

A COMPARATIVE STUDY OF TWO SINGLE-SUBJECT KEYBOARD RICERCARE
BY JOHANN JACOB FROBERGER: PROJECTIONS OF SIXTEENTH-CENTURY
PRACTICE COMBINED WITH FEATURES THAT FORECAST BAROQUE PRACTICE

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This study is focused on an analysis of two single-subject ricercare in the keyboard music of Johann Jacob Froberger and examines possible pathways to the development of the Baroque fugue.

This dissertation is divided into three parts. Chapter I contains the purpose, significance of this study and composer, as well as characteristics of the seventeenth-century single-subject ricercar. Chapter II details and examines Froberger's two ricercare. Finally, a conclusion of this study is presented in Chapter III. Two appendixes are included in this dissertation: a list of the single-subject ricercare of Andrea Gabrieli, Giovanni Gabrieli, and Johann Jacob Froberger; and an analysis of the two single-subject ricercare, FbWV 407 and FbWV 409, by Johann Jacob Froberger.

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TABLE OF CONTENTS

	Page
ACKNOWLEDGMENTS.....	iii
LIST OF TABLES.....	v
LIST OF MUSICAL EXAMPLES.....	vi
Chapter	
I. INTRODUCTION.....	1
A. Purpose	
B. Significance and State of Research	
C. Definition of ricercar	
D. Composer	
E. Characteristics of the Seventeenth-Century Single-Subject Ricercar	
II. AN EXAMINATION OF TWO RICERCARS BY JOHANN JACOB FROBERGER.....	7
A. The Cadence.....	7
B. The Expositions.....	11
C. Ricercar, FbWV 407.....	12
D. Ricercar, FbWV 409.....	17
III. CONCLUSION.....	30
APPENDIX	
A. LIST OF THE SINGLE-SUBJECT RICERCARE OF ANDREA GABRIELI, GIOVANNI GABRIELI, AND JOHANN JACOB FROBERGER.....	33
B. ANALYSIS OF THE TWO SINGLE-SUBJECT RICERCARE, FbWV 407 AND FbWV 409 BY JOHANN JACOB FROBERGER.....	36
BIBLIOGRAPHY.....	50

LIST OF TABLES

	Page
Table 1. The number of single-subject ricercare.....	3
Table 2. The subject-answer dialog relationships.....	6
Table 3. The comparison of the two single-subject ricercare.....	11

LIST OF MUSICAL EXAMPLES

	Page
Example 1. The types of the cadence: Major sixth to octave	8
Example 2. The types of the cadence: minor third to unison	8
Example 3. Johann Jacob Froberger, <i>Ricercar</i> , FbWV 407, mm. 25-27.....	9
Example 4. Johann Jacob Froberger, <i>Ricercar</i> , FbWV 409, mm. 44-45.....	9
Example 5. Johann Jacob Froberger, <i>Ricercar</i> , FbWV 407, mm. 13-15.....	9
Example 6. Johann Jacob Froberger, <i>Ricercar</i> , FbWV 407, mm. 40-42.....	10
Example 7. Johann Jacob Froberger, <i>Ricercar</i> , FbWV 409, mm. 28-30.....	10
Example 8. Johann Jacob Froberger, <i>Ricercar</i> , FbWV 407, mm. 1-15.....	12
Example 9. Johann Jacob Froberger, <i>Ricercar</i> , FbWV 407, mm. 13-27.....	14
Example 10. Johann Jacob Froberger, <i>Ricercar</i> , FbWV 407, mm. 34-48.....	15
Example 11. Johann Jacob Froberger, <i>Ricercar</i> , FbWV 407, mm. 49-52.....	17
Example 12. Johann Jacob Froberger, <i>Ricercar</i> , FbWV 409, mm. 1-33.....	18
Example 13. Johann Jacob Froberger, <i>Ricercar</i> FbWV 409, mm. 16-18, mm. 28-30, and mm. 44-45.....	21
Example 14. Johann Jacob Froberger, <i>Ricercar</i> , FbWV 409, mm. 34-58.....	22
Example 15. Johann Jacob Froberger, <i>Ricercar</i> , FbWV 409, mm. 56-91.....	25
Example 16. Johann Jacob Froberger, <i>Ricercar</i> , FbWV 409, mm. 92-96.....	29
Example 17: Giovanni Gabrieli, <i>Fuga</i> (1a), mm. 1-5.....	31
Example 18: D. Buxtehude, <i>Fuga</i> in G major, BuxWV 175, mm. 1-4.....	32

CHAPTER I

INTRODUCTION

The purpose of this thesis is to study two single-subject keyboard *ricercare* by the Italian-influenced German composer, Johann Jacob Froberger (1616-1667). The study will focus on Froberger's compositional style with emphasis on 1) its adaptation and extension of sixteenth-century norms; and 2) on its features that forecast aspects of later Baroque style.

In the 16th and 17th centuries, there were several different genres and forms of imitative and contrapuntal keyboard works in Italy, Spain, Germany and England. These genres included the *ricercar* as well as *canzona*, *tiento*, *fuga* and *fantasia*.¹ The word *ricercar* is from the Italian word *cercare*, meaning “to search” or “to study.”² The *canzona*, related to the vocal style of the Renaissance, has several themes and sections using meter changes in general.³ *Tiento* in Spanish means “to touch,” “examine” or “scrutinize,”⁴ and is similar to the *ricercar* in contrapuntal style and imitative texture. However, the *tiento* is divided into several sections and is closer to the Italian *toccata* in construction in that it often has free sections. *Fantasia* is the English word for an imitative work such as the *ricercar* and *canzona* and is the same as “fancy” or “fantasy.” The difference between the *fantasia* and the *ricercar* is that the former always makes use of multiple-subjects and ends with ornamented chords,⁵ whereas the “fancy” is a long composition with several themes and sections,⁶ the *ricercar* may have either several subjects or only one.

¹ John Caldwell, “*Ricercare*,” *The New Grove Dictionary of Music and Musicians*, 2nd ed., edited by Stanley Sadie and John Tyrell, vol. 21 (London: Macmillan, 2001), p. 325.

² Willi Apel, *The History of Keyboard Music to 1700* (Bloomington/ London: Indiana University Press, 1972), p. 166.

³ Willi Apel, “*Canzona, canzone*,” *Harvard Dictionary of Music*, 2nd ed., Revised and enlarged (Cambridge, Massachusetts: The Belknap Press of Harvard University Press, 1972), p. 132.

⁴ Willi Apel, *History of Keyboard Music*, p. 188.

⁵ *Ibid.*, p. 210.

⁶ Willi Apel, “*Fancy (fantasy)*,” *Harvard Dictionary of Music*, 2nd ed., p. 306.

Keyboard ricercare are divided into two different styles: the “preludia” or “rhapsodic” ricercar and the “imitative” ricercar.⁷ The rhapsodic ricercar is written in a free compositional style that may include both chordal and scalar passages in a manner similar to the early toccata. By contrast, the imitative ricercar is contrapuntal in style and is closely related to the vocal motet.⁸ M. A. Cavazzoni (1490-1560) composed the first ricercare for keyboard. The organ ricercare of M. A. Cavazzoni were influenced by lute ricercare, which were the rhapsodic type.⁹ The ricercare of M. A. Cavazzoni are in a free style much like an improvisation.¹⁰ After M. A. Cavazzoni, more ricercare that are imitative were composed by such composers as Girolamo Cavazzoni (1525-1577, son of M. A. Cavazzoni), Andrea Gabrieli (1532/3-1585), Luzzasco Luzzaschi (1545-1607), Giovanni Gabrieli (1555/7-1612/3) and Giovanni Maria Trabaci (1575-1647). The genre of the ricercar spread to Germany, perhaps through Girolamo Frescobaldi (1583-1643) to Johann Jakob Froberger (1616-1667).

The Italian imitative ricercare for keyboard are composed as single-subject or multi-subject pieces. The multi-subject ricercare are usually sectional with a new theme for each section. By contrast, the single-subject ricercar can be sectional or not, and the one thematic idea appears throughout in subject-answer dialog.

Composers who composed single-subject ricercare include A. Gabrieli, L. Luzzaschi, G. Gabrieli, G. M. Trabaci, and G. Frescobaldi in Italy and J. J. Froberger, J. Pachelbel, J. Krieger and J. S. Bach in Germany. A. Gabrieli was the first composer to write single-subject ricercare.

⁷ John Caldwell, “Ricercare,” p. 326.

⁸ Ibid., p. 326.

⁹ Willi Apel, “Ricercar(e), ricercata, recercada,” *Harvard Dictionary of Music*, 2nd ed., p. 733.

¹⁰ Don Michael Randel, “Ricercar, Ricercare,” *The New Harvard Dictionary of Music*, edited by Don Michael Randel (Cambridge, Massachusetts, and London, England: The Belknap Press of Harvard University Press, 2003), p. 730.

The next generation of composers includes G. Gabrieli. J. J. Froberger brought aspects of several Italian musical styles to Germany.

Table 1 lists the number of single-subject ricercare written by each of nine composers.

Table 1. The number of single-subject ricercare.

Composer	The number of single subject ricercare	Total number of ricercare
Andrea Gabrieli (1532/3-1585)	5	17
Luzzasco Luzzaschi (1545-1607)	2	14
Giovanni Gabrieli (1555/7-1612/3)	8	11
Giovanni Maria Trabaci (1575-1647)	1	7
Girolamo Frescobaldi (1583-1643)	2	16
Johann Jakob Froberger (1616-1667)	8	12
Johann Pachelbel (1653-1706)	1	2
Johann Krieger (1651/2-1735)	5	5
Johann Sebastian Bach (1685-1750)	1	1

The connections between the ricercare and the sixteenth century compositional practice are not discussed by any scholars. Definitions of sixteenth-century norms are provided in Chapter II.¹¹

A number of sources identify the imitative single-subject ricercar as similar to the fugue. John Caldwell in his *New Grove* article on ricercar,¹² Don Michael Randel¹³ and Willi Apel¹⁴ in

¹¹ For discussion of Renaissance norms and idioms, see Graham H. Phipps, "The 'Nature of Things' and the Evolution of Nineteenth-Century Musical Style: An Essay on Carl Dahlhaus's *Studies on the Origin of Harmonic Tonality*, in *Theoria: Historical Aspects of Music Theory* 7(1993):141-163.

his *History of Keyboard Music*, make this comparison. In his dissertation, Richard J. Tappa discusses *ricercare* by thematic device and structure.¹⁵ Included in his discussion are the real and tonal imitation of the subject, and *stretto*. However, he does not discuss the way that a subject works in the exposition. Nor does he discuss how the treatment of the subjects in the *ricercar* is similar to their usage in the fugue. Willi Apel discusses all nine composers' *ricercare* analytically and compares the differences among these works. However, he does not discuss the relationship of the subject and answer in comparison with the fugue. Gordon Sutherland presents the *ricercare* historically and focuses on the development of the fugue. However, he does not discuss how the exposition is similar between the *ricercar* and the fugue, stating only that the *ricercare* of the first generation are similar to the Baroque fugue.¹⁶ In his study of the keyboard works of G. Frescobaldi, John Storm Mueller concludes that J. S. Bach composed old-fashioned fugues derived from the *ricercar* style of G. Frescobaldi.¹⁷ However, he does not compare and discuss similarities between the *ricercar* and the fugue. The analysis portion of this study provided in Chapter II will address aspects of subject-answer dialog and exposition content that are not found in the secondary literature, as mentioned above.

Johann Jacob Froberger (1616 in Stuttgart-1667 in Héricourt, near Montbéliard, France) was a German composer, keyboard performer, and court organist in Vienna. He studied with G. Frescobaldi (1583-1643) for four years from 1637 to 1641 in Rome. He also traveled to many countries including England, France, Germany, and Italy. His associates were Matthias

¹² John Caldwell, "Ricercare," p. 325.

¹³ Don Michael Randel, "Ricercar, Ricercare," *New Harvard Dictionary of Music*, p. 730.

¹⁴ Willi Apel, *History of Keyboard Music*, p. 180.

¹⁵ Richard J. Tappa, "An Analytical Study of the Use of Imitative Devices in the Keyboard Ricercar From 1520-1720" (Ph.D. dissertation, Indiana University, 1965), p. 190.

¹⁶ Gordon Sutherland, "Studies in the development of the Keyboard and Ensemble Ricercare from Willaert to Frescobaldi" (Ph.D. dissertation, Harvard University, 1942), p. 383.

¹⁷ John Storm Mueller, "Girolamo Frescobaldi (1583-1643): Fantasie, Ricercare, Capricci, and Canzone" (Ph.D. dissertation, Boston University, 1969), p. 197.

Weckmann, Denis Gaultier, and Louis Couperin, who was strongly influenced by Froberger's works.¹⁸ Froberger composed 12 toccatas, 12 capriccios, 6 canzonas, 6 fantasias, 13 partitas, 1 gigue, and 12 ricercare, all for keyboard instruments.¹⁹ His keyboard works are: *Libro secondo* 1649 which contains toccatas, fantasias, canzonas and partitas, *Libro quarto* in 1656 which contains toccatas, ricercare, capriccios and partitas, and *Libro di capricci e ricercare* in 1658 which contains capriccios and ricercare.

Characteristics of the Seventeenth-Century Single-Subject Ricercar

The seventeenth-century single-subject ricercar shares many features with the sixteenth-century motet. The single-subject ricercar is typically written for four voices, each with an ambitus ranging from an octave to a twelfth. In this respect it resembles a four-voice sixteenth-century motet. The typical Renaissance idioms-suspension figures ornamented with a portamento and lower neighbor tone, motivic figures that emphasize the fifth above or below the starting tone, the two-voice cantizans/tenorizans cadence pattern, vertical⁶₅s, linear 5-6 and 6-5 motions, are all common properties of the seventeenth-century single-subject ricercar.

These Renaissance characteristics are combined in the ricercar with features that forecast the Baroque fugue. The subject in these ricercare enters and is usually answered at the fourth or the fifth above or below. Episodes, if they occur, are composed of new material. They most often contain sequential passages. If there are no episodes, the ricercar proceeds with a series of expositions, which incorporate various contrapuntal devices. There is little modulation. Often there is a closing section which lapses into toccata-like passage work, but maintains the four-voice texture.

¹⁸ Howard Schott, "Froberger, Johann Jacob," *The New Grove Dictionary of Music and Musicians*, 2nd ed., edited by Stanley Sadie and John Tyrell, vol. 21 (London: Macmillan, 2001), p. 282.

¹⁹ Willi Apel, p. 552.

While most of Italian single-subject *ricercare* are modal, trends toward the new major-minor tonality are clearly perceptible. Table 2 shows the relationship between subjects and answers in the thirty-three *ricercare* identified in Table 1.²⁰ The “real” answer is the transposition of the subject with the exact same intervals; the “tonal” answer is the transposition of the subject with one or more intervals changed for harmonic reasons.

The following chart lists relationships between subject and answer.

Table 2. The subject-answer dialog relationships.

	Total number	Tonal answer	Real answer
Answer begins 5 th above from the subject	5	3 (D-A)	2 (G-D)
Answer begins 4 th above from the subject	3	2 (A-D)	1 (G-C)
Answer begins 5 th below from the subject	13	6 (D-G)	7 (C-F)
Answer begins 4 th below from the subject	12	7 (A-E)	5 (G-D)

Two single-subject *ricercare* of Froberger will serve to illustrate the transition from a form that belongs to the end of the Renaissance, the motet and its related genres, to a form of the seventeenth century, which leads to the Baroque fugue. Froberger’s *ricercare* include the characteristics of the Renaissance motet, but with similarities to the Baroque fugue.

²⁰ See p. 3.

CHAPTER II

AN EXAMINATION OF TWO RICERCARE, FbWV 407 AND FbWV 409

BY JOHANN JACOB FROBERGER

In both the single-subject ricercare and the multi-subject ricercare, characteristics of the Renaissance remain. Imitation, various contrapuntal devices such as augmentation, diminution, inversion, and Renaissance dissonance treatment play an important role in developing the composition. In particular, cadence structure in the modal ricercar remains in its sixteenth century form. Two single-subject ricercare of Froberger serve to illustrate the transition from a form that belongs to the end of the Renaissance, the motet and its related genres, to a form of the seventeenth century, which leads to the Baroque fugue.

The Cadence

The cadence in the Renaissance is between two voices with specific melodic motions: tenorizans is a typical descending stepwise motion to the cadence tone. The next to last note is usually lengthened so there can be a suspension above it; cantizans is usually a 1-7-1 motion in which the first pitch lengthens to create a suspension.²¹ The cadence occurs on the strong beat, with or without a suspension. There are two different types of motion in the two parts: a major sixth goes to an octave, or a minor third goes to the unison, creating a perfect cadence. In an imperfect cadence, the sixth resolves to an interval other than an octave, and the third resolves to an interval other than a unison. An evaded cadence occurs where one voice resolves to a rest. A Phrygian cadence occurs when the tenorizans pattern moves a half step down rather than a whole step, but moves from a major sixth to octave. See Examples 1 and 2.

²¹ The two-voice cadence is illustrated by Pietro Aaron in *Thoscanello de la Musica*, Venice, 1523, II/18 [trans. Peter Bergquist, Colorado Springs: Colorado College Music Press, 1970]. Aaron's example shows a combination of a 1-7-1 pattern in the upper voice with a 2-1 pattern in the lower voice.

Example 1: The types of the cadence: Major sixth to octave.

a. perfect cadence on A

b. imperfect cadence on A

c. evaded on A

d. Phrygian cadence on A

cantizans

tenorizans

cantizans

tenorizans with an imperfect cadence

cantizans with a cadence tone missing

tenorizans

cantizans

tenorizans

Example 2: The types of the cadence: minor third to unison.

a. perfect cadence on A

b. imperfect cadence on A

c. evaded cadence on A

Three places where the cadences appear most commonly are: at the end of the subject or answer, in the middle of the subject or answer, and in the extension after the subject or answer. These kinds of Renaissance cadences appear throughout Froberger's music, including FbWV 407 and FbWV 409. Example 3 shows a cadence appearing in the middle of the subject. In the *ricercar*, FbWV 407, a Phrygian cadence and a perfect cadence in the middle of the subject are illustrated below. A Phrygian cadence on A between the soprano and the bass and a perfect cadence on G between the tenor and the bass appear in the middle of the subject on D in the tenor in measures 26 to 27. The structure of the cadences in both pieces remains the same.

Example 3: Johann Jacob Froberger, *Ricercar*, FbWV 407, mm. 25-27.

Example 4, from the *ricercar*, FbWV 409, illustrates another perfect cadence in the middle of the subject. A perfect cadence on A appears between the soprano and the tenor in the middle of the subject on B in the bass in measure 45.

Example 4: Johann Jacob Froberger, *Ricercar*, FbWV 409, mm. 44-45.

In example 5, the *ricercar*, FbWV 407, demonstrates an imperfect and an evaded cadence on A between the alto and the tenor appearing at the end of the answer on A in the bass in measure 15.

Example 5: Johann Jacob Froberger, *Ricercar*, FbWV 407, mm. 13-15.

The *ricercar*, FbWV 407, demonstrates a cadence appearing in the extension after the subject or answer. A perfect cadence on A between the alto and the tenor in measure 41 appears in the extension after the second version of the subject, on D in the tenor, in measures 39 to 40. See Example 6.

Example 6: Johann Jacob Froberger, *Ricercar*, FbWV 407, mm. 40-42.

40 sus. 7--3 vertical 6
subject
41 perfect cadence on A
sus. 7---6
42
second version of answer
portamento

An example, in the *ricercar*, FbWV 409, also illustrates a cadence in the extension after the subject. A perfect cadence on C between the alto and the tenor in measure 30 appears in the extension after the subject on B in the tenor in measures 29 to 30. See Example 7.

Example 7: Johann Jacob Froberger, *Ricercar*, FbWV 409, mm. 28-30.

28 sus. 7---6
(6---5)
29 subject
sus. 4---3
30 perfect cadence on C
sus. 7---6
(6---5)

The Exposition

Generally, the multi- or single-subject *ricercare* by such Italian composers as Andrea Gabrieli and Giovanni Gabrieli as well as Froberger are divided into more than one exposition. Three single-subject *ricercare* by Froberger include a triple meter section. In addition, the compositional styles of the *ricercare*, FbWV 407 and FbWV 409 are similar sharing the characteristics of all such *ricercare*: primarily four voices, subject-answer dialog, multi-sectional, closing section (*Sopplimento*),²² and a plagal ending.²³ The latter is not a cadence because its octave is not approached from either major sixth or minor tenth. However, there are differences between the *ricercare* FbWV 407 and FbWV 409. FbWV 409 contains a triple meter section: the entrance of the answer in FbWV 407 is quite unusual and different from other *ricercare*. In the third exposition of FbWV 409 the subject is augmented and there is a counter-subject.

The following chart compares the two single-subject *ricercare*.

Table 3. The comparison of the two single-subject *ricercare*.

	FbWV 407	FbWV 409
Subject-answer dialog	Subject (D)-Answer (A), a fourth below, real answer.	Subject (B)-Answer (E), a fifth below, real answer.
Exposition	Three Expositions	Three Expositions
Episode	no	Yes
Meter change	no	Duple-Triple-Duple
Stretto	Yes	Yes
Augmentation of the subject	no	Yes, in the third exposition.
Closing section	Yes	Yes

²² As defined by Pietro Aaron (1523), *Sopplimento* is a passage that follows the final cadence.

²³ In the *plagal* ending, the final motion in the bass is either a descending fourth or ascending fifth.

Counter-subject	no	Yes, in the third exposition
-----------------	----	------------------------------

Ricercar on d, FbWV 407

The ricercar, FbWV 407, is divided into three expositions: the first exposition from measures 1 to 13, the second exposition from measures 14 to 34, and the third exposition from measures 35 to 50, with the closing section (*Sopplimento*), which appears after the final cadence with a perfect cadence, on D from measure 50 to 52.

The subject-answer dialog in the expositions of this ricercar is not typical of most ricercare. The subject begins on D in the soprano, but the answer does not appear at the end of the subject. Instead, an inversion of the subject begins immediately on D in the alto in measure 3. The subject and its inversion appear once more before the answer enters in measure 9. This first exposition closes with an inversion of the subject in the soprano in measure 11. See Example 8.

Example 8: Johann Jacob Froberger, *Ricercar*, FbWV 407, mm. 1-15.

subject 2 3 sus. 7---6

EXPOSITION I

bass pattern

inverted point of

4 5 6 (3---4) sus. 4---3

imitation

linear (5---6)

subject

Bass pattern

imperfect on D

consonant fourth

inverted

The musical score is divided into three systems, each with two staves (treble and bass clef). The first system (measures 7-9) includes annotations: "perfect cadence on G" and "phrygian on A" above measure 7; "linear (6---5)" above measure 8; "sus. 4---3" above measure 8; "evaded on G" above measure 9; "vertical 6" above measure 9; and "answer" with "(5---6)" below measure 9. A bracket labeled "point of imitation" spans measures 7 and 8. The second system (measures 10-12) includes: "phrygian on E" above measure 10; "imperfect on G" above measure 11; "inverted point of imitation" above measure 12; "sus. 4---3" below measure 11; "(5---6)" below measure 12; and "sus. 2---3" below measure 12. The third system (measures 13-15) includes: "perfect cadence on G" above measure 13; "sus. 7---6" below measure 13; "sus. 9---8" above measure 14; "(5---6)" above measure 14; "imperfect/evaded on A" above measure 15; "EXPOSITION II" in the center of measure 14; and "answer" below measure 15.

Another striking characteristic of this exposition is a shift from a G minor sonority in measures 7 to 8 to a G major sonority with a perfect cadence on G in measure 13. As discussed above, the cadence structure is based on sixteenth-century norms.

The second exposition is like the first except the order of subject and answer are reversed. The answer begins on A in the bass; then the inversion of the answer begins on A an octave higher in the tenor. The subject on D in the alto occurs in measures 20 to 22 after the third

appearance of the answer. The answer and the inversion of the answer appear five times in the second exposition and the subject and its inversion appear three times. The second exposition closes with an evaded cadence on D. See Example 9.

Example 9: Johann Jacob Froberger, *Ricercar*, FbWV 407, mm. 13-27.

perfect cadence on G

13

sus. 7-----6

14

sus. 9-----8 (5-----6)

sus. 7-----6

EXPOSITION II

15

imperfect/evaded on A

answer

16

sus. 4-----3

17

(6-----5)

sus. 9-----6

sus. 4-----3

18

answer

(5-----6)

inverted point of imitation

vertical 6 5

19

(5-----6)

sus. 7-----6

sus. 7-----6

20

21

phrygian on A

subject

22

(6-----5)

(5-----6)

23

sus. 4-----3

(6-----5)

24

imperfect on D

phrygian on E

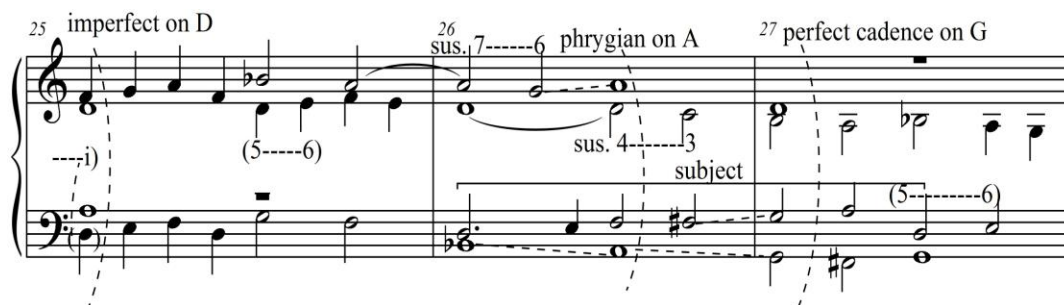
(5-----6)

sus. 4-----3

(fV)

(O)

inverted point of imitation



In the third exposition, the intervals and the rhythm of the subject have been slightly modified. See Example 10. The dotted rhythm of the subject in the first and second exposition has been changed to even notes (second version), and the first three appearances of the end of the subject no longer contain the descending fifth (modified subject). A stretto appears in measures 36 to 38 between the bass and the alto parts on A, which is the modified answer. See Example 10.

Example 10: Johann Jacob Froberger, *Ricercar*, FbWV 407, mm. 34-48.

The image displays three systems of musical notation, likely for a keyboard instrument, featuring various harmonic and melodic elements. The notation includes treble and bass staves with notes, rests, and dynamic markings.

System 1 (Measures 40-42):

- Measure 40: Treble staff has a suspension (sus.) 7--3 vertical 6. Bass staff has a suspension (sus.) 4--3. A "subject" label is present.
- Measure 41: Treble staff has a perfect cadence on A. Bass staff has a suspension (sus.) 4--3 and a "portamento" marking.
- Measure 42: Treble staff has a suspension (sus.) 7--6. Bass staff has a suspension (sus.) 6--5. A "second version of answer" label is present.

System 2 (Measures 43-45):

- Measure 43: Treble staff has a suspension (sus.) 2--3 and a "second version of answer" label. Bass staff has a suspension (sus.) 2--3.
- Measure 44: Treble staff has a suspension (sus.) 4--3. Bass staff has a suspension (sus.) 2--3.
- Measure 45: Treble staff has a suspension (sus.) 4--3 and a "second version of answer" label. Bass staff has a suspension (sus.) 2--3.

System 3 (Measures 46-48):

- Measure 46: Treble staff has a suspension (sus.) 4--3 and a "second version of subject" label. Bass staff has a suspension (sus.) 4--3.
- Measure 47: Treble staff has a suspension (sus.) 7--3. Bass staff has a suspension (sus.) 7--3.
- Measure 48: Treble staff has a suspension (sus.) 7--6. Bass staff has a suspension (sus.) 5--6. A "second version of subject" label is present.

This work includes a short Sopplimento from measures 50 to 52. See Example 11. After the final perfect cadence on D in measure 50, the second version of the subject on D appears in the tenor. This work closes with a plagal ending (iv-I; g minor-D major).

Example 11: Johann Jacob Froberger, *Ricercar*, FbWV 407, mm. 49-52.

49 evaded/imperfect on D

50 sus. 7--6

51 perfect cadence on D

second version of subject

Sopplimento

52 sus. 4-----3

(iv-----I)

portamento

(plagal ending)

Ricercar on e (Phrygian), FbWV 409

The second ricercar to be discussed, FbWV 409, is divided into three sections with a triple meter section between the duple meter sections. The expositions of this work are more typical of the Italian style ricercare than in the ricercar, FbWV 407. While the rhythm of the subject is altered by a meter change in the second exposition and by augmentation in the third exposition, the subject-answer dialog follows the normal pattern. The subject begins on B, the fifth of the scale degree of the Phrygian mode, in the soprano in all three expositions. The answer begins on E in the alto in the first and the second expositions and on E in the tenor in the third exposition. However, there are significant characteristics of this ricercar that are closely related to the early Baroque fugue. This ricercar contains a counter-subject, episodes, and sequences, all characteristic of early fugue.

The first short internal episode in measures 23 to 26 begins with a descending step sequence alternating between 5_3 and 6_5 sonorities. The dissonances propel the music forward through a circle of fifths. Perfect fifth relation is also found between a perfect cadence on C in measure 7, and a perfect cadence on G in measure 27, and again between the final cadence of this exposition on A, and a plagal ending on E that follows. See Example 12.

Example 12: Johann Jacob Froberger, *Ricercar*, FbWV 409, mm. 1-33.

The musical score is divided into three systems, each showing a grand staff (treble and bass clefs) in G minor (three flats). The time signature is 3/4.

- System 1 (Measures 1-3):**
 - Measure 1: Treble clef has a half note G4, bass clef has a half note G3. Labeled "EXPOSITION I".
 - Measure 2: Treble clef has a half note A4, bass clef has a half note A3. Labeled "subject" above and "fifth below" below.
 - Measure 3: Treble clef has a half note B4, bass clef has a half note B3. Labeled "answer" above and "subject" below.
- System 2 (Measures 4-6):**
 - Measure 4: Treble clef has a half note C5, bass clef has a half note C4. Labeled "sus. 7-----6" above and "answer" below.
 - Measure 5: Treble clef has a half note D5, bass clef has a half note D4. Labeled "sus. 7-----3" above and "answer" below.
 - Measure 6: Treble clef has a half note E5, bass clef has a half note E4. Labeled "sus. 7-----3" above and "answer" below.
- System 3 (Measures 7-9):**
 - Measure 7: Treble clef has a half note F5, bass clef has a half note F4. Labeled "cadence on C" above and "portamento" below.
 - Measure 8: Treble clef has a half note G5, bass clef has a half note G4. Labeled "answer" above and "answer" below.
 - Measure 9: Treble clef has a half note A5, bass clef has a half note A4. Labeled "answer" above and "answer" below.

Other markings include "subject" above measure 2, "fifth below" below measure 2, "sus. 7-----3" above measures 3, 4, 5, and 6, "portamento" below measure 7, and "cadence on C" above measure 7.

10 (6-----5-----6) (6-----5) 11 12

subject

answer

(5-----6) sus. 7-----6 (6-----)

13 14 15 sus. 7-----6

subject

answer

sus. 4-----3

---5)

16 (6-----5) sus. 7-----3 17 evaded on A 18

subject

answer (5-----6)

sus. 4-----3

(A)

(6-----5)

19 20 21

subject

answer

(6-----5)

(5-----6) (5-----6)

22 (6----5) subject sus. 7-----5

Episode =mm. 46-47 portamento

23 (a---d---G---C---F---b---e) vertical 6/5 vertical 6/5 vertical 6/5

24 portamento (5--6--5)

25 answer (6----5) 26 **Episode** perfect cadence on G

27 sus. 7-----6 portamento

vertical 6/5 Circle of fifths

28 sus. 7-----6 (6----5) subject

29 sus. 4-----3

30 sus. 7-----6 perfect cadence on C (6----5)

31 (5----6) answer

32 sus. 2-----3

33 perfect cadence on A plagal ending (6----5) (iv-----I) sus. 4-----3 portamento

In this work, there is a repeated pattern both in harmony and in rhythmic patterns. In the first exposition from measure 16 to 17, the subject begins on B in the bass, and the cantizans pattern in the soprano (A-G#-A) appears in measures 29 to 30. However, the difference is that the subject begins on B in the tenor, and it appears in the second exposition from measures 44 to 45 in triple meter. See Example 13. The evaded cadence on A in the middle of the subject does not appear in measure 29.

Example 13: Johann Jacob Froberger, *Ricercar*, FbWV 409, mm. 16-18, mm. 28-30, and mm.44-45.

The image displays three staves of musical notation for Johann Jacob Froberger's *Ricercar*, FbWV 409, illustrating the subject and its variations across different measures.

Staff 1 (Measures 16-18): Shows the first exposition. Measure 16 features a subject in the bass (B) and a cantizans pattern in the soprano (A-G#-A). Measure 17 shows the subject in the tenor. Measure 18 shows the subject in the bass. The subject is labeled "subject" and the cantizans pattern is labeled "cantizans".

Staff 2 (Measures 28-30): Shows the second exposition. Measure 28 features a subject in the bass (B) and a cantizans pattern in the soprano (A-G#-A). Measure 29 shows the subject in the tenor. Measure 30 shows the subject in the bass. The subject is labeled "subject" and the cantizans pattern is labeled "cantizans".

Staff 3 (Measures 44-45): Shows the third exposition. Measure 44 features a subject in the bass (B) and a cantizans pattern in the soprano (A-G#-A). Measure 45 shows the subject in the tenor. The subject is labeled "subject" and the cantizans pattern is labeled "cantizans".

In the second exposition in triple meter, measures 34 to 57, the intervals of the subject are the same as the subject in the first exposition. Four additional notes extend the end of the subject to accommodate the meter. See Example 14. There is a distinct melodic ascending motion involving an D-E-F#-G#-A occurring three times in different voices in measures 39 in the alto, 43 in the alto, and 96 in the tenor. These lines with the two sharps which are out of the mode further imply harmonic progression.

Example 14: Johann Jacob Froberger, *Ricercar*, FbWV 409, mm. 34-58.

34 subject link 35

EXPOSITION II

answer link

36 subject link 37

38 answer link 39

Episode = m. 43, and m. 96.

40 (5-----6) 41 perfect cadence on C answer link

42 Episode perfect cadence on G perfect cadence on C 43 sus. 7-----6 (6-----5) (= m.39, and m.96)

44 45 perfect cadence on A answer modified link subject link

46 Episode 47 answer (6-----5) vertical 6 vertical 6 vertical 6 (5-----6)

48 modified link 49 imperfect cadence on G subject link

The musical score consists of four systems of piano and counter parts. Measure 50 shows a piano part with a suspended 7th (sus. 7) and a 3rd, and a counter part with a suspended 7th (sus. 7) and a 6th. Measure 51 continues the piano part with an 'answer' and a 'link', and the counter part with a suspended 7th (sus. 7) and a 6th. Measure 52 features a 'perfect cadence on C' in the piano part, an 'answer' and 'link' in the counter part, and a 'vertical 6 5' in the bass. Measure 53 shows a 'subject' in the piano part, a 'link' and 'perfect on C' in the counter part, and a 'vertical 6 5' in the bass. Measure 54 continues the piano part with a 'subject' and a 'link', and the counter part with a suspended 4th (sus. 4) and a 3rd. Measure 55 shows a 'perfect on C' in the piano part, a 'link' and 'perfect on C' in the counter part, and a 'vertical 6 5' in the bass. Measure 56 features a 'consonant fourth' in the piano part, a suspended 7th (sus. 7) and a 6th, and a suspended 4th (sus. 4) and a 3rd. Measure 57 continues the piano part with a 'consonant fourth' and a 'portamento', and the counter part with a suspended 7th (sus. 7) and a 6th. Measure 58 shows a 'counter-' in the piano part, a suspended 8th (sus. 8th) in the counter part, and the title 'EXPOSITION III' in the bass.

The descending motion of the dissonances in measures 23 to 25 in the first exposition reappears in the second exposition from measures 46 to 47. In this episode, the bass line is ornamented, and the rhythm of the other voices is altered to fit the triple meter. In this section, the C/G internal cadences are reversed. In measure 42, there is a perfect cadence on G; in

measure 55, we find a perfect cadence on C. The section closes immediately with a return to duple meter and a closing on E without a plagal ending, but with a Picardy third. There is an evaded cadence between the alto and the tenor, which should have gone to e, but remains unresolved. The bass motion moves from B down to E, implying a functional harmonic V-I cadence. It is notable that these cadences on C and on G are respectively a third below and a third above the tonal center of the piece (Ex. 12 and 14).

In the third exposition from measures 58 to 96, the subject begins on B in the soprano in augmentation. The subject-answer dialog is still the same as the first exposition, but with subjects in augmentation. A distinctive counter-subject appears in this exposition. The first half contains repeated notes and the second an ascending scale. The counter-subject accompanies the augmented subject with different intervals. For example, the counter-subject on B in measure 58 is an octave below the augmented subject; the counter-subject on B in measure 61 is a fifth above the augmented answer, and the counter-subject on a B in measure 85 is a sixth above the augmented answer. The ascending scale (A-B-C-D-E-F#-G) of the second half of the counter-subject becomes an independent melodic motion. It appears on A in the alto in measure 75 and in its inverted form in measure 73. Also, the augmented subject and answer are accompanied by a modified counter-subject occasionally. See Example 15.

Example 15: Johann Jacob Froberger, *Ricercar*, FbWV 409, mm. 56-91.

consonant fourth

56 (5-----6) sus. 4-----3 sus. 7-----6

57 sus. 7-----6 (6-----5) sus. 4-----3

58 (8th) counter- EXPOSITION III

consonant fourth portamento

59 augmented subject 60 imperfect cadence on G 61 counter-

subject sus. 2 3 link (6---5) (5th above)

portamento

The musical score for 'The Swan' (Debussy) is shown in two systems. The first system (measures 62-64) features a treble staff with a 'subject' (measures 62-64) and a bass staff with an 'augmented answer' (measures 62-64). The second system (measures 65-67) features a treble staff with a 'perfect cadence on G over on E' (measures 65-67) and a bass staff with a 'modified counter-' (measures 65-67). The score includes various musical notations such as notes, rests, and accidentals, as well as performance instructions like 'portamento' and 'link'.

65 sus. 7---6 consonant fourth consonant fourth
 subject (6-5) sus. 4--3 66 sus. 4--3 evaded on D
 (5---6) (5-6)
 (5---6) sus. 7--6 (6--5--6) sus. 7--6 (6---5)
 (8th below) (5---6)
 augmented subject counter-

The image displays four systems of musical notation, likely from a fugue, with various contrapuntal techniques and annotations:

- System 1 (Measures 71-73):**
 - Measure 71: Treble clef contains an **augmented subject**; Bass clef contains the **subject**.
 - Measure 72: Treble clef contains a **vertical 6** (interval of a sixth); Bass clef contains a **sus. 2** (suspension of the second degree) and a **portamento** (glissando).
 - Measure 73: Treble clef contains an **imperfect on G** (interval of a fifth); Bass clef contains a **sus. 2** and a **portamento**.
- System 2 (Measures 74-76):**
 - Measure 74: Treble clef contains a **counter-subject** (labeled **(8th below)**); Bass clef contains a **portamento**.
 - Measure 75: Treble clef contains an **augmented answer** (labeled **(6-5)**); Bass clef contains a **sus. 2** and a **portamento**.
 - Measure 76: Treble clef contains an **imperfect on C** (interval of a fifth); Bass clef contains a **sus. 2** and a **portamento**.
- System 3 (Measures 77-79):**
 - Measure 77: Treble clef contains a **counter-subject** (labeled **(5th above)**); Bass clef contains a **portamento**.
 - Measure 78: Treble clef contains a **counter-subject** (labeled **(5th above)**); Bass clef contains a **portamento**.
 - Measure 79: Treble clef contains a **perfect cadence on G over on E** (labeled **sus. 4**); Bass clef contains a **portamento**.
- System 4 (Measures 80-82):**
 - Measure 80: Treble clef contains a **modified counter-subject** (labeled **sus. 2**); Bass clef contains a **portamento**.
 - Measure 81: Treble clef contains a **modified counter-subject** (labeled **sus. 2**); Bass clef contains a **portamento**.
 - Measure 82: Treble clef contains a **modified counter-subject** (labeled **sus. 2**); Bass clef contains a **portamento**.

The image displays three systems of musical notation, likely for a lute or similar fretted instrument, in a Phrygian mode. The notation is presented in two staves per system (treble and bass clef).

- System 1 (Measures 83-85):**
 - Measure 83: Treble staff has a half note G4 (labeled (5--6)). Bass staff has a half note G3 (labeled (6--5)).
 - Measure 84: Treble staff has a half note A4. Bass staff has a half note A3.
 - Measure 85: Treble staff has a half note B4 (labeled "imperfect cadence on E"). Bass staff has a half note B3 (labeled "modified").
 - Labels: "augmented answer" (treble), "subject" (bass), "portamento" (bass, between 84 and 85).
- System 2 (Measures 86-88):**
 - Measure 86: Treble staff has a half note C5 (labeled "counter-subject"). Bass staff has a half note C4 (labeled "augmented subject").
 - Measure 87: Treble staff has a half note D5 (labeled "perfect cadence on A"). Bass staff has a half note D4.
 - Measure 88: Treble staff has a half note E5 (labeled "(8th below)"). Bass staff has a half note E4.
 - Labels: "counter-subject" (treble), "augmented subject" (bass), "portamento" (bass, between 87 and 88).
- System 3 (Measures 89-91):**
 - Measure 89: Treble staff has a half note F5 (labeled "augmented subject"). Bass staff has a half note F4 (labeled "subject").
 - Measure 90: Treble staff has a half note G5 (labeled "imperfect on G"). Bass staff has a half note G4.
 - Measure 91: Treble staff has a half note A5 (labeled "Episode"). Bass staff has a half note A4.
 - Labels: "augmented subject" (treble), "subject" (bass), "portamento" (bass, between 90 and 91).

The final cadence is a perfect cadence on A, a common cadence tone of the Phrygian mode.²⁴ This work closes with the plagal ending (iv-I; a minor-E major). See Example 16.

²⁴ In the Phrygian mode, A and C cadences are common. These are the two reciting tones from the authentic and plagal modal pair.

Example 16: Johann Jacob Froberger, *Ricercar*, FbWV 407, mm. 92-96.

92 portamento modified counter-subject evaded cadence on A

93 (5---6) sus. 7---6 (6---5) sus. 7---6 (6---5---6)

94 (5---6) (6---5) sus. 7---6 (6---5---6) consonant fourth

95 (5---6) (6---5) sus. 4---3 (5---6) (6---5) perfect cadence on E

96 (iv---1) (= m. 39, and m. 43.) (5---6) perfect cadence on A

plagal ending on E

CHAPTER III

CONCLUSION

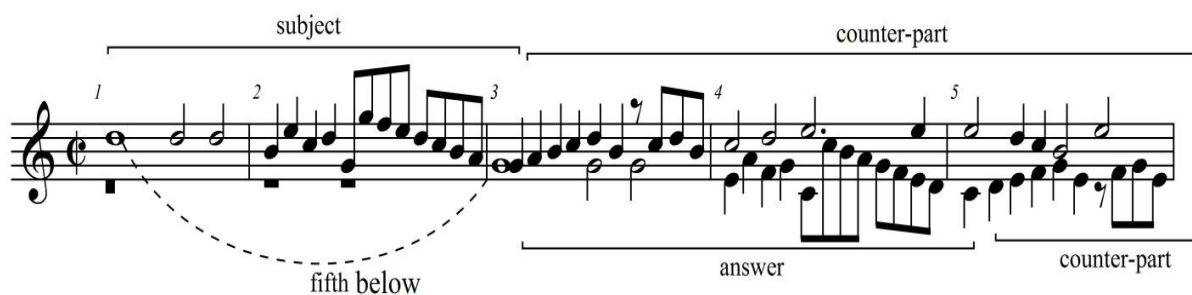
In conclusion, the single-subject *ricercare* by Froberger draw many characteristics from the Renaissance four-voiced motet. Some of these characteristics are ranges of approximately an octave for each voice part, use of Renaissance linear idioms such as consonant fourth and 4-3, 7-6, 2-3 suspensions, Renaissance cadence patterns that combine *tenorizans* and *cantizans*, as defined by Pietro Aaron, and use of a final *Sopplimento* section that concludes with a plagal ending. As is typical of the sixteenth-century motet, voices appear in imitation. Also featured in these *ricercare* are the modal variable sixth scale degree of the Dorian mode as well as the raised sixth and seventh scale degrees, F# and G#, approaching an A cadence. The types of the cadence are a major sixth to octave and a minor third to unison making a perfect cadence, imperfect cadence, evaded cadence, and Phrygian cadence. These cadences appear in three different locations within a phrase: at the end of the subject or answer, in the middle of the subject or answer and in the extension after the subject or answer. In addition, two of Froberger's single-subject *ricercare* contain a triple meter section inserted between the duple meter sections, another feature of the Renaissance motet. As the result, in *ricercare*, FbWV 407 and 409, there are three expositions.

Whereas the imitation pattern at the unison on contrary motion that occurs at the beginning of the Dorian *Ricercar*, FbWV 407, is a type often found in Renaissance motets, the pattern found at the beginning of the Phrygian *Ricercar*, FbWV 409, is more typical of Baroque practice. Since the subject enters on the fifth scale degree, B, the answer must be adjusted, as

described in Chapter II. Other Baroque characteristics in this *ricercar* include its use of a counter-subject, episodes, and sequences.²⁵

Giovanni Gabrieli, wrote pieces called *Fuga* in the late sixteenth and early seventeenth centuries, in the generation before that of Froberger. In a manner similar to Froberger's FbWV 409, the subject for Gabrieli's *Fuga* 1a begins on the fifth scale degree of a G Mixolydian work. See Example 17. Gabrieli's fugue subject may be compared with the subject in Dietrich Buxtehude's Fugue, BuxWV 175, which also begins on the fifth scale degree of a work in the key of G – this time G major. See Example 18. As is typical of sixteenth-century practice, Gabrieli makes a real answer beginning on the first scale degree.

Example 17: Giovanni Gabrieli, *Fuga* (1a), mm. 1-5.

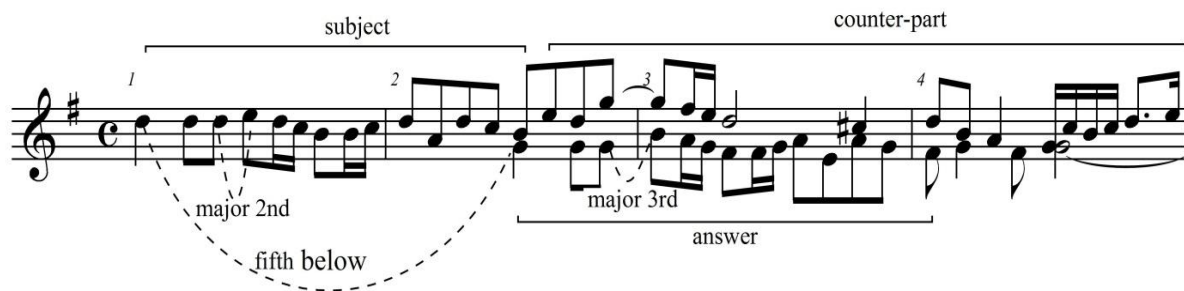


Gabrieli's subject appears in four different voices throughout the music on D and on G. The subject on D appears nine times and on G appears eleven times including the part of the subject throughout the music.

Another example, in the *Fuga* in G major, BuxWV 175 by D. Buxtehude (1637-1707), the subject begins on D in the soprano; then the answer on G in the alto begins a fifth below as a tonal answer. See Example 18.

²⁵ See p. 17.

Example 18: D. Buxtehude, *Fuga* in G major, BuxWV 175, mm. 1-4.



This fugue is divided into three expositions. The subject appears in four different voices throughout the music on D and G. Also, the subject enters eight times in the first exposition, seven times in the second exposition with inversion, and eleven times in the third exposition with both original subject and inversion.

In relation to these two examples, the subject-answer dialog in Froberger's FbWV 409 follows the Baroque practice of Buxtehude with its adjusted answer rather than the Renaissance practice of Gabrieli with its real answer. Other Baroque qualities in FbWV 409 include extended descending step sequences that forecast the circle of fifths motions commonly found in Baroque music and organization of the fugal expositions alternating with episodes that have contrasting material.

Thus, as described above, Froberger's Ricercar FbWV 407 exhibits characteristics mostly of Renaissance practice whereas his Ricercar FbWV 409 exhibits more Baroque characteristics.

APPENDIX A

LIST OF THE SINGLE-SUBJECT RICERCARE OF ANDREA GABRIELI, GIOVANNI GABRIELI, AND JOHANN JACOB FROBERGER

Andrea Gabrieli

Ricercar del Primo Tono alla quarta alta

Ricercar del Secondo Tono

Ricercar del Nono Tono

Ricercar del Undecimo Tono

Ricercar del Primo Tono

Giovanni Gabrieli

Ricercar del 10th Tono

Ricercare

Ricercar del 7th and 8th Tono

Ricercar del Primo Tono

Ricercar del 2nd Tono

Ricercar del 3rd Tono

Ricercar del 4th Tono

Ricercar del 5th Tono

Johann Jacob Froberger

Libro Quarto (1656)

Ricercar, FbWV 407

Ricercar, FbWV 409

Ricercar, FbWV 411

Libro di capricci e ricercate (ca. 1658)

Ricercar, FbWV 401

Ricercar, FbWV 402

Ricercar, FbWV 403

Ricercar, FbWV 404

Ricercar, FbWV 406

APPENDIX B

ANALYSIS OF THE TWO SINGLE-SUBJECT RICERCARE, FbWV 407 AND FbWV 409

BY JOHANN JACOB FROBERGER

RICERCAR

FbWV 407

subject 2 3

EXPOSITION I

bass pattern

inverted point of

4 5 6 (3---4) sus. 4---3

imitation linear (5---6) subject consonant fourth

Bass pattern inverted

perfect cadence on G phrygian on A

7 8 9

linear (6---5) sus. 4---3 evaded on G vertical 6

point of imitation (6---5) (G) sus. 2---3 answer

10 phrygian on E 11 12

imperfect on G inverted point of imitation/2

sus. 4---3 (5---6) sus. 2---3

perfect cadence on G

imperfect/evaded on A

EXPOSITION II

answer

inverted point of imitation

vertical 6
5

phrygian on A

subject

imperfect on D

phrygian on E

inverted point of imitation

imperfect on D

phrygian on A

subject

perfect cadence on G

28 29 30 inverted point of imitation perfect cadence on G

sus. 7-----3 (6-----5) (6-----5) sus. 4---3

portamento portamento portamento vertical 6/5

31 32 33 vertical 6 vertical 6

sus. 2-----3 (6-----5) 5 (5-----6) sus. 9--8 (6-----5) sus. 4---3 sus. 7---6

answer (6-----)

34 35 36 evaded on D second version of modified subject

sus. 4-----3 A, co-final of D (D) 5) bass pattern

EXPOSITION III

37 38 39 evaded on D vertical 6

sus. 7---6 sus. 7--6 (D) (D) sus. 4---3

modified answer modified answer second version of

40 41 42 perfect cadence on A

sus. 7--3 vertical 6 sus. 7---6 (6-5)

subject portamento second version of answer

imperfect on A

43 (6-5) sus. 2---3 44 sus. 4--3 45 (6---5) second version of answer

46 evaded on D imperfect on A (6--5) 47 sus. 4---3 sus. 7---3 sus. 7--6 48 perfect cadence on D (5---6) second version of subject

49 evaded/imperfect on D sus. 7--6 perfect cadence on D 50 sus. 7--6 51 sus. 4---3 second version of subject

Sopplimento sus. 2---3

52 sus. 4-----3 portamento (iv-----I) (plagal ending)

(portamento); melodic anticipation
(5---6); linear 5-6

Ricercar

F#WV 409

subject

EXPOSITION I

fifth below

answer

sus. 7-----3

sus. 7-----3

sus. 7-----3

subject

4

(6-----5)

5

6

(6-----5)

sus. 7-----6

sus. 7-----3

sus. 7-----3

sus. 7-----6

answer

cadence on C

7

8

9

(5-----6)

sus. 4-----3

(5-----6)

answer

portamento

10

(6-----5-----6)

(6-----5)

11

12

subject

(5-----6)

sus. 7-----6

(6-----)

answer

13 subject 14 15 sus. 7-----6

sus. 4-----3

answer

16 (6-----5) sus. 7-----3 17 evaded, on A sus. 7-----6 18 (6-----5)

subject

subject

sus. 4-----3 answer (5-----6)

19 (5-----6) (5-----6) 20 (6-----5) 21

subject

subject

answer

22 (6-----5) 23 Episode =mm. 46-47 portamento 24 portamento

subject

sus. 7-----5

(a-----d-----G-----C-----F-----b-----e-----5)

vertical 6 5 vertical 6 5 vertical 6 5

25 answer (6-----5) 26 Episode 27 perfect cadence on G

A-----d-----G-----C)

vertical 6 5 Circle of fifth

sus. 7-----6

portamento

28 sus. 7----6 (6----5) sus. 7----6 sus. 4----3 subject (6----5) 30 sus. 7----6 perfect cadence on C

31 (5----6) 32 perfect cadence on A plagal ending (6----5) (iv-----I) 33 sus. 4----3 portamento

34 subject link 35 answer link

EXPOSITION II

36 subject link 37

38 answer link 39 Episode = m. 43, and m. 96.

perfect cadence on C

answer link

40 (5-----6)

41

Episode

perfect cadence on G perfect cadence on C

sus. 7-----6 43

sus. 7-----6

(6-----5) (6-----5) (= m.39, and m.96)

44

sus. 7-----3 perfect cadence on A

answer modified link

subject link

46 Episode

47

sus. 9-----6

(6-----5) vertical 6 5 vertical 6 5 vertical 6 5

answer (5-----6)

48 modified link imperfect cadence on G

49

sus. 7-----6

subject

link

50 sus. 7-----3 51 sus. 7-----6

answer

link

perfect cadence on C

52 (5-----6) 53 (6-----5)

answer

link

vertical 6
5

54 subject link perfect on C

55 (5-----6) (6-----5) sus. 4-----3

vertical 6
5

consonant fourth

56 (5-----6) sus. 4-----3 sus. 7-----6 57 sus. 7-----6 sus. 4-----3 58 (8th) counter-
EXPOSITION III

consonant fourth portamento

59 augmented subject 60 imperfect cadence on G 61 counter-
 subject sus. 2-----3 (6-----5) link (5th above)

portamento

62 subject 63 perfect cadence on G over on E 64 (6-----5) modified counter-
 augmented answer link (6-----5)

portamento

65 sus. 7-----6 consonant fourth 66 sus. 4--3 evaded on D 67 (6-----5) counter-
 subject (6-5) sus. 7--6 (6--5--6) sus. 7--6 (6--5) (8th below) (5--6)

augmented subject

68 (6-5) (5---6) 69 imperfect on C 70 (6-5)

augmented answer

subject

sus. 2-----3

portamento

imperfect on G

counter-

71 augmented subject 72 vertical 6 5 73 (5---6)

subject

sus. 2-----3

portamento

74 75 augmented answer 76 imperfect on C

(8th below)

counter-subject

(6--5)

sus. 2-----3

(5-6)

portamento

77 counter-subject 78 79 perfect cadence on G over on E

(5th above)

(5---6---5) (6---5)

portamento

(5---6)

augmented answer

80
sus. 2-----3
portamento
modified counter-subject
modified counter-subject
vertical 6/5
counter-

81
(5--6)
(6--5)
(5---6)
(8th below)

82
imperfect cadence on E
modified

83
augmented answer
subject
portamento
sus. 2-----3

84
perfect cadence on A
counter-subject
augmented subject
(5---6)
(8th below)
counter-

85
augmented subject
imperfect on G
portamento
subject
sus. 2-----3
Episode
91
(6--5)
(5---6)

musical score analysis showing two systems of notation with various annotations and fingerings.

System 1 (Measures 92-94):

- Measure 92:** Treble clef has a whole note G4. Bass clef has a whole note E3. Annotations: "portamento" above the staff, "sus. 7---6" above the treble staff, "sus. 7---6" above the bass staff, and "(6---5)" below the bass staff.
- Measure 93:** Treble clef has a whole note A4. Bass clef has a whole note F3. Annotations: "modified counter-subject" above the staff, "consonant fourth" above the treble staff, and "(5---6---5)" below the bass staff.
- Measure 94:** Treble clef has a whole note B4. Bass clef has a whole note G3. Annotations: "evaded cadence on A" above the staff, "sus. 7---6" above the treble staff, "consonant fourth" above the treble staff, "sus. 4---3" above the bass staff, and "(5---6)" below the bass staff.

System 2 (Measures 95-96):

- Measure 95:** Treble clef has a whole note C5. Bass clef has a whole note F3. Annotations: "perfect cadence on E" above the staff, "consonant fourth" above the treble staff, "sus. 4---3" above the treble staff, and "sus. 7---6 (6---5)" above the bass staff.
- Measure 96:** Treble clef has a whole note D5. Bass clef has a whole note G3. Annotations: "perfect cadence on A" above the staff, "(iv---1)" above the treble staff, "(= m. 39. and m. 43.)" above the treble staff, "(5---6)" above the bass staff, and "plagal ending on E" below the staff.

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