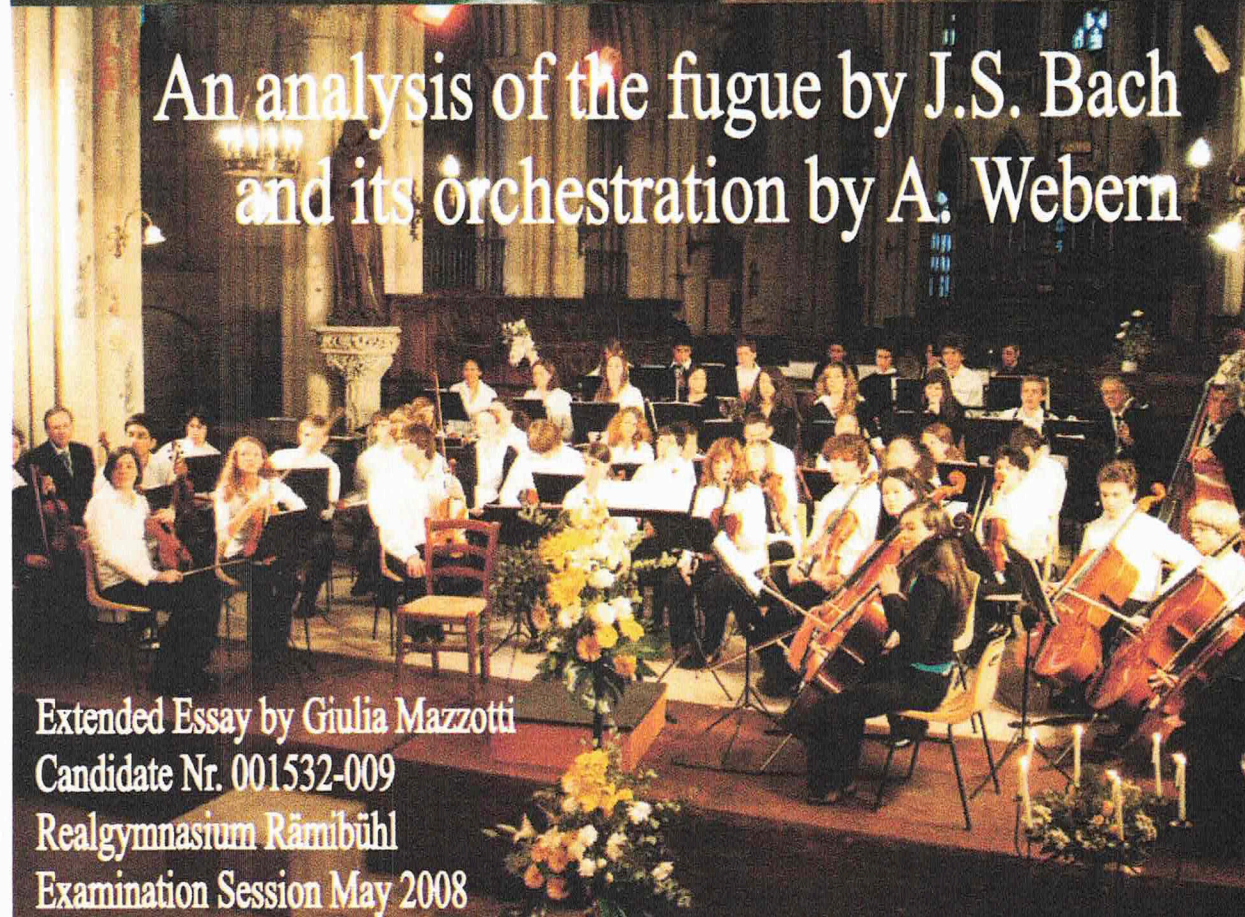




Ricercar a 6

An analysis of the fugue by J.S. Bach
and its orchestration by A. Webern



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Examination Session May 2008

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Extended Essay – Music

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Abstract

In this Extended Essay, I deal with the fugue *Ricercar a 6* from *The Musical Offering*, composed by Johann Sebastian Bach in 1747, and I compare the original fugue with an orchestration created by Anton Webern in 1935.

As the two versions had a very different effect on me, I investigated how Webern's orchestration changes some important features of the original fugue and thus its impression on the listener. For this purpose, I analysed the two versions of *Ricercar a 6*, illustrated their musical-historical context and finally outlined their differences.

Finally, I have reached the conclusion that Webern manipulates the fugue's structure by altering voice leading through the instrumentation, thus affecting the polyphonic structure of the fugue. The principle behind Webern's orchestration is consistent with his contemporary musical style. Variations in timbre and dynamics also produce an effect rather different from the original. As a result, the listener's attention moves from the complex polyphonic structure to other details. Hence, the listener's experience of *Ricercar a 6* is changed.

Acknowledgements

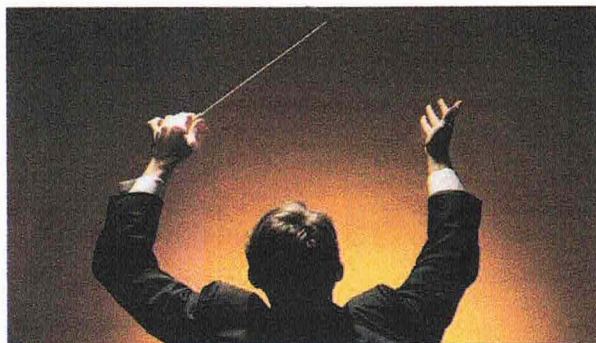
I would like to thank all my music teachers for supporting me in this great passion of mine – be it the oboe, the piano or the orchestra. Of course, I also thank all my friends and my family for sharing my musical experiences!

Most of all, I want to thank my former music teacher, orchestra conductor and supervisor Hans Meierhofer. His competence and advice was of great help for this paper. But most importantly, his enthusiasm and dedication make a complete success of all concerts of the orchestra. All these moments are unforgettable to me!

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Chapter 1



Introduction

In this Extended Essay, I deal with the fugue *Ricercar a 6*. As part of *The Musical Offering*, the six-part fugue was composed by Johann Sebastian Bach in 1747. Almost two centuries later, Anton Webern adapted it for orchestra.

The fugue is special among Bach's many compositions in a number of aspects; most striking is its complexity, as it is composed for six voices. Webern's orchestration provides evidence for the many changes that the nature of music underwent during the two centuries between the two versions.

I got to know the piece when our school orchestra performed Webern's orchestration in a concert (December 2007). The first thing I noticed was that I didn't have the feeling of playing baroque music. When I listened to the original Bach fugue and compared the two, I was surprised by the different impressions they made on me.

Hence, the choice of this topic is motivated by my personal experience as member of the orchestra performing Webern's arrangement of this composition and by the questions raised by it.

The research question I want to investigate is if and how the orchestration by Anton Webern changes significant features of the fugue, and to what extent these changes affect the fugue as a whole and the general impression it makes on the listener.

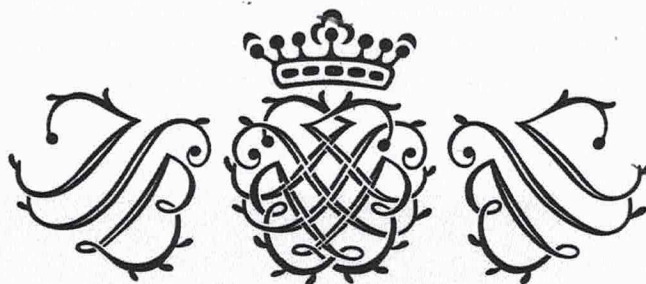
To this aim, I will first analyse Bach's original version of the fugue in order to outline its structure and harmonic features and to characterise its main elements. Then I will study Webern's orchestration and investigate how it is constructed. As I will also refer to the musical-historical context of the two versions, short notes on the life and music style of Bach and Webern will be included. Finally, I will compare the two versions, considering the points of view of the listener and of the performer.

Chapter 2



Ricercar a 6, 1747

2.1 The historical context: Johann Sebastian Bach and the Baroque era

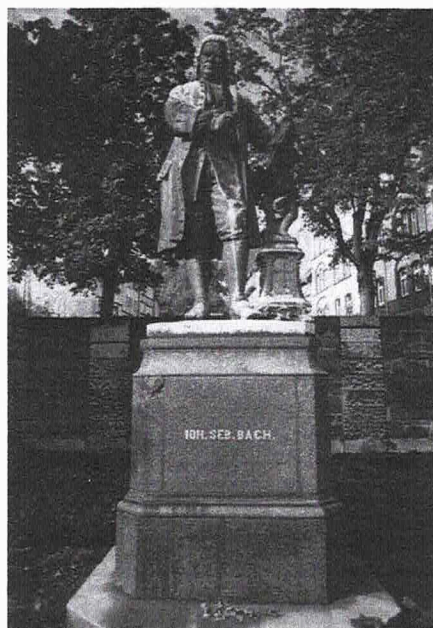


Bach's seal (arrangement of the letters J S B)

'Sein Name sollte nicht Bach, sondern Meer sein' - Ludwig van Beethoven¹

Nowadays Johann Sebastian Bach (Eisenach, March 21, 1685 – Leipzig, July 28, 1750) is considered one of the greatest composers of late Baroque music. At his time, he was known more for his skills as organist and teacher than for his compositions, which were considered old-fashioned. As a matter of fact, his sons had a greater influence than Bach himself on the composers of their time, thus contributing to the establishment of the classical style.

The importance of Bach's music was duly recognized by famous composers only later. Modern composers still mention his major influence on their music. Hence, Bach's compositions can be described as timeless.



Bach's Legacy: the Bach statue in Eisenach

During the Baroque period, from 1600 to 1750, the musical style and genres changed a lot in time and differed significantly throughout Europe. However, they shared certain characteristics. For example the polyphonic texture or the 'basso continuo' accompaniment are regarded as typical of the Baroque.

Thanks to his numerous changes of residence, Bach got to know the different strands of the Baroque period. In his music, they are drawn together. His compositions, including organ and keyboard works, orchestral and chamber music as well as vocal works, are highly intellectual, especially towards the end of his life. Rather than introducing new and innovative forms, they bring the Baroque style to its ultimate maturity.

Some of his works represent collections of compositions that thoroughly investigate the technical and artistic possibilities of a genre. An example is the *Well-tempered Clavier*, a compendium of preludes and fugues exploring the full range of keys.

Sacred music inevitably makes up a significant part of his repertory, as the demand for religious music was high. Moreover, his flair for improvisation and skills in contrapuntal technique lead to the creation of an extensive body of contrapuntal work.

¹ 'His name ought not to be Bach but Ocean' (*Bach* = creek and *Meer* = ocean in German, but also *Meer* sounds like *mehr*, i.e. *more*); Quoted from: Thayer, Alexander Wheelock. *Life of Beethoven, revised and edited by Elliot Forbes*. Princeton University Press, 1997. p.956.

2.2 About *The Musical Offering*: Genesis of *Ricercar a 6*

'(...) To obey your majesty's command was my most humble duty (...) for lack of necessary preparation, the execution of the task did not fare as well as such an excellent theme demanded. I resolved therefore and promptly pledged myself to work out this right royal theme more fully (...)'²



Concert at Frederick's court (Painting by Adolph von Menzel, 1852)

The fugue *Ricercar a 6*³ is part of a collection of late contrapuntal music pieces known as *The Musical Offering* (*Musikalisches Opfer*, BWV 1079). The idea of the work originated in a meeting of J.S. Bach and Frederick II of Prussia (a.k.a. Frederick the Great) in May 1747.

As a skilled flute player and composer Frederick II was devoted to music. He would often have evening concerts at his court, during which he performed as soloist.

Frederick II had a great admiration for Bach. As Bach's son Carl Philipp Emanuel was appointed at his court, Frederick II urged him to invite his father. When Bach arrived, Frederick II played a theme composed by himself (although historians nowadays argue about the original author) on a newly invented instrument, the pianoforte. Bach, known for his ability to extemporize, was asked to improvise a fugue based on it, which he immediately did. But when Frederick asked him to improvise a fugue in six parts, Bach decided to use a simpler theme chosen by himself.

Back in Leipzig, Bach first wrote down his original improvisation, i.e. a three-part fugue based on Frederick's theme. Then he tackled the task of writing a six-part fugue on it.

The two pieces were named *Ricercar a 3* and *Ricercar a 6*. To these he added several canons and a trio, basing all pieces on the king's theme, which became known as the 'Thema Regium'. The collection, entitled *The Musical Offering*, was to Frederick II. The copy he sent to him carried the inscription:

Regis Iussu Cantio Et Reliquia Canonica Arte Resoluta
(At the King's Command, the Song and the Remainder Resolved with Canonic Art)⁴

It represents an acrostic, the first letters of the words forming the word 'ricercar'. The two ricercars within *The Musical Offering* play in fact a central role.

² From the dedicatory letter to the king included by Bach to *The Musical Offering*; Quoted from: Hofstadter, Douglas R. *Gödel, Escher, Bach: An Eternal Golden Braid*. Vintage Books, New York 1980, p.6.

³ The composition is sometimes labelled *Fuga (ricercata) a 6 voci*

⁴ Hofstadter, Douglas R. *Gödel, Escher, Bach: An Eternal Golden Braid*. Vintage Books, New York 1980, p.7.

2.3 Analysis of *Ricercar a 6*: Form and structure⁵

The name 'ricercar' originates from the Latin word 'ricercare', meaning 'to seek'. The composition form ricercar evolved from the traditional motet in the late Renaissance. As imitative contrapuntal form, it developed into the fugue during the Baroque era. Hence, *Ricercar a 6* refers to a six-part fugue.

Bach's original score exists in two versions; the first written on two staves only, whereas in the second the six parts are noted on six separate staves, as it was common for scholarly polyphonic works. As for Bach's other late compositions, there aren't any indications about the instrumentation. Originally, the fugue was meant to be played on the cembalo; indeed, the six parts are arranged in a way that makes it possible to play them with two hands. However, given the polyphonic structure, string sextet arrangements have always been very common.



Copy of a cembalo from the court of Frederick II

In *Ricercar a 6* the theme representing the primary motif is the 'Thema Regium' mentioned above.



The 'Thema Regium' and his structural elements

The long note values, together with the choice of a minor key (c-minor), provide its serious and regal character.

The 'Thema Regium' can be divided into **three parts**: The key is defined with the **c-minor triad** (tonic) at the beginning. The notes in the following **diminished seventh leap (A^b - B^b)** (part of a dominant chord) frame the preceding triad. This first part is concluded with a **rest**. In a second part, the **melody falls chromatically**. Together with the changing note values and the syncopation, this produces a feeling of suspense and hesitation, as if the melody were seeking ('ricercare'!) without knowing where to go. The third part is firmer again, as it consists of **a cadence, leading to the tonic**.

The exposition lasts 56 bars; the subject (tonic key) is followed by the answer transposed to the dominant key. The answers are tonal, i.e. they are not exact transpositions of the subject, but altered in some way in order to stay in the key of the subject. In this case, the third note is

⁵ The original score of *Ricercar a 6* used as references in the following is included in Appendix 1; in some other editions, the 5th and the 6th parts are exchanged. For a schematic structural analysis see Appendix 2.

altered (C instead of D). As a result, the initial triad is no longer a triad in the answer. The same occurs again for the 2nd and 3rd subjects and answers. Afterwards, six middle entries occur, separated by rather long episodes.



Bach's manuscript of Ricercar a 6

Since the theme is highly chromatic and rhythmically irregular, it is not suitable for a complex fugue structure; neither countersubjects nor stretti occur. But the episodes, which have a tension-releasing function, are characterized by fragments of the theme that appear repeatedly in slightly modified form in the different parts and create the impression of a canon (e.g. in the 2nd episode, bars 103-114, the element of the falling chromatic scale is used, representing the theme for a small canon). Mostly, elements such as chromatically falling melodies and firm triads recall the theme.

The effect of the theme fragments is that the theme seems to be seeking the right moment to appear ('ricercare' again!), thus creating a feeling of uncertainty throughout the whole piece.

Rhythmic irregularities like those of the theme (e.g. syncopations) occur in the whole fugue. The episodes also feature long eight-note-chains moving through the different parts, used for modulation (e.g. bars 123-130). On the other hand, long note values are also frequent (e.g. the first five parts in bars 64-71)

A closer look shows that the fugue is not thoroughly six-parted; between bars 132 and 144, for example, the 3rd, 4th and 6th voices rest. The fugue ends with a last entry of the subject in the tonic key, without coda. Instead of featuring c-minor as final chord the picardy third (E instead of E^b in the 6th voice) makes the piece end in C-major.

Summarizing, the complexity of *Ricercar a 6* is caused by the texture (given that there are six parts that interact and produce an especially full sound), by the harmonic and rhythmic features of the theme, and by the frequent theme elements occurring in the episodes. *Ricercar a 6* provides a good example of the intellectual depth of Bach's compositions, which makes them seem so modern.

Chapter 3



Ricercar a 6, 1935

3.1 The historical context: Anton Webern and his music

Anton Webern (Vienna 1883 – Mittersil 1945) was an Austrian composer and a pupil of Arnold Schönberg. His close relationship to his former teacher had a great influence on the evolution of Webern's style, which features many resemblances with Schönberg's revolutionary music. Likewise, Webern started in a late romantic style, which then evolved into atonality. Later, he began to use Schönberg's newly developed twelve-tone-technique in his compositions. He went even further than Schönberg in trying to achieve complete control over the structure of his pieces; not only are the notes schematically organized in terms of pitch, but also in terms of duration and dynamics. The essential core of Webern's music is that he tries to create in his compositions as many connections as possible, each note being related to all the others like in a tightly woven web. At the end of his book *Der Weg zur Neuen Musik*, Webern refers in fact to the following Latin palindrome⁶:



Webern and Schönberg



The famous Sator-square: read top-to-bottom, bottom-to-top, left-to-right, and right-to-left, the verse always remains the same

This symbol represents the essence of Webern's music, and, through the different symmetries among the five words, also the permutations of a theme as used in the contrapuntal technique: prime form, inversion (the theme melody turned upside down), retrograde (the melody backwards) and retrograde inversion (upside down and backwards). Hence, it shows that the connections between the different elements of a composition (i.e. the parts and the themes) are at the heart of contrapuntal technique. Webern's interest for Baroque music is therefore not surprising.

Webern's typical compositions are short and thinly textured, giving great importance to the timbres (which results in detailed instructions to the performer). The melody lines include great interval leaps and often move rapidly between the instruments. This technique of composition was developed by Schönberg and is referred to as 'Klangfarbenmelodie' ('timbre-melody'). Webern's music did not immediately meet a positive public response; the Nazis even denounced it as 'degenerate art'. However, his ideas and techniques had a significant influence on later composers, e.g. by leading to the development of serial music.

⁶ The verse *Sator Arepo Tenet Opera Rotas* may be translated as *The sower Arepo holds the wheels with effort*. The symbol is however highly enigmatic, which makes a translation problematic.

3.2: Analysis of Webern's orchestration of *Ricercar a 6*⁷

Contrary to more conventional arrangements, Webern's orchestration consists of more than just assigning the six parts to different instruments of the orchestra.

First, quite unusually, Webern's orchestration requires the following orchestra elements: strings (first and second violin, viola, violoncello and double bass), solo winds (a flute, an oboe, an English horn, a clarinet, a bass clarinet, a bassoon, a horn, a trumpet and a trombone), timpani and harp.

Then, Webern divides the melodic line of the theme into seven fragments⁸. Whenever it appears, the theme is performed by three different instruments, to which its seven fragments are assigned following always the same sequential pattern.

The 'Thema Regium' fragmented and assigned to three different instruments according to Webern's orchestration

In this way, the melodic line of the theme flows between the three instruments. This idea can be well seen in the score:

The first subject entry of *Ricercar a 6* in the score of Webern's orchestration (resting instruments have been omitted)

⁷ The score of Webern's orchestration of *Ricercar a 6* used for reference in the following is included in Appendix 3.

⁸ Note that in chapter 2.3 I proposed the division of the theme into three subparts

The effect of this fragmentation is that the feeling of uncertainty and seeking ('ricercar'), given by the melodic features of the theme⁹, is extended to a new dimension; now, the theme seems to be seeking also for the right timbre, unable to decide on one of the three instruments. When looking at the combinations of instruments Webern uses for the different theme entries, it can be observed that the same combination of three instruments never occurs twice:

Theme entry (bar nr.)	Instrument 1	Instrument 2	Instrument 3
Subject (1-8)	trombone	horn	trumpet
Answer (9-16)	flute	clarinet	oboe
2 nd subject (17-24)	bass clarinet	trombone	bassoon
2 nd answer (25-33)	English horn	horn	bass clarinet
3 rd subject (37-44)	trumpet	oboe	clarinet
3 rd answer (49-56)	bass clarinet	bassoon	violoncello
1 st middle entry (95-102)	bassoon	bass clarinet	trombone
2 nd middle entry (115-122)	trumpet	oboe	horn
3 rd middle entry (131-138)	oboe	flute	trumpet
4 th middle entry (145-152)	horn	trombone	trumpet
5 th middle entry (171-178)	clarinet	trumpet	horn
6 th middle entry (197-204)	violoncello and double bass in unison		

Until the very last entry, the theme is played by wind instruments only (with the exception of the 3rd answer). This explains Webern's need for a wider than normal range of solo wind instruments, of which he exploits the variations in timbre, pitch and dynamics they allow to full capacity.

The 6th middle entry is the only occasion when the theme is played in its full length by a single instrument (in this case violoncello and double bass in unison), thus creating a theatrical effect for the final climax.



Wind instruments of the Rämibühl orchestra

In contrast to the broken-up theme, there are some places where a tune in an accompanying part opposed to the theme is played in its full length by a single instrument, for example a high-pitched wind instrument (e.g. the oboe in bars 27-29) or the solo violin (e.g. bars 94-103). The attention of the listener is thus attracted to a melody other than the theme.

Generally, all parts are fragmented, and it is not possible to trace them or to determine which instrument is playing which part; they only exist as short melodic units played by the

different instruments. As a consequence, the instruments are all connected, one with all the others, since they have to cooperate to form the melodic line. Webern achieves his aim, i.e. to create a composition where everything is related to everything¹⁰.

⁹ See Chapter 2.3

¹⁰ See Chapter 3.1

The idea of breaking up the parts and spreading them over the different instruments is closely related to the 'Klangfarbenmelodie' technique¹¹. The resulting variations in timbre show how Webern attributes great importance not only to the harmonic interplay of the instruments but also to the quality of the sound. Contrasting articulation and playing techniques, e.g. staccato and pizzicato vs. legato and portato, enhance the variations in sound quality (e.g. bars 123-130: some woodwinds play portato, some brass winds staccato, some pizzicato notes occur in the strings' score and melodies consisting of legato eighth-note chains alternate among other wind instruments).

The instrumentation allows also for an accurate development of the dynamics. In some places, a specific part is played by more than one instrument simultaneously, thus becoming more relevant than the others (e.g. the theme entry at bar 95: the 2nd violin doubles the part of the bassoon). The dynamics helps also to create tension throughout the whole piece. For example, after the exposition (bar 57), the beginning of a new segment is clearly marked. Then, an escalation occurs as more and more instruments join in, and the music swells up like a stream, until the climax is reached with the (suddenly very delicate) woodwinds and violin solo and the following fermata (bar 78). After that, a new part of the piece begins.



Strings of the Rämibühl orchestra

To summarize, Webern's orchestration changes the voice leading by splitting up the six parts and by assigning them to many different instruments. By doing so, Webern makes full use of the different timbres and playing techniques. More contrasts are created, thus making many details in the different parts be highlighted and developing tension over the whole composition.

¹¹ See Chapter 3.1

Chapter 4

Johann Sebastian Bach.

Anton Webern

***Ricercar a 6* between two centuries –
a comparison**

In comparing the two versions of *Ricercar a 6*, I consider the points of view of the performer and of the listener. The observations below are based on my personal experiences in both roles.¹²

I have played Bach's contrapuntal music on the piano many times. On these occasions, e.g. while interpreting the *Two-part Inventions* (BWV 778-786), I always appreciate how the two hands play two completely independent, equally valued parts, which I often practice separately. Of course, the independence of the parts represents a major difficulty if the two hands have to play more than two parts. Trying to play a *Three-part Invention*, I noticed how demanding it was to give continuity and equal weight to each part. Coordinating and playing six parts seems almost impossible to me.

Listening to the cembalo recording of *Ricercar a 6*, I notice how Pierre Hantaï tries to convey the fugue's structure by preceding each theme entry with a slight ritardando, so that its beginning is more distinct and attracts the listener's attention. Hence, it is only by the theme entries that a certain structure is defined. The other parts are difficult to follow and are mostly perceived as accompaniment only.

Although this observation refers to this particular interpretation of the piece, it addresses a crucial characteristic of *Ricercar a 6* in its original form. As for all polyphonic compositions, the listener inevitably tries to follow each independent part. But in *Ricercar a 6*, the attempt fails due to the fugue's extremely complex structure. Textural, harmonic and rhythmic features simply overwhelm the listener. Indeed, also in an arrangement where the parts are played by different instruments (i.e. a string-sextet or a wood-wind sextet), I notice that following the single parts requires too much concentration and is anyhow extremely difficult. The only way to make them distinct would possibly be to assign the parts to six instruments with completely different timbres.

As a result of the features discussed above, Bach's fugue does not really reach the listener. I perceive it as confused and rather cold, because I feel that I am not able to overlook its complex structure and appreciate its details.

One might even argue if this score is mainly abstract, as it is the case for some of Bach's later works where the instrumentation is not indicated. It might not necessarily be meant for performance, but rather for a purely intellectual appreciation by reading the score and 'seeking' ('ricercare' once again!) one's way through the construction.

My experience with Webern's orchestration was completely different. Due to the extremely complex texture, Webern's *Ricercar a 6* challenges any orchestra. It is an extremely difficult task to combine the cues of so many instruments. We needed numerous and accurate rehearsals. The feeling of being a small element of a whole body and of interacting with the other elements, which is typical of my experience in the orchestra, has never been so strong. By splitting up the parts, Webern destroys their continuity that constitutes the principle of contrapuntal technique and of any polyphonic composition. The result is that all instruments become dependent on each other. And as the instruments of the orchestra fuse into a whole, the parts do so, too. The six independent, well defined parts in Bach's fugue no longer exist as such.

Hence, the listener is forced to perceive Webern's version of *Ricercar a 6* as a whole rather than to distinguish between the six constituent parts. The progression of the piece is clearly marked by the development of dynamics and texture, thus diminishing the importance of the theme entries in determining its structure.

¹² The recordings of the different arrangements mentioned in the following are included in Appendix 4 for comparison.

As a result, the composition is less demanding for the listener. Freed of the need to follow the six parts, the listener can turn his attention to other details, e.g. fragments of melodies in accompanying parts highlighted as violin soli. The orchestration seems more varied and lively, capturing the listener and leaving a deeper impression than the original version.

An arrangement does not include changes in the harmonic features. It can only operate with voice leading, instrumentation and effects caused by variations in dynamics, articulation and timbre. The two versions of *Ricercar a 6* show to which extent this can already make a big difference.

Chapter 5



Conclusion

I have shown that Webern's orchestration indeed changes significant features of Bach's original fugue. By fragmenting the theme and parts, the independent parts on which contrapuntal technique is based are dissolved. At the same time, he uses a wide range of carefully chosen timbres and accurate indications of dynamics, articulation and playing techniques to make it more varied and to highlight certain details.

As a result, the experience of the listener is completely different. Webern's *Ricercar a 6* is perceived as a whole rather than as six distinct parts. At the same time, the attention is drawn on melody fragments that would otherwise be perceived as accompaniment only.

I think that Webern's changes suit *Ricercar a 6* and apparently fully exploit the fugue's potential. I would like to mention two points to support my argument.

First, in the original version already, it is not easy to distinguish between the parts, due to the complex texture and the frequent occurrence of rather long note values and long rests. Hence, the continuity of the independent parts is less evident than in the standard polyphonic composition. By destroying it completely, Webern prevents the listener from trying to follow them.

Secondly, the idea of fragmenting the theme is present in the original version already, where fragments are used for the composition of the episodes and create the feeling of uncertainty and seeking ('ricercar'). Webern enhances this effect by extending it to a new dimension, i.e. the continuous switching between a variety of timbres.

A question that arose during this investigation is why Webern chose to orchestrate this particular fugue. I leave it open whether he was attracted by its textural complexity determined by the six voices, or if he was inspired by the harmonic features and the character of the theme which make it suitable for fragmentation and application of more modern musical techniques.

Summarizing, I think that Webern managed to elevate Bach's fugue. The result may seem surprising; Webern's changes, typical for his own style, create a piece which is easier to appreciate for the listener and more moving than the original version. Usually, it is the other way round; modern pieces seem colder than Baroque compositions, and their structure more difficult to perceive. This proves once more how Bach's *Ricercar a 6* is in its structural and harmonic complexity far more modern than common Baroque compositions.

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Chapter 1 :

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Chapter 2 :

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Chapter 3:

- Photograph of Anton Webern:
<http://www.essl.at/pic/projects/weberuhrwerk/webern.jpg>
- http://mariopettenati.altervista.org/foto_home.jpg
- http://www.schoenberg.at/2_center/fotoservice/img/foto1279.jpg
- <http://upload.wikimedia.org/wikipedia/commons/1/16/P8190074.jpg>
- Self-made photograph of the Rämibühl orchestra during a performance in Bernay, France (2007)
- Self-made photograph of the Rämibühl orchestra during a performance in Zurich (2005)

Chapter 4:

- J.S. Bach's signature: <http://www.americanbachsociety.org/images/lsignature.gif>
- Anton Webern's signature: http://www.audio-muziek.nl/componisten/afbeeldingen/webern_aan_hartmann_brief23-12-44.jpg

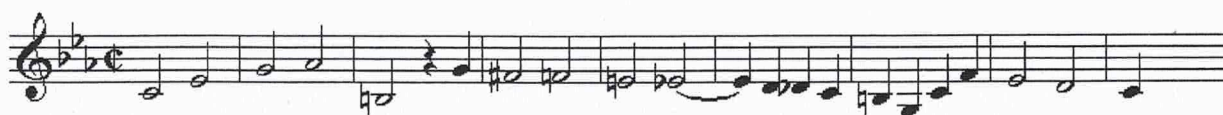
Chapter 5:

- <http://www2.arnes.si/~sspbluka/orkester/dirigent2.jpg>

(All mentioned internet-pages: 02.02.2008)

Appendices

- 1: Score of *Ricercar a 6*: Original version by J.S. Bach
- 2: Table: Analysis of the structure of *Ricercar a 6*
- 3: Score of *Ricercar a 6*: Orchestration by A. Webern
- 4: CD: Different arrangements of *Ricercar a 6*



Ricercar a 6 from 'The Musical Offering', BWV 1079

J.S. Bach

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

16 17 18 19 20 21 22 23 24 25 26 27

28 29 30 31 32 33 34 35 36 37 38

Appendix '1'
J.S. Bach Ricercar a 6 (original score)
The spots referred to in the essay are highlighted

39 40 41 42 43 44 45 46 47 48 49

50 51 52 53 54 55 56 57 58 59 60 61

62 63 64 Ref. p. 9 65 66 67 68 69 70 71 72 73

long note values in most parts

74 75 76 77 78 79 80 81 82 83 84 85 86

87 88 89 90 91 92 93 94 95 96 97 98

99 100 101 102 Ref p. 9: 103 104 105 106 107 108

chromatically falling scale as theme fragment

109 110 111 112 113 114 115 116 117

118 119 120 121 122 123 Ref P-9 124 125

126 127 128 129 130 131 132 133

long eighth-note chains

134 135 136 137 138 139 140 141

This system of music contains measures 134 through 141. It features five staves: a vocal line in the top staff, two piano staves (treble and bass clef) in the middle, and two bass staves (treble and bass clef) at the bottom. The key signature is three flats (B-flat, E-flat, A-flat). The music includes various rhythmic patterns, including eighth and sixteenth notes, and rests. Measure 136 has a slur over the vocal line. Measure 138 has a slur over the piano bass line.

142 143 144 145 146 147 148 149

This system of music contains measures 142 through 149. It features five staves: a vocal line in the top staff, two piano staves (treble and bass clef) in the middle, and two bass staves (treble and bass clef) at the bottom. The key signature is three flats. The music includes various rhythmic patterns, including eighth and sixteenth notes, and rests. Measure 144 has a slur over the piano treble line. Measure 146 has a slur over the piano bass line. Measure 148 has a slur over the vocal line.

150 151 152 153 154 155 156 157

This system of music contains measures 150 through 157. It features five staves: a vocal line in the top staff, two piano staves (treble and bass clef) in the middle, and two bass staves (treble and bass clef) at the bottom. The key signature is three flats. The music includes various rhythmic patterns, including eighth and sixteenth notes, and rests. Measure 152 has a slur over the piano treble line. Measure 154 has a slur over the piano bass line. Measure 156 has a slur over the vocal line.

This image shows a page of musical notation, likely a score for a string quartet or similar ensemble. The score is organized into three systems, each containing four staves. The measures are numbered sequentially from 158 to 185. The notation includes various note values, rests, and dynamic markings. The key signature is B-flat major (two flats), and the time signature is 4/4. The first system (measures 158-167) features a melodic line in the first staff with a long slur, and a rhythmic accompaniment in the lower staves. The second system (measures 168-175) continues the melodic and rhythmic patterns. The third system (measures 176-185) concludes the page with a final melodic phrase and a cadence. The notation is clear and professional, typical of a published musical score.

205 ref. p. 9.

picardy third

Appendix 2

The following table provides a schematic outline of the structure of the original form of *Ricercar a 6* and its elements.

Beat	>>> EXPOSITION	5	10
1 st voice			
2 nd voice			1 st Answer
3 rd voice	1 st Subject		
4 th voice			
5 th voice			
6 th voice			

		15	20	25
				2 nd
	2 nd Subject			

		30	35	40
				3 rd Subject
Answer				

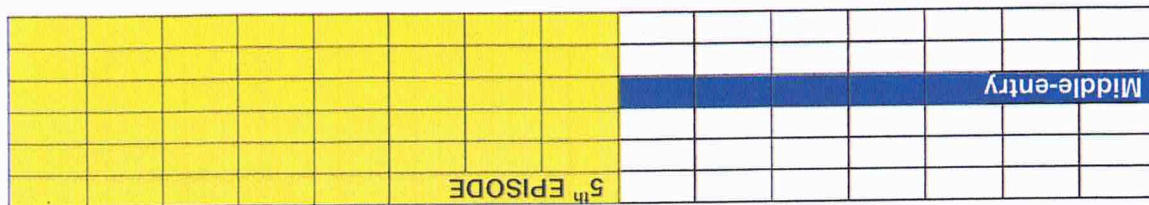
		45	50	55
				3 rd Answer

	>>> END OF EXPOSITION	65	70
	1 st EPISODE		

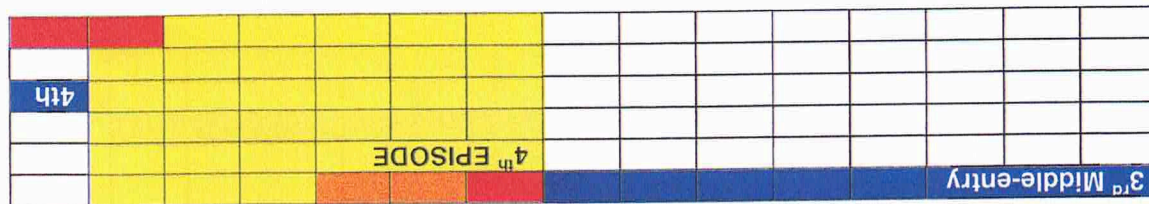
		75	80	85



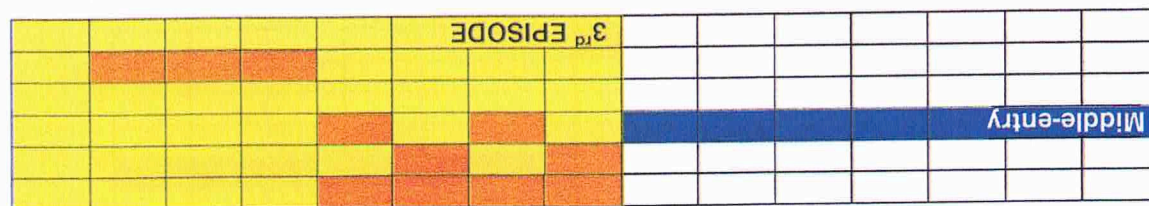
175 170 165



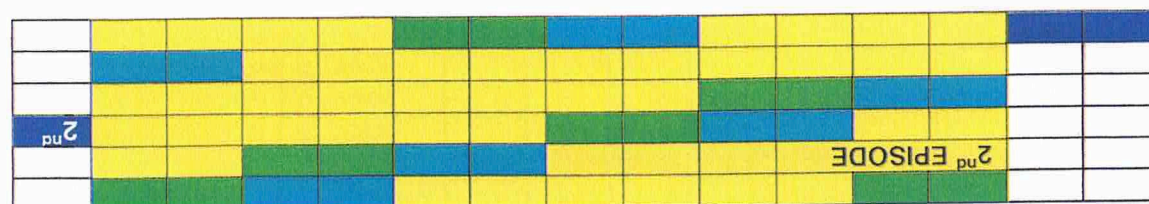
160 155 150



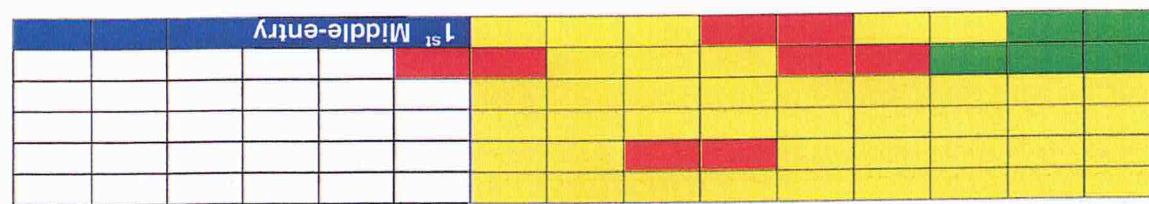
145 140 135



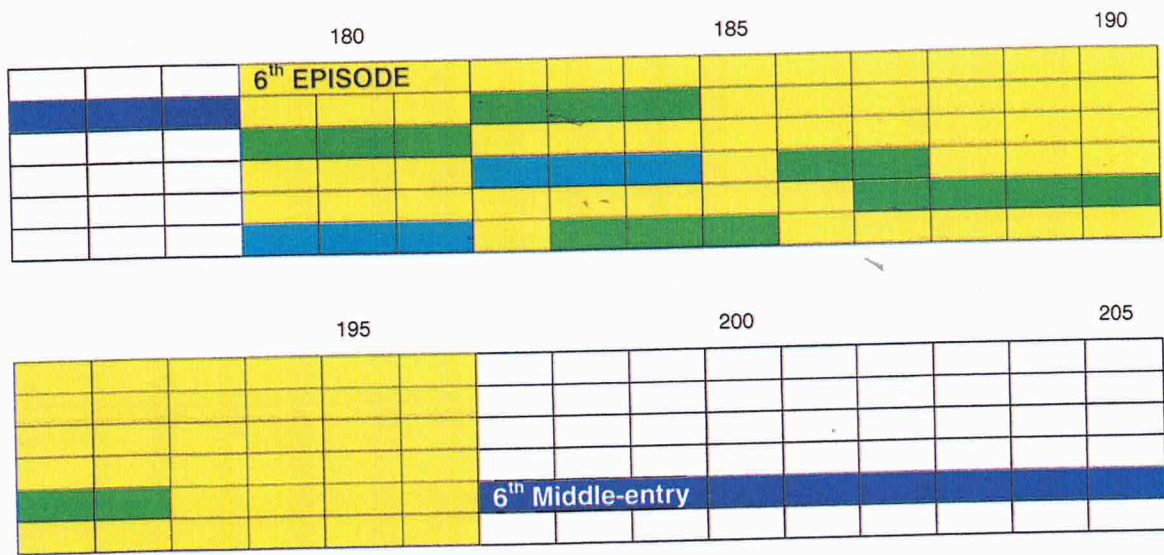
130 125 120








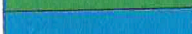
115 110 105



100 95 90



Key

- Theme entries 
- Episodes 
- Elements of the episodes:
- Theme fragment including the triad at the beginning of the theme 
- Inverse theme fragment (triad) 
- Theme fragment including a chromatically falling melody 
- Counter-motif to the chromatically falling melody (ascending scale) 

EDUARD CLARK ZUGEEIGNET

FUGA (RICERCATA)

Nr.2 aus dem „Musikalischen Opfer“ von Joh. Seb. Bach

Für Orchester gesetzt von
Anton Webern

Sehr mäßig $\text{♩} = ca 60$

poco rubato

Flüte
Oboe
Englisch Horn
Klarinette in B
Baß-Klarinette in B
Fagott
Horn in F
Trompete in C
Trombone
Viola
Violoncello
Kontrabaß

Fragmentation of the theme

Fl.
Ob.
E. H.
Kl. B
Bskl. B
Fg.
Hr. F
Trp.
Pos.
Pk.
Hrf.
1. Gg.
2. Gg.
Br.
Vi.
Kbs.

poco allargando - - - tempo

poco allargando - - - tempo

Appendix 3
Score of A. Webern's Ricercar a 6 (orchestration)
The spots referred to in the essay are highlighted

poco rubato *poco allarg.*

Fl. 11 12 13 14 15

Ob.

E. II.

Kl. B

Bskl. B

Fg.

Hr. F

Trp.

Pos.

Pk.

Hrf.

1. Gg. *poco rubato* *poco allarg.*

2. Gg.

Br. Solo

Vlc.

Kbs.

Fl. 16 17 18 19 20

Ob.

E. II.

Kl. B

Bskl. B

Fg.

Hr. F

Trp.

Pos.

Pk.

Hrf.

1. Gg. *tempo* *poco rubato*

2. Gg. *Solo* *Alle pizz.* *Solo*

Br. *Alle arco* *mit Del.* *Solo*

Vlc. *mit Del.* *Solo*

Kbs.

poco allargando - - - tempo

FL. 21 22 23 24 25

Ob.

E. H.

Kl. n

Bskl. n

Fg.

Hr. r

Trp.

Pos.

Pk.

Hrf.

1. Gg. (Solo) pizz. arco

2. Gg. arco pizz.

Br.

Vlc. (Solo) pizz. arco

Kbs.

Dpf. ab

Alle mit Dpf.

Ref p. 13 poco rubato

26 27 28 29 30

FL.

Ob.

E. H.

Kl. n

Bskl. n

Fg.

Hr. r

Trp.

Pos.

Pk.

Hrf.

1. Gg.

2. Gg.

Br. (Solo)

Vlc.

Kbs.

Oboe solo

ohne Dämpfer

Solo

poco rubato

10

poco rit. — — — tempo

31 32 33 34 35

Fl. *p*

Ob. *p*

E. H. *p*

Kl. B *p*

Bskl. B *p*

Fg. *p*

Hr. F *p*

Trp. *p*

Pos. *p*

Pk. *pp*

Hrf. *p*

poco rit. — — — tempo

1. Gg. (Solo) Solo (ohne Dpf.) *p*

2. Gg. *pizz.* *arco* *p*

Br. *Alle pizz.* *Solo Dpf. ab.* *p*

Solo Vlc. Solo (m. Dpf.) *p*

lie übr. *p*

Kbs. *p*

11

poco rubato

36 37 38 39 40

Fl. *p*

Ob. *p*

E. H. *mp*

Kl. B *mp*

Bskl. B *mp*

Fg. *mp*

Hr. F *gest.*

Trp. (m. Dpf.) *p*

Pos. *p*

Pk. *pp*

Hrf. *p*

poco rubato

Solo 1. Gg. *p*

die übr. mit Dpf. *p*

2. Gg. *pizz.* *p*

Br. (Solo) Solo ohne Dpf. *arco* *mp*

Vlc. *Alle* *pizz.* *p*

Kbs. *p*

poco allargando - - - tempo

Fl. 41 42 43 44 45

Ob. *p*

E.H. *p*

Kl. *p*

Bskl. *p*

Fg. *p*

Hr. *p* *offen*

Trp. *mp*

Pos. *p*

Pk. *p*

Hrf. *p*

poco allargando - - - tempo

Solo 1.Gg. *p*

die übr. *p* *pizz.* *arco*

2.Gg. *p* *arco*

Solo Br. *p* *nimmt Dpf.*

die übr. *p* *(mit Dpf.) arco*

Vlc. *pizz.*

Kbs. *p*

poco allargando - - - tempo

Fl. 46 47 48 49 50 13

Ob. *p*

E.H. *p*

Kl. *p*

Bskl. *p*

Fg. *p*

Hr. *p*

Trp. *p*

Pos. *p*

Pk. *er.* *pp*

Hrf. *p*

poco allargando - - - tempo

Solo 1.Gg. *mp* *p*

die übr. *mp* *p*

2.Gg. *p*

Solo Br. *Alle (mit Dpf.)* *p*

die übr. *pizz.* *p*

Vlc. *p*

Kbs. *mit Dpf.* *pizz.*

13

14 poco rubato poco rit. - - -

51 52 53 54 55

Fl. p p p p

Ob. p p p p

E.H. p p p p

Kl. p p p p

Bskl. p p p p

Fg. mf mf mf mf

Hr. p p p p

Trp. p p p p

Pos. p p p p

Pk. p p p p

Hrf. p p p p

Solo 1.Gg. p mf p

die übr. p p p p

2.Gg. p p p p

Br. p p p p

Vlc. p p p p

Kba. p p p p

arco p p p p

mf p p p p

U. E. 10.977

Exp. → tempo, fließender → New segment

56 57 58 59 60

Fl. p p p p

Ob. p p p p

E.H. mp mp mp mp

Kl. p p p p

Bskl. p p p p

Fg. p p p p

Hr. p p p p

Trp. p p p p

Pos. p p p p

Pk. p p p p

Hrf. p p p p

Solo 1.Gg. p mp p nimmt Dpf.

die übr. p p p p

2.Gg. p p p p

Br. p p p p

Vlc. p p p p

Kba. p p p p

pizz. p p p p

cresc. p p p p

U. E. 10.977

15

61 62 63 64 65

Fl. *mf* *f*

Ob. *mf* *f*

E. H. *mf* *f*

Kl. A *mf* *f*

Bskl. B *mf* *f*

Fg. *mp* *f*

Hr. r *mf* *f* *nimmt Dpf.*

Trp. *mp* *mf* *f*

Pos. *mf* *f*

Pk.

Hrf. *f*

1. Gg. *arco* *mp* *cresc.* *f*

2. Gg. *mf*

Br. *arco* *mf* *f*

Vlc. *mp* *cresc.*

Kbs. *mp* *cresc.*

sehr fließend, rubato

66 67 68 69 70

Fl. *plüf*

Ob. *f* *plüf*

E. H. *f* *plüf*

Kl. B *f* *plüf*

Bskl. B *f* *plüf*

Fg. *f*

Hr. f *plüf*

Trp. *f* *plüf*

Pos. *f* *plüf*

Pk.

Hrf.

1. Gg. *plüf*

2. Gg. *f*

Br. *f*

Vlc. *f*

Kbs. *arco* *f*

sehr fließend, rubato

X

rit. ----- tempo I. sehr getragen

Musical score for measures 71-75. Instruments include Fl., Ob., E.H., Kl. B, Bskl. B, Fg., Hr. F, Trp., Pos., Pk., Hrf., 1. Gg., 2. Gg., Br., Vlc., and Kbs. Dynamics range from *pp* to *mf*. Performance instructions include *mit Dpf.*, *dim.*, and *rit.*

U. E. 10.377

Ref. P. 14
molto rit. 78 tempo I. sehr ruhig

Musical score for measures 76-80. Instruments include Fl., Ob., E.H., Kl. B, Bskl. B, Fg., Hr. F, Trp., Pos., Pk., Hrf., Solo 1. Gg., die übr., 2. Gg., Br., Vlc., and Kbs. Dynamics range from *pp* to *ppp*. Performance instructions include *molto rit.*, *tempo I. sehr ruhig*, *Fermata*, and *Solo Dpf. ab*. A circled measure 78 contains a fermata symbol.

U. E. 10.377

81 82 83 84 85

Fl. *pp* *p*

Ob. *pp*

E.H. *pp*

Kl. *pp* *p*

Bskl. *pp* *p*

Fg. *pp*

Hr. *pp* (m. Dpf.)

Trp. *pp* *pp*

Pos. *p*

Pk.

Hrf. *pp* *p*

Solo 1.Gg. *pp* ohne Dpf.

die übr.

Solo 2.Gg. *pp*

Br. *pp*

die übr.

Solo Vic. *pp*

die übr.

Kbs. *pp*

rit. - - - tempo

86 87 88 89 90

Fl. *p* *pp*

Ob. *mp*

E.H. *pp* *pp*

Kl. *pp* *pp*

Bskl. *pp* *pp*

Fg. *mp* *p*

Hr. *mp* Dämpfer ab

Trp. *p* *pp*

Pos. *pp*

Pk. *pp*

Hrf.

Solo 1.Gg. *pp* Solo

2.Gg. *pp*

Br. *pp* Solo

Vic. *pp* Solo

Kbs. *pp* Solo (ohne Dpf.)

XIV

rit. - - - - Ref p. 13 Ref p. 14

91 92 93 94 95

Fl. *pp* *pp*

Ob. *pp*

E. H. *p* *pp*

Kl. *pp*

Bskl. *pp*

Fg. *pp*

Hr. *pp*

Trp. *pp* *p* *pp*

Pos. *pp*

Pk. *pp* *pp*

Hrf. *pp*

1. Gg. (Solo) *pp* Solo

2. Gg. *pp* Solo

Br. (Solo) *p* *pp* Solo

Vic. (Solo) *pp* Solo

Kbs. (Solo) *pp* Solo

U. E. 10,377

theme entry

tempo Violin Solo

doubled entry

poco rubato

96 97 98 99 100

Fl. *p*

Ob. *pp*

E. H. *pp*

Kl. *pp*

Bskl. *pp*

Fg. *p*

Hr. *p*

Trp. *p*

Pos. *p*

Pk. *pp*

Hrf. *p*

1. Gg. (Solo) *pp*

2. Gg. *pp*

Br. (Solo) *pp* Solo

Vic. (Solo) *pp*

Kbs. (Solo) *pp*

U. E. 10,377

poco rubato

101 102 103 104 105

Fl. *pp* *p*

Ob. *p* *pp* *pp* *pp* *pp*

E.H. *pp* *pp* *pp* *pp* *pp*

Kl. *p* *pp* *pp* *pp* *pp*

Bskl. *p* *pp* *pp* *pp* *pp*

Fg. *p* *pp* *pp* *pp* *pp*

Hr. *pp* *pp* *pp* *pp* *pp*

Trp. *pp* *pp* *pp* *pp* *pp*

Pos. *pp* *pp* *pp* *pp* *pp*

Pk. *pp* *pp* *pp* *pp* *pp*

Hrf. *pp* *pp* *pp* *pp* *pp*

rit. - - - tempo, fließender

Solo *pp* *pp* *pp* *pp* *pp*

1.Gg. *pp* *pp* *pp* *pp* *pp*

die übr. *pp* *pp* *pp* *pp* *pp*

2.Gg. *pp* *pp* *pp* *pp* *pp*

Solo *pp* *pp* *pp* *pp* *pp*

Br. *pp* *pp* *pp* *pp* *pp*

die übr. *pp* *pp* *pp* *pp* *pp*

Vic. (Solo) *pp* *pp* *pp* *pp* *pp*

KUs. (Solo) *pp* *pp* *pp* *pp* *pp*

106 107 108 109 110

Fl. *p* *mp* *p* *p* *p*

Ob. *p* *pp* *pp* *pp* *pp*

E.H. *pp* *pp* *pp* *pp* *pp*

Kl. *p* *pp* *pp* *pp* *pp*

Bskl. *p* *pp* *pp* *pp* *pp*

Fg. *p* *pp* *pp* *pp* *pp*

Hr. *pp* *pp* *pp* *pp* *pp*

Trp. *pp* *pp* *pp* *pp* *pp*

Pos. *pp* *pp* *pp* *pp* *pp*

Pk. *pp* *pp* *pp* *pp* *pp*

Hrf. *pp* *pp* *pp* *pp* *pp*

ohne Dpf. *pp* *pp* *pp* *pp* *pp*

mit Dpf. *pp* *pp* *pp* *pp* *pp*

1.Gg. *pp* *pp* *pp* *pp* *pp*

2.Gg. *pp* *pp* *pp* *pp* *pp*

Br. *pp* *pp* *pp* *pp* *pp*

Vic. *pp* *pp* *pp* *pp* *pp*

Kbs. *pp* *pp* *pp* *pp* *pp*

vi

Musical score for page 26, measures 111-115. The score includes staves for Fl., Ob., E.H., Kl., Bskl., Fg., Hr., Trp., Pos., PK., Hrf., 1.Gg., 2.Gg., Br., Vlc., and Kbs. Dynamics include *mp*, *p*, *espr*, and *Alle (mit Dpf.)*. A vertical line is drawn between measures 114 and 115.

Musical score for page 27, measures 116-120. The score includes staves for Fl., Ob., E.H., Kl., Bskl., Fg., Hr., Trp., Pos., PK., Hrf., 1.Gg., 2.Gg., Br., Vlc., and Kbs. Dynamics include *poco rubato*, *mf*, *mit Dpf.*, and *cresc.*. Red and black diagonal markings are present in the Bskl. and Hr. staves.

Ref p. 14
noch fließender

121 122 123 124 125

Fl.
Ob.
E.H.
Kl.
Bskl.
Fg.
Hr.
Trp.
Pos.
Pk.
Hrf.
1. Gg.
2. Gg.
Br.
Vic.
Kbs.

mf *f* *f* *f* *f*

G-Satte
mf *f*

pizz.
ff

...vs. pizzicato

> eighth-note chains (→legato...)
noch fließender,

126 127 128 129 130

Fl.
Ob.
E.H.
Kl.
Bskl.
Fg.
Hr.
Trp.
Pos.
Pk.
Hrf.
1. Gg.
2. Gg.
Br.
Vic.
Kbs.

f *pp* *p* *p*

portato vs. staccato

arco
p

sp
pizz.
f

p

Solo
(m.Dp)
p

4/11/17

30 wieder sehr ruhig

131 132 133 134 135

Fl. *pp* *p* *p*

Ob. *pp*

E. H. *pp*

Kl. *pp*

Bskl. *pp*

Fg. *pp*

Hr. *pp*

Trp. *pp*

Pos. *pp*

Pk.

Hrf. *pp*

wieder sehr ruhig

1. Gg. (Solo) *Solo (m. Dpf.)* *gestrichen, zart* *p* *pp*

2. Gg.

Br.

Vlc.

Kbs. (Solo) *pp* *pp*

136 137 138 139 140 31

Fl. *pp* *p* *pp*

Ob. *p*

E. H.

Kl. *dolcissimo* *pp*

Bskl. *pp*

Fg. *p*

Hr. *pp*

Trp. *pp*

Pos. *pp*

Pk.

Hrf. *pp*

1. Gg. (Solo) *pp*

2. Gg.

Br.

Vlc.

Kbs. (Solo) *pp*

141 142 143 144 145

Fl. *p* *pp*

Ob.

E. H.

Kl. *espr.* *pp*

Bskl.

Eg.

Hr. *(p. Dpf.)* *pp*

Trp.

Pos. *pp*

Plk. *pp*

Hrf.

1. Gg. (Solo) *molto espr.* *p*

2. Gg.

Br. (Solo) *Solo* *pp*

Vic.

Kbs.

poco rubato

146 147 148 149 150

Fl. *p*

Ob.

E. H.

Kl. *pp*

Bskl. *pp*

Eg. *pp*

Hr.

Trp. *p*

Pos. *p*

Plk.

Hrf. *f*

1. Gg. (Solo) *G-Saiten* *p*

2. Gg.

Br. *Alle* *p*

Vic. *arco* *pp*

Kbs. *Alle* *pp*

allmählich fließender

Musical score for measures 151-155. Instruments include Fl., Ob., E.H., Kl., Bskl., Fg., Hr., Trp., Pos., and Pk. Dynamics range from *p* to *f*. A vertical line is drawn through measure 153.

allmählich fließender

Musical score for measures 151-155. Instruments include 1.Gg. (Solo), 2.Gg., Br., Vic., and Kbs. Dynamics include *pp* and *cresc.*

sehr fließend, rubato

Musical score for measures 156-160. Instruments include Fl., Ob., E.H., Kl., Bskl., Fg., Hr., Trp., Pos., and Pk. Dynamics include *f*. Performance instructions include "ohne Dpf." and "Dpf. ab".

sehr fließend, rubato

Musical score for measures 156-160. Instruments include 1.Gg., 2.Gg., Br., Vic., and Kbs. Dynamics include *f*.

rit. ----- tempo I. sehr ruhig

161 162 163 164 165

Fl. *f* *p* *pp*

Ob. *f* *p* *pp*

E.H. *f* *p* *pp*

Kl. *f* *p* *pp*

Bskl. *f* *p* *pp*

Fg. *pp*

Hr. *dim.* *p* *pp*

Trp. (m. Dpf.) *piuf* *p* *pp* nimmt Dpf.

Pos. *dim.* *p* *pp*

Pk.

Hrf. *pp*

1. Gg. Solo *pp*

2. Gg. Solo *pp*

Br. Solo *pp*

Vlc. *dim.* *p* *pp*

Kbs. *dim.* *p* *pp*

rit. ----- tempo I. sehr ruhig

166 167 168 169 170

Fl. *pp* *p*

Ob. *pp* *p*

E.H. *pp* *p*

Kl. *espr.* *p*

Bskl. *espr.* *p*

Fg. *p* *p*

Hr. (ohne Dpf.) *p espr.* *p*

Trp.

Pos.

Pk.

Hrf.

1. Gg. (Solo) Solo *espr.* *p*

2. Gg.

Br. (Solo) Solo *espr.* *p*

Vlc. (Solo) Solo *pp*

Kbs.

XXVI

171 172 173 174 175

Fl. *p*

Ob.

E.H.

Kl. *p*

Bskl. *mp*

Fg. *mp*

Hr. *nimmt Dpf.* *mit Dpf.* *mp*

Trp. *(m. Dpf.)* *mp* *mp* *mp*

Pos. *mit Dpf.* *p*

Pk.

Hrf.

wieder fließender werden

Solo 1. Gg. *p*

die übr. *p*

2. Gg. *pizz.* *p* *pizz.* *p*

Solo Br. *p*

die übr. *p*

Vlc. *Alle* *p*

Kbs. *p*

U. E. 10.377

176 177 178 179 180

Fl. *f*

Ob. *mf* *f espr.*

E.H. *f*

Kl. *mp* *mf*

Bskl. *p* *mp* *f*

Fg. *mp*

Hr. *f*

Trp. *mf* *f*

Pos. *f*

Pk.

Hrf. *f*

wieder sehr fließend

1. Gg. *pizz.* *arco* *mp* *f*

2. Gg. *arco* *mp* *f* *pizz.* *f*

Br. *Alle* *mp* *mf* *f* *Solo* *f*

Vlc. *mp* *mf* *f*

Kbs. *mf* *f*

U. E. 10.377

181 182 183 184 185

Fl.
Ob.
E.H.
Kl.
Bskl.
Fg.
Hr.
Trp.
Pos.
Pk.
Hrf.
1.Gg.
2.Gg.
Br.
Vic.
Kbs.

181 182 183 184 185

Fl. *f*

Ob. *f*

E.H. *f*

Kl. *f*

Bskl. *f*

Fg. *f*

Hr. *f*

Trp. *f*

Pos. *f*

Pk.

Hrf.

1.Gg. *f* *pizz.*

2.Gg. *f* *arco*

Br. *f* *Alle pizz.* *pizz.*

Vic. *f* *pizz.* *Solo arco*

Kbs. *f* *pizz.*

186 187 188 189 190

Fl.
Ob.
E.H.
Kl.
Bskl.
Fg.
Hr.
Trp.
Pos.
Pk.
Hrf.
1.Gg.
2.Gg.
Br.
Vic.
Kbs.

186 187 188 189 190

Fl. *f*

Ob. *f*

E.H. *f*

Kl. *f*

Bskl. *f*

Fg. *f*

Hr. *f*

Trp. *f*

Pos. *f*

Pk.

Hrf.

1.Gg. *f* *arco*

2.Gg. *f* *pizz.* *pizz.*

Br. *f* *pizz.*

Vic. *f* *Alle arco*

Kbs. *f* *arco*

XXIX

rit.

191 192 193 194 195

FL.

Ob.

E. H.

Kl. #

Bskl. #

Fg.

Hr. F

Trp.

Pos.

Pk.

Hrf.

rit.

1. Gg.

2. Gg.

Br.

Vlc.

Kbs.

arco

pizz.

arco

tempo I. sehr getragen

196 197 198 199 200

FL.

Ob.

E. H.

Kl. #

Bskl. #

Fg.

Hr. F

Trp.

Pos.

Pk.

Hrf.

Dpf. ab

tempo I. sehr getragen

1. Gg.

2. Gg.

Br.

Vlc.

Kbs.

get. pizz.

arco

get. pizz.

Dpf. ab

ohne Dpf. arco

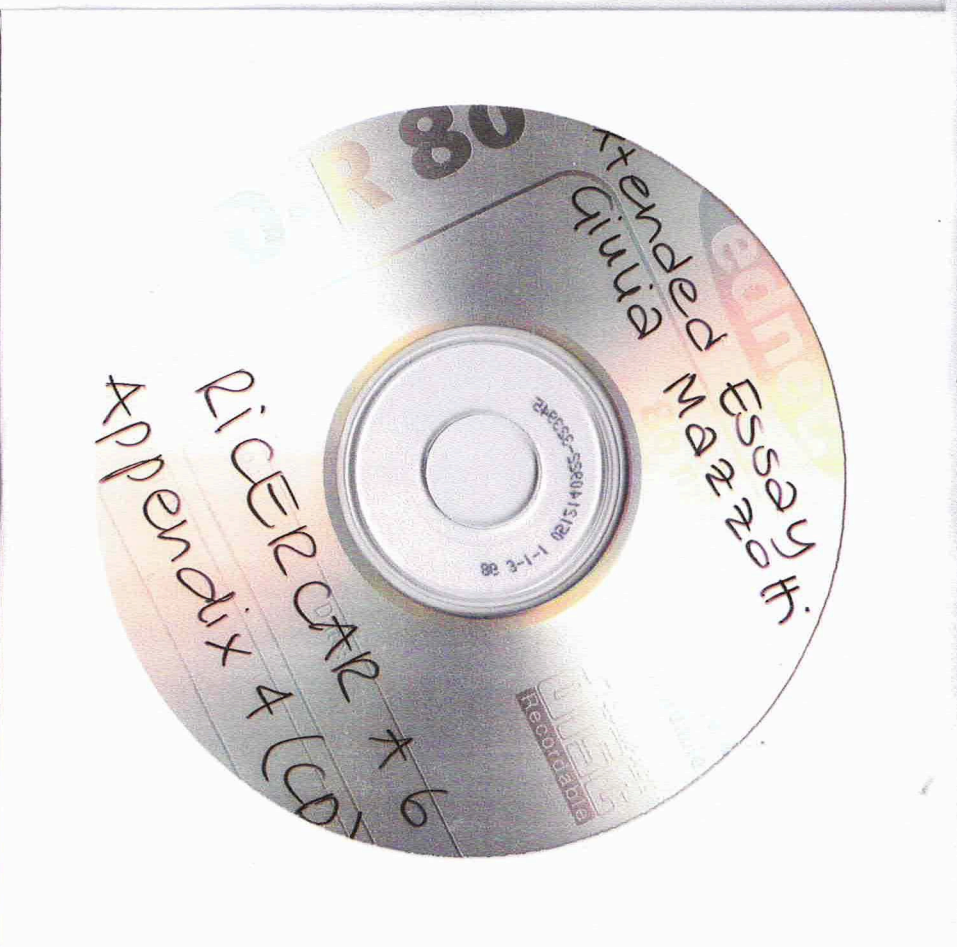
arco

ohne Dpf.

molto rit.

Musical score for orchestra, measures 201-205. The score is marked *molto rit.* and features dynamic markings such as *ff* and *sf*. The instruments listed are Fl., Ob., E.H., Kl., Bskl., Fg., Hr., Trp., Pos., Pk., Hrf., 1.Gg., 2.Gg., Br., Vlc., and Kbs. The score includes measures 201, 202, 203, 204, and 205. The key signature is one flat (B-flat major or E-flat minor) and the time signature is 4/4. The score is written in a grand staff format with multiple staves for each instrument. The dynamics are generally *ff* (fortissimo) with some *sf* (sforzando) markings. The tempo is *molto rit.* (very slow). The score includes various musical notations such as slurs, accents, and dynamic markings.

Appendix 4 (CD)



Different arrangements of *Ricercar a 6*

Track 1: J.S. Bach *Ricercar a 6*, *Musical Offering* BWV 1079 – Pierre Hantai, cembalo

Track 2: J.S. Bach *Ricercar a 6*, *Musical Offering* BWV 1079 – Jordi Savall (conductor), string sextet and basso continuo

Track 3: Anton Webern *Ricercar a 6* (*Transcription from Ricercar a 6*, *Musical Offering* BWV 1079) – Pierre Boulez, Berliner Philharmoniker