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THE FIFTEEN "MYSTERY" SONATAS OF
H. I. F. BIBER (1644-1704)

THESIS

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By

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PREFACE

The "Mystery" sonatas for scordato violin and continuo by H. I. F. Biber (1644-1704) had been largely ignored until 1905, when they were included in the collection of Austrian masterpieces, Denkmäler der Tonkunst der Osterreich. Even then, they were the cause of some confusion which was later corrected in an addenda to the volume which included this series of sonatas.

In the Baroque period, scordatura was used by a few of Biber's contemporaries, but the technique is not commonly used today. In order to fully understand and to appreciate the "Mystery" sonatas, a knowledge of scordatura is necessary, and this technique is discussed in Chapter II.

Because the 17th century violins differed slightly from those used today, and the resources of the instrument had not yet been fully developed, a discussion of these aspects has been included. A comparison of the works of Biber with those of his contemporaries shows him to be an innovator who contributed greatly to the growing technique of the violin.

There are only a few abbreviations used in this paper. The symbol DTÖ is used to represent the Denkmäler der

Tonkunst der Österreich, and HAM is used for the Historical Anthology of Music. In addition, Ms. appears for manuscript; voc. for voice (Latin); Bd. (German), and Vol., for volume; and meas. for measure.

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CHAPTER I

THE LIFE AND CONTRIBUTIONS

OF H. I. F. BIBER

Heinrich Ignaz Franz Biber was born on August 12, 1644, at Wartenberg near the city of Reichenberg, on the Bohemian frontier. His father, Martin Biber, was a Flurschützen (game keeper or field protector) with Count Liechtenstein.¹

Very little is known about Heinrich Biber's childhood, but it is probable that he was educated either at Dresden or Prague,² and that he studied with the violinist-composer Johann Heinrich Schmelzer (1623-1680) in Vienna. Although Biber's work is in a more advanced idiom than Schmelzer's, they both used the same types of movements, and within these movements, they exhibited the same characteristics of free variety of form.³

For some time prior to 1670, Biber is known to have served the Princebishop Karl Liechtenstein-Kastelkorn at the court of Olmütz, in Moravia, where he was both chamber-servant and musician, a combination of duties common in the

¹Constantin Schneider, "H.I.F.Biber," Die Musik in Geschichte und Gegenwart, Vol. I, (Kassel und Basel, 1949).

²Ibid.

³William Newman, The Sonata in the Baroque Era, (Chapel Hill, N.C., 1959), p. 218.

smaller courts of the time. When Karl Liechtenstein-Kastelkorn became Princebishop in 1664, he developed at his court an excellent music chapel. He was especially interested in encouraging church music, and Biber was one of the most important musicians to serve at this court.⁴ The exact date of Biber's appointment is unknown, but correspondence shows that he lost it abruptly in 1670. Letters of the period show that Biber, probably along with another musician and chamber-servant, Sartorius, left the court at Olmütz to travel to Absam, in order to procure some instruments from Jacob Stainer (1617-1683), the violin maker, and apparently never returned. The reasons for Biber's dismissal are unknown, but unfavorable mention of Biber occurs in some letters of Schmelzer and others. In spite of these happenings, however, it appears that Biber had not completely broken off all relations with the Olmütz court. An undated letter of Biber's from about 1673⁵ notes that Biber sent a "Serenade" to Paul Weywanovsky, a Slavic musician, who succeeded Biber at Olmütz.

⁴Paul Netti, "Zur Geschichte der Musik-kapelle des Fürstbishops Liechtenstein," Zeitschrift für Musikwissenschaft, IV, (1921-1922), 485.

⁵Ibid.

In 1673, or 1676,⁶ Biber entered the service of the Archbishop of Salzburg as musician and personal servant.⁷ He became the teacher of contrapuntal singing to the choir boys of the cathedral in 1677, and in the same year, Emperor Leopold I decorated him with a Golden Chain, probably because of his great virtuosity as a violinist. Biber was made Vice-Capellmeister in 1679 or 1680; his fame subsequently spread, and in 1681 he applied for a patent of nobility, although he did not receive it at that time. In 1684, he was appointed Capellmeister and Lord High Steward.⁸ Of his duties at that time, it is known only that he did not have to teach the violin,⁹ and apparently he was concerned primarily with contrapuntal singing and composition. Biber applied for and received the patent of nobility in 1690, and the title "von Biebern" was bestowed upon him by the Emperor. He died at Salzburg on May 3, 1704.¹⁰

His son, Karl Heinrich von Biebern, held the position of Vice-Capellmeister at Salzburg from 1714 to 1743, and

⁶Edmund van der Straeten, The History of the Violin, 2 Vols., (Great Britain, 1933), I, 103, gives both dates. Schneider and Robert Eitner (footnote 7) give only 1676.

⁷Robert Eitner, "H.I.F.Biber," Biographisch-Bibliographisches Quellen-Lexicon der Musiker und Musik-gelehrten, Vol. II, (Berlin, 1900-1904; New York, 1946).

⁸Schneider, op.cit.

⁹van der Straeten, op.cit.

¹⁰Schneider, op.cit.

that of Capellmeister from 1743 to 1744. He was succeeded in this position by Leopold Mozart.¹¹

Survey and Catalogue of Works

The compositions of Biber fall into three general categories: opera, sacred vocal works, and chamber music. There are three known operas, but the only one of which the music survives is Chi la dura, la vince, of 1687. Alessandro in pietra is entirely lost, and only the libretto to L'Ossequio de Salisburgo, 1699, remains.¹² The sacred vocal works include several masses and requiems; the chamber music is for small instrumental combinations.

Catalogue¹³

- 1667 Passacaglia in g minor for unaccompanied violin, edited by Erwin Luntz, DTÖ, Vol. XXV, 1905, 82-84.
- 1673 Serenade mit dem Nachtwächterlied, published by Paul Netti, Nagels Musikarchiv, No. 112, 1934.
- 1674 Fünfzehn Mysterien Sonaten, edited by Erwin Luntz, DTÖ, Vol. XXV, 1905, 1-81.
- 1676 Sonatae--Tam aris, quam aulis servientes, published by J. B. Mayer, Salzburg. Second edition, Löhner, Nürnberg, 1681.

¹¹Eitner, op.cit.

¹²Schneider, op.cit.

¹³This list has been compiled from Groves Dictionary of Music and Musicians, Die Musik in Geschichte und Gegenwart, and Robert Eitner's Biographisch-Bibliographisch Quellenlexicon.

- 1680 Mensa sonora, seu musica instrumentalis (Klingende Taffel/oder Instrumentalische Taffel-Music/mit frisch lautenden Geigenklang), J. B. Mayer, Salzburg, 1680. Second edition, Nürnberg, 1681.
- 1681 Acht Solo Violin Sonaten mit Basso-continuo, Löhner, Nürnberg, 1681.
- 1681 Fidicinium sacro-profanum, zwölf 4-5 stimmung Sonaten, Endtner, Nürnberg, 1681.
- 1687 Chi la dura, la vince, an opera.
- 1689 Alessandro in Pietra, an opera.
- 1693 Vesperae longiores ac breviores unacum Litaniis a 4 voc.
- 1699 L'Ossequio di Salisburgo, an opera.
- 1701 Missa Sti Henrici, edited by Guido Adler, DTÜ, Vol. II, 1918, 1-47.

In addition to the works mentioned above, there are others for which no composition date is available.

Aprobatio des Tractatl's, found in "Manductio" by J. B. Samber, 1704.

Balletsuiten, in St. Mauriz-Archiv in Kremsier, MS.

Harmonia artificiosa-ariosa, Endtner, Nürnberg, 1712

Requiem, edited by Guido Adler, DTÜ, Vol. LIX, 1923, 41-72.

Stabat Mater a cappela, performed in Salzburg in 1727.

Violin Sonata in C, revised by F. Hermann in F, David's Hohe Schule des Violin-Spiels, Bd. 1, Leipzig, Peters.

Several offertories, requiems, and masses, including:

Requiem for 15 in Concerto. MS.

Requiem for 5 voices and 5 violes in Concerto. MS.

Seventeenth Century German
Violin Music

During the Thirty Years War, (1618-1648), which took place largely on German soil, it was difficult for the Germans to devote much time to the arts, and it was not until after the war that much attention was again turned to music.¹⁴ At this time, the nobility began to take an interest in encouraging church music by establishing court chapels and employing musicians. An example of this is Prince Liechtenstein-Kastelkorn's court at Olmütz in Kremsier, when he succeeded to the position of Princebishop.¹⁵ During this cultural lag in Germany, the Italians were able to move ahead in the field of violin music. This was especially true in the development of a clear, crystallized form, as exemplified by the music of Archangelo Corelli (1653-1713).¹⁶ There were some important composers in Germany during these times, but they wrote little in the area of string music.¹⁷ By about 1690, however, Biber (1644-1704) and others, such as Johann Heinrich Schmelzer (c. 1623-1680) and Johann Jakob

¹⁴ van der Straeten, op.cit., I, 109.

¹⁵ Nettl., op.cit. ¹⁶ van der Straeten, op.cit.

¹⁷ Several important German composers at the beginning of the second half of the 17th century were Johann Jakob Froberger (1616-1667), organist, and the creator of the keyboard suite; Johann Rosenmüller (1620-1684), composer of orchestral suites; and Dietrich Buxtehude (1637-1707), composer of organ music and cantatas.

Walther (1650-1717?) had brought German violin music up to a level that compared to that of the Italians. This served as the foundation of the German Baroque school of violin music, which in all but the formal aspect, far surpassed the Italian and French schools.¹⁸

There were two basic differences between the German school and the French and Italian schools. First, the Germans had a traditional contrapuntal schooling,¹⁹ which they transferred to the violin. They were, therefore, interested in experimenting with multiple-stops and counterpoint through the use of scordatura; all of these were developed to a very high level by Biber. Secondly, due to the fluent use of contrapuntal techniques, the German music had a fuller sound than either the French or Italian music. Since the Germans had not as yet adopted the tonal relationships of the late Baroque, many of the modulations, to related but unexpected keys, gave a very chromatic effect to the music.²⁰

Two composers who are particularly important because of their relationship with Biber are Johann Heinrich Schmelzer (c.1623-1680), and Georg Muffat (1653-1704).

¹⁸ van der Straeten, op.cit.

¹⁹ Paul H. Lang, Music in Western Civilization, (New York, 1941), p. 467.

²⁰ This will be more fully treated in the chapter on Biber's music.

In addition to being a composer, Schmelzer was a violinist at the Vienna Court Chapel from 1649-1670. The first German to fill this post at the Austrian court, Schmelzer was appointed assistant conductor in 1671, and conductor in 1679.²¹ It is possible that he was the teacher of Heinrich Biber, since the similarities of their instrumental usages and settings reveal definite ties.²²

Musically, Biber went beyond Schmelzer in nearly everything that then contributed to structural organization. There is greater thematic unity because Biber had greater contrapuntal and harmonic resources by which to keep the theme's reiterations interesting. There is greater overall unity, too, as the result of greater integration and interrelationship of the movements, which include, besides the almost invariable set of variations, dances (even in the "Rosary Sonatas" though not in Fidicinium sacroprofanum), arias, toccata-like sections, and a few polyphonic movements.²³

Georg Muffat was at Salzburg with Biber, and together, they brought music in Salzburg to a peak, although Muffat was not considered to be as technically advanced as Biber.²⁴ Biber and Muffat are considered more important as contributors to the sonata than are Schmelzer, or Johann Josef Fux (1660-1741) who resided at Modena.²⁵ In Biber's modulations can be seen some of the bases of the Sonata-allegro form as it was later used by Franz Joseph Haydn (1732-1809). Biber's

²¹van der Straeten, op.cit., p. 100.

²²Newman, op.cit., p. 218.

²³Ibid., p. 219.

²⁴Ibid., p. 220.

²⁵Ibid., p. 41.

importance as a violinist in relation to his contemporaries is indicated in the following statement by van der Straeten, in a passage about Johann Jakob Walther (1650-1717?):

He [Walther] was the "greatest virtuoso of his time. . . . One finds in his work ("Hortulus Chelicus") all that others believed to have discovered long after him with regard to the various features of violin technics of a virtuoso character, and the best violinists of the 19th century have not surpassed his use of double stops to the same extent that he surpassed his contemporaries, except Biber. . . ." ²⁶

Walther is said to have developed the technique of combining the left-hand pizzicato with a sustained melody played by the bow. ²⁷ As a composer, however, Biber stood far above Walther, ²⁸ and it is possible that Biber's position as a virtuoso violinist in the 17th century was comparable to that of Paganini in the 19th century. ²⁹ Although Schmelzer also used double-stops and scordatura, these techniques were developed to a greater extent by Biber. ³⁰

²⁶ van der Straeten, op.cit., I, 107.

²⁷ Ibid. ²⁸ Ibid.

²⁹ Lang, op.cit., p. 403.

³⁰ Newman, op.cit., p. 218.

CHAPTER II

THE SEVENTEENTH CENTURY VIOLIN AND THE TECHNIQUE OF SCORDATURA

To understand music written for the violin in the 17th century, it is essential to recognize the differences between the instruments used then, and those used in the performance of the same music today. During Biber's lifetime (1644-1704), Italian craftsmen such as Niccolo Amati (1596-1684), Antonio Stradivari (ca.1644-1737), and Giuseppe Bartolomeo Guarneri "del Gesu" (1698-1744) constructed instruments of such lasting beauty and durability that they have never been surpassed, even to the present time. Violin makers in other European countries reached the height of their capabilities at approximately the same time:¹ among them were Jacob Stainer (1617-1683), and Matthias Alban (1621-1712), in Germany.²

The Violin

Over a period of several hundred years, several changes have been made in order to improve the playing and acoustical characteristics of the violin. However, the basic

¹Edmund van der Straeten, The History of the Violin, 2 Vols., (Great Britain, 1933), I, 137.

²Fridolin Hamma, German Violin Makers, (London, 1961), pp. 41, 47.

outline and size of the body remain the same today as they were in the 17th century.³ The first change to take place was the reshaping of the bridge, which had varied in style in the different countries, and sometimes even among the instruments in one country. The early bridges, slightly flatter and lower than later ones, touched the violin all along their lower edge. The holes in these bridges were considered necessary, in order to lighten the mass of the bridge, thereby allowing the vibrations to be transmitted more easily from the strings to the body of the violin. In the new design standardized by Stradivari, the holes were enlarged and the bridge rested on two small feet. These larger holes, in addition to being functional, were also ornamental.⁴

In order for a single line of notes to be played more easily, the top of the bridge was made more rounded and slightly higher. By using the older flatter bridge, and a bow with a minimum of tension on the hair, it was possible to perform chords of two, three, or four notes without difficulty, with all of the notes sounding simultaneously. The newer combination of the more curved bridge and the bow with more tension made the playing of chords more difficult, although a single melodic line was easier to perform.⁵ In

³David Boyden, "The Violin and Its Technique in the 18th Century," Musical Quarterly, XXXVI (Jan., 1950), 11.

⁴Ibid., p. 12.

⁵Gerald R. Hayes, Musical Instruments and Their Music, 1500-1750, 5 Vols., (London, 1930), II, 198.

order to sound all of the notes in multiple stops (at least those chords of more than two notes), the chord must now be broken, an act that often results in a harsh unpleasant effect.⁶

The raising of the bridge also resulted in the raising of the strings above the fingerboard: since this new position placed the strings too high above the fingerboard, it became necessary to raise the fingerboard by slanting the neck back. This was accomplished by inserting a small wedge between the fingerboard and the body of the violin.⁷

At the end of the 19th century, the standard of pitch used by musicians in Europe was approximately a semitone higher than that which had prevailed during the first half of the 18th century.⁸ By tuning the strings higher, a greater tension was placed upon the violin. The greater string tension, combined with the increased tension produced by changing the angle of the neck, necessitated the reinforcement of the part of the instrument which was to support that added tension.⁹ The sound post remained the same, but the bass bar, in order to support the added

⁶The production of a more brilliant tone was also contributed to by the development of the bow. See page 15.

⁷Hayes, op.cit., p. 198.

⁸Willi Apel, "Pitch," Harvard Dictionary of Music, (Cambridge, Mass., 1961).

⁹Hayes, op.cit., p. 198.

tension, was enlarged. These adjustments gradually became a standard part of the violin, and were sometimes incorporated into violins of earlier construction.

The new neck was both flatter and narrower than the old one, not only making it easier to shift from one position to another, but also easier to reach the lowest string. When the neck was lengthened about one half-inch, the vibrating string was also lengthened, thus increasing the power and brilliance of the instrument.¹⁰ In addition, the strings were gradually made thinner,¹¹ a change that helped to give the violin a more brilliant tone, since the tension on the string had to be increased in order to bring the string up to pitch. Although all of the early strings were made of gut, they were frequently wound with silver or aluminum, and eventually exclusively used for the lower three strings. A silver wound g string is mentioned as early as 1741 by Majer.¹² Today, aluminum wound gut strings are widely used for the three lower strings; the upper string is usually unwound steel, although occasionally, all of the strings are steel, according to the preference of the player.

Gradually, the length of the fingerboard was extended, in the direction of the bridge, to its present length of

¹⁰ Ibid.

¹¹ Ibid., p. 200.

¹² J. F. Majer, Neu-eröffneter theoretisch- und prack-tischer Music-Saal, (Nuremburg, 1741), p. 74.

approximately ten and one-half inches. This is about two and one-half to three inches longer than the fingerboard of the 17th century; those built by Stradivari (ca. 1644-1737) are between seven and one-half and eight and one-half inches long.¹³ Presumably, the fingerboard was extended to allow fuller use of the upper range of the instrument, but according to Hayes, this was not necessarily so:

Why the finger-board became lengthened is not easy to understand, as, quite apart from harmonics,¹⁴ the strings are not pressed right down to the wood in stopping extreme (ly high) notes, and the accounts of 17th century players convince us that in some of their more exuberant moments they stopped outside their finger-board altogether.¹⁵

Most violin music composed during the 17th century in Germany does not exceed the third position.¹⁶ The Italians, however, were beginning to experiment with higher positions; for example, Archangelo Corelli (1653-1713) in his Opus V, Number 12, (*La Folia*) occasionally used the fifth position. Gradually, the desire to use even higher positions increased, and the upper limit was extended further.¹⁷

¹³Kenneth Skeaping, "Some Speculations on a Crisis in the History of the Violin," Galpin Society Journal, VIII (March, 1955), 5.

¹⁴Harmonics are produced when the string, which vibrates both as a whole and in sections, is lightly touched at a certain point, so that a particular overtone is heard. Kent W. Kennan, The Technique of Orchestration (New York, 1952), p. 63f.

¹⁵Hayes, op. cit. ¹⁶van der Straeten, op. cit., p. 109.

¹⁷Boyden, "The Violin and Its Technique in the 18th Century," op. cit., p. 20.

The Bow

In the 17th century, it appears that both straight and outwardly curved (i.e., convex) bows were common, especially in Germany.¹⁸ Although some versions of the straight bow existed earlier,¹⁹ it was not until 1784 that the straight bow was perfected by the Frenchman, Francois Tourte (1747-1835).²⁰ In his version, the bow has a slight inward curve to the stick, which, when the hair is taut, remains stiff enough to avoid rubbing the strings. It has been commonly thought that the tension of the hair on the early convex bow was controlled by the thumb, which pressed against the hair on the underside of the wood. This result, however, is a method of performance that is not smooth, and further, if all of the fingers were on the upper side of the bow, it would be almost impossible to avoid dropping the bow when changing the tension of the hair by moving the thumb.

In addition to its different construction, the bow was also held slightly farther up on the stick than it is at present. To this end, there was a wrapping of reed which aided in holding the bow. This wrapping covered about

¹⁸Ibid., p. 14.

¹⁹Hans-Heinz Dräger, "Bogen," Die Musik in Geschichte und Gegenwart, Vol. II, (Kassel und Basel, 1952).

²⁰Boyden, "The Violin and Its Technique in the 18th Century," op.cit., p. 14.

eight inches of the lower end of the wood.²¹ Since the curve of the bow in earlier times was convex, and since there was less tension on the hair, it was possible, with the lower bridge, to play chords with three or four notes sounding simultaneously.²²

The so-called "Bach" bow, actually an invention of recent times, should also be mentioned. It is based upon theories put forward by Arnold Schering and later Albert Schweitzer, and is as follows:

With an outwardly curved bow and slack bow-hair, the sustained 3- and 4-part chords in the Bach Sonatas could be played by relaxing the thumb; and per contra, that single strings could be played by pressing in with the thumb and taking up the slack of the bow.²³

This theory appeared to be a plausible explanation of the peculiar problems encountered in the works of the period that were in a true polyphonic style, but Schering based his theory on these two assumptions, that is, of the convex bow and the slack hair, for which he offered no evidence. In fact, all available evidence points to the contrary, that is, that the bow hair was not and could not be tightened or loosened at will; nor was there any documentary

²¹Kenneth Skeaping, "A Baroque Violin from Northumberland," Galpin Society Journal, XIV (March, 1961), 47.

²²Boyden, "The Violin and Its Technique in the 18th Century," op. cit., p. 14.

²³David Boyden, "The Violin and Its Technique: New Horizons in Research," International Musicological Society, Papers (New York, 1958), p. 32f.

or pictorial evidence to support Schering's theory, and he retracted it in 1920.

When the theory was applied to the construction of a bow to be used for musical performance, the physical difficulties of playing and sustaining 3 and 4 part chords became evident. They found that the thumb alone could not stretch the hair tightly enough to play on individual strings. This defect required that the bow have a mechanism which could be turned to change the tension of the hair, but the time involved in making this change forfeited any advantage gained by being able to loosen or tighten the hair.²⁴ There have been, however, successful experiments in this area, for both Rolph Schröder and Emil Telmányi constructed usable bows along these theories. However, they must be considered as modern inventions and not as models of an earlier bow, since they involve the use of a mechanism to control the tension while the bow is being used, for which there is no historical precedent.

Conclusions About the Violin and Bow

While many of the above changes would have no direct effect on the music of Biber as it is performed today, there are several aspects of the contemporary instrument that greatly influence the interpretation of both his music and the music of his contemporaries. It is difficult, for

²⁴Ibid., p. 32ff.

example, to play three or four notes simultaneously with the modern bow and the modern curved bridge, and yet much of Biber's music involves polyphonic sections in two and three parts. This would have been possible, however, when the music was performed on an instrument with a flatter bridge and a bow with less tension on the hair. At the same time, it would have been more difficult to perform the passages of single notes with a looser bow without touching other strings. It is therefore probable that the style of both the violin and the bow used by Biber and his contemporaries would be somewhere in between the extreme examples discussed above.

A comparable modern performance of Biber's music would seem to require a violin which has been fitted with a bridge slightly lower and flatter than modern bridges in order to allow multiple stops to be played more easily. The three upper strings should be made of gut, while the lowest should be one of gut wound with silver,²⁵ since these produce a somewhat more mellow tone than do the aluminum wound strings.

In Biber's time, the chin rest was not used, but there would be little point in doing without it today, since it would influence only the manner of holding the violin and

²⁵Boyden, "The Violin and Its Technique in the 18th Century," op.cit., p. 37.

not the resultant sound. The same is also true of the shoulder rest, which was not used by 17th century performers.

Scordatura

Literally, the word scordatura²⁶ means "mis-tuning."²⁷ This Italian term was first applied to the lute and viol music of the 16th and 17th centuries, for, at that time, both of these instruments could be retuned to better accommodate the piece of music being played.²⁸ In order that the strings might contain notes found in the tonic triad of the key, the instrument is tuned according to the key in which a particular piece is written. There are several reasons for using different tunings on the violin: to obtain unusual chords; to vary the tone color of the instrument; and most important, to aid in the execution of difficult passages (especially useful in keys involving several flats).²⁹

²⁶The first recorded use of scordatura in a sonata was in 1629, by Biagio Marini, in Opus 7, No. 2. Theodore Russell, "The Violin Scordatura," Musical Quarterly, XXIV (January, 1938), 84.

²⁷Willi Apel, "Scordatura," Harvard Dictionary of Music, (Cambridge, Mass., 1961).

²⁸Frank Kidson, "Scordatura," Grove's Dictionary of Music and Musicians, 5th ed., (London, 1961).

²⁹Russell, op. cit., p. 84.

During the 17th century, it was customary to give an accord at the beginning of each piece of music. The accord is a symbol in which each note represents the pitch of one of the strings of the instrument to be used and gives the normal tuning for that piece.³⁰ Gradually, during the 17th century, the tuning in fifths (g-d'-a'-e")³¹ became standardized,³² and it was no longer necessary to indicate the tuning for the instrument, except when the composer wrote for another tuning, in which case an accord would be given.

Following is a list of terms necessary to the understanding of scordatura. These brief definitions will be amplified in subsequent paragraphs.

The normal tuning of the violin has come to be accepted as g-d'-a'-e". As such, it does not need to be marked with an accord.

Regular fingering is that which is used on normal tuning to produce half and whole steps as directed by the key signature of the piece.

Key signs or key signatures are devices used to indicate sharps or flats throughout a piece, and in all octaves,

³⁰Apel, "Scordatura," op.cit.

³¹The system used to designate the pitch octaves is system number one found in Apel, "Pitch Names," Harvard Dictionary of Music, op.cit., p. 586.

³²Russell, op.cit.

even though they appear in only one. They immediately follow the clef signature.

Scordato tuning is any tuning other than the normal. It must be marked at the start of the piece with an accord, which is a symbol showing the pitch of each of the four strings on the instrument. One or any number of the strings may be different from the normal tuning. Fingering signs are included in the accord.

Fingering signs are the sharps, flats or naturals following the accord and they indicate any change from regular fingering--only in the octave in which they appear.

Adjusted fingering is that fingering which deviates from the regular fingering in accordance with the directions of the fingering signs.

In order for the violinist to perform the music more easily, it is written as if it were regular fingering on the normal tuning; that is, he plays what he sees, regardless of the resulting sound, which is in turn dependent on how much the pitch of the string is raised or lowered. Since each string may be retuned in any manner, each one actually becomes a transposing string. For example, if the notes in Figure 1 (part a) were played on normal tuning (g string), with normal fingering, the sounding and written notes would be the same. If, however, the string is retuned to the pitch of a, the resulting sound would be as in

Figure 1 (part b). Although the notes produced are different, the pattern of intervals between them remains the same.



Fig. 1--The same combination of half and whole steps on the fourth string, when tuned as g, in part a, and as an a, in part b.

If all of the strings were changed uniformly so that the interval of a fifth was kept constant between each string, the violin could be treated as a normal transposing instrument, and music could be written to compensate for this change in tuning. The intervals appearing in the melody line would keep their relationship and sound the same as they are written, although the melody line would be written in a different key from that in which it sounds. In scordatura, however, it is probable that the interval of a fifth between the strings will not be maintained, since any or all of the strings may be raised or lowered. By writing the scordato line so that it may be played with regular fingering on the normal tuning, the intervals produced by playing that line may not be the same as they appear to be. In Sonata 6, which has an accord of a-flat, e-flat', g', d'', a major third is produced between the two inner strings, while the other two intervals remain as fifths. In Figure 2, the third and fourth notes in the top line appear to be a fifth apart, from a' down to d'. The pitches produced



Fig. 2--"Adagio" from Sonata 6

will actually be g' and e-flat' (bottom line), because the a' and d' strings are retuned as those pitches. The same principle holds true for the intervals between the fourth and fifth, the seventh and eighth, and the ninth and tenth notes.

Because of this difference in the intervals, that is, what they appear to be and what they actually are, most of the music for scordato violino must be played in the first position. It is the interval between any two consecutive strings that determines this. If the interval remains as a fifth, the notes may be played in another position (for example, third), without changing the notes. However, if the interval between the two strings is not a fifth, then, for example, when the notes are played in the third position, the interval that is normally a fifth will be changed and the resulting pitches will be incorrect, a circumstance that would not happen in first position. To illustrate this, if the upper line of Figure 2 were played in the third position, rather than first, the result would appear as in Figure 3, and would give the incorrect sound, due to the

tuning of the two inner strings to the interval of a third.



Fig. 3--The results if the top line in Figure 2 is played in the third position.

A related problem is that of double-stops, often used extensively in scordatura. The double-stop appearing to be a third in the scordato line may actually sound as a fourth, in agreement with the principle stated above. Since one key may require a note to be played slightly higher than another, and since the sounding interval and the notes are not actually seen by the performer as they sound, the fingers may be placed in a position that would be correct for the third the performer sees, and still produce an out-of-tune fourth. Such chords must be marked and adjusted by the player, so that he will compensate by raising or lowering his fingers accordingly. In addition, a separate instrument should be used for this music, so that the strings which are to be retuned may be given time to settle on the instrument.

In an accord, there may be signs (sharps, flats, and naturals) both before and after the symbol representing the pitches of the strings. Those coming in front of the notes represent the pitch of the string, while those after refer to the regular position of the fingers on normal tuning, and apply only to one string (or octave). They do not

necessarily, or even usually, show what key the piece is in. The key must be determined by examining each string and the signs which apply to it alone, thereby discovering what accidentals (or raised or lowered notes) are produced on the retuned strings. To illustrate how this is done, the accord for Sonata 3 will be used.



Fig. 4--Accord for Sonata 3

The first string, normally e", is retuned here as d", one whole step lower. In normal tuning, the f-sharp and g-sharp would apply to this first string, as they do here also--raising the first and second fingers each a half-step. But since the string is now one whole step lower, the notes produced using these fingers will not be f-sharp and g-sharp; they will instead be one whole step lower. In Figure 5, by indicating half-steps by small distances (e.f., g-sharp" to a-natural") and whole-steps by large distances (e.g., e-natural" to f-sharp") between the names of the notes, the notes produced by regular fingering (using f-sharp and g-sharp) on normal tuning, and the fingering, may be seen. The symbol "0" stands for open string.

Retuned	e"	f#"	g#"	a"	b"
Fingering	0	1	2	3	4

Fig. 5--The fingering pattern which results when f-sharp and g-sharp are used on the e string.

When the string is retuned as d", and the same intervals, that is, the same fingering pattern are used, the following notes result (Figure 6).

Retuned	d"	e"	f#"	g"	a"
Fingering	0	1	2	3	4

Fig. 6--The result when the finger pattern of Figure 5 is used and the string is retuned as d".

Only an f-sharp" is now produced on the retuned string, whereas the normal tuning produces an f-sharp and a g-sharp.

The second string is raised one whole step from the normal a' to b', and there are no signs applying to it. By using regular fingering as if on the normally tuned string, the notes whose names appear in the lowest line of Figure 7 will be produced. The upper line shows those notes which would be produced on normal tuning, while fingering appears between them. On the retuned string, an f-sharp and a c-sharp will result in place of the b-natural and c-natural of the normal tuning.

Normal	a'	b'	c"	d"	e"
Fingering	0	1	2	3	4
Retuned	b'	c#"	d"	e"	f#"

Fig. 7--The results when the same fingering pattern is applied to the normally tuned second string (a'), and the retuned string (b').

The third string is raised a major third, from d' to f-sharp'. Following it are two natural signs, one on f' and one on g'. They would apply to the third string, normally tuned as d'. These are reminders that on this string,

the fingers will be in the positions given f-natural and g-natural, even though an f-sharp and g-sharp may be used on another string. It must be remembered at all times that these signs do not represent the actual pitches, but only the positions of the fingers. The resulting pitches are shown in Figure 8. On this retuned string, the pitches f-sharp', g-sharp' and c-sharp'' will result in place of the d-natural, e-natural and a-natural.

Normal	d'	e' f'	g'	a'
Fingering	0	1 2	3	4
Retuned	f#'	g#' a'	b'	c#''

Fig. 8--The results when the same fingering pattern is applied to the third string tuned normally as d', and retuned as f'.

The fourth string is also raised a major third, from g to b. Since there are no signs associated with it, the pitches shown in the lower line of Figure 9 will be produced, including a c-sharp', d-sharp' and f-sharp', in place of the a-natural, b-natural, and d-natural'.

Normal	g	a	b c'	d'
Fingering	0	1	2 3	4
Retuned	b	c#'	d#'e'	f#'

Fig. 9--The results when the same fingering pattern is applied to the normally tuned and retuned g string.

By combining all of the sharps now produced on the retuned strings, it may be seen that f-sharp and c-sharp are produced whenever f-natural and c-natural appear. In addition, g-sharp appears one out of two possible times, while d-sharp appears in one of the three places it is

possible to play the note d using this accord. It is apparent that f-sharp and c-sharp are to be a part of the key signature, because they are provided for each time these notes are presented. But in order to determine whether g-natural or g-sharp is called for, we must look at the implied harmony in the melody. With two sharps, the sonata would be in D Major or b minor. After investigation, it may be seen that the piece is in b minor. In order to cancel out the unnecessary g-sharp which results on the third string, Biber chose to use an accidental e-flat in the scordato line. In the same way, he used a b-flat in the scordato line to cancel the unneeded d-sharp which would be produced on the fourth string. Although it occasionally happens that both flats and sharps will appear in the same accord,³³ it is easier for the performer if this does not occur. The composer may choose, as Biber did in Sonata 5, to use only sharps (or flats, as he did in Sonatas 10 and 13), and correct the incorrect notes with accidentals as they appear in the scordato line. The opposite of this may also be true, that is, signs necessary to the key may be omitted from the accord and added as accidentals in the scordato line.

One explanation for using higher tuning is found in the following statement: "The old violins had shorter necks,

³³See Sonata 7, Page 58, Figure 35.

hence shorter strings, which lacked brilliancy because of less tension. The present strings are long enough to require more tension, and the tone is therefore more brilliant."⁵⁴

Scordatura may also give the violin music a much richer sound. The many possible tunings allow passages of parallel thirds, sixths, and octaves to be played easily, as well as numerous other combinations, which would otherwise be very difficult.

⁵⁴F. B. Emery, The Violinist's Encyclopedic Dictionary . . . (Chicago, 1928), p. 220f.

CHAPTER III

BIBER'S INNOVATIONS AND THE "MYSTERY" SONATAS

Heinrich Biber contributed much to the development of string music, both as a composer and a performer. He "is one of the outstanding figures in the history of the violin, who . . . far surpassed his Italian contemporaries."¹ Biber traveled to many of the European courts to perform, receiving honors and recognition. In his compositions, he developed to a high level several techniques which had already been tried, especially those of multiple-stops and scordatura, or the mis-tuning of the violin.² Extensive use of these two techniques enabled Biber to write polyphonically for one violin, as in Sonata 10 of the "Mystery" sonatas.³ In addition, Biber used the upper range of the violin more than others, and gave directions for pizzicato, as in the Nachtwächter Serenade Musik.⁴

¹Edmund van der Straeten, The History of the Violin, 2 Vols. (Great Britain, 1933), I, 103.

²Andreas Leiss, "H. I. F. Biber," Die Musik in Geschichte und Gegenwart (Kassel und Basel, 1949).

³Variation 3 of "Aria con Variazioni," Figure 54, p. 69.

⁴E. H. Meyer, "Die Bedeutung der Instrumentalmusik am Fürstbischöflichen Hofe zu Olomouc (Olmütz) in Kroměříž (Kremsier)," Die Musikforschung, IX (1956), 402.

Biber's Passacaglia in g minor (often called Number 16 of the "Mystery" sonatas) of 1667 is the first sonata known to have been written for unaccompanied violin.⁵ It uses the normal tuning of g-d'-a'-e", but employs many multiple-stops, which give it its polyphonic character. The 64 variations of the passacaglia are based on a reiterated four note theme (Fig. 10). This passacaglia, along with a suite by Johann Paul Westhoff (1656-1705) of 1683,⁶ and an undated



Fig. 10--Main theme of Passacaglia in g minor

sonata by Johann Georg Pisendel (1687-1755), are probably the only works for unaccompanied violin preceding Bach's six sonatas and partitas of 1720.⁷ The main characteristics of their works are the emphasis upon polyphony and full chords throughout the violin part, features rarely present in contemporary Italian and French music.⁸ Bach's sonatas and partitas, along with Biber's passacaglia, form an important part of the German Baroque school of violin music.

⁵William Newman, The Sonata in the Baroque Era, (Chapel Hill, N.C., 1959), p. 19.

⁶Rudolf Aschmann, Das Deutsch Polyphone Violinspiel im 17. Jahrhundert, (Zurich, 1962), p. 8.

⁷Newman, op.cit., p. 269.

⁸Alfred Frankenstein, "Bach's Cöthen Period," J. S. Bach . . . Sonatas and Partitas for unaccompanied violin, (Radio Corporation of America, 1957).

The movements used by Biber may be divided into two large categories. The first group, based on the stylized Baroque dance, includes the gigue, gavotte, sarabande, courante, and chaconne. Except for the chaconne, these dances follow the customary Baroque binary form including the open cadence⁹ (i.e., having a cadence chord other than the tonic) at the end of the first part. The second group of movements used by Biber are either given abstract titles like adagio, allegro, or specific titles of abstract forms like aria, sonata or prelude. As used by Biber, none of these movements had a fixed form. Some of them make use of the tonal arch (derived from the dance movement) while others, like the "Preludium" of Sonata 10, do not leave the tonic key. Sometimes these sonatas are composed of many smaller sections, linked together to form one continuous movement, in direct contrast to the separate two-part forms of the dance movements. In this way, they resemble the so-called sonata da chiesa of the middle Baroque, and are comparable in style, for example, to the sonatas da chiesa of Corelli's Opus 6. (See Number 6 of Biber's sonatas, which is entitled "Lamento" and consists entirely of connected short sections.) Biber, however, made no effort to keep the sonatas intended for church use free from dance movements. These appear through-

⁹Willi Apel, "Binary and Ternary Form," Harvard Dictionary of Music, (Cambridge, 1959), p. 86.

out the "Mystery" sonatas, freely intermixed with the non-dance movements described above.

Many early sonatas featured alternating fast and slow movements, as in works by Vivaldi and Corelli.¹⁰ Biber also used the fast and slow movements, but not always in strict alternation seen in the works of these two composers. A typical sonata is Number 7 of the "Mystery" sonatas, which has the following movements: Allemande, Variatio, Sarabande, and Variatio, all of which are of a moderate tempo.

The basis of Corelli's sonatas was "formal uniformity and underlying form,"¹¹ but for Biber, it was free improvisation.¹² Many of his sonatas contain fantasia-like sections, similar to coloratura, as in the first movement of Sonata 1.¹³

The Fifteen "Mystery" Sonatas

The "Mystery" sonatas, or more correctly, the Rosary sonatas, by Heinrich Biber, were composed to represent the fifteen mysteries in the lives of Mary and Christ, that are recognized and celebrated as part of the feast of Our Lady of the Rosary. This feast originated when the success of the Christians at the battle of Lepanto was attributed to

¹⁰ Donald Jay Grout, A History of Western Music, (New York, 1960), p. 354. Also, Corelli, Op. V, No. 8. HAM II, p. 139.

¹¹ Leiss, op.cit.

¹² Ibid.

¹³ See Page 40, Figure 11.

intercession of the Virgin in answer to the prayers of the communicants, on October 7, 1571. Pius V appointed that date as the feast of Our Lady of the Rosary¹⁴ (also called the Feast of the Rosary of the Blessed Virgin Mary),¹⁵ and in 1583, Gregory XIII transferred it to the first Sunday in October.¹⁶

The complete Roman Catholic rosary of the present day consists of 150 beads, these being divided into decades by fifteen beads of larger size. . . . To each of the fifteen decades is assigned for meditation one of the principal mysteries in the life of Christ or of the Virgin Mary. . . .¹⁷

The fifteen mysteries are divided into three groups of five; these three categories represent the joyful, sorrowful and glorious mysteries in the lives of Christ and Mary. In turn, each category contains the following mysteries: the joyful includes the annunciation, the visitation, the nativity, the presentation, and the finding of Jesus in the Temple; the sorrowful includes the agony and bloody sweat of Jesus, the scourging, the crown of thorns, the bearing of the cross, and the crucifixion; the glorious includes the resurrection, the ascension, the coming of the Holy Spirit, the assumption of the Virgin, and the coronation of the

¹⁴O. Zöckler, "Rosary," The New Schaff-Herzog Encyclopedia of Religious Knowledge, Vol. X (New York, 1911).

¹⁵Winifred S. Blackman, "Rosaries," Encyclopaedia of Religion and Ethics, Vol. X (New York, 1928).

¹⁶Zöckler, op.cit.

¹⁷Blackman, op.cit.

Virgin.¹⁸ Biber composed one sonata to represent each of these mysteries.

The manuscript is undated, but it is thought to have been written around the year 1674.¹⁹ Eitner's Quellen-Lexicon (1904) gives the location of the manuscript as the cathedral at Salzburg,²⁰ indicating that Biber may have been in Salzburg in 1674.²¹ The DTÜ, however, locates the manuscript at the Hof- und Staatsbibliothek in Munich (Mus. Mss. 4123), and refers to it as the only known copy.²² The sonatas remained in manuscript until 1905, when they were edited by Erwin Luntz for the DTÜ. This edition includes, in addition to the fifteen "Mystery" sonatas, a passacaglia for violin alone, which is listed as number 16, although it has no actual connection with the fifteen sonatas based on the Rosary. It was probably written in 1667, for the Feast of the Guardian Angel,²³ otherwise known as the Feast

¹⁸Zöckler, op.cit.

¹⁹Constantin Schneider, "H.I.F.Biber," Der Musik in Geschichte und Gegenwart, Vol. I (Kassel und Basel, 1949).

²⁰Robert Eitner, "H.I.F.Biber," Biographisch-Bibliographisches Quellen-Lexicon der Musiker und Musik-gelehrten, (Berlin, 1900-1904; New York, 1946), Vol. II.

²¹Ibid.

²²Erwin Luntz, "Revisionsbericht," to Denkmäler der Tonkunst der Österreich, Vol. XXV, (Vienna, 1905).

²³Schneider, op.cit.

of St. Michael, the most ancient angel festival, which is celebrated on September 29.²⁴

In the original manuscript, a vignette depicting the subject of the sonata was placed before each piece. The "mood" of each sonata is suggested by the title and the accompanying vignette, but they are not true program sonatas in the sense that they tell a story.²⁵ The movements used are of a wide variety, including dance movements as well as movements of a more abstract nature. Only the first two sections of one of the sonatas can be said to be truly programmatic--the "Intrada" and "Aria Tubicinum" in Sonata 12, in which the violin part is written to sound like a trumpet fanfare.²⁶ Many of the other pieces, however, do feature devices like the dialogues in Sonata 2, entitled "Mary's visit to Elisabeth."

There are several characteristics occurring in the sonatas that are common to all or most of them. Within each sonata, all of the movements begin and end in the key of the sonata. Although there are frequent modulations in each movement, they are only for short periods, and always to closely related keys. All of the movements cast in the form

²⁴James B. Carleton, "Festivals," Encyclopedia of Religion and Ethics, Vol. V, (New York, 1928).

²⁵Schneider, op.cit.

²⁶Erwin Luntz, "Einleitung," to Denkmäler der Tonkunst der Österreich, Vol. XXV, (Vienna, 1905). See Page 34.

of a theme and variations follow a basic pattern of increasing tension in the variations by means of increased rhythmic motion. This is frequently in two phases, the first leading to a slow movement, after which the second part either continues the rhythmic subdivision or begins again with the principal rhythmic pulse.²⁷

Variations are the most common kind of movements used in the sonatas. Twelve of the fifteen sonatas contain some kind of variation, appearing either in the form of a double (3, 5, 8, 9, 12) or a melodic variation (1, 4, 7, 10, 11, 14, 15) over a stable (i.e., unvaried) bass and harmonic pattern.²⁸ The latter occurs in Sonata 4, in which an eight-measure theme is presented with twelve variations, in the style of a chaconne. In the DTÜ edition, two of the twelve variations of this sonata (Numbers 7 and 12) are actual repetitions of the first theme, leaving only ten real variations.²⁹

In only one of the sonatas (Number 11) does Biber insert words to help in conveying his intention. In this sonata, he bases the variations on "Surrexit Christus hodie,"

²⁷See Sonata 1, Page 41.

²⁸Occasionally, chords are changed in some of the variations, usually only from major to minor, or minor to major.

²⁹At this point, the DTÜ and Reitz editions are slightly different. The first reappearance of the main theme is missing in Reitz, but the last is present.

and he writes this title in the manuscript at that point. The tune is an anonymous Latin hymn which first appeared in three manuscripts of the 14th century.³⁰ An Easter Carol, it probably was originally part of an Easter play.³¹ It is found in German as the chorale, "Erstanden ist der heil'ge Christ," and was used by J. S. Bach as the basis of a chorale prelude.³² In 1708 it appeared in English in the Lyra Davidica of J. Walsh (London), as "Christ our Lord is risen today."³³ Although it is only in Number 11 that the whole tune appears, the melody of the first few notes (i. e., head-motive) appears in the opening bass notes of a principal movement in eight of the sonatas (Numbers 4, 7, 8, 9, 10, 12, 13, 15). It is difficult to ascertain the extent to which Biber intended for this to be a significant factor in the organization of the sonatas. In addition, there is a tune (i. e., a cyclic theme) that appears in four of the sonatas (Numbers 2, 3, 12, 15).³⁴ In Number 15, the last

³⁰Munich No. 143, Prag No. 183, Engelberg Ms. (1372). James Mearns, "Surrexit Christus hodie," A Dictionary of Hymnology, (New York, 1957), p. 1104.

³¹Mearns, ibid.

³²May de Forest Payne, compiler, Melodic Index to the Works of Johann Sebastian Bach (New York, 1938).

³³George Arthur Crawford, "Jesus Christ is Risen Today," A Dictionary of Hymnology (New York, 1957), p. 596.

³⁴See Figure 79, p. 84.

sonata of the set, both of these themes are stressed and developed together to form the basis of the whole sonata; in view of this treatment it seems possible that both of these themes may have been used intentionally by Biber to connect the sonatas into a unified set.

Most of the movements that are based on stylized dance forms follow the rhythmic characteristics of the form; any slight exceptions are mentioned in the descriptions of the individual sonatas. The movements which are called "Sonata" are not as representative of a standard form as are the dance movements. They are loosely divided into a varying number of parts (usually two or three), somewhat in the style of the sonata da chiesa.

The descriptions of the sonatas are intended to show how each sonata is constructed, and to point out harmonic, melodic and formal points of interest. All examples of the violin part will be written for normal tuning, instead of scordato tuning, unless otherwise indicated, and are extracted from the Reitz edition.

Descriptions of the Sonatas

Sonata 1.--"Ankündigung der Geburt Christi"³⁵

Praeludium
Aria con variazioni
Finale

The first sonata has three movements, and is the only sonata using the normal violin tuning of g-d'-a'-e". The 25-measure "Praeludium" is in d minor and consists of two large sections containing similar but different material. The melody of each of these sections may again be divided into two types: one of them is rhythmically strict, while the rhythm of the other is more like that of a coloratura. The material of the first type (i.e., rhythmically strict) appears in three short sections, between which are interpolated the coloraturas. The first section (measures 1-9)

Fig. 11--Sonata 1, "Praeludium," measures 1-2

³⁵"Announcement of the birth of Christ."

occurs over a tonic pedal that moves to the dominant in measure 12. The second half of the movement, beginning over a 5 bar dominant pedal, returns to the tonic by means of an extended full close.

The "Aria con variazioni" begins with a 4-measure theme, presented by the bass alone. The repetition of



Fig. 12--Sonata 1, "Aria con variazioni," measures 1-4, ground bass theme.

this theme is accompanied by a second thematic idea in the violin that serves as a basis for the variations. The bass



Fig. 13--Violin theme of "Aria con variazioni," Sonata 1, measures 5-8.

remains the same throughout; the harmony changes very little from one variation to another, the most important difference being the use of the Picardy third in the final cadence chords of three of the last four variations (Numbers 4, 5, and 7). This movement does not modulate from d minor.

The "Finale," apparently unconnected with the other sections of the sonata, consists of an extended coloratura or cadenza-like passage over a subdominant pedal that culminates in a plagal cadence to a major tonic after 7 measures.

This set is typical of Bibers' variations. In the first one, the melody is broken into notes one-half the size of those in the original statement, that is, mostly eighth notes.



Fig. 14--Sonata 1, "Aria con variazioni," Var. 1

The second variation further subdivides the rhythmic unit so that there is a progression from quarter, to eighth,



Fig. 15--Sonata 1, "Aria con variazioni," Var. 2

and then to sixteenth notes. In the last two variations (Numbers 6 and 7), the violin is given thirty-second notes,



Fig. 16--Sonata 1, "Aria con variazioni," Var. 6

continuing the idea of dividing the note values. In the fourth and fifth variations, as a means of giving the work some variety, a different technique is employed. Marked



Fig. 17--Sonata 1, "Aria con variazioni," Var. 4

adagio and andante respectively, these variations, employing multiple stops, have contrapuntal violin parts.

Although these are not true program sonatas, they frequently depict the mood suggested by the title. In the Reitz edition of the sonatas, Alfred Heuss³⁶ suggests that in the first sonata the running passagework in the first and last movements represents the Archangel Gabriel appearing to Mary, while the "Aria con variazioni" brings to mind the words "and He will be a King from the House of Jacob eternally and His kingdom shall not end." Reitz, however, may have been looking for things that were not necessarily present, since it seems apparent that Biber only attempts to generally establish a mood which corresponds to the title, rather than telling the story involved.

Sonata 2.--"Maria Besuch bei Elisabeth"³⁷

Sonata
Moderato
Allegro
 Allemande
 Finale

This is one of the three sonatas which does not include a set of variations, and the first of the fifteen to make use of a scordato tuning. The following accord (Figure 18) is given, and its choice provides a solid foundation for

³⁶ Alfred Heuss, "Erläuterungen der Sonaten," Fünfzehn Mysterien, of H.I.F.Biber, (Vienna, 1915), p. 2.

³⁷"Mary's visit to Elisabeth."

chords based on both the tonic and dominant of the key of the sonata (A Major).³⁸



Fig. 18--Accord for Sonata 2

³⁸The two upper strings, normally e'' and a', remain tuned to those pitches. The lower two, however, are each raised one whole step (i.e. from d' to e' and g to a). The fourth string is therefore made to sound the tonic of the key, or a (an octave below the second string). The third string is then tuned a fifth away from a, to e', and gives the dominant of the key (an octave below the first string). The open strings are therefore a sound basis for the tonic and dominant chords in the key of A Major, allowing the performer to play these chords more easily.

The signs following the accord indicate the position of the fingers on the respective strings in order to insure the proper intervals in the key of A Major. Therefore, they are not necessarily all of the sharps required by the key, and in addition, flats and naturals may also appear. The upper F-sharp, the C-sharp and G-sharp, are as normal, since they refer to the two upper strings, which are unchanged. The lower F-sharp, applying to the third string, tuned to e', indicates that the second finger (normally playing an F-natural) is to be played at the point that would give F-sharp in normal tuning. In this case, however, it will give a G-sharp,

	Normal	d'	e'	f#'	g'	a'
III.	Fingering	0	1	2	3	4
	Retuned	e'	f#'	g#'	a'	b'
	Normal	g	a	b	c'	d'
IV.	Fingering	0	1	2	3	4
	Retuned	a	b	c#'	d'	e'

or a major third above the open string (e'). No sign is necessary to assure an F-sharp, since the first finger would be placed a whole step above the open string in normal tuning with regular fingering. No sign is called for on the fourth string, because when the fingers are placed in the regular fingering position, the second finger is placed a major third above the open string (g) to give a B-natural, and a Major third above the open string (a) gives C-sharp'.

The first movement, a sonata, is cast into two sections, each of which is in turn divided symmetrically into two parts. The first part, a 16-measure Moderato, has an overlapping cadence in the dominant, at the beginning of the second part. The ensuing 28-measure Allegro, however, is clearly divided with an authentic cadence into the tonic. The second part of this section begins in the dominant with the same material used to open the Allegro.

The Allegro uses imitation, in the form of a canon, to indicate that this is intended to be a dialogue between Mary and Elisabeth. The first four bars of the Allegro are written in the form of a double canon, two parts appearing in the continuo and two in the violin. Strict imitation

Fig. 19--Sonata 2, "Sonata," Allegro, meas. 1-4

ends after the fourth measure, but the polyphonic nature of the movement continues. The Moderato and Allegro are connected melodically by means of an ascending scale passage appearing in the bass at the beginning of each section.

The "Allemande" is a symmetrical binary form and has an open cadence to the dominant (E Major) at the end of the

first section. It exhibits the usual characteristics of this dance form through the use of 4/4 time, and an eighth note anacrusis to the first measure.

The "Finale," 22 measures long, begins in A Major. The first $3\frac{1}{2}$ measures are for the continuo alone, after which the violin enters with a 5-measure passage of scales and broken chords based on a sixteenth note rhythm. The remainder of the movement continues to increase the tension by extending the rhythmic interest to an arpeggiated sextolet pattern followed by a series of sixteenth note chords containing double-stops. This part of the movement also continues the dialogue effect of the sonata by means of a concertato effect between the solo instrument and the bass.

Sonata 3.---"Geburt Christi. Anbetung der Hirten"³⁹

Sonata
Moderato
Allegro
Adagio
 Courante
 Double
 Adagio ma non tanto

This sonata, in b minor, has the following accord:⁴⁰



Fig. 20--Accord for Sonata 3

³⁹"The birth of Christ. Adoration of the shepherds."

⁴⁰In this accord, all of the open strings are changed. The first string is lowered a whole step from e" to d". The

The first movement, 19 measures long, is a sonata, and, like the sonata at the beginning of Number 2, is divided into a slow and a fast section. The resemblance to the style of the earlier sonata continues to the extent that each section also uses related material. The slow

second is raised a whole step, from a' to b'. The two lowest strings are each raised a major third, the d' to f-sharp' and the g to b, and they are therefore still a fifth apart.

This sonata is in b minor, so in the signature, there must appear an F-sharp and C-sharp, or, with the accord, provision for them. Applying to the first string are an

	Normal	e"	f#"	g#"	a"	b"
I.	Fingering	0	1	2	3	4
	Retuned	d"	e"	f#"	g"	a"

F-sharp and G-sharp. Tuned to d", the resulting pitches would be d", e", f-sharp", and g-natural". It must be remembered that when the string is retuned, the signs indicate finger position for normal tuning, and not a particular

	Normal	a'	b' c"	d"	e"
II.	Fingering	0	1 2	3	4
	Retuned	b'	c#"	d"	e"

pitch. No sign applies to the second string, although regular finger position gives a c-sharp, with the first finger.

The signs of F-natural and G-natural apply to the third string, now tuned as an F-sharp. The fourth finger gives a

	Normal	d'	e' f'	a'	b'
III.	Fingering	0	1 2	3	4
	Retuned	f#'	g#'	a'	b'

C-sharp, but the first finger gives an unnecessary G-sharp, and in order to cancel this, Biber had to write an E-flat in the scordato line. This occurs on the fourth string, also, where D-sharp is produced by the second finger. These unnecessary accidentals occur in the accords of several of the "Mystery" sonatas, and apparently Biber felt that it was easier to cancel each one individually than to put another sign in the accord.

	Normal	g	a	b c'	d'
IV.	Fingering	0	1	2 3	4
	Retuned	b	c#'	d#'	e'

section of this movement begins with the first five notes of an ascending b minor scale (b-f#) that is completed at the beginning of the Allegro (f#-b). The binary sectioning is also apparent in both of these sections, moving in the first part to D, and closing in b; the Allegro section, only $6\frac{1}{2}$ bars long, stays in the tonic key, but ends with an authentic cadence in the key of the dominant, thus preparing for the next movement, which begins immediately.

The "Courante" is a symmetrical binary form modulating to the dominant at the end of the first section, and followed by a double. The violin part of the double observes the main melodic outlines of the "Courante," although the double melody consists mainly of eighth notes, instead of the quarter note rhythm of the "Courante." The bass line and harmony of the double remain the same as the "Courante," except for the major tonic chord occurring at the end of the double.



Fig. 21--Sonata 5, violin parts of "Courante" and double, measures 1-3.

The concluding movement is an "Adagio," in the tonic key of b minor. This movement, an expressive aria, makes extensive use of ornamentation and contrapuntal writing.

The following figure shows the use of imitation within the violin part.



Fig. 22--Sonata 3, "Adagio," measures 12-13

Although this movement modulates briefly to G Major and its relative minor e, it remains for the most part in b minor. There is none of the binary sectioning, nor repetition of melodic ideas, observed in other movements, and because of this, the movement is considered to be through-composed.

Sonata 4.--"Christi Darstellung im Tempel"⁴¹

Ciaccona

The whole of this sonata is arranged in the form of a chaconne. It is in the Dorian mode, and although there is no key signature, a b-flat is often added, giving a feeling of d minor. The following accord is given:⁴²



Fig. 23--Accord for Sonata 4

⁴¹"Christ's presentation in the temple."

⁴²Here, the second and third strings remain unchanged. The first string is lowered a whole step to d", and the sign

The chaconne theme is 8 measures long. This theme, appearing in the bass, remains the same throughout, and the changes in the harmony are of minor importance.

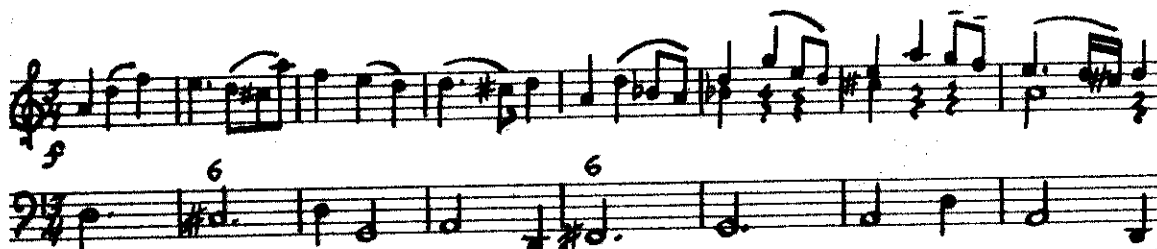


Fig. 24--Sonata 4, bass line and main theme, measures 1-8.

Most of the variations are rhythmic, and the melody is always recognizable in the different variations. Through-



Fig. 25--Sonata 4, Variations 1 and 2, meas. 1-4

of F-sharp indicates that the first finger is to be played a

	Normal	e''	f#''	g''	a''	b''
I.	Fingering	0	1	2	3	4
	Retuned	d''	e''	f''	g''	a''

whole step above the open string (as an F-sharp in normal tuning). The resulting pitch is E-natural, and the following half-step is F-natural. The fourth string is raised a

	Normal	g	a	b	c'	d'
IV.	Fingering	0	1	2	3	4
	Retuned	a	b	c#'	d'	e'

whole step, from g to a. No sign is given, although an unnecessary C-sharp is then present. Like the unneeded notes in Sonata 3, it is cancelled when the C-natural is desired.

out the variations, the tension is increased. The main theme, mainly quarter notes, is broken up in the first and second variations into eighth and sixteenth notes.

Variation 3 returns to the eighth note pattern in a running figure that outlines the harmony, while the fourth variation is mostly quarter notes and employs some double-stops. The fifth variation, essentially sixteenth notes, uses a coloratura scale in thirty-second notes on the first beat of each measure. Variation 6 is marked Adagio, and, although it has a basic sixteenth note rhythm, is in a very ornamented style. The seventh variation, an Andante, uses a sextolet pattern.

The next three variations, 8 through 10, are all in sixteenth notes. Number 8 is an arpeggiated pattern, and

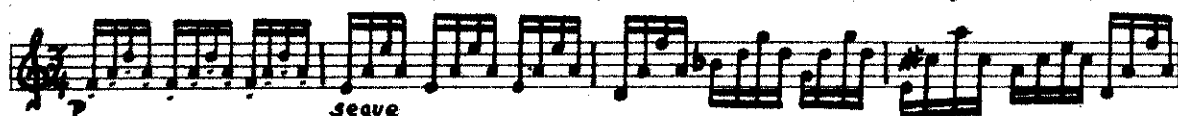


Fig. 26--Sonata 4, Variation 8, measures 1-4

in this instance, the bass melody appears on the second half of each beat as an eighth note, preceded by an eighth rest. Number 9, also based on an arpeggio, increases the tension by adding a multiple-stop on the first beat of every measure, while Number 10 has double-stops on every eighth note.



Fig. 27--Sonata 4, Variation 10, measures 1-4

A repeat of the main theme appears as an epilog, to close this sonata.

The DTÜ edition gives the chaconne theme followed by 12 repetitions of the bass. The corresponding violin part in 2 of these (Numbers 7 and 12) is an exact repetition of the first theme, once an octave lower (in 7), and once in the same octave in which it originally appears (12). Reitz omits the first of these variations (which corresponds to the DTÜ Number 7), and calls the second an "Epilog," rather than Variation 11.

Sonata 5.--"Der Zwölfjährige Jesus im Tempel"⁴³

Praeludium
Allemande
Gigue
Sarabande
Double

This sonata is a dance suite in A Major, for which the following accord is given:⁴⁴



Fig. 28--Accord for Sonata 5

⁴³"The twelve-year-old Jesus in the temple."

⁴⁴Only one string remains unchanged in this sonata, and that is the second, or a' string. The C-sharp following the accord applies to this string.

The first string is lowered from e" to c-sharp". A sign of F-natural follows, and the result is three sharps, on f", c", and g". The third string is raised to an e', and an F-sharp indicates a higher second finger position. This gives both F-sharp and G-sharp.

The "Praeludium" is 14 measures long, and is divided into two equal sections, a Moderato and an Allegro. The movement begins and ends in the tonic, with an open cadence in the dominant at the end of the Moderato. The opening of this movement is essentially a fanfare, in that it is based on an A Major chord through measure 3. The Allegro uses motivic patterns similar to those of the Moderato.



Fig. 29--Sonata 5, "Praeludium," Moderato, meas. 1-3

The "Allemande" is a symmetrical open binary form, beginning in A Major. Its two sections are almost equal in length, being seven and nine measures long. The bass enters in measure three, with the same theme with which the violin began. The second section, which does not use the same material as the first, begins with the interval of a

	Normal	e'' f''	g''	a''	b''	
I.	Fingering	0 1	2	3	4	
	Retuned	c#'' d''	e''	f#''	g#''	
	Normal	d'	e'	f#'	g'	a'
III.	Fingering	0	1	2 3	4	
	Retuned	e'	f#'	g#'	a'	b'

The fourth string is also raised a half-step, to a, producing a C-sharp. There are no unnecessary sharps provided for by this accord.

	Normal	g	a	b c'	d'
IV.	Fingering	0	1	2 3	4
	Retuned	a	b	c#' d'	e'

rising fourth, similar to that used in the opening of the "Praeludium."

Like the "Allemande," the "Gigue" is a symmetrical open binary form. The following dotted rhythm is characteristic of this movement. The intervals of the second

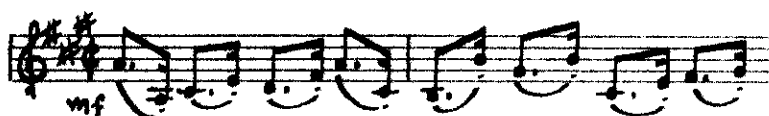


Fig. 30--Sonata 5, "Gigue," measures 1-2

half exhibit a change of direction from those of the first half, in a rather free attempt to follow the normal practice.

The "Sarabande" is also a symmetrical open binary form. In measures 7 and 8 of the second section, 2 measures of the opening material are used, making this a rounded binary. The appearance of a rounded binary at this time is very rare; they do not become common until the latter half of the 18th century, occurring only infrequently in the works of J. S. Bach. Another rounded binary appears in the "Courante" of Sonata 9. The initial interval of a rising fourth is reminiscent of the "Praeludium" and "Allemande." The material in both sections of this movement is similar.



Fig. 31--Sonata 5, "Sarabande" and double, meas. 1-2

The following double, in the same form, is also rounded. Figure 31 shows the first two bars of both the "Sarabande" and the double.

Sonata 6.--"Leiden Christi am Ölberg. Judas' Verrat"⁴⁵

Lamento

This sonata is interesting in that it is actually one long movement, a "Lamento," made up of shorter sections. Although each of the larger sections ends with a fermata, the motion continues without pause between sections. The sonata is in c minor, and the accord is given as follows:⁴⁶



Fig. 32--Accord for Sonata 6

⁴⁵"The sorrow of Christ on the Mount of Olives. Judas' treason."

⁴⁶All of the strings are retuned in this accord. The first and second are both lowered a whole tone each, to d" and g'. The F-natural, indicating a low first finger on the first string, gives an E-flat, needed in the key of c minor. Without further signs, an A-natural is produced by the fourth finger in normal position. In c minor, however, an a-flat is needed, so Biber writes a B-flat in the scordato line.

	Normal	e" f"	g"	a"	b"
I.	Fingering	0 1	2	3	4
	Retuned	d"e b "	f"	g"	a"

Although no signs apply to the second and fourth strings, the diagrams show how the normal fingerings on the retuned

	Normal	a'	b' c"	d"	e"
II.	Fingering	0	1 2	3	4
	Retuned	g'	a' b '	c"	d"

The first section, 11 measures long, is marked Andante molto tranquillo, and is based on a c minor triad. It is followed by a 3-measure Adagio beginning in B-flat Major and ending in c minor (on a dominant chord). The succeeding 7-measure Andante begins in E-flat Major, but also ends in c minor.

The next section is a binary Allegro based on sixteenth note patterns; the first section closes in the relative major and after a slight pause returns quickly to the home key. The rest of this section, beginning slowly, gradually increases the tension. For 5 measures, only eighth and quarter notes are used. These are followed by 5 measures of predominantly sixteenth notes, which utilize the technique of bariolage. One and one-half measures of sextolets follow, and sixteenth notes with double-stops

strings would provide for some of the flats. As with the first string, not all of the needed flats are given yet, and furthermore, a d-flat is given on the fourth string. This

	Normal	d'	e'	f#'	g'	a'
III.	Fingering	0	1	2 3		4
	Retuned	e♭'	f'	g'a♭'		bb'
	Normal	g	a	b c'		d'
IV.	Fingering	0	1	2 3		4
	Retuned	a♭	b♭	c'd♭'		e♭'

problem is solved in a similar manner as the A-natural on the first string: to produce a C-natural, a C-sharp would be written in the scordato line.

The third string is governed by an F-sharp, which prevents a G-flat from occurring. The rest of the notes on that string are then correct.

are used for the last 4 measures. This is concluded by a 2-measure Adagio, which serves as a bridge to the next part.

A 34-measure Andante in 3/2 forms the next major section. The bass motion is usually by step. The melody of this Andante moves predominantly in quarter notes for 16

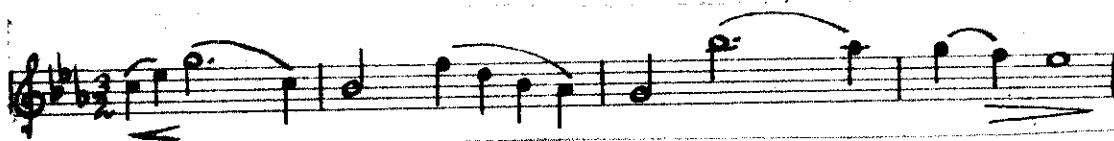


Fig. 33--Sonata 6, Andante, measures 1-4

measures. It is interrupted by a section of eighth note scales, and then returns to a slow section that resembles the beginning. Although the material in the first and last sections are different, the expressive mood is the same. This Andante ends in E-flat Major and is followed by a 14-measure section that alternates between short passages of coloratura allegro and rhythmically strict adagios, ending in C Major.

A 6-measure Adagio in 12/8 follows. Based on outlines of chords, this section begins in c minor and ends on the dominant of that key. The closing section, an Andante, continues with the dominant from the preceding section and ends with a C Major chord. It is rather unusual, in that each 4-note phrase is immediately echoed with shorter notes in the same rhythm (Figure 34).

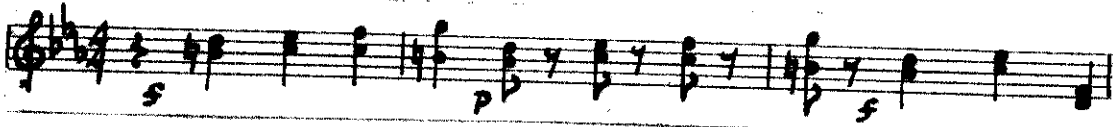


Fig. 34--Sonata 6, Andante¹, measures 1-3

Sonata 7.--"Die Geisselung Christi"⁴⁷

Allemande
Variation
Sarabande
Variations 1, 2, 3.

Like Sonata 5, Sonata 7 consists only of dance movements. It is in F Major, with the following accord.⁴⁸



Fig. 35--Accord for Sonata 7

⁴⁷"The flagellation of Christ."

⁴⁸This accord is one of three in which all of the strings are tuned to notes within one octave. (See Sonatas 8 and 12.) In this case, a tonic chord is produced on the open strings by playing the upper three, lower three, or all four strings.

The first string, e^{''}, is lowered a major third to c^{''}, and by using the signs of F-sharp and G-sharp to indicate finger positions, notes beginning on the open string of c^{''} are produced without accidentals.

	Normal	e ^{''}	f ^{#''}	g ^{#''}	a ^{''}	b ^{''}
I.	Fingering	0	1	2	3	4
	Retuned	c ^{''}	d ^{''}	e ^{''}	f ^{''}	g ^{''}

The second string, a['], is tuned as normal, and the sign of B-flat applies to it.

	Normal	d [']	e [']	f ^{#'}	g [']	a [']
III.	Fingering	0	1	2	3	4
	Retuned	f [']	g [']	a [']	b ^{b'}	c ^{''}

The "Allemande" is a symmetrical open binary form, whose opening melody, rhythmically altered, appears at the beginning of the second section in the key of the dominant. The variation following the "Allemande" ornaments the melody, but the bass and harmony remain unchanged.

Fig. 36--Sonata 7, bass and violin parts of "Allemande" and its variation.

The "Sarabande," also a symmetrical open binary form, is followed by three variations, all with the same bass and harmony.

The sign of F-sharp applies to the third string, tuned up a minor third to f' . It provides for an A-natural, and the B-flat, necessary for the key of F-Major, is taken care of by the normal finger position of G-natural.

	Normal	g	a	b c'	d'
IV.	Fingering	0	1	2 3	4
	Retuned	c'	d'	e'f'	g'

The fourth string is raised a fourth to c' . No signs apply, and normal finger positions give the correct scale.

In this sonata, there are numerous examples of multiple-stops based on the chord of f - a - c . When played on a scordato violin, these would be merely open strings. Scordato tuning, therefore, permits the violinist to play these chords more easily, thus giving a fuller sound to music played in this manner.

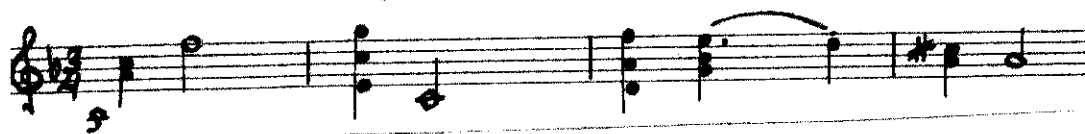


Fig. 37--Sonata 7, "Sarabande," measures 1-4

The first variation uses a sixteenth-note figure to outline the melody.



Fig. 38--Sonata 7, Variation 1 of "Sarabande," measures 1-3.

Variation 2, although it also uses sixteenth notes, is more chromatic. The scale pattern appearing at the end of the first section of this variation is also present at the same point in Variation 1.



Fig. 39--Sonata 7, Variation 2 of "Sarabande," measures 1-3.

The third variation, marked Maestoso, continues in the same manner of the others but also seems to serve as a finale for the sonata. The rhythmic pattern shown in Figure 40 occurs frequently throughout this variation.



Fig. 40--Sonata 7, Variation 3 of "Sarabande," measures 1-2.

Sonata 8 -- "Die Dornenkrönung Christi"⁴⁹

Sonata
Adagio
Allegro moderato
Adagio
 Gigue
 Doubles 1, 2.

Sonata 8 is in B-flat Major, and has the following accord.⁵⁰



Fig. 41--Accord for Sonata 8

⁴⁹"Christ's crown of thorns."

⁵⁰This accord, like those of Sonatas 7 and 12, falls within the range of an octave, and again, by playing all, or the upper or lower three open strings, the tonic chord of the key (B Major) is given.

The first string is lowered a whole step, from e" to d". There is no real need for the F-natural sign, except to show

	Normal	e" f"	g"	a"	b"
I.	Fingering	0 1	2	3	4
	Retuned	d" e ^b "	f"	g"	a"

to show that the F-sharp one octave lower does not apply to this string. Normal fingering would give a low first finger (e" to f"), here providing an E-flat.

The second string is raised to B-flat'. Since the C-sharp applies, the second finger will be raised to provide for two whole steps and then a half-step. This allows a D-natural, instead of a D-flat (which would occur if there were no sharp sign), and leaves the E-flat, which is necessary in B-flat Major.

	Normal	a'	b'	c# d"	e"
II.	Fingering	0	1	2 3	4
	Retuned	b ^b '	c"	d" e ^b "	f"

The third string is raised from d' to f', and the sign of F-sharp applies to it. This shows that the second finger

The first movement is a sonata, and is made up of three sections, Adagio, Allegro moderato, and Adagio, of which the third is a repetition of part of the first; as such, this movement is the only real ternary form in the whole collection. The first part, an Adagio, is 18 measures long, and uses imitation frequently. The movement opens with the continuo, which presents the main theme. On the third beat of measure two, the violin enters, with the same theme one octave higher. This imitation is reversed



Fig. 42--Sonata 8, "Sonata," measures 1-4, violin and bass.

is to be raised, and with the string tuned to f' , an A-natural is produced. Normal fingering provides the necessary B-flat.

	Normal	d'	e'	$f\#'$ g'	a'
III.	Fingering	0	1	2 3	4
	Retuned	f'	g'	a' $b\flat'$	c''

The lowest string is raised a fifth from g to d' , with no sign applying to it. This means that there will be an E-natural and an F-sharp with normal fingering, so when writing the part for scordato violin, it would be necessary to write an accidental A-flat in order to produce E-flat. Similarly, a B-flat would give F-natural.

	Normal	g	a	b c'	d'
IV.	Fingering	0	1	2 3	4
	Retuned	d'	e'	$f\#'$ g'	a'

in the second sentence of the Adagio, giving this part a kind of binary sectioning, especially since the first section closes in the key of the dominant.



Fig. 43--Sonata 8, "Sonata," measures 12-15, violin and bass.

The fast section is an 18-measure Allegro moderato that modulates frequently to F Major. It is predominantly eighth and sixteenth notes, which give the section a very crisp sound, and, of course, provide the necessary contrast for the alternating form.

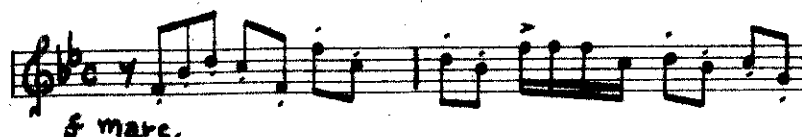


Fig. 44--Sonata 8, "Sonata," Allegro moderato, measures 1-2.

The third section is 7 measures long and repeats the material of the second sentence of the first Adagio (measures 12 to 17), displacing it one-half bar, and thereby altering the rhythmical emphasis.

The "Gigue" is a symmetrical open binary form, and is followed by two doubles. The second halves of the "Gigue" and doubles exhibit a change of direction, which, as in the earlier "Gigue," seems to be an attempt at inversion. In

6/4, the "Gigue" uses a dotted rhythm; in the first double, this rhythm is smoothed out to even quarter notes, which, in turn, in the second double, is given over to a predominant eighth-note pattern.



Fig. 45--Sonata 8, violin parts to "Gigue" and its doubles, measures 1-2.

Sonata 9.--"Christi Kreuztragung. Gang nach Golgotha"⁵¹

(Sonata)
Grave
Piu mosso
Adagio
Piu mosso
 Corrente
 Doubles 1, 2.
 Finale

This sonata is in a minor, and the following accord is given:⁵²



Fig. 46--Accord for Sonata 9

⁵¹"The bearing of the cross. The road to Golgotha."

⁵²This is one of the few sonatas in which there are no signs following the accord. The upper two strings remain

The opening movement is 28 measures long, in 4/4. The Grave is divided into two parts, the first of which cadences on the dominant. The second section begins immediately in the tonic and through the use of similar material moves to a cadence in measure 18. The tonic chord which forms the end of the Grave is also the beginning of the Piu mosso which concludes the first movement. The violin part of the Piu mosso is toccata-like in its use of rapid scale passages (thirty-second notes). This is interrupted in measure 25 by a repetition of measures 6 and 7 of the Grave. The Piu mosso then continues, at first with thirty-second notes, and then with sixteenth-note triplets



Fig. 47--Sonata 9, ("Sonata"), measure 25

tuned as normal, e'' and a'.

The third string is raised a whole step to an e', on which normal fingering produces an F-sharp, due to the whole step between the open string and the first finger. In order to obtain an F-natural, an E-flat would have to be written in the scordato instrument's music.

	Normal	d'	e' f'	g'	a'
III.	Fingering	0	1 2	3	4
	Retuned	e'	f#' g'	a'	b'

The fourth string is raised a fourth to c', and here normal fingering produces no accidentals.

	Normal	g	a	b c'	d'
IV.	Fingering	0	1	2 3	4
	Retuned	c'	d'	e'f'	g'

culminating in a trill which very effectively slows the motion at the cadence.

The "Corrente" is a symmetrical rounded binary form, and is followed by two doubles. The rounding is maintained in the first double, but is very obscure in the second. Both follow the same bass line and harmony of the "Corrente."



Fig. 48--Sonata 9, violin part of "Corrente," and doubles, measures 1-3.

The last movement is a 15-measure, toccata-like, "Finale" in 4/4. The entire movement is over an e pedal, which closes with an authentic cadence in the last measure to a minor.



Fig. 49--Sonata 9, "Finale," measures 1-2

Sonata 10.--"Die Kreuzigung Christi"⁵³

Praeludium

Aria

Variations 1, 2, 3, 4, 5.

Sonata 10 is in g minor, and has the following
accord:⁵⁴



Fig. 50--Accord for Sonata 10

There are two main movements, the first of which is a "Praeludium." It is in 4/4, and is 19 measures long. Although no repeats are used, the movement is in two sections, and similar material is used to begin each section; the second appearance, however, is on the half bar. Figure 51 shows a rhythmic pattern frequently used in this movement.

⁵³"The crucifixion of Christ."

⁵⁴In this accord, only the first string is changed, while the rest remain tuned as normal. The first string is lowered from e" to d", which will give an E-flat, with normal fingering.

	Normal	e" f"	g"	a"	b"
I.	Fingering	0 1	2	3	4
	Retuned	d" e ^b "	f"	g"	a"

The only sign, a B-flat, applies to the second string, a'.

Since there are two flats in the key of g minor, the composer must use accidentals to provide for them in the scordato line.



Fig. 51--Sonata 10, "Praeludium," measures 4-5

The second main movement is an "Aria," which is followed by five variations. The "Aria," in 4/4, is a symmetrical open binary form, of which the first section ends

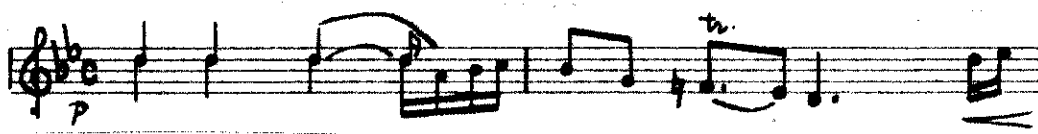


Fig. 52--Sonata 10, "Aria" theme, measures 1-2

in the relative major of B-flat. The second section, however, begins in d minor, a feature not characteristic of



Fig. 53--Sonata 10, Variations 1 and 2, measure 1

the form. Variations 2 through 4 follow this pattern, but in Variation 1, the second half begins in D Major. Running passages of even sixteenth notes are used for the first variation, while in the second, thirty-second note passages, as well as dotted rhythms, are used. Variation 3, an adagio, is polyphonic (Figure 54).

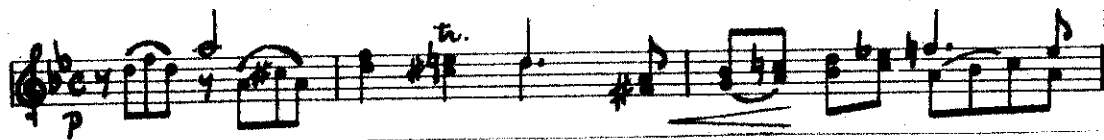


Fig. 54--Sonata 10, Variation 3, second half, measures 1-3.

Variation 4, a moderato, is developed as a repeated note variation, again making use of the technique of bari-



Fig. 55--Sonata 10, Variation 4, measure 1

olage. The final variation, also a moderato, is in 12/8. It uses a few chords in the violin part plus many sixteenth notes, which occur as scale-like passages.



Fig. 56--Sonata 10, Variation 5, measures 1-2

Sonata 11---"Die Auferstehung Christi"⁵⁵

Sonata
Adagio
Adagio (with variations)
Andante

This is the only one of the "Mystery" sonatas for which Biber included an incipit to indicate the source of his material. In addition, this is the only sonata in

⁵⁵"The resurrection of Christ."

which the entire theme appears. (That is, "theme" in the sense of a cyclical idea that occurs in all or at least many of the sonatas. This idea is fully discussed on Page 57ff above.) The melody used here is "Surrexit Christus hodie," a 14th century Latin Easter carol, and is used here as the basis for a set of variations. The sonata is in three sections, an "Adagio," a second "Adagio" containing the variations, and an "Andante." The sonata, which is in G Major, has the following accord:⁵⁶

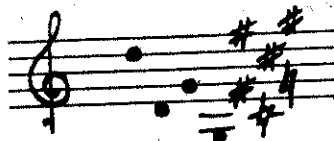


Fig. 57--Accord for Sonata 11

⁵⁶This is very unusual, in that the second string is tuned to a lower pitch than the third string, and the result is two sets of octaves. (That is, the two lowest strings give an octave g to g', and the two upper strings give an octave d' to d'', with the lower d' being a fourth below the higher g'.) Following this accord are six signs: four sharps and two naturals. The higher of the two F-sharps, and the G-sharp, change the normal fingering on the first string, normally an e'', but here lowered to d''. As a result, the notes in the key of G (including an F-sharp) are produced.

	Normal	e''	f#''	g#''	a''	b''
I.	Fingering	0	1	2	3	4
	Retuned	d''	e''	f#''	g''	a''

The second string (normally a') is lowered a fifth, to the d' below the first string. A C-sharp indicates a raised second finger. As a result, the notes produced are exactly one octave lower than those produced on the first string.

	Normal	a'	b'	c#''	d''	e''
II.	Fingering	0	1	2	3	4
	Retuned	d'	e'	f#'	g'	a'

The 30-measure "Adagio," in 4/4, is in G Major. It moves over a tonic pedal for 17 measures, at which point it moves to D Major, for the remainder of the "Adagio." The violin part in this movement is like a toccata.

The third string is raised from its normal d' to g'. An F-sharp indicates a raised second finger (the g-natural' means to disregard the other sign on g", a sharp), and the resulting notes are the first part of a G Major scale.

	Normal	d'	e'	f#'	g'	a'
III.	Fingering	0	1	2	3	4
	Retuned	g'	a'	b'	c"	d"

The fourth string remains tuned as g, this being one octave lower than the third string. The C-natural shows that the above C-sharp should be disregarded, and the normal finger pattern gives the beginning of the G-Major scale, the same as on the third string.

By using this accord, Biber could write parallel octaves for the violin, which could be played by pressing the two strings tuned an octave apart with one finger. This is considerably easier than playing them when strings are tuned in fifths, although it is possible to do so.

When the DTÜ edition of these sonatas was originally published, there was some confusion on the editors part as to exactly what this accord was. They did not overlay the tunings, and as a result, the melody was not correct. When the error was realized, a revision of the sonata was added to that volume, with the violin part arranged for normal tuning instead of for scordato tuning, which does not follow the format of the DTÜ edition.

In measures 8 and 9 of the first "Adagio," four beats show how Biber used the new tuning. Although it looks as if the violinist is jumping across strings, he is actually playing the fingerings of a descending scale.



Fig. 58--Sonata 11, "Adagio," measures 8-9

The second section, also an "Adagio," is based on the tune "Surrexit Christus hodie," and is in 3/4. The melody first appears in the continuo line, and lasts for 16 measures, although the violin enters in canon with it in measure 8. The theme is in the bass again between

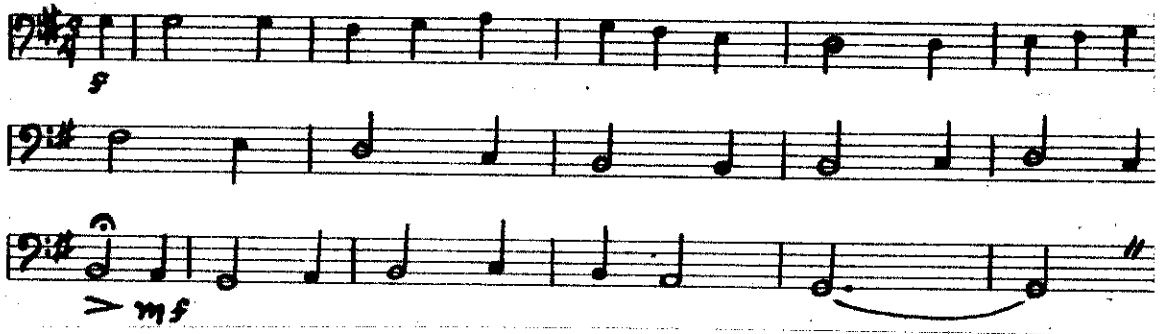


Fig. 59--Sonata 11, "Surrexit Christus hodie," as it appears in the continuo.

measures 17 and 34, and then in the violin from 34 to 50. Between measures 50 and 81, almost twice the length of the theme, Biber has given sections of it first to the violin and then to the continuo, so that it eventually appears in its entirety in both parts. The theme appears again in the bass from measures 81 to 97, and the last appearance is in both the bass and violin in unison, each in octaves. This section remains in G Major.

The last section is an "Andante." In 4/4, it remains in G Major, and the violin part is polyphonic throughout (Figure 60). Only the head-motive of the "Surrexit Christus hodie" is used in the bass of this section.



Fig. 60--Sonata 11, "Andante," measures 1-6

Sonata 12.--"Christi Himmelfahrt"⁵⁷

Intrada
Aria Tubicinum
Allemande
Courante
Double

This sonata, in C Major, is the third one of the fifteen to use an accord with all of the strings tuned to notes within an octave. (See Sonatas 7 and 8.) It is as follows:⁵⁸



Fig. 61--Accord for Sonata 12

⁵⁷"The ascension of Christ."

⁵⁸The first string is lowered a major third to c", and the normal finger position is changed by the presence of an F-sharp and a G-sharp. With the resulting fingering, a scale beginning on c", with no sharps or flats, is obtained.

	Normal	e"	f#"	g#"	a"	b"
I.	Fingering	0	1	2	3	4
	Retuned	c"	d"	e"	f"	g"

The second string, normally a', is lowered to g', and since no sign applies, normal fingering is used. This produces a b-flat, however, making it necessary to write a C-sharp in the scordato line, in order to produce the pitch of B-natural.

	Normal	a'	b' c"	d"	e"
II.	Fingering	0	1 2	3	4
	Retuned	g'	a' b'	c"	d"

one following obviously made programmatic use of the trumpet idiom in order to describe the triumph with which Christ entered into heaven.

The second movement, "Aria Tubicinum," is similar to the "Intrada," but notes outside of the C Major chord are used in the melody more frequently. It is a symmetrical binary form, and, except for a few isolated chords of the dominant (G Major), remains in C Major.

The third movement, "Allemanda," is a symmetrical open binary form. In C Major, the 4/4 meter has many sixteenth note passages scattered among notes of long value.



Fig. 63--Sonata 12, "Allemanda," measures 1-2

The final movement, a "Courante," is a symmetrical open binary form in 3/4. It, too, is in the key of C Major, and is followed by a double having the same bass and harmony. Figure 64 shows the violin parts of both the "Courante" and double.



Fig. 64--Sonata 12, "Courante" and double, measures 1 and 2.

Sonata 13.--"Die Ausgiessung des Heiligen Geistes"⁵⁹

Sonata
Gavotte
Gigue
Sarabande

The sonata is in d minor, and has the following accord:⁶⁰

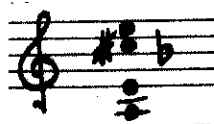


Fig. 65--Accord for Sonata 13

⁵⁹"The effusion of the Holy Ghost."

⁶⁰The first string remains tuned as e". The second string is raised to a C-sharp", and has a B-flat applying to it. In addition to the C-sharp, produced by the open string, this also gives an F-sharp and G-sharp.

	Normal	a' b'	c''	d''	e''
II.	Fingering	0 1	2	3	4
	Retuned	c#' d''	e''	f#'	g#'

With the third string tuned to e', an F-sharp is produced, and the fourth string, tuned to a, gives a C-sharp. At no point on the scordato line is the B-flat produced "naturally," i.e., without accidentals.

	Normal	d'	e' f'	g'	a'
III.	Fingering	0	1 2	3	4
	Retuned	e'	f#' g'	a'	b'

	Normal	g	a	b c	d
IV.	Fingering	0	1	2 3	4
	Retuned	a	b	c#' d'	e'

As far as producing the key of d minor, this accord seems rather inappropriate. However, when looking at the violin line, it may be seen that there are many C-sharps, throughout the entire "Sonata," therefore justifying the tuning of one of the strings as a C-sharp. The F-sharps and G-sharps brought in by the artificial tuning would simply need to be cancelled when those notes appeared in the scordato line.

The opening movement is a sonata in d minor, consisting of alternating sections in 3/4 and 4/4. Beginning in 3/4, with a three-fold fanfare over a tonic pedal, it



Fig. 67--Sonata 13, "Sonata," measures 1-4

changes to 4/4 in measure 15. In measure 21 this section closes on the dominant. Returning to 3/4, there is a new



Fig. 68--Sonata 13, "Sonata," measures 22-26

melody, followed by a Grand Pause in measure 36. At this point, the opening melody returns, and 7 measures later it moves again to 4/4. The remainder of the movement is similar to the first 4/4 section. A Picardy third is used to end the movement on a D Major chord.

Tuning the upper two strings in thirds allows passages of parallel thirds to be easily played, as in the second part of the "Sarabande," and especially in the "Sonata."

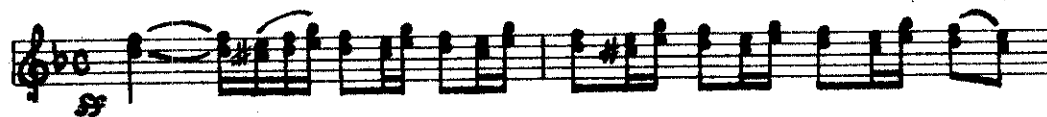


Fig. 66--Sonata 13, "Sonata," measures 15-16

Likewise, parallel sixths are easily produced on the second and third strings, as in the "Sonata," meas. 17-18.

The "Gavotte" is a symmetrical binary form. Beginning in d minor, the first section ends in D Major. The second section begins in A Major and ends in d minor. There are a number of multiple-stops in the violin line of this movement.



Fig. 69--Sonata 13, "Gavotte," measures 1-4

The next movement is a "Gigue" in 12/8. It is a symmetrical open binary form, and again, the violin part has polyphonic tendencies.

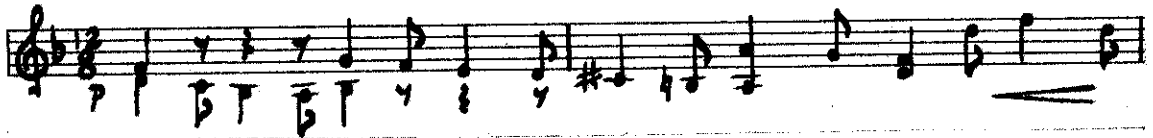


Fig. 70--Sonata 13, "Gigue," measures 4-5

The final movement is a "Sarabande" that is cast in a symmetrical open binary form. It is in 3/4, and like the previous movements, the violin line is polyphonic. Rhythmically, each part of the "Sarabande" may be divided into two similar phrases. The first four measures (Figure 71) are in the characteristic "Sarabande" rhythm, of dotted



Fig. 71--Sonata 13, "Sarabande," Part I, measures 1-4

quarter, eighth, and quarter notes, the exceptions to this being Part I, measure 1, and Part II, measure 4. In the second four measures of each section, the melody is broken into eighth notes (Figure 72).



Fig. 72--Sonata 13, "Sarabande," Part I, measures 5-8

Of the three dance movements in this sonata, only the "Gigue" follows the tonal arch characteristic of the form. As was mentioned above, the first section of the "Gavotte" cadences on a major tonic chord, but continues with the dominant; the "Sarabande" makes a characteristic close in the Relative Major (F), but like the "Gavotte," continues in the dominant. These variations in tonality give evidence that the tonal usages of the late Baroque were not yet fully formed in Biber's time.

Sonata 14.--"Mariae Himmelfahrt"⁶¹

(Sonata)
Allegro maestoso
Grave
Adagio
 Aria (Ciaccona)
 Gigue

The fourteenth sonata is in D Major, with the accord shown in Figure 73.

⁶¹"The ascension of Mary."

Fig. 73--Accord for Sonata 14⁶²

The first movement is 20 measures long, and is made up of three short connected sections in D Major. The first is a 6-measure Allegro maestoso, with a pedal on D throughout. After an opening whole note, the violin is given a passage of sixteenth notes, based on broken chords and scales. Measure 7 is marked Grave, and the violin part is now eighth notes, although a Tempo I in measure 8 brings

⁶²The first string is lowered from e'' to d'', and the signs F-sharp and G-sharp apply. By creating two consecutive whole steps, and then a half-step, an F-sharp is produced by the second finger, and a G-natural by the third.

	Normal	e''	f#''	g#''	a''	b''
I.	Fingering	0	1	2	3	4
	Retuned	d''	e''	f#''	g''	a''

The second string remains as a', and has a sign of C-sharp.

The third string, raised from d' to e', has no sign applicable, and the first step (a whole above e'), gives F-sharp.

	Normal	d'	e' f'	g'	a'
III.	Fingering	0	1 2	3	4
	Retuned	e'	f#' g'	a'	b'

The fourth string is also raised a whole step, to a, and has no sign. Here, a C-sharp is produced by the second finger.

	Normal	g	a	b c'	d'
IV.	Fingering	0	1	2 3	4
	Retuned	a	b	c#' d'	e'

Unlike the preceding sonata, all of the necessary sharp's are provided for, and no extras are produced.

a return of sixteenth notes, which continue until measure 10. At this point, the third section, an Adagio, begins. The violin part of this section is mostly eighth and sixteenth notes.



Fig. 74--Sonata 14, ("Sonata"), Adagio, measures 11-12

The next movement is called "Aria" and is in the form of a chaconne. An 8-measure theme is presented, and is followed by 20 variations. The bass remains the same each time, and this movement is entirely in D Major. There is a meter signature of 3/2. The theme as it first appears, with the bass line, is as follows:

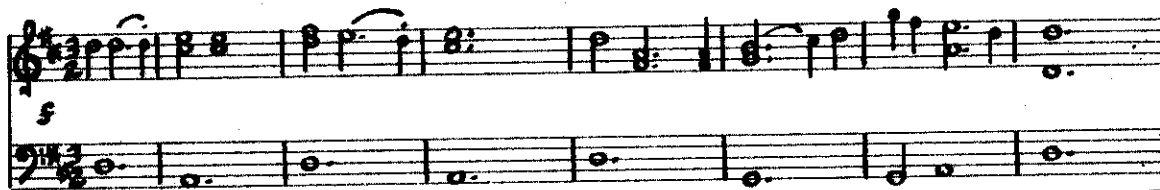


Fig. 75--Sonata 14, "Aria," measures 1-8, violin and bass.

The repetition of the G at the beginning of bar 7 in the bass creates a feeling of hemiola in the otherwise staid triple rhythm. Many types of variations follow this theme. Rhythmically, they include half notes, (Variations 1 and 12), quarter notes (2), quarter and eighth notes in various combinations (3), eighth note passages based on broken chords (5, 8, 19 and 20), triplets (6 and 9), and others.

Melodically, some of them are based on chords, and others on scale-like passages, but all maintain the outline of the original melody.

Six more variations are given but are grouped together in a "Gigue." Although they are still in $3/2$, triplets are used to unify all of these variations. The final variation, 26, is especially interesting. While the violin remains in triplets, the bass in Variation 26 returns to $3/2$ without triplets. If the realization of the continuo part were to follow this pattern, a feeling of a long, written-in ritard would be obtained.

Fig. 76--Sonata 14, "Gigue," Variation 26, measures 4-8, showing change from triplets to $3/2$.

Sonata 15--"Mariae Krönung"⁶³

Sonata
Aria
Variations 1, 2, 3.
Canzone
Sarabande
Variation

⁶³"The coronation of Mary."

The final sonata, in C Major, has this accord.⁶⁴



Fig. 77--Accord for Sonata 15

The opening movement is a 25-measure sonata, and can be clearly divided into two sections. The first 6 bars present a calm melodic line. Beginning with measure 7, the violin line is polyphonic, and uses a motive based on the opening phrase. At that point, for $4\frac{1}{2}$ beats, there is an exact imitation in the violin line at the fifth below, one

⁶⁴Like the accord for Sonata 14, this one does not produce extra accidentals for the key. Only one string, the fourth, is left in normal tuning. The first is lowered a whole step to d'', and an F-sharp indicates that the first finger should be placed a whole step from the open string. This gives e'', and the next half-step gives f''.

	Normal	e''	f#''	g''	a''	b''
I.	Fingering	0	1	2	3	4
	Retuned	d''	e''	f''	g''	a''

The second string is also lowered a whole step, to g'. A C-sharp calls for a whole step between the first and second fingers, and B-natural is therefore present.

	Normal	a'	b'	c#''	d''	e''
II.	Fingering	0	1	2	3	4
	Retuned	g'	a'	b'	c''	d''

Like the first two strings, the third is also lowered a whole step, to c'. An F-sharp has the effect of raising the second finger, so that an E-natural is produced.

	Normal	d'	e'	f#'	g'	a'
III.	Fingering	0	1	2	3	4
	Retuned	c'	d'	e'	f'	g'

beat apart, and two octaves and a fifth below in the bass, beginning a measure later. Although this use of the motive is the only real imitation, the polyphonic line is sustained until the end of the movement.

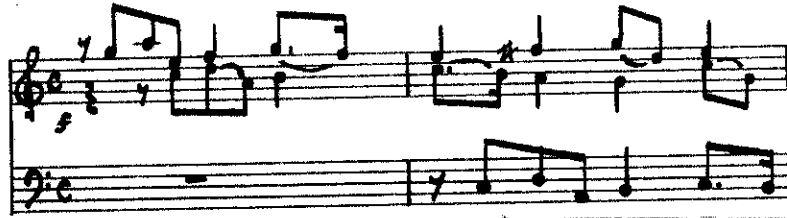


Fig. 78--Sonata 15, "Sonata," measures 7-8, showing imitation.

The second movement is an "Aria," in C Major. It is a symmetrical open binary form in 4/4. The rhythm of the first three beats is used at the beginning of the second half of the form. For the first time, both of the cyclic themes, the melody (which also appears in Sonatas 2, 3 and 12), and the head-motive of the "Surrexit Christus hodie,"



Fig. 79--Sonata 15, "Aria," Part 1, measures 1-2

appear together. The "Aria" is followed by three variations. The first has sixteenth and thirty-second note scale passages, as shown in Figure 80.



Fig. 80--Sonata 15, "Aria," Variation 1, Part 1, measures 1-2.

The scale-like passages and broken chord patterns are also a characteristic of the second variation, but here each beat alternates between triplet eighths and eighth notes.

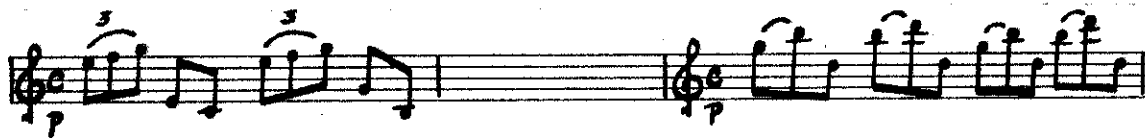


Fig. 81--Sonata 15, "Aria," Variation 2, Part 1, measure 1; Part 2, measure 1.

In the first section of the third variation, an elaborate rhythmic pattern is used, but the second section returns to the rhythmic idea of the first variation. That is, it consists of passages of alternating sixteenth and thirty-second notes.



Fig. 82--Sonata 15, "Aria," Variation 3, Part 1, measure 1.

A 39-measure "Canzone" in 4/4 is the next movement. Like the "Aria," the "Canzone" uses both the cyclic theme and the head-motive of the Easter carol. The violin begins with the cyclic theme, and is imitated one bar later in the bass. In the third bar, it appears again in the violin, one octave higher than before. After a short episode, this theme again appears in the bass, but now in the dominant. This alternation between tonic and dominant entries of the

theme continues throughout the movement, gradually becoming more complex toward the end.

The final movement is a "Sarabande," followed by a variation. It is a symmetrical open binary form, and at the beginning of the second half, there is a repetition of the material at the beginning of the first part. While the



Fig. 83--Sonata 15, "Sarabande," measures 1-2

original melody is basically quarter notes, the variation is mostly sixteenth notes.



Fig. 84--Sonata 15, Variation on "Sarabande," measures 1-2.

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