand to draw staves from right to left. Thus from the appearance, the second and third lines are the thickest: but if the former hypothesis is correct, it should be third and fourth lines. Again the third space appears the widest, but it should be the second. The rastrum was held steadily without missing any line, and the pressure was even when it was in motion. One prominent habitual feature is found in the manner in which the apparatus was lifted up from the sheet. The right margin, which appears as left margin, is not only far from aligned, but also shows an acute bend where the apparatus was lifted.

In the bottom margin are found two narrow rastra. They have similar structural as well as habitual features. In both R-E (7.5 mm) and R-F (7.25 mm) the fourth space is the narrowest. The thickness of the five lines in R-E is fairly equal on the one hand, that in R-F is unequal. They are both handled with a steady hand and used with thin ink.

TEMPORAL AND HABITUAL FACTORS IN L

The comparisons between rastra and watermarks (see Table 8, p. 45 and Table 14, p. 72) suggest two of the probably most powerful facts to assist the chronological study of MS production. The first finding lies in the match between them. The matches R-A = Wm-III, R-B1 = Wm-I,²¹⁶ R-B2 = Wm-VI, R-Cabd = Wm-II,²¹⁷ R-Cc = Wm-V and R-D = Wm-IV are perhaps evidence of wide spacing in time between those MS productions. The second finding lies in the various features found in R-C, which spans Wm-II and Wm-V. Should R-C be truly the only standard-size instrument used on these papers, the evidence may be interpreted as meaning that the dating of Wm-II and Wm-V will be very close in comparison with the rest. At the same time, the usage of sheets bearing Wm-II can be seen as a careful preparation of sheets, but only when R-Cb and R-Cd are used. This gives a clear contrast to the use of R-B1 and possibly R-Ca, where mass-pre-preparation of the sheets seems to be the case.

²¹⁶ This combination is also found in St. 129 (BWV 1057) and St. 154 (BWV 1067) according to Franklin (1989), pp. 247-248.

²¹⁷ This combination is also found in St. 76,1 and 7 (BWV 210) dated 1738-40 by Dadelsen-TBSt 4/5. p. 110. Franklin (1989, p. 249) says "show the same handwriting characteristics".

With Bach's rastrum was used an ordinary ink. In some sheets staves appear to be drawn with the similar type of ink as other symbols such as clefs and notes. But in others they are drawn in distinctively different shades of ink from the rest. In such cases, staves are prepared with thinner ink. This type of ink was used among R-A, R-B2, R-Cb, R-Cd, R-D, R-E and R-F, and ordinary thicker ink was among R-B1, R-Ca and R-Cc. Further discussion of ink associated with strategical purpose will be found in Chapter 4 "The Choice of Ink", pp. 201 ff.

Associated with the choice of ink, the habitual features can be closely identified in a similar line of study. From this we can identify three distinctive habits of the user. For the time being I shall refer to them as **Hand A**, **B** and **C** from the manner they handled the apparatus. Their handing of rastra varies in the following two aspects: 1) the speed and pressure of lining; 2) the manner of lifting the apparatus; and 3) the manner of taking margins.

The speed and pressure of staff-lining can be identified by looking into the difference in darkness and thickness of individual lines within a staff. The edges of each staff being darker and thicker (coded as >-< in Table 14) are the common features of **Hand A**. R-B1 and R-Ca, and less obviously R-A, are most likely his. The cause of such features can be thought of in two ways. In one, the rastrum was at first handled slowly and heavily, then the pressure was released as he speeded it up, and when he was reaching the finishing point, slowed down with increased pressure. In the other way, these rastra could have been more sensitive in pressure than the rest of the rastra for structural reasons. From the reasons stated above, the twelve sheets prepared with R-B1 are likely to have been prepared by a single person, **Hand A**, though we know two hands, Bach and his wife, who copied the music on to them.

The rest of the folia were most likely ruled by different hands, which we may call **Hands B** and **C**. These two hands draw the staves with even pressure throughout (coded as --- in Table 14). The fact that thinner ink was mostly used by them appears to be prominent.

The distinction between **Hands B** and **C** is found most clearly in their manner of lifting the apparatus. While **Hand B** lifts it smoothly, **Hand C** leaves a trail of unskilfulness in sharply bending lines at the lifting points (R-D). From these features, one may possibly say that **Hand B** was the most skilful hand in preparing staves.

The examination of the margin, i.e., maximum width of the margin and its variation, shows quite similar results to that of the previous enquiries (see Table 15 below).

Table 15: *Stave ruling and Margin taking Showing Maximum Width and its Variation*

FOLIO	HAND	WM	RA	LM-1	RM-1	LM-2	RM-2	NOTES
2	A	I	B1	5 (4)	1 (0)	2 (0)	7 (4)	
12	A	I	B1	7 (2)	1 (1)	2 (0)	6 (2)	
4	A	I	B1	7 (3)	3 (1)	2 (0)	2 (1)	
11	A	I	B1	7 (3)	2 (1)	2 (1)	4 (4)	trim: RM SYS,2
8	A	I	B1	7 (3)	2 (2)	3 (2)	5 (4)	
21	A	I	B1	8 (1)	2 (1)	3 (2)	7 (4)	
10	A	I	B1	8 (2)	1 (0)	2 (1)	7 (2)	
22	A	I	B1	8 (2)	3 (2)	3 (2)	5 (4)	
17	A	I	B1	8 (7)	3 (3)	3 (2)	7 (1)	
5	A	I	B1	9 (2)	2 (0)	2 (0)	7 (4)	
7	A	I	B1	9 (2)	2 (1)	3 (1)	5 (3)	damage: centre fold
16	A	I	B1	9 (2)	3 (3)	2 (2)	6 (3)	
3	A	II	Ca	7 (2)	0 (0)	1 (0)	3 (1)	
9	A	II	Ca	7 (4)	2 (1)	3 (2)	6 (5)	
19	A	II	Ca	10 (4)	2 (1)	2 (1)	5 (4)	
20	B	VI	B2	5 (4)	1 (0)	3 (2)	7 (2)	damage: centre fold
6	B	II	Cb	9 (3)	2 (2)	1 (0)	3 (2)	
15	B	V	Cc	9 (4)	2 (2)	2 (1)	2 (1)	
18	B	II	Cd	7 (6)	2 (0)	2 (0)	6 (3)	
1	B	III	A	4 (1)	2 (0)	1 (0)	5 (2)	
14	B	III	A	n/a	n/a	1 (1)	5 (4)	
13	C	IV	D	7 (7)	5 (2)	5 (5)	7 (5)	

LM - Left Margin; RM - Right Margin; 1 - 1st column; 2- 2nd column; () - variation
Measurement (mm) is carried out from recto.

This shows that Hand A and Hand B have similar features in setting margins, and that Hand C has its own unique feature. The Hands A and Hand B distinguish equally wider margins (ca. 7 mm with variation of 3 mm) towards the edges of sheets on the one hand, they use narrower margins towards the centre fold (ca. 2 mm with variation of 1 mm) on the other. Hand C does not seem to have such a policy at all: it gives a general impression that margins are not considered as one of the important factors in stave ruling.

Other features left by the staff-lining can be critical if one looks into certain aspects of rastrology. Occasional failure in lining a perfect staff, leaving one or a few lines undrawn, is one of such findings. Those missed out lines are, in most cases, re-drawn by free hand. In those cases, it is important to observe whether it happened before the music was copied, or when once the written notation was revised. From the former case, we often also learn the direction of staff-lining and the copyists' psychological reflection from such results.

From a number of unsuccessful linings of staves may be deduced the particular circumstances in which the apparatus was used. In most instances staves were lined from left to right with the right hand.²¹⁸ Three observations testify to this. Fig. 10 (a) tells us that staff-

²¹⁸ Bach did not draw staves from right to left to my knowledge. One exceptional case among contemporary MSS suggests an occurrence in the autograph of the St. Matthew Passion (P 25). The reversed direction of lining staves is observed only in even numbered pages of 2-24 [verso side of f.1v-12v]. In the beginning section of once complete bound MS, extensive damage on the outer edge led Bach to trim off the section and supply unused sheets by glueing onto the existing ones. The closer analysis of this case, however, reveals that the staves were drawn from left to right in the usual way, but the sheet is

lining was once halted when the missing line became obvious, then resumed right after. Fig. 10 (b) tells us the reversed situation that too much ink spills onto the spaces between lines and dragged until the user noticed the mess. Fig. 10 (c) tells us that an empty pen can scratch the surface of paper for only a few millimetres.

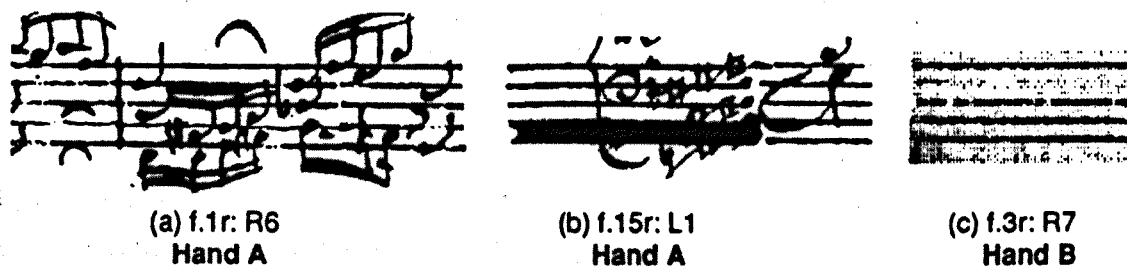


Fig. 10: *Unsuccessful staff drawing with rastra*

Based on the preceding observations, let us take a closer look at the habitual feature Hand B in f.6 where he decided to use thinner ink for drawing staves. In the majority of cases, the right-most side of the staves is darker: it tells us that the rastrum was released at this point and resulted in dripping superfluous ink on the paper (See Fig. 11 (a) below). Furthermore, in some instances the slight sideways lifting of this instrument causes small off-centre collections of ink (Fig. 11 (b)). At the left-edge of the staves, on the contrary, there is not even a trace of such a shade (Fig. 11 (c)).

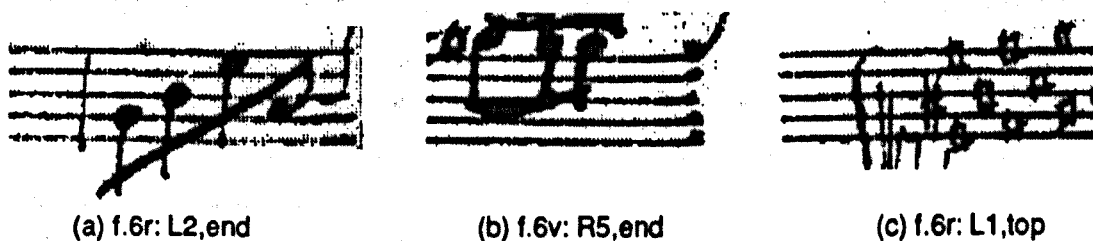


Fig. 11: *Habitual factors of using Rastra left on the sheet*

From the facts above, we can reconstruct the lining of a staff to a certain degree: Hand B started lining while the rastrum was in motion before it touched the paper. When the lining was completed, the rastrum was lifted fairly vertically up, and the instrument was no longer in motion.

turned around top to bottom for even numbered pages. This could be the only position where he could comfortably begin to draw extensions to the existing staves if he was using his right hand in the usual manner.

PSYCHOLOGICAL FACTORS IN L

The last issue, the psychological aspect, is perhaps of the most grave concern in our present study, because it holds the key to disclose the order of compilation which is not clearly understood through the study of watermarks. In this discussion, I shall concentrate on two specific aspects that are closely related to Bach's change of tactics in MS making.

The premise of the layout in L seems to accommodate every movement in a single side of an open bifolium, while each prelude-fugue pair has to be found on a single sheet. This layout was perhaps best suited for an early stage of compilation, for any leaves can easily be replaced by new ones if necessary. Or it could have been decided in this way to enable him to perform a piece by simply placing it on the clavier, requiring no page turn.²¹⁹

That Bach's psychology reflects on stave ruling is no better understood than looking into the facts in stave layout. The most important observation is perhaps to examine any trace of a plan and the execution of such a plan on a sheet, whether the staves were designed to be for the very movement or otherwise within the space available. In L staves are usually ruled seven systems (14 staves) per column.

In Group 1, seven system layout is pre-fixed. There is no influence from the length of piece. When Bach copied a short piece (viz., f.2, f.5v, f.16 and f.17v), he sometimes left more than three systems unused. And when the pieces were too long (viz., f.5r, f.6r, f.7, f.8, f.9r, f.10v, f.15v, f.20v, f.22), he made extra staves in the margins, always free-hand.²²⁰

It is significant that exceptions are found only in Group 2 and Group 3. For long movements, the sheets were prepared in 8 systems (16 staves). The examples are restricted in Group 2, f.19v (Fg.b^b) and f.15 (PrFg.g[#]). For shorter ones, unnecessary staves were not lined, and a large empty space was left below. This is found only in Group 3, f.14v, 2nd column. Among these three exceptional cases, two cases are of Hand B (f.14 and f.15) and one case is of Hand A (f.19v).

Another important aspect in designing the layout of a musical score is the selection of a rastrum in terms of the stave height. Despite the use of six (or possibly seven) different rastra in L, I found no particular evidence that Bach had deliberately selected one out of the many available, apart from the two types, i.e., standard size and reduced size, which I have already discussed on pp. 70 ff.

The usage of narrower rastra, viz., R-E and R-F, can also be seen as significant when, after examining all the features that have been discussed so far, we discover Bach's two distinctive tactics of preparation between the two large groups in L, *Præludium* (Group 1) and *Prelude* (Group 2). In the two groups there are an equal number of cases (6 each) where extra systems were needed at the initial copying stage (See Table 8, p. 45). In Group 1 Bach and

²¹⁹ See Footnote 126.

²²⁰ See Emery (1953), p. 119. Only f.22v, the additional system was probably made by Anna Magdalena.

Anna Magdalena made all of them by free-hand.²²¹ In Group 2 Bach halved the usage of hand-written staves in margins. Instead, in one instance, he employed the narrow rastra (f.18r + v) at the initial copying stage. And, when it was not available, he ruled reduced height staves with a ruler line by line (f.19r). From this general tendency, one may assume that in Group 1 Bach was making copies more hastily than in Group 2.

I tend to conclude that Hand A was perhaps not Bach, considering the task too mechanical. If Bach knew how mechanical the task would be, he must certainly have asked his assistant (one of his students) to do such a task, or perhaps Anna Magdalena. But Hand B could well be Bach, because it was only he who could anticipate the length of the piece by taking his note distribution into account (see R-A, f.14). The fact that the narrower rastra were handled by Hand B could also stand as evidence for this. And finally Hand C was perhaps still another person who was less experienced in lining staves.²²²

To reconstruct the sequence of events concerning the preparation of sheet, I describe three groups separately. Group 2 and Group 3 I divide into several further layers. However I imply no chronological order among them at this stage.

Group 1

Bach decided to copy out many preludes and fugues entitled "*Præludium*..." with the help of Anna Magdalena, and either instructed one of his assistants (Hand A) to prepare a lot of clavier scores (at least 12) in seven systems on both sides, or fetched a pile of sheets pre-prepared for keyboard music. Thus we can see a general trend in Bach's working method from the outset, namely that Bach was well prepared for making copies in a non-perfect yet reasonable layout. This policy was still effective when, after running out of space on the sheet, Bach found himself obliged to draw extra systems by free-hand. This particular event can be interpreted in either or both of the following two ways. The answer, correct or not, would depend on how we interpret Bach's psychology.

- 1) If Bach regretted drawing staves free-hand: he was at the time either so genuinely impulsive to complete the compilation or not so concerned about the final copy that he did not search for a small-height rastrum to do the task.
- 2) If Bach preferred to do so: he did not mind at all facing a slight predicament at the end of the piece. More important still was therefore to complete the piece with already well-developed ideas as quickly as he could.

²²¹ See Footnote 220. The only extra system, which was prepared with the narrower rastra, was the case when the piece (f.4r) was later revised and an extra system was thus needed.

²²² From the identity of watermarks (see pp. 63 ff), one may naturally suspect that Hand C can be Johann Elias Bach.

When we look at f.4r, where Bach used R-F to prepare a system for a newly written extension, we notice that Bach allowed himself the time lapse only here. It is indeed Bach's musical activity that is to be progressive. We may quote an anecdote showing Bach's peculiar disposition:

Johann Sebastian Bach once came into a large company while a musical amateur was sitting and improvising at a harpsichord. The moment the latter became aware of the presence of the great master, he sprang up and left off with a dissonant chord. Bach, who heard it, was so offended by this musical unpleasantness that he passed right by his host, who was coming to meet him, rushed to the harpsichord, resolved the dissonant chord, and made an appropriate cadence. Only then did he approach his host and make him his bow of greeting.²²³

Group 2

There are several different layers at the initial stage of preparing music score in this group.

- LAYER 1 Bach decided to copy out the pieces entitled "*Prelude ..*" and obtained the music paper in the same way as for Group 1, for f.3 and f.9. It is also possible that these sheets are pre-ruled, for we find the same layout, watermark and rastrum which was used most likely by Hand A in P 226.
- LAYER 2 Bach asked his assistant (Hand A) to prepare music sheets specially for PrFg.*b^b* (f.19), one side 7 systems and the other side 8.
- LAYER 3 Bach decided to copy out pieces one by one, and accordingly Bach prepared or had the staves prepared by Hand B. Each sheet is ruled with a slightly different rastrum. In this group, we have f.6, f.15, f.18 and f.20.

In Group 2, Bach allows himself a time-lapse for preparing extra systems with a rastrum (f.18) or with a liner (f.19r). This particular decision was possibly made under the following two conditions;

- 1) There was no need to prepare extra systems hastily, for each movement in this group was prepared slowly, leaf by leaf. *Fine* at the end of each Fugue may be related with this trend.
- 2) As Bach was still in the very act of intensive composing or revising activity, he required cleanly prepared systems to allow his musical idea to run smoothly.

Group 3

- LAYER 1 Bach asked his less skilful assistant (Hand C) to prepare music sheets for Pr.A^b (f.13). This was done with thin ink.
- LAYER 2 Bach asked another assistant or himself (Hand B) to prepare the rest of the sheets (f.1 and f.14). Note that f.14 was designed specially for the piece.

²²³ Johann Friedrich Reichardt: *Musikalischer Almanach*, Berlin, 1796. Anecdote No.6. English translation in: BR, pp. 290-291.

PROCESS AND DISTINCTIVE STAGES IN COMPILATION

The principal problem of this MS is to decide when and how the selection of individual pieces was made. To this I shall devote the final part of this chapter. In order to pursue this, we shall assemble the following evidence discussed so far to reconstruct Bach's process of compiling WTC II:

- 1) various designations in the titles of the individual movements and other instructions.
- 2) Six types of watermark
- 3) Seven types of rastrum and usage.
- 4) a varied working pace
- 5) Preparation of sheets

Since the early part of this chapter, I gave the three groups in L (see Table 8, p. 45) as my hypothetical chronological order. Now I shall examine each in turn according to the following further variety of historical approaches, and give them historical perspectives in Bach's overall compiling tactics:

- a) Biographical approach
- b) Philological approach
- c) Structural and stylistic approach
- d) Size of individual movement
- e) Bach's clef usage
- f) Calligraphic approach

Note that the last approach, calligraphic approach, will not be used in this chapter due to the complexity of the subject. This, however, I shall cover on pp. 199 ff.

GROUP 1: "PRÆLUDIUM"

It is fortunate that the dating of paper marks the chronological placement of this group very firmly among all the others, and places it the earliest of all. And here in the first stage of the compilation of WTC II, a dozen scores (see Table 8, p. 45, Group 1) are produced. The titles of these movements begin uniformly with *Præludium*. And because *Fine* is found only after the final fugue, all the scores can be considered to have been prepared as parts of a complete collection of WTC II. From these, we learn Bach's passionate intent to produce a complete set.

No piece appears in any earlier MSS with the heading and numbering of L's titles. They may well be the first version specifically for WTC II apart from their exemplars. For example, Pr.d first appears in P 1089 entitled *Præambulum*, which was then modified as *Præludium* in P 226 (ca. 1738), and appeared in L as *Præludium 6 di J. S. Bach*. Interestingly this numbering on both movements in the pair was originally written as "5", then the error was rectified in several layers with a thick pen and a sharp pen as shown in Fig. 12 below.

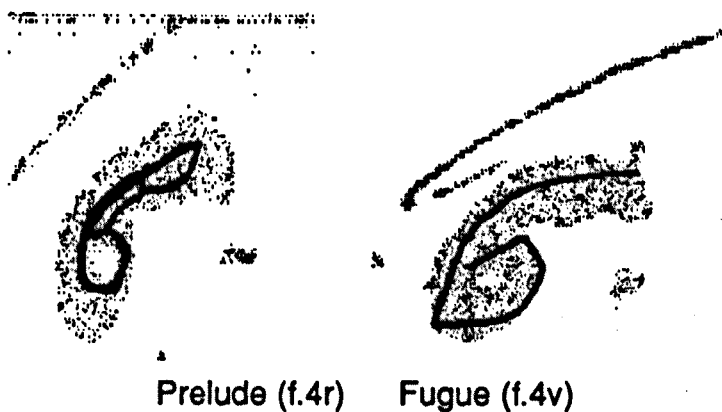


Fig. 12: Magnified reconstruct model of numeration '6' showing the trace of sharp pen-stroke.

This emendation strengthens the hypothesis that the compilation was at this time still in a primary stage when the numbering system had not yet been firmly established. Brokaw and Franklin speculate that this original number '5' came from WTC's intermediate stage of arrangement as seen in P 401 (WTC I), where Bach, while arranging the majority of movements in a conventional order (C c C# c#, etc. / 1 2 3 4, etc.), gave preference to the keys with non-raised or natural thirds, as opposed to the keys which require chromatically raised thirds (d D, e E, a A / 5 6, 9 10, 19 20).²²⁴ This unique manner of ordering, in fact, originates from the pre-finalized stage of WTC I, viz., Cb-WFB, and also the early models of WTC II (see p. 31). This is, however, the order when the systematic, crudely mechanical order of WTC I had not yet come into Bach's mind. Therefore it was perhaps not specially intended to be different from the final order. It would be unrealistic indeed, if Bach had risked confusing himself by preparing WTC II in such an order. If Bach really wished, giving a different title to the movement heading, e.g., *Præludium* and *Prelude*, would alone be sufficient for the purpose. My conclusion of this issue is that, because the emendation is made on number 6 alone, and not 10 or 20 of the same group, the numbering '5' was likely to be an error, and not intended from the outset to be different from the final order of WTC.

Anna Magdalena's Assistance

The assistance given by Bach's wife also suggests the background of the compiling process. We know from many of her copies one outstanding feature: her calligraphy was so similar to Bach's that some of her copies were long thought to be Bach's autograph.²²⁵ In many

²²⁴ Brokaw (1985), endnote 47 and Franklin (1989), pp. 256 ff, 260. Franklin, in his Table 7, Stage II, shows the exchange of order also applying to G/g, but this is likely to be a misprint, and not what he intended.

²²⁵ From the period of the Mid 1730s to Bach's last years, Anna Magdalena collaborated in making three MSS apart from L, viz., St. 7 (BWV 6) [ca. 2nd half of 1730s], P 25/St 110 (BWV 244) [for the performance on 30 March 1736] and P 65/St 12 (BWV 195) [after August 1748]. See Kobayashi (1988), pp. 28, 36 ff. See also Footnote 127.

instances in L it may appear that she contributed successfully to her husband's work. Closer examination of L suggests, however, that Anna Magdalena in fact made so many errors, apart from ruining the quality of the copy (f.8r) due to her lack of insight into the economic use of space on sheets, that Bach often spent some time correcting her mistakes. And when it was too serious, he had to accept its outcome. This is where it becomes important to grasp why Bach asked Anna Magdalena to copy out some of the pieces for L. For Breckoff this fact could be one of the premier factors that dominated his decision to designate **Group 1** as non-fair copies.²²⁶

Notably in this period, Bach had various talented music students who could assist him in the same way as Anna Magdalena did or possibly even better in some respects. For example, Agricola, who succeeded to her place in copying P 226 and P 202, might be one of the first candidates.²²⁷

There are two ways to interpret Bach's decision to work with Anna Magdalena. Firstly, L could have been regarded at this stage as a semi-final stage in the process of compilation where Bach would normally ask his copyist to do the copying task. This trend may explain the bulk preparation of sheets, shown in the ruling of the staves, *Fine* at the end of the collection (instead of *S[oli].D[eo].G[loria].*), and the assistance of his wife. It is, therefore, reasonable to suppose that the musical text of those pieces had already been finalized. At least those pieces which were copied by Anna Magdalena must have existed beforehand in a complete state, for she obviously needed exemplars to copy from. All movements copied by Anna Magdalena were checked by Bach.²²⁸

Secondly, it is possible that Bach did not want to ask his pupils or other copyists to do the task.²²⁹ It can be speculated further that Bach might have wished his pupils not to see so private, yet monumental work as WTC II before it was in a satisfactory state. The four fugues copied by Agricola (P 595) may be, in this way, interpreted as the attestation of the compilation already in progress, which was passed to his pupils at this early stage, but the plan itself was undisclosed.

Question of Fair Copy

Another important issue is the question of fair copies. Knowing to what extent Bach intended these scores as fair copies may help us to speculate on some important questions, such as the purpose of the copies. From various considerations, the majority of movements

²²⁶ See p.48.

²²⁷ These MSS are described in Chapter 1 under "P 226", pp. 35 ff.

²²⁸ Though there would be little doubt that Bach must have checked his copyists' work, there is evidence that Bach did not proof-read Pr.E thoroughly. The detailed discussion is found in Chapter 4, under "Pr.E".

²²⁹ This reasoning would also apply to the drawing of staves in specific keyboard layouts. See above, p. 79, for a suggestion be Anna Magdalena's.

were made as fair copies. Out of twenty four movements in this group, only three are possibly copied without exemplars, viz., Pr.E^b, f# and a, and four revision copies, viz., Fg.E^b, g, A, and a.²³⁰ The copies made by Anna Magdalena are all supposed to be fair copies, though f.8 appears to be far from such.

But unlike other fair copies, such as of WTC I (P 415), Bach did not plan L to be a bound MS but as a collection of separate bifolia, each bifolium containing a prelude-fugue pair, while keeping one movement on one side of the sheet as strictly as he could.²³¹ In this way, the layout is suited to its use, viz., performance, teaching and revision, rather than for publication or archival purposes.

Developed from Pre-Existent Pieces

There seem to be certain reasons why Bach started copying from the pieces in Group 1. The most natural is the pre-existence of models to work on. Bach's habit of composition described by Pitchel is the best explanation.²³² In these instances, Anna Magdalena was responsible for most of these pieces (see Table 16, Group 1).

Table 16: *Number of Years between known Early Models and L*

Key	Origin	WM (=Group)	Hand	Dating	Resp'te
Fg.G	pre 1725/26	I	AMB	1739	13-
Pr.d	1726/30?	I	AMB	1739	9-13?
Fg.d	pre 1738?	I	AMB	1739	1?
Fg.c	pre 1738?	I	AMB	1739	1?
Fg.E ^b (D)	pre 1738?	I	JSB	1739	1?
Pr.C# (C)	pre 1733?	II	JSB	1740	7-9
Fg.C# (C)	pre 1738?	II	JSB	1740	2-4?
<i>Fg.c# (c)</i>	<i>pre 1738?</i>	<i>II?</i>	<i>JSB?</i>	<i>1740?</i>	<i>1-3?</i>
Pr.C	pre 1725/26	III	JSB	1742	14-17
Fg.C	pre 1725/26	III	JSB	1742	14-17
Fg.A ^b (F)	pre 1726/30	III	JSB	1742	10-16

Key (I) - key of original conception; *italics* - piece missing from L

²³⁰ Detailed discussion is found in Chapter 4 under each movement.

²³¹ In Chapter 4, I shall show how Bach struggled to accommodate a long movement by carefully calculating the available space.

²³² See BDok II/499; BR, p. 290.

Some exceptions to the relation between early compilation and the existence of the model, i.e., PrFg.C, C# and A^b (see Table 16, Groups 2 and 3), are not altogether inexplicable. This I shall come back to discuss shortly.

Common keys

One of the other factors lying behind the selection of pieces in Group 1 is associated with a particular feature that they have in common. Bach started the compilation by assembling the pieces which are written in commonly used keys of fewer than four sharps or flats.²³³ Notably it includes all the keys found in the early models (C d e F G) except C major (the reasons will be discussed shortly). The average number of #s or ^bs in these key-signatures is 2 (see Table 17(a)).²³⁴ By comparison, the same inquiry into Group 2 gives 5.14 (see Table 17 (b)), more than twice that of Group 1 .

Table 17 (a): All movements which belong to Group 1 ("Præludium") indicating the help of Anna Magdalena, the number of #s or ^bs, Pre-existent pieces and the Length of piece in UNIT.

Piece	AMB	#/ ^b	Pre-ex.	Len.	Order
Pr.c	•	3		441	8
Fg.c	•	3	•	380	5
Pr.d	•	1	•	623	24
Fg.d	•	1	•	494	11
Pr.E ^b		3		634	25
Fg.E ^b		3	•	366	3
Pr.E	•	4		643	29
Fg.E	•	4		373	4
Pr.e		1		649	32
Fg.e		1		796	37
Pr.F	•	1		861	40
Fg.F		1		598	20
Pr.f#		3		568	18
Fg.f#		3		863	41
Pr.G	•	1		565	17
Fg.G	•	1	•	451	9

(cont.)

²³³ Franklin calls them "Primary Keys". His reconstruction of *Urpartitur* relies partly on these 15 "Primary Keys" (C c D d E^b E e F f# G g A a B^b b) which Bach used in the Inventions and Sinfonias. It is significant that this order, though not complete, is also found in Cb-WFB. But following the order of some 20 years old practice, I do not see equivalent systematic working policy in L as were in Bach's early works. See Franklin (1989), pp. 255-260.

²³⁴ Although Bach notates many #s and ^bs which are duplicated at the octave, I excluded the duplicated signs from my discussion for several reasons. The most apparent problem was his inconsistent manner in notating key-signatures. In some staves, duplicated #s or ^bs at the octaves in the key-signatures were occasionally omitted, especially in common keys such as F# minor. The detailed description is found in Supplement A under General Features for each movement.

Table 17 (a): (cont.)

Piece	AMB	#/b	Pre-ex.	Len.	Order
Pr.g		2		348	2
Fg.g		2		904	44
Pr.A		3		397	6
Fg.A		3		334	1
Pr.a		0		600	21
Fg.a		0		561	16
Pr.b		2		646	30
Fg.b		2		585	19
Average:		2		570	

Table 17 (b): All movements which belong to Group 2 ("Prelude") and Intermediate one (PrFg. f) indicating the number of #s or ^bs, Pre-existent pieces and the Length of piece in UNIT.

Title	#/b	WM	Pre-ex.	Len.	Order
Pr.C#	7	II	•	526	12
Fg.C#	7	II	•	526	12
Pr.d#	6	II		620	23
Fg.d#	6	II		526	12
Pr.F#	6	II		875	42
Fg.F#	6	II		638	27
Pr.B ^b	2	II		1043	47
Fg.B ^b	2	II		556	15
Pr.b ^b	5	II		646	31
Fg.b ^b	5	II		917	45
Pr.g#	5	V		798	38
Fg.g#	5	V		893	43
Pr.B	5	VI		730	34
Fg.B	5	VI		785	43
Pr.c#	4	II?		635	26
Fg.c#	4	II?	•	843	39
Pr.D	2	II?		965	46
Fg.D	2	II?		400	7
Pr.f	4	II?		484	10
Fg.f	4	II?		673	33
Average:		5.14		719.93	

Average is calculated without taking missing pieces into account.

Table 17 (c): All movements which belong to Group 3 Indicating the number of #s or ^bs, Pre-existent pieces and the Length of piece in UNIT.

Piece	#/b	WM	Pre-ex.	Len.	Order
Pr.C	0	II	•	615	22
Fg.C	0	III	•	640	28
Fg.A ^b	4	III	•	753	35

(cont.)

Pr.A ^b	4	IV	1111	48
Average:	2		779.75	

C major: Enigmatic exclusion

Now let us come back to discuss the key of C major. This key is, in fact, so special that without considering its unique nature no reason can be sought for the exclusion of PrFg.C from **Group 1**. Traditionally it was the fundamental key on which every other key was defined, and practically it was probably the most commonly used key. It held one of the most important roles in WTC's architecture as an opening key. To select the right piece for this important position, Bach must have considered the pair initially in **Group 1**: it was perhaps the prelude we have seen in P 226 and the fugue in P 595, both eventually transposed a semitone up and included into **Group 2**.²³⁵ It is significant enough that both movements appeared at historically the right time: it was most likely within a year of the creation of these MSS that Bach started copying **Group 1** of L. It appears strategic, too, that the Prelude resembles Pr.C of WTC I. But Bach, perhaps after considering it, decided not to use them as PrFg.C of WTC II, but as PrFg.C# by transposing them a semitone up. This explains why PrFg.C# is the only pair in **Group 2** which was based on older models, and why PrFg.C, which is found in **Group 3**, was arrived at last in the final group. The decision to transpose the pieces in the compilation was perhaps one of the prevailing thoughts at the time when Bach was writing up **Group 1**. We can find another such example: the fugue in D major in P 595 was also transposed into Fg.E^b in **Group 1**. This explains also why another commonly used key, D major, which is included in **Group 2**, was to be found later since the originally planned piece vacated the position. This chain of thoughts can be extended perhaps to B^b major - B major, since, if we persist in pursuing our logic, B^b major is a far more commonly used key than any others in **Group 2**, using only two flats in the key signature (see Table 17 (b)).

Shorter Pieces

Another interesting feature of **Group 1** is the inclusion of the nine shortest movements, viz., PrFg.c, A, Pr.g, Fg.d, E^b, E and G, among the 42 movements in L.²³⁶ It cannot be said, however, that all pieces in **Group 1** are short. Three pieces, viz., Pr.F, Fg. 1# and g, are among the longest, ranked from 5th to 9th on the list. Nonetheless, the pattern of movement-lengths in this group points towards an intention on Bach's part to include the shortest pieces.

²³⁵ See Franklin (1989), pp. 262-263.

²³⁶ The measurement is made by the total of UNIT. The definition of terms and the method of investigation is given on pp. 206 ff, while a list in full is found in Supplement C - Density of Writing.

Interestingly, at least three out of those eight shortest movements are known to have been derived from an early model. In addition, we may note that the one of those shortest nine, Fg.E, also has a model, although it is not by Bach: the movement is based on the E major fugue of Johann Kasper Ferdinand Fischer's *Ariadne Musica*.²³⁷

Historical Perspective

The study of Bach's biography suggests that the compilation of WTC II was closely related with the copy production of WTC I (P 202) endeavoured first by Anna Magdalena and completed by Agricola.²³⁸ And not a few pieces from Group 1 of WTC II had already been finalized by the end of 1738 taking the text of P 226 and P 595 as evidence. At this stage, some pieces, e.g., in C and D, were written in provisional keys, and their later transposition was not perhaps envisaged. Bach, however, suspended the task of copying WTC II seriously until CU3 was ready to be published. CU3 was published on 30 September 1739, so it might well have been ready by Easter. But at the same time Bach was also working on St. John Passion, which was to be ready by Easter of the same year. We know that Bach gave up copying the full score himself after copying 20 pages, and gave the task to his copyist to continue.²³⁹ This could be the right time for Bach to turn his attention to WTC II. He then thoughtfully copied at a great pace, with Anna Magdalena, to produce a semi-final fair copy.²⁴⁰ While the already well-prepared ones are simply reproduced onto new sheets, some pieces were written down to papers without exemplars, and others were revised as he copied.²⁴¹

Concerning the selection and trend of compiling Group 1, Bach, on the one hand, tended to consider first the common keys and the short length of the piece, as he did on former occasions such as Cb-WFB and WTC I. On the other hand, he also considered the other types of pieces that were longer or written in difficult keys. And this was perhaps the stage where transposition was considered, and where Group 2 was defined.

²³⁷ This is stated in Kimberger circle MSS of WTC II (e.g., Am.B.57, P 1182 and P 513). N. Carrell, p. 234, quotes that S. W. Dehn says this theme originates from Froberger. The unspecified book by Carrell is perhaps *Analyse dreier Fugen aus dem Wohltemperierte Klavier* (Leipzig, 1858), but I found no such information from the book.

²³⁸ See Dehnhard (1977), p. xvii.

²³⁹ See Footnote 184. This event was perhaps related with the sudden notice by the council to cancel Passion performance in March 1739. See Bach Reader, p. 162 f. and BDok II/439. Chafe (1989), pp. 76 ff, considers the reason as Bach's theological presentation of text in the St. John Passion which caused certain conflict with Leipzig town council.

²⁴⁰ See Breckoff, p. 90; See also Footnote 180.

²⁴¹ See Chapter 4, "Outline of Revision Process", pp. 208 ff.

GROUP 2: "PRELUDE"

Problems on its Historical Implication

Due to the lack of evidence, chronological assessment of Group 2 is difficult: yet it is the most important issue to be probed. One must proceed with great care, however. Implanting a forcible chronological order into the group in the past tended to overrule many historical factors. This can result in re-interpretation of such factors, turning them into pseudo-evidence supporting an arbitrarily reconstructed compilation of WTC II. The danger of such an approach seems quite unavoidable in our case, because a few historical facts often point to a certain date, and perhaps also because such historical facts often seem to make sense as soon as they are fixed on a particular date. Let us see first how Breckoff and Franklin differ in explaining the origin of Group 2.

Breckoff, whose interpretation is premised on secure biographical data, assumes that Group 2 was completed by 1742, after three years of interruption of the work on Group 1.²⁴² He assumes that the reason for Bach's change in copying tactics (e.g., titles, page turn, etc.) is merely the time-lapse and the influence from a trip to Berlin and Dresden in the early 1740s. He strengthens his interpretation by adding that he has found no original MSS by Bach for Clavier or Organ which bear the title "Prelude".²⁴³ Thus Breckoff sees Bach's notation merely as historical fact, not to be treated as significant evidence of an intention to separate layers within one category of *Urpartitur*. Notably, as Breckoff did not know the dating of watermarks except WM-I, he assumes that the 'falsely written style - *Prælude*' title of Pr.C (Group 3) was developed in the transition between two stages, viz., from *Præludium* to *Prelude*.²⁴⁴ In his interpretation of the MS, he also maintains that the order of non-fair copy (*Præludium*) and fair copy (*Prelude*) serves as evidence for his chronological placement, coinciding with musical maturity in the compilation.

Franklin, whose interpretation is enriched by the result of recent Bach research and also based on philological data, assumes that Group 1 and Group 2 were generally written closely in this order.²⁴⁵ His unique study of Bach's calligraphy in the titles entitles him to say further

²⁴² See Breckoff pp. 90-91. Breckoff lists Bach's renewed involvement with the collegium musicum as the reason.

²⁴³ See Breckoff pp. 26-28, 85-86.

²⁴⁴ See Breckoff, p. 28.

²⁴⁵ See Franklin (1989), p. 248, who says, "Bach went back and forth between the various layers [i.e., between Group 1 and Group 2] over a period of several months and perhaps several years, filling in missing preludes or fugues, or substituting an entire folio." But because he shows little concrete evidence (e.g., no example is given to show changing formula of clef or minim from sheet to sheet), this invites much inspiration as well as scepticism. Also refer to my discussion of "Dating of Watermarks: Wm-I and Wm-II", p. 60.

that a portion of Group 2 was written at the same time as parts of Group 1.²⁴⁶ Franklin hypothesizes that Bach planned the compilation by dividing 24 pairs into two groups, 15 primary keys (C c D d E^b E e F f# G g A a B^b b) and 9 secondary keys (C# c# d# f F# A^b g# b^b B), however incomplete it appears in L.²⁴⁷ About the major puzzle on the titles, Franklin explains that Bach distinguished the maturity of musical text by titles. Franklin in fact raised this very question in 1976 and hypothesized that Bach was replacing the composing scores entitled *Prelude* with the fair copies entitled *Præludium*.²⁴⁸ His hypothesis must surely be based on the fact that Bach used the title *Præludium* for his fair copy of WTC I (P 415), and that he judges the majority of the "*Præludium*" group in L to be fair copies. The most vital and yet controversial part of his hypothesis is the evidence he relies on, i.e., his chronological placement of text given in F and H in this order, because H gives three pairs more preludes that bear the title *Præludium* than L or F.²⁴⁹ But as I shall show in the discussion of F and H in the following chapter, that their textual relation must be reversed.²⁵⁰ There are several more controversial pieces of evidence misused by Franklin for his "Prelude-*Præludium* replacement" theory. One of these is his definition of the status of scores, already discussed on p.49- f. The other is his interpretation of A1.²⁵¹ This MS by Altnikol gives the title as "Prelude [key]", which is certainly very similar to that of Group 2. But since A1, which contains the version of movements earlier as well as later than that of L, does not give such a variation of titles as L does, it is equally possible that Franklin's hypothesis can be reversed. Considering these aspects of his evidence, I cannot support his basic hypothesis. Instead, I begin to think that Bach's title distinction could have been for the particular piece or time, regardless of Bach's grading of its compositional state.

What is left unexplained by Franklin among many other questions is the reason why Bach used different paper and rastrum in Group 1 and Group 2 if they were processed in parallel. This question is indeed most difficult to answer, for, as has been repeatedly said, we have no proof from Bach's own account, while other factors can be interpreted in many ways.

One of the possible ways to understand Bach's distinctive use of paper is found from non-musical considerations: it may simply be the plan of symmetrical gathering as shown in Table 12. If this was the case, it should have been simple for Bach to separate two types of sheet. But this does not explain why Bach needed still to differentiate the titles between *Præludium* and *Prelude*, page turn instructions, fermatas, etc. And if we consider these, a more practical

²⁴⁶ See Franklin (1989), p. 267.

²⁴⁷ See Franklin (1989), p. 255 ff. These groups are closely related to the 16 keys described by Mattheson in *Das neue-eröffnete Orchester* of 1713 (d g a e c F D G c f B^b E^b A E b f#) and by Niedt in his *Musikalische Handleitung* of 1710 (c C d D e E f F g G a A b^b B^b b B).

²⁴⁸ Franklin (1976), quoted from Brokaw, p. 20.; also Franklin (1989), p. 274.

²⁴⁹ Franklin (1989), p. 274. They are Pr.f (not L but in F), Pr.b^b and Pr.B. See pp. 133 ff.

²⁵⁰ See pp. 133 ff.

²⁵¹ Franklin (1989), p. 263.

reason emerges. It is probable that Bach separated between Group 1 and Group 2 for a different purpose: that is, Group 2 was not merely intended as a part of the collection that is aimed at in Group 1, but rather as a gathering of independent preludes and fugues. It is confirmed that many preludes end with *Volti*, while the accompanying fugue ends with *Fine*. Also the musical content is quite different from Group 1. Our attention is drawn almost instantly to the stylistic variety of the preludes and contrapuntal intricacy of the fugues. Thus from these, one may argue that the scores in Group 2 were assembled for Bach's own performance or teaching his advanced pupils.²⁵² The fact that the type of paper was distinguished by Bach may be vital evidence to support this theory. In my examination of the original MS, I confirmed that the paper bearing Wm-II is much thicker and less damaged in comparison with the paper bearing other types of watermark.²⁵³ Thus one can say that Bach considered the assembly of Group 2 for such purposes as teaching, performance, etc., where he desired a durable type of sheet, knowing that the constant handling of the MS would cause wear and tear.

Contrary to the puzzle concerning Bach's distinction of titles, there is no particular problem in comprehending Bach's selection of pieces for Group 2. There is a potent logical sequence in the suggested order of compilation. One of the most characteristic features is the use of rarely used keys as is shown in Table 17 (b), p. 85. The order of compilation can be expected biographically and most naturally as we have already discussed Bach's earlier example, Cb-WFB.²⁵⁴

Sub-Groups

In this Group 2, there are five distinguishable sub-groups which are isolated by the chronology given by the studies of watermarks and rastra. Unfortunately, we cannot find from these any reliable evidence to reconstruct the order of events. And because there is a possibility that several of them could have been replaced with a revised copy, it is perhaps wrong to examine their chronological implications together on the same ground. However, I am going to classify seven pairs into five sub-groups which can be reasonably established as valid.

The study of watermarks suggests that Bach picked up the paper bearing Wm-II slightly after Wm-I. The other two watermarks in this group, i.e., Wm-V and Wm-VI, are not known. Therefore, as far as this study is concerned, we know nothing whatsoever about these two watermarks when they were used by Bach.

The study of rastra indicates that there is a continuation of the compiling process between Group 1 and Group 2. The hint is reflected in the manner in which Bach's assistant (Hand A) prepared the sheet for him. Thus the first batch of Group 2 consists of PrFg.C# and F#. It is

²⁵² Bach resumed his activity with collegium musicum as a conductor from October 1739, and it is also possible that he played the clavier there. See BDok II/457.

²⁵³ See Footnote 177.

²⁵⁴ See p. 31.

significant and certainly not coincidental that these are the keys furthest removed from C major. The idea could have originated from the very process of Group 1 when Bach became suddenly aware of the needs of such remote keys, and transposed the C major model for this purpose.

The next piece was most likely PrFg.b^b. This sheet was the last one in L prepared by Hand A. The only reason to isolate this leaf from the previous sub-group is the way the sheet was ruled. From Group 1 up to the previous sub-group, all sheets were mass-pre-prepared by him. And in PrFg.b^b, the number of systems, 8, in the fugue side was specified by Bach for this long movement. A remarkably close key relation to the pieces in the previous group also shows that Bach was almost certainly working from the keys distant to C major.

There are two other pieces PrFg.d# and B^b which bear Wm-II. Except that they were both ruled with thinner ink and drawn by Hand B, there is no conclusive evidence by which to judge their chronological placement.

There is no clue to place the chronological position for PrFg.g# and B within L as far as the identity of watermark and rastrology are concerned. The fact that these were copied onto a single type of paper may be related to his frequent trips between late 1739 and early 1741.²⁵⁵

From the textual evidence at the final cadence of Fg.B, there appear to be certain length of time-lapse between L and F to allow the edge of f.20 to crumble.²⁵⁶ Indeed when we look into calligraphic feature of crotchet rest, we may find possible time-span from other piece.²⁵⁷ Furthermore, the revision carried out on the MS, i.e., b.59 in the soprano, is taken into F on the one hand, the copy leading to H does not contain the new reading. It indicates that Bach revised the very fugue between those copies if the text in H was truly linked directly with L. If we make the same textual comparison with PrFg.g#, we have more evidences of possible time-lapse between the inception of the piece and F though none of them contributes to vital proof to qualify the historical order. It is also possible to interpret that these leaves were the replacement of revision copy bearing Wm-II.

Historical Perspective

It is difficult to say when, relative to the progress of Group 1, PrFg.C# was transposed and revised accordingly. However, the identity of sheets with P 226 (Wm-II) can suggest the time from as early as pre-dating Group 1 to the end of Group 1 period, totally depending on how we interpret the historical placement of P 226.

²⁵⁵ To my knowledge Bach went to the following towns during this period: Ronneburg (12 September 1739); Altenburg (26 Oct 1739); Weißenfels (7-14 November 1739); Halle (17 April 1740); Berlin (July - August 1741).

²⁵⁶ See Chapter 3 for details.

²⁵⁷ See Supplement A under "Crotchet Rest".

GROUP 3: FRENCH TITLES FROM EARLY MODELS

The most obvious reason for the last delivery was to fill the gaps and to mark the completion of compiling 48 movements.²⁵⁸ The pieces included in Group 3 are therefore rather special in several aspects. As the latest addition, the most predominant is the immature musical status. f.1, which contains PrFg.C, is a very interesting score, because we can observe composing and up to three layers of revising processes on a single sheet.²⁵⁹ One of the factors in its late compilation might have been either a delay or a difficulty in revising process. This struggle of Bach's can invite some speculative interpretation of Bach's compositional practice.²⁶⁰

Independent Revision and Philological Interest

The pieces bearing Wm-III, i.e., f.1 and f.14, are very important in philological approaches. Both leaves were not ready when H was made. These pieces were also independently revised at a later stage, and some of the revised text was not taken into the direct descendant copies (K and F). Thus the wide range of variations found among these movements can serve as evidence to reconstruct Bach's revision process. At a still later stage, these scores are also considered to have been replaced with much more elaborate versions, which are included in the tradition A and Group H MSS.

Distinctive Titles for Early Versions

Another prominent distinction is the movement title given to the pieces of Group 3. They appear at first sight to be very close to those of Group 2, but it is certainly worth examining the details of their differences. The title of Pr.C could be derived directly from the old model (BWV 870a) which was also entitled as *Prælude*.²⁶¹ Interestingly, Fg.A^b was also found in an early cycle (P 1089) but in F major (BWV 901,2). Together with Pr.A^b, the titles of both preludes are similarly written in French convention: the word *par* was most likely overwritten on *di*.²⁶² The French titles were also in common in P 1089. Therefore it may be worth considering these two pieces as the direct descendants of the early cycle, and that Bach kept the titles of the models at this pre-finalizing stage. It was perhaps the time when Bach ran out of original ideas for writing a suitable movement for these keys.

²⁵⁸ See Franklin (1989), pp. 270 ff.

²⁵⁹ See pp. 209 ff.

²⁶⁰ See J.Barnes: "Bach's keyboard temperament: Internal evidence from the Well-tempered Clavier". *Early Music*, Vol.7, (1979) 236-249. Barnes demonstrates how Bach perceived his temperament through the composing activity.

²⁶¹ P 804 - *Praelude. / Fugetta*; P 1089 - *Prelude composé par J.S.Bach. / Fugetta*.

²⁶² See Franklin (1989), p. 271. Franklin suspects that the modification of "par" in Pr.C may be in the hand of Wilhelm Friedemann. Also see pp. 209 ff.

Using French conventions was not the only way to distinguish the pieces. In many other cases, it can be assumed that Bach used "[movement] ex [key]" for the early versions.²⁶³ For instance from the model of Group 1 we learn that Bach distinguished the draft of Pr.E^b contained in P 416 as *Prelude ex es +*. And Pr.f in F, which is possibly classified between Groups 2 and 3 (missing from L), gives similar title as *Prelude 12 ex F b +*.²⁶⁴ Finally Fg.A^b in P 274 (possibly the earlier copy of Fg.A^b of Group 3) and the same piece in L give the title *Fuga* originally with music pen. There was a time-lapse when the additions to the title *ex gis dur. di J. S. Bach* was made to them. These particular additions were, therefore, possibly made at the time when it became apparent to Bach that the version had lost its status as the latest version.

Dating

Under "Dating of Watermarks: Wm-IV", p. 63, we have already discussed that the paper bearing Wm-IV was used in January to August 1741, and so far no other music by Bach has been found written on the same type of paper. The fact that this particular type of paper was only found (apart from f.13 of L) among a draft of letters by Bach's personal secretary, Johann Elias Bach, suggests that, when the stock of paper (chiefly the paper bearing Wm-II) was exhausted from Bach's workshop at the time Pr.A^b was being written, the paper was obtained from Johann Elias. This biographical assumption begin to make sense when we look into Bach's usage of paper bearing Wm-III. This type of paper, used here by PrFg.C and Fg.A^b, is found in many other works of Bach's as well as for other purposes, and dated ca. 1742 by Kobayashi. Thus the paper bearing Wm-III may well be the next batch of paper Bach purchased. Thus it is probably the case that Pr.A^b (bearing Wm-IV) was written slightly earlier than PrFg.C and Fg.A^b (both bearing Wm-III).

Background of Glueing of A^b Major Pair

The composing state of the two leaves containing the two movements of PrFg.A^b shows a complete contrast: the prelude is possibly a composing score on the one hand, the fugue is possibly the second attempt to copy out.²⁶⁵ Though there is no other chronological evidence except that of watermarks, we may deduce from the unusual format of the fugue that the fugue in L was written after the prelude.

²⁶³ While this "ex" (in Latin) must mean "in", I suspect Bach possibly distinguished its stylistic usage, for it may also mean "previous" as a prefix, marking that the version on the score was the old one.

²⁶⁴ From this evidence in F (P 416), my interpretation of the missing leaf of PrFg.f is classified not in Group 2 as has proposed by Franklin.

²⁶⁵ See Franklin (1989), p. 271. The detailed evaluation of each movement is discussed under Chapter 4, on pp. 271 ff.

The prelude was, as has already mentioned, thoughtfully written down without using exemplar on pre-ruled music sheet. Bach started, as usual, from the second page (i.e., l.h.col. of an open bifolium) of the four-page unio fascicle. The music occupied three pages, leaving only one page for the fugue to copy. Bach found no way to copy the accompanying fugue, which would occupy twice as much space as was available on the sheet. Bach thus solved the problem by using an extra sheet for the fugue.

But before copying out the fugue, Bach might have already considered gluing the extra sheet on to the unused page, i.e., f.13r r.h.col. This plan of Bach's can only be deduced from the unique stave-layout of f.14, which I shall now explain.

It is reasonable at least, for there is no other example in L, that such a plan of layout must have been made initially. It is the only example in L that the number of staves prepared was smaller than 14 and exactly what the length of the movement required. And the most important point to observe is the location of a four-page fascicle where Bach planned to start ruling the stave, i.e., the starting point of the music. He did so from the second column of an open sheet, so that he can glue two sheets together on unused pages (see Fig.9, p. 57), and consequently PrFg.A^b would conform with Bach's ideals of the purpose of this MS - a single pair in a single fascicle.

We can also see why the emendation of the title of Fg.A^b became necessary, because it was not necessary under the circumstances when the fugue was initially written. The title of the fugue was originally written as *Fuga* with the pen which copied the music. It was much later that he added *ex gis dur. di J. S. Bach* apparently with a thinner pen with darker ink. The further modification to the title was not made by Bach, but possibly by Wilhelm Friedemann.²⁶⁷ The additions to the first given title were perhaps desired when Bach decided how to fold the sheet for archival purpose as the first page of the fugue became page 1 of the six page fascicle (see Fig.9).²⁶⁸

Historical Perspective

There is still an unexplained characteristic of Group 3 - the use of the treble clef. But to cover this aspect, a much broader historical perspective has to be given, for this is the topic where the chronological implication of the particular symbol must be understood as a premise in order to interpret the decision taken by Bach.

It is probably George Stauffer who first offered a possible chronological approach into Bach's keyboard music by studying his clef usage for the R.H. part. In his study, Stauffer concludes broadly that the year 1723 was the time Bach changed his basic usage of the clefs: the earlier works were consistently written in the soprano clef, and the later in the treble clef.²⁶⁹

²⁶⁷ See Supplement A: f.14r, Title for detail.

²⁶⁸ See my different interpretation of this addition, p. 94.

²⁶⁹ Stauffer (1980), pp. 14 ff.

This generalization was probably based on the fact that all parts of Bach's *Clavierübung* used the treble clef for R.H. part. He also suggests that the transposition work was one of the reasons why the treble clef became useful. In such a case, the key originally written with the soprano clef was raised a third.²⁷⁰ But recently Stinson challenges the theory presented by Stauffer. Stinson claims that Bach used the treble clef most frequently before 1720 in transcribing orchestral and chamber music, but he tended to write non-German music on it directly.²⁷¹

In the case of Fg.A^b, it was probably the case where the old model written in the soprano clef was transposed, revised and transmitted in the treble clef.²⁷² But it was not done on the version in L, but probably on P 274, or its exemplar if at all.²⁷³ Thus it was most likely that the treble clef was first used on an earlier occasion in the fugue, and that the Pr.A^b was written after the fugue to conform to the clef usage. It is not very clear why Bach needed the second copy of Fg.A^b except that Bach had planned Fg.A^b of L specially for gluing.

The history of PrFg.C is different from that of PrFg.A^b. The early model of PrFg.C was likely to have been written on the soprano clef on the evidence of P 804 and P 1089. If it was the case, Bach must have transmitted the piece into the treble clef without transposing. It is not exceptional, as Stinson explains, for Bach to make extra work for himself during the 1726 - ca.1733 period by altering the clef of a work from soprano to treble as he revised it.²⁷⁴ But if it was a case of repeating a decade old practice, we have one serious omission - i.e., how do we understand the lack of conformity with regard to the usage of soprano clef in Group 1 and Group 2? Conformity was indeed a grave matter for Bach. The use of the soprano clef in these groups was probably linked with WTC I.²⁷⁵ The conclusion: Bach's usage of the treble clef originated from the revision / transposition of Fg.A^b, and the other pieces of Group 3 followed the convention so that he could easily distinguish them as a group, the group of the latest additions, which required further revisions.

SUMMARY OF GROUPINGS

Our discussion so far reveals that Bach's changing tactics in handling three individual groups are deliberately made apparent in the titles, viz., Group 1 - "Præludium"; Group 2 -

²⁷⁰ See Stauffer (1980), pp. 14 ff; See also Stinson (1989), pp. 442 ff, esp. 450-452. Stinson points out with many examples that Bach did exactly the reverse as well (treble - soprano clefs transposition).

²⁷¹ See Stinson (1989), pp. 448-449.

²⁷² See Stinson (1989), p. 452. Stinson also points out that the flute sonata (BWV 1030) was also proceeded in the same way. See also Marshall (1979), pp. 463 ff.

²⁷³ See pp. 111 ff.

²⁷⁴ See Stinson (1989), p. 450.

²⁷⁵ See Stinson (1989), p. 452.

"Prelude" and; Group 3 - the use of French "par" instead of Italian "di". Interestingly, such distinction in Group 3 was made as an afterthought. In all the preludes of the group, "par" was overwritten on "di". Thus it is possible to interpret that the purpose of such distinction in Group 3 was to strengthen the initial action taken by the usage of treble clef.

Further one may deduce that Bach distinguished the titles for two distinct purposes in L. The distinction between "Præliudium" and "Prelude" groups is plausibly decided by the technical demands of the individual pieces as apparent from the use of black keys and structural complexity. The other distinction associated with the third type, such as "par", "Prelude (Fuga) ex [key]" can be deduced from the degree of musical maturity judged by the composer.

Finally let us focus our attention to the question of the whole gathering. It is clear that L's unique characteristic was the presence of three distinctive groups. And our study so far suggests that this unique feature is unaltered, even after the careful revision work as seen in f.1r in Group 3. However, I should make the point clear that the replacement of scores in Group 2 might have been carried out. But once all the 48 movements were compiled, the basic status as the *Urpartitur* was unchanged. Instead, Bach made the replacement in another set of MS, which is inextant, but can be reconstructed as the text seems to be mirrored in the Altnikol tradition. This MS should include the replacement of many revised movements from the first two groups (e.g., Pr.E^b, Fg.e, PrFg.b^b) and the entire Group 3. This totally new historical movement was planned after the complete copies of 1742 version attested in H and F.

Our discussion is so far based on the extrapolation of evidence mostly found within the observation of L. In next chapter, I shall explore more about the question the compilation and completion from outside L.

CHAPTER 3

EVIDENCE FOR THE COMPLETED COMPILATION OF WTC II

SOURCE SITUATION OF WTC II AND THE TRADITIONS (GENEALOGICAL BRANCHES)

In the previous Chapter, we have seen through the study of L Bach's unique strategy in compiling WTC II. In the present Chapter, we shall be looking into the stages when Bach had primarily accomplished the compilation and decided to impart the work to his pupils or to hand it over to copyists. Our prime aim is to establish additional evidence concerning the compilation of WTC II which has not been confirmed within the study of L. At the same time, we shall also consider questions about the completion of the work, *Fassung letzter Hand*. To satisfy these objectives, we are now to broaden the study by considering all relevant MSS. Here I shall discuss fifty-seven MSS, containing either all or some of the WTC II pieces.

In discussing such an extensive array of MSS, the most immediate task is to arrange them in an explicit order. This enables one to evaluate each MS in clear historical perspective. It may seem that by covering both physical and musical aspects of chronology one can organise the MSS in an final order - *stemma*, or genealogical diagrams. However ideal the concept may be, this really is a formidable task, for considerable difficulties are caused by the loss of primary and intermediate sources. What might be considered an easier alternative is to examine the extant principal sources only. This method has been the basis of interpretation in the past. It was widely known among the editors of the late nineteenth century in Germany that the source situation of WTC II was complex and imperfect. The most remarkable achievement at the time was the publication of a critical edition by Hans Bischoff, for which he examined the textual details of the then known seventeen MSS and four editions.²⁷⁶ In his edition he distinguished, for the first time, several important MSS and groups, viz., Fürstenau, Kirnberger and Altnikol, and considered that none of these entirely represented Bach's final version.²⁷⁷ The question of ultimate importance was about how many copies of WTC II Bach wrote himself, and how each

²⁷⁶ Bischoff, pp.3-5. The MSS discussed by Bischoff are: P 274, P 213, P 416, Fürstenau, P 210, P 402 (= Altnikol I), P 430 (Altnikol II), P 207, P 212 (= Forkel), Am.B.57 (= Exemplar Kirnberger's), Am.B.49, P 211, P 206, Mus 2407 T7 (Dresdener MS), P 209, P 226 and P 804 (Kellner's MS); The editions: NÄGELI, SIMROCK, HOFFMEISTER and KROLL.

²⁷⁷ Bischoff, p. 3. The Fürstenau MS in Bischoff's time refers only to P 416 and the part discovered by Moritz Fürstenau. See p. 120 ff. The Kirnberger MS was represented by Am.B.57, and Altnikol by P 402.

of the important MSS was related to the autographs. This line of enquiry was unfortunately not viable for Bischoff, who did not know of L. In introducing L to the world in 1896, Ebenezer Prout established the relationship of the important MSS. Here he noted that "Bach must have made at least two and very probably three copies of the whole work."²⁷⁸

A major breakthrough in approach was made by Werner Breckoff in 1965. He made the first attempt to classify the then known forty-three MSS, dividing them into three groups: the London manuscript (L), the cycle of Kirnberger, and the Altnikol tradition (apart from his distinction of the early models, already discussed in Chapter 1). Breckoff placed each source in the arrangement according to the degree of its consanguinity [Verwandtschaftsgrad] within a group.²⁷⁹ His work is unfortunately untrustworthy in places, for I find some of the evidence for his interpretation invalid.²⁸⁰ The most serious omission in his part was the general lack of evidence to support his decision on the grouping and arranging of the MSS. It seems that his classification of the MSS is not concerned with their genealogy as a factor of importance, but rather introduces the most basic features of the MSS and seldom looks beyond them. Within this scope of study, Breckoff demonstrates the particular historical significance of these groups. He agrees with the two points suggested by Bischoff - viz., that none of the three groups represents Bach's latest reading as *Fassung letzter Hand*; and that the two groups stemming from Bach's students Kirnberger and Altnikol are based on entirely different models.²⁸¹ While he recognizes the close kinship between L and the Kirnberger group, Breckoff finds that Altnikol's models are now largely missing. From this, Breckoff hypothesizes that Bach had two sets of complete copies of WTC II - L as a fair copy and the other set (now lost) as a gathering of composing scores or the corrected exemplars [Korrektorexemplare].²⁸² He considers that these two sets of autographs were completed at different times, in 1742 and 1744 respectively, and that Altnikol used the second model for his text.²⁸³ The last hypothesis invites many questions. Among the most important would be the following: Why did the Altnikol group include movements representing not only later versions but also earlier ones? Breckoff's answer is this: since all the movements in the two sets of WTC II were written in loose bifolia, the sheets could have been carelessly exchanged. This happened in the situation where the frequent revision of individual sheets made the distinction between a fair copy and a corrected exemplar very unclear.²⁸⁴ It is frustrating to find that this assumption of Breckoff's is substantiated neither by

²⁷⁸ Prout (1896), p. 49. This contradicts Spitta's earlier remark, "We possess not a single copy of the second part [of WTC] made by the composer; hardly more than one will therefore ever have existed". See Spitta, II, p. 663.

²⁷⁹ Breckoff, p.16.

²⁸⁰ See, for example, Footnote 381 below.

²⁸¹ Breckoff, p.63.

²⁸² Breckoff, p.65. This lost set of autograph is referred as the source 'S' in my discussion.

²⁸³ Breckoff, pp.86-92.

²⁸⁴ Breckoff, p.65.

the evidence nor by logical argument, however. More recently Dehnhard, whose approach seems to be more firmly genealogical, finds an interesting answer to the same question:

Altnikol was Bach's pupil from 1744 onwards. The beginning of his lessons was undoubtedly the reason for the copies which he made. The movements which were used during his private lessons were possibly collected in an initial (and still very incomplete) pupil's copy. When Altnikol then embarked on the fair copy he will probably have had widely divergent manuscripts - some of them in two versions to work from: recent fair copies, corrected and uncorrected sheets - and his own pupil's copy. It is possible that Altnikol was not up to the task of reliably reproducing Bach's final revisions.²⁸⁵

Thus Dehnhard suggests that the confusion of the whole matter was due to Altnikol's incompetence. Again, Dehnhard gives no vital evidence for this statement, but says only, "This would at least explain why D [P 430] juxtaposes older readings made redundant by A [L] and more recent versions which A does not contain".²⁸⁶

Also understood only vaguely was the origin of readings for the MSS of the Kirnberger's cycle. Breckoff, while saying that the musical text made gradual editorial improvements starting with Am.B.57, gives no evidence or references to specify what the improvements are and how they were made.²⁸⁷ A more serious matter left unanswered by Breckoff was Kirnberger's process of assembling the models for his personal MS, Am.B.57. Dehnhard, on the other hand, claims, "Kirnberger derives his readings partly from B [= F], partly from C [= H] but for the most part from no longer extant intermediate manuscripts based on A [= L]."²⁸⁸ In this case, too, he gives no evidence for his interpretation.

It is now clear that the arrangement of the MSS into three groups was interpreted in various ways, and that none of these is supported with sufficient evidence. It would seem that it was the restricted approach of our scholars - studying the principal sources only - that limited the extent of our information. Among the most severely restricted areas of information is the historical detail about individual sources. To procure this knowledge, I expand the study into the examination of all the available extant MSS including secondary source MSS, concentrating particularly on the aspects of their history and genealogical relations and the development of variant readings. The result of the study is Supplement B, where the MSS are listed in groups, with full details including the analysis of the errors and variant readings. The validity and the method of the study is explained on pp. 101 ff below. This study shows that the MSS are indeed distinguishable in the three groups. It also indicates that there were some critical sources, now missing, which linked the separate groups to a possible single origin. This study also results in the revision of Breckoff's classification of the MSS. I refer to my three groups as

²⁸⁵ Dehnhard (1983), pp. xxii-xxiii.

²⁸⁶ Dehnhard (1983), p. xxiii.

²⁸⁷ Breckoff, p.64.

²⁸⁸ Dehnhard (1983), p. xxiii.

traditions, distinguishing them by a single letter B (Bach), K (Kimberger) and A (Aitnikol), respectively. Under each tradition, recognisable sub-divisions are defined as groups. The listings of MSS are given under each division - tradition B in Table 19, p. 110, tradition K in Table 24, p. 149 and tradition A in Table 25, p. 175. It must be noted, however, that the way in which I treat these three groups equally as 'traditions' should not mean that they are of equal importance in every respect. Within the limits of this study they mean only that each group contains unique characteristics in its readings, the origin of which cannot be attributed to the others. And since the historical emphasis on its textual origin is eliminated from the definition of grouping, the genealogical significance can vary greatly among these. In tradition B, our study mainly concerns the chronology of several layers of revisions on the autographs. In tradition K, it concerns the textual origin as well as the gradual process of perfecting WTC II as a result of Kimberger's eclectic view of editorial work. In tradition A, it concerns the historical significance of the text presented by Aitnikol with regard to tradition B. In describing individual MS, I intend to display the evidence for its genealogical relationships.

INTERPRETATION OF VARIANT READINGS

It is a daunting task to ascertain the cause or the origin of individual errors and variant readings in every single MS. To accomplish this, only a thorough systematic study seems workable. All the work must then be reviewed from the larger historical perspective to confirm whether or not the results of the study indeed apply to the genealogical system inherent in the MSS.

As in any types of detective work, our study also requires a valid hypothesis to evaluate and analyse the facts, i.e., variant readings. In our case, the hypothesis is to be qualified systematically by the basic two phases - absolute and relative - the angles from which is viewed the position of an individual MS in a particular genealogical system. In the "absolute" phase I shall study the autonomous type of information from a particular MS, indifferent to genealogical significance. This covers two categories of information: 1) the physical features of the MSS, such as paper, watermarks, rastra, ink and pen, and 2) all the information about the scribe, such as his disposition, skills, the diplomatic policy and the notational convention. These features are particularly capable of identifying the chronological and typographical factors of the MSS. The "relative" phase, on the contrary, concerns the type of information intelligible only when it is interpreted in relation to the other equivalent data in the genealogical system. As already mentioned, this study has been widely neglected. The chief predicament in the study seems to have been due to missing primary and intermediate sources at the crucial junction in the genealogical system. Among the most important is the interpretation of historical background and genealogical juncture between S and A, which I shall discuss in detail on pp. 175 ff.

Criteria for the Evaluation of Variant Readings

Let us image how one may interpret variant readings without being deeply involved in manuscript study. The criterion on which one can rely is perhaps little short of a general knowledge of music theory. Under such circumstances errors may be distinguished from valid readings and evaluated accordingly. But for our purpose this approach is very unsatisfactory, for, in order to resolve a difficult problem, we must make the best use of the evidence. It is essential that every variant reading be interpreted legitimately and classified systematically. In this way the resultant statistics may be used as evidence for proving the hypothesis. Thus for this purpose we must define legitimate criteria from all the possible angles that the manuscript studies can offer.

In short, the criteria are the systematic branches of the hypothesis. They are, of course, polarized into the two phases of the hypothesis, already discussed. Here I shall explain in detail three criteria only, viz., diplomatic policies, notational conventions, and variant readings from different versions.

DIPLOMATIC POLICIES

In evaluating the variant readings, one of the most powerful tools is to assess the diplomatic policy of the individual copyists. It will be seen shortly that some copyists aimed to produce a literal copy of the exemplar; and that others allowed themselves a little freedom in omitting some non-essential symbols, re-formatting the layout and modifying various notational symbols or wordings, as well as improving the master's work in various musical aspects in accordance with their musical understanding, taste, style and the particular duty under which they worked.

The most unusual, yet effective, contribution to the statistical study is the examination of the format, especially the change of systems and pages. The careless omission of ties, for example, is often caused at the change of system, where the continuous musical activity of copying is temporarily interrupted.

NOTATIONAL CONVENTIONS

Another related factor is the confusion about new and transitional notational conventions in Bach's time. This seems to have affected the use of musical notation in preparing a new MS: that is, the scribe made a decision to maintain the notational convention of the exemplar or not to do so. In L we find Bach in conflict with the following traditional notational conventions:

- 1) An accidental was basically valid only on the note to which it was attached, regardless of bar lines, unless the same pitch was immediately repeated.
- 2) A double sharp was notated as a single sharp (#) provided that the note was already raised a semitone by the k-s.
- 3) A double flat was notated as a single flat provided that the note was already flattened a semitone by the k-s.

With regard to (1), we find that Bach sometimes omitted the accidentals necessary under the old notational conventions, or rather tended to overlook them. It is interesting to find that this advanced notational practice can often be seen at an early stage of manuscript making, for many accidentals appear to have been added later.²⁸⁹ This means that Bach began to extend the valid duration of an accidental, which required another accidental to cancel its effect.²⁹⁰ This manner of extending the rule necessitated further expansion in another direction: the use of an accidental neither to alter the pitch nor to restore, but to remind the performer of the absolute pitch of the note. The main purpose is probably to reduce the risk of being confused by the complex tonality or subtle shade of harmony.²⁹¹ It is interesting to note that in changing the conventions of his notation Bach was trying to avoid ambiguity by using notation more precisely.

Let us then consider a strange case where Bach seems to have omitted an essential accidental by mistake in *Fg.g*, b.64 (f.12r,L2,b.2) as shown in Fig. 13 below.



Fig 13 *Fg.g*, b.63,2 - b.65,1 (f.12r,L1,b.1-3)

It is fairly obvious that the two *a*'s on b.64,3/1,3 were intended as *a^b*'s, for otherwise, the natural on *a*' on b.65,1 cannot be justified under the key-signature of G minor. It is problematic, however, to suppose that the natural was truly intended as a reminder in effect: for, if that were

²⁸⁹ This is particularly strongly perceived in *Fg.b*, where precise pitch can be assumed confidently from stereotyped motivic treatment of figures. See, for example, b.20: A/4 (f.21v, L3,b.3) and b.30: B/4 (L4,b.6).

²⁹⁰ See, for example, *Pr.C#*, b.47:B/6 (f.3r,R6,b.2) and *Pr.g#*, b.19:B,4/1 (f.15r,L7,b.1). In these cases, the accidentals were double sharps, and Bach used naturals to cancel them.

²⁹¹ There are plenty of such instances, but it is especially notable in pieces written in rarely used keys. See, for example, *Pr.g#*, bb.41 and 43 (f.15r,R5,b.1,3). The naturals given to *e*, the sub-mediante, was to clarify the use of harmonic minor scale which alter the leading note on the scale only. Another interesting and controversial instance is the natural in *Pr.a*, b.25:S,4/3 (f.17r,R3,b.2), which Dehnhard (1983), p. xxx, thinks is due to Bach's confusion: "An accidental is indeed needed here, but the natural does not change the note, and a sharp sign ought to be written". But, as I have pointed out, Bach did use accidentals for a reminder. I consider Dehnhard's argument unsatisfactory and inconclusive.

the case, there should have been an antecedent, i.e., an accidental flats to a' on b.64,3/1,3. Thus it is likely that Bach was temporarily confused by the shift of harmony at this point, and wrote as if there were an flat on a' in the key-signature.²⁹²

All this was the result of an increasingly elaborate exploration of harmony and keys. And this necessitated the introduction of a strict definition of accidentals, viz., natural, single sharp/flat, and double sharp/flat. Double sharps were becoming increasingly common, and in L there are many corrections from single sharps to double sharps. The double flat used by Bach was not the same as ours: Bach's was written like a single flat, but emboldened and enlarged.

These personal rules of Bach's were not explained in treatises. Thus it is to be expected that misinterpretation of Bach's accidentals will occur. Many double sharps, written as single sharps by Bach or Anna Magdalena (e.g., Pr.E, bb.29-31), are interpreted as unnecessary symbols - sharps placed on notes already sharpened by the key-signature - and were therefore later omitted by copyists of group H MSS.

Attempts to modernize notational conventions became the common practice among copyists of the Bach manuscripts made or edited from ca. 1760 onwards. The conversion of notational convention was perhaps the most important aspect to maintain the MSS readable if they were to be used in practice. Among many successful modifications to the convention, we may list the following principles:

- 1) The conversion of the natural, which was employed as a reminder to cancel the effect of the double sharp. Each symbol was either converted to a single sharp (e.g., P 212) or to a natural and a sharp juxtaposed, often by squeezing in a sharp beside the existing natural (e.g., group H1 MSS).
- 2) The omission of accidentals which were merely employed as a reminder in a specific harmonic context, and of which the effect was to duplicate the k-s.
- 3) The omission of an accidental if the same accidental was previously employed on the same pitch within the bar (e.g., group K4 MSS).

Carelessness in carrying out these conversions, on the other hand, resulted in the introduction of variant readings or errors. An error associated with principle (2) has already been described in the example found in the copy of Pr.E by Anna Magdalena. Situation (3) caused a number of errors in group K4 MSS. When the cancellation of an accidental was required for the second or subsequent appearance of a particular pitch within the bar, a cancelling accidental was not needed under the old convention. Under the new convention, however, the cancellation had to be written in: but this demanded that the copyist be aware of the music itself, and could not be effected by a purely mechanical conversion of the notation. The result of this could be the omission of the necessary cancellation of the altered pitch, apparently leaving the note still governed by the previous accidental. Most of the accidentals

²⁹² A similar instance is found in Fg.D, b.45: T,3 (autograph missing).

required in this context are not supplied in Group K4 MSS, while the omission of superfluous symbols is faithfully done. This made the state of the reading very confusing.²⁹³

The majority of extant MSS which were made under the old notational convention were modernized to a greater or lesser extent. This particular act of editing seems to have decided the question whether the MSS could or should be edited more generally. We often find several layers of later additions onto MSS, possibly by the successive owners, even to an extent that alters the basic musical text for various reasons, e.g., the personal incentive to revision, comparison with the other MS tradition, etc.

VARIANT READINGS FROM DIFFERENT VERSIONS

The evaluation of variant readings can also be strictly operated on a genealogical basis. This approach allows us to decide the relative merits of different versions of a piece. Due to the incomplete source situation, however, the decision can sometimes be made with more confidence than at other times. In some parts of the genealogical system, the origin of the readings can be ascertained in one of the following four forms: 1) unrelated, 2) identical, 3) ante correcturam and 4) post correcturam. In other cases, due to the missing intermediate sources, the origin of the variant readings cannot be ascertained. On the other hand, the variant readings can be used to construct the hypothetical text of an exemplar. In this manner, the state of a missing source may be demonstrated.

The terminology "genealogical system" I have used so far may have implied the model tree structure in which any branch is related^{to} another branch in only one way. The real source situation of WTC II is not as simple as this. Due to the eclectic editing activity among various versions or readings by either the scribe or the later owners of the MSS, branches of various levels are intertwined with each other. Fortunately this activity can be ascertained in many cases, since the initial eclectic activity is mostly recorded in the form of later revisions to the score. The result is that new genealogical branches arise in the system.²⁹⁴

²⁹³ See p. 172 ff.

²⁹⁴ For example Schwenke's MS, P 204, is descended from P 430 (A1) after the latter's editing by reference to Am.B.57 (K1). Thus the ancestry of P 204 is not a simple one, and P 204 can be regarded as the first member of a new genealogical branch. See p.178 and 181 below. Bischoff regards the choice of movements in P 206 (Group H1) as the result of eclectic editing: but I consider it to result from the method of compilation of the exemplar, not to any eclectic editing in it. See pp. 130 ff.

Forms of Variant readings

The errors or variant readings appear in the following three forms; the omission, superfluous presence, or alteration of parts of the musical text. The omission of text can involve anything from complete systems to, bars, individual voices, notes, rests, dots, beams, stems, flags, necessary additional clefs, accidentals, ties, embellishments, and bar lines. This happens most often in the scores that were made by copyists of poor skill, and in this case we may regard the reading as an error. Errors are, of course, caused by lack of attention, but certain types of error are also associated particularly with environmental, technical and diplomatic factors. This is seen in the cases where certain types of symbol tend to be corrupted fairly constantly. For example, the omission of a dot from a note-head is always found in large numbers in pieces written in compound time, the more complex environment for notation.²⁹⁵ No doubt this is caused by the copyists' lack of experience with the particular metre. Again, the omission of ties can be seriously affected by the sequence of notation, where a tie can be written at various moments: right after the copying of the first of two note-heads to be joined, or after the second of the pair is written. For this reason, ties can easily be overlooked either when the notes are of large value or at the change of a system. It is easy to forget that the omission of parts can also be variant readings stemming from the composer. A limited use of rests (e.g., fewer than are strictly required by part-writing) and embellishments is often characteristic of an earlier version.

The superfluous presence of text can involve any symbols listed above. This happens normally with the copyists who do not follow the music as they copy it. In this case, it is an error, and is often found in F. It can also happen when the scribe attempts to improve a consistent or extended use of embellishments, or to make a fuller treatment of the voice texture. This is often found in P 204 and Group K4 MSS.

The alteration of text can be anything from a simple orthographic error to the result of inspired editorial work. In all cases it is essential to analyse the events according to the MS's genealogical position. Errors in pitch have basically two causes. If the error was at an interval of a second, the origin can sometimes be traced from the ambiguous notation in its exemplar. There are numerous such examples in group F MSS. If the error was at an interval of a third, the cause could be the lapse of attention of the copyist leading to the misallocation of notes in relation to the lines and spaces. In special circumstances, such as the variant of pitch between *c'* and *a*, the variant reading could be caused by ambiguous note-head positioning between the

²⁹⁵ In discussing this particular issue, one must be careful about the flexibility of notation, and the errors from valid readings. In Pr.D, where Bach uses t-s ♩ 12/8, Bach often distinguishes the duple notation from the triple according to the most influential motivic development in respective sections. See also Rastall (1983), pp.216-220.

staves.²⁹⁶ Errors of rhythmic notation seem often to have been caused either by ambiguity of the notation itself where a staff camouflages the beams of the rhythmic notation or by crowded notation on staves.

Ornaments and embellishments are most vulnerable to careless alteration. It is well known that Bach specified and distinguished more than half a dozen carefully defined ornaments in Cb-WFB. These can also be found in L. It is surprising to find that in the majority of later MSS most of these are changed to either a simple trill or to a mordent. It appears that there was even an interchange of these two basic forms. The transformation of trill into mordent perhaps occurred as follows: in some instances Bach wrote trill (~~~) on top of a stem, making it appear as if the trill has a vertical stroke, as a mordent does.²⁹⁷ The opposite process could have occurred in this way: many copyists wrote trill (~~~) as simply "tr" or "r" so untidily that some of them became hardly distinguishable from a genuine mordent (~/~).

Another problem concerns the notation of appoggiaturas.

(a) f.3r: R3,b.2
Pr.C#, b.4

(b) f.15r: L2,b.1
Pr.g#, b.26

(c) f.5r: R7,b.1
Pr.E^b, b.62

(d)

Fig 14: Bach's Appoggiaturas in L - accent steigend (a & b) and accent fallend (c & d)

As shown in Fig. 14 above, Bach's appoggiaturas appear basically in two different forms, the hook - see (a), (b) and (c) - and the small note - see (d). Both can be with or without a slur. Though the reason for such distinction by Bach leaves much room for debate, it may be agreed that Bach used the former more frequently.²⁹⁸ What appears to be problematic about the symbol is the ambiguous, subtle shape itself.²⁹⁹ For example, the distinction between *accent steigend* and *accent fallend* is established by either the position of the symbol itself or the shape of the hook, but it is not unusual for the distinction to be made by the musical context.

²⁹⁶ See Fig.F, b.86 (f.8v, R btm,b.7), for example. This is because the note written in mid-system with one leger line can be either pitch in a soprano / bass clef system, while in our present piano system they are both c'.

²⁹⁷ See Emery Ornaments, p. 20.

²⁹⁸ Emery (Ornaments, p. 77) observes that Bach preferred the latter to the former when an appoggiatura required an accidental. Emery also discusses the possibility of Bach's distinction between appoggiaturas and Nachslags in notational form. Such argument is yet to be substantiated, however.

²⁹⁹ In extreme instances, appoggiaturas in hook form are interpreted merely as slurs in P 210.

This appears to be an inherent problem with the symbol, for it requires considerable knowledge to interpret it correctly. Thus a desirable solution is to spell out such instructions clearly, and the only way to achieve this is to convert a hook to a small note.³⁰⁰ This is where the problem occurs: it lies in the process of pitch-interpretation by copyists who do not understand Bach's precise intention. While some hooks are converted appropriately, others are not. Often met with are the copyists who write one of the two hooks as a quaver-like symbol for various reasons.³⁰¹ In extreme case, the resultant pitch was wrongly converted as much as a fourth high (e.g., Pr.c#, b.30:S,1 among group K4 MSS). This kind of notational conversion affected Pr.c# most severely.

The final and yet the most important alteration is that of accidentals, especially naturals. There are two causes of variant readings with accidentals: 1) the transition between notational conventions, and 2) possible later revisions by Bach. The use of a later notational convention enabled musicians to write naturals for a specific purpose - viz., naturalizing the effect of either sharp or flat - in contexts where they would formerly have written flats or sharps.³⁰² It was perhaps related to the fact that the shape of a natural was so close to a flat - a natural can be formed by the addition of one simple vertical stroke to an existing flat - and that a natural closely resembles a sharp also. Thus a natural can be made from either sharp or flat, or vice versa, with a fairly simple amendment, without removing the entire symbol. For this reason the naturals were exposed to both inadvertent and judicious modification. Apart from the shape of the symbol, the confusion was extended to the effect of the symbol under various notational conventions in later generation MSS, as has already discussed on pp. 102 ff. The second cause of variant readings associated with accidentals could have stemmed from Bach. Among the most outstanding features of Bach's later revisions is the discreet control of applied accidentals with a view to melodic revision.³⁰³ In such cases, Bach would either modify the existing accidental by simply trimming or by overlaying, or add the new one in the space wherever he finds it appropriate.³⁰⁴ This process can be interpreted by the copyists of the descendant MSS in various ways depending on when, where and how the symbol was written or modified.

³⁰⁰ There is, however, an instance where the reverse process is carried out in P 587. Such activity is certainly motivated by the awareness of inaccurate notational form.

³⁰¹ The other source of such confusions is probably not in the conversion process, but in the reproduction of a hook in "c" form, which often becomes indistinguishable from a small down-stemmed quaver. In many cases, however, one may perceive that irresponsible or unmotivated copyists would exploit the inherent ambiguous quality of the symbol. In such cases, we could witness only a certain proportion of the symbols being written positively for specific pitch.

³⁰² That is, under the old convention, a flat or a sharp was used to naturalize a note raised or flattened by the k-s.

³⁰³ See Chapter 4, pp. 230 ff.

³⁰⁴ See my definition of amendment types in Chapter 4, pp. 193 ff.

The analysis of individual errors or variant readings shows that there are classifiable categories of causes. I shall summarise them in Table 18 below.

Table 18: Classified Cause of Errors / Variant Readings

Causes	Description of the causes
Convention	Happens when notational convention confuses the revisor.
Disposition 1	Happens when the copyist does not follow music as he goes on copying.
Disposition 2	Happens when the copyist's writing skill is poor.
Interpretation 1	Happens as the part or the symbol is not regarded as a significant part of the music
Interpretation 2	Happens when the revisor thinks the alternative reading is better for whatever reasons
Orthography	Happens irrespective of musical understanding of the copyist
Source 1	Happens when the exemplar was poorly (ambiguously) written
Source 2	Happens where the notation is affected by change of system or page.
Source 3	Happens when the symbol was mis-interpreted or mis-read.
Source 4	Happens when part of the exemplar is lost
Version	Proves the version of the piece, earlier or later

TRADITION B (BACH'S AUTOGRAPH)

In the Autograph Tradition, I am going to discuss the MSS of which the texts are based on either L or Bn (P 274, the so-called "Berlin Autograph"), as listed in Table 19 below.

Table 19: MSS belonging to Tradition B

Abbr.	MS	Origin of text	Scribe	Date
Bn	P 274	autograph	J.S.Bach	1735-1746
	P 213	Bn	unknown	2nd half 18c
	VII 45 237	P 213	unknown	2nd half 18c
	P 304	VII 45 237	unknown	2nd half 18c
	DD 70	Bn + L	W.F.Bach	ca.1750
L	Add.35021	autograph	J.S.Bach & A.M.Bach	1738-1742
F	P 416	m.c., L	Anon.Vr	ca. 1742
	Add.38068			
	MS 6A 72			
	FÜRSTENAU (lost during the war 1945.)			
	Go.S.312	F	unknown	last 3rd 18c
	P 210	F? / Go.S.312	unknown	ca. 1760s
H	<i>inextant</i>	a.c., L	unknown	1740?
H1	M B/1974	H (a.c., L)	Gestewiz & Anon.H1	last 3rd 18c
	P 206	M B/1974	P.G.	2nd half 18c
	P 818	H?	Anon.300	ca.1760
	P 589	m.c., M B/1974	Anon. K4	unknown
H2	P 209 (Ia)	H?	Kirnberger	ca.1760
	P 209 (Ib)	H?	Su1.	ca.1760
	P 209 (Ic)	H? / P 209 (Ia)	Anon.302	ca.1760
	P 209 (Id1)	K	Su2	ca.1760
	P 209 (Id2)	H?	Anon.K1c	ca.1760
	P 209 (Id3)	H?	Su4	ca.1760
	P 209 (Id4)	p.c., H?	Su5	ca.1760
	P 209 (II)	K1?	Anon.302	ca.1760
	P 631	P 209 (Ia)	unknown	2nd half 18c
	P 632	P 209 (Ia)	unknown	unknown
	P 588	P 209 (Ia)	Anon. H2	unknown
	P 584	P 209 (Ic)	Anon. H2	unknown
	P 593	P 209 (Ic)	Anon. K3	2nd half 18c
	P 634	P 209 (Id1)	unknown	2nd half 18c
	Mus.2405 T 7 ³⁰⁵			

(cont..)

³⁰⁵ According to Dehnhard (1983), p. xxii., Mus.2405 T 7 is identical with H1. Though I have not examined the MS, Bischoff's study enables me to say that the MS contains variants which often coincide with P 209.

Table 19 (cont.)

Abbr. MS	Origin of text	Scribe	Date
Other			
P 587	L	unknown	unknown
P 594	L	unknown	unknown
P 590	p.c., L	Anon. K2	unknown
P 592	L	Anon. K2	unknown
No.543	a.c.,L?	Kp.I	1771

key: K-ex - exemplar compiled under Kimberger for Am.B.57
a.c. - ante correcturam
m.c. - medius correcturam
p.c. - post correcturam
italics - unexamined source.

Since I have already discussed L in Chapter 2, I shall begin with Bn in the following subsection. The more important MS is L, however, from which at least two MSS are considered to have been reproduced faithfully - the sources H and F - at different times. Previously their musical texts have been considered identical, but I shall explain that H dates from slightly earlier than F.³⁰⁶ Both sources are extremely important in tracing the order of revisions found in L, and provide vital evidence for my discussion of Bach's revision process. Kimberger's MS, P 209, is included in this group instead of tradition K on the evidence of its clear textual characteristics. Other MSS, relatively less prominent in the tradition, will be discussed last.

THE BERLIN AUTOGRAPH

P 274: The Source Bn

The other autograph of Bach's, containing Fg.A^b only, appears as pp. 29-30 of MS P 274. In the early part of this miscellaneous volume are contained preludes and fugues for organ which were copied in collaboration between Bach and J. P. Kellner.³⁰⁷ Bn was already deposited in the Königlichen Bibliothek when Kroll prepared the BG edition.³⁰⁸ The Fg.A^b was known as an autograph by Kroll and Spitta, and its beautiful calligraphic appearance did not allow any doubt of its authenticity. It is now kept in SPK. The music is contained in a single sheet, neatly accommodated in eight piano systems per page. The brownish paper is hard. The uneven oblong sheet measures roughly 33.5 x 20.5 cm. It bears no watermark.³⁰⁹ The staves

³⁰⁶ Breckoff (1965), p.81, however, notes in this trend under the examination of individual movement, Dehnhard (1983) avoids to touch upon this issue, while Franklin (1989), p.274, claims that H was later than F.

³⁰⁷ BWV 547 (J. P. Kellner: pp. 2-11); BWV 548 (J. S. Bach: pp.10-14, J. P. Kellner: pp.15-20); BWV 531,1 (J. P. Kellner: pp.23-25). See Kast, p.18.

³⁰⁸ BG XIV, source number 14b., p.xviii. I find no earlier history of the MS.

³⁰⁹ Breckoff, p.31; NBA KB IX, p. 112.

are ruled with a single-staff rastrum measured 10.2 mm (-2.5-2.5-2.6-2.6=). The fifth line tends to be the thickest. The rastrum was presumably held in R.H., since the staves were drawn from right to left.³¹⁰ The ink for staves is dark brown, whereas that used for the notation is uniformly black. There is no variation of ink shade between the original notation and the revised part. Thus it is likely that the amendments are only immediate corrections.³¹¹

The Fg.A^b was entitled *Fuga ex Gis dur di J. S. Bach*. Closer examination shows that *Fuga* was written with the same ink and pen as the music, and *ex Gis dur di J. S. Bach* was added afterwards since it was written in brownish ink with a thin pen.

The musical text is similar to that of L: it is the semi-final version of Fg.A^b. But the textual details appear as if it was the improved version of L, for we can find a few inspired variant readings in pitch and note values which are neither found in early models written in F major (e.g., P 1089) nor L.³¹² We may also find that the treatment of voice-leading in Bn is more convincing than that of L, for we find a more specific voice exchange based on the inherent voice ranges of the individual lines. For example, the soprano at b.11, which includes *b^b*, could only be accepted as the alto line if it was still in F major. Similarly, in Bn Bach carefully specifies the voice exchange between inner voices in b.10 as shown in Fig. 15 below, which he ignores in L.



Fig. 15: Fg.A^b, b.10. Voice exchange specified in the autographs

This kind of improvement was not carried out consistently, however. In three instances (the tenor, b.13,3; the soprano, b.31,4; the bass, b.32,3-4) Bach omitted the rests necessary to make the part-writing clear. This seems to indicate a change of mind, perhaps caused by a problem inherent in the fugue. As we can see in much of the first half (that section modelled fairly closely on the early, 25-bar version), the fugue is in three voices, except for the last entry starting in b.22. In view of the fact that the later version in A was based on L, it seems that Bach

³¹⁰ I tend to believe the sheet was turned around after staves were drawn in usual manner as L.

³¹¹ The amendments are listed and described in Supplement A under Fg.A^b.

³¹² See Supplement B under "Fg.A^b" for listing of variant readings.

at some stage found this kind of improvement inadequate and accordingly stopped implementing his plan.

Such analysis of the text, however, does not contribute very much to the chronological order of events between Bn and L. In Bn, there are in fact fewer errors caused by lapse of attention. Also there are no traces of revision linking directly from an early model, while we do find such links in L. Conclusion on this aspect cannot be reached without examining L itself. I shall come back to the issue on pp. 272 ff.

P 213 3 an

MS P 213 is a collection of seven MSS in 128 pages. In the fourth, P 213 3 an, pp. 27-56, we find Fg.A^b as one of six fugues.³¹³ This gathering has a title page (p.29) which reads "*VI. Fuge / per il Cembalo / del / Sigr: Giov: Sebast Bach.*". The MS is organized as single + VI + I.³¹⁴ The cream coloured paper, which is probably trimmed on the top, measures approximately 35 x 23 cm. The staves were prepared with a single-staff rastrum 9.5 mm high, and arranged in ten uniform staves spaced fairly equally.

The six fugues were copied continuously, and no consideration was given to starting a piece on a fresh page. All the pieces are uniformly entitled "*Fuga* [sequence number]". Thus Fg.A^b is introduced as "*Fuga 3.*". Page turns are required, two of them in Fg.A^b. The scribe is not known. Kast classifies him as Su 3, suggesting a date in the second half of the eighteenth century.³¹⁵

The musical text is derived most faithfully from Bn. There are two special places which caused a variant text in the later source. One is the stemming in the tenor, b.23,1/1 *db'*. The stem is so ambiguously written, touching both the tenor and the bass, that the pitch can be equally read as *db'* or *f*. In VII 45 327 and P 304, the place was unfortunately incorrectly read as *f*. The second is the reading of the alto, b.37,1-2. This place is also transmitted in the two later MSS.

VII 45 327

MS VII 45 327 (SB Q 11500) in the Gesellschaft der Musikfreunde, Vienna, has not previously been studied in relation to WTC II. The source has only been examined through a

³¹³ The selection of pieces is as follows: BWV 944,2 (pp. 27; [p.28 blank; p.29 title] 30-36), Anh.177,2 (pp. 37-39), Fg.A^b (pp. 39-42), 951a (pp. 42-46), 951 (pp. 46-51), 539,2 (pp. 52-56).

³¹⁴ Note that the first single leaf was most likely attached to the MS at a later stage, for we find the title page at the beginning of the gathering VI.

³¹⁵ Considering the fact that the MS belonged to Graf v. Voss-Buch (end.18c - mid.19c), who also possessed P 210, etc., the date of the copy cannot be later than mid. 19th century. Breckoff, p. 32, considers on the evidence of Johann Heinrich Jakob Westphal's handwriting in P 213 and his possible involvement in administering the Estate of the late C. P. E. Bach that Bn could have been inherited by C. P. E. Bach.

microfilm containing part of the MS, however. In ff.6r-7v is contained Fg.A^b. The movement is also entitled "*Fuga 3*". The movement is likely to be one of six, the collection of P 213.³¹⁶ The staves were prepared with single staff rastrum and arranged in five piano systems, just like P 213.

The musical text is in fact thought to have derived from P 213. The quality of text appears to be rather poor, however, for we find about ten omitted rests and three missing ties. Some errors go so far as to modify the contour of the counter-subject (b.36). The later revision mainly concerns the accidentals to modify pitches. We find two such unique revisions of pitch. The one is the correction of pitch at b.31:S,1/2, the error of which originated in Bn. The other is probably an attempt to improve the original pitch at b.25:B,1/2. All the variant readings discussed so far are taken into later MSS, such as P 304. There is, however, one revision which is not taken into later MSS. This revision, found in b.44:A,1/2, is concerned with the note-head itself.

P 304

MS P 304 is a collection of various pieces in 152 pages. On pp.101-151, we find the same contents as P 213 3 an. It begins with the following title page: "*VI / Fuge / per il / Clavi Cembalo / del: Sigre: Giov: Seb: Bach.*".³¹⁷ The cream coloured paper is trimmed, and measures 30 x 21.7 cm. The staves were ruled absolutely straight with the rastrum which was capable of drawing two staves at a time, and were arranged in four piano systems per page. Each staff is 9.8 mm high.

On pp.119-123 is found Fg.A^b, which is entitled "*Fuga. / III*". There are two page turns in the movement, and in both cases we are reminded with "*v: s.*" (*volti subito*).

The musical text is considered to have stemmed from post correcturam, VII 45 327. The quality of text is unfortunately much poorer than its model. The major cause was poor copying skill, which is reflected in the overlooking of ties. I counted twelve instances more than in VII 45 327. Apart from this, the omission of rests, and errors of note value may also be listed.

DD 70

MS DD 70 in the Civico Museo Bibliografico Musicale, Bologna, has not previously been studied in relation to WTC II. The MS is examined from microfilm only. It consists of two bifolia measuring 42 x 32 cm, and contains four movements from WTC.³¹⁸ They were all copied by

³¹⁶ The only evidence is the fragment of the surrounding movements, Anh.177,2 and 951a. It appears in the film that the MS was copied from back to front. These points have to be clarified when the original MS is examined in future.

³¹⁷ With a thick quill, "*Fuga*" was modified to "*Fughe*".

³¹⁸ Claudio Santini: "Diciotto anni di ricerche per scoprire un manoscritto del primogenito di J. S. Bach." *Carlino-Sera*, 4 Maggio 1964, p. 3. I am particularly grateful to Prof. Giorgio Piombini for the information of this article.

Wilhelm Friedemann, which Santini believes that the copy was made ca. 1740.³¹⁹ Two of the four are from WTC II - Pr.C and Fg.A^b.³²⁰ They are entitled "*Preludio di Bach*" and "*Fuga di Bach*" respectively. It is interesting to notice that Wilhelm Friedemann avoided ascribing the work to be overtly to his father.

The musical text of Pr.C is thought to derive from L. It contains many unique variant readings, and most of them are highly inspired improvements by Wilhelm Friedemann.³²¹ The extent of such modification indicates that the version of L appeared to him to leave much room for improvement.

The musical text of Fg.A^b is thought to derive directly from Bn, and not from L. The quality of text is extremely good, as we can see that two rests missing in Bn are provided here. The most interesting feature of Wilhelm Friedemann's improvement to the work is the use of *accent steigend* to the longest note of the subject (a crotchet *db*" in the initial entry). This does not occur at every entry, but only in bb.2,4,7,9,14,17 and 42, where its application is technically feasible and effective.

What seems to be a variant text presented by Wilhelm Friedemann, however, contains extremely valuable information for our source study of WTC II. Firstly the selection of two movements, Pr.C and Fg.A^b, which are the latest additions in Bach's compilation of the work in ca. 1742, have been revised and virtually transformed by 1744. Secondly, two movements are copied not from a single source, but from two, i.e., L and Bn. There are two most probable backgrounds for this. The one is that Wilhelm Friedemann made these two copies on visiting Leipzig when Bach had only recently completed these two MSS. The other is that Wilhelm Friedemann inherited both L and Bn and made these copies after 1750. In the future, examination of the original MS is required, especially to ascertain the watermark of the MS, so as to establish the date of the paper.

THE SOURCE F

The MSS which we are going to discuss shortly are thought to have been a single set of MS, which made up a complete copy of L. At some stage in the past, the complete set was divided into four. Through private estates, each of them was finally acquired by public institutions: they are SPK (P 416); the Newberry Library, Chicago (MS 6A 72); the BL (Add. MS 38068) and Sächsische Landesbibliothek, Dresden (so-called "Fürstenau MS", now considered lost).³²² These four sources are considered here as a single source, F (for Fürstenau).

³¹⁹ *ibid.*

³²⁰ It appears that they are not contained in the same leaf. Fg.A^b is copied on the back of the fugue in B^b minor (WTC I), and Pr.C is paired with the fugue in C major (WTC I).

³²¹ See Supplement B for listing.

³²² Dehnhard (1983), p. xxi.

All the extant parts of F were copied by a single hand, Anon. Vr.³²³ From the study of his handwriting and the watermarks of his MSS, Kobayashi deduces that F belongs to one of the earliest copies he made under Bach.³²⁴ More importantly, they are said to bear the same watermark - Wm-III (Weiß 67) of L.³²⁵ As Wm-III was found only among the presumed latest additions in L, it is most probable that F was made as soon as WTC II became complete, ca. 1742.³²⁶ This suggests that the purpose of the commission to make F was to have a duplicate of L as soon as Bach considered it desirable. The early history of the ownership of F is not clearly known. The MS was probably retained in Bach's possession until his death, for there is evidence that at least some of F came into the possession of Wilhelm Friedemann, who gave away parts of it possibly at various times.³²⁷

The set originally consisted of many separate bifolia and, in one known instance, accompanied with an additional single sheet (PrFg.c#), so as to accommodate this unusually long pair of movements. In principle, each prelude-fugue pair was designed and copied as a single bifolium, each movement being copied on one open side, just as in L. But some of the long movements, which occupied three pages of a four-page fascicle, were not copied together with their accompanying movements. This is partly because all the sheets in F were ruled in fourteen uniform staves regardless of the length of individual movements, and also because the scribe did not compress his notation as Bach did. This is why, in five instances, prelude-fugue pairs are now separate, and some of them survive without their accompanying movements. The decision to use two bifolia for a pair appears to be an afterthought, for in the earlier cycle of the collection, we find different tactics to solve this inherent problem. As mentioned, PrFg.c# uses an additional single sheet to avoid separating the pair. Two fugues, viz., Fg.c# and Fg.D, start from somewhere in the middle of the page, immediately following the final bar of the preceding movement. Contrary to these tactics, the separation of a pair by using two bifolia for each movement is found only in the later part of the WTC II cycle, i.e., PrFg.g#, A^b, B^b, b^b and B. This transition in copying tactics seems to point to the chronological order of events. In Table 20 below, I describe the physical and notational features of the extant portion of F.

³²³ Kobayashi (1988), pp. 29-31. This copyist is called by Kast as Anon.12.

³²⁴ Kobayashi (1988), p. 30.

³²⁵ Kobayashi (1988), p. 30.

³²⁶ Kobayashi (1988), p. 30.

³²⁷ Hill (1950), p. 377.

Table 20: Description of notational features in F
arranged according to MS, folio and original sequence of page order

BWV	Key	Rast	Page	Description
P 416				
872	C#	A1b	64	Prelude /3 di Ji: S. Bach.
			65	(Volti)
			66	Fuga
			63	(Fine)

873,1	c#	A1b	70	Prelude /4 di J. S. Bach
			71	cont.
877,2	d#		72.1	b.44,3-4 of Fg.d# is accidentally copied in.
873,1	c#		72.1	Pr.c# cont.
873,2			72.2	Fuga.
			69	cont.

			68	cont. (Fine)
			67	blank. pp. 67-68 is an additional single sheet. It was presumably a separate leaf, but presently it appears as if it was attached to the centre fold of a double sheet from the fugue side.

874	D	A1a	74	Prelude /5. di J. S. Bach.
			75	cont.
			76.4	Fuga
			73	cont. (Fine)

875	d	A1a	78	Præludium /6 di J. S. Bach.
			79	cont.
			80	Fuga. /6.
			77	cont.

881,1	f	B	82	Prelude /12 ex F b. +
			83	cont.
881,2			83.5	The last 3 bars of the fugue (there are 4 bars, but the penultimate bar is repeated)
			84	Fuga
			81	cont. It is possible that the last three bars of the fugue was originally planned to be copied in the foot margin of page 81 where we find a narrow system prepared unsuccessfully.

885	g	A2	88	Præludium /16 di J. S. Bach_.
			85	Fuga /16
			86	unused.
			87	unused.

887,1	g#	A2	90	Prelude /8. di J. S. Bach_
			91	cont.
			92	cont.
			89	unused

888	A	A2	96	Præludium /19. di J. S. Bach_
			93	cont.
			94	Fuga /19
			95	cont.

(cont.)

-----	890,1	B ^b	A2	98	<i>Prelude 2i di J. S. Bach_</i>
				99	cont.
				100	cont.
				97	cont. (<i>Fuga_</i>)
-----	891,1	b ^b	A2	102	<i>Prelude /2.2 di J. S. Bach.</i>
				103	cont. The last 3 bars are found in foot margin.
	876,1	E ^b		104.1	<i>Prelude ex dis +. bb. 1-5,1 sketch. This is crossed out with ink.</i> ³²⁸
	891,1	b ^b		104.2	The last three bars of Pr.b ^b reproduced.
	891,2			104.3	<i>Appendix Fuga. bb.83,3 - end. This is crossed out with ink.</i>
				101	unused.
-----	892,1	B	A2	106	<i>Prelude /23. di J. S. Bach_</i>
				107	cont.
				108	cont. (<i>Volti / Fuga</i>)
				105	unused.
-----	886,2	A ^b	A2	110	<i>Fuga. ex Gi [sic!] dur. di J. S. Bach_</i>
				111	cont.
				112	cont.
				109	unused
	MS 6A 72				
	892,2	B	A2? recto		<i>Fuga à 4.</i>
					cont.
			verso		cont.
					unused?
	Add. MS 38068				
	884	G	? recto		<i>Præludium 15. di J. S. Bach.</i>
					cont.
			verso		<i>Fuga.</i>
					cont.

----- Presumable physical separation in the original state of the MS before binding.

Rastrum A1a: 10.5 mm (= 2.7 = 2.7 = 2.6 = 2.4 -): drawn left to right
A1b: 10.5 mm (- 2.4 = 2.6 = 2.7 = 2.7 =): drawn right to left
A2: 10.4 mm (= 2.7 - 2.7 - 2.5 - 2.4 -): drawn left to right
B: 10.1 mm (= 2.8 = 2.6 = 2.5 - 2.1 -): drawn left to right

P 416 3 an

MS P 416 3 an is the largest part of F, archived in SPK. It consists of seven prelude-fugue pairs, four preludes and one fugue, together with some minor bits from other movements, such as a sketch of Pr.E^b, the last part of Fg.b^b, and less than a half bar only from Fg.d#. These fragments were obviously copied by mistake. No title page is attached to the MS.

³²⁸ Franklin (1989), p. 263, says the fragment of Pr.E^b, together with other parts of PrFg.b^b, is written in a single sheet. This is incorrect, as my consultation with P 416 clearly showed that pp. 103 and 104 were one side of the leaf of the other.

The earliest record of its ownership ascribes it to "Prof. Bach in Berlin".³²⁹ In 1866, when Kroll made the Bach-Gesellschaft edition, he declared that the MS was Bach's autograph. The MS was shortly afterwards acquired by Guido Richard Wagener (1822 - 1896), a famous private collector in Marburg. It was most likely under him that, together with other unrelated Bach MS, the MS was bound along the centre-fold of the bifolia. In 1874, the MS was in this state presented to the Berliner Bibliothek.³³⁰ The method of binding caused some problems: it made the originally intended sequence of pagination very confusing. A more serious consequence is that some notation written close to the centre-folds is now hidden.

The MS is preserved as it was, except for some minor repairs to reinforce corners and edges. The cream/light-brown paper is very thin and flexible. It suffers slightly from ink acid: in some places ink from the other side of the paper shows through noticeably.

CHICAGO (MS 6A 72)

MS 6A 72 in the Newberry Library, Chicago, contains Fg.B only. The MS is said to have been in the estate of Wilhelm Friedemann's favourite pupil, Sarah Levy.³³¹ The MS was probably brought to the U.S.A. by Justus Amadeus Lecerf, who noted this interesting remark into the MS. The MS was long believed to be Bach's autograph, and it was Hill's main contribution to clarify its true authenticity. In doing so, he found that CHICAGO is related to P 416 which was by that time known not to be a Bach autograph.³³²

The MS was originally a bifolium, but it is now separated at the centre-fold into two leaves.³³³ I have examined the source only from the photocopy.

Add.MS 38068

Add.MS 38068 in the BL is a bifolium containing PrFg.G. The earliest known history of the MS's ownership began in England. It was reported as the discovery of a Bach autograph in April 1902.³³⁴ The MS then came into the possession of Mr.W. Westley Manning. It was presented to the BM on 30 October 1910 by the wife of Mr. Alfred Morton. The transaction or sale between Morton and Manning is yet to be uncovered. I have so far been unsuccessful in finding out who declared it not to be autograph, and when.

³²⁹ BG IX, p. xviii. Hill (1950), p. 383, suggests that it was August Wilhelm Bach (1796-1869) who had been made a Royal Professor in 1858.

³³⁰ Hill (1950), p. 383.

³³¹ Hill (1950), p. 377.

³³² Hill (1950), p. 377 ff.

³³³ Hill (1950), p. 384.

³³⁴ See an anonymously published article in MTimes 43 (May 1) (1902), p. 315.

Add.MS 38068 is the newest addition to the bound volume of L (see Table 10). It is preserved as an open sheet. To preserve the fragile MS, the BM restored it with gauzing in 1953.

The Fürstenau MS

The remaining pieces, PrFg.C, c, E^b, d[#], f[#], E, e, F, F[#], a, b; Pr.A^b; Fg.g[#], B^b and b^b, were discovered by Moritz Fürstenau (1824 - 1889) in 1876.³³⁵ They were available to the inspection of Hans Bischoff, who considered the collection as a non-holograph.³³⁶ He and Spitta regarded it as a part of a complete copy of WTC II in affiliation with P 416.³³⁷ Afterwards it is said that the MS was in the possession of the Sächsische Landesbibliothek. We cannot trace the MS further on. It is believed to have been lost in 1945 during the war.³³⁸

GENERAL FEATURES OF F

F contains various unique information: from the general appearance of the MS, we learn the policy of the scribe, or the instruction by the master, such as format, pagination, titles and, most importantly, the presumed state of the exemplar; and from the musical notation in particular, we learn the scribe's technical skills in copying music, his peculiar copying habits and the level of his musical understanding during the copying process. Also important is the time when the MS was made, as mentioned earlier. This information is extremely valuable in any philological approach in establishing the chronological order of revision work carried out in L. While most of the movements represent a text identical with that of L, only a few movements give the ante correcturam. It is significant that the process of such deviation is clearly recorded in L as revision, e.g., PrFg.d. Some texts in F, however, suggest a temporal distance from L. For example, a unique reconstruction work in F is found at the end of Fg.B where the musical text was trimmed off from the autograph.³³⁹

Another evidence of their genealogical relation is the manner in which the scribe of F copied the music: he copied as literally as possible, even reproducing Bach's orthographic errors as well as extremely subtle pen slips. One of several such examples may be quoted from Fg.g, b.80, reproduced in Fig.16.

³³⁵ Hill (1950), p. 383.

³³⁶ J. S. Bachs Clavierwerke Vol. 6. (Leipzig: Steingräber, 1884).

³³⁷ Bischoff, p. 4.

³³⁸ Dehnhard (1983), p. xxi.

³³⁹ Hill (1950), p. 378.



L (f.12r, L5,b.4)



P 416 (p.87, sys 7,b.2)

Fig. 16: Genealogical relation shown in Fg.g, b.80.

In this example, we can see how heedlessly the copyist reproduced the dual-hump tie.³⁴⁰ Also important to observe is that the crossed out crotchet in L, located on the 3rd beat of the soprano, is not reproduced in F. These two observations suggest that the copyist was partly concerned to write an error-free copy. As the result of his copying work being far from perfect, the significance of such calligraphic features in Bach's score is now entirely lost, and the reproduced effect is meaningless and confusing. Likewise in many other movements, revisions found in L are often reproduced as if the same revisions were carried out in F. This point is often crucial in our philological approach, for Bach appears to have made melodic revisions into L after Group H MSS were made. In such instances, revisions were sometimes only to add accidentals. For example, in Pr.A Bach added a sharp above the note head *a* in the bass, b.28,2/3. Anon.Vr reproduced the sharp somewhat unconfidently in an ambiguous way. It was written very small, positioned top-left - between the correct place for *a*# and the place where Bach positioned it. This type of unsureness does not always occur. In many other such cases, accidentals added in L were placed in just the same position in F.

This half-conscious and half-mechanical working manner of Anon.Vr normally results in a faithful copying process but does indeed go beyond it on occasions. In Pr.g, b.6, and Fg.g, bb.11 and 63, for example, he wrote some bass notes an octave lower. This was probably done for the sake of legibility, for there was no room left for the bass to be copied neatly in its proper place, which was already occupied with other voices.³⁴¹ His technical ability is also reflected not only in numerous traces of the simple slip of the pen in the text, but also in several serious orthographic errors that originated in the mechanical working method from note to note and "not

³⁴⁰ My reconstruction of Bach's order of corrections in the soprano is as follows: 1) Bach first wrote a minim and a crotchet; 2) added a tie between the notes; 3) extended the tie when he decided to join the note over the bar line; 4) Bach then had to cross out the crotchet and added a dot to the minim. Thus the dual-hump tie is the result of a two-stroke process.

³⁴¹ The other possibility, i.e., improving the musical text itself, is unlikely to be the case considering the usual poor quality of his practice.

understanding what he was copying".³⁴² This becomes a prominent characteristic of F. As in most cases he was extremely faithful and yet did not always think what he was doing, whatever was done by him, successfully or unsuccessfully, is valuable in that one can ascertain some unknown aspects of Bach's revisions carried out in the missing autographs, viz., PrFg.c#, D and f.

The faithful yet unreliable work of Anon.Vr is also seen in the format of the copy, though not in significant detail. Only Pr.A is formatted extremely closely to L. It is obvious that, by keeping the same format, the copyist should be able to work easily. But it appears that Anon.Vr did not or perhaps could not for some reason keep the same format. Instead, he used 'pointers' to ease his copying task. The pointers he used merely marked unique symbols on the exemplar (i.e., L), often appearing as '=' or '#', some being removed physically from the paper. I list in Table 21 below those which I identified the pointers written on L used at either page turns or system changes in the extant part of F.

Table 21: *Anon.Vr's pointing marks on L*

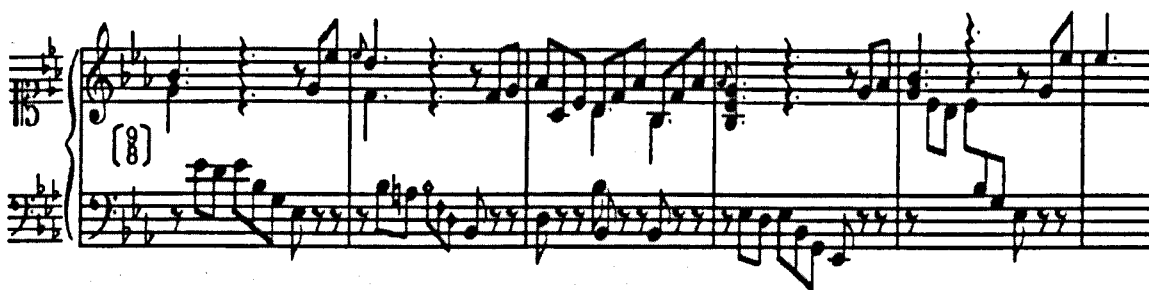
ff.	MS-Pos	Bar	Mark	St	Position on L	F	Position in F
3r	R1,b.1	20,3	=	R	Above S.	P 416	Page turn
4v	R1,b.2	18,3	=		Above system	P 416	Page turn
11r	R2,b.2-3	30	=		Above system,	Add.38068	Page turn
14r	vL5,b.1	34,4	=		B. above semiquaver g	P 416	System change
15r	L8,b.1-2	22	=		Above system,	P 416	Page turn
18r	L7,b.3-4	27	=	R	Upper staff,	P 416	Page turn
18r	R7,b.1	55,1-2	?	R	Sop.	P 416	Page turn
18r	R3,b.2	39,2-3	=?	R	Sop.	P 416	System change
19r	L7,b.4-5	41	=	R	Above system,	P 416	Page turn
20r	L7,b.2	21,4	#		S. above semiquaver e'	P 416	Page turn
20r	R6,b.2-3	42	#		Above system,	P 416	Page turn
20v	L7,b.2-3	42	=	R	Above the system,	CHICAGO	Page turn
20v	R1,end	52,1	=		Below system	6A 72	Page turn

NB. Status - Removed or (unremoved); Position - "?" indicates pointer being written on the bar line

The fact that Anon.Vr was permitted to write these symbols into L may be significant in the way we interpret the background of MS making. Though there are presumably many such pointers unaccounted for in the missing Fürstenau MS, we may probably say within the scope of this study that the copyist tended to write such pointers more frequently in the later part of the WTC II cycle.

The bifolium for Pr.b^b (pp. 101-104) tells us much about the copyist as well as the state of his exemplar. The five-bar sketch of Pr.E^b on p. 104 is very interesting. It is located in the top left column of the verso. The musical contents are reproduced in Fig. 17 below.

³⁴² Hill, p.383.



Diamond-shaped note-heads indicate implied notes, but presumably omitted accidentally by Anon. Vr.

Fig 17: *The fragment of Pr.E^b in P 416, p. 104.*

While Breckoff claims this fragment as an improved version of L,³⁴³ Franklin regards it as a preliminary draft for the movement on the evidence of the title and the length of the version.³⁴⁴ A closer examination of Fig. 17 reveals several facts relevant to their assessments. Firstly, Anon. Vr did not give the time-signature '9/8'. Secondly, the musical join in bb. 4-5,1 is not related to any of the full-length versions. These facts support Franklin's interpretation of the fragment as a draft. Some variants or errors in the text, however, could have originated with the copyist: the missing note-heads (shown here as diamond-shaped note-heads), the doubled note in the bass on b.3,2 and the pitch a^b in the soprano on b.3,2/3, which is given as b^b in all the other known MSS. On the other hand, there is evidence to support Breckoff's interpretation. The voice-split in the soprano / alto, b.3,2, suggests that this text can be considered as an authentic interpretation in our scholars' view.³⁴⁵ Considering all the aspects of this draft material as well as Anon.Vr's usual copying practice, I consider that these five bars were all that existed of the piece in the exemplar, and that Anon.Vr did not notice that it was a fragment when he copied it. It is not certain when the text was crossed out with pen in dark brown, which appears to be the same ink as for the musical text. The most probable time is when he set up copying Pr.b^b from the other side of folio, (probably unknowing that Pr.E^b was previously copied) and turned the sheet around to continue the last three bars. The error must have been noticed at this moment. Another interesting thing is found immediately after it: the *Appendix Fuga* of the same fugue, which is also crossed out with pen. What Anon.Vr might have thought initially is that *Appendix Fuga* is an extension of the prelude, since in L Bach wrote the final cadence of Pr.b^b and *Appendix Fuga* on the same system. This type of error is hardly conceivable for a good musician who understands what he is writing. The full-length version of

³⁴³ Breckoff, p. 29. This interpretation is probably based on his understanding of L's title, *Præludium* and *Prelude*. See pp. 48 f.

³⁴⁴ Franklin (1989), p. 263.

³⁴⁵ None of the extant MSS I have examined except P 416 has this voice split. Without referring to P 416, Bischoff considers this point to be Bach's later revision target. Later editions generally follow Bischoff's view, including Tovey, MORGAN, BUSONI and HENLE. It was not taken into WIEN, however.

Pr.E^b (71 bars) was once present in F, in the lost Fürstenau MS. This fact does not contribute significantly to proving the copying order of these two versions, however. All that we know is that Anon.Vr copied two versions of Pr.E^b possibly accidentally, and crossed out the shorter one.

THE THREE PRELUDE-FUGUE PAIRS MISSING FROM L

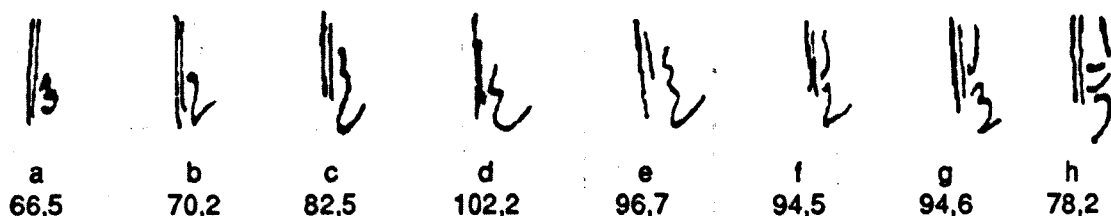
Of particular interest are the three prelude-fugue pairs missing from L (viz., PrFg.c#, D and f), for we have already learned that we can expect these scores to reflect the history of L in specific details, however indirectly. Since their titles are all written as *Prelude...*, it is possible to consider that the exemplar, i.e., the scores in L, belonged to Group 2.³⁴⁶ On the other hand, it is also possible that the last pair, PrFg.f, could be categorized in Group 3, for it contains the characteristics of Group 3 in its movement heading, i.e., ".. ex [key]..". The musical text of PrFg.f is, however, quite different from those of other movements in Group 3. In the case of PrFg.C and A^b in L, the musical texts represent the semi-final version. In contrast, PrFg.f in F represents the final version, which is closely allied with A, while the version of H is not at all close to F, but an intermediate version developed from K. From these observations, I conclude that Bach carried out an extensive revision on these movements between H and F. There is no positive clue to say, however, that the revision was carried out on the score which served as exemplar for both H and F.³⁴⁷ It is the title of Group 3 that may be the evidence for such activity. As we know in the state of pieces in Group 3, they required further attention in Bach's mind. It suggests that the revision might have been carried out on the score missing from L. Therefore, I tend to regard this pair as rather special, and I place it as an intermediate stage between Group 2 and Group 3.

³⁴⁶ Franklin (1989), p. 258 ff.

³⁴⁷ A stricter study of F may reveal some sort of evidence for Bach's later revision, especially the effect from the added symbols, such as the direction of stem, position of accidentals, etc. We may also rely on the presence of cancelled symbols from the earlier reading juxtaposed with the later reading. This is testified in Pr.E^b (not F, but in P 210).

ABOUT THE C CLEF

A prominent feature of Anon.Vr's calligraphy is the range of shapes of his C clefs, as shown in Fig. 18 below.³⁴⁸



Numbers indicate the position of *Page, System* of P 416.

Fig. 18: *Eight types of C clef used by Anon. Vr*

Among eight forms of C clef, we can distinguish four groups:

- 1) *a* is a '3-form' single-stroke symbol (i.e., taking the two vertical strokes for granted, the far right-hand element consists of a single pen-stroke).
- 2) *b*, *c*, *d* and *e* are 'hook-form' single-stroke symbols, and are sometimes joined to the vertical lines: The distinction among this group is made by the direction and number of small distinguishable curves in various directions within a stroke.
- 3) *f* and *g* are 'K-form' two-stroke symbols, and the lower half of the symbols resembles that of group (2), esp. *b* and *c*.
- 4) *h* is also a 'K-form' symbol, but this is disjointed, there being four strokes rather than one or two.

The variety of Anon.Vr's C clefs is really confusing. To clarify the situation, let us analyse them according to when, where and how they were used. In Table 22 below, I list all the occurrences of his C clefs in F system by system.

³⁴⁸ Dadelsen, TBS_t/1, p. 16; Kobayashi (1988), p. 30.

Table 22: Various shape of C clef in F

Page	BWV key	Sys1	Sys2	Sys3	Sys4	Sys5	Sys6	Sys7
P 416								
64	872 C#	c	c	b	c	c	c	c
65		c	c	b	b	b	b	-
66		b	b	f	f	a	f	f
63		c	c	c	c	f	f	-
70	873 c#	c	b	f	f(f)	f	f	f(f)
71		c	f	f	f	f	f	f
72		f(f)	f(f)	f	f	f	f	f
69		f	f	f	f	f	f	f
68		f	f	f	f	f	-	-
67								
74	874 D	b(b)	f	f	f	f	f	f
75		f(b)	f	f	f	f	f	f
76		f	f	f	f	f	f	f
73		?	f	f	f	?	f	-
78	875 d	c	h	h	h(bf)	f?	f	f
79		h	f	f	f	f	f	f
80		h	f	f	f	f	f	f
77		f	f	f	f	f	-	-
82	881 f	c	c	c	c	c	c	c
83		c?	c?	c	?	f?	-	-
84		d	c	d	c	c	d	c
81		f?	f	f	f?	f	f	f
88	885 g	c	c	f	f	f	f	f
85		f	c	c	f	?	f	f
86		f	f	f	f	f	f	f
87		g	f	f	?	f	f	?
110	886,2A ^b	==	(f->a)	==	==	==	==	==
111		==	==	==	==	==	==	==
112		==	==	==	==	==	==	==
109		-	-	-	-	-	-	-
90	887,1g#	c	c	c	c	c	c	c
91		f	c	c	c	c	c	c
92		f	f	-	-	-	-	-
89		-	-	-	-	-	-	-
96	888 A	f	f(f?)	f	f	f	d	d
93		f	f	f	f	-	-	-
94		d	f	f	f	f	g	g
95		f	f	c	c?	-	-	-
98	890,1B ^b	c	f	b	c(d d a a)	a(d a)	f	f
99		c	f	f	f(f?)	f(a b f)	f	f
100		c	d	d(var?)	d(g)	b	f	f
97		f	f(f)	-	-	-	-	-
102	891,1b ^b	c	d	d	c	c	c	d
103		c	c	f	f	f	f	?
104		d	d(a)	c	d	f	f	-
101		-	-	-	-	-	-	-
106	892,1B	c	c	c	d	c	d	c
107		a	a	c	d	c	c	a
108		f	f	-	-	-	-	-
105		-	-	-	-	-	-	-

(cont.)

Table 22 (cont.)

Page	BWV key	Sys1	Sys2	Sys3	Sys4	Sys5	Sys6	Sys7
CHICAGO								
1	892,2B	d	d	a	a	a	a	a
2		d	a	a	a	a	a	a
3		d	a	a	a	a	a	-
Add. MS 38068								
f.1r	884 G	f	f	f	f	f	f	f
		f	f	f	f	f	-	-
f.1v		f	f	f	f	f	f	f
		f	f	f	f	-	-	-

- () accidental change of clef
 - unused staff
 -> revised to
 == treble clef is used instead of C clef

The analysis above shows that *a* is rarely found. It appears in 6 pages only - viz., pp. 66, 98 and 107 from P 416 and all the three pages of CHICAGO. In some instances, *a* was also used in revisions as shown in Fig. 19 below.



Fig. 19: C Clef 'a' used for revision in P 416

These observations about clef-type *a* seem to point to scribal variation during the production of F. If so, type *a* later became customary in Anon.Vr's work. By changing our observing angle, i.e., locational usage of clef type *a*, we also encounter a very interesting aspect of his copying manner. We find that type *a* was never used in the initial system of the piece, but was found only in places where he could not copy it from the exemplar because the format of the text had become different from that of L. One extreme instance is seen in CHICAGO. Thus all the evidence leads us to believe that *a* became Anon.Vr's natural clef shape towards the end of his copying of F.

The remaining clef-types except *h* all share the same calligraphic feature in the final stroke. I found no particular strategy, however, in which Anon. Vr distinguished the hook-form symbols (i.e., *b*, *c*, *d* and *e*) from that of the 'K' form (i.e., *f* and *g*). I may only suggest that he

preferred to use *c* for the initial system of each prelude-fugue pair. There are nine such instances out of thirteen. This may be related to his copying policy in general, in that Anon. Vr initially tried to imitate Bach's handwriting: for this type of clef, *c*, resembles Bach's most closely. Equally interesting is that the most elaborate symbols from both, i.e., *e* and *g*, are used together in only a limited number of movements, concentrated on pp. 94-100 of P 416. This also seems to point to a certain chronological order of events. Kobayashi claims that, toward the end of Bach's life, Anon. Vr used a C clef in jagged-form.³⁴⁹ This clef form is the closest to *g*, the lower part in particular. It is thus possible to see that his clef went through changes towards this direction.

The last type, *h*, was probably not written by Anon. Vr, judging from its remote calligraphic feature. It is only found in PrFg.d (pp. 78-80 of P 416).

LATER MODIFICATION TO THE TEXT

Modifications to the text of F by later hands are mostly minor. Some errors, even eccentric ones such as the repetition of the penultimate bar (Fg.f), remained uncorrected. But revisions are certainly found, though their concentration and type vary greatly. The most common revision target is ornamentation. In Pr.c#, almost every appoggiatura was modified from the simple hook form used by Bach to a more specific notation, i.e., a quaver in reduced size. Also many mordents (~/~) were added in Pr.c#, Fg.f. Another minor modification is the addition of accidentals. Some of these are merely for supplemental purposes (e.g., Fg.C#, b.13:B,4/2), and unrelated to the revision in L. Significant revisions, on the other hand, were caused by comparison with *MSofA*. It ranges from the addition of ornaments and accidentals to the emendation of pitch and note values. In most cases, new additions are calligraphically distinguishable. The ink used for this is dark black, probably made of soot: this can be easily distinguished from the dark brownish ink used previously.

We have so far examined selected aspects of F. It revealed important historical information: Anon.Vr was not commissioned to produce a beautiful fair copy in a bound state, but merely a duplicate of L. It also revealed that the texts are quite unreliable, full of errors. Yet the point has to be emphasised that such errors mostly originated from the scribe's mechanical working method, without following the music; and many of them, especially errors of pitch, can be rectified by a good musician. The study of the later generation MSS, which we are about to discuss, will show that the errors mostly remained unrectified. It may be said even further that the untidy state of F probably made it very difficult for scribes to make good copies from it.

³⁴⁹ Kobayashi (1988), p. 30. The example is given in his article as Abb.9.

Go.S.312

Manfred Gorke Collection, MS.312, of the Bach-Archiv, Leipzig (abbreviated as Go.S.312), is known to be the close descendant of F, dated in the last third of the eighteenth century.³⁵⁰ The watermark is not known. It was copied by Herr Cand. Phil. Klaus Enger.³⁵¹ It consists of 22 loose unbound bifolia (88 pages): missing pieces from the collection are PrFg.E^b,b, Pr.A^b, g#, b^b and B.³⁵² Thus the movements missing from both F and Go.S.312 are PrFg.E^b, b, Pr.A^b and B.

According to Breckoff, the musical text contains numerous slips of the pen. I assume that these might be related to the poor notational practice of F, the presumed exemplar of this MS.³⁵³ According to Franklin, its title designation also varies from L or F in the following pairs:

BWV	Key	Movement headings
870,1	C	Praeludium 1 di J. S. Bach
890,1	B ^b	Praeludium 21 di J. S. Bach
880,1	F	Praelude 11 di J. S. Bach
881	f	Praelude 12 di J. S. Bach - Fuga à 3 ³⁵⁴

It is interesting to note that these deviations of title from L and F directly link to those of P 210 which I shall discuss next.

P 210

MS P 210 in SPK is a copy of the first half of WTC II (nos. 1-12). It begins with the following title page: "*XII. / Prelude con Fuge di / J. S. Bach*". The MS was copied from the outset as a bound MS sewn in gatherings, gathered as IV x 3 + V. The paper size is 34 x 21 cm. The light brown paper is very hard and of good quality. Nothing about the watermark and the scribe is known. The staves were prepared with a single-staff rastrum 8.7 mm high. They are arranged in six uniform piano systems on each page. The ink used for ruling staves is thin, dark brown in colour. By contrast, the ink used for the notation is very thick, dark black ink. There is little evidence of repair, corrections or additions.

Since the copy was made as a bound book, all the movement headings were written without "*di J. S. Bach*". Similarly, the numerical order of WTC II for the fugues is entirely eliminated. The other minor deviation of title designation from L and F is as follows:

³⁵⁰ Unfortunately the reproduction of the MS has not been made available to me despite my repeated requests to the Bach-Archiv.

³⁵¹ Breckoff, p.35. Franklin (1989), p. 246, dates it ca. 1750s, and describes the copyist as a "Leipzig copyist".

³⁵² Breckoff, p.35; Dehnhard (1983), p. xxi.

³⁵³ Dehnhard (1983), xxii, is possibly the first scholar to identify the genealogical link with F.

³⁵⁴ Franklin (1989), p.246.

BWV	Key	Movement Header
870,1	C	Præludium I.
871,1	c	Præludium II.
877,1	d#	Prælude 8
878,1	E	Prælude 9./
880,1	F	Prælude. 11.
881,1	f	Prælude /12.

The musical text is, as in Go.S.312, known to contain numerous errors. Many of them are, however, traceable to F. In addition, many bizarre errors in F are reproduced here.³⁵⁵ Especially noteworthy is the trace of occasional attempts to rectify such errors in F, which often result in variant readings.³⁵⁶ Probably related with such attempts, many time-signatures are different from those in L or F. There are altogether six instances, viz., Pr.C, Fg.C#, Pr.D, Fg.E^b, Fg.E and Fg.e. In all cases, the change is made to either common time (C) or alla breve (c), interchanging between the two. It is possible, however, that such changes could have been influenced by other MSS, such as H2, A, and K4, though no single MS contains such wide variation as P 210.

The most valuable information obtainable from P 210 may result from the presence of PrFg.C and E^b, which were missing from both F and Go.S.312. They are expected to contain readings of a possible intermediate stage of L that was transmitted to F.

THE SOURCE H

Classified under this section are the MSS which can be considered to have stemmed from, or to have some sort of relation with, the inextant copy in C. P. E. Bach's estate, H (for Hamburg). Here we have twelve MSS, listed in Table 19, pp. 110 f. above. It is also possible to include the Hering MS here.³⁵⁷ I categorize them further into two divisions, H1 and H2, with the view to their genealogical origin. Their musical origin is considered to be direct from ante correcturam of L, and earlier than F.

M B/1974: The Source H1

MS M B/1974 in the Universitäts- und Staatsbibliothek in Hamburg consists of two bound volumes containing the complete WTC. The volume for WTC II (abbreviated as H1) contains all

³⁵⁵ See e.g., Pr.c#, b.47:A,3,3; Fg.c#, b.5:S,4; Fg.5, b.50:T,3-4; Pr.d, b.33 (b.27 in ante correcturam version),S,2/2 in Supplement B.

³⁵⁶ See Pr.D, b.25:A,1; b.52:A,3-; Fg.D, b.28:B,1-2 in Supplement B. These, however, may have been literally copied from Go.S.312, which I have not yet examined.

³⁵⁷ This was the product of S. Hering. According to Franklin (1989), p. 278, it bears the following title page: "XXIV / Preludium und Fugen / Durch alle Ton Arten / sowohl mit den kleinen als grossen Terz / gefertigt / von Johann Sebastian Bach / zweiter Theil: Anno 1742". This MS is from the Erich Prieger estate. It was sold at auction at Lempertz, 17 July 1924. This privately owned MS is currently not available for inspection.

twenty-four prelude-fugue pairs.³⁵⁸ The volume was from the outset designed as a bound MS sewn in gatherings (III x 7 + II x 1). Each movement starts from the left top corner, and is accommodated within two pages of an open score: thus page turns are entirely eliminated in the middle of a movement. The size of a page is approx. 30 x 44 cm. It bears the following watermark;

- a) Fleur de Lis with three-notched crown, and below it we find letters "PCB"
- b) letter "B".³⁵⁹

The staves were ruled with a single-staff rastrum 9.9 mm high (-2.2-2.2-2.7-2.3-), arranged in four uniform piano systems per page. Wherever a movement is longer than the prepared space, a narrow additional system is written free-hand in the foot margin.³⁶⁰ Titles for individual movements are written in the top margin as in L and F. The individual titles generally follow the convention of L. Slight but significant variations will be discussed shortly.

One unique feature of the MS is the inclusion of a title page with the date of the work. Book II begins with the following title page:

*Des Wohltemperirten Claviers
Erster Theil*

*bestehend in
Preludien und Fugen
durch
alle
Tone und Semitonien
verfertigt
von
Johann Sebastian Bach
Königlich Pohlnisch und Churfürstl: Sächsischen
Hoff Compositeur, Capellmeister und Directore
Chori Musici in Leipzig.*

Gestewiz.

Anno. 1742.

It may appear that the copyist wrote this title page on the wrong volume, for we find volume one entitled "... Zweyter Theil..." without the date of work and the name of scribe. This error is also

³⁵⁸ Dehnhard (1983), p. xxi, says Pr.a is missing from the MS, as was the case with the microfilm supplied by the Staats- und Universitätsbibliothek, Hamburg. But the MS contains all the movements, including Pr.a. I am particularly grateful to Dr.B. Stockmann of the Staats- und Universitätsbibliothek, Hamburg, who at my request made the complete reproduction available to me.

³⁵⁹ Breckoff, p. 33.

³⁶⁰ The extra system is found in both scribes. In this case, Gestewiz's hand is less tidy than the others'. It is interesting to note that in the volume of WTC I, we find the use of narrower rastrum (7.8 mm (2.0, 1.9, 2.0 and 2.0 mm)) for Fg.a and b.

reproduced in its copy, i.e., P 206, as shall be discussed shortly. It is most probable that the title pages of the two volumes were mixed up by the scribe, Gestewiz. There are several places of evidence to support this hypothesis, if we study the calligraphy and its implication, rastra, ink, etc. If this is not what happened, the date '1742' could be interpreted in one of the following three ways: 1) for WTC I; 2) for WTC II or: 3) for both volumes of WTC.

This MS is made by two copyists: the first is probably Gestewiz, whose name is found in the title page. The name of the other copyist is unknown. Gestewiz, whose calligraphy is elaborate and decorative, was responsible for the title pages of both volumes. For the musical text, he was responsible for a part of WTC II only, viz., the entire PrFg.C and A^b, and minor additions to Pr.d and Fg.e. All the rest, including all the forty-eight movements of WTC I, was copied by the single hand of unknown identity, which I shall call Anon. H1. His calligraphy is neat and less elaborate than that of Gestewiz. From the musical notation in general, both copyists must have been top rated professionals.

It has been considered that H1 is a secondary source copy originating from L, and that it dates from the last third of the eighteenth century.³⁶¹ From the evidence of its past and present location in Hamburg and its resemblance of title, it seems likely that the exemplar belonged to C. P. E. Bach (referred as source H).³⁶² A closer study reveals, however, that the MS demonstrates special qualities of a primary source copy. It is probably the case that, unlike F, H1 and H were extremely carefully copied and checked by good copyists.³⁶³

The musical text of H1 originates from two different sources: Gestewiz's from A, and Anon. H1's from some early stages of L. From the order of entries in Pr.d and Fg.e, it can be considered safely that Anon. H1 started and brought the volumes almost to completion, and that subsequently, for some reason, Gestewiz took over the task by supplementing the missing parts (PrFg.C & A^b), additions (Pr.d & Fg.e) and the title page. The most natural way to interpret this change of hand is this: the exemplar used by Anon. H1 lacked two complete movements, viz., PrFg.C and A^b, despite the clear plan of its scribe to make a two-volume bound MS. These two pairs were, as discussed in the previous Chapter, the latest additions to L. This suggests that the exemplar used by Anon. H1 was the copy which was made when these two pairs in L were yet to be composed. The same historical perspective can be obtained

³⁶¹ Breckoff, p.34; Dehnhard (1983), p. xxii.

³⁶² According to the Nachlass of C. P. E. Bach (1790), the MS bears the following title: "*Des wohl temperirten Claviers zweyter Theil, bestehend in 24 Präludien und 24 Fugen durch alle Töne und Semiton. Eingebunden.*" See BDok III/957. This MS and the Bach autograph quoted by Hilgenfeldt (1850), p. 123, in C. P. E. Bach's estate may well be of the same identity. Hilgenfeldt says this MS gives the date 1740. See also Footnote 385 and Franklin (1989), pp. 273, 277. The origin of H1 was not clearly known, but as far as I can trace, this MS was in the possession of Fr. Chrysander, Bach scholar in Hamburg in the earliest 1900s. Staats- und Universitätsbibliothek Hamburg acquired the MS from his Nachlass in 1956. I am grateful to Dr. Bernhard Stockmann, the director of the music section of the library, for this information.

³⁶³ See Footnotes 362 and 385.

from detailed examination of variant readings. The musical text in the work of Anon. H1 shows that a great many revisions of minor details carried out in almost every leaf of L, which were taken into F, had not been carried out when H was made.³⁶⁴ The quality of text is, however, notably good. Although we occasionally find a few ties in a movement being overlooked, we rarely encounter serious errors such as pitch, note values, rhythm and so on. It is worth noting that most of Bach's appoggiaturas are correctly reproduced, while in MSS descended from the H1 sources, such as P 206, these are transmitted incorrectly.

The movement headings written by Anon. H1 also show a tolerable identity with those in L and F. The individual movement headers of L and F, such as the distinction between *Præludium* and *Prelude*, are generally maintained. There are, however, certain systematic and classifiable differences between the two as follows:

- 1) Movement headings for the first two pairs copied by Anon. H1 (i.e., PrFg.c and C#) were not given, but supplied later by Gestewiz.
- 2) The titles of the twelve fugues which belong to Group 1 of L do not include the work number of WTC.
- 3) The titles of the following preludes vary the presentation of Bach's name:

Præludium /6. without *di. J. S. Bach.*

Præludium /7. *di J. S. Bach.* instead of *di. Joh. Seb. Bach.*

- 4) The titles of the following preludes have variation of style between *Præludium* and *Prelude*:

Præludium /12 instead of *Prelude* /12 *ex F b. + (in F)*

Præludium. 22. *di J. S. Bach.* instead of *Prelude*

Præludium /23. *di J. S. Bach.* instead of *Prelude*

The analysis of such classified variations suggests that these variations stem from Anon. H1, who had the task of changing the nature of the MSS: L was grouped by Bach into three as a collection of loose bifolia, and I speculate that H was also in loose folia since the collection was not complete. H1 did not carry such significance as three groups and was bound in a unified single MS. So the justification for (2) may be to acquire a solid conformity in styles among headings. The reason for (1) may be that he did not initially know how to make the various titles consistent, and started off copying the music without giving the movement headings. The variation in (3) could have also been generated by Anon. H1 in the same chain of policy. Therefore it is dangerous to consider that the variation (4) was originated from Bach.³⁶⁵

³⁶⁴ Full detail is listed in Supplement B, and this evidence is used in the following Chapter to reconstruct the order of revision in L. This fact was considered differently by the previous scholars. Dehnhard (1983), xxii, says H1 contains additions. This is, however, not precise enough and somewhat misleading. The additions found in H1 are only in Gestewiz's part, and this does not affect the state of the exemplar used by Anon. H1. Franklin (1989), p.274, says H1 gives a later text than F or A. His evidence for this statement is invalid as I shall show below.

³⁶⁵ Franklin (1989), p.274, uses these variations in movement headings as evidence for his interpretation of musical maturity, and Bach's replacement of scores for PrFg.f,b^b and B.

The musical interpretation by Anon. H1 suggests the same diplomatic decision. In Pr.E, for example, Anon. H1 omits all sharps between b.29 and b.31 given to f#, interpreting that they were superfluous symbols.³⁶⁶ But the fact was that these were intended by Anna Magdalena in L as double sharps. Likewise the complex ornaments found in L, such as *doppelt-cadence* or *accent und trillo*, are transmitted here as simple trills.

The text by Gestewiz differs in many respects from that of Anon. H1. The movement headings by him closely resemble those of P 430 - "*Prelude* (work order number)" and "*Fuga* [a (voice spec.)]".³⁶⁷ The examination of variant text also suggests its origin in A however difficult it is to verify the exemplar used by Gestewiz. The fashion of movement headers and the error in b.19 of Fg.C suggest that the exemplar was P 430. On the other hand, the use of ornaments and fuller notation of rests points to the link with P 204 made by the Hamburg organist, Schwenke. The variants found in Gestewiz's text also include unique and yet quite authentic enhancements. For example, a tempo marking "*Allegro*" in b.83-84 in Fg.e and a voice split in b.62 in Pr.A^b are found only in Gestewiz's text.³⁶⁸

There are numerous later additions which can be classified into three by a study of the ink. Watery ink of a dark brown shade (Ink1) is generally used for the addition of accidentals. In most cases, this is to modernize the notational convention to our modern convention. Watery ink of a black/grey shade is used for similar purposes, but it occurs more rarely. Pencil is used probably at a much later date. It is used more widely than two later ink-types used for annotations. Detailed study of such later additions suggests various interesting historical facts, e.g., how it was later compared with other MSS, how it was used, which piece was most liable to later annotations, etc.

P 206

MS P 206 is a bound copy of WTC II. The MS measures 22.5 x 35 cm, and consists of 86 pages organized in signature as in H1 (IV x 4 + III x 1), and is the one of two volumes of an entire `48'.³⁶⁹

The MS begins with the following title page:

Since he does not discuss the diplomatic policy of the copyists of H1, I can say here only that the possibility of this being good evidence is greatly diminished.

³⁶⁶ This is less likely to be derived from the copyist who presumably copied the text from L in ca. 1740 under Bach's supervision, since this error is caused by the changing notational convention of the day.

³⁶⁷ He enters voice specification only to the copies for which he was responsible (Fg.C and A^b).

³⁶⁸ See Footnote 364.

³⁶⁹ P 205, which is also a bound MS of 64 pages, contains WTC I.

Des Wohltemperirten Claviers
~~2ter~~
Erster Theil
bestehend
in
Praeludien und Fugen durch alle Tone
und Semitonen verfertigt von
Johann Sebastian Bach,
gewesenen Königlich Pohlnisch und Churfürstl. Sächsischen
Hoff Compositeur, Capellmeister und Directore
Chori Musici in Leipzig. P.G.

W.+xxl

From the initial stroke up to "P.G." the title was written in brownish ink with a badly worn out quill. The calligraphy of this part is identical with the movement headers of the music. Thus it can be considered that the initial, P.G., was the scribe of the MS. At the bottom of the page, we find W.+xxl: this can be considered ^{to have been entered by} one of the earlier possessors of the MS.³⁷⁰ It was probably he who made the correction of the error on "Erster", which has its origin in H1, for we find the identity of ink and pen (thinner ink with light brown shade and a sharp tip of pen) between the correction and W.+xxl.

The MS also bears a name and a date in the left top of the back of top cover, read "G. Poelcau, Dresden 1796". This may mean the completion of copy, but more plausibly the acquisition date and place of the MS by Georg Poelcau (1773-1836), a famous Bach scholar of the day.³⁷¹

The paper bears the watermark, crossed sword in oval shield, ca. 5 cm.³⁷² The rastrum is of a single-staff type measuring 8.5 mm high. The staves were ruled out in five piano systems from pp.3-86 indiscriminately. On three occasions narrow rastra were used in the foot margins, viz., 5.7 mm (Pr.2 and Fg.9), 5.4 mm (Pr.6). Unlike H1, P 206 does not restrict itself to accommodate individual movements in a uniform format. Out of 48 movements, six movements do not start from a fresh page, viz., Pr.c, Fg.d, Pr.E^b, Fg.f#, Pr.G, Fg.G. On the contrary, two unused pages within the sequence of WTC II, i.e., pp.29, 53, suggest that the scribe also ensured to eliminate possible page turns for the two long movements, viz., Pr.e and Fg.g.

³⁷⁰ BG XIV, p. xv.

³⁷¹ According to Vogt (1988), p.21, Poelcau acquired a great portion of Bach MSS when C. P. E. Bach died in 1788. The inscription by Poelcau to MS P 206 suggests, however, no relationship with C. P. E. Bach with this MS.

³⁷² Breckoff, p. 34.

The musical text of P 206 was taken from post correcturam of H1 by Gestewiz. In the case of Pr.d, the scribe copied the revised text of H1 so carelessly that the text of P 206 may appear as if it went through the same revision process.

The handwriting of the scribe is less neat, careful and pleasant than that of H1. His carelessness is reflected most clearly in subtle places, such as the pitch implied by appoggiaturas. The score is unfortunately heavily annotated later by unidentified hands in several layers. Especially noteworthy is the abundant supplement of accidentals. This was done a little too far, as it made the score quite confusing. In some instances, the supplements go to the extent that the cancellation of accidentals can be found at two bars distance or more.

Closer inspection of the MS shows several distinguishable shades of ink for later corrections and annotations. The numerous added accidentals, already mentioned, are usually dark black. Many ties and appoggiaturas were added with thin brownish ink with a sharp pen. With the same ink and pen, we also find the supplement of many overlooked rests which should have been written in the initial copying stage. Later revision of the text in general has its origin in either P 204 or P 237.³⁷³ It may be noteworthy that the both MSS are made ca. 1780 by Hamburg organists, Schwenke and Borsch in Hamburg, suggesting the extent of the active use and modification of the text of WTC II in the region.

P 818

MS P 818 has not previously been studied in relation to WTC II. It is a single sheet containing two pieces on each side. The brownish paper is hand and of medium thick. It was trimmed on the top and bottom sides, giving measurement of 32.2 x 21.3 cm.

In the first page is accommodated Pr.c, entitled "*Prel.*" Kast considers that it was made by Anon.300, a copyist of C. P. E. Bach in the years ca. 1755-1760s.³⁷⁴ The musical text is believed to have stemmed from H from C. P. E. Bach's estate. The unique manner of accidental applications resembles in detail with H1. The piece contains unique pitch errors at b.4:S,3/1 and b.25:S,3/2, of which the former is also found among the MSS of K. The fact that it contains full fingering suggests the practical usage of the MS.

P 589

MS. P 589 is a single bifolium containing PrFg.d only. The thick, light brown paper is in good condition, but the centre-fold is reinforced from the back. The folded sheet measures 35.2 x 21.8 cm, and in the inner fold (pp. 2-3) is contained the prelude, entitled "*Praeludium 6. J: S. Bach.*" Just above the heading, we find the original page number "84". The other side of the leave (pp. 4 and 1) is contained the fugue, entitled "*Fuga*".

³⁷³ In some places, however, the later modification to the text has no traceable origin. See, for example, the revision of bb.40-41 in Pr.A^b in Supplement B.

³⁷⁴ Kast, p. 50.

The staves were prepared with a single-staff rastrum 9.0 mm high, and are arranged uniformly in six piano systems.³⁷⁵ They are written with dark brown ink, possibly the same ink as for notes. In places some symbols such as naturals and stems appear in light brown shade.

The musical text is presented less impressively, judging from general calligraphic neatness and the nature of orthographic error in b.13 of the prelude. The prelude is possibly copied from *medius correcturam* of H1 if we are permitted to distinguish such layers of revisions by Gestewiz. The only outstanding difference from H1's final reading lies in bb.43-49, where P 589 gives *ante correcturam* of H1. The fugue is also copied from H1, for we find the reproduction of H1's unique errors, such as the omission of ties (bb.10, 21, 27). There are further minor corruptions of symbols.

P 209: The Source H2

MS P 209 is a gathering of twenty-four loose bifolia including almost complete WTC II cycle, containing thirty-nine movements out of forty-eight. Missing movements from the MS are PrFg.c#, Pr.f, PrFg.F#,G and b^b. Among the thirty-nine, we find two duplicated prelude-fugue pairs, viz., PrFg.E^b and F, though the latter can be ascertained to have been copied by a different scribe from the other. The last two leaves accommodate the opening and the closing preludes of WTC I. It was perhaps appended to the volume as a second thought.

The sheets for WTC II were arranged in quite a reverse order of WTC II: the cycle begins with PrFg.B, moves towards PrFg.C, but concludes with PrFg.b. The only exception to this rule is PrFg.d which is placed between C# and c. Two duplicate pairs are placed adjacent in its place in the cycle.

Each single movement is contained within the open sheet, and its accompanying movement, wherever applicable, is found in the other side. Thus the idea of the layout is very similar to L. Movement heading, which is always found in the top margin, is of great interest here, as it seems to reflect fairly clear distinction of its genealogical origin. The preparation for an individual music sheet appears to have been carried out with some careful thoughts. According to the length of an individual movement is decided the system format ranging from six to nine, eliminating the awkward situation as to write an extra free-hand system in the margins, or even worse, page turns in the middle of the movement. Thus the philosophy of bifolia format is based on its practical usage.

The MS, now bound, consists of various types of paper: although the watermark of individual paper was not studied, a classifiable paper sizes, which are preserved untrimmed, may be seen as evidence of their physical variations. Such distinction of paper types is probably related closely to the various rastra and the six classifiable scribes. A closer examination of the musical text and the movement heading provide us with further evidence to classify the origin of individual sheets into two large groups with subdivisions.

³⁷⁵ See also Fig.22, p. 166.

The Group I is has its origin entirely in H, or more precisely, in the particular reading of L at the time when H was made. Its unique variants among H, however, often coincide with those of Mus 2405 T7, suggesting the two classifiable subdivision within H.³⁷⁶ This group is discussed in further divided four subdivisions (a, b, c and d) according to the scribe.

Table 23 (a): *Group Ia, P 209: copies by Kirnberger*

page	Mvt	Hand	Ra	Corpus	Movement header (catch word)
3-4	PF.B ^b	Kirnb	8.5	46.6x35.6	Præludium 21. del <u>Sigre</u> J S. Bach. (Fuga) PG Fuga
9-10	PF.g#	Kirnb	8.5	47.1x35.1	Præludium 18. J. S. Bach. (Fuga) PG Fuga
11-12	PF.A ^b	Kirnb	8.3	47.0x35.0	Præludium 17. J S. Bach. PG Fuga a 4.
15-16	PF.f#	Kirnb	8.4	46.5x35.2	Præludium 14 J: S. Bach. PG Fuga.
21-22	PF.F	Kirnb	8.3	45.7x34.2	Præludium 11. del <u>Sigre</u> J. S. Bach. PG Fuga
27-28	PF.d#	Kirnb	8.5	45.6x34.5	Præludium 8 J. S. Bach. (Fuga.) PG Fuga a 4.
33-34	PF.D	Kirnb	8.5	46.0x34.5	Præludium 5. J. S. Bach. (Fuga.) PG Fuga
35-36	PF.C#	Kirnb	8.5	45.1x34.0	Præludium 3. J. S. Bach. (Fuga.) PG Fuga

NB: Ra - Rastrum; Corpus width x height; Movement header: the words in *italics* are later addition

|PG| - Turn the page, and we find:

The Group Ia is the largest portion in the MSS. The scribe is said to be Kirnberger, which is remarked by Georg Poelcau written in the MS as well as many later scholars.³⁷⁷ The unique movement heading is the mixture of Latin and Italian, however lacking a unified style. The detailed examination of the musical text here reveals that it contains a large number of errors consisting mainly of the omission of ties, rests and notes, confusion between sharps and double sharp, and the interchange of trill with mordent.³⁷⁸ Such quality of text is normally caused by severe lack of skills in copyists' part. The fact may also be interpreted otherwise that all the errors originated from inextant intermediate scores between the authority of L or H and P 209. It may be worth noting that the musical text of this group is scarcely related with Kirnberger's personal copy, Am.B.57.³⁷⁹

³⁷⁶ Though I have excluded the inspection of Mus 2405 T7 from the present study, the evidence of its reading is quoted from Bischoff (1884), which I included into Supplement B.

³⁷⁷ G.Poelcau's remark, "*Von Kirnbergers Hand. GP.*" is found in the foot margin of page 47, Pr.b of WTC I. This copy was made by the same hand as the scribe this Group. See also TBSt I, pp.22-23.

³⁷⁸ See Supplement B for detailed listings.

³⁷⁹ One of the rare relation is found in the cadence of Pr.D.

Table 23 (b): *Group Ib, P 209: copies by unknown scribe 1 (Su 1)*

page	Mvt	Hand	Ra	Corpus	Movement header (catch word)
1-2	PF.B	Su1	8.3	47.0x35.0	Præludium 23. J. S. Bach. (Volti) PG [no title]
13-14	PF.g	Su1	8.5	46.6x35.8	Præludium 16. del <u>Sigr</u> Giov: Bas: Bach (Volti) PG unused, (völti) PG [no title]
31-32	PF.E ^b	Su1	8.5	46.4x34.3	Præludium 7 J. S. Bach. PG Fuga.
43-44	PF.b	Su1	8.5	46.8x35.2	Præludium 24. J S Bach PG Fuga.

NB, see abbreviation in Table 23 (a)

The Group Ib contains the copies by unknown scribe 1 (Su 1) only.³⁸⁰ The scores of this group resembles very closely to Group Ia, viz., rastra, paper size, movement header and the origin of the musical text including the number and the types of errors. All these suggest the possibility that the copies in Group Ia and Ib were made at the same time.

Table 23 (c): *Group Ic, P 209: copies by Anon. 302 based on H*

page	Mvt	Hand	Ra	Corpus	Movement header (catch word)
7-8	PF.A	An302	7.9	40.7x33.5	Præludium. Del Sigr. J. S. Bach. (Fuga) PG Fuga.
19-20	PF.F	An302	7.9	40.6x32.8	Præludium 11 Del. Sigr. J. S. Bach. PG Fuga.
25-26	PF.E	An302	7.9	41.0x32.3	Præludium Del Sigr. J. S. Bach. PG Fuga.
41-42	PF.C	An302	7.8	41.1x33.2	Præludium. 1 Del Sigr. Bach. / Fuga

NB, see abbreviation in Table 23 (a)

These copies of Group Ic, consisting of copies by Anon. 302, have the same unique movement headings as Group Ia. It is fascinating to find that some of the headings were amended later to maintain its consistency. The identity in the rastrum and paper size suggest that all the four copies could have been made within a short period of time. A close examination of text reveals, however, that they represent the movements the least faithful and careful copy stemmed from H. Among the most outstanding is the numerous omission of ties and rests. Also noticeable is the unique notation of the trill, which is simply written as "t.". This modification of ornamentation is probably directly linked to the variation, as has already discussed on pp. 107 ff. One important fact is that one of the duplicated pair, PrFg.F, is considered to be stemmed from ante correcturam of the other copy by Kirnberger (pp.21-22) judging from the generation of errors.³⁸¹

³⁸⁰ The reference of scribe, Su 1, is Kast's.

³⁸¹ Both copies lacks certain symbols at so unique place and in so large number that are little room to doubt their relations. The examination, of which the result is listed in Supplement B, reveals the fact that the copy by Anon. 302 has much greater number of errors. From this reason, I cannot agree with Breckoff (p.39), who considers their genealogical relation the other way around.

It is said that Anon. 302 is one of C.P.E. Bach's copyist.³⁸² This suggests that Kirnberger's copy, which contained many errors, went to C. P. E. Bach's circle in Hamburg for some reason. Strangely, the later correction was only made to Kirnberger's text, however incomplete. Considering many errors contained in these copies, the purpose of their use was perhaps not a very important one.

Table 23 (d): *Group Id, P 209: copies by unknown scribe 2,3,4 and 5 (Su 1)*

page	Mvt	Hand	Ra	Corpus	Movement header (catch word)
5-6	PF.a	Su2	8.3	43.6x33.8	Præludium PG Fuga.
17	Fg.f	AnK1c	7.1	43.7x35.4	Fuga. 12 J. S. Bach.
23-24	PF.e	Su4	7.9	42.8x34.8	Præludium PG Fuga.
39-40	PF.c	Su5	8.8	43.6x35.2	Præludium & Fuga 2. di J. S. Bach. (Volti Fuga.) PG Fuga 2.

NB. see abbreviation in Table 23 (a)

Group Id is a collection of copies by various scribe in single occurrence. They, however, are similar in paper width, and movement headers. PrFg.a is not based on H, but K, with the same later modification to the text as in Am.B.57. Fg.f is from H.³⁸³ PrFg.e is stemmed from H with many corruptions. And finally PrFg.c is probably from post correcturam of H, for the extent of variation and errors are very similar among them. The interchange between trill and mordent is also found in PrFg.a and Pr.e.

Table 23 (e): *Group II, P 209: copies by Anon. 302 based on K.*

page	Mvt	Hand	R	Corpus	Movement header (catch word)
29-30	PF.E ^b	An302	9.3	41.3x35.4	Preludio. dell Sigl: Sebastian Bach. (Seque Fuga) PG Fuga. / a. 4. (Fine)
37-38	PF.d	An302	9.0	45.3x35.5	Preludio 6 dell Sigl: Sebastian Bach. PG Fuga. / a. 3. (Fine)

NB. see abbreviation in Table 23 (a)

Despite the same identity of scribe, Anon. 302, with Group Ia, Group II is marked with its unique movement header in Italian, rastra and paper size. The musical text is based on K. Pr.E^b is fairly closely related to Am.B.57. Fg.E^b is closest to Am.B.49 or MU MS 161. Thus the pair, PrFg.E^b, is not related to the other copy made by unknown scribe 1 (see Table 23 (b)). Pr.d is either from ante correcturam of Am.B.57 or from post correcturam of L. And finally Fg.d is the

³⁸² Breckoff, p.39.

³⁸³ The scribe Anon.K1c, whose hand also found in Am.B.49 and P 633, is described by Kast as Su3.

closest to P 211, the copy of Am.B.57. The transformation of ornamentation is also found here. In Pr.d, mordent is changed to trill. In Fg.d and Pr.E^b, trills were notated as "t".

Though Breckoff considers this MS as Kirnberger's corrected exemplar for his personal complete copy of WTC II, Am.B.57, specially obtained from C. P. E. Bach for this purpose, I find no conclusive evidence to link between these two MSS except Group II and PrFg.a of Group Id.³⁸⁴ If Breckoff's hypothesis is correct, we would have to conclude that Kirnberger hardly referred the text of P 209 for the compilation of his part. It is also difficult to consider P 209 within the genealogical branch of H, since P 209 contains many further variants and errors. On the other hand, it is possible to link between the Kirnberger's copy in P 209 and H with the unique historical position, ca. 1740, where lays two possible interpretations that smartly explain the question: 1) H and P 209 were copied in the same period from the same state of L; and 2) Kirnberger, whose musical knowledge was less than that of in his late years, did not copy from L but from H for whatever reasons when he had studied under Bach.³⁸⁵ These interpretations are also supported by my genealogical order of copying from Kirnberger to Anon. 302. These hypotheses, however, lack vital evidence: we know very little about Kirnberger's study on WTC II under Bach; and we know almost nothing about the paper of P 209 where it was made.³⁸⁶ The foremost task in the future study is to inspect Mus 2405 T7 to establish genealogical link between them.

P 631

MS P 631 is a bifolium, containing Pr.f# only. The brownish paper is hard. It was trimmed on all the sides, and measures 35.5 x 25 cm. The sheet is restored with gauzing on the sides as well as centre-fold from unused side. The paper suffers badly from ink acid also. In the inner side of the bifolium (pp. 2-3) is found the prelude, entitled "*Præludium 14. J. S. Bach*". The staves were drawn with a single-staff rastrum 9.4 mm high, and were arranged in seven piano systems on all these unused pages, and in eight piano systems on unused pages of the other side of the leaf. This manner of layout suggests that the leaf was originally designed to accommodate the fugue as well. The ink used for staves appears in light brown colour, while that for notes is very dark brown, almost black. The musical text is stemmed from ante correcturam of P 209, Group Ia. It contain several further errors that are not shared with P 209, let alone P 632.

³⁸⁴ Breckoff, pp. 39-40.

³⁸⁵ The later interpretation may be related to the state of H at the time. From Hilgenfeldt, pp.123-124, we learn that H (see Footnote 362) contained many amendments in black ink as well as red ink. Thus if Kirnberger made copy from H in those years in Leipzig, he was most likely copied from ante correcturam, and this shall explain the reason why P 209 contains so many errors.

³⁸⁶ Breckoff, p. 40, finds only that the paper is not among the Leipzig paper.

P 632

MS P 632 is also a single bifolium, containing PrFg.f#. The brownish paper is of medium thickness, and probably trimmed at top and bottom edges, which gives the measurement of 35.5 x 22.5 cm. Though the centre-fold is repaired, paper is still in good, flexible quality. It suffers, however, from ink acid quite badly. The staves were ruled with a single-staff rastrum 8.1 mm high, and were arranged in eight piano systems in all the four pages. They are drawn with watery dark brown ink, giving good contrast with thick black or very dark brown ink for notes. In the outer side of the bifolium (pp. 4 and 1) is found the prelude, entitled "*Pra'ludium di J. S. Bach*". On the other side of the leaf, pp. 2-3, is placed its accompanying fugue, entitled "*Fuga*". Both movements are copied from ante correcturam of P 209, Group Ia. The Pr.f# contains two further errors. These are shared neither in P 209 nor in P 631.

P 588

MS P 588 is a single bifolium containing PrFg.D only. The light brownish coloured paper is of a medium thick, and its sides as well as the centre-fold is repaired with gauzing. The sheet is untrimmed, and measures 34.4 x 21 cm. In the inner side (pp. 2-3) is contained the prelude entitled "*Præludium. 5.*". After the catch word "Seg Fuga" at the right bottom corner, we find the fugue, entitled "*Fuga*", in the other side of the open sheet (pp. 4 and 1). The fugue has no other instruction. The sheet is given a page number, "111" on the left top corner of the prelude.

The staves were prepared with a single-staff rastrum 8.5 mm high. They were written less carefully, and were arranged in eight and nine piano systems for the prelude and the fugue respectively. They were drawn with thin dark brown ink, giving good contrast with very dark brown ink for notes. The scribe is unknown. But its calligraphic feature we find an identical hand in P 584 which is discussed next.

The musical origin is P 209, Group Ia. Beside over ten its own errors, P 588 inherited about twenty unique errors/variants from P 209 in two movements. In the fugue, we find the most clear evidence for their genealogical relation, such as the false interpretation of rests (b.37) and of voice textures (bb.12 and 15). At some late stage, pedal instruction was added to the fugue in red ink. It appears twice, bb.6 and 18, both as "*Pedal*".

P 584

MS P 584 is a single bifolium containing PrFg.C. The brownish paper is of a fairly thick, flexible type, and its sides are reinforced with gauze. The centre fold is also reinforced from the back with paper. The sheet is untrimmed (sides are crumpled), and measures 35.0 x 21.5 cm. In the outer side (pp. 4 and 1) is contained the prelude, entitled "*Præludium. 1.*". The accompanying fugue, entitled "*Fuga*", is found in the other side of open sheet (pp. 2-3). No other instruction is given except that the original page number "112" written in left top corner of the prelude. This suggests that the leaf was originally stored next to P 588 discussed above.

The staves were probably prepared with the same rastrum and hand as P 588. They are, however, arranged in seven uniform piano systems per page.

The musical origin is closely related with P 209, Group Ic. In contrast to P 588, the relation with P 209 must remain vague, for P 584 lacks positive quality as being the second generation of P 209. Beside matching corruptions, viz., eighteen ties and six rests, we find almost equal number of unique corruptions in either side. In one instance, b.15:A,2 of the prelude, we may even doubt that the relation is other way around.³⁸⁷ As in P 588, red ink is also used for later annotation. This time, it was found in prelude for the addition of tie (b.19:S,1/2-) and of a flat (b.24:A,1/2).

P 593

MS P 593 is also a single bifolium. It contains PrFg.A. The light brown paper is flexible, and apart from the reinforcement to the back of the centre-fold, the MS is in good condition. The sheet is untrimmed, and measures 34.8 x 21.4 cm. In the inner side (pp. 2-3) is found the prelude, entitled "*Praeludium 19. d. Sigl. J. S. Bach.*". The accompanying fugue, entitled "*Fuga*", is found on the other side of the open sheet (pp. 4 and 1). No other instruction is given except the original page number "89," written in left top corner of the prelude (p.2). The staves were ruled with a single-staff rastrum 9.5 mm high, drawn neatly by free-hand, and were arranged in six piano systems in all the four pages. The ink used for staves is distinguished by thin, dark brown colour from that for notes in very dark brown. The scribe is unknown, whom I refer to as Anon. K3. The same hand is also found in P 585 and P 586 of Group K1.

The musical text is related very closely to P 209, Group Ic, and shares the significant details in variant readings.³⁸⁸ There are, however, certain number of readings suggesting their distance in their relation.³⁸⁹ These are minor, and all of these can be caused by accident, and equally they can be re-supplied without much deeper consideration, for they are the part of thematic characteristics of the piece. One interesting finding is that the trills are written correctly as "~~~", which is written differently in P 209 as "l".

³⁸⁷ The controversial note, quaver *b^b* plus quaver rest in P 430, and other MSS is given in P 584 as quaver only, while P 209 gives it crotchet. This is the question of probability that the error of generation is less likely from P 209 to P 584 in such a case.

³⁸⁸ The errors that are shared between them are: missing ties (Pr.A: b.5:A,2-; b.32:B,1-; Fg.A: b.13:B,3-) missing rests (Fg.A: bb.1-2, A), the error of rest-value (Pr.A: b.30:S,4) and variant rhythm (Fg.A: b.20, B.2).

³⁸⁹ The errors unique to P 209 are three missing ties only, viz., b.7:A,2-; b.12:S,1- and b.16:A,1-. The errors unique to P 593 is equal in number, but spread out in two movements: viz., missing ties (Pr.A: b.15,B,3-; b.28:A,1-) and missing rest (Fg.A: b.16:A,3-4).

P 634

MS P 634 is also a single bifolium, containing PrFg.a. The brownish paper is hard and of medium thickness. It is trimmed on the top and bottom edges, measures 35.6 x 24 cm. The sheet once suffered from moisture damage on the top down to the centre fold, and subsequently, quite extensive restoration was carried out: the repair is concentrated on gauzing on the sides and reinforcing the centre fold. The staves were prepared with a single-staff rastrum 9.4 mm high, and were arranged in eight uniform piano systems per page. They are drawn with watery black ink, giving reasonable contrast with thick, black ink for the notes. In the outer side of bifolium is contained the prelude, entitled "*Præludium*". On the other side is the fugue, entitled "*Fuga*". The scribe is unknown, but his calligraphy, especially large crotchet rest, resembles to that of its presumed exemplar, Su1 of P 209, Group Id.³⁹⁰ The only variant reading it did not inherit from P 209 is the sharp in b.3:S,4/3 of the prelude, which was later added to the text of P 209.

OTHER MINOR GROUPS FROM L

The following are the MSS which do not form themselves in major branch stemmed from L. It does not mean that they are unimportant. In fact, the MSS numbered P 500s' of this group can be seriously considered to have stemmed directly from L. Moreover, this is the only possible extant MSS, which might have provided Kirnberger with the reading of post correcturam of L so as to compile WTC II, Am.B.57.

P 587 and P 594

MSS P 587 and P 594 are both single bifolium each containing one prelude-fugue pair only. Both MSS are made by the same unknown scribe. It seems that he used L as the model. The paper appears also to be of the same type: thick, brownish paper is in good order, and no trace of ink acid damage is found. The examination of its watermark should be included in the future study. The size of paper varies due to the fact each sheet was trimmed separately.

P 587 contains PrFg.c#. The paper is probably trimmed on three sides, and measures 35.6 x 21.8 cm. Only repair is the reinforcement to the centre-fold from the back. In the inner side of the bifolium is found the prelude, entitled "*Prelude %4 di J. S. Bach.*" Above this heading is found original page number "88." Following the catch word "*Volti.*" at the end of the movement, we are led to the other side of bifolium. And here is found the fugue, entitled "*Fuga.*" The movement terminate with "*Fine.*". The staves were ruled with a single-staff rastrum 8.8 mm. high. They were neatly drawn by free-hand, and were arranged in eight piano systems on all the pages.

³⁹⁰ Breckoff, p. 54, relates the text of P 634 with that of P 594. I found no firm evidence to link these two however.

The music is based on inextant copy of L, judging from the generation of errors. Text critic study shows that neither the unique errors of F nor that of K1 are found here.³⁹¹ Yet the most significant is the fact that the textual detail is closest to F. This suggests that the text of P 587 reflects the text of L faithfully, without errors. One noteworthy variant is the form of ornamentation the scribe confused in the earlier part of the prelude: in bb.1-18, all the mordent was consistently converted to "tr". Later revision, which is mainly carried out on appoggiaturas, is done with dark black ink with slight grey element. The modification is a fairly thorough one: I found without special equipment almost twenty instances. In most cases, the later hand was to restore the form of notation from small downstemmed quavers to hooks.

P 594 contains PrFg.a. The paper is apparently trimmed much, and cut the most off original page number written on the left top corner of the prelude side. As a result, the size of paper is slightly shorter than that of P 587, measures 35.1 x 21.9. In the outer side of the bifolium (pp. 4 and 1) is found the prelude, entitled "*Præludium %20 di J. S. Bach.*". The fugue is on the inner side of the bifolium (pp. 2-3), which is entitled "*Fuga 20*". The staves were prepared with the same rastrum as P 587, but arranged in six piano systems instead of eight. This suggests that the scribe was aware of the necessity to vary page format according to the length of individual movements.

The musical text is considered to have stemmed directly from L despite its unique errors and variants. The difference from L can be attributed to the scribe in two-fold factors: 1) copying errors at the change of system, and 2) attempt to rectify errors in L. The first factor was probably responsible for the error of the fugue, b.28,B,4. The second was for the rest, including the change of note-value (Pr.a, b.16:B,3), fuller supplement of trills (Fg.a, b.12:A,2) and the change of rhythmic notation (Fg.a, b.28:B,1). Other interesting things to find are the later modification to the text, not only supplementing the reading, but also rectifying the errors made by the scribe at his initial attempt. These are: addition of natural (Pr.a, b.19:S,4/2) and the correction of rhythm (Fg.a, b.28,b.1). It is significant that the same process of these amendments is found in P 211. This strongly suggests that they are together possessed by the same person. From a different angle, we may also find certain credibility that the ante correcturam of P 594 served the model for K1, and together with them revision was made to the both.

³⁹¹ The errors of F (P 416) are: Pr.c# - missing rest, missing ties, missing note, the error of note-value (b.53 and 54), the error of voice texture (b.61); Fg.c# - missing tie, the error of note-value and accidentals. The errors of K1 (Am.B.57) are: Pr.c# - missing ties (b.8, b.48:S,3-; b.60:B,2-) and the error of note-value.

P 590 and P 592

MSS P 590 and P 592 were predictably made by the same scribe, whom I refer to as Anon. K2, who also made P 591.³⁹² Each of these three MSS consist of a single bifolium. Also the same is the paper type: they are all thick and hard in brown colour. In them we find neither repair nor reinforcement. They are obviously preserved in excellent condition. The sheets are probably trimmed, which measure 35.4 x 21.8 cm. The staves were prepared with a single-staff rastrum 8.7 mm high, and were arranged in seven plano systems. They were drawn with thin dark brown ink, giving sharp contrast with the black ink for notes.

MS P 590 contains PrFg.d. In the outer leaf is contained the prelude, which is entitled "*Præludium. 6. di J. S. Bach*". In the other side of the leaf is contained the fugue, which is entitled "*Fuga. 6.*". It is worth noting that these headings are identical with L. At the end of the fugue, we find "*Il Fine*". This is found in all leaves in this hypothetical group of MSS (P 590, P 591 and P 592) by the same scribe.

MS P 592 contains PrFg.G. Two movements are respectively entitled "*Præludium 15. di J. S. Bach.*" and "*Fuga 15*", identical with L. It has the same layout, format and pagination as those of P 590.

The musical text of PrFg.d may have been from post correcturam of L, the score initially made by Anna Magdalena, and later revised by Bach.³⁹³ The quality of text represented in PrFg.d is good. There are only two variants/errors in the prelude. The first, b.29:B,2/3, is ante correcturam of L. The second is the final chord modified to a minor chord ending. This could have been unintended omission of an accidental, a sharp on *f*. In the both sides of the leaf we find two layers of addition of symbols - mainly accidentals. These are aimed partly to preserve old notational conventions as used in L, and partly to supplement the extra accidentals to expel ambiguity from the text. Such addition can be classified by the shade of ink used between two occasions: 1) thin pen with thinner brown ink; 2) fat pen with dark greyish ink.

The clearest genealogical relation is shown in Pr.G in the notation of the soprano, b.4, and in the false interpretation of repeat marking, which is reproduced as a *cadence* on S,2/1, b.20. In Fg.G, on the other hand, we can confirm several unique attempt by the copyist to rectify Anna Magdalena's errors on note (rest) values.³⁹⁴

³⁹² Though Breckoff put these three MSS as a single group, I separated them in traditions B and K on the evidence of text critic study. See also Footnote 419.

³⁹³ It is interesting to note that in L these movements were copied by Anna Magdalena. This fact raises a probability that PrFg.f in L (which is found in P 591) was also copied by her.

³⁹⁴ There are altogether three instances: b.15, soprano; b.39, alto; and b.59, alto. See Supplement B for details.

No.543

MS No.543 of Riemenschneider Bach Institute, Baldwin Wallace College, Ohio, contains only the twenty-four fugues of WTC II.³⁹⁵ The bound MSS consists of 110 pages (55 leaves) organized in five gatherings (VII + V + VII + V + III½). White, medium thick paper measures 22 x 30 cm. Watermark of the paper consists of three parallel, crescent-shaped "C's" underneath which are the letters, "REAL." Jan La Rue identified this mark as that of an Italian paper maker.³⁹⁶ The volume was originally part of a ten-volume set of copies of keyboard works by "Sebastian Bach," scribed by the copyist known as "Kp.I" for the Prefect of the Imperial Library, Baron Gottfried van Swieten (1734-1803).³⁹⁷ Warren Kirkendale considers that it has a link with the fugue arranged for string quartet by Mozart.³⁹⁸ The volume has no title page. Each movement heading is written generally in the following fashion: "[WTC work order number in Latin]. à [no. of voice] tro. / Fuga / In [key in German] [major/minor in Italian]" - e.g., Fg.c as "*A² II à 4tro. / Fuga / In C Minore.*"

The origin of its musical text is extremely difficult to ascertain. Let us look at from three different angles. Firstly, from the broadest observation of its genealogical origin, we find that all the movements except Fg.C and Fg.A^b are related somehow to the reading of L. The two exceptions are related with the new reading in A. From this unique arrangement we may have to consider the possibility of the relation with H. What I say as relation with H here should not convey the implication to the extent that they are genealogically linked. Such link appears to be quite irrelevant, for the text in No.543 can be to some extent ascertained to have stemmed from much earlier versions, either the earliest state of text in L or its exemplar. What I precisely mean in relation is the selection of movement in No.543 itself, which might have been influenced by the acknowledged existence of H or vice versa.

Secondly, from the observation of the quality of text, we would find that the text is poorly represented indeed. There we find numerous omissions of rests, ties and corrupted notes in every movement. There are also many unique variant readings in melody, rhythm and voice texture. In one sense, we may find that they could have been made deliberately. What I see as the most curious and outstanding is the variant readings in voice texture. They tend to occur where the voice texture is reduced. From such observation, one may have limited choice to interpret the event: it could be the result of the attempt either to enrich the piece, or to restore

³⁹⁵ This was referred as Ma M5 by Breckoff, p.41. This MS is reproduced as a facsimile edition contained in Book III-IV of Riemenschneider Bach Facsimiles, Volume 1. (1985). I have only examined the source from the facsimile.

³⁹⁶ Jan La Rue, "Watermarks and Musicology" *Acta Musicologica* XXXIII (1961), pp.138-139.

³⁹⁷ *ibid.*, pp.35-37.

³⁹⁸ Warren Kirkendale, "More Slow Introduction by Mozart to Fugues of J. S. Bach?" *JAMSoc* XVIII, 1 (1964), pp.45-64. See also Gerhard Herz "Bach-Quellen in Amerika" in *Bachiana et alia musicologica* (1983), p.105.

the reading based on the assumption that his exemplar was corrupted. It seems significant that the variant readings in melody and rhythm can also be caused by the same motivation.

Thirdly, from the observation of its genealogical relation in its variant readings, we would find an interesting fact is that there are certain agreeable kinship with the readings of K4 MSS. It is truly difficult to have to make a conclusion within the extent of this study, but I would consider the origin of its text in complex, chaotic state of poorly written exemplar, which stemmed from the earliest Bach's score and also had an indirect link to K4 MSS. Many other variant readings and the unique integration of new version in Fg.C and Fg.A^b, I tend to ascribe to the result of scribe's restoring, eclectic editorial work. What appears to be an unique text in No.543 is nonetheless invaluable. Better understanding of its background of MS making would surely enable us to unveil an entirely new perspective into Bach's compiling and revising activities of WTC II.

TRADITION K (KIRNBERGER'S COPY)

In the Kimberger tradition, I am going to discuss the MSS of which the origin of their texts is related to Am.B.57, the complete copy of WTC II compiled by J. P. Kimberger. In this section, the following MSS are dealt with:

Table 24: MSS belonging to Tradition K

Abbr	MS	Origin of text	Scribe	Date	
†	K1	Am.B.57	K-ex	Anon. K1	ca. 1760
		P 211	a.c., Am.B.57	Anon. K1	ca. 1760
		Am.B.49	p.c., Am.B.57	Anon. K1c	ca. 1770
		P 626	P 211	Anon. 402	2nd half 18c
		P 597 2 an	p.c., Am.B.57	Fr. C.	2nd half 18c
		P 591	p.c., Am.B.57	Anon. K2	2nd half 18c
		P 585	a.c. P 430 / S	Anon. K3	2nd half 18c
		P 586	from P 209	Anon. K3	2nd half 18c
		Am.B.55	a.c., Am.B.57	Anon. K1	ca. 1760
		Am.B.79	Am.B.57	Anon. K1	ca. 1760
		P 633	p.c., Am.B.57	Anon. K1c	ca 1770?
	K2	P 814	K-ex	unknown	2nd half 18c
		P 1182	K-ex	unknown	2nd half 18c
		P 513	P 1182?	Moehring?	2nd half 18c
MU MS 161		early K-ex	Fitzwilliam	1772	
P 580		early K-ex	unknown	2nd half 18c	
K3	P 582	K-ex / a.c.K1	Anon. K4	unknown	
	30 386	early K-ex	Su IV	last 3rd 18c	
	P 414	from 30 386?	Su IV?	ca.1800	
K4	P 608	corrected K-ex	unknown	unknown	
	P 237	modified K-ex	J.S.Borsch	ca. 1780	
	RM 21 a9	as P 237	unknown	ca. 1780	
	LM 4837	as P 237	unknown	2nd half 18c	
	30332	as P 237	Hossbach	1778	
excluded from the study					
	P 298		unknown	1st half 19c	

key: K-ex - exemplar compiled under Kimberger for Am.B.57
a.c. - ante correcturam
p.c. - post correcturam

As shown in the Table 24 above, I classified the MSS into four groups, viz., K1, K2, K3 and K4, from the characteristics of their genealogical relation with Am.B.57.

GROUP K1

Group K1 is Am.B.57 itself and the MSS which are considered to have^{been} copied directly from Am.B.57.

† N10483, AmB49?, unknown, unknown

Am.B.57

MS Am.B.57 (Nr.57 of Amalienbibliothek) has been known as "Kirnberger's Handexemplar" for some time, and regarded as one of the most important first source MSS.³⁹⁹ It consists of two bound volume MSS containing complete WTC I and II in each volume. Book II (Am.B.57,2) is in the corpus of 36.1 x 23 cm, and on its cover, the volume is labelled with Kirnberger's handwriting, "*24 Klavier Präludia und Fugen / Zweiter Theil / von / Joh: Seb. Bach*".⁴⁰⁰ The watermark of this light brownish paper has not been studied, but Breckoff considers that the MS dates in the period of 1760 - 1780 from his philological interpretation of the MS. The volume consists of 98 pages, and is originally paginated.⁴⁰¹ The title page is found in page 1, and at the top of the page, we find the volume title by Kirnberger in a similar fashion:

*24 Praludia und Fugen
von J S. Bach
zweyter Theil.*

*Kirnberger.*⁴⁰²

The music was not in the hand of Kirnberger, however, but that of his copyist, who is referred to by Plath as Anon. 2, whose handwriting is also found in many other MSS of tradition K1.⁴⁰³ I shall refer to him in this study as Anon. K1. He uses Italian for titles and instructions, which becomes the prevailing feature of K tradition. The movement headings are given as "*Preludio* [work order]" and "*Fuga à* [number of voice]".⁴⁰⁴ They are not written in the top margin, but on the left most part of the initial system, immediately followed by the music

³⁹⁹ BG XIV, p. xiv. Kroll describes this as Nr.2 in his listing of MSS.

⁴⁰⁰ Breckoff, p.46.

⁴⁰¹ Page number is found in the top margin, close to the centre-fold. The numbering is, however, confusing: page 1, where Pr.C begins, is given to page 2 of our convention. In the following discussion, I shall maintain the reference of page number to our convention, and not the actually written number.

⁴⁰² There is a strange abbreviation "r. s", or "a. s" in the middle of the page. I have been so far unsuccessful in decoding its meaning.

⁴⁰³ From Breckoff, p.46. Plath's publication is not cited by Breckoff. I assume this is NBA KB V/5, p. 23, where Am.B.478 is discussed. Plath does not say the scribe as Anon. 2, however.

⁴⁰⁴ Work order number of WTC II was most likely added at a later stage. There is two reasons to believe this. For one, in almost every page, we find a work order number in the top left corner of the open page written in pencil. This is totally unnecessary if the work order number is included in the heading from the outset. For another, the work order number in the header was not written in line with "Preludio", but below it. This reduces the credibility that the work number was initially written as a part of the heading. These observations may be applied to interpret the heading of Pr.F#, where the work number is not given in the heading, but we find "13" in pencil on the left top corner of the page.

itself.⁴⁰⁵ Also at the page turns within a movement, "*Volte Subito*." is given (pp. 19, 63, 73 and 83). At the very end of the cycle, "*Fine*" is found (p. 97). Kirnberger's handwriting is found in added annotations, located above the headings of every fugue in red ink as "*Donisch*", "*Aeolisch*", etc. They signify the character of the fugue subject with reference to the church mode.⁴⁰⁶

The staves were ruled with a single-staff rastrum 9.1 (-2.5-2.2-2.2-2.2-) mm high. They appear in dark brown shade, and are clearly distinguished from that for notes which are in black. The music score was prepared with some thought. It can be seen that the copyist tried to accommodate a single movement in the open pages so as to avoid page turns within a movement. Main tactics for this was to plan the number of systems in a page according to the length of a movement. There are four variations, ranging from six to nine.⁴⁰⁷ Failing to begin from a fresh page are the four movements, Fg.D, Fg.g, Pr.A and Fg.B^b. Except Fg.g, they are the result of having been placed after extremely long movements in WTC II cycle that inevitably flew over to the next open page (viz., Pr.D, Fg.g# and Pr.B^b). Fg.g was, on the contrary, affected by extremely short movement in the preceding order, i.e., Pr.g, in the cycle.

The musical text was based on the intermediate MSS (inextant) in Kirnberger's possession. And it is possible that this source had already served as an exemplar for Group K2. The general survey of the tradition K serves to show that each movement from this MS contained many minor errors, ranging from a few omission of ties, corrupted symbols, notes or rests in incorrect note value or pitch in 2nd or 3rd, misinterpreted rhythm and accidentals, and though rarely, the misinterpreted voice texture. This resulted in generating identical errors to various groups within K, even some did not stem from Am.B.57.

The origin of this model could have been taken and assembled from various sources, and that in some pieces Kirnberger could have afforded to chose a version out of several. Remembering that Kirnberger was one of Bach's students in the years 1739-1741, the time WTC II was in the process of compilation, he could have had opportunities to make copies straight from Bach's composing scores. From this background, are originated PrFg.c and PrFg.f, which currently represents the earliest version of the movement.⁴⁰⁸ And there will be little doubt that he had made some copies from L also. The fact that a great majority of

⁴⁰⁵ Exception to this rule is Fg.e, and the header is found in top margin. It was due to the extreme length of the movement that this space for the header has to be used by the music.

⁴⁰⁶ Breckoff, p.46. See also Spitta III, p. 133. The character is explained by Spitta as "a certain form of modulation in the style of the ecclesiastical modes". The list of Kirnberger's definitions is to be found in Supplement B under "sub-title".

⁴⁰⁷ The statistics of such distinctions is as follows: six system format = 5, seven = 24, eight = 13, and nine = 6. Note that pp.1 and 98 is not ruled.

⁴⁰⁸ We do not count the movement represented in the early models, e.g., P 595. The version of PrFg.c (ante correcturam of Am.B.57) is identical with that in tradition A. The version of PrFg.f is only found in K and P 1076.

movements in K were indeed related closely to L does not mean however that the model of K were copied from it directly. The closer philological study suggest that most movements in K stemmed from post correcturam of L, which is less likely for Kirnberger to access during his period of study in Leipzig. Also important to remember is that only extant copies in his hand are P 209, which gives ante correcturam of L. One of the possible answers to this query seems to be found in the relation with other group of MSS - F. It is certainly strange enough that the text of PrFg.C, and less positively, PrFg.d# and PrFg.A^b are closest to F, for in these movement some unique errors are reproduced, very curious indeed. It seems significant that the movements which Kirnberger has to hunt for were among the latest additions to Bach's compilation of WTC II. These were the movements which Kirnberger did not possess for some reasons - possibly because he gathered his text from P 209 or other related MSS, or because he left Leipzig before these movements became available to him. It may, however, seem somewhat strange to notice the fact that in his compilation Kirnberger took the reading of PrFg.C and A^b from F, the simpler version, despite the strong probability that Kirnberger possessed P 209 at the time, which could have included the new version of PrFg.C and A^b as is now. This question cannot be answered at least until we understand P 209 better.

The primary belief to Kirnberger's compilation would be summarised as this: he came to possess an almost complete set of MSS which was based on post correcturam of L, which lacked a few movements, and looked for them in F. The MSS of this unique feature are not known to have existed, however. On the other hand, we only know part of the cycle in many bifolia stemmed directly from post correcturam of L, such as P 587, P 590, P 592 and P 594. The textual link between these and K1 is, however, not well established. Another possible way to make such MSS for such a good musician as Kirnberger himself is to pursue the editorial work based on F and H or P 209, which are currently the only certain sources. As the link with F and H is the only known and credible sources, the model of K can be made by rectifying numerous errors of F against the reading of H. This type of editorial activity is, in fact, confirmed in Fg.e. This movement in Am.B.57 is an extended version (86 bars), but retains all the unique errors of his shorter version (71 bars) given in MU MS 161. This suggest that Kirnberger originally had a shorter version with several unique errors, and only supplemented the extended part of the new copy which was obtained later. This type of eclectic editorial work can therefore be seen as a prevailing feature of this MS. Much of such editorial work by Kirnberger is, however, found after the MS was once completed. For example, the mixture of tradition L and A (earlier version) for Fg.a was probably first carried out on Am.B.57. The first layer of Kirnberger's reading was the version of L, but he later modified the final cadence from three-voiced major cadence *a' c#' AA* to five-voiced minor *a' e' c' A AA*.⁴⁰⁹ The result of such work on the MS necessitated some sort of personal reference to distinguish his from the Bach's authentic readings. This, I speculate, is

⁴⁰⁹ In the earlier version, represented in P 402 and ante correcturam P 430, the final cadence is 4-voiced minor chord *a' e' c' A*. In P 430, it was probably Grasnich who added the fifth note to the chord when he was editing P 430 with Am.B.57. See p.178 below.

given in "X" or "+" in red ink, placed before the movement headings of Fg.c, Fg.D, Fg.d, Fg.E, Pr.e, Pr.f, Pr.G, Pr.a, Fg.a and Fg.b^b.⁴¹⁰ In most cases, later added or modified symbols were written in lighter coloured brownish ink.

Another type of reference mark, "X", is found in the musical text in dark black ink with thin pen tip. This is considered to have been written by F. A. Grasnich, who scrutinized the text of Am.B.57 against P 430.⁴¹¹ In Fg.E^b only, the "X" mark is written in green ink (bb. 41 and 43). This was probably given when the MS was compared with No.543 or its related MS. Another unique finding is the number "8", "10" and "12" placed at the entry of the counter subject in Fg.g and Fg.B in red ink.⁴¹²

Verily Am.B.57 is one of the most important MSS in our source study of WTC II. However may it seem to contain certain amount of non-original ideas of Bach's, we should not underestimate its factual value. The essence of its value lies in Kimberger's understandings, preference and inspired improvement to the work seen in the compilation of his part. As a cherished Bach student, Kimberger's such pursuit can be affected by or originated from certain unknown factors in Bach's part. To this direction we should continue to delve for much unearthed worth in the MS.

P 211

MS P 211 is a bound MSS of fifty pages, containing twelve preludes and fugues from WTC II. The MS is in the corpus of 35.5 x 22 cm, and its light brown paper has smooth edges, but not trimmed, and certainly in very good condition. In the title page (page 1), we find a title to the volume, or rather the table of contents: "*Joh. Seb. Bach. / Das wohltemperirte Klavier. / II Theil. Präludia und Fugen: / N^o 1. 2. 4. 6. 9. 10. 12. 13. 15. 19. 20 und 22.*" Since this is in the different hand from the scribe who copied the music, it may be considered to have been added by one of the later owners of the MS.

The music was probably copied by the same scribe as Am.B.57, Anon. K1. Movement headings are also very similar to Am.B.57, except that the headings of the prelude are simply "*Preludio*" without the work order number of WTC II, and that the page turn instruction is simply

⁴¹⁰ In the case of first three movements, I found later modifications in their accompanying preludes, and not in fugues themselves. In Pr.e, I find no marked later revisions. The reference mark "x" to its heading means possibly that the unique rhythmic figure of bb.3,4, 12 and 22, which are not found in any other tradition, are of Kimberger's.

⁴¹¹ Breckoff, p.46; BG XIV, p. xiv. The result of this work of Grasnich is summarized in P 1146.

⁴¹² Fg.g - b.12: "8"; b.28: "12"; b.32: "10"; b.36: "12"; b.45: "10"; b.51: "10"; b.59: "10"; b.67: "12"; b.80: "10". Fg.B - b.28: "12"; b.36: "12"; b.43: "12"; b.49: "12"; b.86: "12"; b.94: "12". This is also taken into Am.B.49 (in black ink) and in P 430. In the case of the latter, the addition was made by Grasnich when he compared P 430 with Am.B.57.

written as "Volti".⁴¹³ Also noteworthy is that there is no extra headings in P 211 such as "Donisch" or "Aeolisch".

The staves were ruled with a single-staff rastrum 9.2 mm, very similar to that in Am.B.57. They were drawn with thin ink of dark brown shade, making clear contrast with thick, black ink for the notes. The music score was prepared with the same carefulness as Am.B.57. But unlike Am.B.57, no page turns during the movement is found, for the long movements which caused the page turn problem in Am.B.57 were not included in P 211. This being the case, every movement is perfectly accommodated within the two pages of the open volume. Format for the individual pieces in P 211 is probably better, for there is smaller number of bar splits over two systems.

The musical text is basically taken from ante correcturam of Am.B.57. There are, of course, number of unique errors or variant readings. The corruption of notes are found in Pr.C and Fg.F#, and other minor errors are also found in Pr.C, PrFg.c#, Fg.E, Fg.f, PrFg.A and Fg.b^b. Some errors in Am.B.57, mainly missing ties, are not inherited in the following movements: Fg.c, Fg.c#, Pr.E Pr.F#, Fg.G and Pr.A. The most unique feature of P 211 is the revision to the text. It appears in four movements, viz., Pr.c, Pr.f and PrFg.a, that the identical revision is found in Am.B.57. In Pr.G, unique addition of accidentals is related with P 209.

All the features of the text suggest that the MS was made for partial duplicate of Am.B.57 at the time before Am.B.57 was confronted with further revisions.

Am.B.49

MS Am.B.49 is a large bound MS containing both volumes of WTC in their entirety. The cream coloured paper is obviously trimmed, and in the corpus of 37.6 x 24.5 cm. The paper is very hard, and in many pages we find cracks in the paper alongside long straight strokes of ink, e.g., stave, stems and beams. The volume has a title page: "*Das / wohltemperirte Klavier / oder / Präludien und Fugen / durch alle Tonarter*". Between WTC I and II, we also find a short introduction to the second volume:

*Der
Zweyte Theil.
J. Seb: Bach.*

This title page as well as the music was copied probably by the same scribe as Am.B.57, but appears to have been copied extremely neatly. Thus I shall distinguish this hand as Anon. K1c (for "calligraphic") from Anon.K1. Movement headings are identical with post correcturam of Am.B.57, except that none of reference to church mode is found here.

⁴¹³ As already mentioned, the work order number in Am.B.57 was added afterwards, and the title of P 211 is taken from ante correcturam of Am.B.57. The page turn instruction in P 211 is slightly different from those in Am.B.57 in the sense that these are placed at the end of the prelude, while those are placed within the movement.

The staves were ruled with a single-staff rastrum 8.9 mm high. They were drawn with dark brown ink. The ink for notes are much darker brown. Page layout basically follows the same principle as Am.B.57, but instead of making a crowded format, or of compromising the beginning of the piece not from the fresh page, long movements in Am.B.49 are not restricted within two page of an open volume, but in four pages of specious layout. In such circumstances, page turns within a movement is carefully placed. For example, Pr.D is copied into four pages, divided at the double bar of this binary structured movement, despite the fact that each section is of far from equal lengths, 16 and 40 bars respectively. This explains nothing but how beautiful the MS was made out to be - the *édition de luxe* for Princess Amalia.

The musical text is basically taken from post correcturam of Am.B.57. As a result of the greater involvement into the calligraphic beauty and neatness, the copyist was predestined to make some errors of serious types, such as corruption of notes (Pr.E^b, Fg.A^b and Fg.b^b), errors in pitch notation (Pr.C#, Pr.d, Fg.f, Fg.A^b, Pr.g#, PrFg.a, Pr.B^b and PrFg.b^b) and errors in rhythmic notation (Pr.d#, Pr.f# and Pr.b.). Nonetheless, Kimberger's continuing revision activities in the compilation of his part is clearly reflected in the improved details, which were found neither in Am.B.57 nor in P 211. The common finding is the missing ties in Am.B.57, which are not inherited in Am.B.49. The most extraordinary is the relation of the text with the post correcturam of L, which overrides some unique reading prevailing in tradition K. PrFg.C is, for example, clearly revised according to the text of L. This is probably because Kimberger thought the source of the text had to be re-ascertained, since he must have aware of the unreliable nature of the exemplar he used for the movements. Equally for PrFg.c#, Pr.E, PrFg.g and Pr.B^b a similar revision process could have been considered.⁴¹⁴ In some places, we also find later revision clearly distinguished by the black shade of ink.

Although Breckoff considers that Am.B.49 was made ca. 1758, before Am.B.57, the order of their dates must be other way around.⁴¹⁵ That Am.B.49 contains not only the post correcturam of Am.B.57 but also the latest reading revised only here suggests that Am.B.49 must have acquired the status as being the most important MS in Kimberger's mind.

N.10483

MS N.10483 has not previously been studied in relation to WTC II. The twenty page MS consists of two fascicles, *ternio* + *binio*. The cream paper is hard and of medium thick, but the quality of paper differs between the fascicles. I find fascicle 2 slightly thicker than fascicle 1. In the former, together with the first page of the latter, are accommodated six preludes from WTC II, and in the rest are used by two pieces by Kimberger. The entire music was copied by the

⁴¹⁴ One extraordinary evidence of such activity is most clearly reflected in the revisions carried out in Pr.E, b.50:B,1, where is found the same revision in L. This raises the possibility that Am.B.49 and L were compared directly and modified at the same time. There is no other MSS which gives such reading.

⁴¹⁵ Breckoff, p. 48.

same unknown scribe. The first page (p. 1) is the title page, which reads: "*Preludia / von / Johann Sebastian Bach*".

The staves in fascicle 1 were prepared with the rastrum 8.5 mm high, written in thin dark brown ink, while that in fascicle 2 were prepared with 7.6 mm instrument with thin light brown ink. They were carefully arranged according to the length of each individual piece so as to avoid unnecessary page turns: five system format is found on pp. 2-3,11,14-15; six system format on pp. 4,6-10,16-17; seven on pp.5,12-13,18-19.

The preludes of WTC II are as follows: Pr.c (pp. 2-3); Pr.e (pp. 4-5); Pr.f (pp. 6-7); Pr.G (pp. 8-9); Pr.a (pp. 10-11); and Pr.b (pp.12-13). All piece bears the movement heading "*Preludio*". Except the last piece, only the half of which was copied in fascicle 1, all the preludes share a same feature - short binary structure. Thus it is most likely that the last prelude, Pr.b and two pieces by Kirnberger were added afterthought. This explains the differences between the two fascicles, such as the quality of paper and the size of rastra.

The musical text resembles in detail with Am.B.49. Despite the profound attention paid in the staff layout, the musical text contains several orthographic errors, the type normally found in less skilful copyists, e.g., rhythmic notation (Pr.e: b.22:S,1) and frequent omission of accidentals and ties. The error in Pr.b, viz., the pitch error of b.62:B,2/2, also suggests the link with P 1182 and P 513. It is possible to think from this evidence that when the scribe considered to add Pr.b, he referred a MS of Group K2. The MS was later revised. In Pr.e and Pr.a some corrections were entered with very dark brown ink.

P 626

MS P 626 consists of two bifolia each containing a single movement, Pr.e and Pr.F respectively. Both leaves are light brown, thick and yet flexible. Their watermarks are unknown. They suffers slightly from ink acid. They were originally part of large gathering, for it appears that the first leaf was numbered "*Nro:14*", and the latter "*Nro: 15*."⁴¹⁶ The first leaf was ruled with rastrum 9.2 mm high, and the second leaf with the instrument of 7.8 mm high. In both sheets the staves were arranged in seven piano systems. And in both scores, R. H. was transmitted on the treble clef, which is the only instance in the MSS of K. The scribe is known as Anon.402.⁴¹⁸

The musical text of Pr.e is identical with P 211 in most significant details. That of Fg.F can be partly identified with Am.B.57 and Am.B.49 in generation of errors: but the pitch error of b.86, the characteristic reading of F and H, must have been stemmed from the other source, possibly from the models used by Kirnberger. Another interesting feature is the manner it avoids using clef change normally found in the reading of L, H, K1 and K2. Only K4 and A does the same as P 626. Considering these contrasting elements in readings, these two movements could have^{been} copied from different sources at different times.

⁴¹⁶ Plath considers the link with MS Mus. ms Joh. Ph. Kirnberger 11632. See NBA KB V/5, p. 36.

P 597 2 an

MS P 597 is a miscellaneous collection of four MSS by different scribes in twenty-four pages. In the third section, pp. 13-16, we find a single bifolium containing Pr.f only. The light brown paper is thick and hard, and the centre fold tends to be torn off. The sheet is trimmed, and measures 34.4 x 21 cm. It suffers slightly from ink acid: the ink not only comes through the paper, but also affects the surface of the facing pages. The first page, p.13, is a title page on blank background, read "*Preludio. / Joh: Seb: Bach. ̇. / Fr. C: ̇.*"⁴¹⁷ In the inner side, pp. 14-15, is found the prelude. Its movement header was unfortunately trimmed off from the paper. The last page, p.16, is left blank. The staves were prepared on pp.14-15 with a 9.5 mm rastrum, which was probably capable of drawing only one staff at a time. They were neatly drawn by free-hand, and were arranged in seven piano systems.

The musical text is based on the post correcturam of Am.B.57. The only difference is the accidental in b.32:A,1/2. While P 597 gives a natural to g', Am.B.57 later adds a flat here. Since the errors associated with these two types of symbol is so common, it is too dangerous to interpret their relation on this evidence alone.

P 591

MS P 591 is a single bifolium containing PrFg.f only. The unknown scribe of the MS may be considered to be Anon. K2, the scribe who also made P 590 and P 592, for we find the close resemblance not only in calligraphic features but also in diplomatic features, such as stave layout and catch words. Its physical aspect has already been described on pp. 146 f. In the outer side (pp. 4 and 1) is contained the prelude entitled "*Fantasia del Signore Giov: Seb: Bach. 12*". At the end of the prelude, we find instructions: "*Segue la Fuga. / volti.*" The fugue is found in the inner side of the folio, and is entitled "*Fuga. 12.*" The piece terminates with the word "*// Fine*".

The musical text of the prelude is not related with these MS.⁴¹⁹ It is taken either from post correcturam of Am.B.57 or P 211, or from their model that did not contain the pitch error of

⁴¹⁷ The name of the scribe, Fr.C, was also found in P 579 (BWV 848,1) and P 601 (BWV 582).

⁴¹⁸ Kast, pp.39 and 139. His handwriting is also found in P 289 9 an (BWV 1007-1009) and P 1085 (BWV 906,1).

⁴¹⁹ Note that the philological evidence I manipulate here leaves much to be desired, for it is very hard to judge their genealogical position since they are isolated leaves. It is, however, not impossible to give a hypothesis that the three MSS, P 590, P 591 and P 592, could have been a part of the set of MS. If it is the case, this would be the MS which links the post correcturam of L and Am.B.57, the MS that is considered to have served as exemplar for Am.B.57. This exciting speculation is slightly obliterated by the fact that, by comparing with H, the text in P 591 originated from the earlier text of L, and that of P 590 and P 592, post correcturam of L, is from later text of L.

b.55:S,1/4. That of the fugue is from the text closely related to ante correcturam of Am.B.57. Revision was only made to the fugue possibly twice - mainly supplying missing accidentals and rests: the first amendment was to rectify the errors contained in the text of K by referring to the text of B/A. From this state, the reading of the fugue perhaps served as model for P 1076;⁴²⁰ the second amendment was made to the similar point, but not in great deal. Most interesting finding perhaps is the reading of b.60:A,1/2, which is obviously taken from either Group H MSS or Am.B.49. Another evidence, trill on b.84:S,2/1, supports the point further that the model could have been P 209.

P 585 and P 586

MSS P 585 and P 586 are both single bifolium each containing one prelude-fugue pair only. Both of them are made by the same unknown scribe, whom I refer to as Anon. K3.⁴²¹ They both show the similar features in physical aspect, stave layout and the musical text. Both folia are reinforced with thin piece of paper from the back alongside the centre-fold. They suffer slightly from ink acid. As a result, we can see the ink faintly coming through to the other side of the sheets. The staves were ruled with a single-staff rastrum 9.6 mm high, arranged in seven piano systems in all the pages. The music and the staves were probably written with the same black ink.

MS P 585 contains PrFg.c. Untrimmed brownish paper measures 36 x 21.5 cm at its folded state. In the inner side (pp. 2-3) is found the prelude, entitled "*Preludio 2.*". Just above the heading, on the left top corner of the page, is found the original page number "114". Its accompanying fugue, entitled "*Fuga à 4*" is found in the outer side (pp.4 and 1).

The musical text of P 585 stemmed possibly directly from ante correcturam of P 211, judging from the generation of errors.⁴²² The most noteworthy unique errors that were shared between these are the invalid tie (slur) in b.8:S,4/2- and the incorrect alignment of a flat in

⁴²⁰ Among the most convincing pieces of evidence are the following: the revision of an accidental in b.37:B,2/4; the addition of a tie in b.37:A,2/2; and an addition of a rest in b.71:A,2/2. These are originally present in P 1076. Thus it is not impossible to say that their relation is other way around. But that is most unlikely, since P 1076 contains far more number of errors as well as large scale corruptions. The same observation to the prelude, on the contrary, suggest little about their relation. From all the evidence, I suspect there was an intermediate MS which linked these two.

⁴²¹ From the close resemblance in calligraphy and the size of rastrum, we may consider that the same scribe made P 593 also. Breckoff, p. 43, classifies these three MSS in the same group for this reason. I do not follow his idea. I find in P 593 many features which do not share with P 585 and P 586, such as layout of staves, ink and textual origin.

⁴²² The only difference between P 211 and Am.B.57 is the reading of the fugue, b.19:A,1/2, which is an error in Am.B.57's part. This suggests that Am.B.57 and P 211 was not related as parent - child, and that P 585 stemmed from the model of P 211.

b.18:T,3/3 in the fugue. The text of P 585 contains further unique errors in both movements that their genealogical relation is undoubtedly irreversible.⁴²³

MS P 586 contains PrFg.C#. The brownish paper is trimmed at the bottom, which measures 35.5 x 21.5 cm, slightly shorter than P 585 as a result. In the inner side (pp. 2-3) is contained the prelude, entitled "*Preludio 3.*". The original page number "145," is also found in the same place as P 585. Its accompanying fugue, entitled "*Fuga*" is found in the outer side (pp.4 and 1).

The musical text of P 586 is stemmed from ante correcturam of Am.B.57 or its model. In two instances, the errors in P 586 are shared only with Am.B.49.

Am.B.55

MS Am.B.55 has not previously been studied in relation to WTC II. It is a collection of MSS, measuring 32.5 x 20.2. Our interest is the second fascicle, pp. 37-44, where two fugues in full score from WTC II is located. The title page, p. 37, is read "*2 Fugen/ vom / Joh: Seb: Bach.*". On pp.38-41 is found Fg.E, entitled "*Fuga à 4*", and on pp.42-44 is found Fg.A, entitled "*Fuga*". The staves were prepared with a single-staff rastrum 8.2 mm high. For Fg.E, they are arranged in four systems, each containing four staves with appropriate margins. For Fg.A, on the other hand, they are arranged in five systems, each containing three staves with appropriate margins. The staves were written with watery brown ink, giving decent contrast with very dark brown ink for notes. The scribe is possibly Anon. K1.

The musical text is considered to have copied directly from Am.B.57, ante correcturam. The format of system change are also faithfully followed. Apart from supplementing rests for absent part, the score appears to have made quite mechanically. One of the unfortunate result of such is reflected in the error of note value in Fg.E, b.30:B,1.

Am.B.79

MS Am.B.79 is a single binio fascicle. The trimmed paper measures 33.4 x 21.3 cm. The first page is the title page of which the contents, calligraphy is identical with that in Am.B.55. On pp.2-5 is found the Fg.B^b, entitled "*Fuga à 3.*", and transmitted in full score. The staves were ruled with the same rastrum as Am.B.55, and were arranged in exactly same manner as for Fg.A of the same MS. The scribe is Anon. K1, identical with Am.B.55.⁴²⁴

⁴²³ The unique errors of P 585 are of the following: the prelude - missing tie (b.12, A2,1-2), missing accidental (b.20:S,4/4), pitch error (b.27:S,1/1); the fugue - variant rhythm (b.19:T,1) and pitch (b.19:T,2/1).

⁴²⁴ Breckoff says Am.B.79 also contains Fg.B, but he is incorrect in this account. On pp.6-8 is found Fg.C of WTC I.

The musical text probably copied directly from Am.B.57. As expected, the rests required for absent voice are supplied here in full. Unlike the fugues in Am.B.55, Pr.B^b here does not follow the system changes of Am.B.57.

P 633

MS P 633 is a single binio fascicle containing Fg.g copied in full score. The light brown paper is thick and hard. Despite the sheet is reinforced to the part of the centre-fold from the outmost leaf, it is otherwise in good condition. Currently ink acid does not cause too grave concern. The staves were prepared with a rastrum 6 mm high on pp.2-8, and were arranged thoughtfully in three systems, each gathering four staves with plenty of margins in between systems. The first page is left blank, where, with some illustrations of flowers, we find the original title to the fascicle, read "Preludio NB Fuge! Largo / von Herren. J. S. Bach."⁴²⁵ From the next page to the last is copied Fg.g, with the heading, "Preludio / Fuga / Largo". Note that the "Fuga" was added by later hand. The scribe is unknown, but appear to be identical with that of Am.B.49, Anon. K1c.

The musical text probably stemmed directly from post correcturam of Am.B.57. It not only inherited all the unique variant readings and errors, but also the layout of the movement, such as system breaks. Since the music is copied in four stave score, resting voice are fully specified, which is not the case with Am.B.57 or any other MSS. Probably during the copying process, a crotchet rest from Am.B.57 in b.13:B,1, could have been added, which was originally missing from the K1 MSS.⁴²⁶

GROUP K2

The group K2 MSS has its origin in either ante correcturam of Am.B.57 or its closest model. Their musical text is thus fairly close to K1. Unique feature of their text is two fold: it generally contains fairly large number of errors, and occasionally their reading varies slightly, the variation of which can be identified in the process of Kimberger's compilation of Am.B.57. The MSS of this group are all selection of pieces from WTC II. The first two, P 814 + P 1182 and P 513, are allied very closely with each other. MU MS 161, on the other hand, contains two movements only that are overlapped with the other MSS of K2, and cannot be ascertained fully that the MS is grouped together. But as far as its characteristics of reading is concerned, it possesses the same quality as being K2. The rest, P 580 and P 582, contains the quality that possibly link traditions B and K.

⁴²⁵ The part, NB Fuge, is added with pencil.

⁴²⁶ The added rest in Am.B.57 is calligraphically quite remote from the one in P 633, however.

P 814 and P 1182

MSS P 814 and P 1182 are considered to have belonged to a single volume, judging from the unique continuation of movements and the other physical features in the two MSS. In both MSS the staves were ruled with the same rastrum 9.7 mm high, and drawn with thin ink in dark brown shade. Notes were written in thick, black ink in contrast in the hand of an unknown scribe.

MS P 814 consists of a single sheet, probably the broken half of a bifolium. The sheet is flexible paper of medium thickness, and has many creases suggesting that it had been diagonally folded in several places. Thus it is likely that in this manner the damage to the first part was made, which led to the loss and the separation of the MS. The paper is trimmed, and sized 34 x 23 cm. The paper is light brown colour, but the top 10 cm of the sheet from the recto is dark brown in colour, probably affected by the sun light.

MS P 1182 is a bound MSS of 26 pages. The trimmed sheet measures 35 x 23.5 cm. The paper is light brown, fairly thin and flexible. The MS consists of a large gathering (VI x 1) with a single leaf attached to it. Thus it is likely that the original state of the MS was formed as shown in Fig.20 below:

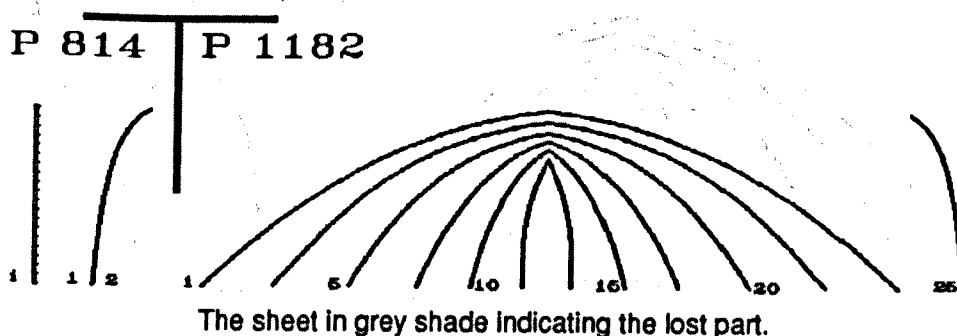


Fig.20: Gathering of P 814 and P 1182

CONTENTS:

Page	Movement	Movement headings, & description.
P 814		
1	Pr.c	bb.17-28 only, presumably the second page of the two page movement.
2	Fg.c	<i>Fuga.</i> containing bb.1-15.
P 1182		
1	Fg.c	continuing from P 814, p.2., bb.16-28.
2-3	Pr.b	<i>Preludio. / Allegro.</i>
4-5	Pr.d	<i>Preludio.</i> + [added with pencil].
6-7	Fg.d	<i>Fuga/ à 3. Donisch. (Kirnberger)</i>
8-9	Pr.E	<i>Preludio.</i>
10-11	Fg.E	<i>Fuga. à 4. Tonisch. Von J. C. F. Fischer musikalisches Thema. (Kirnberger)</i>
12-13	Pr.e	<i>Preludio.</i>
14-15	Fg.F	<i>Fuga. Tonisch mit Lydisch vermischt. (Kirnb.)</i> Beside it we find another large Kirnberger written in pencil.
16-17	Pr.F#	<i>Preludio.</i>

18-19	Pr.f#	<i>Preludio.</i>
20-21	Fg.G	<i>Fuga. Donisch. (Kirnberger)</i>
22-23	Pr.A	<i>Preludio.</i>
24-25	Fg.A	<i>Fuga. / à 3 Donisch. (Kirnb.)</i>

NB. *Courier* - added with dark black ink unless specified otherwise.

From the way the MS was made, we may consider that the original plan of the MS was only a gathering of a large portion, and a small portion was subsequently added in front. If this is the correct background, the scribe initially wrote the pieces from Pr. d upto Fg.A in the order of WTC II, and afterwards added a single sheet where the title and Pr.c were written.

The musical text is not descended directly from Am.B.57, but probably from its model, for some of the unique errors found in K1 is absent, such as an omitted accidental in Pr.f#, b.6:S,3/4. The text also contains certain types of error susceptible to poor notation, such as the error of rhythmic notation, pitch notation in seconds and the confusion of accidentals between naturals and flats. Another interesting feature of its reading is the later revision. In PrFg.d, we find later revisions identical with those in Am.B.57. Such amendments were, however, not entered by the same hand.

P 513

MS P 513 is a bound MSS of sixteen bifolia gathered in two fascicles (III + V). It contains three prelude-fugue pairs, four preludes and three fugues. Apart from these, it also contains two movements from ^{the} partita for lute in C minor (BWV 997,4-5). The light brownish paper is untrimmed judging from its crumpled edges, and is in the corpus of 36.5 x 21.5 cm. The volumes bears no title page, but at the bottom of the opening blank page, we find "*Herr Moering.*", which is believed to be the scribe of the MS.

CONTENTS:

Page	Movement	Movement headings
1 & 32		blank.
2-3	Pr.d	<i>Preludium</i>
4-5	Fg.d	<i>Fuga. Donisch. (Kirnb)</i>
6-7	Fg.F	<i>Fuga. Tonisch mit Lydisch vermischt.</i>
8-11		BWV 997,4-5
12-13	Fg.c	<i>Fuga. Donisch. (Kirnberger.)</i>
14-15	Pr.b	<i>Preludio. / Allegro.</i>
16-17	Pr.E	<i>Preludio. Tonisch. Von This addition was mistaken for the fugue, and interrupted on the half way.</i>
18-19	Fg.E	<i>Fuga. / à 4. Tonisch. Von J. C. F. Fischer musikalisches [?] Thema. (Kirnberger)</i>
20-21	Pr.e	<i>Preludio.</i>
22-23	Pr.F#	<i>Preludio.</i>
24-25	Pr.f#	<i>Preludio.</i>
26-27	Fg.G	<i>Fuga. Tonisch. (Kirnb.)</i>
28-29	Pr.A	<i>Preludio.</i>

30-31 Fg.A Fuga.

NB. *Courier* - the addition to the headings probably by Grasnick.⁴²⁷

It is significant that while the selection of pieces are almost identical with that in P 1182, the arrangement of the pieces vary slightly. A striking finding is that the cycle here starts from Pr.d, which in P 1182 could have also the starting point of its cycle. It is strange, however, that in P 513 the cycle was interrupted by the two movements from the partita for lute, and from the way resuming the cycle is resumed unceremoniously from the last page of the first gathering, as if the second gathering as an afterthought. For this reason, the distinction of movement headings "*Preludium*" and "*Preludio*" made in two gathering appears to be significant.

Despite such observations, all the pieces of WTC II are stemmed from the identical source - ante correcturam of P 1182. Apart from the errors and variants found in P 1182, we find serious errors in every movement, such as the corruption of notes and the omission of ties and rests in large numbers.

MU MS 161

The MU MS 161 (also called 32.G.18) in Fitzwilliam Museum, Cambridge, is the first time to be discussed in the source study of WTC II.⁴²⁸ The MS consists of eleven separate volumes, labelled A to K, and in volume A are found the twelve fugues from WTC II. The volume consists of sixteen folia, measuring 35.0 x 22.2 cm.⁴²⁹ The gathering is organized by eight bifolia in unio (1 x 8). The light brownish paper is not trimmed, and edges are uneven and crumpled. In such places the edges were often reinforced with gauzing. The MS was originally paginated by the scribe, not in our convention, but starting from f.1v as many other eighteenth century MSS. The original pagination is overridden by folio number which was penciled in later.

The staves were ruled very neatly with^arastrum 9.5 mm high, and were arranged in uniform interval of fourteen staves on all the pages (f.1r - f.16v). This manner of staff layout caused some difficulty in reading music, and indeed in copying it. Many copying errors, which were mostly corrected, are considered to have caused by this. Very thin, light brown coloured ink was used for staves. It gives good contrast with thicker brown ink for notes.

The title page (f.1r) is read as follows:

⁴²⁷ Breckoff, p.49.

⁴²⁸ See J. A. Fuller Maitland and A. H. Mann: *Catalogue of the Music in the Fitzwilliam Museum, Cambridge* (London, 1893), p. 96.

⁴²⁹ In *Catalogue of the Music in the Fitzwilliam Museum, Cambridge*, the number of folia was stated as eighteen. This is incorrect.

R. Fitzwilliam

1772

Fugue 12.

Seb

dell' Sigli ~ Bach.⁴³⁰

The name and date written to the upper right of the title could be the scribe and the date of the copy.

CONTENTS:

follo no	Movement	Movement headings and description
1v-2r	Fg.C	<i>Fugue</i>
2v-4r	Fg.c#	<i>Fugue 2.</i> At the end of p.5 we find page turn instruction <i>Volti Subito</i> , and at the end of p.7, we find an instruction <i>Siegue Fuga</i>
4v-5r	Fg.E ^b	<i>Fugue 3.</i> At the end of p.9, we find an instruction <i>Siegue Fuga</i>
5v-6r	Fg.D	<i>Fugue 4.</i> Note that "4" was overwritten on "3".
6v-7r	Fg.E ^b	<i>Fugue 5.</i>
7v-8v	Fg.e	<i>Fugue 6.</i> At the end of p.15 we find <i>Volti / Subito</i> .
9r-10r	Fg.E	<i>Fugue 7.</i> At the end of p.15 we find <i>Volti Subito</i> .
10v-11r	Fg.F	<i>Fugue 8.</i>
11v-12r	Fg.F#	<i>Fugue 9.</i>
12v-13v	Fg.f#	<i>Fugue 10.</i>
14r-15r	Fg.g	<i>Fugue 11.</i>
15v-16r	Fg.b	<i>Fugue 12.</i>
16v		unused. 14 staves ruled.

NB. Actual page number written in the MS starts counting from page 2.

The musical text is considered to have originated from the Kirnberger's model. This can be deduced from the fact that MU MS 161 contains some unique errors and variants found in K1, as well as the earlier text than K1. For the former, it may be sufficient to quote the corruption of the alto in Fg.f#, b.44, and unique barring of Fg.E. For the latter, the most interesting is the version of Fg.e, which is already discussed on p.152. Also interesting would be the appoggiaturas to the final chord of Fg.b, which is found in K1, and not contained in here. These observations point towards certain probability that Kirnberger's deep involvement in refining the text for Am.B.57 was true, and that the model of MU MS 161 originated from Kirnberger's earlier set of MSS. The quality of the musical text in general is unfortunately rather poor. Apart from the error from its model, we find many missing ties, minor corruption of notes, pitch errors, and other occasional errors in note values and rhythm.

⁴³⁰ The parts shown in *Courier* are added later with pencil.

P 580

MS P 580 is a bifolium. The sheet is trimmed on top and bottom, which measures 33.5 x 21.8 cm. The brownish paper is thin and flexible. The staves were prepared with a single rastrum 9.6 mm high, and were arranged in seven uniform piano systems on all sides. Both staves and notes are written with dark brown ink. The note-heads are generally blurred, while the sharps and the mordents appear in lighter colour. The ink contains acid, and paper suffers most crudely from it.

In the inner fold (pp. 2-3) is contained Pr.c#, entitled "*Preludio 4.*" With thinner brownish ink is added "*J. S. Bach. aus d. / wohltemp. Klavier.*" Further addition "*II / (I)*" was made in pencil. Ascertaining the musical origin is formidable, for we currently know virtually nothing about the scribe and the date of copy. From the text critic study alone, I consider the text to be or to have stemmed from ante correcturam of the model for K1. While the text shares the characteristics of K4 in minor details, such as ornamentation (bb.23, 30, 37 and 50), it also contains important prevailing errors in group K MSS: these are missing ties (b.8 = H/K MSS; b.34 = Am.B.49 only; b.48 = K MSS) and the error of note value (b.38 = Am.B.49 only). The most striking evidence for my judgement of its genealogical position placing earlier than K1 is the reading of the cadence in G# minor at bb.16-17, which is given in Fig.21 below.



Fig.21: Variant reading of Pr.c#, bb.16-17.⁴³¹

The reading of first can be considered an error, 8ve by a similar motion between the alto and the bass. This is probably what Kirnberger thought and accordingly changed the part writing.

P 582

MS P 582 is also a single bifolium. The light brown paper is flexible and in good condition. The sheet was most likely trimmed on the sides, which measures 34 x 21.5 cm. In the inner fold is contained Fg.c only, while the other side is blank. The unknown scribe, whom I refer to as Anon.K4, may be identified with the scribe of P 589 from number of observations, e.g., his

⁴³¹ Note that the text of first example is modelled from P 580. While F has superfluous crotchet in b.18,2 in the alto, H lacks the tie in b.18,1-2 in the alto. These errors are most likely affected by the appearance of the missing leaf in L, which I consider to have been the revised from the text of A. Further discussion of this aspect is found on pp. 230 ff.

unique features in his calligraphy, diplomatic policy such as stave layout and the quality of the copy. It is thus fascinating to find that the rastrum used in these MSS partly shares the characteristics of the instrument as shown in Fig.22 below.

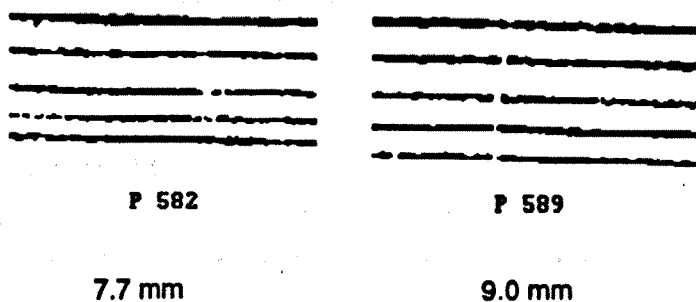


Fig. 22: *The Rastrum used in P 582 and P 589*

The different widths in gauges in the lowest two spaces and the almost identical widths in the rest serves to show that the two instruments could be in fact of a single identity, and that the some of the gauges changed during the years of its usage. The ink used for the copy differs considerably from P 589. The staves were written with very thin, watery ink in brown shade, while notes are written with much thicker dark brownish ink.

The musical origin is identified with the earlier version of the fugue, which is reflected in P 402, ante correcturam of P 430 and the model which related closely to Am.B.57. The quality of the copy is not very good, however. We find several corruption of symbols - three ties and 2 essential rests. This perhaps triggered the later modification of the text was later modified thrice. Dark black ink was used for various purposes: it is used for the addition of pedal instruction "Ped." in bb.7 & 19, of accidentals to make unique variant in b.5:T,3/1 & 4/1 and of leger line for the same purpose (pitch is raised from *b* to *c*') in b.21:T,1/1; and for correction of error in rhythm (beaming) in b.9:A,1 & 3. Pencil is used for filling other part of pedal instructions elsewhere. Finally, thin brown ink was used for the addition of accidentals in b.18:A,1/4 & A,4/1. It is interesting to note that the last amendment is also found in P 204 in similar type of ink.

GROUP K3

The group K3 MSS probably originates in the earliest state of model which Kirnberger later modified and incorporated into his compilation of WTC II. In this group, we are going to discuss three MSS only, MS 30 386, P 414 and P 608.

MS 30 386

MS 30 386 (formerly P 625) is a bound 76 page MS. The first 32 pages are entirely allocated for WTC II, while in the second half is found Bach's Fantasy in G major (BWV 572) followed by the pieces by W.F. Bach and Goldberg. And in this first half, we find three prelude-fugue pairs, three preludes and two fugues in three distinctive fascicles (I + I + IV).

Page	Movement	Movement headings and description
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Fascicle 1: 33.3 x 20.9 cm

1		Page unruled. <u>Nro</u> : ii. is written.
2-3	Fg.c#	<u>Nro</u> ii./ Fuga à 3. Donisch (Kirnb) Fingering is penciled in the text.
4		blank

Fascicle 2: 34.1 x 21.3 cm

5		Page unruled. <u>Nro</u> : iB is written.
6-7	Pr.a	<u>Nro</u> : iB. / <i>Preludio</i>
8		blank

Fascicle 3: 34.5 x 21.1 cm

9		Page unruled. Title page:
---	--	---------------------------

*Cinq Preludes et quatre Fugues
composées
par
Jean Sebastian Bach.*

10-1 (1-2)	Pr.C	<i>Preludium</i>
12-3 (3-4)	Pr.c	<i>Preludio Sciolto</i> - added in pencil.
14-5 (5-6)	Fg.c	<i>Fuga à 4 Donisch.</i> (Kirnb.)
16-7 (7-8)	Fg.d	<i>Fuga à 3 Donisch.</i> (Kirnberger.)
18-9 (9-10)	Pr.f	<i>Preludium</i>
20-3 (11-4)	Fg.f	<i>Fuga / à 3. Aeolisch.</i> (Kirnberg)
24-5 (15-6)	Pr.g	<i>Preludium / Largo</i>
26-9 (17-20)	Pr.B ^b	<i>Preludium 21.</i>
30-1 (21-2)	Fg.B ^b	<i>Fuga 21. / à 3. Donisch (Kirnb.)</i>
32		blank.

NB. page in () is the original, written in ink, which was later crossed out. New page number system is written in pencil.
Courier - added annotations at a later stage in dark black ink

The staves were ruled with single staff rastrum, measuring 7.8 mm (for fascicle 1 and 2) and 7.0 mm (for fascicle 3). This suggests close relation between fascicle 1 and 2. Scribe of this

MS is described by Kast as Su IV, an unknown scribe who worked in Vienna around the turn of the 18-19th centuries.⁴³²

The musical text is originated not from Am.B.57 directly, but predictably from one of its models.⁴³³ This is ascertained statistically by examining number of variant readings in K. This shows that some unique variants of K1 are certainly inherited into MS 30 386, but others are not, which are mostly coincide with that of L or A. This indicates that the errors must have occurred at some later stage, i.e., during the time when Kimberger was compiling the models for Am.B.57. The direct link to Am.B.57 did exist, however, but only at much later date, for we find several remarks, which was clearly added to the score, referring to the variant readings found only in K1.⁴³⁴ Later correction to the text was also made against the post correcturam of Am.B.57. At this stage, the unique sub-heading of the fugues were entered with distinctive dark black ink.

Other unique aspect of the text represented by K3 MSS is its thorough specification voice texture at the commencement of fugues by supplementing rests for the forthcoming entries of voices. Also in Fg.B^b we find the application of slurs extended beyond the range specified in K1. Some errors are unique to K3. Though less errors it inherited from K, it inherited more errors from other sources. The minim/semibreve rests are so poorly written that one can hardly tell from their appearance what they are. The error on rhythmic notation, voice texture and note value are prevailing feature in K3.

P 414

MS P 414 is a gathering of many different pieces from WTC I, II, other preludes and fugues by Bach, the pieces by C. P. E. Bach, Goldberg, and incerta, all mixed and arranged in the order of WTC to form a unique volume. It has no title page. The trimmed light brown sheet measures 23.9 (H) x 32.5 cm (W). The Staves are ruled with single staff rastrum, measuring 6.4 mm.⁴³⁵

⁴³² Kast, pp. 95 and 139.

⁴³³ Breckoff, p. 50, firmly believes its origin in Am.B.57, however.

⁴³⁴ See b.27 of Pr.C and b.64 of Fg.f in Supplement B. Note that the variant reading of Fg.f was added here in marginal space.

⁴³⁵ The measurement of other page gives the size 6.6 mm. The further examination is required in future study.

CONTENTS:

Page	Movement	Movement headings	Stave Layout
8-9	Pr.C	<i>Preludium</i>	6
44-45	Pr.f	<i>Preludium</i>	5
46-47	Fg.f	<i>Fuga</i>	6
62-63	Pr.G	<i>Preludium</i>	5
76-77	Pr.g	<i>Preludium</i>	6
88-89	Fg.B ^b	<i>Fuga</i>	6

Except Pr.G, all movements are found in fascicle 3 of MS 30 386. It is not surprising, therefore, to find that from the ante correcturam of MS 30 386 the text can be seriously considered to have stemmed directly. Most of the errors in MS 30 386, including the poor notation of minim/semibreve rests, are also found here. We may say even that the quality of the text in P 414 is poorer than MS 30 386, for it contains many minor errors that are not found in MS 30 386, but seldom other way around.

The scribe of this volume is not known. Kast classifies the scribe as Su, um 1800.⁴³⁶ From the calligraphic identity and the musical text, I think that the scribe is identical with Su.IV who made MS.30 386.

P 608

MS P 608 has not previously been studied in relation to WTC II. The MS consists of two bifolia, and in two inner pages of the second leaf (pp. 6-7) is contained Fg.A^b. The light brown paper is hard, yet in good condition. No repair to the paper is found. The sheet is trimmed, and measures 36.5 x 24.5 cm. The staves were prepared with a single-staff rastrum 6.1 mm high, and were arranged in nine piano systems on all the four pages. They are drawn with thin, light brown ink, giving good contrast with very dark brown ink used for notes. The scribe is unknown.

The Fg.A^b has a movement header "*Fuga.*", as well as the name of the composer, most of which is trimmed off the paper. Just below the place, we find the later addition "*J. S. Bach*". The genealogical origin of its musical text seems to be somewhere in between K1 and K4. While it contains the unique errors found in K1, such as the chord texture of b.46, R.H.,1, the variant pitches in bb.44-45 in the alto, it also contains the unique error of K4, such as superfluous tie in bb.22-23:A,4/1-S,1/1. On the other hand, some of the unique errors in either K1 or K4 are not inherited.⁴³⁷ Also seems significant is that the errors shared between K1 and K4 such as the position of accidentals in b.49:B,4/3 is not reproduced here.⁴³⁸ This unique state of text seems

⁴³⁶ Kast, pp. 29 and 141.

⁴³⁷ The rectified errors in K1 are: accidentals of b.35:A,4, slur of b.37:S,4- (the error originated in L). That in K4 are numerous, and I do not list here. See supplement B for details.

⁴³⁸ It may be of worth noting that the error is originated in the squeezed addition of the symbol in L, which was interpreted in K1 and K4 as if the symbol was for the next note-head *d^b*, already flattened by the k-s. It is obvious for a musically conscious scribe that the such presence of flat was insignificant, and if it was to be a double flat, it is harmonically wrong.

to suggest that the piece was revised at some stage of the branches in K. The precise genealogical location of P 608 cannot be ascertained fully without further study into physical investigation of papers, the owners and the scribe. Its notational convention, which uses the new convention as K4, suggest that the MS was made in the late eighteenth century. Our text critic study suggests only that the text of P 608 stemmed out from the link between K1 and K4, but then it was independently corrected.

GROUP K4

The Group K4 MSS are the farthest relation in tradition K, and characterised partly by unique mixture of features found in K1 and K3. The most unique feature is, however, the unusual types and the nature of variant readings, which shall be explained shortly. We have four MSS in this group, viz., P 237, RM 21 a9, LM 4837 and MS. 30 302, of which the first two contain WTC II in complete.

P 237

MS P 237 is two volume MSS, each containing respective part of complete WTC. The volume for WTC II (P 237, II) is a thick, bound MS of 140 pages. The paper is trimmed, and measures 31.9 x 22.7 cm.⁴³⁹ The title page is found in page 1 given in the following fashion:

*Praeludia und Fugen
für Clavier durch alle Töne
2ter Theil
Joh: Seb: Bach.*

This page as well as the music itself was copied by Johann Stephan Borsch (ca. 1744-1804), known as "Butcher's master and Organist" in Hamburg, who became a sexton and organist at Holy Spirit Church, Hamburg, in 1778.⁴⁴⁰

The movement headings differ slightly from other MSS of K. The headings in P 237 are written in unified fashion: "*Præludium* [work order] [key in German]" and "*Fuga* [work order] à [no. of voice]". Thus PrFg.C will be "*Præludium 1 C dur*" and "*Fuga 1 à 3*". Page turn within a movement is fairly common, probably due to the fact that the stave layout was prefixed to seven piano systems. There are twenty instances, and in all the instances we are reminded with "Volti Subito". And with the word "Finis" the volume terminates. It is noteworthy that the style of such instructions disagrees with those in Am.B.57. One unique convention is the indication of

⁴³⁹ The measurement of the volume by Kast (p.16) and Breckoff (p.49) gives 32.5 x 23 cm, but this is the size of the cover, slightly larger than the paper inside.

⁴⁴⁰ TBSt 1, p. 21, esp. footnote 2. Breckoff, p. 49.

number of bars in a movement, or wherever applicable, in a distinctive section within a movement.

The staves were ruled with a rastrum 9.4 mm high. The rastrum was probably capable of drawing two staves at a time.⁴⁴¹ The staves were drawn absolutely straight, and were arranged at equal interval of fourteen staves in all the pages of the MS. From this one may think the music score could have been prepared professionally for multiple purposes. The staves were drawn with thin brownish ink, and notes appear in much darker brown ink.

The musical text is probably originated from the model of K, and partly identified in K3. The testimony is found in itself. There is no doubt that the text can be linked to Am.B.57, but the relation remains in distance. When we examine PrFg.C#, PrFg.E^b, Fg.A^b and Fg.g#, we will find that the errors of Am.B.57 are not present in P 237. On the other hand, the relation to K3 is strongly perceived in Pr.C, PrFg.c, Fg.d, PrFg.f and PrFg.B^b. The full voice specification at the commencement of fugues are the shared features in K3 and K4. In some unique cases, the variant reading associated with the application of ties is considered to have relation with No.543.⁴⁴²

When one examines the quality of text as it stands, he or she will be stunned to find how many errors it contains. Errors are everywhere. They range from missing bars and parts, incorrect re-interpretation of voice texture, note value, pitch and rhythm to missing ties which can often be counted well over ten instances in a single movement. And yet one most distinctive characteristics in the MS of K4 is the notational convention it uses, and caused the mis-interpretation of pitch. This issue has already been dealt with on pp. 105 ff.

Later correction to the text was entered in several occasions. It is possible to classify the amended parts according to the distinction in the colour of ink. Some of the them are done with thin ink, resembling to the one used for the stave ruling; others appears in dark black; but the most unusual, but the majority of corrections, mainly the addition of corrupted symbols, are done with the dark black ink with gold flicks appearing on the surface. The closer examination of variant readings and corrected parts reveals that the model for such amendment was not a single MSS, but at least two - one from K1 and other is from A1.

⁴⁴¹ The only evidence for my judgement is the slight misalignment at the right edge of staves, which are sometimes indented in pair. This, I think, requires further study to reassure the judgement.

⁴⁴² The relation is found in Fg.F# and Fg.g. In the case of Fg.F#, while No.543 fundamentally disagrees with any other MSS in the application of tie in counter-subject of the fugue, K4 MSS partially takes its unique interpretation of the phrase, though not used in thematically significant part.

RM 21 a9

MS RM 21 a9 (formerly KL 21) in BL, London, is a large bound volume of 196 folia, containing WTC I (121 p + 3 p unused), WTC II (140 p) and CU3 (126 p + 2 p unused). The thick, cream coloured paper is trimmed after the music was copied, and measures 23.5 x 29.7 cm. The MS was completed by 1788, for we find at the first page the volume, "*This Volume belongs / to The Queen. / 1788*".⁴⁴³ This remark is said to be in the hand of Mrs. Papendiek, who had close relationship with Johann Christian Bach.⁴⁴⁴ Her further involvement, such as undertaking the copying task in the MS, is not well established. What is certain from the calligraphic features is that each of three sections of RM 21 a9 was copied by different scribes whose names are yet to be ascertained. In my opinion, the scribe of WTC II has the most beautiful and confident calligraphy among the three copyists.

The section of WTC II is marked with an elaborate title page read:

XX:IV.
Preludien und Fugen
durch
Alle Ton-Arten.
so wohl
mit der groszen als kleinen
Terz
verfertigt.
von
Johann Sebastian Bach
2.ter Theil.

Movement headings are entirely eliminated except for that of the initial movement, which reads: "*Preludium*". Page turn instruction is also commonly found as in P 237. In twenty cases, we find "V: S.", and in two cases, "*Siegue Volt*". And with the word "*Fine*" the section of WTC II terminates. Still further, bar total number is found, as in P 237, at the end of each distinguishable section.

The layout and copying convention is also very similar to P 237 in principle. The staves seem to have been ruled with a rastrum 10.4 mm high, but since they were arranged so perfect, i.e., lines are absolutely straight, evenly spaced and indented, that the staves could have been

⁴⁴³ This remark is on the first sheet of the three unruled additional sheets. They were inserted in front of f.1 probably when the volume was bound.

⁴⁴⁴ Stanley Godman: "Mrs. Oom and 'the 48'". *Music and Letters*, Vol. 32, No.3 (1951), p. 299.

prepared by different means. Stave layout is ten uniform staves per page, from the title page through to the end of WTC II.⁴⁴⁵

The musical text probably originated from the same exemplar as P 237. This conclusion is lead by the following two facts: 1) most of exclusive variants and errors in P 237 are reproduced; 2) both P 237 and RM 21 a9 omit many ties in unshared places that neither can be generated from the other. Remembering that both P 237 and RM 21 a9 were made by able musicians, judging from their notational habits and calligraphies, the most probable historical background would be this: the exemplar which was used by the two MSS in question was made by the person whose notational habit was so poor that the scribe of these MSS could not reproduce some symbols such as ties, which are the most vulnerable.⁴⁴⁶

The only major difference of text between P 237 and RM 21 a9 seems to lie in the fact that these copyists held their principles slightly differently from each other. As seen in the reduction of movement headings, the copyist of RM 21 a9 tends to omit what seems to be a non-essential symbols. This may well be the reason for not omitting considerable number of ornaments from the text.

LM 4837

MS LM 4837 from the Lowell-Mason collection in Yale University, New Haven, is an incomplete copy of WTC II. I have examined the MS from a microfilm only.

The volume was probably aimed to be the complete WTC II, but ends at b.20 of Fg.g. The text was copied by two scribes: the first scribe was responsible for first five movements (Pr.C - Pr.C#) and the last piece (Fg.g), while the second scribe did the middle part. The score is best described as scribble: There are numerous instances where ties were omitted, text was corrupted, and so on. The illegibility is also endowed by the lack of note-alignment habit as well as poorly formed individual symbols. The musical text was closely related with P 237.

Breckoff considers that the MS is from the second half of the eighteenth century.⁴⁴⁷

⁴⁴⁵ The same staves are also found in the section of WTC I, but not in that of CU3, which uses slightly narrower staves.

⁴⁴⁶ If it were the case, the unique improvement to the text, such as fuller notation of rests, could have been added by a different person who has better understanding in music. This assumption is not entirely satisfactory when we find some of added rests were in fact invalid ones. For example, Pr.E^b (b.71), Fg.b^b (bb.72, 85-86) and Fg.B (b.29) clearly show the additions as the result of poor understanding of linear progression.

⁴⁴⁷ Breckoff, p. 37.

MS 30 332

MS 30 332 (formerly P 757) is a forty-eight page MS, measuring 32.3 x 20,1 cm. The volume has a title page, entitled "*Sammlung einiger Fugeri*" where we also find the table of contents as well as the name of scribe "J. C. Hossbach. / 1778." Amongst the pieces by C. P. E. Bach, Handel, Kirnberger, Graun, and others is contained Fg.d on pp. 26-27, entitled "*Praeludium èn Fuga a deva fujets furle Credo di Sebastian Bach a la Contrapunct in 8o.*" [?].

The musical text contains some unique features. The text is in most part identified with the rest of K4 MSS, except two instances of K3 identity. Apart from this, several ties are missing which are partly identified among K4 MSS. Yet most unusual is the tempo marking "*Allegretto*" and the pedal instruction "*Pedale doppio*" at the entry of the bass, b.6.

TRADITION A (ALTNIKOL'S COPY)

In the Altnikol tradition, I am going to discuss the MSS of which the origin of their texts is related to either P 430 or P 402, the copies made by Altnikol. In this section, the following MSS are dealt with:

Table 25: *MSS belonging to Tradition A*

Abbr. MS	Origin of text	Scribe	Date
<i>S</i>	<i>inextant</i>	<i>J.S.Bach?</i>	<i>1738-1744</i>
A1	P 430	Altnikol	1744
	P 1076	Homilius	ca.1750?
	P 204	Schwenke	1781
	P 207	unknown	1791
	P 1078	Kühnel	late 18c
	P 1137	Kühnel	late 18c
	P 212	Forkel	late 18c
	P 222	Forkel	late 18c
	P 546	Grasnick	1st half 19c
	P 828	unknown	1st half 19c
	<i>Konwitschny</i>	<i>unknown</i>	<i>unknown</i>
A2	P 402	Altnikol	1755
	<i>MS.33,2</i>	<i>unknown</i>	<i>unknown</i>
	<i>PM 6597</i>	<i>unknown</i>	<i>unknown</i>

NB. Sources in *Italics* are unexamined.

P 430: The Source A1

MS P 430 is a complete copy of WTC II in sixty folia made by Bach's later son-in-law, Johann Christoph Altnikol (1719 - 1759). His name and the date of completion is found at the end of Fg.b - "Scr[ipsit]. Altnickol / a[nn]o. 1744".⁴⁴⁸ The year, 1744, was Altnikol's first year under Bach, and the making this MS might have been one of the duties for Altnikol to fulfil. It must be noted that this is the only extant MS that is complete and made in Bach's lifetime. The title given to the volume, reproduced in the frontispiece, is the earliest record of the title of WTC II among extant MSS.

The paper, which is in light brown or cream, is medium thick and hard, measuring 31.0 x 22.8 cm. The MS is initially designed to be a bound volume. As in Am.B.57, stave ruling of the open pages is carefully thought out. The staves were manually but carefully prepared with a single-staff rastrum 9.8 mm high (-2.6-2.5-2.7-2.0-). According to the length of each movement,

⁴⁴⁸ The supplement to the wording is by Dehnhard (1983), p. xxii. Two lines were in fact written at different times, judging from the distinction of pen and ink. The first line "Scr. Altnikol" was written in brownish ink with thin pen, while "ao. 1744" is in black ink.

number of systems is decided ranging from five to seven. This fact enables us to say that the music was copied from Pr.C to Fg.b in absolute succession.⁴⁴⁹ The tactical and stylistic principles are thus similar to those of Am.B.57. Nonetheless the subtle difference between them is certainly noteworthy. The movement headings are, as in Am.B.57, found in the same line as the initial system of each movement. But instead of being written on the staff, it is done on blank background created by indented system. Each prelude starts from a fresh page of an either side of the open volume, and the accompanying fugue generally does the same. In some instances where the prelude appears to leave too wide space below, the following fugue can begin from a fresh indented system directly below the end of the prelude. Our observations so far suggest that Altnikol was extremely careful to prepare staves, and that he considered little to avoid page turns within a movement.

Altnikol's movement headings fundamentally disagree from what we have seen so far. He gives consistent two-line wording "*Prelude* / [key in German] [# (major) or *b* (minor)]" and "*Fuga* / @ [no of voice]". Exception to the rule is Fg.a, which is entitled "*Fugetta* / @ 3."

In all the movements, P 430 gives a different text from that in traditions B and K. The range of differences varies from only a slightest variation, e.g., clefs (Fg.E^b, b, etc.) ornamentations (Pr.e, etc.) and accidentals (Pr.e, a, etc.), to the complete overhaul of the piece (PrFg.C, C# and A^b). The reason for such difference one may ask - how did it come to be different? The answer has to be sought both internally and externally. The internal inquest would be dealing with the examination of text and its analysis in conjunction with Bach's compositional activities. The external inquest, on the other hand, would be dealing with the historical fact about the MS who and how it was made and used over the generations. Let us begin with the internal inquest. When we look into the text of P 430, we find that the majority of movements can be considered seriously as authentic, the verdict of which is to be ascribed to Bach, the composer. Such consideration is, of course, based on the probability linking with Bach's general compositional and revising activities the evidence of textual difference between the text of P 430 and that of other traditions.⁴⁵⁰ On this ground we may say that P 430 may be the evidence for the presence of Bach's second set of scores, which we shall call the source 'S'.

The inquest also reveals several other aspects of P 430 or S. The first, it is the state of the selection of pieces which is a mixture of earlier version of movements and revised ones. This can be interpreted that S was initially distinguished by Bach as a collection of scores of secondary importance (e.g., gathering of draft and composing scores), and when the collection L was complete, Bach turned his attention to complete S by replacing some movements with the revised scores. If it be, Bach's intention will become clear: Bach turned his attention to

⁴⁴⁹ The page sequence of P 430 was corrupted probably when the MS was re-bound at some stage. Two continuous folia 50-51 are inserted in wrong place between folia 37 and 38.

⁴⁵⁰ This argument for individual movement is found under Chapter 4, "Outline of Revision Process", pp. 208 ff.

perfect S for some reason, while L was left aside. Our study of L, H and F also point to this being the case.

The second aspect of S is about the textual status of the version within a movement in which we find partially earlier reading and partially later reading. But some readings cannot simply be classified by these two clear terms. For example, the variant in the use of extreme low registers can be interpreted as being both authentic, valid version for a particular instrument.⁴⁵¹ One of the reasons must be that both L and S were the MSS which were used in practice, exposed themselves for possible corrections and improvements. Another common reason may be that, when Bach was copying a piece onto a separate sheet, he could have revised the piece instantly without modifying the text of the exemplar. One of the other reasons would be that Altnikol added his own improvement to Bach's text.⁴⁵²

The third aspect of S is about the quality of text dubious to attribute its origin to S, i.e., to Bach. For example, the poor, incorrect rhythmic notation in Pr.f# and Pr.g is such that it is very unlikely to have derived from either Bach or Altnikol directly.⁴⁵³ These movements were likely to have been excluded from S, and the exemplars Altnikol used here were probably the copies made by one of Bach's pupils during their lessons. The most possible reason for such unusual cases would be that Bach wrote some movements in L without exemplar.⁴⁵⁴

The chain of observations seems to reveal a probable reason for the first inquest - the unique mixture of versions in S. That is: the movements represented as later versions in S was to fill the place which was originally either vacant or included provisional scores of draft material. Bach's decision to complete the collection S was certainly for one step towards his *Fassung letzter Hand*, the third and a bound fair copy.

Altnikol's task in 1744 is thus revealed to have been a fairly arbitrary one, for P 430 cannot be attributed fully to S. The arbitrariness is possibly extended to further confusing introduction of source situation in P 430. In some instances, we may find that some movements in P 430 represents the mixed reading of S and L. This aspect shall be debated further in our discussion later under P 402. At any rate, the likelihood that Altnikol obtained Bach's exclusive permission to use S instead of L suggests Bach's intense concentration on improving collection S at the time. This is most significant.

⁴⁵¹ One of the best examples would be the use of the lowest note in WTC II, contra A, in b.16 of Fg.A. But as Dürer (1978), pp.73 ff, points out, such variant may also be linked to the chronological order of the version.

⁴⁵² It is generally considered that Altnikol seems to have practised the addition an enharmonic note in semiquavers to a plain scalic passage in quavers. See, for example, Fg.f, b.50 and Fg.A, b.3 in Supplement B.

⁴⁵³ The error in Pr.f# is not only attested in incorrect note values, but also in many notes in pitch being corrected on the MS.

⁴⁵⁴ In Chapter 4, pp. 261 ff, I shall show that the version of L for Pr.f# was represented as a kind of composing score, and there would be no entry for this prelude in S.

The text of P 430 was later modified several times by later possessors. The common amendment is the addition of ornaments, mostly against the other traditions. One of the most outstanding was made when the MS was obviously compared with the text of Am.B.57. Though only in two instances (Pr.d#, b.13 and Fg.F#, b.80), we find numerous later annotations which can be positively attributed to the MS of Kimberger. The annotation is fairly thorough, and mostly written in sharp pen in dark black ink. The variant readings between the traditions appealed to the editors as more authentic than those in P 430 were entered here as amendments. Similarly, the readings that arouse less such interest were simply marked "X" above. Some of the editorial work was believed to have carried out by F. A. Grasnick (? - 1877), who made P 546 and P 1146.⁴⁵⁵ This, however, contradicts to the fact that majority of such amendments had already been taken place before Grasnick was born.

P 430 is undoubtedly one of the most invaluable MSS, and yet not explored in great detail. The future study should include the thorough evaluation of individual movement in order to ascertain various aspects of its origin. At the same time, the study should be extended to the stark classification of later amendments. This may reveal many fascinating relations among the MSS of traditions A and K.

P 1076

MS P 1076 is an incomplete copy of WTC II. The scribe is Gottfried August Homilius (1714-1785), whom Hiller describes, "the only still living Bach's student".⁴⁵⁶ The brownish paper is of medium thick, and suffered fairly heavily from the acid contained in the ink. The paper, which is trimmed on the top and bottom, measures 33.5 x 20.6 cm. The present state of eighty-page MS appears to be irregular (see Fig.23 (a) below), but originally it was possibly organized as IV x 5 (see Fig.23 (b) below):

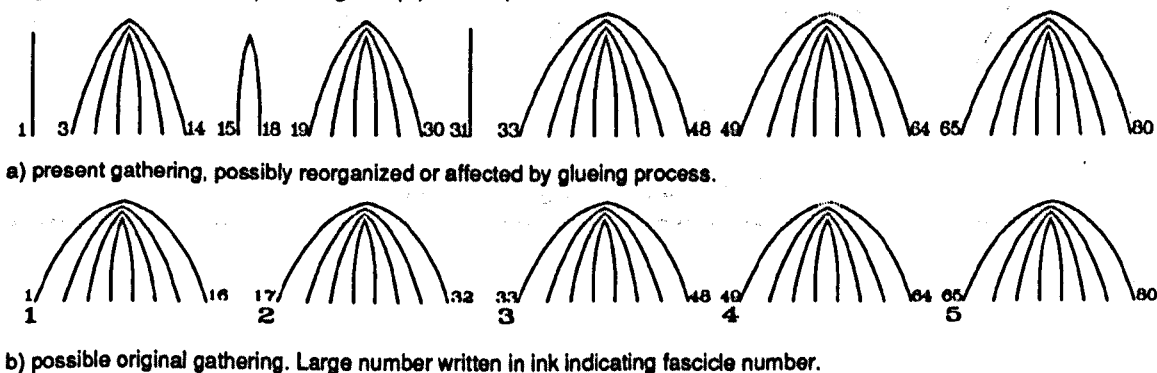


Fig. 3: *The gathering of P 1076*

⁴⁵⁵ Breckoff, pp.49 and 56, assumes that the addition of sub-titles to the fugue, the reference of church modes to the subject, was in his hand. He also links the same addition to P 513.

⁴⁵⁶ BDok III/895. Though the exact episode about Homilius's study with Bach is not known, Löffler, p. 21, considers that Homilius possibly studied under Bach during his study in Leipzig University, which began 1735.

Title: (p.1)

*Das Wohltemperirte Klavier.
Zweyter Theil,
oder:
Præludia und Fugen durch alle Tone,
und Semitonia So wohl Tertiam
Majorem oder ut Re Mi anlangend,
als auch Tertiam minorem oder Re
Mi Fa betreffend,
zum
Gebrauch der Lehrbegierigen Musika=
lischen Jugend, als auch der in diesen
Audio schon habit,, seyenden besonde=
rem Zeitvertreib, aufgesetzt und ver=
fertigt von
Johann Sebastian Bach.*

CONTENTS:

Page	Movement	Headings; (instruction) n - page number
2-3	Pr.C	<i>Prelude C #. (Cegue / Fuga)3</i>
4-5	Fg.C	<i>Fuga a. 3.</i>
6-7	Pr.c	<i>Prelude C. b. (Ciegue Fuga.)7</i>
8-9	Fg.c	<i>Fuga a. 4.</i>
10-12	Pr.C#	<i>Prelude Cis. #.</i>
13-15	Fg.C#	<i>Fuga a. 3. (v. Prelude)15</i>
16-19	Pr.c#	<i>Prelude Cis</i> The symbol 'q' was corrected from 'b'.
20-25	Fg.c#	<i>Fuga a. 3. (V. S.)21</i>
26-30	Pr.D	<i>Preludio D dur.</i>
31-32	Fg.D	<i>Fuga a 4. (V / S)31. The fugue was interrupted at b.33.</i>
33-35	Pr.E	<i>Preludio E. dur.</i>
36-38	Fg.E	<i>Fuga. à 4.</i>
39-48		unused pages. 7 systems were ruled.
49-51	Pr.f	<i>Preludio F. moll. (V. S.)49</i>
52-55	Fg.f	<i>Fuga.</i>
56-59	Pr.F#	<i>Preludio. Fis dur. (V. S.)59</i>
60-63	Fg.F#	<i>Fuga. a. 3.</i>
64		unused page. 7 systems were ruled.
65-69	Pr.A ^b	<i>Preludio Gis. dur (V. S.)69</i>
70-73	Fg.A ^b	<i>Fuga. a. 4.</i>
74-80		unused pages. 7 systems were ruled.

Obvious from the presence and the contents of the title page, this MS was originally designed to accommodate the entire WTC II cycle. The large portion of unused pages on pp. 39-48 was for PrFg.e and PrFg.F, but they were not copied for some reason. At a later date, the MS was reduced in thickness, either by damage or by intention possibly to utilize some unused sheets for other purposes. The second single sheet, pp.31-32, is most interesting in this respect. As gathering is expected to be either ternio or quarternio, this sheet is probably the broken half of a bifolium, the first part of the gathering of ternio or quarternio which most likely contained the rest of Fg.D (bb.34-50) and PrFg.d, E^b and d#. ⁴⁵⁷ However, it is likely that the last three prelude-fugue pairs were not copied. Between pp.64-65 there might have been another gathering of quarternio, allocated for PrFg.f#, G and g. And after p.80, the same assumption can be made for PrFg.g# to the end of the cycle.

The staves were ruled with single staff rastra by free hand. The size of rastra differs in places: on pp. 2-19: 8.1 mm; pp.20-80 except p.21: 9.2 mm; p.21: 8.8 mm. The staves were arranged in seven uniform piano systems. They were drawn with thinned dark brown shade of ink in contrast to black ink used for notes.

Except PrFg.f, all the movements were related with ante correcturam of P 430. They contain numerous errors, however. The most common errors are the omission of ties, but there are several corruption of parts and bars. The only exception, PrFg.f, is related with the MSS of K, especially P 591. It is interesting to find that from Pr. D onwards Homilius changes the movement headings from Altnikol-style "*Prelude*" to Kimberger-style "*Preludio*". Despite the fact that the scribe is a Bach student of the period when WTC II was compiled, the musical text seems to be ^{of a} secondary-source nature.

P 204

MS P 204 is a bound MSS of 142 pages containing WTC II in complete, and is the product of Christian Friedrich Gottlieb Schwenke (1767-1822), who was the student of Kimberger, and later successor of C. P. E. Bach in Hamburg. ⁴⁵⁸ The volume begins with the following title page:

⁴⁵⁷ It is also equally possible to think that the torn sheet was originally joined with the other single sheet, pp.1-2. This would make the loss of one complete gathering easier.

⁴⁵⁸ Breckoff, p. 58. Schwenke became the music director of Hamburg in 1 October 1789. The MS is paired with P 203 (212 p). This volume contains CU4 (pp. 5-50), WTC I (pp. 58-145), and the pieces by Kuhnau and Handel. At the end of WTC I, we find the date "Ao 1783". This is an very interesting volume, for we find not only the hand of Schwenke, but also J. S. Borsch on pp.154-189. The volume was probably completed by G.Pölichau, who completed the table of contents (p.1). The whole volume tells us many fascinating activities among Hamburg organists.

*Des Wohltemperirten Claviers
Zweiter Theil
bestehend
in
Praeludien und Fugen
durch
alle
Tone und Semitonien
verfertigt
von
Johann Sebastian Bach*

*Königl. Pohlnisch und Churfürstl Sächs.
Hoff Compositeur Capellmeister und
Directore Chori Musici*

*in
Leipzig.*

*Im Jahre
1744.*

It is interesting to find the date of work "1744" in the title page, which is the only known instance in extant MSS. At the end of Fg.b, p.119, we find the date of the copy probably in Schwenke's hand, "*II / Fine. / 1781*". From page 120 onwards were included a fugue by Graun, Toccata in C minor (BWV 911) and other organ pieces by Bach. These were likely to have found themselves as an afterthought in the pages left unused by WTC II, assuming from the way the MS was made.

The MS was bound in gatherings. The sheets are found to be gathered mostly in quaternios. The paper is light brown in colour, and kept in good condition, though not very flexible. The staves were carefully ruled with single staff rastra. The rastrum 6.8 mm high was used on pp.2-53, while that in 8.4 mm high was used from this point onwards. The staves were distinguished by thin, dark brown ink, from the black or very deep brown ink used for notes. The music was beautifully copied and formatted into carefully calculated space.

The musical text was stemmed directly from post correcturam, P 430. This enables us to say that the date of work given in the title page was probably taken from the completion date of P 430. The quality of its text is good. We can hardly find common errors such as overlooked ties. However rare, we can find several unique errors, some of which serve as evidence for its relation with the exemplar.⁴⁵⁹ Perhaps most interesting is the later amendments to the text, which can be classified into four judging from the shade of ink - grey, dark black, brown and thinned brown.⁴⁶⁰ Most commonly found places are the addition of ornaments and the modification of accidentals. The former is aimed to fill in all the implied ornaments. The latter is

⁴⁵⁹ The error which stemmed from the copying process itself is the first beat in the bass, b.37 of Pr.e. The pitch in P 204 is given as E#, the sharp being mistaken as accidentals, which is the key signature in P 430.

⁴⁶⁰ In supplement B, the listing of variant readings and amendments, I have specified the shade of ink, wherever identified.

to change notational conventions in the use of naturals to cancel the effect of double sharps. Some amendments, such as b.46 and b.48 of Pr.E, must be attributed to the musician who thought he understood the music better than the composer. In these instances, amendments are entered with dark black ink. Probably the same hand also entered such amendments as referring to the reading of other traditions.⁴⁶¹

P 207

MS P 207 is a collection of pieces in 236 pages by an unknown scribe. The cream colour paper measures 34.5 x 21.5 cm. In the back cover of the MS, we find the owner's name with date, "G. Poelchau / Jena 1792". In the first 78 pages is contained WTC I. It is incomplete, arranged in quite corrupted manner. And on p.1 is found the title to the volume:

*Des
 Wohltemperirten Claviers
 oder
 Praeludia und Fugen
 durch alle Tonarten
 Erster Theil
 von
 Herrn Johann Sebastian Bach,
 Königl. Pohln: und Churfürstl.
 SächBl. Hof=Componisten
 Capellmeister und Director der
 Musik
 in
 Leipzig. +*

Below this is found, "Poelchau", the possessor, in different calligraphy. At the end of the first piece (BWV 846,2) is found a date "d. 21. Aug. 1791", the date possibly when the MS was made. The section of WTC II is found on pp. 79-159. Again, the collection is incomplete, consisting of six prelude-fugue pairs and fifteen fugues only.⁴⁶² Missing preludes are: c - e, f - G, A^b-g#, a, B and b; missing fugues are: f, G and a. The pieces are arranged in ordinary way except Pr.B^b which is inserted between Fg.d and Fg.E^b. There is no special title page for WTC II, but instead, "Zweyter Theil" was written above Pr.C, p. 79. Movement headings are given in a uniform fashion - "Preludium" and "Fuga a [no. of voice] 2". Note that "2" at the end of the heading for fugues implies WTC II.

The staves were ruled with a single-staff rastrum 8.7 mm high, and were arranged in seven piano systems throughout. They were written with black ink, indistinguishable from that for notes.

⁴⁶¹ See, for example, Fg.D, bb.5 and 44, in Supplement B.

⁴⁶² Breckoff, p. 58, says P 207 contains complete two volumes of WTC, but he is incorrect in this account.

The musical text is related to P 430. The quality of text is rather poor. We find many careless errors, such as incorrect pitch, misinterpreted or omitted accidentals and overlooked ties. Most extraordinary finding yet is the unique variant readings. They are clearly the simplified text for specific purposes such as the versions for less advanced performer.⁴⁶³ The most extensively affected are Fg.C# and Pr.B^b. Fg.c is less processed. There is no MS which stemmed from P 207.

P 1078 and P 1137

MSS P 1078 and P 1137 have once been gathered in a same collection in the possession of Ambrosius Kühnel (ca. 1770 - 1813), who has referred only as a Leipzig organist.⁴⁶⁴

MS P 1078 is a single bifolium. The brownish paper is medium thick and hard, and reinforced alongside the centre fold from the outside. The sheet is trimmed along the top and bottom, and measures 31.9 x 23 cm. The title page, p.1, reads: "*N^o.36. / Praeludium / von / Sebast. Bach. / Kühnel.*" The staves were prepared on pp. 1-4 with a single-staff rastrum 9.0 mm high, and were arranged in seven uniform systems. The staves were written in dark brown coloured ink. Notes were probably written with the same quality of ink, but generally appears in much darker colour. In this space is contained Pr.D, of which the movement header is read "*Praeludium Sebast. Bach.*" "*Volti subito*" is found at the page turn. The musical text originated from P 430. There are some evidence to show the immediate correction of errors. The scribe is unknown.

MS P 1137 is also a single bifolium. The light brown coloured paper is thin and hard, and the same reinforcement was made from the back of the folio. The sheet, which was trimmed after music had been written, and measures 30.9 x 23.2 cm. The title page, p.1, reads, "*N^o 38., / Fuga in D# / Seb. Bach. / Kühnel.*" The staves were prepared on pp. 2-3 with a single-staff rastrum 9.1 mm high, and were arranged in 6 systems. The staves were written with thin brown ink, while notes were with very dark brown ink. In this space is contained Fg.D, which has the movement header "*Fuga Sebastian Bach.*" The text is stemmed from P 430. No amendment to the text is found. Kast considers the scribe as Kühnel, the possessor of the MS.

The musical text of Pr.D is derived from ante correcturam P 430. It contains many orthographic errors, such as pitch errors and overlooked rests. Many trills (~~~) were modified into mordents (~/~). The text of Fg.D is also from the same origin, and, again, the

⁴⁶³ From the way the text is simplified, one may be confused that the text of P 207 reflects Bach's earlier version. Indeed there are many readings identical with those of Bach's earlier version, especially in Fg.c and Fg.C#. In these cases, reduction is made on rhythmic aspect. However there are many unique reading of A which give advanced reading remaining in P 207, such as Fg.C#, b.28:S,1. Thus we may conclude that it is coincidental that many simplified readings in P 207 are often identical with those of Bach's earlier version. It may be added that reduction of melodic intricacy, such as in Pr.B^b are represented as unique readings.

⁴⁶⁴ Kast, p. 145; Breckoff, p. 58; Schulze 18c, p. 49.

representation is rather poor. In addition to the abundant omission of ties, the voices were carelessly interchanged at the crossing points at bb. 12, 23 and 41.

P 212

MS P 212 is a collection of various compositions in 188 pages. It is this MS which Bischoff refers as "Forkel". The "little handbook" type volume measures 17 x 21 cm, and on its cover is labelled a volume title in the hand of Johann Nikolaus Forkel (1749 - 1818). It reads, "*Auswahl einiger vorzüglicher / Clavier-Kompositionen / von / Johann Sebastian - Wilhelm Friedemann und / Carl Phil. Emanuel / Bach.*". The first page (f.1r) is a title page.⁴⁶⁵ It reads:

*Sammlung
einiger auserlesener Claviercompositionen
aus den größern Werken
von
Johann Sebastian, Wilhelm Friedemann und Carl
Phil. Emanuel Bach gezogen.*

The yellowish paper is untrimmed, and the edges are often crumpled. The size of the sheets are thus not even, and often attached smaller sheets of various sizes for long movements to avoid page turns.

The section of WTC II starts from p.25 with Fg.C. Beside the movement header of Fg.C is found an introductory note to WTC II, which added with thin ink. It reads, "*Aus dem 2ten Theil der Wohltemperirten Claviers v. J. S. Bach.*"

CONTENTS:

Page	Movement	Movement Headings
25-26	Fg.C	<i>Fuga, à 3.</i>
27-28	Pr.d	<i>Prelude.</i>
29-30	Fg.d	<i>Fuga, a 3.</i>
31-32	Pr.E	<i>Prelude.</i>
33-34	Fg.E	<i>Fuga, à 4.</i>
35-36	Pr.e	<i>Prelude.</i>
37-39	Fg.e	<i>Fuga à 3.</i> A small sheet (16.1 x 19.9 cm), ruled in 5 piano systems, was originally pasted onto p.38, which is now detached. The other side of the sheet is blank. This sheet is counted as one page.
40-41	Pr.F#	<i>Prelude.</i>
42-43	Fg.F#	<i>Fuga, a 3.</i>
44-45	Pr.f#	<i>Prelude.</i>
46-47	Fg.f#	<i>Fuga, à 3.</i> An small sheet (10.5 x 18.9 cm), ruled in 3 piano systems, is attached to p.47. The other side of the sheet is blank. This sheet is not counted as one page.
48-49	Pr.G	<i>Prelude.</i>
50-51	Fg.G	<i>Fuga à 3.</i>

⁴⁶⁵ This page is not called p.1, though it is in our convention. Kast maintains his with the penciled pagination written on the MSS. I follow this accordingly.

52-53	Pr.a	<i>Prelude.</i>
54-55	Fg.a	<i>Fughetta à 3.</i>

The staves were prepared with a single-staff rastrum 7.9 mm high, and were arranged in five piano systems, except additional small sheets, which have already been described above. It is strange, however, that the first line of every staff appears in thin brown ink, while the rest of the lines are dark brown. The notes appear to have been written in the same colour of ink as these lines.

All the movements for WTC II are written by Forkel, all stemmed from P 430. Forkel makes minor changes on notational conventions at initial stage of copying, concerning the cancellation of double sharps. Instead of using naturals, Forkel uses single sharps.

P 222 2 an

MS P 222 is a gathering of seven separate fascicles containing various pieces. The piece of WTC II is contained in P 222, 2 an, pp. 13-16, where we find Fg.F# only. The paper measures 35.1 x 20.5 cm, and was originally a single bifolium. The staves were ruled on all sides with single rastrum 9 mm high, and were arranged in eight piano systems. They were drawn freehand. The ink is of dark brown shade. Outstandingly thick among the five lines of a staff is the first line. The title page, p. 13, was written by Forkel on this ruled page. It reads:

*N^{ro} 34. LL.
Fuga
per il Cembalo
composta
da
J. S. Bach*

In next two open pages (pp.14-15) is contained Fg.F# with the header "*Fuga à 3.*" The last page (p.16) is unused. The music was based on post correcturam P 430.

P 546

MS P 546 is a collection of fugues by various composers including Bach, Froberger and Pitsch. The MS consists of 24 pages organized by three binio fascicles (II x 3). The yellowish coloured paper, measuring 31.7 x 24.8 cm, is flexible, and has very sharp edges. In page 1 is found the table of contents written in pencil. Apart from this the volume is entirely written by Friedrich August Grasnich (? - 1877). Kast considers the date of MS to be ca. 1820.

The MS was perhaps dedicated for the fugues from WTC, which occupies just over the first half of the volume.

CONTENTS:

Page	Movement	Movement	Headings
2-3	Fg.D	Fuga a 4 Voci	Joh. Seb. Bach.
4-5	Fg.E	Fuga a 4 Voci	Joh. Seb. Bach
8-9	Fg.E ^b	Fuga a 4 Voci	Joh. Seb. Bach.

All the three fugues uses treble clefs for R.H. instead of soprano clef. The musical contents themselves are, however, identical with P 430, which Grasnich himself possessed.

P 828

MS P 828 is a single bifolium. The paper is trimmed on three sides and measures 23.6 x 34.7 cm. It is hard and medium thick; its colour of inner folio is greyish, whereas that of outer folio is brownish. It was reinforced along the centre fold from inner folio (pp.2-3). The ink used for the MS is black, probably containing soot. The acid in the ink erodes the paper to visible extent, appearing as blotches to the other side. Kast dates it in the first half of the 19th century.

The first page is the title page. It reads:

*J. S. Bach.
Fuga in C.*

(Wohltemperiertes Klaviers II,1.)

Stellung = Kroll (Peters) und Bischoff (Steingraber)

*Aus dem Rechtenbachschen Nachlaß.
umfallen Januar 1885.*

Th. Borsdorf.

An unknown scribe wrote the first two lines only. All the others were added later, probably by later owner of the MS, Th. Borsdorf. In two inner pages (pp.2-3) the staves were ruled extremely neatly with a rastrum 8.4 mm high, and were arranged in four piano systems. On this space is found Fg.C, entitled "Fugue." It was extremely neatly prepared. Unlike the other MSS of A, this is the only instance in which the R.H. staff uses the treble clef.

The scribe used the version of A as a model, using the notational convention of later annotators of H.⁴⁶⁶ The musical text contains only a few minor error, such as the omission of tie in b.22:S,2-. All the mordents were written initially as "tr", and later annotator, possibly Borsdorf could have referred it with the editions of Kroll and Bischoff, made various annotations -

⁴⁶⁶ Breckoff, p.43, lists this P 828 among Kimberger circle MSS. He also claims that the MS was modelled from Kroll's edition (Peter). These two interpretations disagrees each other, because Kroll's version is not K, but A. Moreover I do not think that the annotation in the title page about the Kroll's edition means the direct relation between them.

including bar numbers, modifications of ornamentations and comments related to the annotations.

P 402: The Source A2

MS P 402, often referred as *Altnikol I* by previous scholars, is a large volume of 320 pages containing both volumes of WTC. It is, however, divided in two clear sections, WTC I and WTC II, paginating them separately. The front cover is labelled as "*W. Steifensand / Seddin bei Stolp*", the name of the possessor Wilhelm Steiffensand (1820 - ca 1900).⁴⁶⁷ The volume is currently heavily damaged alongside the binding line, and may be re-bound in near future. The MS was the assembly of quaternios.⁴⁶⁸

The title page (p.1), written in the same hand as the cover label, is read: "*Das wohltemperirte Klavier / oder Praeludien und Fugen von / Johann Sebastian Bach / 1str Theil / geschrieben von Johann Christov Friedrich Bach / Ano 1740 Professor.*" It was written in thin brownish ink, while '1ster Theil' was in much darker shade. This remark is considered false.⁴⁶⁹ At the end of the WTC I (p.112), we find the original remark by the scribe, "*Scrip[si]t: Altnicol 1755*".

WTC II is introduced by a simple remark "*2ter Theil*" on blank background on p.1 of the second section of the MS. The staves were ruled carefully with a single-staff rastrum 9.7 mm high (gauges 2.1, 2.6, 2.6 and 2.6 mm from 1 - 4 spaces). They were drawn with very thin, light brown coloured ink, giving clear contrast with the notes in dark brown shade. And they were arranged such in seven uniform piano systems per page that we find no such thought here as P 430 to plan a special layout for individual movements. Movement headings are thus written on the left most part of the system. They appear in uniform style "*Prelude*" and "*Fugue / a.* [no of voice]". Thus we can see that in every non-musical aspect of the MS *Altnikol* preferred less elaborate fashion than his previous pursuit. Nonetheless, his calligraphy is extremely careful and beautiful, full of respect to the work.

The musical text, which is fortunately mostly preserved intact, is certainly related closely to P 430. But occasionally found significant differences in reading raises a possibility that the scribe, *Altnikol*, copied from a different exemplar, or perhaps, intended to make the MS in slightly different characteristics from his previous attempt, P 430. The analysis of these readings often leads to the same answer: it reveals that the part of the text of P 402 gives certainly earlier text than P 430, the verdict suggesting the evidence of Bach's composing and revising processes. This is clear especially in the following movements: Pr.g#, Fg.a and possibly PrFg.b also. On the contrary, possible later text in minor detail can be confirmed in

⁴⁶⁷ Kast, p.148.

⁴⁶⁸ Breckoff, p. 62.

⁴⁶⁹ Breckoff, p. 62; Kast, p. 28.

Fg.f. I must stress, however, that in this case the text in P 430 was represented as clear error. Likewise, Pr.g and Pr.f# contains less errors than those in P 430.

From these facts I contemplate that Altnikol did not or could not use P 430 as models.⁴⁷⁰ The most probable reason for this would be that P 430 could have been dedicated to Bach at its completion.⁴⁷¹ And in return, Altnikol might have received S, the second set of autograph. This would be one of the possible reasons why the text of S was known through Altnikol exclusively, and why P 402 reflects the older reading more faithfully. To validate or invalidate such speculation, we require immediate work on investigating the history of owners of P 430.

CONCLUSION

Let us now consider how our aims of this chapter are accomplished. Firstly, we have found the additional proofs of the compilation of WTC II in three aspects - chronology, maturity of the pieces and the selection of pieces according to the demand of individuals. Clearly reflected by the chronological factors is the separation of **Group 3**, as seen in source H. The same group of pieces seems to have lacked musical maturity, for it appears that Wilhelm Friedemann (DD 70) made his own revision to these movements only. A similar, but certainly different consideration was also made in the selection of individual pieces. For example, in P 513 we find the selection of thirteen movements of which all but one is **Group 1** of L. This may be decided by the less technical demand in the pieces. Other copyists also made free selection of pieces for various purposes, however not directly related to our discussion. Fugue only selections, such as No.543, MU MS 161, are particularly attracted by those who appreciated the ingenuity of the musical form itself. The reduction of cycles, due to the huge size, is also common: we find in P 210 (first half), P 211 (fairly random selection).

The other issues, such as the origin of variant readings, are also clarified as being either from the reading of a different version or the errors made by the copyists. Of the foremost importance is to ascertain the origin of the errors, for if it was ascertained not to be the error, it

⁴⁷⁰ It is interesting that the chronological order of these two MSS by Altnikol gives reverse reference to actual chronological order of text. This fact caused unique and rather confusing references to these MSS by Bischoff and Tovey: they refer to P 430 as *Altnikol II*, and P 402 as *Altnikol I*.

⁴⁷¹ The only piece of evidence for this hypothesis is that Schwenke, who was the successor of C. P. E. Bach in Hamburg, made the copy P 204 from the post correcturam of P 430 in 1781. This is the earliest record of correcturam among the MSS of well established dates. It is also noteworthy that, according to Dehnhard (1983, p. xxiii), the MS in Konwitschny state, which survives only in microfilm in Bach-Archiv, Leipzig, is said to be originated from ante correcturam of P 430. Pity is that the source has not yet been made available to my inspection despite my requests twice in writing, and that I could not confirm the remark by Dehnhard myself for this study.

must be otherwise a variant reading. I have tried two tools for the analysis - the study on the diplomatic policy of individual scribes and their notational convention: the evaluation of the variants is to be strengthened further by statistical analysis laid out in hypothetical genealogical relations of the MSS carried out in Supplement B. Such analysis often enabled us to judge some of the variant readings as the result of improving the original, or of unsuccessful restoration of the errors. This very manner of procedure in the study also revealed very complex editorial activities within and outside the tradition.

The third issue, the origin of variant tradition, showed many interesting phases in individual traditions. The tradition B, the most orthodox of all, reflected Bach's revision activity in clear chronological order, since it is originated from the constantly revised autograph. This shows that Bach allowed to make copy out of his still incomplete state of work. The tradition K showed how eager Kimberger was to compile an error free complete work. His ceaseless pursuit seems to have caused adding more inspired reading of his new age. Thus it seems that Kimberger began this work out of insufficient resources, and at a later date, he seems to have succeeded in accessing L directly. His quest for improvement was made in such a thorough and systematic manner that one may feel Bach's intention of the work at the time, which was much imperfect and unsatisfactory for publication. The study also indicates that what seem to be valid variant readings contained in tradition K were mostly Kimberger's afterthoughts, which are considered to have been accumulated during Kimberger's own compilation and the perfection of the work. Finally the tradition A reflected the different type of activity by Bach - making an incomplete, second set of MSS to a complete state. It is significant that all the traditions share the same feature, i.e., aiming toward the perfection. All the extant MSS so far indicate that the final task, *Fassung letzter Hand*, was never done by Bach.

Due to the limitation imposed on my study, I was obliged to leave out some important research work. Immediate future study should include the following two research topics: first, the study should cover all the known MSS, since I could not do so within the scope of this study. This should enable us to establish more solid genealogical relation of the MSS, and on this basis, we shall be able to interpret the origin of variant readings more confidently; second, all the MSS should be accurately dated by scrutinizing the physical aspects (e.g., watermark, rastrum, ink) to the chronology of the scribe and the owners of the MS.

CHAPTER 4

REVISION PROCESS OF THE LONDON AUTOGRAPH

Forkel wrote:

"I confess that I have often felt both surprise and delight at the means which he employed to make, little by little, the faulty good, the good better, and the better perfect. Nothing can be more instructive than such comparisons, for a connoisseur as well as for everyone who is eager in the study of his art."⁴⁷²

Though the outcome of his study itself may not always be accurate, the study project offered by Forkel remains valid and is most fascinating.⁴⁷³ It is especially so in our case, since Forkel's observations included the pieces of WTC II. The study is valuable, especially when it helps to give various perspectives to the image of Bach the composer. Taking an example from the study of variant or alternative readings, we may learn at least three aspects reflecting the purpose of revision:

- 1) a consideration for a particular instrument in terms of its resonance and register;
- 2) a technical consideration for less or more advanced pupils.
- 3) a stylistic consideration in the performance;

Yet, in my view, it would contribute to nothing more significantly and effectively than to the chronology of Bach's revision techniques. This can ultimately lead to the dating of various versions if such study can be substantially authenticated by other approaches. One of these is the study of Bach's biography. This can give a clue for us to determine the purposes of revision, which we normally restricted to four, i.e., performance, teaching, copy making, and publication.

One may find it strange why such an important study as this has not yet been explored exclusively for Bach's keyboard music, let alone WTC II. There is no doubt that the study must have been fettered mainly by our source situation, where we know very few autographs, especially composing scores. Apparently the ideal of our study is to be able to access a set of autographs showing the advancement from its conception to perfection. In the case of WTC II, the situation is far from ideal: we have autographs which cover only a very limited part of the process of betterment; and as is shown in Chapters 1 and 3, we have to rely for the rest on the copies. In many cases, even these copies do not exist; and if they do exist, some of them are found only to be of a spurious origin.

On this background, Brokaw (1986) recently made a significant step forward towards our understanding of Bach's revision process in the pieces of WTC II. He focuses his attention particularly on the harmonic structure between the early models and the autographs, endeavouring to show us the composer's deep insight into improving the original harmonic plan.

⁴⁷² Forkel (1802), Chapter X. English translation in BR, p. 348.

⁴⁷³ BR, p. 348; Stauffer (1985), p. 185.

It was his prerogative that he was able to integrate the discussion with manuscript studies.⁴⁷⁴ Nonetheless he makes no significant attempt to establish the chronology of Bach's revision techniques which he classifies into nine types.⁴⁷⁵ Nor does he make use in his discussion of the precise order of events taking place in Bach's revision process. It is apparent that more involvement into the study of chronology is the immediate task. This undoubtedly enlightens the approach that Brokaw has taken.

ANALYSIS OF AMENDMENTS

Significant amounts of information about Bach's copying and revising processes contained in the London Autograph (L) have never been thoroughly disclosed.⁴⁷⁶ One of the chief reasons for this seems to have been our doubt over whether such an undertaking would be useful in the study of Bach's revisions and whether it would contribute towards the elucidation of the mystery about Bach's *Fassung letzter Hand*. But, as I shall show, the detailed study of this aspect of L is indispensable in any kind of systematic approach to Bach's compiling and revising procedures of WTC II. It can provide a vital piece of evidence which enable us to reconstruct a fairly authoritative historical image of the work at the time when Bach might have considered or perhaps written an inextant copy of *Fassung letzter Hand*.

The method of my approach is not innovative, though there are presently some pioneering, sophisticated technologies such as radiography or infra-red available to our other industries. The method I use is in fact virtually unchanged since Bischoff's time. But it is a major advance from his time, apart from the public recognition of L, that I am permitted to spend more time and much freedom with the MS owing to the recent publication of a high quality facsimile edition.

Another important advance from my predecessors' is the manner of interpreting the order of events. Unlike my predecessors, who were merely to point out the different readings between various MSS, my chief task is to re-construct the history of L exclusively from Bach's working method and conventions identified in the process itself. The earlier part of the MS's history, i.e., Bach's copying process and corrections, can be partly ascertained by the precise identification and classification of various types of amendments found in the autograph. Unfortunately this is insufficient for the ultimate purpose I intend to pursue, however: the cause

⁴⁷⁴ Though his manuscript study is largely the translation of Breckoff (1965), it describes for the first time some unknown, and yet significant aspects of MSS P 1089 and N.10490. His study of the autograph is, however, premature; his observation is often incorrect, which inevitably reduces the credibility of his work.

⁴⁷⁵ Brokaw(1986), p. 4.

⁴⁷⁶ There are only a few articles about one of the movements: Pr.C - Brokaw (1989), Pr.d - Stauffer (1985).

or necessity of amendments made by Bach are still not apparent from the visual evidence alone. In order to discuss the psychological as well as strategical aspects of Bach's copying process, I shall introduce to the study a rather controversial topic of research on Bach's "density of writing". By combining these two diverse approaches, it seems for the first time feasible to visualize the evidence in Bach's working process at this particular stage of MS making. The later part of the history, i.e., later revisions, can be ascertained by the types of ink, calligraphic distinctions and the comparison with its "offspring MSS" which often represents the reading before revisions.

VISUAL EVIDENCE OF THE REVISION PROCESS

In the following discussion, I shall use two terms for categorizing amendments in the light of Bach's working methods. "*Correction*" is the act of correcting a demonstrable error. "*Revisor*" is an act of improvement, where the original reading was grammatically correct and was originally intended by the composer. Therefore the term "*Amendment*" is used here as a cover term for "*change*", implying either correction or revision or even both.

Classification of Visual Evidence

Establishing the reasons for amendments can be criteria for the analysis of revision process. They are assessed mainly by the appearance of the amendments. Amendments made on the MSS are of various types. They can be classified in two ways: one is by the method of amendment, and the other is by moments or events.

THE MANNER OF AMENDMENTS

In order to analyse what was actually involved in amendments and why such amendments were necessary, we have to first identify what was written at an initial layer, and what types of action were followed. Analysis can then be made based on such compositional / revision procedures. In my study, I shall distinguish such procedures in four groups of eight types of methods:

Table 26: *Classification of amendments by method***A. Pen Emendation**

1. amended (symbol): one symbol is amended by pen to the same type of symbol.
2. overlaid (symbol A) by (symbol B): [Symbol B must be a different type of symbol from A.]
3. cancelled (symbol): symbol is crossed out by pen.
4. amended by lettering: letters are used to specify the reading.

B. Scraping Emendation

5. trimmed (symbol): part of a symbol is removed by scraping.
6. removed (symbol): an entire symbol is removed by scraping the surface of paper.⁴⁷⁷

C. Scraping and Re-notation

7. replaced (symbol A) with (symbol B): the original symbol is removed by scraping from the surface, and a new one, which is not necessarily the same type of symbol, is written on the top

D. Later Addition

8. added (symbol): without erasure, a new symbol is added, most often squeezed into insufficient space or written over the top.

A statistical study of this classification shows that the particular types of amendment often arise from similar causes, e.g., the disposition and skills of a copyist, the degree of maturity in musical inspiration and ideas, or fixed revision criteria.

THE HYPOTHETICAL MOMENTS

The amendments can also be classified by different means. According to the hypothetical moment when they were entered on the score, they can be categorised into three different types. Marshall assigns into the following three types: 1) "immediate", 2) "later", and 3) "chain-reactive" amendments.⁴⁷⁸ I shall explain each in turn.

IMMEDIATE AMENDMENTS

The "immediate" amendments are specifically identified visually as having been made by the composer without delay. In other words, no further music had been written before the completion of the amendments. For example, the emendation of a note-head in pitch can only be an immediate amendment if the stemming and beaming belonged to the amended reading. From the nature of amendment, the immediate amendments are usually corrections. They are more often identified in composing scores where Bach was working from thematic material, and found poor voice-leading, such as consecutive 8ves, before stemming and beaming. In fair

⁴⁷⁷ In L I have not discovered the removal of ink by blotting, which is believed to be very common.

⁴⁷⁸ Those three types of correction are classified and discussed in Marshall, p.34 f. My classification and designation slightly differs: those will be explained in due course.

copies, this type of amendment is generally restricted to half drawn symbols and the immediate discovery of clef errors.

LATER AMENDMENTS

"Later" amendments,⁴⁷⁹ as a purely linguistic term, should include all the remaining types of amendment. However, for the benefit of obtaining deeper historical and analytical insights into the study, I shall restrict the semantic implication of the term. By the restricted designation as "later" amendments, I mean amendments which were entered on an already completed texture. Therefore, the later amendment could be carried out at a separate sitting: either a proof-reading of the original with necessary corrections, or inspired revisions. In addition, the use of a different shade of ink and thickness of pen will distinguish later amendments. These are the clearest proof of a time-lapse between copying and later amendment.

CHAIN-REACTIVE AMENDMENTS

The third type of amendments, which I shall call "chain-reactive", is very special.⁴⁸⁰ For one thing, this type of amendment must, by definition, consist of at least two amendments. For another, one of the pair (or more) of the amendments does not necessarily look like an amendment on the score. In fact, we can sometimes also count initial entries as results of "chain-reactive amendments" if we can establish firm grounds for saying that in that particular instance the composer had amended his originally planned notation before setting it down on paper. Therefore, we can say that this type of amendment is a revision. And the amendments must be seen to have been carried out in chain-reactions. This type of amendment is mostly found in thematically or motivically related passages.

Because the "chain-reactive" amendments cover both immediate amendment and later amendment, I shall distinguish the two. The first type is called "immediate chain-reactive amendment". It must meet the following special conditions: An antecedent amendment appears later than its consequences. The identifiable chain involves an immediate amendment or a complete "new" reading which necessitated correction of an earlier passage or passages (the consequent amendment). The second type is called "later chain-reactive amendment". This has a clear condition: all the motivically related amendments must appear in the form of later amendments.

Let us quote an example of "immediate chain-reactive amendments." In Pr.d# (f.6r), the revision was deployed in the characterization of a minor scale by later added accidentals into

⁴⁷⁹ See Marshall (1972), p. 34 f. Marshall calls it as "subsequent" or "delayed" corrections. His designation slightly differs to my concept of this type of emendation.

⁴⁸⁰ Marshall's term "chain-reaction correction" differs essentially from my designation. His designation includes wider hypothetical moments including "proof-reading", which I included in "later" amendments.

the descending scale passage in b.1 (R.H.). This can be observed as an immediate chain-reactive revision if we compare with that of L.H. in b.2, which includes those accidentals at the initial copying. In all probability, Bach might have had an exemplar, which gave a plain minor scale syntax for both instances, which he amended it instantly at bar 2 at copying stage, then came back to bar 1 to enter the same revision.

By interpreting the visual evidence as the notation of consecutive compositional processes, it is possible to reconstruct the order of events in a series of revisions following the initial composition. At this stage, the several layers of compositional activity can be distinguished, from the initial copying stage to the final revision.

However, some types of amendments⁴⁸¹ can occur at almost any moment. Not only the types of mistake but also certain features of calligraphy can be affected by unknown biographical factors.

MS TYPES AND THE TYPES OF AMENDMENTS

First Layer of the Score

Distinguishing the first layer of a score is the most vital task in our study, for this provides various pieces of evidence to re-construct many unknown factors, such as the state of the exemplar, compositional progress and the initial purpose of the score. The first layer of the score can be a temporary stage or the final state of the piece. This stage may begin with planning and executing stave-layout, through writing music, and may be completed with the final double bar or fermata. Scores are generally described by conventional terms, i.e., composing scores, revision copies and fair copies. But these terms often do not convey sufficient and precise information about the initial state of the scores due to the loose definition of the terms. Thus I shall re-define the terms below. One of the factors that necessitated my re-definition is that under the traditional method ^{scores} are sometimes defined without much evidence or strict criteria. Such terms can lead one to describe a score from either the final appearance of the copy or the amount of amendments left on the score. These are often inconclusive, and dangerous. These criteria do not justify the composer's initial aim of the score. For example, in the genre of 'fair copy', we may have to include, apart from a genuine fair copy, the score on which a piece was composed smoothly and the score on which a pre-improvised piece was merely copied. Again, under 'composing score', we may include the score on which heavy revision was carried out, sometimes in several layers, as well as sketches or memoranda. Another type of confusion arises from flexibility of this conventional terminology when the terms

⁴⁸¹ e.g., 1) obvious from melodic as well as harmonic scheme. 2) change of note-head at change of system in the middle of bar, 3) wrong clef was in mind assuming from the melodic interval and harmony.

imply a judgement on the implication of the maturity of the composition, or of a particular version of it.

At this first layer of the score, I shall place the composer's activity among one of the following four types according to the initial purpose of the score, or the composer's attitude at this stage - sketching, working out, improving some details and making fair copy. I shall refer to the score, in the four types, as the first record or a draft, a composing score, a revising score and a fair copy respectively.⁴⁸² Thus these terms are only used to describe the first layer of the score.

This strict definition of the initial stage of the score prevents one from judging the status of a copy by its the general appearance. The terms has definite specific meaning. In order to gather sufficient evidence to be able to define them, we have to first examine and analyse the initial copying process. This can be done by distinguishing the initial amendments from later ones, analysing them in the light of Bach's musical activity, and finally giving insight into the density of his notation.

FIRST RECORD

By definition, a first record is the score on which the composer was basically transferring his musical ideas to notational form on paper for the first time, without altering or developing the basic musical idea on the paper. Its purpose is simply to record a new musical idea. From the degree of musical maturity, we can classify this type of score into two sub-types. Underdeveloped ones we may call 'primitive records', 'drafts' or 'memoranda'. They were often less than eight bars long. Well-developed ones we may call 'mature records'. This second type is a unique score, and probably only found in Bach's keyboard music. Under such cases the scores may contain complete pieces of music, which could have been developed in his improvisation on the clavier. From the final appearance, such a score can only with difficulty be distinguished from a smoothly processed composing score or an uninspired fair copy, not only because all three could just produce copies in similar appearance, but also because the most vital evidence, i.e., the presence of exemplars, may not easily be ascertained. Careful study on Bach's amendments and his density of writing could suggest, however, that Bach's emphasis is laid on the recording rather than the improvement of musical details or calligraphic beauty.

COMPOSING SCORE

By definition, a composing score is the score on which a composer worked out his musical ideas based on the first primitive record. Such ideas are not distinguished by length, but must contain workable musical figures that display inherent basic, clear musical characteristics, e.g.,

⁴⁸² See Dürr (1984), p. xvii. Dürr's four terms, viz., Sketch [Entwurfsschrift], Working out score [Ausarbeitungsschrift], revising score, [Umarbeitungsschrift] and a fair copy [Reinschrift], are equivalent to my terms, except that the definition of the first two terms is different.

melodic contour, rhythmic velocity, etc. The most important evidence on the composing score is the presence of such characteristics being worked out on the score.

A feature of the composing scores is the presence of numerous amendments as the result of extensive work involved in the early stage of compositional activity. The scores often contain large scale revisions of a "formative"⁴⁸³ nature as well as the traces of primitive compositional process such as figured bass working principle, harmonic skeletons and grammatical errors. In some instances, Bach leaves sketches or drafts with the worked out version in the same sheet. But these features cannot serve as evidence to judge the initial layer as they are often the result of later revising activities. The most important task is to isolate strictly the layers of revision activities and to analyse each layer accordingly, so that we may find out which aspect of compositional activities was more predominant or less so at the initial layer of the compositions. From the result of this kind of analysis, we may be able to ascertain the state of the exemplar and Bach's general compositional methods and the order of compositional procedures.

REVISION SCORE

A revision score⁴⁸⁴ is, by definition, a score which is intended from the outset to revise and copy out a composition with reference to an exemplar containing the old version of a complete piece. Analysis of the amendments and copying procedure in the new score must show that the composer copied attentively and made specific improvements. The identified revisions must therefore point to the incentive of making such a copy. Our most important and by far the most difficult task is to ascertain the revision which was presumably instantaneously completed at copying stage. This is normally the case, because the composer planned initially how the revised version should be. There is a way to ascertain the revision of this type to certain degree. Since Bach revised a piece in highly categorised and logical fashion, there appears not a few places where Bach had to readjust the initially entered revision according to the feature in the various parts of the piece. It would therefore be extremely helpful to know the version on which the new revision is based.

The revision which is not planned initially but arisen during the copying activity also reflects another aspect of the revision score. However does this type of revision affect the definition of the score type, it is often associated with the activity and the process of revision itself. The chain reaction revision is the best example. In addition, we may consider amendments made at a later stage, which were most likely anticipated from the outset.

There are basically two types of revision technique in revision scores in WTC II, viz., structural overhaul and detailed improvement. Usually structural overhaul can be seen in either

⁴⁸³ Marshall uses this term when the contour, character, and structure of the musical ideas have been basically altered for purely aesthetic reasons. See Marshall (1972), p.34.

⁴⁸⁴ See Marshall (1972), pp13 and 18.

the expansion of the cadential section alone (e.g. Fg.C and Fg.Ab) or the expansion of multiple small sections (e.g. Pr.C, Pr.d and Fg.C#). Detailed improvement, on the other hand, can be seen in many aspects of musical compositions. It can include the revision of the theme itself, which is to alter the basic musical idioms and the character of composition such as Pr.C.

Apart from the one described above, several other attempts to perfect the initial aim of the score can be considered as criteria for 'revision':

- 1) voice-leading in the light of clearer and fuller voice texture.
- 2) maintenance of rhythmic consistency in continuous flows of minimum note value (often semiquavers) attained by the synthesis of multiple voice texture.
- 3) melodic refinement in scalar passages by revising accidentals.
- 4) harmonic improvement in bridge passages.
- 5) addition of diminutions, grace notes, trills.
- 6) addition of extra voices, doubling for cadential sections.
- 7) slight departure from fixed thematic, contrapuntal development for purely aesthetic reasons.

The final appearance of the revision score may be partly that of a composing score and partly that of a fair copy. The appearance of the score is totally dependent on the specific ideas of revision involved. The characteristics of the composing score are usually found in concentrated areas in a piece where the composing process met with critical difficulties. As could be expected, Bach's general method of composition is also confirmed in these areas.

The dating of revisions is in some cases possible by comparing the identified revisions and the dating of other extant MSS, such as the sources A, F, H and K. From the assembled pieces of evidence, it becomes apparent that Bach worked out from simple to complex, seldom in vice versa.

FAIR COPY

By definition, a fair copy is a score on which the composer intended to reproduce the reading of the exemplar in order that the text matured through his previous revisions is accessible from a clean and pleasant score, free from errors. At the first layer of the score, the text is supposed to be the final authoritative reading, though it may be altered at a later stage. Equally important is an aesthetically pleasing calligraphic appearance. This criterion can be isolated into two further aesthetic elements as calligraphic handwriting and well-planned stave layout.

But in reality, few scores that meet the definition in the strict sense. There are normally more than a few corrections, though they are often restricted to slips of the pen. This does not mean that Bach was incapable of writing flawless copies. It has been thought that in his late years Bach did not have the patience or inclination merely to copy out a piece mechanically.⁴⁸⁵

⁴⁸⁵ Marshall (1972), p.15, quotes that only one exception exists - a fair copy of St. Matthew passion (P 25) which is dated slightly earlier than L. But he admits that some part of the 83 folios copy were heavily revised.

In my observation of L, I found that his copying process tended to be no less than a fresh musical activity, giving him an opportunity to revise the composition at the same time. Thus there can be several "later" or "chain-reactive" amendments, such as improvement of melodic character by controlling the application of accidentals, but hardly the types of revision that alter the fundamental idea of the composition.

Final Stage of the MS

The final stage of the MS, in my definition, is the stage where Bach finished working with a score. This is the state we see it as the MS. The distinctions made at the initial stages of the score, such as composing, revising, etc., were not important for Bach at this stage. More important were the musical maturity and the calligraphic neatness.

What is important for us, then, is to measure Bach's commitment to the score during his revision process. The reason for doing this is to establish a firm background to judge Bach's psychology at the time Bach completed his editing of the score. Here we find two possible steps of some importance that Bach has taken:

- 1) The music is complete and the score is final, and no further improvement could be made for the time being.
- 2) The music is incomplete, and has to be transferred onto a new score for a variety of reasons.

How can we measure such abstract idea as "Bach's commitment" and "psychology"?

There are at least the following methods of evaluation:

- 1) initial state of the copy.
- 2) number and types of amendments and appearance of the score.
- 3) number of revision layers and appearance of the score.
- 4) comparative study of other extant versions of the same movement.

INTERPRETATION OF BACH'S CALLIGRAPHY

The aim of interpreting Bach's calligraphy is to reveal two factors resident in MS making - the chronology of his calligraphy and the types of calligraphy distinguished by him for certain purposes. Recent studies by Kobayashi on the former aspect show that such a study can provide a vital piece of evidence in the classification of Bach autographs in a certain chronological order.⁴⁸⁶ But when it comes to identifying such a MS as L which spans within a couple of years only, it seems impossible to make chronological distinction between them.⁴⁸⁷ On the other hand, slightly outdated yet still legitimate and important studies by Dadelsen and

⁴⁸⁶ Kobayashi (1988), pp7 ff and NBA KB IX,2, pp191 ff.

⁴⁸⁷ In Supplement A, I have included the detailed examination of crotchet rests and down-stemmed minims.

Marshall include the latter aspect as well as the former: they show that Bach indeed distinguished between what they defined as "non-calligraphic" and "calligraphic" hands.⁴⁸⁸ The criterion for judging Bach's two types of handwriting is the shape of various musical symbols. In fact, handwriting can be affected by many factors: the degree of commitment to make scores neat, the composer's flow of imagination, patience in the simple mechanical process, the status of the exemplar and so on.

In discussing Bach's revision process later on, I shall differentiate the scores basing on these handwriting criteria, i.e., non-calligraphic and calligraphic. Here I shall briefly dwell upon how four of the symbols are interpreted.

- 1) Note-heads in calligraphic hand are generally rationally spaced and equally sized according to temporal value of the piece.
- 2) Stems in calligraphic hand are vertically straight or with a slight natural curve for upward stems. Their length is basically maintained between two and a half to three spaces of the staff used. There is also a general trend to shorten them if they are to be joined with a beam. Those in non-calligraphic hand are often tilted to the right.
- 3) The position of down stemming from a note-head is usually distinguished between calligraphic and non-calligraphic hands. That of Bach's calligraphic hand is from the left side of a note-head, while his non-calligraphic hand as well as that of Anna Magdalena's is from the right side.⁴⁸⁹ In a larger time-scale, this also indicates the chronology of Bach's handwriting.⁴⁹⁰
- 4) Beams in calligraphic hand are generally running parallel to the note-heads, and the edges of a stroke are nicely shrunken as a result of speedy, confident writing skills. Those in non-calligraphic hand as well as in Anna Magdalena's often do not conceal the edge of stems, while Bach's calligraphic scores' do.

The distinction of notational neatness is in fact not limited to judging the degree of commitment or inspiration in writing. Precise perception of such psychological factors can also be used as a criterion for the interpretation of the amendments of notational symbols.

Also important is it to remember Bach's order of notation: 1) note-head, 2) stem, 3) flag or beam. For example, The amendment of a note-head alone can be interpreted differently if the stem is already present or not. Thus the judgement of "immediate" or "later" amendment is based on this premise.

The other important aspect of notational practice is note alignment. This practical device was used to present music in a readable form, and Bach pursued it wherever possible. Note alignment, however, is slightly different from and can be quite unrelated to our distinction of calligraphic features, for it relies more on the deeper mechanical task involved in the copying process, while calligraphic variations could also stem from free, arbitrary musical activities. This being the case, note-alignment can be regarded as an extended branch of the calligraphic

⁴⁸⁸ Dadelsen TBS_t 4/5, pp.44 ff; Marshall, pp.4 ff

⁴⁸⁹ It is important to note that those untidy ones are natural to the physical movement, but also accepted formerly in the older handwriting notational convention.

⁴⁹⁰ Emery (1953), p.117; Kobayashi (1988), pp.17 ff.

element. Wherever note-alignment fails in a score, it attests to various interesting problems present the writing task, which can otherwise remain undetected. In Bach's composing scores, this can be regarded as a result of his not seeming to have sufficient insight into all the voices at the time he put down the first voice. For his non-composing scores, an unsuccessful alignment can often point out Bach's later revisions on the MS where he added enhanced melodic and rhythmic details in the space left on the staves. On the other hand, it can also be caused by the constraints of space allocated for a particular piece of music that forbade him to consume as much space as he was normally allowed. This type of misalignment is only observed either towards the end of a piece where space shortage became apparent or due to the occasional use of demisemiquavers which could not be made smaller than the size of a semiquaver owing to the inherent physical size of the symbol.

THE CHOICE OF INK

In many sheets two or sometimes three different shades of ink are found. One of the most acclaimed contributions of this kind which leads to the re-interpretation of Bach's working procedures in to the fact that Bach probably worked in various stages between wide spaces of time.

In the folia prepared by Hand A, staves and notes are written with the same kind of ink, which appears to be dark black in colour. A closer look at the drawing of staves reveals that ink has not penetrated into the paper smoothly and this gives the staves deficient appearance in many places. This kind of ink can be conclusively assumed to be thick. In the rest of the folia in L, a thinner, lighter colour of ink is used for drawing staves. This choice gives much better readability to the score. It is possibly thinned for this very purpose.

In examining the original MS, I noticed that most of the amendments associated with pitch emendations are in the nature of immediate amendment: they normally give a distinctive light reflection⁴⁹¹ as well as a slightly different shade of colour from the rest. The type of ink is generally easily distinguishable from the one which is used for later stages of revision, which will be discussed shortly. This ink could be identical with what was used at the initial sitting. The difference in shade seems to be caused by two factors: the overlaying of ink and the tempered and softened by pen. This type of amendment also causes unexpected ink smudge and stain to penetrate to the other side of the folio.

Another important finding in the examination of the original MS is that Bach occasionally used a totally different type of ink from the rest of the notation when he made amendments at a later date. This revision ink (abbreviated as RI) is often found in proof-reading amendments. It appears that it is normally black - the particular reflection suggesting a soot type of ink. Also noticeable is the thin pen tip used in conjunction with this ink, thus making it possible for

⁴⁹¹ I examined the MS under normal lighting condition. The reflection became obvious when the angle of my observation of MS is about 45 to 60 degree.

squeezing in accidentals and demisemiquavers. The pen-stroke is generally much sharper than the rest, and there is no smudge around the edge of the notation. From this, it can be concluded that RI is a thicker ink in comparison with the other types of ink used. There are, however, some symbols of later additions which were in light brown. They were found in minor supplements only.

It must be also noted that there are a number of instances in Group 1 in which the ink seem to vary as well though the variations are not as distinctive as RI. These curious varying shades appear in the notations of ornamentations and in the titles in Pr.e, f#, g and b. It is perhaps plausible to maintain our hypothesis that in Group 1 Bach and Anna Magdalena were consecutively producing MSS without giving proof-reading, ornamentations or the title until scheduled number of copies was completed. At this stage, due to the lapse of time, the ink used might have become thicker and darker, and Bach could have been revising all the pieces continuously at one sitting with this ink. The validity of this hypothesis, however, cannot go beyond this. Only when one is able to make an equipment which can detect the density of ink will there be a break-through in authenticating the order of events in these particular cases.

STRATEGY OF COPYING PROCEDURE

PSYCHOLOGY AND FAIR COPIES

As already stated, whenever Bach made fair copies, he tried to make really good ones. S. Boorman, discussing the general procedures of making a MS, says that whether text or music was to be copied first was a decision made on the basis of the nature of the piece.⁴⁹² But for Bach, the decision was also influenced by many practical reasons, arising from the purpose of the score. For example, each movement in L was to be accommodated within a single bifolium for the sake of various considerations, such as to save paper, to be able to replace it easily with the revised version, to be able to handle the sheets easily in performance, and so on. His fair copies in L were not merely conceived to be beautiful, but also to be practical. And in order to pursue this ideal image of the MSS we cannot ignore one of the most vital of Bach's practices, i.e., the calculation and consequent thoughtful distribution of musical symbols within the available space on paper. The New Grove commentary, referring specifically to L, notes:

"J. S. Bach was both very economical and surprisingly inaccurate at this [habit of note distribution]: many of his copies have a few extra bars squeezed on to an additional line at the foot of a page."⁴⁹³

The two points made in this concise statement by Wolff can be interpreted to mean that Bach practised some sort of paper saving method, but his inaccuracy resulted contrary to his initial plan, in some undesired drawbacks. I assume that the economic policy that is implied in Wolff's statement is perhaps the calculated distribution of musical symbols. But if we are to look into the details of copying activity, we would have to analyse such activity in more detail on the basis of individual sheet, for L is a collection of various types of MS, some having been copied from exemplars and others not. At the same time, it is also desired to find out what other important aspects in MS making caused Bach to be inaccurate. In order to monitor the process of MS making, we need a tool, and the only powerful tool is the study of Bach's density of writing.

DENSITY OF WRITING

By "density of writing", I mean the relative concentration of symbols written on the page. The aim of studying the density of notation is to reveal the presence of certain psychological influences caused by unknown events during the composing or copying process. A close study

⁴⁹² Stanley Boorman: *The New Grove: Sources, MS I. Introduction*, p. 591 f.

⁴⁹³ Christoph Wolff: *The New Grove, Vol.1, "Bach, J. S."*, fig.8. See also Emery (1953), p.119.

should provide us with some clues about where the composer changed his pace of writing.⁴⁹⁴ Combined with the study of other musical and non-musical factors, this will perhaps enable us to determine the various possible reasons for such a change of density, e.g., composing difficulties, compositional tactics, the status of the exemplar, the purpose of the copy, the disposition of the copyist, etc.

There are, however, natural reservations about this approach. The environmental factors that might have affected the composer's writing density could be infinite in number and unpredictable in real life. The pursuit is only valid if the analysis can be based on a firm logical background and reliable sources of information. This preparatory stage can be partly achieved by interpreting the types and hypothetical historical moments of amendments on the MS and examining some other aspects related to the general composing procedure.

Clearly, a great composer as Bach must have surely had a respectable experience and skill in copying music, which would be expected to give a smooth and evenly spaced natural appearance as the result of a relaxed hand movement. Thus the reason for the change of density is not often a technical problem in copying music. It is easier to assume the existence of a particular situation than would be the case with a copyist whose musical understanding is less profound than Bach's. Wherever there is a large difference in writing density, there could be certain significant changes in either psychology or the strategy of copying. By examining various other factors in the copying process, the change of density in Bach's writing is expected to arise from a logical, traceable factor.

Our pursuit is also encouraged by valid historical knowledge concerning the preparation of a musical sheet - mainly in ruling staves. All the sheets in L except a few were, as mentioned earlier, prepared regardless of particular pieces, let alone the length of individual pieces. The premise to the state of the score at this stage was a collection of a single bifolium, each accommodating a single prelude-fugue pair. Thus it becomes apparent that Bach had one psychological apprehension for a space constraint. His insights into the production of fair copies, therefore, partly reflect the problem of how to allocate a piece within the fixed space for those pieces.

Apart from the factors considered so far, the traceable change of writing density can be ascribed to four factors:

Any types of score

- 1) modulation scheme - use of increased number of accidentals, as well as psychological rise, fall alongside musical progression.

⁴⁹⁴ See Emery (1953), p.116, 119. As far as WTC II is concerned, the density of writing was first suggested by Emery to identifying the copyist as well as the policy they had in copying procedure. Emery's prime purpose was to explain why a change of hands took place during the middle of copying process, and why the second scribe has to compress his or her notation to such an outstanding degree.

Composition Scores: without space constraints

- 2) compositional difficulty - working from larger note-values in the bass / soprano lines and later working out detailed melodic characteristics

Fair copies: with space constraints

- 3) gradual easing of density - tight spacing, a calculated space allotment at the initial stage, is weakened as the copy proceeds due to the deeper involvement in musical activities, such as revisions.
- 4) sudden rise of density at certain notationally significant place - can be affected by psychological change if it occurs at a point where the music changes. When it occurs at the turn of a fresh page, it is most likely that re-calculation could have been made to confirm the progress in space-tight pieces.

One of the strongest arguments is the nature of revisions. If we take the logical line, the simultaneous consideration of those two observations can often be correlated, which enables us to re-construct historical moments authentically.

Problem of Calculation

However promising the theory may appear, the remaining problem we still have to face is the method of calculation which could enable us to get a reliable figure to compare the rate of increase or decrease during the course of copying. If this can be accomplished, every psychological factor in the copying process could be legitimately estimated. Usual attempts to estimate a writing density can give confusing results. For example, if we compare the note spacing of a breve in b.1 (0.8 mm) of a fugue in E^b major and the same note at b.60 (2.7 mm), the latter is three times larger than the former. Can we say that the former is three times higher in density? Or comparing the two lines containing the minims above (L1 and R2) from the same fugue, and counting number of units⁴⁹⁵ placed on the staff, we find that there are 34 units in L1⁴⁹⁶ and 44 units in R2.⁴⁹⁷ Can we now say conversely that the latter is 1.29 times higher in density?

These two examples are, in fact, based on different criteria. The first method - spacing according to note value - may only be effective if one has fixed note spacing for rationally figured out individual note values - e.g., four semiquavers = crotchet. In this method, counting the number of bars alone should show the fluctuation of density. The second method - notational convention - may only be effective if one has fixed note spacing for individual units regardless of note values. From the examination of these measures, Bach's copying strategy appears to be neither of them individually, but a combination of both. He has a general tendency to maintain the first method (the density of note values) with the exception of places

⁴⁹⁵ Minimum note value + accidentals occupying one vertical position on the staff.

⁴⁹⁶ 34 notes + no valid accidentals. See Supplement C.

⁴⁹⁷ 36 notes + 8 valid accidentals. See Supplement C.

where note values differ from the rest: in those places, he either compresses or loosens the density either to save space on paper or for readability: in other words, he borrows the idea from the second criterion - the density of notation. It has been mentioned that Bach employed rationally sized note-head in a distinctive way, and it is out of the question that Bach practised a logical spacing of individual note value⁴⁹⁸ at his own rate.

It is an universal problem in musical notation which is based on the convention of the paper saving method: notation is a conversion of equal time into irrationally compressed written form. Taking a small example, even a flagged quaver occupies larger space than beamed one. Bach's strategy for assigning irrational rates into notation may possibly be determined by complex, huge statistical analyses. This is, however, out of the scope of the present study.

Nonetheless I have come to the conclusion that there is an approach which can yield fairly approximate results suitable for my purpose. This approach integrates two dissimilar methods of calculation:

1. Density of note-spacing in terms of note-value.
2. Density of note-spacing in terms of the number of symbols present irrespective of individual note-value.

These methods are then considered together in order to estimate Bach's COMPACTNESS OF WRITING.

Method of Analysis

The analysis for the Density of note-spacing in terms of Note-Value is carried out system by system, which I shall call LOGICAL POPULATION OF NOTE ALLOTMENT (LPNA). Calculation is planned in the following manner:

$$LPNA = \text{Number of Bars in a System} / \text{Length of System}^{499}$$

The value of LPNA is later adjusted by assigning 'value 1' to the first datum, so that the result of the calculation can be readily used for obtaining results indicating COMPACTNESS OF WRITING.

The other method of the analysis, Density of note-spacing in terms of the number of symbols present irrespective of individual note-value (to which I have assigned three levels) is called LINE POPULATION (LP). This is obtained from the following formula:

$$LP = \text{number of units in a system} / \text{length of system.}$$

⁴⁹⁸ This value is totally dependent on individual piece, especially on temporal value.

⁴⁹⁹ Length of system is given in centimetre. Measurement is taken from the left edge of the first occurring note-head (or accidentals where applicable) to the right edge where the notation ends. There are various other considerations in measurement - e.g., inserted clef in the middle of system, etc.

The value given by LP depends very much on the way in which UNITS are being counted. LP1 includes all the vertical occurrences of the note-heads of minimum note-value in a system. LP2 adds the number of Valid Accidentals⁵⁰⁰ on the top of LP1. LP3 subtracts the number of notes from LP2, on which the notes in larger note value overlap on the other for the following reasons:

- 1) the smaller note values are later added as a part of revision; and,
- 2) the smaller note values are horizontally shifted to unused space (normally to the left) in order to reduce the rate of density in a particular line.

And finally **COMPACTNESS OF WRITING (CW)** is given in three levels by multiplying the result of two analyses as follows:^{499a}

$$CW1 = LPNA \times LP1$$

$$CW2 = LPNA \times LP2$$

$$CW3 = LPNA \times LP3$$

The **COMPACTNESS OF WRITING** proposed here is by no means a perfect solution. The resultant figures thus obtained do not make any sense on their own with reference to density nor do they intend to convey a precision indicated by the numbers in a truly mathematical sense. What the figures set out to do is to outline a general trend or tendency with a mathematical metaphor.

Promisingly Bach's music always proceeds in a stable manner by using the minimum unit throughout except occasional gracing notes. This helps eliminate diverse symbols of notation from counting as each equal unit - they are normally only observed at the cadence and at the commencement of fugue subject. Furthermore, the simultaneous consideration of two irreconcilable methods justifies the reason for unaccountable rise or fall of density in each other. For example, increase of number of units may be considered together with decreased number of bars. In the case such as the example given above where the two results give symmetrically deviations from the previous data, the density can be equalised. On the other hand, if both sets of data show a similar trend, we can safely assume that the change of density is significant.

^{499a} Since in Bach's score the result of LP3 is virtually identical with that of LP2, I do not give this third level of variation (viz., LP3 and CW3) in the Graphs in Supplement C.

⁵⁰⁰ The term is abbreviated as **VAC** in Tables. **VAC** is obviously thought to have been entered initially at composing stage and inserted between notes occupying its own vertical position on stave. **TAC** (Total number of **A**ccidentals) is also given for reference. It includes the following:

- 1) those which occur at the same vertical position as the others in the other voices,
- 2) those added later at revision process,
- 3) those inserted above the note-head deliberately for whatever reasons,
- 4) those inserted between note-heads where the space is already occupied by some other note-heads in the other voices.

OUTLINES OF REVISION PROCESS

GENERAL PROCEDURE OF DISCUSSION

The heart of our discussion about Bach's revision process is based on the facts listed in two supplements: the identified amendments in the autograph are methodically described in Supplement A - **The London Autograph: Critical Comments**; and the full listing of variant readings among extant MSS are tabulated in Supplement B - **WTC II: Examination of variant readings**. By assuming that my reader would possess a facsimile of the autograph, I should reproduce the example only on a limited basis, such places as the revised part where the information is only accessible from the original MS. These layer of activities are demonstrated as reconstructed models, in which each activity is distinguished by the shade of colours. As a general convention, black symbols represent the part of the reading unaffected by revision; traced out symbols, appearing only in the contour of the symbol (or often completely erased), represent the symbols later added and were not present at the time when the particular reconstructed reading was written; and the symbols in grey shade represent what was considered once present at the time before the revision.

Analyses and syntheses are then made in historical, philological and musical contexts in my argument. I shall also integrate the study of density of writing wherever appropriate though it is not used as primary evidence. Whenever I refer to this particular area, the reader is recommended to consult the corresponding Graphs and Tables contained in Supplement C - **The London Autograph: Density of Writing**.

The order of discussion is:

- 1) Outline of discussion
 - i) Status of this copy
 - ii) Status of possible exemplar and existence
- 2) First copying stage and its background
 - i) Corrections and analysis
 - ii) Analysis of the density of writing
- 3) Revision criteria and types. Analysis
- 4) Possible way into future reading.

PRELUDE 1 IN C MAJOR (F.1R)

The version contained in f.1r is an intermediate version of Pr.C (BWV 870,b), showing a direct link from the earlier version (BWV 870a,1) towards the final version (BWV 870,1). The earlier version, given in P 804 and P 1089, is 17 bars long, and will be shown that Bach used

Early Model⁵⁰³

London MS.

 Fig. 25: *Fg.C, b.1 (L1,b.1) - Change of Instrumental Idioms from Early Model.*

The melodic line is changed from the property of a delicate solo instrument - solo violin, or flute - to that of an organ or a harpsichord. This figural change was also reinforced by adding the pedal note, C. This new character, i.e., the falling arpeggiation inherent in two voices, appears to be a dominant feature of the version. It can be seen that the same figuration not only appears in the alto, b.7,3, but also replaces a unique arpeggio passage that inherits two voices, the upper part being held on the same pitch, while the lower part being descending scale-wise. This figure is found in the soprano, b.2, and the bass, bb.3 and 10. What appears so far is a manner of revision so consistent that one can perceive Bach's firm, well-planned idea of the revision. We may, therefore, call this new figuration 'revision motive'. Apart from the major change of figuration, Bach also paid attention to a detailed decoration. In three instances - b.6,4, b.21,2 and b.22,4, demisemiquavers are inserted as being decorative elocutions to the melodic contour of the soprano.

Such instant conversions of the figuration appear to have been abortive in some places and require certain amendments. For example, the amendment of tie facing in b.10:T,3-4, reconstructed in Fig.26 below, can be seen to have originated in the resultant problem in the process.

Early Model

L

Chord: Em G7 A7 D

Em G7 A7 D

Harmony: d: II IV7 V7 I

d: II ~~IV~~7 V7 I

 Fig. 26: *Pr.c, b.10 (L4,b.2) - Improvement of voice texture and re-notation of tie in the Tenor.*

⁵⁰³ The two existing early models (P 1089 and P 804) use soprano clef in the upper staff.

The direct cause, however, appears to be the sequence in the notation: Bach must have written the important conversion point, the bass line together with the emerging tenor first, before the alto part was filled in later in the lower staff.⁵⁰⁴ Another amendment included in the same example, b.10:A,1-2, is also noteworthy. It seems that this amendment to the note-value of the alto was an afterthought. The preoccupation note, *d'* in L, b.10: A,2/2, perhaps became desirable only after the bass was converted into its new shape. This can be ascertained by the analysis of the chord texture where the original pitch *d* in the bass, b.10: B,2/3 was moved in the new reading to *B*, and the alto had to move out from *b* as a consequence.

A similar figurative modification is also found in b.13, where the abstruse arpeggiated tenor line, in which two contrary motions are inherited, is being effectively simplified.



Early model

L, ante correcturam.⁵⁰⁵

Fig. 26a: *Pr. C, b. 13 (L5, b. 2) - The Identity between Early Model and Reconstructed ante correcturam L*

The modification was concentrated on two points: one is to simplify the linear progression of the tenor by keeping only the upper line of the two; the other is to fill in the continuous semiquaver flow by altering the rhythm in the bass. This initial modification is, however, perceived as a fairly mechanical alteration of the old, where one can still find the inherent abstruse quality in these voices, perhaps due to the lack of motivic individuality. There could have been no delay when the two voices were revised again on the 4th voice according to the rhythmic characteristics of their 3rd beat, for we find the corresponding part of the second section, b.28:1-2, appearing in the form of post correcturam.⁵⁰⁶ The other revision, found in the soprano and alto on the 3rd-4th beat, is considered to have revised at a much later date, for the corresponding section in

⁵⁰⁴ It is also significant to note that the alto must have been written in the upper staff, where the soprano clef rather than the treble clef was used.

⁵⁰⁵ This is a re-construction of the initial reading at first copying stage based on the types of revisions. See detailed explanation of individual observation listed in Supplement A.

⁵⁰⁶ The other possible temporal interpretation of the revision is the moment when the latter part (b.28) was instantly modified to the new shape, and the former (b.13) was accordingly chain-reactively revised. I find no conclusive evidence to decide which case it really was.

the second section appears in the form of ante correcturam.⁵⁰⁷ The incentive of revision differs also: it was merely for adding extra rhythmic thrust to the texture.

The observation on the density of the section A1 reveals a very interesting fact. The density is gradually relaxing towards the end of the exemplar - this being the general feature of intense musical activities.

FIRST BRIDGE (b.14-19)

Following the end of supply from the suggested exemplar, the score begins to show many features of being Bach's composing score. Having been abandoned in a crossed-out form, the two systems (L6 - L7) clearly reflect Bach's struggle with the composition. A closer examination reveals that this discarded reading represents the second. For the purpose of discussion, I have separately re-constructed the initial layer and the abandoned second layer of readings in Fig. 27 and Fig. 28 respectively.

The initial layer of reading, shown in Fig. 27 below, is clearly a sketch. In the most uncertain joining passage, i.e., bb.18-19 (L7,b.2-3), what Bach considered was only the first line, the bass, together with harmonic skeleton for the rest of the voices. The exclusive evidence for the judgement is the note spacing. One may find that the bass line was clearly put down irrespective of the length of note-value, totally being inconsiderate of the other voices to follow. As a result, the initially entered line generally occupies a larger space, and is better-shaped than the later filled-in parts. The reconstruction of the first reading can be suggested as follows;⁵⁰⁸

⁵⁰⁷ It is interesting to note that Wilhelm Friedemann's revised reading (DD 70) gives post correcturam in this section.

⁵⁰⁸ The reconstruction of the initial reading leaves much to be desired. There are several more places where simpler voice-leading may be initially written. The version given here is, in my opinion, maximum degree that can be suggested as authentically presented judging from the manner of correction as well as of general notation. Prout identifies the second reading as the first, probably either because Prout might have considered the initial reading tentative, or because he simply overlooked it. Prout (1896) p.51.



Fig. 27: *Pr.C, b.14,4-19 (L6 - L7) - Reconstruction of ante correcturam*

The compositional process of this section can be divided into two small sections as bb.14,4-16 (L6) and bb.17-19 (L7), both are proceeding towards the cadence in F major. The first half, from b.14,4 to the cadence on F major at b.16,3, Bach was principally writing from a firm harmonic skeleton of one beat basis:

F major: IIa - V7c - Ia | II7 - V7b - I
 (b.15,1; 3; 4; | 16,1; 2; 3)

This is reflected in the amended parts: the revised note-value of a minim b^b in the bass at b.15,1 was originally a crotchet. Equally significant is the motivic construction of the section. This is largely based on a segment contained in a one beat time-space. As a composed section, the order of notation among various motivic segments can often be ascertained. With the exception of the bass line, the first figure appears to be a U-shaped one observed in succession from b.14,4 in the alto $f'' c\#'' d'' f'' f''$ to the b.15,1 in the soprano $a'' f\#'' g'' a'' d''$.⁵⁰⁹ It is then followed by a dotted rhythm figure of b.15,2-4. Towards the F major cadence, the compositional difficulties are eased, and the bass line was confidently entered for the first time since b.14,4. The dialogue of a four-note figure in N-shape between the alto and the soprano succeeded the important place of motivic development. The second half (bb.17-19) is very much the same. Apparent from the free well-formed bass line, Bach entered the bass line first. The most significant motivic figure is the falling scale figuration, which is originated from the previous section, b.16,1. This is maintained in the earlier half of this section. The latter part of this section has to wait until the bass is revised in the second reading.

⁵⁰⁹ Stauffer (1985), p.191, esp. Ex.5, claims the figure in b.14: A,4 as $f'' c\#'' d'' f'' d''$ however. This reconstruction by Stauffer would give a reasonably shaped figure without an abnormal abrupt octave leap. Not very convincing part of his reconstruction is the crotchet f'' , which was actually written by Bach, and ignored in his discussion.

As the first draft soon failed to satisfy the composer, the first reading was partly crossed out, amended or overlaid by the second reading:⁵¹⁰ in some places the new reading is squeezed in between the existing notations, some are cancelled with a pen (L6,b.1-2), and in other places by physically removing the ink from the paper. The finalized reading at this stage is given in Fig. 28 below:



Fig. 28: *Pr.C,bb.14,4-19 (L6-L7) - Reconstruction of the second reading.*

In this second reading, U-shaped figures in bb.14,4-15,1 were removed, and replaced by the 'revision motive'. Also significant is the revision of the bass line in b.19 and the motivic unity enforced in b.18:S,2. It is apparent from the score that some of the filled-in note could not be accommodated within the space available, and surely, there was scarcely any room left for any future revision on the existing reading. This reading was also doomed to be abandoned later. This section was then crossed out, and the new reading was written in fresh systems, R6-R7. This will be discussed under LATER REVISION.

The abrupt rise in the density of notation at this point can be explained by the lack of consideration on equal distribution of symbols. Here the filling semiquavers in inner voices are visibly crushed into the narrow space crudely allocated for them.

SECOND SECTION (A2ii - bb.20-28,3)

After the cadence in F major at b.20 (R1,b.1), Bach's constant pace of writing appears to be resumed for eight bars. Without little doubt, this section was the faithfully transposed section of the earlier, bb.5,3-13 (L2,b.2-L5,b.2). During the transposing and copying processes, Bach made some minor errors and corrections. Included is the misplacement of bar lines for

⁵¹⁰ Prout gives an example of the second reading quoting as the first reading, but unfortunately it contains numerous mistakes. See Prout (1896) p.51. Morgan's reconstruction, quoted as the original reading, gives better reading, but still omits a tie in the alto *e'* between bars 18 and 19.

consecutive 3 bars (R1). This can be explained by the half bar shift of the notation in the earlier part.⁵¹¹ We also find two important revisions here. The first is the harmonic revision of b.22, where G minor chord is changed to G major by erasing two flats on S,3/1 and B,4/2. This revision is hard to be justified within the chord sequences at a local level. But it seems to contribute at a higher level of linear progression to the structure of the piece as being an effective and strategic announcement of the dominant chord in the midst of the key of uncertainty, wafting about in flat keys of D - G minor. The second, the addition of a flat in b.26:S,1/3, could be a chain-reactive revision activated at b.26:S,2/1, where we find the flat was not squeezed in. This revision is significant not only melodically but also harmonically. The extension to the revision was also chain-reactively made to the first section, i.e., b.11,3.

The density of writing shows a steady pace of note distribution. Looking at the density graph, we find that the curves in LPNA, LP1 and CW1 (R1-R3) bear very close resemblance to those of the previous section (R3-R5). On the other hand, CW2 and LP2 give much higher figure and shape due to the increased number of accidentals during the course of modulation. This supports the same interpretation: Bach was closely and strictly referring to the section A2i so that even a note-spacing was reproduced.⁵¹²

SECOND BRIDGE (b.29-31)

The final major struggle in the compositional process can be observed in the second bridge, bb.28-29 (R4,b.1-2), which links the second transposed section to the final cadence. As in the first bridge (bb.14-19), here are also found the most extensive tentative revisions. Since it is hardly possible to distinguish the precise sequence of revisions, I suggest in Fig. 29 below a possible form of reconstruction assuming the pre-finalized reading.

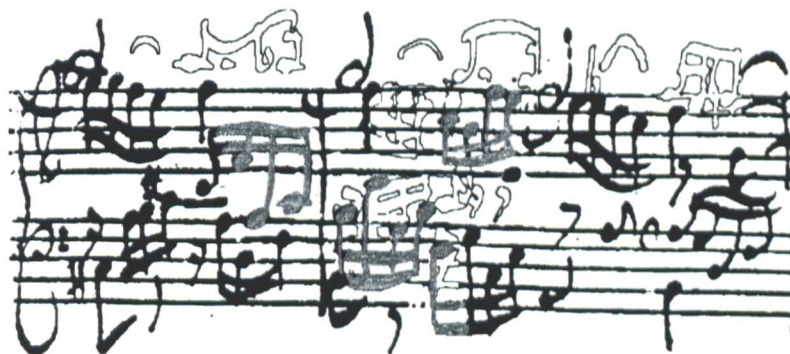


Fig. 29: *Pr.C, bb.28-29 (R4,b.1-2) - Reconstruction of the pre-finalized reading.*

⁵¹¹ Breckoff, p. 66. Brokaw (1989), p. 232, quotes that Franklin gives a different interpretation. According to him, this bar misplacement was a pre-formatted bar for a 17-bar version initially planned. I find this interpretation very difficult to accept. Besides the quotation by Brokaw is said to be Franklin/Daw, but I found no such remark by Franklin.

What we may learn from the reconstruction is this: Bach could not work out what appears to be a clear sequence of texture in bb.28,3-29,3 for the first time, but it was achieved after having made tentative pursuit based on the chain of the 'revision motive'. The density of writing at R4 sharply rises as in the previous joining section (L7).⁵¹³

TOWARDS THE CADENCE (Bi - bb.32-34)

The cadential section (b.31-) is the expanded version of the reserved last two bars of the exemplar. Although there are a few later revisions,⁵¹⁴ the basic composing process is consistently based on a firm harmonic scheme. In bb.32-34, it is obvious from four successive equally spaced out minims *c* that Bach was working down from a larger harmonic scheme into a two-beat unit:

C major: I - IVb - | I₇ - IVb - | I
(bb.32,1; 3; 33,1; 3; 34,1)

Thus it must be the case that the bass line was written first as a yardstick for the plan of harmonic progression. The density of writing falls back indicating the release from the strain of compositional difficulty.

LATER REVISION

Some time after the completion of the copy, Bach decided to come back to this MS and gave an extensive revision to it. The major aim was to revise the first bridge, bb.14,3-19. This was done by crossing out the second reading, L6-L7, and by writing afresh the third reading in the space left unused, R6-R7.⁵¹⁵ This newly added part was written in more compact and careful handwriting. We can see that the majority of accidentals as well as note alignment are evenly distributed regardless of the motivic importance. As a result, the density of writing gives a much higher figure as a result of an increased number of VAc. This new reading was, however, possibly entered here without intermediate sketch. The origin of the reading revised in b.15:A,3 (R6,b.2) can be traced back to the second reading.

⁵¹² The close density given by CW1 is believed to have^{been} caused by the order of copying - the bass first - which has less filling notes, thus less accidentals to be considered at first place when bar lines are drawn.

⁵¹³ Because this section is a composition score, many accidentals are not placed beside their note-heads, but squeezed in, or placed above the note-heads. Some of them are even thought to be afterthoughts in the revision process. This is why the valid number of accidentals is only 1, while the total indicates 8. Compare the rise of CW1 with CW2 at L7.

⁵¹⁴ See revision of b.33 (R5,b.3) in Supplement A.

⁵¹⁵ Prout refers to this reading as the second reading. His music example for this reading again contains many mistakes. See Prout (1896), p.51.

FUTURE AMENDMENTS

It would be impractical indeed if one is to make any inspired revisions in quantity on the score where no room is left to put down the ideas. On the contrary, one may consider to enter revision on the same score usefully if the composition is quite sufficiently matured that the revision was hardly required except perhaps for only some minor changes in details, such as the addition of accidentals. In this score, we find that Bach left many details unrevised, even the required ones, such as the textual improvement of b.28:S/A,3-4 as already mentioned. Also left out were the required rests which were to fill in the complete four-voiced texture. So we may naturally conclude that this score was unfinished or abandoned. Yet we have a philological evidence suggesting that the score was once regarded as authentic reading when it imparted its text to F. Nevertheless it was eventually revised again, not on the same score, but on a new sheet in the form of what we know as the version transmitted in A1. This version contains not only the corrected details, but also many inspired readings - the grandeur of melodic refinement featured in flowing demisemiquavers. It is also interesting to note that the first bridge section was once again heavily revised.

FUGUE 1 IN C MAJOR (F.1V)

The version contained in f.1v is a semi-final version of Fg.C (BWV 870b,2). Apart from its final version (BWV 870,2) represented in A, we also know the early version of the piece (BWV 870a,2), which is already discussed under P 1089 and P 804 in Chapter 1. This early version is written in ϵ metre, with two bars incorporated into one, giving the total of 34 bars. Suppose that these two versions were directly linked, i.e., the early model became the basis for revision for L, we may reconstruct the plan of detailed amendment and structural overhaul, as shown in Fig. 30 below.

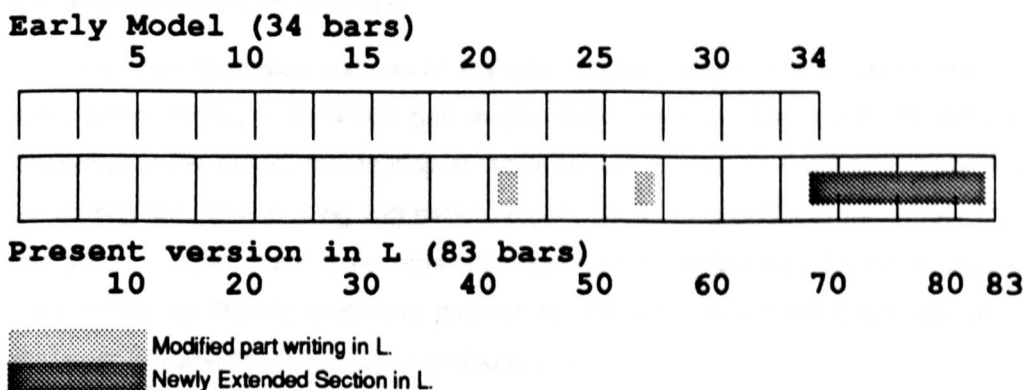


Fig. 30: *Fg.C - The Plan of Expansion in two levels*

The plan reveals a few interesting facts: Firstly, apart from the extending the tail section, Bach virtually kept the model unchanged in terms of figuration. The only change which was considered by Bach seems to be on the character of the piece: in this case a slow moving ϵ

metre was replaced with a fast moving 2/4 metre with an increased number of strong down beats. This also affects the use of ornamentation. In the early model version, we find an abundant use of ornaments, while in this version, these ornaments are mostly eliminated from the texture. Secondly, the newly extended section (bb.69-83) contains a few layers of revision. It shows nothing but the hardship he went through in composing a new section. The whole picture suggests that the score was a revision score based on the exemplar giving virtually identical reading to the early version.

INITIAL COPYING PROCESS (b.1-68)

The copying process seemed to have been fairly confident, in which only two apparent amendments are found in the early part of the second half - b.45 (R1,b.3) and b.54 (R2,b.6). While the first instance does not suggest anything other than the correction of a simple slip of the pen, the second, the replacement of a note-head in the bass, may be considered as a result of Bach's active revision work. Theoretically speaking, the *ante correcturam e'*, which might have been entered as an improvement, was not grammatically wrong. Bach decided that the original reading in the exemplar was, after all, perhaps artistically quite superior.

The density of writing seems to reflect a transition in Bach's psychology. Graph 2 indicates that Bach's writing density fell very slightly in the first page, and rose again at the beginning of the second page. The only exceptional peak in the first page is the third line (L3) where a modulation towards super-tonic key seems to have affected Bach's writing density.

From the trend of Bach's fairly deeply-involved copying process, there is a certain likelihood that three changes - two in the alto at bb.42,1 and 54 and one in the bass at b.53 - could have been worked out when the piece is copied on this sheet.⁵¹⁶

COMPOSED SECTION (b.69-83)

The new extension was, as in any other fugues, largely based on the musical ideas that have been playing a dominant part in the earlier section. These are: the prevailing melodic character in the fugue, constituting of two four-note figures - a scale-based one (figure A); and an arpeggiated one in a zig-zag pattern (figure B). It is important to remember that, apart from the subject itself, there is no other distinguished musical ideas based on figures. We shall concentrate on Bach's ambitious plan as to how he extends the coda section, and how he achieves a grand finale with such limited ideas.

The extended part (bb.68-83) shows many features of Bach's composing score. But the decision of this expansion was not planned beforehand. This can be learned directly from the

⁵¹⁶ The reading in Ms.N.10490 suggests perhaps more reliable verdict on this account, for it could have been copied directly from Bach's autograph of an early model. According to N.10490, the reading of b.42 was already carried out; b.53 was given as an intermediate reading; b.54 was not yet carried out. See Supplement B for details.

pitch indicated by the ante correcturam *c* of the bass direct at b.68 (R4,end), the cadence proper, similar to what was in the earlier version. It is therefore significant to see that the following note at the beginning of b.69 in the bass was notated as *A*, like that of the new version. Thus it may be surmised that Bach changed his plan at this point, and suddenly decided to write a new extension. In this section, some amendments reveal features of a tentative nature in the composing process. In most cases, two layers of reading in a particular place can be traced from the MS with the exception of the bass at b.81 where we find a further layer. Most of these are found in the secondary line, i.e., the counter-melody, of the contrapuntal texture.

The plan of the extension is simple. The section consists of three consecutive entries of the subject in Dux with the addition of the final cadence. The sequence of the entries was decided to be from the lowest to the highest, an arrangement suitable for building up a grand ending.

In the first part of the extended section, bb.68-71, the initial reading of the soprano was physically scraped off from the paper. At the same place, the second reading was written. I have re-constructed the initial layer in Fig.31 (a) below.



(a) b.68-70 (R5,b.1-2)

(b) b.72 (R5,b.4)

Fig. 31: *Fg.C, bb.68-72 - Reconstruction of ante correcturam*

The initial reading is strictly based on figures A and B. It is interesting to find that figure A, employed in b.68:S,1, creates a quite unbearable parallel ninths with the subject entry in the bass. It may be the result of uninspired activity, reflecting total lack of well-established ideas on Bach's part. Considering the fact that this initial layer of reading was not taken into its descendant MSS, we may safely assume that the second reading was entered without too much delay. This new, second reading is given in the facsimile as the final reading, and is taken into the MSS of groups F and K. The purpose of the revision was to create a new type of musical thrust. This can be seen as two distinctive types of revision concepts. The first instance, b.68:S,1, is aimed to change its role in the texture, from a simple and poor passing note to the proper status of the subject in sixth. It is important to note that such an improvement was made at the expense of losing its identity with figure A. The second instance, bb.68:S,2 and 70:S,2, is aimed at strengthening the harmonic progression by introducing the 7th notes. By so doing, the identity of figure B is lost from the passage also.

In the middle of the extended section, bb.72-75, we find beneath the revision a more adventurous tentative reading, which is reconstructed in Fig. 31 (b) above. It shows that the original idea was to introduce the doubling of the entry in 3rds. This idea itself is indeed most fascinating, for it is an entirely new motive in the whole fugue. It seems significant that the revision found in b.68:S,1 could have been motivated by this, and this certainly influenced the next entry found in b.76 which is for the first time and also for the last properly doubled. A closer look at the revision shows that such a brilliant new idea as this did not convince Bach, for we can see that the initial reading appears only in note-heads, without stemming and beaming. Clearly, Bach decided to introduce this idea in the next entry.

In the final part of the extended section, bb.76-83, we can confirm that the new idea conceived in the previous section is worked out magnificently together with the introduction of the tonic pedal. Such is the growth of Bach's inspiration that we are hardly surprised to find the amendments in this section being concentrated on something totally different from what we have seen so far. The most of the revision were concentrated in the bass. Especially noteworthy is the introduction of a scalic element to the bass towards the end of the section (bb.80-82), where a semiquaver arpeggio, the device of harmonic as well as rhythmic foci, has an inherent refined melodic quality. Interestingly, this revision was partly achieved by replacing the tonic pedal notes Cs (see Fig. 32 below).



Fig. 32: *Fg.C*, bb.80-82 (f.1v: R7, bb.1-3) - Reconstruction of ante correcturam

This decision of Bach's may appear to be hesitant, when we find another trace of revision (addition) which suggests Bach's effort to restore the lost impact on the tonic pedals. It is the unique symbol, "P(?)" placed below C at b. 80,1, that appears as if it were the pedal instruction on the organ to sustain the pedal note. Likewise the strange symbol found below the last semiquaver in the bass, b. 81, can be the instruction to release the pedal.⁵¹⁷ Also in the upper staff of the same place, we find another possible revision by Bach. The crowded and addition-like appearance of Bach's writing for part of the 4th voice (the alto) suggests that this cadential section was initially conceived in three-part texture.

⁵¹⁷ The shade of ink for the latter symbol (i.e., pedal release instruction) is slightly different from that of the former. This diminishes the plausibility in this hypothesis. Still further, the mark "P" can also be read as 'd', the pitch of the post correcturam at b.80: B, 1/2.

It is very unlikely that this initial reading reconstructed in Fig. 32 survived for long. Examining the harmonic texture of bb.80,2, 81,1 $\frac{1}{2}$ and 82,1, for example, immediately reveals poor quality in the text initially composed. How, may we raise the question, did these errors come into being? I tend to think that there was an earlier stage than what I have suggested in Fig. 32 above. Bach probably wrote the bass first, as he did in Pr.C, bb. 32-33: but there were probably only four Cs in crotchets in bb.80-81 in order to ensure its harmonic structure in the final cadence. He then filled in the soprano and the alto in this order. At this stage, everything went on as planned without errors. The mistake emerged only when Bach filled in those semiquavers in the bass fairly mechanically. It can be seen that, at the beginning of b.80, Bach probably filled in three semiquavers, *c f c*, on the first beat. This Bach repeated three times, and having completed the third time, he committed the error at b.81,1.

FUTURE AMENDMENTS

The revised reading represented in this MS still required perfecting. It is apparent that when we compare the text of L with that of A1, we find in the latter many authentic improvements largely concentrated on the newly extended part - such as the doubling of the subject of b.76 and a four-voiced texture towards the ending. In addition, the improved melodic consistency in the soprano at bb. 67, 68 and 70 as well as the rhythmically enriched alto at b.71 can be appreciated as Bach's confident masterly revisions, satisfying both preserved motivic identity and strengthened musical thrust. Finally, of particular interest is the reading of the pitch in the alto at b.13: at his final version, Bach overturned his previous revision to restore the primary reading.

PRELUDE 2 IN C MINOR (F.2R)

It is generally assumed that Bach was unwilling to do the task if it is merely a mechanical one.⁵¹⁸ This applies in the case of Pr.c contained in f.2r, the copy made by Anna Magdalena. By the time when it was made, the piece must have been matured leaving little room for improvement.

The first soprano clef was written by Bach.⁵¹⁹ Anna Magdalena soon took over the quill, for we find the common time signatures written in her hand.⁵²⁰ This suggests that there was a brief session with Bach instructing how she should proceed with the copy. Her calligraphy is neat and steady. The only problem in her writing was the note-alignment between a pair of staves.

⁵¹⁸ See Footnote 485.

⁵¹⁹ Emery (1953), p.117.

⁵²⁰ *ibid.*, p.118.

The study of writing density shows an unusually high level of fluctuation despite the fact that the piece was written in unvarying, constant semiquaver figuration. This can be attributed to an unreliable hand of an unskillful copyist. Her attention also lapsed regularly. This is reflected in the correction of note heads in five places - three in the first page, viz., b.6 (L3,b.1), b.8 (L3,b.3) and b.13 (L5,b.2), and two in the second page, viz., b.23 (R2,b.2) and b.26 (R3,b.3). These were all corrected before the text was imparted to F and H.

There are also some unique unrectified errors by Anna Magdalena that apparently escaped Bach's attention in his proof-reading. Among the most serious errors is the omission of a natural on *a'* at b.3:S,2/4. This was reproduced in F and H. Another is the unique placement of trills in bb.14 and 16, where trills are placed above incorrect note-heads. They are taken into F and Am.B.49 only. And finally, the poorly corrected natural from a flat on *e^b* at b.18:B,4/1 (L7,end) affected the reading of F (P 210) which gives ante correcturam.

FUGUE 2 IN C MINOR (F.2V)

Apart from the copy which served as an exemplar for Fg.c, we know an earlier version of the fugue attested in P 595. In revising this early version, Bach made many improvements in details, which shall be discussed shortly.⁵²¹ It was probably to make an error free fair copy that Anna Magdalena set on her duty. Apparent from the consistent affinity of C clef and the formation of time signature, Anna Magdalena copied it all out without Bach's intervention, possibly continuing from the prelude on the other side of the sheet.⁵²² Her density of notation was fairly steady in the first page, but began to fall from the second. She made many minor errors, as in the prelude, such as directs at b.4 (L1,end) and b.17 (L6,end), note-alignment at b.5 (L2,b.2) and possibly pitch at b.12 (L4,b.3). These were all corrected by scraping the paper surface.

There is, however, one unique correction, the crossed-out note-head with the letter "*f*" in b.9 (L3,b.3), marked in the ink of a distinctively different quality with a thick quill. This was entered after the score had imparted the text to both F and H. A similar type of revision by the letter "*c*" only found in b.27 (R4,b.1), also in dark black ink but with thin pen strokes, was entered here much earlier, for we find no errors in F and H.

REVISION BETWEEN THE EARLY VERSION AND THE EXEMPLAR OF L

Despite the fact that the revision score itself is lost, it is to some extent possible to reconstruct the events and Bach's background thoughts through the analysis of textual

⁵²¹ This revision score in Bach's hand is unfortunately inextant. Its text can be considered to have transmitted to K and A. This is a slightly different version from L. This version, however, contains some unique readings that can hardly stem from any link between the early model and L, e.g., the variant accidental on b.5:S,3/2 and the rhythm on b.26:S,2-4.

⁵²² Emery (1953), p.118, gives the same account.

differences between P 595 and L. Basically there are no structural differences between them. If there are any, the differences are only minor. Depending on the quality of the variant readings in the earlier version, we may classify them into two groups. The variants of an acceptable quality, which were improved in new readings, are concentrated on two areas. In b.9:A,1 and b.10:A,1 are found the readings of which the change was made to the style of suspension and resolution. In b.19:A,3-4, b.22:A,1 and T,3-4 are found the readings of which the change was made to the effective figuration. To this group, the addition of a natural in b.21:A,2/2 and the change of the final chord from major to minor may be included. The variants of a poorer quality, or possibly errors in the earlier readings, are mainly related to pitch notation. In b.16:A/1 and b.26:T,4/2 are errors, placed at the distance of 3rds. The inadequate use of accidentals causing the pitch errors are found in b.16:B,4/1, b.21:T,2 and b.22:A,3/3. In this aspect may also include the missing ties of b.21:T,1-2 and b.27:A2,2-3. From this study, we learn that the text of P 595 could have copied from Bach's composing score yet to be finalized, containing some invalidated symbols. And, as any piece of unfinalized version, this early version omits all the ornaments, e.g., trills in bb.2 and 4, and arpeggio in b.28.

PRELUDE 3 IN C# MAJOR (F.3R)

In f.3r is contained the semi-final version of Pr.C#, the version linking the early model found in P 226 and the final version found in A. Based on this knowledge, it may be reasonable to hypothesize that on the very score Bach transposed and worked out the prelude in details. Yet there we find a few insignificant scraped amendments only, indicating neither the revision of music itself nor the sort of errors caused by the transposition process. This can, on the other hand, be ascribed to the fruit of Bach's well-planned systematic manner of revision. It can be seen, for example, in the first half (bb.1-24) where Bach simply changed the texture from the succession of chords in minim to a regular, systematic four-voiced arpeggiation. The most uncertain part of this task was to write a good, melodically sound tenor line, and it is understood that Bach was not completely satisfied with this, for it was completely altered in the next version. Again in the second half (bb.25-50) we can also find a systematic manner of improvement to the contrapuntal texture of the fugato. The aim was chiefly to strengthen each linear structure. One tactic was to reduce the use of long notes, e.g., b.32:A, b.37:S, b.41:S and bb.44-46:A. Also significant is voice swapping in the two lower voices in b.36. This allows the alto to breathe and the bass to participate in a role in the texture. The quality of the contrapuntal structure is thus substantially improved.

The density of writing gently falls throughout the piece except at the change of page (L7 and R1) where it rises abruptly. Such change does not seem to be governed by any psychological reason, but by the strategy of format: Bach may well be in the hope of a neat layout if he can start the second section from the beginning of a new line. The same interpretation can be derived from the sharp fall of the density at R2, where Bach, conversely,

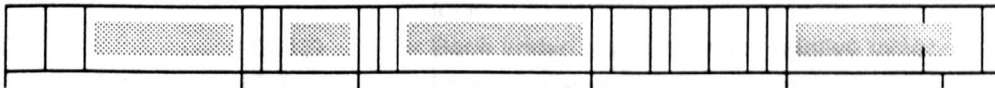
reduced the writing density to re-adjust the landing point. The whole picture of Bach's activity is depicted thus: Bach was not conscious at all about the neat format except at the entry of the second section. As to his general disregard for the format, it may suffice just to quote the unpleasant, quite disagreeable manner of bar-split at the change of system at L1 and L4 where he splits a bar between 3rd and 4th beats. Judging from this sort of half commitment to the neatness of the format, we may conclude that the score was a revision score aimed to look like a fair copy. This enables me to say further that all the revisions, which have been analysed so far, could have been carried out on this score without any more intermediate copies.

FUGUE 3 IN C# MAJOR (F.3V)

The version of Fg.C# contained in f.3v is also a semi-final. Though the exemplar of this fugue is lost, a possible reading can be reconstructed from an extant copy made by Agricola (P 595). This early version was written in C major in 30 bars, 5 bars shorter than the version of L. There is, however, still an earlier version known to have existed. This is found in P 563, 19 bars in length.⁵²³ The three layers of expansion is graphically shown in Fig.33 below.

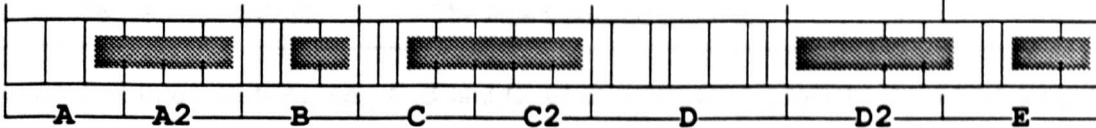
1st version (19 bars)

1 4 7 10 17 18 19



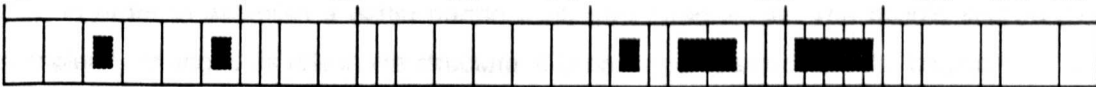
2nd version (30 bars)

1 7 11 15 18 25 27 30



Present text in L (35 bars)

1 7 11 15 18 25 32 34 35



- (blank) closely related reading with neighbouring level
- discarded reading in the 2nd level.
- newly added part in the 2nd level.
- extensively revised, newly added part in 3rd level.

Fig. 33: *Fg.C# - Plan of revision and expansion in three levels*

⁵²³ The existence of the earlier MS is currently only known from the hand of Michel, the copyist of C. P. E. Bach. Printed version is found in BG XXXVI, p.225. This version is found in Schmieder's catalogue as BWV 872a,2.

The first layer of revision, the version of P 563 to P 595 I shall briefly discuss under the heading of 'Preliminary Revision'. But for the greater portion I shall concentrate on the revision of the second layer, the version of P 595 to L.

PRELIMINARY REVISION

In revising the version of 19 bars, Bach expanded the piece in a quite different manner from the method he used for other fugues, such as Fg.C, Fg.e and Fg.Ab, in which he simply added the tail section. Instead Bach subdivided the exemplar into five clear parts as shown in Fig. 33, and enlarged these individually in a systematic manner. The harmonic function of individual section is listed in Table 27 below.

Table 27: *A Plan of Structural Revision from 1st version to 2nd version.*

Sec	P 563	P 595	Harmonic scheme and revisions
A	1-3	1-6	Modulation to the dominant. Bach required an extra subsection to complete the process of modulation.
A2		(3-6)	Bach added an extra section to modulate to the dominant.
B	4-6	7-10	Modulation through the super-tonic to the tonic.
C	7-10	11-16	Modulation through the sub-dominant, the dominant to the tonic.
C2		(15-18)	Bach added a section in the relative minor.
D	10-16	17-24	Long middle section through the sub-dominant.
D2	17-18½	25-27½	Principally written on the dominant key preparing for the final cadence.
E	18½-19	27½-30	The final Cadence (+Coda).

In the first three sections, i.e., A, B and C, all of which were originally three bars long, Bach basically retained the first two bars while he discarded the last bar and replaced it with a motivically improved reading. In A and C, two further three-bar sections were added (A2 and C2), in order to establish a better harmonically-structured whole. The middle section (D) has completely changed its role in the structure: it is no longer marked with the beginning of a fresh section, but the extended part of a newly added section (C2). This is a clear example of Bach's skilful cut-and-join expanding technique where he basically maintains the musical material while breathes into it a new life under different circumstances. The motivic elements are better transfigured and used more effectively in the texture. The newly expanded section (D2) is a complete replacement of the old. Here Bach created an opportunity to explore a little more of a contrapuntal artistry by adding flowing demisemiquavers for the first time in the piece. Finally, Bach added a coda (E), which was absent in the first version.

REVISION ON L

At second improvement, which was carried out on L directly, Bach only extended a single section located at the climax of the piece. In these extended five bars are two augmented

subject entries at b.27 and b.31, and the minor chords, the sub-mediante and the super-tonic in succession from b.25,3. However, a more important purpose of the revision seems to improve the piece in greater details. An analysis of the locational distribution of revisions shows that these new revisions were meant to revise the first revisions. It is interesting to find that this time Bach did exactly in the same manner as he had done in the first revision. For example, in the first two sections (A1 and A2), Bach basically retains the first two bars, while he discards the last bar and replaces it with a motivically improved reading. Thus our observation seems to suggest that Bach revised the newly constructed structure itself, particularly the joints that troubled him most.

STATUS OF THE MS

From the sheer number and type of amendments it becomes clear that the score is not a fair copy. Our knowledge about the version of P 595 immediately leads to the hypothesis that it might have been conceived as a revision score. On the inspection of the original MS, it becomes clear that the score was revised in at least two layers with distinguishable qualities of ink. Bearing these thoughts and observations in mind, we shall look into the details of these amendments.

FIRST AMENDMENT

At the initial copying process, Bach was thoughtfully copying down the fugue from an exemplar, while at the same time he transposed it a semitone up. He was also consciously revising the piece, and wherever necessary, he was adding, changing and discarding ideas until one small section was satisfactorily joined to the next section. As shown in Fig. 33, Bach made some amendments to bb.3 and 6, both located at the tail parts of their sections. The amendment of b.3 was successfully made without further adjustment, where the bass line was fairly straight-forwardly lowered an octave. The amendment of b.6 was, however, not successful initially. There we find some amendments which can be ascribed to Bach's insufficient insight at this initial copying stage as to how the idea was to evolve into its final shape. In Fig. 34 below, we find two interesting amendments precisely caused by the conditions prescribed above:



Fig. 34: *Fg.C#, b.6 (L2,b.3) - Reconstruction of ante correcturam*

The first reconstructed symbol, the amended accidental of a double-sharp from a sharp at b.6: S,3 (L2,b.3), is best explained as having yielded to the transposition. The same instance is also found in b.13: B,3 (L4,end). The second one, the later added semiquaver $g\#$ at b.6: S,4/2, may be caused by the complex transfigured rhythm between the two upper voices.

Sections B and C were copied out with no need for corrections. But towards the end of C, i.e., C2, are found a few interesting corrections as if certain modifications were to be enforced: an obvious instance is the correction of pitch *by a* 2nd at b.15: B,4/4 (L5,b.3); a few possibly unsuccessful attempts at revision are the amendment of accidental, from a natural to a sharp, at b.16: A,3/2 (L5,end) and the amendment of pitch in a series of notes in 3rd at b.18: S,3 (L6,b.2).⁵²⁴ The density of writing here (L5 and L6) can be interpreted as being slightly rising if one scrutinizes it closely.⁵²⁵

Immediately after, we find in Section D, bb.18-24, many instant textual modifications. Among the most outstanding achievements are two revisions concentrated on a particular area: 1) in bb.18-19 in the alto and the bass, the usage of the diminution figure of the subject is reconsidered in terms of the register and the contrapuntal texture without changing the harmonic context; 2) in bb.21-23 in the alto, the harmonic as well as linear texture is strengthened by an increased use of suspended notes instead of rests. There are a few other interesting changes made to the texture. The change of figuration at b.22: B,1; S,2 is particularly intriguing. This was the deliberate abdication of thematic element, probably to avoid the doubling of the 7th note in the harmony; but it can also be perceived as if the alteration contributes significantly to the firm establishment of the chord, $F\#$, in this structurally salient

⁵²⁴ The amendment of b.16 could have been carried out at a much later date. H and K give the reading of ante correcturam, while F gives post correcturam.

⁵²⁵ Since the UNIT in this fugue varies frequently, the figure given in CW becomes very unreliable. In any case, at L5 the highest in the region are LPNA and LP2, and at L6, LP1 and CW1.

point. The density of writing here (L7 and R1) falls sharply. This may well testify to Bach's intense revision activity with regard to smaller details.

Up to b.24 the copy has been made fairly smoothly. It is therefore for the first time that the major compositional trace is found at bb.25-27 (D2) where the two augmentations of the subject are tentatively employed. The reconstruction of the pre-revised reading is suggested in Fig. 35;

The image shows a musical score reconstruction for two staves, likely Alto and Bass. The score is written in G major (one sharp) and consists of two staves. The music is divided into eight numbered sequences indicated by brackets above and below the staves. Sequence 1 is a single note in the bass. Sequence 2 is a group of notes in the alto. Sequence 3 is a group of notes in the bass. Sequence 4 is a group of notes in the bass. Sequence 5 is a group of notes in the alto. Sequence 6 is a group of notes in the alto. Sequence 7 is a group of notes in the bass. Sequence 8 is a group of notes in the alto. The notation includes various note values, rests, and accidentals, with some notes appearing to be revisions or additions.

Fig. 35 *Fg.C#*, b.25,2-28,1 (R2) - Reconstruction of a hypothetical reading before revision with the suggested order of compositional sequences

It looks as if the first of the augmentation in the alto on b.25 was an afterthought, which probably found its way into the composition after the outer voices had been entered. On the contrary, the second appearance of the augmentation in the bass in b.27 was entered before the other voices judging from the mis-aligned notation with the soprano. In all probability, the former was constructed in the present shape when Bach revised the whole section. Apart from this, we also find two other interesting traces of compositional snags. One is the amended stemming for the semiquaver figuration at b.26,3. It clearly shows that the figure was initially planned as being a continuing property of the soprano. The other is the amended note-value of crotchet rest at b.27,2 and the replaced notation at b.27,4 in the alto. They suggest that the alto was not considered at the initial composing process. The sudden growth shown in Bach's writing density at R2 seems to delineate precisely what his writing habit was. This is nothing other than the composing process, where Bach as a rule recorded from the bass line consisting of larger note-values.

Having completed the extension, the piece enters the final section, E (bb.30-35). Though the section is constructed upon the two chords only - the dominant and the tonic, there are other musical ideas which were not used so far, such as the use of demisemiquaver motive and thickened 4-voiced texture. These fresh elements are in fact present in the previous versions: the use of demisemiquavers is first found in the 2nd version (P 595) and the thickened 4-voiced texture was already present in the 1st version. What Bach did in the 3rd version appears to be the revision of the previous revision, i.e., ameliorating the usage of the demisemiquaver figures which have not yet been fully amalgamated in the texture. Bach did so in L partly by extending their usage and partly by permeating them into the 4-voiced texture. Associated with this, further demisemiquavers are tentatively established in b.30:B,2 (R3,end). This can, however,

be seen as a chain-reactive revision of the 4th beat (R4,b.1). From this point onwards, demisemiquavers are regularly integrated into the melodic texture at the initial copying stage. Similar revisions to the earlier sections were not made at this stage but at a separate sitting, for we find those in a very different shade, apparently written with a dissimilar type of ink.

SECOND REVISION

No particular evidence suggests Bach's immediate proof-reading. But it was much later, sometime after the score was completed, that the second layer of revision followed. The revisions are marked with distinguishable dark black, possibly soot-based ink. At this level they show the nature of proof-reading, giving a fine touch to the melodic character and motivic consistency. Those are found in:

- a) all squeezed demisemiquavers before b.30.
- b) several inserted accidentals for improving subtle melodic character as well as for improved coherence in harmonic progression between b.28-33 (R2,end-R3).
- c) outlining ambiguous note-heads for clarifying purposes at b.30 (R4,b.1)

In this score is found no further scraping revision associated with any aesthetic improvement of the text. The score had already become untidy enough: one may even consider that Bach decided not to touch some places where no room was left for putting in further detailed embellished readings: for example, the most probable places are b.15,4 (L5,b.3) and b.16,2-4 (L5,end) - in the former, Bach once carried out scraping revision before, and not very suitable for such another; in the latter, there was no room left for squeezing notes into as the original notation was already very much squeezed. Philological study, however, gives a different picture. The reading of F, K and H provides an evidence that the final reading of L has served as a final reading for some time.

FUTURE AMENDMENTS

Our overall examination of several layers of revision processes reveals that the revision target was often related to the proposition emerged in the previous revision where the potential of the proposition had not yet fully flourished. An interesting fact we have learned from this study is: Bach seems to have known, when he revised a composition, precisely what was lacking from the existing work, and what was still to be done. He knew by the time he had decided to do it, the scale of the revision at hand: if it is small, he would do it on the same score; if otherwise, he would rewrite a score afresh. The final version emerged from the latter, which was transmitted in A. There we find the fully materialized use of demisemiquavers, aspects of which were found tentatively in the previous attempt.

PRELUDE 4 IN C# MINOR

The autograph of Pr.c# is lost, but a possible state of the text can be reconstructed on the evidence of its descendant MSS. The most vital piece of evidence is the notational characteristics of F, especially its diplomatic aspect, which seems to reproduce the subtle inaccurate notations in L including the symbols as a result of revisions. Here I will discuss two points: the misplaced accidentals and the immediate revision of note-value.

The former is considered on the basis of the statistical evidence that the scribe of F, Anon.Vr, would write the symbols as they appear in L. In Fig. 36, I give three such examples from P 416.⁵²⁶

Figure 36 consists of three pairs of musical staves, each representing a different measure from the manuscript. The first pair is labeled 'b.20', the second 'b.22', and the third 'b.47'. In each pair, an arrow points to a specific note or symbol on the upper staff, which is the focus of the discussion. Below the staves, the text 'Arrows indicating the symbol in question' is centered.

Fig. 36: *Pr.c#*, bb.20,22 and 47 - Later addition of sharps in L reproduced in F

It seems significant that these accidentals are found in F, H and K, but absent from A. The most probable reason for such variants is that these accidentals were added to L as later amendments with a view to melodic revision.

The latter is a unique case (see Fig. 37 below), for the symbol written by Anon.Vr does not look as a valid musical symbol.

Figure 37 shows the musical notation for measure 61 of the prelude. On the left is the original notation on two staves. On the right, there are two alternative readings of the bass staff. The top reading is labeled 'Reading in a' and shows the notes in a different clef. The bottom reading is labeled 'Reading in F, H and K' and shows the notes in a different clef, illustrating the revision of note-value in the bass.

Fig. 37: *Pr.c#*, b.61 (P 416) - Revision of note-value in the bass

⁵²⁶ There is, in fact, another such place, i.e., b.30:S/3/3. But in this case, the reading of F does not reflect such a trace as the later addition in L does.

A possible reason for the strange symbol in the bass, b.61,2, is that Bach originally wrote a crotchet here, and subsequently enlarged the note-head to the left to make it into a minim. This process of revision by Bach appears quite possible when we compare the text of A and L. In all probability, Bach made instant revision of the voice texture at this cadence, dividing the bass into two voices (see an example given in Fig. 37 above).

These two facts indicate that A was a possible earlier reading, which could have served as the exemplar for L. If this was true, the instant revision must also include the systematic transfiguration of appoggiatura notations, such as bb.16, 19, 21, 22 ff.

Among descendant MSS of L, there are certain sub-groups, probably due to the sooty and unpleasant look of the revision score. This would explain unique errors and variants in all the sub-groups of L, i.e., F, H and K.

FUGUE 4 IN C# MINOR

As is the case with the prelude, the autograph of Fg.c# is also lost. But we may consider that a possible text was attested in its later generation MSS, such as F, H and K; but unlike the prelude, there is no significant difference in their readings. This prelude is known basically in two versions, B and A. On the evidence of the early model written in C minor, which is found in P 804, we may say that A is the earlier version of the two, for the text between P 804 and A are basically identical, allowing the possible errors made by copyists and minor variants revised by Bach. The textual difference between A and B is, however, more recognisable, yet no large scale revision such as structural revision is found.

Our text critic study shows that the differences between the two versions are minor and subtle: there are only three types of variant readings - 1) the notation of ornamentation in b.26:B,2, 2) the use of accidentals for the subtle shade on melody in b.42:A,3/2, b.45:A,2/3 and b.68:B,3/2, and 3) the interpretation of melody at b.54,3.

On these grounds, I believe that the exemplar of B was not transposed between P 804 and A, for otherwise, more variant readings would have been included in A; and that on L Bach transposed as he copied. Thus B is likely to have been a revision score. Particularly interesting is the notation in F, where we find many accidentals squeezed in above or below note-heads.⁵²⁷ This particular notational feature of F may not mean perhaps that the symbols were added on B at a later stage; instead, this suggests that Bach wrote the fugue in compact notation, presumably trying hard to accommodate the long movement within the space available.

Finally, we will question the possible presence of the autograph at Clementi's possession in early 1800s'. The text in his edition is basically stemmed from B. It is interesting to find, however, that unlike Fg.C, his score contains some errors, such as omission of ties in bb.8 and

⁵²⁷ See Fg.c#, b.1 in Supplement B.

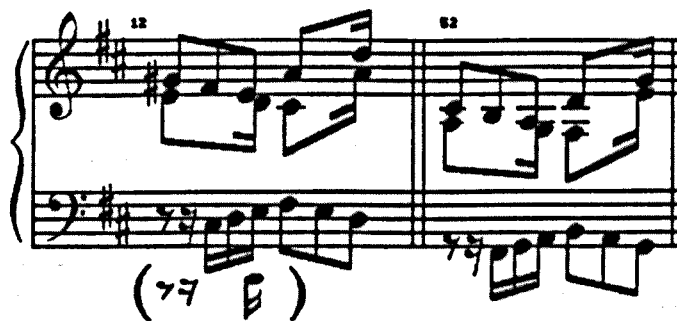
10, incorrect note-value in b.24 and the invalid pitch in b.69. Thus its unique variant interpretations of bb.32 and 54 become spurious in origin. Considering these facts, I tend to conclude that Clementi did not reproduce the reading of the autograph in his edition. Thus it is likely that Clementi did not possess the autograph of Pr.Fg.c#.

PRELUDE 5 IN D MAJOR

The autograph of Pr.D is lost. Its text is given in later MSS, such as F, H and K. The prelude is known in two versions, B and A. The decision on their genealogical relation is controversial; Dehnhard and many other editors claim that A contains both the earlier and later readings from Bach. However, I agree with Bischoff that A can be considered seriously as the earlier version, and that B is the final, though it seems to have contained some errors.⁵²⁸

The text critic study shows that, on the one hand, the version of L was written in fuller notation of ornamentation and rests as well as thicker texture. For example, ornaments in b.14:B,2, b.23:A,2 and b.40:A,1 are only found in the descendant of L and not A. Similarly, the following rests, which are required for clear textual writing, are missing from A: b.18:B,3-4, b.27:A and b.30:A,1. The thicker texture at bb.20, 40 and 56 in L can also be explained by the same reason.

On the other hand, the controversial part is the interpretation of two figurations in the bass, b.12,1 and b.36,4. In the former case, we recognize a certain relation with the same passage in the recapitulatory section, b.52. Dehnhard explains from the analogy of textual relations that A was the revised reading of L (see Example 3 below).



The rhythmic variant reading of L is indicated in bracket

Example 3: Pr.D, bb. 12 and 52 - Textual difference between L and A

It is, in my view, not a valid piece of evidence to support this typical interpretation, for such thematic deviation can often be found in inspired later revision on stereotyped writing.

The valuable part of the reading in F is gathered in the final section of the piece, where we find three interesting errors in the alto. Apart from the omission of rests in bb.53-54, I find the

⁵²⁸ Dehnhard (1983), p.xxiv. Bischoff, p. 22. Although not explained in words, HENLE and TOVEY also hold the same view as Dehnhard.

pitch error at b.52,1, given as $c\#'$ instead of a , highly crucial to the interpretation of the missing autograph, for it could have ^{been} caused by the vague pitch notation on Bach's part. Together with the considerable length of the piece, it is feasible to think that Bach used an extra narrow system at the foot margin to finish off the movement.⁵²⁹ This would perhaps also explain why the final cadences given in F and H are incomplete. This passage is a revised reading of the earlier, as already mentioned, improving its textual thickness. And here I think Bach failed to write a crotchet on b.56,3 on d' to complete the thickened texture.⁵³⁰

FUGUE 5 IN D MAJOR

Similar to the case with the prelude, the autograph of Fg.D is also lost. Its text was taken into F, H and K; but A can be considered to have stemmed from a different score, the earlier version of the piece. The difference in the two versions is clear: B is written on ϵ metre, while A is on C metre. Perhaps the clearest proof of the later reading is the melodic revisions, such as diminutions in bb.22 and 44.

Assuming from the number and the types of errors in F and H, it is difficult to believe that the missing autograph was a fair copy.⁵³¹ Unlike its accompanying prelude, space shortage must not have been the problem for lack of legibility, for this fugue is short.⁵³² It appears also that this clear four-part writing is not fully clarified with the insertion of rests.⁵³³ From these points, we may consider that the score could have been a revision score, and was not considered as a fair copy. Thus it is possible to visualize that some of the textual differences between B and A could have been worked out during the copying process.

PRELUDE 6 IN D MINOR (F.4R)

This Pr.d appears to have been one of the favourite pieces among Bach circle: from Forkel we learn that he had four different versions, each of which is showing some improvement.⁵³⁴

⁵²⁹ The similar pitch error is also found in the narrow hand-made system in Fg.F, b.86 (f.8v:Btm,b.7).

⁵³⁰ It is interesting to note that this crotchet is given in H2 as well as K1. This suggests that the error was noticed only by Kirnberger. In Am.B.57, someone added a tie on d' between 3rd and 4th beat at a later date. This particular amendment is not agreeable.

⁵³¹ The errors in F are: b.28 (rhythmic notation); b.36 (missing tie); b.37 (missing rest) and b.50 (pitch error). H contains a single error on voice texture in b.6. The overlooked accidentals, already mentioned in Footnote 292, also point to the same trend.

⁵³² It is clear when we compare the length with Fg.B (f.20v), the composition of a similar texture. Fg.D (P 416) has 400 units, 53 VAc and 68 TAc, while Fg.B (L, f.20v) has 785 units, 118 VAc and 144 TAc. This gives the length of Fg.D almost half of Fg.B.

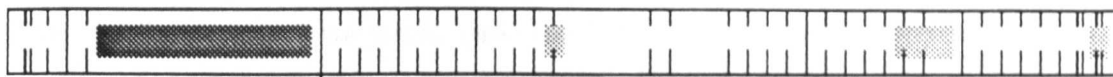
⁵³³ See, for example, the notation of rests in bb.1-5 in the bass. It appears that K gives fuller notation than more faithful F and H which give b.1 only.

⁵³⁴ Forkel (1802). English Translation is found in Bach Reader, pp. 348-349.

The version contained in f.4r shows the text from the second stage to the final, three versions juxtaposed, as shown in Fig. 38 below.

1st version: P 1089 (43 bars)

1 5 7 15 19 20 22 33 43



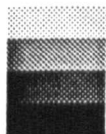
2nd version: P 226 + L ante correcturam (53 bars)

1 5 9 12 24 28 31 42 53



Present text in L (61 bars)

1 5 9 18 22 26 30 34 39 43 51 61



fairly extensive modification in next level.

discarded in next level, and replaced with new longer reading.

1st later revision in fine melodic detail. Taken into A

2nd later revision in fine melodic detail. Not taken into A

Fig. 38: *Pr.d* - Plan of revision and expansion in three levels

In revising the first version, Bach lengthened the piece from 43 bars to 53 bars. This Forkel describes, "the transposition of theme into the bass is inserted whenever it occurs in related keys." It must have been true as Forkel says, "many persons enjoyed the piece even in its original form.", and Bach must have surely thought so when he finalised the text in what we know as the second version, presented here as *ante correcturam*. As a result, Anna Magdalena was asked to copy out the piece. As in *Pr.c*, Bach wrote the first C clef, and Anna Magdalena directly took over the quill and wrote the time signature.⁵³⁵ Judging from the notation, Anna Magdalena copied out the entire music under Bach's constant supervision. And this intervention by Bach is most interesting. In the piece are found five C clefs by Bach - at b.1 (L1: Upper staff), b.22 (L5: Lower staff), b.25 (L6: L), b.29 (L7: U), b.54 (R6: U) and b.58 (R7: U).⁵³⁶ This suggests that Anna Magdalena was not totally trusted by Bach with regard to this particular piece, though it was possibly the second time for Anna Magdalena to make the copy of *Pr.d*. It must be that Bach knew how *poorly* she did on the first occasion, i.e., the piece in P 226. There she made many kinds of errors. Included was the format failure: the prelude was not accommodated within one side of an open bifolium. If these were the correct background, we would be able to say that Anna Magdalena used the same exemplar, which presumably

⁵³⁵ Emery (1953) p.117.

⁵³⁶ See Emery (1953), p.118. Bar numbers are of the final version. The C clef placed at the end of L4 is suspicious to ascribe to Bach.

contained many revisions, some of them being quite indecipherable. It is therefore possible to conclude that Bach was occasionally monitoring Anna Magdalena's copying progress particularly of note allotment. The same conclusion can be drawn from Anna Magdalena's high rate of writing density: CW2 stays constantly at around 3 or sometimes above, while the same piece in P 226 indicates substantially lower figure.⁵³⁷

Amendments carried out on this MS can be grouped into three types according to the possible order of events - 1) corrections of errors made by Anna Magdalena; 2) the interpolation of transient passages; and 3) revision of fine melodic details. I will discuss each in turn.

Corrections are partly identified by the nature of errors, the errors as a result of copying activity without musical enterprise. Of this category are listed the pitch emendations of seconds at b.7 (L2,b.4) and b.29 (L7,b.1). Apart from corrections, all the mordants that are absent in P 226 could have been added at this stage, possibly during Bach's proof-reading. From this state of the text are originated F and ante correcturam of H.

The interpolation of transient passage is made twice by Bach, bb.10-17 and bb.37-38. The first interpolation of eight bars (bb.10-17) is a replacement of the two bars, bb.10-11 (L3,b.2-3), which are subsequently crossed out. The second instance (bb.37-38) is an insertion of two new bars. These appenda are notated side by side on an extemporaneously but carefully prepared narrower stave at the foot margin.⁵³⁸ Bach distinguishes two distinctive jump markers: for the former he used "F" and for the latter, he used "⊗". It is interesting to notice that both interpolations concern the sections which were lengthened at the first revision, and that their functions within the harmonic structure are fundamentally unchanged: both are bridge passages, constructed by a circle of fifths. It is clear that the purpose of revision was to strengthen the harmonic goal by means of the reinforced chain of chords. And because such sequential phrases can be improvised, one may speculate that Bach wrote them directly without drafting. Apart from Bach's non-calligraphic hand, we also find not a few corrections reflecting a slight trouble in the process. Especially significant is the difference of reading with the version transmitted in A. There are two such important readings: the one is the pitch affected by an accidental on *b^b'* on b.11:S,1/3 where a natural is given in L and a flat is given in A;⁵³⁹ the other is a pitch in b.38:S,3/2 where *f* is given in L and *b^b* in A. I believe the version

⁵³⁷ See also CW2 of Præludium 2 in comparison.

⁵³⁸ This stave is prepared by a rastrum. Drawing was carried out from left edge to right edge of an open sheet with a single stroke. It appears to be a unique size as no other of this size is found in WTC II. Ink used to draw stave is appeared to be thin, light brown in colour.

⁵³⁹ Dehnhard (1983), p. xxv, considers that the natural in L was revised from the flat. Ascertaining this is extremely difficult from the calligraphic feature of the symbol alone, for Bach sometimes wrote naturals by way of writing flats. Another unique speculation by Dehnhard - the theory of transition of reading from A, L to post correcturam of Am.B.57 - is interesting. But having already discussed the nature of Am.B.57, I tend to believe that the

of A was the revised reading of L, possibly polished forthwith when the same interpolations were supplemented to S.⁵⁴⁰

The revision of fine melodic details was made at the last stage, the refinement. From philological evidence, it was thought to have been carried out in two separate sittings as shown in Fig. 38 above. The first melodic revision was focused in the bass, bb.39-49, where two specific character of the piece was strengthened: 1) every first beat of metric pulse in bb.43-45 was strengthened by a spelt-out mordant - a semitone passing note embroidering the dominant notes; 2) simple broken chords at bb.46-47 and 49 are replaced with more inspired, complex pattern of broken chords. The remaining amendment is a change of pitch at b.39: B,1/1, from *e'* to *e*. This is, however, not quite related to the motivation of those revision criteria. I consider the reading of *ante correcturam* to be something unnatural, an erroneous reading in the context. All those revisions were also taken into A.

The second melodic revision can be considered the last and the most unique set of amendments made by Bach; two types of revision were contained in the soprano, bb.18-25, and one in the bass, b.40: The most orthodox type is the one in bb.18-21, 23 and 25, which can be seen as a later chain-reactive revision of the amendment made on the previous occasion in the bass, bb.43-45. At the same time, Bach, for the first time in this prelude, introduced the demisemiquaver flourishes in bb.22 and 24. The most remarkable one is, however, the revised pitch of b.40, for the revision is only appreciated when we see it in long linear hearing; it is especially remarkable, since the modification made the passage extremely difficult to perform. As a whole, our observation indicates that the final refinements reflect Bach's profound insight and inspiration into the work, which was only made possible by his supreme virtuosity. The fact that the revised reading from this sitting was not taken into A can serve as an evidence for their chronological order of events. It is also possible, on the other hand, that Bach deliberately reserved S as an alternative version, for he was aware that such modification would be technically too demanding for some of his students to learn.

FUGUE 6 IN D MINOR (F.4V)

In f.4v is contained Fg.d copied by Anna Magdalena. Initially the score was intended as a fair copy, but Bach, possibly a few years later, made certain revisions. Here we can confirm the process of revision from the semi-final to the final version. The exemplar which Anna Magdalena used could have been a revision score, possibly S, now inextant. From it, in all probability, A was stemmed. The possible revisions involved between P 595 and S can be roughly ascertained by textual comparison between P 595 and L.⁵⁴¹

third reading was not Bach's revision written in the new copy, but was the inspired revision by Kirnberger at a later date, which was necessitated by a poor reading left by the master.

⁵⁴⁰ Dehnhard (1983) gives the same interpretation.

⁵⁴¹ See Supplement B under Fg.d for detailed listing of variant readings between P 595 and L.

The score was made by Anna Magdalena obviously without Bach's intervention. The examination of the density of writing shows a very interesting picture of Anna Magdalena's copying policy: she, having copied with a stable and compact hand in the first page, suddenly eased the tension from the beginning of the second page. It may be compared with her previous copy in P 226 which gives quite a different picture. Two peaks of her writing density in L, i.e., L5 and R3, are probably the results of her lack of insight into note-alignment. In b.21 (R3,b.1) she made such a serious error, as shown in Fig. 39 below, that the part-writing required a scraping re-notation.



Fig. 39: *Fg.d, b.21,2-4 (R3,b.1) - Reconstructed model of ante correcturam*

The cause of error in the soprano is no more than the omission of three semiquavers, since all the earlier copies, including P 595 and P 226, give the post correcturam.

The first later amendment to the score took place as a proof-reading. The chief purpose was to correct the poorly written notational symbols, such as ties which had extended their length. In the score are also found many erased symbols. Among these are the erased lines linking two voices. These were aligning indicators between a pair of staves, to which Bach resorted in order that the score might be more readable. Who erased and when they were erased are uncertain. Revisions, on the other hand, are scarcely considered, except perhaps for the addition of trill at b.16: S,4. From this state of reading are imparted F and H.

The second amendment was considered to be some time later, after having generated F and H. It was to carry out decided melodic revision at b.13-14 (L6,b.1-2) by raising the soprano an octave. The most probable date of the revision is between 1742 - 1744 on the evidence of A which gives post correcturam. Another significant melodic revision was carried out in b.21: B,3/5, the ante correcturam of which is shown in Fig. 39 above. The revision was to enhance the nuance of a melodic passage. On the evidence of the reading in A, we may perhaps speculate that the revision on this particular passage in D minor was carried out twice: in A, this beat is read *e d c# B c# d*, both the 6th and 7th were raised a semitone up regardless of scale ascent or descent. In ante correcturam of L, it is read *e d c B c d*, a natural minor scale. The order of revisions between these is uncertain: however, assuming from Bach's general procedure, A, which uses accidentals, must be the revised reading of ante correcturam of L,

which uses no accidentals. In the final version, post correcturam of L, the passage was changed to *e d c B c# d*, a melodic minor scale, distinguishing shades between ascending and descending scales. From this state of reading is originated ante correcturam Am.B.57.

PRELUDE 7 IN E^b MAJOR (F.5R)

The piece contained in f.5r is a semi-final version of Pr.E^b. From a philological view, it is placed between the 5 bars sketch of P 416 and the final version given in A.⁵⁴² Having written the 71 bars composition, Bach came back to this score to make certain types of amendment. This layer of activity can be distinguished by a different shade of ink.⁵⁴³ In the following sections, I am going to discuss those events in chronological order: 1) initial copying process and first amendment and 2) later revision.

INITIAL COPYING PROCESS

One may see its untidy appearance at the first glance. A more careful observation soon unveils the fact that this was caused broadly by the type and the manner of amendment - some symbols apparently being tentatively inserted afterwards and others boldly modified. There are even such sort of pitch emendation as being indicated by letters, viz., b.20 (L5,b.2) and b.56 (R5,end), the type being avoided normally.⁵⁴⁴ These amendments are clearly the result of tentative putting down immature ideas, requiring further revisions. Thus the score was not a fair copy, but was the score belonging to one of the early stages. To clarify the status of the score further, we must examine where and to what extent the piece was revised. From a broad structural point of view, we find no trace of extension being interpolated or appended. This suggests that Bach wrote the whole length of the prelude at one sitting. It is significant that, despite of many details being revised, the structure of the piece was already finalized at this stage. From a more detailed structural analysis, on the other hand, we can see that the first amendments occur only at structurally weak points, such as where the phrases were joined and where new motivic ideas were introduced, as shown in Fig. 40 below.

⁵⁴² Refer to Chapter 3 under P 416 for details.

⁵⁴³ From the identification in ink, the maximum layer of revisions I have successfully traced was only two. The use of sophisticated ink analysis may provide an extra layer or perhaps more.

⁵⁴⁴ See f.2r, f.2v, f.13.

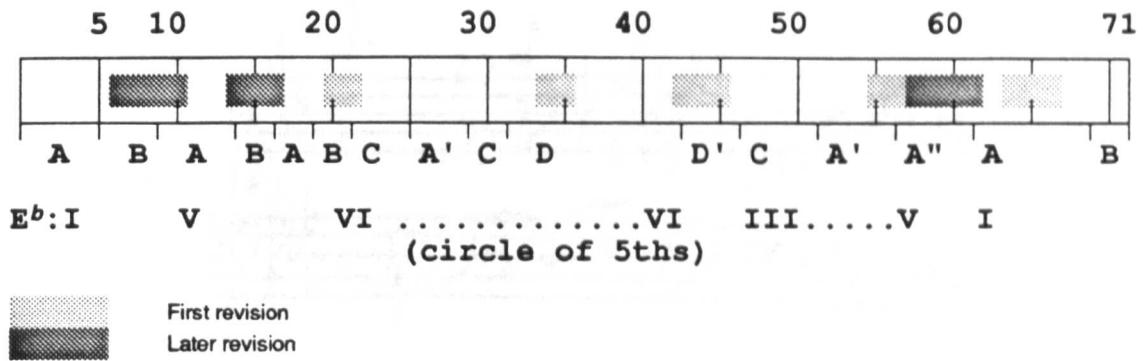


Fig. 40: *Pr. E^b* - Plan of revisions and motivic development types

Note that the distinction between the first and later amendments are effectively distinguished by the type of ink. The first amendments are considered identical with the one used at the initial copying stage. Here I discuss the amendments in five passages, viz., bb.19-20 (L5,b.1-2), bb.34-35 (R1,b.2-3), bb.43-45 (R3,b.2-4), bb.55-56 (R5,b.5-6) and bb.64-66 (R7,b.3-5). The hypothetical moment of the amendments can be any of the three types, i.e., immediate, later, immediate chain-reactive, which shall be discussed in sequence.

But before discussing the amendments, it has to be made clear that the piece was based on three fundamental motives as shown in Example 4 below.

Example 4: *Pr. E^b* - bb.1-2: Three fundamental motives
mordant (*m*), scale (*s*) and arpeggio (*a*).



The pitch emendation at bb.19-20 (L5,b.1-2) is located at the end of the section constructed on the first motivic idea. The reconstructed model, shown in Fig. 41 below, shows that the part writing, i.e., controlling the thickness of texture, was identical with the corresponding section in the previous passage, bb.16-17.

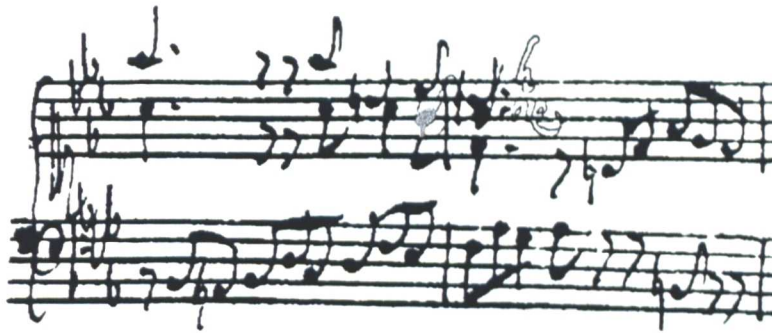


Fig. 41: *Pr.E^b*, bb.19-20 (f.5r: L5,b.1-2) - Reconstructed model of the initial reading

It may appear that the amendment was required only to change the harmonic quality of the section. Let us see the harmonic contents of the respective readings. At the initial reading the R.H. bb.19,3/2-20,1 was harmonized as $Ia-V_7c$ in C minor, leading towards the cadence in bb.21-24. The revised reading was IV_7c-V_7c , maintaining its ambiguous gesture initially given on b.19,3/1. From this observation, we learn that, by reducing the qualitative significance as a cadence, the reading of post correcturam contributes to the successful transition of motivic ideas. What might have appeared as a harmonic revision was in fact a structural revision.

The next set of amendments are found in bb.34-35 (R1,b.2-3). Here we find two distinctive manner of amendments, addition and scraping re-notation. The ante correcturam is suggested in Fig 42 a) below.

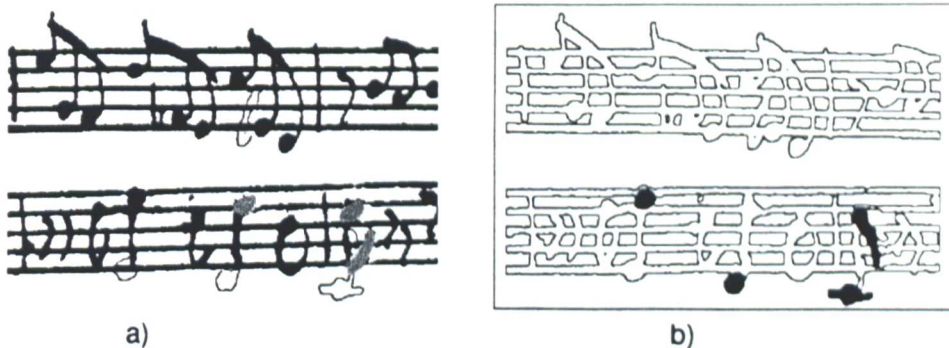


Fig. 42: *Pr.E^b* - b.34-35,1 (R1,b.2-3)
 a) Reconstruction of ante correcturam
 b) Outlined Symbols with Revision Ink

It is important to note that the passage work, characterised by a descending melody with fast moving harmonic rhythm, was used for the first time in the piece. The figuration employed here is in fact not new, but is modelled from that of b.3. But the most immediate model is the figuration of bass (ante correcturam), a sequence of rising interval of a second, which is taken directly from the preceding sections, shown in Example 5 below.

Example 5: The development of a motive in the bass in *Pr.E^b*, bb.25-33

The motive is indicated by brackets

This shows how the motive was used in a dominant role in this section, and how the speed of harmonic rhythm was increased towards this passage in question. The revision in the bass was considered very soon, either immediately after completing the initial passage or after having written the corresponding passage in bb.37-38 in a new form (chain-reactive revision). The most probable reason for the revision was to strengthen the linear progression as pure falling scale in a latent four-voiced texture. Interestingly, the pure chromatic scale in the latent alto was perfected on a much later occasion (see Fig. 42 (a), b.34,3/2). It was probably triggered by the immediate chain-reactive revision in an equivalent passage of b.41.

The motivic development type D' is the section attached to the previous section D (bb.32-42). Its function is, by way of culminating the sequential passage developed from the circle of fifths, to restore the original motivic development type C in G minor. In this section are found the next arrays of amendments. I suggest the reading of ante correcturam as in Fig. 43 below.

Fig. 43: *Pr.E^b*. bb.43-44 (R3,b.2-3) - Reconstructed model of a hypothetical reading before revision.

From the viewpoint of motivic development, we may say that in D' the voice first written was the bass (motives m + a), which was echoed by the soprano of b.42. The same conclusion can be drawn from the observation of calligraphy, especially the quaver g", ante correcturam, at b.43,3/3. The two notes in the bass that were amended later in pitch were not errors, but valid, tentative readings. The revision was based on the criteria of the motive 's', which has also been seen in the amendment of the previous part (b.34). The heavily revised soprano is certainly most interesting, for it has only a vague motivic identity, but plays a significant role in the entire

structure of the piece. In terms of motivic development, it may be seen that the original motivic material of the rejected part writing in bb.43-44, e.g., quaver + crotchet, was taken directly from the previous section, b.34-35 in the bass. The usage of the motive was, however, entirely different, for it is now that the crotchets are deployed on the down beats, announcing the highest note in the piece, and that they participate in significant part of a local linear line, *c'' b'' a'' g''*, or N-3-2-1 in G minor. The revision of the part writing was done chain-reactively. That of b.45,1 was rhythmically sequenced with the previous two bars, and was harmonized in the subdominant of the forthcoming G minor cadence at b.47. The revision was thus significant not only in the linear progression but also in harmonic matters, for by changing the beat in the tonic of G minor at root position a firmer cadence was achieved.

To prepare the reinstatement of the entry phrase at b.61 Bach wrote two preparatory phrases based on the motivic development type A, i.e., A' (bb.51-54) and A'' (bb.56-59). Between these phrases is located a two-bar joining passage containing amendments. The reading of *ante correcturam* is suggested in Fig. 44 a) below.



Fig. 44 *Pr. E^b, b.55-56 (R5, b.5-end)*
 a) *Reconstruction of ante correcturam*
 b) *Outlined Symbols with Revision Ink*

Among a lot of tentative writing, the most significant part of revision is seen in the co-ordination of harmonic progression between the voices at b.56,1, where the bass arrives at the dominant one beat earlier than the soprano.

Having written the careful preparatory passages A' and A'', the reinstatement of the initial four bars was realized from b.61 onwards. The original brief phrase was, however, modified and extended to eleven bars making it suitable for the final cadence. In such process of modification, Bach employed several contrasting devices: first, the motivic idea of the third bar was modified so as to efface its cadential character. This passage was repeated four times, forming a sequence in a descending scale (bb.63-66); second, the subsiding passage work was interrupted abruptly by the contrasting, strong cadence formula (bb.67-68); and finally, the

cadence was announced in the original fashion, but prolonged again, tripled in length. In writing these ideas what caused certain difficulty was the first device. I suggest the reading of ante correcturam as in Fig. 45 below.



untenable reconstruction is indicated by '?'

Fig. 45: *Pr.E^b - b.64-66 (R7,b.3-5) - Reconstructed reading of ante correcturam*

From its clear motivic identity between b.3 and bb.63-66, one may consider that Bach wrote the soprano prior to the bass. The sequential pattern in the bass, bb.63-66, was conceived after tenable struggle. The reading of ante correcturam, suggested in Fig. 45 above, shows that the down beat of the bass in bb.63-66 was originally an octave higher, and the detailed figuration in each bar was tentative and dissimilar to any other figurations found in the piece - the common character of a filling voice.

Summary: in all the five passages the amendments show significant betterment of the original ideas. Especially noteworthy is that these are located at the sections outside the stereotyped motivic development. Among these, the most interesting one is the new, revised figuration introduced at b.34, which is immediately taken into the following figuration without further amendments. This confirms Bach's intense revision activity at the time of copying out the music. From this point of view, we may conclude that the score is not a composing score based on the draft found in P 416, but a mature record with revisions based on the concepts developed from the improvisation on the clavier.

The examination of Bach's writing density reveals a very interesting fact: the curves of LP and LPNA go almost parallel to each other - it means that the density of notation is clearly affected by certain factors. Another interesting fact is that the density of Bach's writing was not at all affected by the application of accidentals. The only feasible explanation for this may be of psychological factors, i.e., the increased musical apprehension at modulations made him write the piece with more compact hand. However subtle the rate of variation may be, the same factor may be responsible for the rise of density in the most important motivic revision found in bb.43-45 (R3,b.2-4).

The abrupt rise of density after R5 is different. It is seen as Bach's strategic change in copying the music, for it is the place where Bach could have already realised the space shortage to finish off writing the piece. The turning point is b.56 (R5,end) where the dominant

chord section predicts the recapitulation. Here Bach is evidently in the position for the first time to be able to judge how many bars he would need to finish off the work.⁵⁴⁵ Such a decision was apparently too late, and he was obliged to use an extra system. It is interesting to see that this system was not long enough, and later extended for about 1.2 cm to complete the last bar.

LATER REVISIONS

A later revision on the MS is confirmed by the distinct black shade of ink. The revisions at this stage were concentrated on proof-reading as well as certain improvement. The most typical one is to clarify the reading of previously revised sections, such as b.20 (L5,b.2), b.34-35 (R1,b.2-3) - see Fig. 42 b), b.44 (R3,b.3), bb.55-56 (R5,b.5-6) - see Fig. 44 b) and b.59 (R6,b.3). There is, however, an extraordinary instance at b.34 (R1,b.2) where a wrong note was outlined - see Fig. 42 b) above.

Musical revision, on the contrary, is to be considered in two aspects - melodic and textual. The former is seen in the insertion of a natural at b.43 (R3,b.2), which is shown in Fig. 43. The more significant improvement is, however, the latter, the enrichment of voice texture by adding pedal notes at bb.5-8 (L1,end-L2,b.4), bb.13-17 (L3,b.4-L4,b.3) and bb.57-60 (R6,b.1-R6,b.5). In Fig. 46 below, I demonstrate the initial reading of bb.14,3-16.



Fig. 46: *Pr.E^b* - bb.14,3-16 (L4,b.1-3) - *Reconstruction of ante correcturam*

It is particularly interesting to see that the inner voice in bb.15-16, which was initially the bass, was not initially fully worked out. This figuration can be compared with the bass at b.20,1. The revision caused further revisions. Among the most grave is the pitch emendation in the bass, b.10,1/1, where *f* was lowered an octave. This was necessitated when the added tonic pedal notes *E^b* became so significant in terms of linear structure.

⁵⁴⁵ The significance of this phenomenon is considerably reduced if Bach knew the total number of bars before he set off: the calculation of the norm of copying pace (71 bars /14 system = 5.07 bars per a system) is not difficult to maintain.

FUTURE AMENDMENTS

The observation from within L so far suggests that the transposition process and the modification of figuration in section E took place on L. However, the reading of A, which links the reading between P 595 and L, points to the presence of an intermediate version.⁵⁴⁷

Among the offspring MSS from L, the only noteworthy variant reading is the tenor, *b^b* in two minims at b.30. Being located at the change of system, some scribe, whose copy possibly became the basis of groups H and K MSS, judged the reading of L as an error, and supplied a tie between the minims.⁵⁴⁸

PRELUDE 8 IN D# MINOR (F.6R)

The piece contained in f.6r is the final version of Pr.d#. The model for this prelude is lost. Despite its clean, fair appearance, this copy is practically made as a revision score. Here we find revisions at least in two occasions, one at the copying stage, the other at a later stage. The possible state of its exemplar can be reconstructed in two ways - the study of copying and revising process in L; and the comparative study of text between L and A. Closer studies on these aspects indicate that the relation between L and A is not a clear, one-way generation. And, as far as the revisions in L suggest, the text of the exemplar was far more immature than any other texts contained in extant MSS.

The first amendments are concentrated on the melody by adding accidentals. This is found in the treble of the commencing bar, appearing as an immediate chain-reactive revision related thematically to the passage in the bass of the following bar. The other motivically-related revisions are not clearly ascertainable from the appearance due to the way notes were well spaced out. But on the evidence of the text in H2, one may consider two cases, viz., b.12: B,3/4 and b.28: B,3/4, as a similar chain-reactive revision, where the accidentals could have been added later.

There are also several orthographic errors appearing as misplaced note-heads (b.5, b.8 and b.14): these are pitch errors at the interval of a second, all occurring as large leaps of sevenths. Also concerned is the error related with the accidentals. Double sharps are often corrected from #, e.g., b.24: S,2/4, b.27: S,4/3 and b.32: B,1/2. Some sharps on *b* also tend to

⁵⁴⁷ A is written on common time (C), as is the case with ante correcturam of P 595. It also shares the older reading with P 595, i.e., the reading of b.58: B,1/4 (see Supplement B). Apart from these aspects, there is no marked difference in reading between A and L, and we may say they are the same version.

⁵⁴⁸ In Agricola's copy (P 595), the tenor was a ^{semi-}breve instead of two minims, as well as the note-value of the following entry in the bass. So far as the rhythmic shape of the subject is concerned, the modification found in L is systematic, and the omission of tie in the tenor at b.30 is likely to be intentional. It may also be interesting to note that the interpretation of the tenor in question differs between A1 and A2: in A1 two minims are tied, and in A2 the tie is omitted. It is difficult to ascertain the link between A2 and H or K in this case, for there is no trace in these MSS being tempered at a later stage. I consider the case as being coincidental.

be overlooked at the initial stage, e.g., b.12: B,1/3 and b.14: B,1/4. These errors depict the image of a Bach who was not confident in writing: it is possible to see the picture of Bach copying from the exemplar which was written in a different key, possibly in E minor.

A later amendment is found in b.20 (R1,b.3) where harmonic progression is decisively changed by the application of accidentals. The reconstructed model of ante correcturam is given in Fig.48 below.



Fig.48: *Pr.d#*, bb.20-21,2 - f.6r (R1,b.3-4) - Reconstruction of ante correcturam

This is the only place on this sheet where a very dark black shade of ink is used. The modification is made on the 4th beat only, changing the chord texture from the 2nd inversion of B₇ to the root position of D#₇. Thus the relation to the following chord E on b.21,1 is effectively changed from the E Major property (V₇-I) to the G# Minor (V₇-IV).

Surmising from these observations, Bach must have had a well worked out exemplar at hand, while he carried out a systematic melodic improvement. Bach's writing density shows his struggle with the space available on the sheet. In each page we find a general tendency where the initial determination to tighten the compact writing was eased. The sudden recovery of the compact writing at the change of page (R1) indicates the re-installation of tighter writing, where Bach might have re-calculated the remaining space. This tight rate of writing was not maintained, and as a result, an extra system was needed in the foot margin to copy the final bar. The sacrificed calligraphic value of the MS is compensated for by the improved artistic excellence through his active process of revision process and the transposition.

All revisions entered in L are taken into F and H except in one instance, a double sharp later added on *cx'* at b.23: S,3/4. A1 and A2 are basically the same version, but A2 appear to be revised text of the A1. This version is, as already mentioned, different in details from that of L. It contains many errors as well as possible later revisions by Bach or Altnikol.⁵⁴⁹ Thus the relation between A and L can be best explained as follows: A was based on an intermediate copy, possibly S, which was copied presumably not by Bach, referring to the partly corrected

⁵⁴⁹ Possible errors or early readings are: b.5: S,4/2; b.17: S,1/1, b.20:S,2-3; b.23: S,4; b.29:B,3; and b.35: S,3 (A1 only). Possible later readings are: b.9:S,2/3; b.14:S,3/3; b.18:S,4/4 (A2 only).

version of L's exemplar. During or after the copy making, several inspired amendments to the text were made to it alone.⁵⁵⁰

FUGUE 8 IN D# MINOR (F.6V)

The piece contained in f.6v is also the final version of Fg.d#. But, as in the case with the accompanying prelude, we know neither the existence of its exemplar nor the possible reading of the exemplar attested in extant MSS. Our study will suggest, however, that the reading of A can be considered fairly close to the exemplar, as we have seen in the prelude. The text of L contains many interesting amendments which can be distinguished by their nature - correction of errors and decided improvement of the original text.

The study on Bach's density of writing suggests that the copy was made very carefully and strategically. The most significant is the sudden rise of density at the change of page (R1). It indicates that Bach was from the outset aware of possible space shortage and tried to avoid this by re-calculating and adjusting his compactness of writing.

Corrections are mostly minor and are possibly carried out as proof-reading amendments. All the corrections appear in the form of later amendments. The most frequent and consistent corrections are to amend accidentals. Two of these examples are found in bb.14-15 (L4,end - L5,b.1) where double-sharps are written over sharps.⁵⁵¹ In later part of the piece, we also find two corrections in the alto, bb.39-40 (R5, b.2-3): the one is the adjusted length of tie in b.39,4- and the other is a amended note-head in pitch in b.40,1.⁵⁵² Interestingly these two particular instances are located in similar geometric positions on the score - the fifth of seven systems. It is probably affected psychologically, for we witness in these places the fall of writing density.

The rest of the amendments are dominated by the revisions. On the evidence of the reading of A, they can be classified into two types - ones taken into it and others not. While this may be considered as the evidence of chronological order in a particular place (e.g., see p. 250 below), it cannot be entirely ruled out, and therefore no further speculation is made in this respect.

Revisions are found in many isolated parts, suggesting Bach's attention to overall structure of the piece. The earliest is b.19 (L6,b.3), where we find two interesting revisions, ante correcturam of which is reconstructed in Fig.49 (a) below.

⁵⁵⁰ Dehnhard (1983), p.xxvi, agrees with this interpretation.

⁵⁵¹ The same revision is also found in b.21: S,3/1. But in many other cases the error was not rectified. See, for example, b.9:A,1/2; b.39: S,3/1 and b.40: A,3/1.

⁵⁵² Apart from these, we should also take into account the unrectified errors of accidentals, already discussed in Footnote 551.



Fig.49: *Fg.d#*, b.19 (f.6v: L6,b.3) and b.36 (f.6v: R4,b.3) - Reconstruction of ante correcturam

The squeezed in double-sharp on b.19,2/2 in the alto is a melodic revision,⁵⁵³ and the natural on b.19,2/3 in the bass is a harmonic revision, enforcing the modulation towards G# minor. The latter was most likely carried out at a later stage, for it was not entered into the other copy (exemplar) which became the basis of A.

The next revision is concentrated on bb.29-30, the section preparing dramatically for the relative major at b.30,2. The replaced accidental, a natural on *a'* in the alto of b.29,2, was originally a double-sharp. And this appears to have been an unsuccessful attempt to improvement, for one may discover a specific purpose in the ante correcturam, which was altered before it had been accomplished: the ante correcturam could contribute to the harmonic preparation for the relative major section if the following note, *b'*, was sharpened also, harmonizing as the double dominant (G# major chord) of the arrival key. This speculation is justified by the fact that the plan was abandoned immediately, for the *b'* was never sharpened. It appears that such an attempt was prevented by the bass progression, presumably already written down, and the use of double dominant was postponed until the end of the bar. There is another revision made to the pitch in the tenor, b.30,1. This is an introduction of suspension at the crucial cadence.

In the later part of the fugue are found two large scale revisions, the one in the alto at b.36 (R4,b.3) and the other at b.45 (R7,b.2). The former is a rare example where Bach reduces the texture in revised reading. Interestingly, the ante correcturam (reconstructed in Fig. 49 (b) above) is retained in the exemplar, which is attested in the reading of A.⁵⁵⁴ The latter is a revision on the texture of the final cadence where the texture is increased to five voices. The reconstruction of ante correcturam is given in Fig.50 below together with the reading given in Altnikol's copy, A2.

⁵⁵³ This squeezed accidental in the alto was interpreted in F (P 210) as for *c#'* in the tenor, b.19,2/2.

⁵⁵⁴ Dehnhard (1983), p. xxvi, gives slightly different reconstruction, the alto being *fx' e' d# c#'* instead of my *d# e' d# c#'*.



Fig.50: *Fg.d#*, b.45-46 (f.6v: R7,b.2-3) - *Altnikol* (P 402) and *Reconstruction of ante correcturam* (L)

It appears that the revision was carried out twice on L on separate occasions: the first revision took its reading to the Altnikol version, and the second finalized the reading.

All the revisions were carried out before F and H were made. The other version represented in A contains, apart from the readings of *ante correcturam* of L already discussed, some errors and unaccounted-for variant readings.⁵⁵⁵ The majority of the variant readings are obviously less inspired, but are possibly retained as alternative readings.

PRELUDE 9 IN E MAJOR (F.22R)

The piece contained in f.22r is perhaps the final version of Pr.E somewhat misrepresented by Anna Magdalena.

The study of her writing density immediately discloses that Anna Magdalena was unaware of consuming too much space till she reached the end of R5. She then had to squeeze her notation for the last two systems, and gave herself up at the end of R7. Bach took over the quill and made an extra system in the foot margin, and finished off the copy.

As in other Anna Magdalena's copies, many subtle symbols such as accidentals are written in such a poor manner that it is difficult to distinguish those initially written ones from the added ones. In one extreme example at b.17 in the alto (L5,b.3), a sharp is placed 5 mm away from the note-head. The sheet was also scraped off in many places, showing many additional errors made by the copyist. Among these are four removed symbols which can be identified tentatively. These are: a crotchet rest - b.14:A,1 (L4,b.4); a natural - b.16:A,3 (L5,b.2); a trill - b.21:B,1 (L6,b.4) and a sharp - b.45:A,3 (R6,b.3).⁵⁵⁶ There are, however, some errors unnoticed. For example, all the double sharps on *f* in bb.29-31 were mistakenly written as

⁵⁵⁵ Errors are: b.7:A,4/1; b.23: T,2/2; Variant readings are: b.11: A,4; b.14: S,2; b.18: B,3/2; b.29: T,3 (A1 only); b.30: T,3; b.34: S,2/1 (A1 only); b.34: A,3 (A2 only); b.35: b,3.

⁵⁵⁶ The second case, the trill, is also missing in F and H; but it is found in K1, K2 and A.

single sharp, which caused misinterpretation of the reading in H.⁵⁵⁷ Some of the variant readings between L and A could have resulted from her copying errors. Among the probable readings are b.9,1/2 and b.48,2: in both of them there are pitch variants notated in 2nd higher in the alto.

The only positive trace of later amendment is located at b.50,1 in the bass (R7,b.3). The authenticity of the revision is suspicious. While ante correcturam *b a g#* is taken into H and F, post correcturam *g# f# e* does not appear in any other MSS except Am.B.49 to which someone made the same emendation.⁵⁵⁸ It may be worth noting that K gives *c#' b a* and A gives *b g# e*.

This prelude is known in three basic versions, i.e., L, K and A, though the differences are minor. K was based closely on L; but it contains certain interesting eclectic elements in its text, especially in grammatically suspicious readings in L, e.g., b.9:A,1/2 and b.50:B,1, in addition to the texture at the final cadence. The fact that A also shows different interpretations in these particular readings seems to point to ^{the fact} that the exemplar used by Anna Magdalena already contained some of these errors, especially that of b.50:B,1. A is not based on L, but possibly on S. On the whole, it appears that Bach never went back to revise the score in detail. Schwenke's revision (P 204) at bb.46 and 48 in the alto is another good example of such a state of reading.

FUGUE 9 IN E MAJOR (F.22V)

The piece contained in f.22v is the final version of Fg.E copied entirely by Anna Magdalena. This score contains orthographic errors in a larger number. This can be partly ascribed to the metrically inarticulate character of the piece. As we can see, there are three instances where note aligning indicators were needed between the inner two voices at b.13,2 (L5,b.1), b.15,2 (L6,b.3) and b.41,1 (R7,b.2). More involved physical repair, such as replacing symbols, was also carried out where the original notations were too bad, e.g., b.7,2 (L3,b.1), b.27,1 (R2,b.3). Corrections were also made to a variety of errors: the direction of stemming in b.9:A,1 (L3,end) and b.31,2 (R4,b.1); removing the invalid bar lines at b.23 (R1,b.2) and b.31 (R4,b.1); removing an unnecessary natural on *b'* at b.5:S,2 (L2,b.2); amended note-heads in pitch at b.15:T,1 (L5,end) and at b.18:B,1 (L6,b.3). The most important yet difficult one to interpret is the sharp at b.19:S,2/3 placed south-west of note-head *e'*. This somewhat misplaced symbol was in fact so poorly formed that it must have been kept unnoticed when H and F was made from L. It is quite probable that Bach entered this sharp as a later revision in the earlier score which Anna Magdalena used as her exemplar.

The revision made to the score was only minor. There is one instance where a voice-leading indicator is added where the alto temporarily uses the lower staff at b.25-26 (R2,b.1-2).

⁵⁵⁷ See Footnote 558

⁵⁵⁸ It is interesting that Dehnhard (1983), p. xxvi, speculates that the reading of ante correcturam stemmed from the error in the transposition from D major. This would also explain why the error of double sharp emerged in bb.29-31.

During the modulation to G# minor at b.33-34, almost all double sharps on *f* and *c* were amended from single sharps. They are all marked with thick strokes, possibly entered at the moment of proof-reading by Bach. The "t" in b.15:T,2/2 on *d*# was probably added after H was made.

The study of density of notation reveals the highest compactness at the change of columns (L7 and R1). In contrast to the prelude, we find no particular effort being made by Anna Magdalena to accommodate the fugue within the space prepared.

This fugue is known in three versions, i.e., L, K and A. While L, A2 and K use allabreve *c* metre, A1 uses C metre. Allabreve is interpreted in L and A2 as 4/2 on the one hand, K halves the bar into two, interpreting it as 2/2. Apart from this, there is no significant textual variations.

PRELUDE 10 IN E MINOR (F.7R)

The piece contained in f.7r is, in my view, the final version of Pr.e, represented as a calligraphic fair copy. Its exemplar does not survive, however; a text critic study suggests that its possible reading is reflected in A. In our score are contained a few corrections as well as minor later revisions. Apart from these, I consider Bach made a few revisions instantly as he copied. Bach later gave it a thorough proof-reading, and made significant improvements, attested by a distinguishable shade of ink.

This prelude, written in a binary form, is remarkably formatted in the way that each section is contained within a single page. It goes without saying that this format gives a specific advantage for performers who would be otherwise in the trouble of finding where the repetition marks lead them to. In the case of f.7r, this format was achieved by the careful planning of note-distribution, for the second section is 20% longer than the first.

The study of Bach's density of writing reveals more details about Bach's copying strategy and its execution. It indicates that Bach calculated the norm for copying out each system: it works out to be 7 bars/line and 8.58 bars/line for each page respectively. The actual copying process followed is fairly close to this figure. The important fact is that in both pages we find slight falls of density towards the fifth line. This suggests that at these points Bach was not particularly concerned with this mechanical copying activity for some reasons. It is unfortunate that in return Bach was obliged to make an additional system at the foot margin to finish off the second section. What are the obstacles in copying? I think one of them was the musical activity, particularly to revise the details. Here I find two sharps in the soprano, at b.30,4 *g*#' (L5,b.2) and at b.74,6 *c*#" (R3,end), which, I believe, were added instantly, for they were missing in A.

Immediate corrections found in f.7r are found twice, at b.84 (R5,b.2) and 91 (R6,b.1): both are amended note-heads in pitch. It is interesting to find the falling writing density at these points.

In proof-reading, Bach made certain amendments with distinguishable dark ink. I assume this took place on a later occasion. Surprisingly, among these is the correction of error at

motivically prominent interval of the diminished 5th in the bass, b.4. But apart from this, all the amendments are the supplement of accidentals, viz., the sharps at b.45 (L7,b.3) and at b.77 (R4,b.3), as well as the addition of embellishments, such as the addition of trills and mordents.

All the later amendments entered here were subsequently taken into descendant MSS, such as F or H. But all the subtle distinction of accented ornamentations, viz., doppelt-cadence and accent und trillo, are unfortunately ignored, and converted into ordinary trills.

Finally, we must touch on the reading of K1, which is regarded by the majority of editions as the final reading of the movement. This version^{is} based on L, but effectively adds to the V-shaped figures the passing notes in demisemiquavers in bb.3, 4, 12 and 24 as well as the staccatos in the soprano on bb.18,2 and 20,2. Although they were later added to A1, there is no evidence suggesting that Bach himself wrote them to autographs.

FUGUE 10 IN E MINOR (F.7V)

The piece contained in f.7v is a semi-final version of Fg.e in 71 bars. From the way the score was written, we may say that the piece might have initially been intended as a fair copy based on the exemplar, which is now lost. The final version is represented in A, which is lengthened into 86 bars by the addition of the coda. A text critic study suggests, however, that this final version was worked out on the earlier copy, the possible exemplar for L. This explains why both A and L contain a unique mixture of earlier and later readings.

This copy reflects two interesting facts in Bach's copying activity - 1) struggle with a fair copy production; and 2) effort to make instant revisions.

The appearance of the score gives a general impression that one may find it difficult to assume the score having been conceived as a fair copy. There are certainly many features of a non-fair copy, such as non-calligraphic handwriting and the use of extemporaneously prepared extra system in the foot margin. The abrupt change of note spacing between L2 and L3, in particular, tends to show the total lack of consistent strategy in copying. It would be a very strange case if it was really intended to make such a distinction as to make the fair copy of the prelude on one side of the sheet, and the non-fair copy of the fugue on the other.

One answer to this unique phenomenon can be found through the study of Bach's density of writing. The key to the answer is the dramatic sharp fall of the density at L3 which seems to reflect some important strategic change rather than tactless outbreak. Suppose we have the piece in 71 bars piece and want to copy it down in 14 systems, we may wish to know the average copying space for each system. The simple calculation gives the figure 5.07 bars/line. If we look at the first two lines of f.7v, i.e., L1 and L2, we will find that Bach was doing exactly what we suppose he would do according to the plan. He suddenly gave up maintaining the compact writing at L3, and managed 3.5 bars/line only, the lowest density in the piece. This attests to the fact that the initial plan was too tight and unworkable, and that Bach was obliged to make certain amendments to the plan - to make use of an extra system in the foot margin.

The drastic change in the plan at L3, in fact, conveys Bach's disappointment and frustration also. And that seems to be the major reason to account for Bach's non-calligraphic handwriting. The amended plan, 4 bars/line, was fairly faithfully observed till the end.

There are several corrections of note-heads as a result of Bach's lapse of attention particularly at the change of the system, such as the amended note-value in the alto at b.16,1 (L3,end) and the amended pitch in the bass at b.24,2 (L6,b.1).

The other amendments can be related to the melodic revisions at a specific location. In bb.52-54 (R5,b.4-R6,b.2) we find four amendments in non-thematic part writing. Close by it, the amended note-head in note-value B at b.60 (R7,b.4) in the bass can also be interpreted as one of these amendments.

FUTURE VERSION

Bach regarded this score as the final version for some time, and added many specific ornamentations, such as staccatos, mordents, turns, etc. From this reading are originated F and ante correcturam of H and K. K was based on a poorly written copy of L, which contained many errors. Most of these errors remained unrectified even after the revision undertaken under Kirnberger. Bach's next revision on the fugue took place between 1742 and 1744 on the exemplar of L, and extended the fugue to 86 bars in length, while also improved it in minor details.⁵⁵⁹ This version was transmitted to A. This new version contains partly the old reading, such as b.18: S,2/5. It can be explained that Bach made instant revision when he made L. Both H and K were independently revised later by referring to the reading of A.

PRELUDE 11 IN F MAJOR (F.8R)

The piece contained in f.8r is possibly the final version of Pr.F. The score was initially intended as a fair copy, and after Bach's briefing Anna Magdalena started off coping the first page of the prelude, bb.1-19,2. At the beginning of the second page Bach took over the quill, and finished off the movement. This copy contains many errors, corrected and uncorrected, in addition to possible revisions on several occasions, distinguished by the shades of ink. It also contains some interesting biographic tale of Bach family involved in MS making. The exemplar is lost. Its possible reading can be reconstructed to some extent, for it is considered to have been reflected in A, on the evidence of text critic study.

As Walter Emery demonstrates, Anna Magdalena's spacious writing was not contributive to the task she was to perform on this occasion. The following Bach's compact notation indicates the serious problem of space shortage caused by Anna Magdalena's writing. It is interesting to find that the dynamic change of density of writing on Bach's part occurred twice, i.e., on pages 2 and 3. This indicates that Bach habitually recalculated his note spacing at the change of page.

⁵⁵⁹ The possible later readings are b.30: B,2/3 and b.51:B,2/1.

It is extremely difficult for any scribes to copy this sort of piece written in thick, five-voiced texture. The complexity of the texture was even more increased by using abundant suspensions. Thus it is expected naturally that Anna Magdalena's text contains many errors. In her text, we find corrections of note-heads in pitch at b.3: B,1 (L1,b.3) and in note values at b.6: T,1/2 (L2,end), b.9: T,2/2 (L4,b.1) and b.18: B,1 (L7,b.2), in addition to many ties amended in shape and length.⁵⁶⁰ In contrast to her unreliable hand, the text of Bach's part contains no amendments of this sort. But probably due to his increased concentration on compact writing, Bach overlooked many ties, most of which were added on later occasions.

The later amendments are distinguished by the use of a different type of pen and ink. Our text critic study indicates that this occurred after H was copied from L. The correction was possibly carried out as a proof-reading which included supplementing the initially overlooked ties, all in the tenor, viz., b.8,1- (L3,b.3), b.13,2- (L5,b.2), b.35,2- and b.70,2- (L7,b.4).⁵⁶¹ Far more significant is the manner of notation, wobbly in places. Many legatos were also added in this manner. The authenticity of such notation is, however, doubtful. It is nonetheless possible to visualize Bach's notating them when he was teaching one of his pupils at the clavier, instructing the interpretation of detailed phrasing.

This final reading is taken into F and K, though K contains its unique variant readings at b.17: S2,1 and b.55: A,2. The text of A can be best described as a different version, which I believe stemmed fairly faithfully from the exemplar of L. It certainly contains early readings such as the thin chord texture at b.32. But in many other cases the variants are only on notational matters, such as the filling in of rests and the duration of notes.

FUGUE 11 IN F MAJOR (F.8V)

The piece contained in f.8v is the final version of Fg.F. The way in which this copy was written indicates that the full length version was used as an exemplar, which is now lost. But text critic study may provide a clue to its possible reading in the text represented in A. Our text is virtually absent of simple orthographic errors. On the other hand, it contains a few interesting amendments projecting Bach's fascinating working process.

It is plain that the fugue was written after the prelude: due to the way the prelude consumed the three pages of a four-page fascicle, the fugue has only the room of one page to accommodate itself. As a result, this fugue is the only instance in L which uses three extra systems, one in the top and two in the bottom margins. From the evenly sustained high density of writing, we have little doubt that Bach had an exemplar giving in full length, and carefully planned his note distribution before he set off copying.

⁵⁶⁰ See b.2: S1,S2,A (L1,b.2), b.10:A,1-3 (L4,b.2), b.12:B,3- (L5,b.1), b.13:T,2- (L5,b.2), and b.16:S,1- (L6,b.3).

⁵⁶¹ It is possible that Bach forgot to supplement some ties, also in the tenor, viz., in b.31,3- and b.71,3-. They are present in A.

A detailed examination of the score shows only how carefully it was written: there is no blunt orthographic error except in two instances, 1) the crossed out soprano direct at the end of R7, which was originally placed a 3rd below, and 2) the amended accidental in the soprano, natural from flat, b.74,2/2. The latter is a later amendment carried out at a later date, the time after H was made, but before F was made. The error was probably closely related to Bach's notational convention of accidentals, for the natural on *e'* might have been used supplementarily in the exemplar under the section in F minor key. This symbol is, of course, non-essential and may cause confusion. I consider that Bach was initially confused when he wrote a flat in L.

Apart from corrections, Bach also carried out two decided revisions. The one is the replacement of the counter-melody to the Comes at bb.6-7 (Top.b.6-7). In Fig.22, I suggest the initial note-heads by grey-shade.

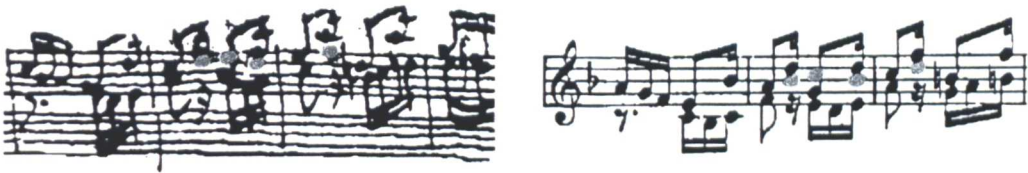


Fig. 51: *Fg.F, bb.6-8 (f.8v: Top,b.6-8) - Suggestion of ante correcturam in Grey-shade*

This revision appears to have been the immediate amendment of note-heads only, before stemming and beaming. This revision in particular, which took place at the beginning of the fugue, does not necessarily affect our interpretation of the state of the exemplar, especially when this fugue does not possess a fixed counter-subject. Even after the revision, this counter-melody remains, in my view, to be in the nature of a filling voice.

Another decided revision could have been made at the return of the subject in the tonic at b.85 (f.8v: Bm,b.6) where this fugue becomes temporarily a four-voiced texture. From the squeezed nature of the newly emerged tenor at b.85,2, we can consider this being added. The same can be said for the two inner notes *b^{b'}* & *f'* in the R.H. chord at b.87,1, which are missing in A, though it looks less obvious as if had been squeezed in later.

From this state of L, F is copied. But due to the way the fugue uses suspensions abundantly, almost every later copy contains errors, such as the omission of ties. And also due to the way Bach used squeezed notation and narrow systems, the later scribes encountered certain difficulties in reading the score in some places. For example, the pitch of the quaver *c'* in the tenor, b.86,2, which is located between the staves, can be read as either *c'* or *a*.⁵⁶²

⁵⁶² F and H interpreted it *a*, while K interpreted it *c'*. A, which is not based on L, gives the reading *c'*, which is the correct reading.

PRELUDE 12 IN F MINOR

The autograph of Pr.f is lost. There are basically three known versions - 1) K with P 1076; 2) H; and 3) F and A. This unusual complexity of source situation is most fascinating, for this is the only instance where H and F are represented so sharply apart and F and A are related so closely instead.

A closer textual study enables us to say that K is the earliest known version. It is marked with unique textual features at the sections using semiquavers: in this case these sections are written in a two-part texture (i.e., bb.21-23, 38-39, 54-55, 57-60, 63-65) instead of three parts found in other versions. Also unique is the manner in which it keeps the thematic element arranged strictly in chromatic scale in b.50. In other versions, this particular phrase is modified, probably because such adherence would not be quite suitable and effective within the harmonic scheme of the section. This is a good example reflecting Bach's process of composition and revision.

The later readings are thus divided into two, H and F+A. Their relationship is, however, fairly close but unclear. From the view of fully filled-in rests clarifying the voice texture as evidence of a later version, we may say that H is the earlier version, which has incomplete sections outstanding in bb.0-3,10-15 in the alto. It, however, contains unique variant readings that cannot be said to be simply an early text, viz., b.37:S,2/1 (rest instead of suspension) and bb.55:S,1/4; 64:A,1/2 (pitch). In my view, these places are better presented in the other versions including K.

The versions of F and A are thus possible latest readings. Ignoring the possible orthographic errors in pitch by Anon.Vr (e.g., b.2:S,2/2 and b.21:S,2/3), we find that these two could have stemmed from the identical score, for it contains a unique pitch error in the alto, b.35,1, as well as a later reading of voice texture at b.54.⁵⁶³ I shall come back to speculate a possible process of revision and replacement of scores after discussing Fg.f.

FUGUE 12 IN F MINOR

As is the case with the prelude, the autograph of Fg.f is lost, and sources are represented in the three versions - 1) K with P 1076; 2) H; and 3) F and A. But unlike the prelude, K and H are represented in a similar form, making clear contrast to the other two, F and A.

On the evidence of rest filling of bb.0-4 in the alto, we may say that K and H is based on the older mould. The overlooked accidentals in b.60:A,1 (K only) and b.76:B,2/4 (K and H) may also suggest the same interpretation. There are also variant readings of melody in bb.37:B,2/4, 53:S,1/1-2, 57:A,1, 60-61:A, 78:B,1, which are possibly seen as uninspired readings. The more intricate voice exchange at b.22 is, however, controversial, for this type of variant is normally

⁵⁶³ It appears that this quaver b^b in the alto, which is only found in F and A2, was added later as an extension to the already divided part writing of bb.55-56 (H and A1).

the later reading.⁵⁶⁴ The fact that H1 contains several pitch errors in 2nds and 3rds, such as bb.9, 64 and 65 seems significant, for together with the exclusive variant readings to H in the prelude, these could have been caused by the poor writing in the exemplar as well as on the very copy.

From numerous textual differences, including that at a notational level (e.g., b.14:A), we may judge that F and A were stemmed from a different score from K and H. Excluding the orthographic errors possibly made by Anon.Vr in F (missing rest - b.23; missing tie - b.56; pitch errors - bb.28,30,54,59,82; bar repeated twice - b.84) and a possible improvement by Altnikol of b.50, these two were probably copied from the same copy.

When we put these pieces of information together into a single picture, we find that the revision on the two movements took place separately - the prelude being revised prior to H, and the fugue posterior to H. On the evidence of the movement header in H1 - "*Præludium 12*", the missing autograph in the collection L was perhaps a fair copy made by Anna Magdalena based on a revision copy made by Bach. Within a few years' time, between 1740 and 1742, Bach probably revised the fugue on a fresh sheet under the heading of "*Prelude 12 +*". Thus the score of PrFg.f was replaced with a new one in the L collection. The explanation of the unique identity of reading between F and A can be given as follows: because this score was the latest revision when F was made, Bach must have decided firmly to keep it for the final version. It seems that towards 1744 Bach planned to compile the second collection, i.e., S, which became the model for A. This latest version of PrFg.f only was thus moved to the collection S.

PRELUDE 13 IN F# MAJOR (F.9R)

The piece contained in f.9r can be considered as the final version of Pr.F#, despite the fact that K1 gives a revised reading of L.⁵⁶⁵ The way in which this copy was prepared serves to show that Bach used an exemplar, which is now lost. The text critic study indicates that the exemplar could have been close to the version represented in A. Our text presents two interesting phases: 1) the struggle with the fair copy production, and 2) possible instant revisions.

This copy is made as a fair copy despite the fact that it ended in failure as we notice the use of an extra system extemporaneously made in the foot margin. The cause of such an unsuccessful format is explained by space shortage. The study of Bach's density of writing

⁵⁶⁴ See Fg.B^b, b.45.

⁵⁶⁵ HENLE gives some of these in brackets, such as the appoggiatura in bb.1 and 15, the mordents in b.12 and 22. The error contained in L is the rhythmic notation of the soprano, b.66,3. This error caused various interpretations among later MSS. See Supplement B for details.

shows that Bach wrote it with very compact notation throughout, even to the extent that a proper note-alignment was not always maintained.⁵⁶⁶

The amendments made to the score were all entered later. The replaced note-heads in pitch at the interval of 3rds are found in two places, one in the bass at b.1,1/2-2/1 (L1,b.1) and the other in the soprano at b.25,1 (L5,b.5). The former is a melodic revision, and the latter is likely to be the correction of orthographic errors with a view to the melodic syntax used in the surrounding areas. The variant reading of the bass, b.9,1/3, which is given as *b* in L and *b#* in A, is controversial. This may be related to Bach's later addition of a sharp to *b#'* in the soprano at b.9,3/3, for in this key texture, i.e., D# major chord as the dominant of G# major, a sharp may have been overlooked in Bach's notational convention.

Besides this, there are many variant readings presumably instantaneously worked out at copying stage without affecting or being affected by the reading in the exemplar. Among these are systematically conceived harmonic revisions in bb.19 and 22, where ^{in L} the seventh notes of the dominant replaced the root notes in ^{the exemplar} _L⁵⁶⁷. There are also many amendments made in the reprise (b.57 ff) towards the coda section (bb.68-75). Interestingly, some of these are attested in A1 but not A2, suggestive of Bach's revision on the exemplar (S) after 1744 based on L.⁵⁶⁸ The addition of ornaments can also be included here.⁵⁶⁹ There are, more strikingly, an unusual large number of carefully removed notations among which could be once present trills, ties, or certain symbols of musically unrelated ones.⁵⁷⁰ The authenticity of these are uncertain.⁵⁷¹

From its final reading are generated F, H and ante correcturam K1. As is the case with Pr.e, some delicate ornaments, such as *accent und trillo* in bb.44 and 67 in the soprano were converted into simple trills in later MSS.

FUGUE 13 IN F# MAJOR (F.9V)

The piece contained in f.9v is a final version of Fg.F#. As is the case with the prelude, its exemplar is lost; but A can be considered to have retained some of the variant readings. Our text is a fair copy. As can be seen from fairly relaxed, evenly spaced out notations, Bach

⁵⁶⁶ It becomes evident when we find the average figures of CW1 (3.23) and CW2 (3.5) with other scores which have basic UNIT as semiquavers. Compare these with Pr.C# (CW1 = 2.18; CW2 = 2.43), Pr.d# (CW1 = 2.4; CW2 = 2.82), Pr.Ab (CW1 = 3.04; CW2 = 3.34) and Pr.B (CW1 = 2.76; CW2 = 3.1)

⁵⁶⁷ The presumed ante correcturam are preserved in A - b.19: B,3/2 as *c#'* instead of *b*, and b.22: S,3/2 as *f#* instead of *e*.

⁵⁶⁸ These readings preserved only in A1 are: b.58: S,end, b.61: S,3/1, b.66: S,3; b.69: B,2/1, b.71: B,1/2, b.73: S,3. The older readings attested in both A1 and A2 are: b.67: B,3; b.73: A,3; b.74: S,2-3.

⁵⁶⁹ These are appoggiaturas at b.15: S,1; b.41: S,3; b.43: S,1 and trills at b.22: S,1; b.74: S,3.

⁵⁷⁰ See Supplement A for listing.

⁵⁷¹ I speculate that those were perhaps done by Anon.Vr who made F.

planned note distribution very carefully from the outset. Copying task itself, however, appears to have been mechanical and quite banal, for here we find a few stereotyped improvements in isolated areas only, and instead, many errors were newly born.

In the earliest part of the copy, i.e., L1-L4,5 (bb.1-24), I believe Bach was very conscious about what he must do. And there we find the possible readings revised instantaneously. On the evidence of the text in A, I consider to be the case the two accidentals of b.14: B,2/2 and b.16: A,2/2 as well as the rhythmic notation of b.21: A,1. Apart from these, many trills are added throughout the fugue either instantly or later.

After this section I tend to believe that Bach's concentration was weakened, for many errors, irrespective of having been corrected or not, are concentrated in the middle of the piece, i.e., between L4,b.6 and R3 (bb.25 - 60). There are all sorts of corrected errors: pitch error in 2nd (b.25: S,2/2), note-value (b.45: A,1/2), the correction of accidentals (b.29: S,2/1; b.41: A,1/2), and the use of tie (b.52-53: S). The errors that remain in the text have to do with the accidentals: the natural instead of sharp at b.42: B,2/2 (L7,end); the natural overlooked at b.55: S,1 (R3,b.1) and the incorrect usage of double sharps at b.59: B,2/1,3 (R3,b.5). In the former two instances, these error could have been affected by the system change.

The only trace of revision marked on the score is the removed natural from *c*# in the bass at b.80,2/4 (R7,b.3). The initial reading was possibly *c*# on the evidence of the reading in A, which is the fifth note of the F# major chord. The ante correcturam of L, *c*, would have been an improvement on the harmonic as well as the subtle melodic shade, which resolve nicely on the next down beat, b.81,1. The post correcturam, *c*#, was probably intended to remove such device as motivic imbalance in the cadential phrase, which, otherwise, lose a higher uniformity in the most important cadence of the piece.

A unique revision was made to the score on a much later occasion with the distinguishable quality of dark black ink. It was probably to outline the symbols which became obscure under certain storage condition. The amended symbols, listed in Supplement A, are all concentrated on a particular area of the sheet - upper middle near the centre fold. The authenticity of the hand is unaccounted for.

PRELUDE 14 IN F# MINOR (F.10R)

The piece contained in f.10r is the final version of Pr.f#. I consider that the score could also have been either a composing score or a mature record.⁵⁷² Through the revisions at several stages, the score was only gradually brought to a more or less perfected form.

The clearest evidence which reflects Bach's compositional activity is perhaps the manner in which Bach wrote the principal figure, i.e., the interval of a perfect 4th in a syncopated

⁵⁷² Breckoff, p.77, claims, however, that it was made as a fair copy, and the errors were due to the result of Bach's hesitant, instant improvement on the exemplar. Dehnhard (1983) also supports Breckoff's basics.

rhythmic pattern (e.g., in this case: a quaver + a crotchet). By looking into such elements as at b.13 (L4,b.3), b.16 (L5,b.3) and b.42 (R6,b.1), given in Fig. 52 below, we can see how those thematic elements strategically preceded the process of linear construction at the initial stage of writing, and how, as soon as the linear construction began, Bach made immediate amendments to his thematic elements.



Fig. 52 *Pr. f#*, b.13, b.16 and b.42 - Reconstruction of ante correcturam

Having amended N-Hs or the shape of flags or beams, Bach made adjustments to the note-values without delay. This must have been the case, for we find no further amendments in the following beats. If we consider these thematic elements were so essential as to be written down irrespective of forthcoming development, we can be sure of his working policy with his theme at this composing stage without referring to a properly written exemplar.

Another level of compositional activity is reflected in the way grammatical errors were rectified as immediate corrections. We find two instances in the alto, b.20,3 (L6,b.4) and b.40,3 (R5,b.2), both were consecutive octaves. Being the middle voice, both are possibly filled in the end. It is significant that under these similar circumstances Bach's reaction was the same. This fact perhaps permits us to say that the balance between the venture and the caution at this level of composing activity is maintained in the following principle: Bach worked out the melody first as a succession of note-heads; he then checked the grammatical details before writing stemming and beaming.

In particular sections of the piece, there is other evidence to suggest that Bach seemed also to be working out a plan similar to the figured-bass principle, or harmonic skeleton. The evidence for the employment of such a working method is only specifically found in less thematically developed, homophonic places. There are at least three places, b.13, b.15 and b.37.

The apparent amendments of N-Hs in note-values at b.13 (L4,b.3) already given in Fig. 52 above and that in b.15 (L5,b.2) suggest that the diminutions in the bass were worked out when Bach came back to revise these sections. The former, b.13, was not intended perhaps to be worked out from such a principle, because the text was based on that of bb.(1)-2. Nonetheless

the composing process seemed to have derived from the principle of figured-bass. In b.15 the figured-bass developing method seems to have ^{been} more firmly established, for the identify of the motive (which originates from bb.1-2) now becomes more obscure due to the developmental, episodic mood created by the introduction of a circle of 5ths. And the middle voice was certainly filled in after the treble and the bass. And it is at this stage that the rhythmic flow in L.H. was thoroughly revised.

The third example is found in b.37, of which I have reconstructed the ante correcturam in Fig. 53 below.



Fig. 53: Pr.#, b.37 (R4, b.1) - Reconstruction of ante correcturam

This must be a later amendment, because the original notation in the bass is complete, and the shade of the ink in the amended part is of a different quality. Apparently Bach wrote the bass first to ensure the intricate shift of harmony in 2nd and 3rd inversions - c#: V7c - lb - V7b - 17/1#: V7 - ... I. But he probably wrote it down without taking much of the soprano into account: the misaligned notations between R.H. and L.H. must have become obvious but inevitable when, writing the treble, Bach noticed it overflowing the available space, due to the unexpectedly abundant use of accidentals (seven in all).

The study of Bach's writing density also provides us with the insight into a unique phase in his compositional tactics and ensuing consequences. Here in R4, where Bach failed to maintain the initial plan of note-alignment is in the lowest density. On the contrary, the highest density is found in R1, b.25,3-29, where Bach, in fact, used the same working method: The bass line's simplicity, and its construction by the repetitive use of a single thematic idea rising chromatically from *d* to *f*#, suggest that this whole section could have been written in one breath. And it is most probable that as soon as the bass was entered, Bach drew bar lines before writing the upper voices. This action of Bach's can probably be explained in the way that as he approached the recapitulatory section beginning at b.30, he had foreseen it as early as at b.26 (R1, b.1), and tried to establish the most important underlying harmonic link before kneading together and shaping the delicate melodic line in the treble.⁵⁷³ Another factor, which we cannot

⁵⁷³ The most interesting, and yet controversial is the interpretation of harmonic rhythm in bb.25-27 decided by the bass. From the bass progression alone, we may find that the rhythm was dotted minim + a quaver, which was decided by chromatic scale in bb.26-27. If

ignore, is the format: it can be the case, as was in Pr.C#, that Bach was planning to begin the recapitulation from a fresh system.

Having completed the composition, Bach came back to the beginning of the piece and considered improvements. The melodic revision is found towards the end of the piece at b.39 (R4,b.3) in the soprano. The revision appears to have been carried out in two stages on the evidence of different shades of ink. The initial reading is a plain minor scale shown in Fig. 54 (a), which was later revised to the intermediate form given in Fig. 54 (b).

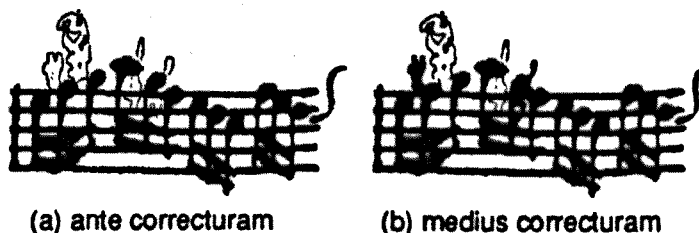


Fig. 54: *Pr.f#*, b.39 (f.10r: R4,end) - ante correcturam and medius correcturam

The final reading was probably worked out sometime later, for two further accidentals on *e*'s appear to have added with a distinguishable dark shade of ink from the rest. At this state, the passage was transfigured into a melodic minor scale.⁵⁷⁴

There is also an interesting revision on rhythmic aspect at b.10,1 (L3,b.4) in the bass. The original reading was *c# B* in plain quavers, which were later modified to a dotted rhythm. The reason for this revision, however, seems to be quite different from that for revising bb.13 and 15, already discussed. Here the decision for the revision was made at the expense of a strict contrapuntal echo from *g# f# e d# c#* in the middle voice in the preceding bar, b.9,2-3. Bach must have weighed the relative importance of the less weighty contrapuntal device and the rhythmic quality of the section. Obviously he decided to maintain the rhythmic virtue at the expense of the other.

Bach made revision also to a non-musical aspect of the score, i.e., the appearance and readability of the score. There we find numerous accidentals as reminders (mainly naturals) inserted at a later stage, e.g., b.35:S,2/4, b.38:S,3/5, b.41:S,2/2.⁵⁷⁵ like that we have seen under melodic revision, though I do not intend to list them here. Also interesting is that all triplet markings '3' are written with a darker shade of ink. There are, however, some instances

the soprano was to maintain this scheme, b.26,3/2 must be *d*", and b.27,3/2 must be *e*". Based on this, we may say that the reading of b.27,3/2 in L (*e#*"") was an error, and A gives the correct interpretation of both. It may be worth noting that K4 MSS interpreted it otherwise to have a minim + a crotchet as the harmonic rhythm for the soprano.

⁵⁷⁴ The text critic study suggests, however, that the sharp on *e#*" was entered earlier than the natural, for the latter is not found in H1, K1, K2 and A.

⁵⁷⁵ The fact that these are not taken into H, K and A suggests their later addition.

suggesting the revisions^{are} incomplete. For example, the rhythmic notation of the alto, b.12, is a clear error.⁵⁷⁶

The text including all the amendments except the addition of reminder accidentals became the basis for H and K.⁵⁷⁷ Having discussed the composing activity in L, we have the necessary background to interpret the different version represented in A. This version contains many variant readings. While some of these can be attributed to the earlier reading, such as lack of trills and rhythmic simplicity in bb.7-8, many harmonic and textual variants are not so easy to be determined otherwise. And since A1 also contains^{an} unusually large number of corrections of orthographic errors in pitch, I tend to conclude that A is based on a copy stemmed from L made by a copyist of poor calligraphy; the copy must have also contained interesting variant interpretations.

FUGUE 14 IN F# MINOR (F.10V)

In contrast to the accompanying prelude, this fugue contained in f.10v is presented in a fair copy in the final version. Though the composing score for the piece is lost, its existence is undoubtedly attested in the text given here.

The score contains a few corrections only, all of which are amended note-heads on either pitch or note-value - at bb.17, 21 and 54. They are probably all slips of the pen. No revisions are found.

The study on the density of writing indicates Bach's steady copying process at a fairly high, compact rate. It seems that the use of the foot margin must have been regarded as inevitable under the circumstances in which the staves had been prepared indiscriminately well beforehand. A slight change of copying strategy can be detected in the first bar of R2 (b.38) slightly after the introduction of the third subject in semiquavers: from this point onwards, Bach reduces the size of notation in general.

Probably due to deep involvement in compact notation, Bach's copy includes inaccurate and ambiguous symbols. For example, the pitch notation of $g\#'$ at b.37: A,3/2 is interpreted in K as $f\#'$. So as the rhythmic notation of b.35: S,3, which is interpreted incorrectly in H and K. Not apparent, but yet most obvious is the manner in which Bach did not maintain his notation of accidentals consistently in remote modulations such as to G# minor in bb.42-43.⁵⁷⁸

There are basically two versions, L and A. In all probability, A is based on the exemplar of L, which does not contain all the trills in bb.3-16. This earlier text may have ended with $F\# a f\#'$,

⁵⁷⁶ This error is taken into K1, and perhaps F, but not H. See also Footnote 573.

⁵⁷⁷ It is worth noting that the text of H2 may possibly be considered to have reflected the slightly earlier stage of L than H.

⁵⁷⁸ Bach omitted two sharps on the dominant note, $d\#$, in this G# minor section, viz., b.42: A,3/3 and b.43: S,2/1. The similar trend also found in A indicates that the origin of the error could have been in the exemplar.

which was altered later into unison in L and A2. Many unique trills on the second subject in bb.20 ff in A1 were entered by someone at a later date, and did not necessarily stem from Bach's intention.

PRELUDE 15 IN G MAJOR (F.11R)

The piece contained in f.11r is a final version of Pr.G copied out by Anna Magdalena. No copy made by Bach himself survives. It is certain, however, Bach's own copy did exist at one time which probably served as the exemplar for this score. Unlike other copies by Anna Magdalena, we find in this copy no evidence of briefing by Bach, for there are no clefs in Bach's hand.

As often found in Anna Magdalena's copies, we find many corrections of errors, such as note-alignment between voices at b.6,1 (L2,b.3) and b.36,1 (R3,b.4), the error at the change of systems in b.4 (L1,b.4-L2,b.1) and the amended note-heads in pitch at b.5:B,1/3 (L2,b.2), b.28:S,3/2 (R1,b.3) and b.30:S,3/2 (R2,b.2).

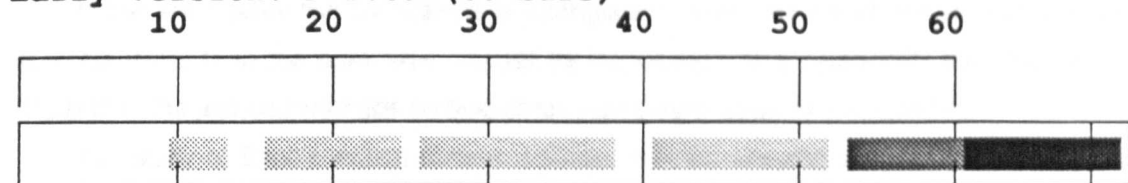
The study of writing density shows nothing else but the unique features of Anna Magdalena's copy: the high fluctuation rate is justified neither by logical copying policies nor by any kind of musical reasons. It is at the mercy of the order of notation from where she may start copying.

As in f.7r, most of the ornaments appear to have been written with a different quality of ink. They were probably added on a later occasion.

From this reading was imparted the generation of H and F. The small tie in the soprano, bb.3-4, could have been added after H, however. The piece is basically known only in a single version. A, containing two variant interpretations of ornamentation only, viz., b.13:S,3/2 and b.45:S,3/2., is probably based on the exemplar of L.

FUGUE 15 IN G MAJOR (F.11V)

The piece contained in f.11v is a final version of Fg.G in the hand of Anna Magdalena. As is the case with the accompanying prelude, she copied the piece from another score, now lost, which was probably written by Bach himself. The obvious reason for Anna Magdalena's task is to make a fair copy. Her exemplar was possibly a revision score on which Bach revised the composition of the early version in 60 bars. Since both scores are lost, the only access to Bach's process of revision was to study the text represented in the copies. The early version was found in P 1089, P 804 and Mus N.10490. When we compare its text and ours, it immediately becomes apparent that the revision was systematic: while he retained the basic structure and the subject (except that some extension to the original structure was made). Bach completely overhauled the contrapuntal writing of secondary thematic importance (see Fig. 55 below).

Early version: P 1089 (60 bars)**Present text in L (72 bars)**




 Revised part writing based on the same thematic development
 Revised part writing based of new thematic development
 Newly composed part

Fig. 55: *Fg.G - Plan of expansion*

In the score we can find many errors made by Anna Magdalena. There are three places where voice aligning indicators were added to make score readable, viz., at b.15 (L3,b.1), 38 (L6,b.4) and 69 (R4,b.5). Apart from these, here we find two major corrections of orthographic errors only, viz., a misplaced tie in the soprano, b.16,3- (L3,b.2) and a misplaced quaver flag on a crotchet in the alto at b.44,1 (L7,b.4).

This copy of Anna Magdalena was proof-read by Bach, for the latter set of two sets of fermatas is in Bach's hand.⁵⁷⁹

It should be the case that the text represented in the exemplar used by Anna Magdalena and the resultant copy must be the same version. For this reason, the text of L and A are almost identical. There are, however, some inevitable minor differences in readings. Generally, a fair copy contains fuller embellishments, such as trills in b.10: S,2, b.12:S,2. They are absent in A. There are also some errors in interpreting voice texture correctly. They were attributed to Anna Magdalena, viz., b.15:S,2-3; b.31:R.H., b.39:A, b.59:A,2-3. It is interesting that F reproduced these errors, while H rectified them. The less obvious error, such as the omitted accidental on b.60:S,1/2, was unnoticed in all descendant MSS from L including F, H and K.

PRELUDE 16 IN G MINOR (F.12R)

The piece contained in f.12r is the final version of Pr.g represented as a fair copy. In L this is the only example which started from the second page of an open bifolium, except for Fg.A^b - but in this case the first page was used for glueing the sheet to the other sheet (f.13). In our case it is clear from the way the music was formatted, particularly the use of a system left by the fugue (f.12r,L7), that the prelude was copied after the accompanying fugue had been copied. We also learn from revision-free writing that Bach copied it from an exemplar, now lost.

⁵⁷⁹ See the same manner at the end of f.4v.

In this short piece two corrections of orthographic errors are found: the error of note-value at b.3,3 (R2,b.1) in the bass was caused by the change of a system;⁵⁸⁰ the other at b.7,1 (R3,b.2) in the alto was perhaps nothing other than simple lapse of attention.⁵⁸¹

The study of Bach's writing density indicates that the copying process was calm, without disruption until the very last system in the space left by the fugue was reached. A significant rise in density can be explained by space constraints alone. Despite this I tend to believe that Bach initially worked out the plan of note distribution, for there is no possible room left on the paper.

There are basically two versions, L and A. A is, in some sense, an earlier version, for it contains fewer embellishments. It is, however, not an authentic version, for it contains inconceivable errors in rhythmic notation though they were rectified in A2. Its interpretation of b.13 is more homophonic than that of L. This aspect of the version suggests particularly the kind of piece revised through improvisation on the clavier rather than worked on the paper.

Our version is, in fact, not perfected at the notational level. I find many rests unfilled, such as b.1:A,1, b.5:S,3, b.10:A,2/1 and b.11:T,1/2-2. It is thus interesting to find that the scribes of later MSS made their own attempt to fill them into their copies, such as K3 and K4. For Bach's part, I believe, this particular aspect could have^{been} considered unproductive, since the prelude, which looks as if it had been built on a rigid four-voiced texture, was in fact not so. If we are to observe the strict counterpoint, for example, the bass entered at b.1 disappears altogether from b.2 onwards. It was certainly written in four voices, but Bach's free contrapuntal writing enabled each voice to take part in an unfixed position in the texture after a break. This conflict of rules in this prelude, orthodox or non-orthodox counterpoint, could^{not} be reflected any more meaningfully than^{by} the tie placed on c in the bass at R2,end (b.5).⁵⁸²

The text of L was faithfully reflected in H and F. There are two small ties in b.21, one on c" in the A,2/2 and the other on d" in the S2,3-4, which could have been added after these MSS had been made. It is interesting to note that these are both present in K1 and K3 except for Am.B.49.

⁵⁸⁰ Interestingly, F gives ante correcturam, while H gives post correcturam. The fact is not necessarily the evidence for their chronological relation, since it was statistically proved to be otherwise. It is perhaps the case that to Anon.Vr, the careless scribe as he was, the post correcturam, which in our case a large crotchet, might have appeared as if it were an unsuccessfully written minim.

⁵⁸¹ Though not manifest, the overlooked tie in the tenor, b.16,2-, may also be included as an error. This was reproduced in H and F. K1 and K3 supplied this tie, while missing from K4. Since this tie is present in A, the exemplar of L might have had it in.

⁵⁸² It was reproduced in F and H, while ignored in K.

FUGUE 16 IN G MINOR (F.12V)

Our text of Fg.g represented in f.12v and the first page of f.12r is generally considered as the final version. The score is, however, recorded in a non-calligraphic hand: as it shows many tentative approaches to revision. I therefore cannot regard it as a fair copy but possibly a revision score. The revision took place at least in two stages, judging from the two distinguishable shades of ink used. The later type, which appears in darker colour, is only found in the third page, i.e., f.12r, L.H. col., where we notice particularly Bach's rough writing practice. This fact can suggest various possible situations: was it the case that Bach lost concentration after waiting for a long time for the ink to dry? Or was it the case that he composed the coda section (bb.75-84) on this sheet?

In the first page, f.12v, L.H. col., we find a general lack of calligraphic beauty in Bach's handwriting. Here Bach made two orthographic errors at bb.14 and 27. Except for one possible revision which is the squeezed accidental in the bass, b.19,3/3, there is no clear evidence of betterment. Bach's density of writing gradually falls towards the end of the page.

Something must have occurred at the top of the second page, R1, for here we find sharp recovery of Bach's writing density. There are also noteworthy errors, the clef error and associated corrections of pitch in the soprano, b.31,2 (R1,b.1). These facts seem to indicate the time lapse at the change of page. This rise of density does not seem to reflect such a usual tactic as adjusting the compactness of writing in fair copies, for the density here soon fell to the normal level.

It seems significant that in the third page the same phenomenon is repeated. It is in this section that many amendments are concentrated. Among these is a possible instant revision, such as the four semiquavers $c'' b^{b'} c'' b^{b'}$ in the alto squeezed in at b.62,2 (rL1,b.4). This can be interpreted as immediate revision from $c'' b^{b'}$ in quavers. Many others are, however, corrections on note-heads, such as the error in pitch in the tenor at b.72,2 (rL4,b.1) and that in note-value in the soprano at bb.80-81.

Later amendments, which can be isolated from the rest by the shades of ink, are found in the third page only. They were proof-reading amendments, mostly to clarify the ambiguous notations by outlining the existing notations at bb.60 and 78. In one instance, this seems to have been used for addition of semiquavers in the two inner voices in b.77,2/3 (rL5,b.1).⁵⁸³ If this was true, it was a rhythmic revision, filling the flow of constant semiquavers.

All the amendments were carried out before the text was imparted. The text is, however, known in two dissimilar versions, represented by L and A. L can be subdivided into three, i.e., orthodox (L + F), H and K. This source situation alone seems to reflect the doubt on the

⁵⁸³ It is also possible to interpret that these notes were only outlined with this ink on existing symbols.

authority presented in this text by Bach. Apart from Bach's incompletely filled rests,⁵⁸⁴ we find not a few serious errors which were unnoticed. For example, a necessary accidental was overlooked in b.9: A,1/3, and a tie was omitted in b.56:A,2-3 (this was present in P 402 and P 207). One of the most extreme example is the tie on *e^b* in the soprano, bb.35-36 (R1, end-R2, b.1), only half of which was notated at the system change.⁵⁸⁵ The other version transmitted in A contains numerous variant readings. Most of these are generally regarded as earlier texts. Considering these two versions on textual grounds and from the point of view of copying process in L, the relation between Bach's intense, instant revision activity and his uninspired handwriting in low density seems to match logically.

PRELUDE 17 IN A^b MAJOR (F.13)

The piece contained in f.13 is the earlier version of the two. Judging from the nature of amendments, I consider that this non-calligraphic score was either a composing score based on a draft material or a mature record after the improvisation on the clavier. The amendments can be classified into three types: 1) the instant amendments made at the composing stage; 2) the later amendments made at proof-reading; and 3) the revisions carried out on at least two separate occasions distinguished by the shade of ink.⁵⁸⁶

There are indeed scarcely any corrections of orthographic errors. The amended note-head in b.55:S,1/2 (R7,b.3) can be one of such rare examples; but even so, this was an immediate correction. On the contrary, there are at least three immediate melodic revisions: these are the octave sinking of a note-head *e^b* in the bass at b.16,1/2 (L4,b.4), smoothing the soprano melody at b.35,1/4 (R2,b.3) and sinking a melodic line in the bass in 3rds at b.57,1/3-2 (R7,b.5). Because such revisions were considered and carried out at the moment when they were examined within the surrounding musical context, it is likely that the ante correcturam of these never existed in a written form.

The study of writing density indicates that Bach was writing with very compact notation. It could be due to the profuse use of demisemiquavers; but it is also possible to see that Bach knew the length of the work before he started writing. On this basis, it is interesting to see the sharp fall of compactness in writing at R2. It might be indicating the difficulties or breakdown of nerves in the composing process where the music moves into the relative minor key. The amended pitch in b.35 (R2,b.3), already discussed, can be related with either possibility. Toward the final cadence, where the piece goes through the *Neapolitan* sixth key (B^{bb} major), the

⁵⁸⁴ See, for example, b.16:T,3 (filled in H and K1, but not in K2 and Am.B.49) and b.50:S (filled in P 206 and P 633 only).

⁵⁸⁵ While F duplicated the error, the other copies of L ignored it.

⁵⁸⁶ It is pity that the verso of the sheet was restored by gauzing recently which made it impossible for me to distinguish the amendments in this particular observation. In fact now the original MS is virtually illegible under normal lighting condition.

density at vL5 again falls dramatically. Of course, we should take into account the change of figuration at this point to justify the interpretation of writing density; but it can also be partly explained in the copying process where Bach was fully aware of this exciting musical idea, and the duty to notate accidentals very clearly.

The rest of these later amendments are identified as either proof-reading amendments or harmonic and textual revision. The former type is included the supplement of accidentals required at various levels to clarify the ambiguity in notational form. Here we find five such examples, b.14:S,3/3 (L4,b.2), b.15:B,2/4 (L4,b.3), b.23:S,3/2 (L6,b.3) and b.32:B,2/4 (R1,b.3) and b.35:S,3/4 (R2,b.3). A simple notational correction is found at b.52 (R6,b.4), the crossing out of an irrelevant symbol, which was carried out at a later stage with distinctive dark ink.

The revisions, on the other hand, are found to be more exciting. At the return to the tonic at b.63-64 (vL2,b.3-4) we find a harmonic amendment, revising from the first inversion of the chord to the root position. The reconstruction of ante correcturam is given in Fig. 56 (a) below, in which the light grey shade indicates the ante correcturam.

(a)
bb.63-64,1 (vL2,b.3-4)

(b)
bb.69-70,1 (vL4,b.1-2)

Fig. 56: *Pr. A^b, bb.63-64,1 - Reconstructed model of ante correcturam*

The revision was made in a bold manner, i.e., the overlaid symbol at b.63:B,3/4 and the crossed-out symbols at b.64:B,1/1-2. The manner is so impulsive that Bach seems to have been revising the piece on tentative basis. The post correcturam is taken into K, but it was again revised when Bach embarked on making a new score, which is attested in A.

Another interesting revision on the texture is made in bb.69-70 (vL4,b.1-2). In Fig. 56 (b) above, I demonstrated the later added symbols by darker grey shade. This revision must have occurred at a later date, judging from the reading of K, which shows ante correcturam.

The majority of those revised readings were taken into F and K. According to Bischoff, the text of F was later modified to a certain degree. I consider that it was based on the textual comparison with A, as is often the case in other movements, and that the later amendments in F are unrelated to Bach's intention. When we examined the textual differences between the two versions, it may appear that the improvement made to the new version was systematic: it was concentrated on two aspects - thickened texture at crucial juncture between tutti and solo

motives (e.g., bb.10,1, 24,3-25,1, 26,3-27,1, 28,3-29,1) and melodic overhaul of modulatory section, esp. bb.52-57. To prepare a new score, it seems that Bach initially tried to make certain amendment on L, for the former revision was already made partially in b.69-70 in L.

FUGUE 17 IN A^b MAJOR (F.14)

The piece contained in f.14 is a semi-final version of Fg.A^b. This is the only instance in which the same piece was represented in two versions in Bach's own hand. The other autograph, Bn, is basically the same version. In the following discussion I shall delve into their relationship.

Despite the fact that our score was written in a calligraphic hand, we cannot simply identify it with a fair copy, for there we find an unusual large number of amendments, mainly corrections of errors. These amendments are made at various stages. From visual evidence, we can distinguish between immediate and later amendments. But also from textual comparison with its closest genealogical relations (i.e., F and K), we can classify later amendments roughly in two time scales. But what we may find particularly interesting is that they occur at specific sections of the piece (see Fig. 57 below), and that three such bunches gather in the first half of the piece. This seems to be an indication that for this score Bach used as an exemplar the early version of 24 bars long, written in F major. The autograph of this early version is lost, but we can obtain its possible text from P 1089 and Ms.N.10490.

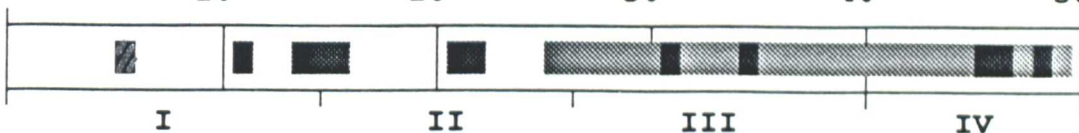
Early version: P 1089 (24 bars)


10 20 24



Present version in L (50 bars)

10 20 30 40 50



 Improved reading in next level
Corrections

 Newly written part
Later Revisions

Fig. 57: Fg.A^b - Plan of Expansion

When we closely look at the locational factor of these amendments in the first half (sections I and II), where Bach could have had the exemplar to copy from, we will notice an interesting point: the improved readings (shown in upper level of Fig. 57) are located very close to the corrections (shown in lower level of Fig. 57) in three isolated places. Notably these corrections are restricted to pitch emendation. In this type of amendments we find two distinct manners - correction of note-heads (b.11:B,3, b.16:T,3, b.20:B,2) and accidentals (b.21:A,4). Among these

errors, the pitch error in the alto, b.16,3, can be considered to have been directly caused by the transposing process.

Close to these corrections, there are also revisions. In bb.14-15 we find two revised symbols which link the readings between early model (P 1089) and the final text of L. In Fig. 58 below, I demonstrate their ante correcturam.



Fig. 58: *Fg.A^b*, bb.14-15 - Reconstruction of ante correcturam

Although these are later amendments, the emendation took place at a fairly early stage, for F gives post correcturam for both. Suppose that the text represented in Ms N.10490 was correct, the added accidental in b.23:T,2/2 (f.14v: L1,b.2) may well be one of those as well.⁵⁸⁷

In section III (bb.27-40) the process of MS making could have changed completely, for we find the types of errors found in this section are entirely different from those of the first two sections. Here we find only a single type of amendment, viz., correction made to the accidentals at b.31:S,1/2, b.31:A,4/1, b.34:S,1/2, b.34:B,3/3.⁵⁸⁸

In section IV (bb.41-50), especially b.44 ff where the music goes through D^b minor, we witness a large number of corrections reflecting Bach's struggle with the copy making. Let us take a closer look at the corrections packed in bb.44-45 (f.14v R1,b.1-2), of which I have reconstructed the ante correcturam in Fig. 59 below.



Fig. 59: *Fg.A^b*, bb.44-45,1 Reconstruction of ante correcturam

⁵⁸⁷ In P 1089, the tenor in b.23 is corrupted.

⁵⁸⁸ It may be interesting to note that the error of b.31:S,1/2, later addition of a flat to g^b", was also made in Bn, but Bach did not correct it in Bn.

In this particular place, we find five pitch emendations, all made to the note-heads, 2nd above. As the errors are sporadic yet progressive, one may wonder Bach might have confused the harmonic texture in this section. It is noteworthy that similar pitch emendations are also found in Bn.

The later cluster of amendments in bb.47 and 49 suggests possible compositional processes. The amended note-head e^b in the bass at b.47,4, changed from 3rd below, might have been originally intended to be the entry of the subject - $d^b c f \dots$ ⁵⁸⁹ Likewise the ante correcturam of alto in b.49,1 suggests that the alto could have been intended as the counter-subject.⁵⁹⁰

The study of Bach's density of writing seems to reveal very exciting facts. In the first page (bb.1-22,2) Bach's pace gradually decreases towards the end of the presumed exemplar. Considering the types of amendments already discussed and his calligraphic hand here, we may assess Bach's intense activity in three aspects, i.e., revision, transposition and fair copy making. In the second page (bb.22,3-43) Bach's density of writing became not only higher, due to the increased number of accidentals, but also became stabilized except for L5 (bb.34,3-37). This change of hand disposition may be partly explained by the conventional compositional process of a fugue, in which thematic elements are put down prior to the filling voice. Or it may be the case that this section was copied from an already finalized model.

Closely associated with the density of writing is the format of staves. This is the only instance in L in which the systems were prepared exactly for the amount needed; thus it is highly probable that Bach knew how many systems the piece would require.

I conclude from these various observations that Bach knew the final length of the piece when he prepared the sheet; for the first half he referred to the early model and the later half, probably to another score, a finalized full-length version. Why did he work in such a curious way? In pp. 112 ff., I have discussed in Bn the inspired, yet abandoned motives in revision. It is possible that by placing Bn chronologically earlier than L, many strange working procedures by Bach are logically explained.

In L we find a few later amendments which most likely took place after F was imparted. These are: 1) melodic revision of b.6:S,1; 2) supplement of natural to d^{\flat} at b.27:S,3/4; 3) addition of flat on f^{\flat} at b.46:A,1. They are represented as post correcturam in K.

A later version transmitted in A is developed on post correcturam of L. This new version include many minor improvements as well as equally valid variant readings; but A1 seems to contain a few errors which were rectified in A2. This version was probably prepared to complete the collection S, for Pr.A^b existed only in a composing score in L.

⁵⁸⁹ This entry is found one bar later in the tenor 2 in one octave higher.

⁵⁹⁰ This part is given in newly added fifth voice in the first bass.

PRELUDE 18 IN G# MINOR (F.15R)

The piece contained in f.15r is believed to be the final version of the Pr.g#, represented as a calligraphic fair copy. Though this is the only extant copy made by Bach, his learned manner of stable writing indicates that he was making a fair copy based on a full length model. The autograph of this early version is lost, but its text seems to have been transmitted fairly faithfully in A.

In comparison with the other binary piece of a similar size, such as f.7r, we notice Bach was not successful in making the copy into an idea! format - i.e., distributing each section in a separate page. However, the study of writing density indicates that Bach was in fact working very closely to this plan. It also shows that in the second half of the piece Bach was compressing his notation at a considerable rate. This is inexplicable as far as the prelude is concerned; but when we look at the accompanying fugue, we immediately notice how large the fugue was, and how, having completed the prelude, Bach struggled to copy it down within the space available. I therefore understand that in the second half of the prelude Bach was aiming to leave some room for the fugue to start, and that this plan was carried out successfully.

There are only several orthographic errors. Two of these are found towards the end of the first half, at b.22:B,2/2 (L7,end) and b.24:A,2 (L8,b.3). They were most likely caused by lapse of attention, indicating Bach's deviated attention perhaps to the format of the copy.

There are, on the other hand, many accidentals appearing to have been added later. The added sharps at b.2:B,2/3, b.23:B,3/2&4 and b.36:B,3/3; B,4/2 (R3,b.4) might have been absent from his exemplar, as they were missing from A1. They are all supplements, clarifying the ambiguous notations. Two sharps at b.37:S,1 (R3,end) could have been checked at a much later date, for they are also added in F later.⁵⁹¹

There are two amendments which can be considered as harmonic revisions. The amended note-head in the bass at b.17,4/1 (L6,b.2) can be the immediate harmonic revision of the root to the 7th. Another such instance is located at b.6:B,2/1, also in the bass, where the sharp on *e* is trimmed to a natural. This is a later amendment, and no other extant MSS give the post correcturam.⁵⁹² Prout considers that the thematically related phrase at b.22:B,2 should also be given such a correction.⁵⁹³ Strange is the fact that such a reading is given only in A.

This prelude is known basically in two versions, L and A. And A is, as already mentioned, stemmed fairly faithfully from the earlier score. But their relation is not absolutely one way. For one thing, their texts can both be valid variant versions. But perhaps most controversial is the inconsistent manner in which some of these variant readings were represented. Apart from

⁵⁹¹ Because they are found among the squeezed notation at the end of a system, Bach might have written them deliberately in this manner. It may be noteworthy that the second of the two accidentals, the sharp written for *cx* is missing from H. It is probably omitted by the scribe of H, for this should have been a double sharp.

⁵⁹² In Am.B.57, this point is marked with "X", probably indicating the variant reading in L.

⁵⁹³ Prout (1896), p.75.

such example in bb.6 and 22 in the bass, we also find in the second half variant readings inconsistently represented between the two versions. I quote two instances, bb.27 and 29, which I have illustrated in Example 6 below.

Example 6: *Pr.g#, bb.27,29 - Variant reading between L and A*

The revision in these passages concerns a melodic aspect in a minor scale. Normally the more intricate the change of shades imposed by the application of accidentals, the more likely it will be the later version: thus I may suggest that the later reading of b.27 was given in A, and that of b.29 in L. But I would rather consider that these are both valid variant readings, and that Bach probably kept two valid versions of this prelude. That the relationship between L and A resembles that of *Pr.d#*, the keys of close relation, seem to be a significant fact. In these rarely used keys, Bach's working procedures might have been different from a piece composed of commonly used keys.

FUGUE 18 IN G# MINOR (F.15V)

The piece contained in f.15v is the only version of *Fg.g#* represented in a fair copy. It was copied carefully from a well-written exemplar, now lost. As there is no significant variation in the texts between L and A, we may consider that Bach was not making any attempt to revise the piece. His writing density shows remarkable steadiness in disposition.

Here we find only several minor amendments. Apart from such a common error as sharp / double sharp confusion at notational level (b.45:A,2/1), there are two pitch errors in 3rds at b.73:A,2/2 and b.84:B,2/2.

There are a few later amendments. At b.58:A,2, a quaver rest was added with a pen stroke of different characteristics. This was initially overlooked by Bach, and supplemented after H and K had been imparted. A trill at b.69:A,2 might have also been added later, though in this instance the symbol was not visibly distinguishable from the rest. This was absent from H, K (except Am.B.57) and A, but present in F.

PRELUDE 19 IN A MAJOR (F.16R)

The piece contained in f.16r is Pr.A, the only known version of the piece. The score was written in Bach's calligraphic hand, and contains a single correction of stemming only (b.21:S,2/2).

Bach's writing density is fairly low, indicating relaxed note spacing. As LP2 was maintained while LP1 goes down in between L1 - L3, we may say that Bach was carefully writing down each symbol evenly regardless of notes or accidentals. The change of tactics may be observed at L7, where we find that Bach kept LP1 instead of LP2. This is because from this line onwards Bach preferred to maintain three full bars in each line until the end. There is no doubt that Bach intended to maintain this format, and, I dare say Bach should have done this from the outset.

In this score are found two later amendments. One is the supplement of a sharp on *g*# at b.27:B,1/3, which is, in fact, not required in this passage.⁵⁹⁴ The other is also the addition of a sharp on *a*#, appearing as a melodic revision. As it was written with a distinguishable pen stroke, it is likely that the sharp was added at a later date - between H and F, judging from text critical survey.

The text of A is identical except for the appoggiatura at b.19:S,1, which is found in B and K only.

FUGUE 19 IN A MAJOR (F.16V)

The piece contained in f.16v is considered to be the final version of Fg.A. The score is written in Bach's calligraphic hand, and contains all the quality of a fair copy.

One interesting fact revealed by the study of Bach's writing density is the even, spacious writing: here we have a fairly stable CW2, as LP2 and LPNA are given in contrasting curves. This reflects Bach's policy in which he took into account not only the space occupied by notes but also certain amount by accidentals. This suggests that the process of copying was always calm.

In this score is found no correction of orthographic errors apart from the amended note-head in alignment at b.5:S,4/3. One may find the pitch emendation of b.8:S,1/2, changed from 3rd above, as corrections; I would rather consider it as a later chain-reactive revision, for ante correcturam is still valid reading, and post correcturam is motivically more agreeable.

All the other revisions are focused upon the subtle melodic shading at the chains of semiquaver figurations, ideas derived from the subject. In L we find three such instances, viz., bb.9, 21 and 28. The first instance, in b.9:B,2/3; B,3/3-4, is resolved by the addition of accidentals. No variant interpretation is found in other MSS. The second instance, b.21:S,1/4 appears to be revised twice, which I demonstrate in Fig. 60 below.

⁵⁹⁴ This superfluous accidental is found unanimously in B, while omitted in A.



Fig. 60: *Fg.A, b.21,1 (f.16v,R1,b.1) - Reconstruction of ante / medius correcturam*

It seems significant that while post correcturam is found among the MSS stemmed from L, ante correcturam is given in A1 and medius correcturam is given in A2. The third instance, b.28:S,3/4; S,4/4, is the addition of a sharp and a natural respectively. In the later generations of L post correcturam is given, while in A is given ante correcturam. Based on these revisions, we can see that there were two scores in Bach's possession, L and S, and that L gave the text later than S. The second case, i.e., b.21, is especially interesting: it suggests that Bach made the first layer of revision after 1744, for A1 (dated 1744) gives ante correcturam. But the reading of this section was finalized in L before 1740 on the evidence of H. This serves to show that Bach deliberately made two valid variant readings.

Between these two versions, there are several unique textual differences. Among these is a possible melodic revision of the above mentioned criteria - b.8:B,4/4. Strangely this was made to S and not to L. There are also other three important variants in A (S). These are: 1) a rhythmic diminution at b.3:B,3/1 (by Altnikol?); 2) rather conservative figuration at b.13:S,1; and 3) conservative manner of subject entry at b.16:B,1. The nature of these variant readings is such that L is more radically presented as the later version. Especially the last variant, where the extreme low note was attached to the point of structural importance, such as to a thematic figure, seems to be a prevailing feature in L to preserve variant readings.⁵⁹⁵

PRELUDE 20 IN A MINOR (F.17R)

The piece contained in f.17r is usually considered as the final version of Pr.a. However, written in a calligraphic hand, the score contains many amendments: apart from the accidentals squeezed in or added in later, the majority of errors were carefully corrected, replacing invalid symbols with valid ones. In this manner, the score was successfully represented as if it were a fair copy. But as we discuss the amendments in detail, we shall see that the score was a mature record, and not a copy from a score containing the piece in full-length.

The most striking evidence for my hypothesizing that the score was a mature record is the way how errors were entered into a critical thematic figure, and how they were taken into the

⁵⁹⁵ This trend is found in three successive fugues from Fg.A to Fg.B^b.

subsequent contrapuntal texture. The figure in question is first represented in the soprano, b.1, which is perhaps the second most important idea in the piece. The figures that were to be modified occurred three times during the course of the piece, i.e., bb. 9, 25 and 31. In Fig. 61 below, I demonstrate the ante correcturam of these points.

Fig. 61: *Pr.a*, bb. 9, 25 and 31 - Reconstruction of ante correcturam

The first distortion of the figure occurred at b. 9, where $a\#'$ at S,2/1 was misrepresented as $c\#''$. In the next instance at b.25,1 (R3,b.3) we find that Bach initially wrote e' at S,1/6 instead of the expected fall of a perfect 4th, g' . It seems significant that the same modification to the figure was repeated at the next entry of this figuration, b.31,1 (R5,b.3), where we get a' instead of c'' . Here in b.31, another pitch was also modified: it happened at S,3/1, where should have been given the pitch a' but c'' . The error is possibly related with that in b. 9 S,2/1, however different in the precise location of beats within the figure, for at this point the bass gives the identical pitch, $f\#$. From the way these errors were imparted to other places, we may judge that they were not corrected immediately. But more important are the facts that these errors were not disagreeable in harmonic terms, and that when Bach copied this piece, he did not have a steadfast melodic notion of this figure.

The other types of amendments are less thematically oriented. Many accidentals, which may appear to have been added later, are difficult to distinguish between those caused by notational practice and those of melodic and harmonic revisions. The former type was caused by the order of notation. In some instances, viz. b.23:B,3/5 (R2,b.3) and b.29:S,4/3-4 (R5,b.1), we would perhaps notice that Bach wrote quaver figures prior to the semiquaver figurations. Under these circumstances Bach often deliberately wrote these accidentals in a somewhat misplaced manner in order to retain a clean, calligraphic writing for notes. The latter type was caused by revisions, and I consider b.19:S,1/6 (R1,b.1), b.22:S,1/5 (R2,b.2) and perhaps b.24:B,4/3 (R3,b.1) all belong to this case.⁵⁹⁶ Finally, one unusual correction at b.26:S,1/2 must be discussed. From the musical texture, it may appear that it was a note-alignment error caused by the lapse of attention.

⁵⁹⁶ It is worth noting that in A the pitch at b.24:B,4/3, which is $f\#'$ in B, is given as f' , the ante correcturam of L.

The format of the piece also tells us about some important factors in copy making. Since this short binary piece has two sections in equal length of 16 bars, it would have been a fairly straightforward task to write each section on one side of an open bifolium. But here we find that Bach made no effort to pursue such an aesthetic element in the format. This is strange, for he certainly wrote the music with a careful calligraphic hand. Thus we find Bach's copying policy rather inconsistent and discrepant.

The study of Bach's density of writing shows that in the first three lines, i.e., L1 - L3, Bach was writing with the most compact notation. From L4 to L7, Bach eased the high compactness. This change of tactics may serve to show that Bach tried to bring the half point double bar close to the end of the page. Our studies on the format and the density of writing both point out that Bach was writing a fair copy without using an exemplar.

All the amendments entered into L were faithfully taken into H and F. Basically, this prelude is known in a single version, but there are several noteworthy variant readings among later MSS, which enable us to classify them into three further groups, i.e., ante correcturam A, post correcturam A1, post correcturam K. I consider that these were not stemmed from Bach, since they were carried out on later copies by revisions. Among these the most significant variant reading is given to the inverted thematic figure at b.30,2/2-3: in post correcturam A are given the pitches $e^b d$ instead of $e d^\#$ in L. Both readings are valid in harmonic terms; but as far as the thematic consistency is concerned, that of L is inappropriate, and so did the reviser of A1 judge. Nonetheless, this raises again the question of Bach's notion of the second most important figure in the prelude at the copying stage.

FUGUE 20 IN A MINOR (F.17V)

The piece contained in f.17v is possibly the final version of Fg.a. There is little evidence in the score indicating that Bach had difficulty in copying constant changes of figuration in a wide range of note values. This leads us to believe that the score was prepared from a properly written exemplar, which is now lost.

Contrary to the accompanying prelude, this fugue contains a single correction of pitch error at b.11:A,4/1. This was probably triggered by the change of staff for this note-head.

The study of Bach's density of writing (see CW2) indicates that the score was written with even spacing except for L4, where Bach squeezed three complete bars into a line. Also important is the fact that at this point the number of overlaps in the spacing of note-alignment gives the highest figure. This seems to be a strategic reason for a fair copy. Bach, however, did not use these tactics ever again.

This fugue is known in two basic versions - L and A. The text given here in L is fairly faithfully transmitted into H except for a few ornaments less. This can serve as evidence that these embellishments are Bach's later additions. F is lost; but according to Bischoff, its text must have been altered later according to the text of A. The reading of A, which is entitled as

Fugetta, is possibly considered as an early version of the fugue, for the majority of its variant readings are modest and less deviated from the basic thematic figurations, such as b.6:A/B and b.17:A,2/1. While it uses fewer low registers at b.15:B,1-2 and at the final cadence, b.28:B,3-4, the most noticeable, perhaps, is that the cadence is in a minor chord. Such a distinction in character may be a deliberate attempt to preserve a piece in two different characteristics. Though no trace of the transition of versions is found in L, it is certainly one of the possibilities that Bach used it as an exemplar and revised it as he copied it on to the sheet. But as is the case in Fg.A, where the use of AA at b.16 also distinguishes the characteristics of a version, those variant readings may be preserved purposely for a variety of reasons.

PRELUDE 21 IN B^b MAJOR (F.18R)

The piece contained in f.18r is considered to be the latest version of Pr.B^b. The score is a revision score, showing an interesting process of improvement from the early version attested in A.

There are relatively fewer orthographic errors in this prelude considering its frequent change of clefs for the requirement of hand crossing as a virtuoso element. Corrections are mainly pitch emendations. There are three amended note-heads at b.14:S,2/1 (L4,b.2), b.24:B,3/2 (L6,b.4) and b.61:A,3 (vL1,b.3), all corrected within the interval of a 2nd. From their obvious melodic relations with neighbouring areas, they must have been corrected immediately. The later addition of flats in b.38:S,3/2; S,4/3 is also a harmonic correction. These amendments are all correctly taken into descendant MSS of L.

The rest of amendments are considered to be revisions. The most important harmonic revision may have tentatively taken place in bb.62-64, the ante correcturam of which is reconstructed in Fig. 62 below.



Fig. 62: Pr.B^b, bb.62-64 (f.18v, L1,end - L2,b.2) - Reconstruction of ante correcturam

The first sign of the revision is attested in b.62:B,4/3 with the introduction of a chromatic link g - g^b - f by means of a flattened 5th, g^b . Because this flat is absent from A, we may consider that it was added as an instant revision. It was, however, removed later, between the time H and F were imparted. In b.63, where system change occurred, Bach presumably started writing the

bass. He made the first two beats probably in dotted quavers as my reconstruction in Fig. 62 above shows, which he soon changed to the present reading. The introduction of tonic minor chord at b.63,3 was an afterthought: it must have been planned after the revision of the bass figure b.63,1-2; for, otherwise, we cannot explain why the flat at b.63,3/1 was squeezed in a reduced size. At b.63:B,4/3, we find a vertical stroke stemming up from the note-head, *f*. This was perhaps the same type of harmonic revision planned in b.62:B,4/3, but abandoned half way. Having completed the bass and drawn the bar line, Bach came back to write the two upper voices, judging from the failure in note-alignment. The flat at b.63:A,2/2 could have been either added later as a harmonic revision or written deliberately there due to room shortage. What we can be sure of is that the melodic revision to introduce the tonic minor was definitely finalized before the flat at b.63:S,3/2 was written.

The density of notation tells of no specific events in the background of the copying process. Nor does the format of this binary piece, of which the double bar is not at the end of a page. One thing for sure about Bach's writing is that his note distribution was not affected by the application of accidentals. This is why CW1 stays level on the one hand, CW2 shows several sharp rises and falls, being affected by the number of applied accidentals.

Other revisions were later amendments. At b.26:B,2 a compound ornament (*idem*) was trimmed, made into a simple mordant. This amendment was entered after F was made, because F gives ante correcturam.⁵⁹⁷ The addition of natural at b.60:B,3/3 looks as if it was a correction; but as the natural is missing in A, it is likely to have already been missing in the exemplar (S). The same correction was made to F, while H gives ante correcturam. The source situation within B is thus clear - H as ante correcturam and F as post correcturam. Correction of rhythmic notation at b.7:S,4 was entered at a much later date: ante correcturam was given in H, F and Am.B.57, while only in Am.B.49 the post correcturam is given.⁵⁹⁸

Our discussion of Bach's copying activity so far has led us to believe the probable situation that when Bach copied the piece from S, he was at the same time revising it. The textual differences in b.34:S,3-4 and b.45:B/A,3-4 as well as the melodic details of b.59:B,2/2 and b.70:A,3/2 are important evidence of their genealogical relationship. However, some of the other melodic details, e.g., b.36:B,1/3, b.46:B,3 and b.67:S,2/1, seem to argue to the contrary. They were either copied incorrectly in L or revised later in S.⁵⁹⁹ The probability of the former may be raised if we notice that between L and A there are very minute variant readings of note-values, e.g., b.27:A,2, b.28:A,2, b.83:A,1. Surely Bach did not practise verbatim copying.

⁵⁹⁷ This ornaments is missing in H. A gives post correcturam.

⁵⁹⁸ This unique identity of later revision between Am.B.49 and L is also found in Pr.E, b.50:B,1.

⁵⁹⁹ Dehnhard claims that A is derived from Bach's copy of the Improved reading (S) which replaces L. This sharply disagrees with the result of my study.

FUGUE 21 IN B^b MAJOR (F.18V)

The piece contained in f.18v is normally considered as a semi-final version of Fg.B^b. The score was probably intended as a fair copy despite the fact that it does not look like one. This was because having completed the prelude, Bach was left with one page only for the fugue, and had to create two extra systems in the foot margins, one directly below and another on the other side of the bifolium, to make up for the space shortage.

In copying out the fugue, Bach made three obvious corrections of pitch error half way, viz., b.47:B,3/2 (R6,b.3), b.57:B,2/2 (R7,b.4), and b.59:B,1/2 (R7,b.6). All of these are minor errors, perhaps caused by the lapse of attention.

The revision, on the other hand, is found in one place only, viz., b.78:S,3/2 (Btm,b.17). This was made to the significant note of the subject, deciding either DUX or COMES. All the MSS in B except No.543 and L give ante correcturam (COMES). A gives post correcturam (DUX).

From the even spacing, yet in compact notation, there is little doubt about Bach's consciousness of space restriction. The most significant finding in this study is the horizontal curve of CW2. It discloses that Bach considered the application of accidentals equal to notes. On this evidence, we may consider further that this fugue was fairly faithfully and perhaps mechanically reproduced from the exemplar. Interestingly, this was a policy in contrast with the one adopted for the accompanying prelude.

The final version of the fugue is generally considered to have been transmitted in A. It has many variant readings as a result of melodic and textual revisions on the text of L (e.g., bb.5-6, 88-90). This may mean that Bach came back to the exemplar of L to make revisions, probably to preserve two valid versions. I believe this is the case, if we are to justify an interesting variant reading in L at b.38:B,1/1, E^b, for the attachment of a low note instead of a rest to the thematic figure is one of the significant features of the variant readings in L, as has already^{been} discussed in Fg.A. Apart from this, some of the other variant readings seem also to have their own artistic beauties as well as theoretical strengths (see e.g., bb.19 and 22). However one cannot plainly verify their authenticity.

PRELUDE 22 IN B^b MINOR (F.19R)

The piece contained in f.19r is possibly a final version of Pr.b^b. It is not easy to determine whether this score was written with or without an exemplar. For one thing, this piece can be written fairly effortlessly since: 1) the form is a conventional ternary form; 2) the theme is well-designed and fully effective, and 3) the style of writing is taken from a conventional 3 part invention (Sinfonia). But the fact that the amendments were so scarcely found on the score seems to speak of Bach's use of an exemplar.

The amendments found in this score can be visually classified into immediate and later ones. There is only a single instance of an immediate amendment made at the initial copying

stage. This is located in the bass at b.66,2/2-3 (R4,b.6). It appears as a correction of a grammatical error, i.e., hidden fifths with the soprano. It is significant to observe that the error was easily removed by replacing it with an inverted motive.

The study of Bach's writing density fails to reveal evidence of Bach's aim of the score, i.e., to be a fair copy or otherwise. No reason so far can account for the outstanding fall of density at L5 (bb.25,2-31,1).

The later amendment occurs only in one place, viz., an trimmed accidental on g^b in the bass, b.16,2/2 (L3,b.4). I think this was a harmonic revision, giving this passing note a harmonic role in the texture. It was entered sometime between H and F when they were imparted. A gives here ante correcturam.

The source situation in B is clear: while H gives ante correcturam, F and K give post correcturam. A is probably based on another copy, possibly S. This is basically the same version as H, but contains vital variant readings in b.81:S,2/1, which could have been added by Bach at a later date.

FUGUE 22 IN B^b MINOR (F.19V)

The piece contained in f.19v is normally considered as a semi-final version of Fg. b^b . From the way the score made use of the space left by the prelude, it is clear that the fugue was written after the prelude. This score contains amendments in such a large number that one may suspect that it might be the composing score. By extrapolating various types of evidence, I shall gently disclose the fact that in this score was recorded an early stage of the composition, possibly the first fully worked out version of the piece ever written.

It is, however, very much doubtful if the great master of fugal composition as Bach himself could have ever composed this tremendously complex fugue straight out of his brain. It is thus sensible to make the premise that Bach worked from a sketch containing the plan of both thematic exploration capabilities and the order of its development, which must have existed irrespective of this particular historical moment. Without such a plan, it is hardly conceivable that the writing of such a masterpiece as this Fg. b^b , interweaving systematic structural order and musical intricacy, would have been possible.⁶⁰⁰

In the early part of the piece are found several corrections of grammatical errors, presumably caused by the composing activity. Here I will concentrate on two such places, b.14 and b.25. In Fig. 63 below I give the reconstructed text of ante correcturam.

⁶⁰⁰ In addition to the precise shape and length of the subject, the plan should also include the number of sections, entries in each section, modulations, the type of stretto used and the types of combination of subject (plain or inversion, with or without stretto). From this plan, it is not too difficult to see how many bars a fugue is going to be.

bb.14-15,1 (L3,bb.3-4) bb.24-25 (L5,bb.3-4)

Fig. 63: *Fg.^{b♭}*, bb.14 and 25 - Reconstruction of ante correcturam

The replaced symbol in the alto at b.14,3 appears to be a harmonic as well as a strict contrapuntal revision. The original part writing itself is a valid melodic progression resolving from the leading note to the tonic. This resolution is, however, against the harmony (super-tonic) created by the other voices at this point, and also against the figuration of counter-subject. Although the replaced symbol can be identified as a later amendment, it is difficult to imagine that the error could have been left unnoticed for a long time. The amendment made to the part writing in the alto at b.25,1 was a grammatical correction. It read *f' d^b'* initially, as can be expected from the part writing of bb.20-24. The correction was to avoid the consecutive 8ves with the soprano resolving from *e^b"* to *d^b"*. These two examples show that Bach was so concentrated on a particular part writing that he overlooked the textual validity.

In bb.67 and 81 we encounter two further corrections where the thematic identity of the second entries in strettis were distorted rhythmically. In Fig. 64 below, I demonstrate the ante correcturam of these errors.

b.67 (R5,end) b.80-81 (R8,bb.3-4)

Fig. 64: *Fg.^{b♭}*, bb.67 and 80-81 - Reconstruction of ante correcturam

In both instances, the syntactic errors occurred on minims, which were erroneously split into crotchets and crotchet rests. Such confusion in the thematic identity seems to have been caused by certain factors, for we can identify a certain resemblance between these errors, e.g., strettis and note-value. One thing for sure is that Bach did not write a pair of entries in strettis. Considering various possibilities, I would conclude that Bach wrote these sections from his

memorandum which contained an elementary plan of the fugal structure. And although he was fully aware of the musical progression as he went along, he did not pay a great amount of attention to the detailed thematic identity in less salient parts (i.e., the second entry in stretti). Instead, Bach was perhaps more deeply involved in establishing melodic and harmonic validities based on the rules of counterpoint and artistry, e.g., overall harmonic skeleton, rhythmic articulation, and melodic elocution.

It may be interesting to point out that there is an area holding a large number of corrections. They occur one-third of the way through the piece, and the four errors gather in L7, bb.33-39. Since the majority were pitch errors in 2nds, they were probably caused by stagnation of artistic ideas. Also in two-thirds of the way through the piece, three errors are gathered in R4-R7, bb.59-74. They were perhaps caused by the lapse of attention at the change of the system. Those are b.59:B,1 (R4,b.1), b.68:B,2 (R6,b.1) and b.73:S,2-3 (R7,b.1), of which two are part of the subject entries. It is noteworthy that this section contains the error of stretti already discussed.

In one instance, we encounter a correction on voice exchange between the tenor and the alto at b.61,3 where the texture was restored to three voices after a moment of a two-voiced texture. Initially, the newly entered minim, f^{\flat} , was specified as the tenor by the minim rest placed in the alto; later Bach boldly cancelled the rest and added a new minim rest in the tenor, so that the sounding part became the alto. We lack conclusive evidence to determine when the correction was made. The most probable hypothetical moment was the time either when Bach reached b.67 where a full four-voiced texture began or when he did proof-reading.⁶⁰¹

There are many other interesting places where notations were squeezed in, or misaligned due to the notational and compositional sequence. We may consider in bb.25-26 and 33 as such instances.

The study of Bach's writing density only shows that Bach was writing with an extremely compact notation. This is evident if we compare the CW2 with the pieces from a similar time, e.g., Fg.E^b or Fg.B. This suggests that Bach was aware how long the piece was. The format of the staves indicates the same fact. This sheet, f.18v, was prepared in eight piano systems, while the other side, f.18r, was in seven piano systems. From such evidence, we may say that before writing Pr.b^b Bach knew about the length of the fugue. Thus I consider that the draft of the fugue included minute structural plan, which gave him the idea of its length.

Sometime later, Bach decided to impart its text to H. This is why H does not contain further amendments made into L at a later date. These later amendments consist of proof-reading corrections and revisions. The former type, proof-reading amendment, was attested in various forms. In b.64,2/2 (R5,b.2) in the alto, a natural was added to g^{\flat} in very thin brownish ink. The

⁶⁰¹ From H and K1 the rest is missing, or probably omitted deliberately, since these two rests are written so poorly that they may just as well be seen as ink stains. In A, the minim rest was specified as the tenor (= post correcturam L).

authenticity of this amendment is spurious, for it was taken into H, but not other sources.⁶⁰² In b.79,1/3 (R8,b.2) in the alto, we find a correction of pitch attested in the later addition of natural to *g'*. This was probably added at a much later date, for we find it still missing in H, K and A. Finally in b.91,2 (f.19r: Btm,b.6) in the soprano, Bach made a pitch emendation, changing from *bb'* to *g^b'*. On the evidence of H, I assume that Bach did not delete the invalid note-head, presumably allowing it to dry before scraping it off. This note was later neatly scraped off.

A later melodic revision was considered in the soprano at b.76,1/2 (R7,b.4). Bach inserted between crotchet *c''* and *a^b'* a passing note *b^b'*. This note in quaver is marked with blurred ink.

What we usually consider as the final version is a unique mixture of readings between L and A. A contains some artistically inspired readings at bb.22, 41 and 77. But since it also contains many errors, it is doubtful to believe that Altnikol copied it from Bach's fair copy. It is sensible to speculate that a new fair copy was prepared by a copyist, on which Bach made a few later readings but some errors escaped unnoticed; but Bach kept L and entered a few amendments independently.

PRELUDE 23 IN B MAJOR (F.20R)

The piece contained in f.20r is normally regarded as a semi-final version of Pr.B. The score was a fair copy, though Bach's handwriting is considered a little rough. But it is the only score in L that contains virtually no amendments.

Perhaps the greatest interest is located at R1, bb.23,3-27, where we find an unusual high peak of writing density. This appears to have been deliberate. For if we take a close look at the motivic development at a sectional level, R1 is packed with everything of the alberti-bass development section. This strategy seems to be quite effective if a performer was to read a score and to respond to the change of mood as instructed by the change of system.

This prelude is basically known in two versions, L and A. Between them we find only several variant readings. Their genealogical relations are uncertain, however, for the latest reading seems to have been distributed irregularly between two autographs, L and S. The possible later reading in L is the bass, b.45,1. All the others are usually considered to have been transmitted to A through S.

FUGUE 23 IN B MAJOR (F.20V)

The piece contained in f.20v is a final version of Fg.B, represented in a non-calligraphic fair copy. But in sharp contrast to the prelude, Bach entered on this score later revisions in several stages. These are attested in descendant MSS as clear chronological layers.

⁶⁰² Dehnhard (1983), p. xxxi, claims that this natural was deleted. If he is right, the source situation is logically explained.

The score contains very few corrections. The only noteworthy orthographic error is b.37,1 in the bass, where a series of four consecutive note-heads were put down initially in 2nd higher. They were amended in a casual manner.

The study of Bach's density of writing shows that his notation was not particularly compact here, there being much more space between his notations than in Fg.b^b. It certainly was not as commodious and relaxed as that in Fg.E^b. Generally Bach's note spacing tends to ease gradually. It may be a reflection of Bach's deep involvement in musical progression as he copied along. It indicates that in two places where Bach might have had a moment of pause to check his notational spacing, and restored the compactness. The first was at the 5th system, which coincides with the musical break of b.27. The second place is the beginning of a fresh page, R1. It is interesting that in these locations, the music was written first in a two-voiced texture and increased into three. From this view, the restoration of density may not be as strategic as I have suggested. But the critical fact is that Bach did not take very seriously about the appearance of the score. It is particularly regretful that this careless copying tactic caused the loss of the final bar from the sheet, as Bach had to write it in the fragile edge of the sheet. This happened as early as within a couple of years of the MS production. The sheet was already damaged when F was made.⁶⁰³

The more important and valuable part of Bach's musical activities are recorded in the revisions. Here I discuss four in all. They were all later amendments, with the new symbols physically replacing the old readings. They are all found close to each other and located half way through the piece. The oldest revision occurred in the bass at b.42,1 (L7,b.3). This is a fine, aesthetically motivated melodic revision, replacing *B G# A# B* with *B B A# G#*. The ante correcturam is taken into No.543 only. The rest of the revisions took place slightly later; but before these were made, H had already been made from L. In bb.51-53, Bach made a very careful revision, which could have otherwise remain unnoticed. The reconstruction is given in Fig. 65 below.



Fig. 65: Fg.B, bb.51-53 (R1,end - R2,b.1-2) - Reconstruction of ante correcturam

⁶⁰³ Hill, R.S. (1950), p.377 ff.

The revision was to cancel suspension, and to create accented passing notes. As it was required to break the sequential echo from the previous bar, this revision may be seen as a departure from conventional contrapuntal writing, often found in the last stage of Improvement. The last instance occurs in the soprano at b.59,1/2 (R3,b.2), where the original pitch *g#'* was raised a semitone and a natural was added beside the amended note-head. This is also a melodic revision.

It appears that the similar revisions were not entered in S, for A gives ante correcturam in those instances. Source situation is thus classifiable in three explicit chronological orders stemming from L throughout: 1) No.543; 2) H and A; and 3) L and F.

PRELUDE 24 IN B MINOR (F.21R)

The piece contained in f.21r is the final version of Pr. represented in a calligraphic fair copy. The piece is sixty-six bars long, and was superbly copied into the allocated space on the sheet, leaving little room unused.

In this score we find three orthographic errors. The earliest one occurs at b.15,2 (L4,b.2) in the bass. The note *f#* was originally placed a tone below, and probably amended instantly. The error was probably triggered off by the preceding note: this was written ambiguously, and can be read as *d* as well as *c#*. The other corrections are made to the rhythmic notation. At b.28,1 (L6,end) and b.34 (R1,b.1) both in the soprano quaver figures were incorrectly written as semiquavers. The correction from the smaller note-value is the type of error which is not found in any other scores in L. The most probable explanation for these errors is that Bach used the version of A2 as a exemplar.⁶⁰⁴

The study of Bach's density of writing shows that Bach kept LP2 at a fixed level except in L6 where he squeezed the notation, particularly in the last bar of the system, b.28. This is an interesting point, for Bach normally eases his compactness of writing around here. It seems to indicate that Bach was seriously trying to make a good copy with a pleasant format. And wherever possible he tried to avoid unnecessary bar split.

The text contains many detailed embellishments, consisting of staccatos, slurs, trills, a mordent, a turn and an appoggiatura. These are a common feature of a fair copy, and could have been added in during proof-reading. There is one possible later addition of a symbol, the tie in the alto at bb.56,2/2-57. This symbol appears to have been entered with a different quill from the one used for the rest of symbols. It is missing in H.

This prelude is known in three versions, i.e., L, A1 and A2. As already mentioned, A2 is likely to be an early version; it is written in C metre, and it halves the note-value, while throwing two bars into one. The majority of the embellishments in L are not found here. It also contains several variant readings in figuration and texture. Some scholars claim that this was a later

⁶⁰⁴ Dehnhard (1983), p. xxxii, is the first scholar to point out this probability on the evidence of Bach's copying errors.

version from their aesthetic point of view.⁶⁰⁵ But as seen in Fg.C, I consider that Bach revised this lively piece from A2 to L in order to increase metric foci, and to make the piece livelier still. A1 is an intermediate version, linking L and A2; its barring and note value were converted into the system of L, while the majority of the unique variants in A2 were kept. A1 was written in C metre without *Allegro*.⁶⁰⁶

FUGUE 24 IN B MINOR (F.21V)

The piece contained in f.21v is possibly the final version of Fg.b. It is represented in a fair copy. But unlike the final fugue of WTC I in P 415, Bach did not write "S.D.G", but "Fine" to mark the end of WTC II.

The score shows no evidence of revision undertaken. Here we find a single instance of immediate correction of pitch at b.93,3 (R6,b.3) in the alto. It may be seen that Bach also supplemented several accidentals for clarifying his notation, e.g., at b.11 (L2,b.2) and b.24 (L3,end). But it was inconsistent, for we find many equivalent places left intact, e.g., b.9 (L1,end), b.20 (L3,b.3) and b.22 (L3,b.5).

This fugue leaves almost three quarters of a system unused. There is no sign of space constraint, and his notation was not done in as strenuous manner as that in Pr.e (f.7r). The study of Bach's density of notation shows that his note spacing takes into account the number of accidentals (attested in LP2), the characteristics of a fair copy.

The fugue is basically known in two versions, L and A. The array of variant readings is relatively small, but it is not easy to determine the latest reading by relying on aesthetic judgement alone. Perhaps the most significant difference among these variants is at the cadence, bb.99-100 in the bass. It reads *B D F# BB* in L and *B d f# B* in A. Such a difference in the use of the low register serves to show that Bach deliberately distinguished such versions possibly as a consequence of revision, as we have already discussed in Fg.A, Fg.a and Fg.B^b. In all cases, Bach assembled the piece using the lower register in L. The other variants, e.g., bb.16 and 21, are not distinguished by register but for aesthetic reasons.

⁶⁰⁵ Prout (1896), p.76; TOVEY (1924), p.192; Keller (1976), pp. 137,199.

⁶⁰⁶ The text was unfortunately heavily edited by someone at a later date, obviously referring to the text of Am.B.57.

CONCLUSION

CHRONOLOGY FOR WTC II

This is the summary of the history of WTC II based on the discussion of the previous four chapters.

THE GENESIS OF WTC II

The embryo of WTC II already existed probably before that of WTC I (i.e., Cb-WFB). It included the early versions of seven pieces altogether, viz., PrFg.C, PrFg.C#, Pr.d, Fg.G and Fg.A^b. However small and underdeveloped, some of them already formed a collection of prelude-fugue pairs arranged in a particular system, the key-scheme filling a scale C-d-e-F-G. Thus we may perhaps say that some embryos were already developed at the larval stage. The fact is, however, that at the first stage of compilation of WTC II Bach apparently did not attempt to extend this restricted system into a more extensive scheme: he did however use the early G major pieces (BWV 902), as models for the larger collection.

The pupal stage of the development (pre-1738) was partly identified with the revision of earlier works. Pr.d (BWV 875a) is here brought from 43 bars to 53 bars (BWV 875b,1), and Fg.C# (BWV 872a,2) from 19 bars to 30 bars (BWV 872b,2), still in C major. In both cases, the revisions were to overhaul the structure of the works, first by segmenting them into many sections, and second by expanding them according to the new plan of the pieces. Also the characteristic of Bach's work at this time was the mass-production of fugues in preliminary forms, viz., Fg.c, Fg.C#, Fg.c#, Fg.E^b. These four fugues were brought very closely to the final shape in L, but it is significant that at this stage three of them were written in keys a semitone below their eventual tonality.

CHRONOLOGY OF COMPILATION

Compilation took place in a practical way, by the assembly of bifolia (Auflagebogen). This enabled Bach to use the scores for any practical purposes, such as for teaching, or his own performance, while allowing him to replace any part of the collection with a new one if necessary. In copying the pieces, Bach initially set off making the "*Præludium*" group, which are basically written in commonly used keys. He began with a very strong inclination to complete the group, and so mass-prepared the sheets irrespective of a particular piece. In doing so, he asked Anna Magdalena to prepare some of those of which the text was already finalized and relatively short: he himself wrote the rest, some straight out from his brain (viz., Pr.E^b, Pr.f#, Pr.a) and others very long (viz., PrFg.e, Fg.f#, Fg.g). Bach also took charge of the pieces which required slight revisions in the process of copying, such as to change figurations or to make transpositions (viz., PrFg.C#, Fg.E^b, Fg.g, Fg.A).

At some stage of compiling the "*Præludium*" group, Bach began preparing the "*Prelude*" group, which are either long and difficult or written in uncommon keys. Compiling this group

was a difficult task: the physical features of L indicate that Bach was unable to copy this group in the continuous fashion that had characterised the copying of the "*Praeludium*" group.

CHRONOLOGY OF REVISIONS

The first stage of later revision in L was carried out fairly soon. Bach used thick black ink to revise Fg.C#, Pr.E^b, PrFg.d#, Pr.f#, Fg.g and PrFg.A.

The inclusion of a title page on the now lost MS H, together with a possible date of 1740 on that MS, suggests that it may have been in that year that Bach decided to make the collection known. I consider that MS H was the exemplar of H1 and possibly of part of H2. At this stage, PrFg.C and PrFg.A^b were still to be added to the collection.

By 1742 Bach added these movements to complete WTC II. While Pr.A^b was composed separately in the first half of 1741, the rest of the three movements were written possibly together as revision scores: these three were all significantly taken from the early cycle found in P 804 and P 1089 as if Bach had run out of original ideas and filled the gap hastily. And in the mean time, he made minor revisions to Pr.G, Pr.A, Pr.B^b, Fg.b^b and Fg.B, and replaced PrFg.f with the most recently revised version. Immediately after the completed compilation followed the duplication of L, i.e., F. It is likely that close to F were made some more copies, possibly for private sale, which included the completion date "1742" in the title page. The unexamined Hering MS may be descended from one or more MSS of this group.

Even after this, Bach continued to revise the detailed text in L. Perhaps more interesting is the fact that Bach entered the revision not only in L, but also in his second set of copies, S. This can be confirmed in revisions to Fg.B^b (b.78) and the first layer of later revisions in PrFg.d in L and A. At some stage in doing this, Bach turned his attention solely to S. This was partly to preserve the reading of L, which contained the most updated versions so far, and partly to bring S (which was still far from complete) to a complete state.

By 1744, Bach had supplied some of the movements missing from S with the latest version, viz., PrFg.C, PrFg.A^b and Pr.E^b, and had also replaced drafts with newly revised fair copies (e.g., PrFg.C#, Fg.e, Fg.B^b, Fg.b^b). And by this time, S gradually acquired the importance equal or perhaps superior to that of L. In 1744 when Altnikol made A1, Bach showed him the collection S, not L, except that he apparently showed him the L copy of PrFg.f. This is the only evidence of Bach's inclination to the collection S at the time. But the text of A1 suggests that S at this stage was still incomplete, and that for certain pieces, such as Pr.f# and Pr.g, Altnikol had to refer to inferior copies not authenticated by Bach.

After this, we have evidence that Bach returned to L to add further minor improvements into PrFg.d and Pr.g#. Many accidentals, which were only to supplement the notation, were also added into Pr.f#. This seems to provide some information about the two collections after 1744, the year A1 was made. While we cannot confirm satisfactorily about these revisions being entered into S, Bach nevertheless kept the characteristics of L and did not interchange the versions between the two collections. This suggests that Bach distinguished the two with

their own characteristics, such as the use of extreme low pitch in collection L (e.g., Fg.A, Fg.a, Fg.B^b, Pr.B and Fg.b). Yet one more fact I have to mention is that Bach sometimes made certain arbitrary minor revisions unspecific to either collection. This resulted in a confusing situation in which variant readings are equally valid. It may not be a coincidence that this problem is apparent in two preludes in rarely used minor keys, viz., d# and g#. This suggests that for these pieces Bach did not hesitate to edit the score in either collection if the revision was small. Indeed, the revisions Bach entered at this late stage were of two basic kinds: 1) subtle chromatic adjustment of melodic lines; and 2) deviation from stereotyped motivic development. Thus for the sake of increased artistic elements, Bach often sacrificed motivic uniformity. At this level of deciding between conflicting musical interests, one can imagine how difficult the revision could be. As has already been seen in Fg.C#, one fresh idea, such as introducing demisemiquavers into one specific figure, can sometimes take two stages of revision to perfect. Bach must have known this sort of trouble revisions can cause: besides, such idea as the motivic deviation offered a real possibility of endless series of revisions.

And as far as we can trace, Wilhelm Friedemann inherited L and F, while C. P. E. Bach inherited H and possibly A1. Nothing is known about S. The only probable place for S is in Altnikol's possession in exchange with S. If this assumption was correct, then we can explain the enigma of the textual relation between A1 and A2: that is, that in A1 Altnikol did not merely reproduce S, but tried to make *Fassung Letzter Hand* for Bach by referring to L for certain movements (e.g., Fg.a and PrFg.b) which he considered to be superior versions. And when he embarked again in 1755, what Altnikol had at his possession included neither A1 nor the copies from L, but S itself with some other copies of lesser importance. This hypothesis also explains why Bach came back to L to revise PrFg.d after 1744.

Our discussion so far revealed no evidence suggesting that Bach himself made *Fassung Letzter Hand*. Let us put the matter into a larger historical perspective. One of the reasons would be that even excluding the autographs there had already been three copies at least in Bach's household, viz., H, F and A1, and therefore there was no immediate need for it. But a perhaps more influential factor seems to be that Bach could not devote himself to WTC II alone. From 1746 onwards we find that he was more and more heavily involved in canon composition. It appears that his visit to Frederick the Great in Berlin in May 1747 affirmed the way Bach would spend the rest of his life. Only one month later he joined Mizler's *Societät der Musicalischen Wissenschaften*, and followed the publication of Musical Offering among many other canonic compositions.⁶⁰⁷ The music printing of the Musical Offering perhaps raised another dimension into publicizing his works of a monumental scale. Surely it would be a more exciting and rewarding project than merely to write a MS. It is possible that Bach abstained

⁶⁰⁷ The compositions of this period also include: Canon triplex a 6 (BWV 1076), Canon Trias Harmonica a 8 (BWV 1072), Canonic variations "Vom Himmel hoch da komm ich her" (BWV 769), Canone doppio sopr'il soggetto (BWV 1077) and Canon super fa mi a 7 post tempus musicum (BWV 1078).

from writing up a *Fassung Letzter Hand* of WTC II considering that there was a real possibility of engraving the work. If the technology in publishing business was fifty-years ahead, or if the operations on Bach's eyes in 1750 were successful, we might have seen much different music history.

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