Italian Baroque Ornamentation: Taking into account the Baroque Oboe

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During the first half of the eighteenth century, there were a tremendous number of sonatas and concerti written for the then newly-developed oboe. Particularly in those works written by Italian composers, a great deal of ornamentation must be added by the performer. Both the characteristics and the technical problems encountered when playing the baroque oboe would have greatly affected a performer's choice of ornaments. Through the prism of the second movement of the *Oboe Concerto in d minor* by Alessandro Marcello, this article explores both the limitations of and possibilities for ornamentation on the baroque oboe, which can then be applied to the modern oboe in an effort to create more authentic ornamentation.

Until the middle of the seventeenth century, double reed instruments were rather crude by today's standards. Around 1660 three families in Paris began working on the shawm, converting it into what has come to be known as the baroque oboe. The families Philidor, Chédeville, and Hotteterre were all members of the wind ensembles of the Grand Ecurie du Roi[1, 2], who performed Lully's operas-ballets, the first works that frequently included the oboe/shawm.[3] Bruce Haynes has shown in his study of art works of the 1660s to 1700s that the oboe evolved from the shawm over a period of twenty to thirty years,[4] with the first oboe-like instruments appearing the early 1650s.[5] The baroque oboe's final development dates to in the early 1680s, with the publication of the first technical description of the instrument by Bartolomeo Bismantova in his *Regole . . . del Oboe* of 1688 and a 1696 application made by J. C. Denner and J. Schell of Nuremberg asking permission to build the new French musical instruments developed about twelve years earlier.[6]

The oboe had made its way to Italy by 1692, where it was used in the operas of Carlo Francesco Pollarolo and Giacomo Perti. It was introduced six years later into the orchestra of the chapel of San Marco in Venice.[7] The first oboists performing in Italy were from France and Germany.[8] Aléxis Saint-Martin was thought to be one of the oboists responsible for bringing the instrument to Italy. [9] Saint-Martin was also the father of Giuseppe Sammartini, an oboist and composer of many works for the instrument in the eighteenth century.

The oboe which arrived in Italy differed greatly from the loud and unrefined shawm. The baroque oboe had no pirouette (the cupped top found on some shawms), which allowed the oboist to play with the lips directly on the reed and gave the performer more control over sound, dynamics, and intonation. The oboe was also built in three sections with swellings along the bore, while the shawm came in one straight, although slightly conical, piece.[10] The oboe could play two octaves chromatically, with the exception of the c#'. The oboe also had a smaller bore and tone holes than the shawm. Unlike the shawm, the oboe was fitted with two or three keys (one or two keys for eb—the second being a duplicate key appearing only on the earlier baroque oboes—and one for c', sometimes referred to as the "great key.)[11] There were only two vent-holes on the oboe, while the shawm had five. The finger-holes on the oboe were positioned lower on the instrument than on the shawm and the oboe also had a bell lip at its bottom.[12]

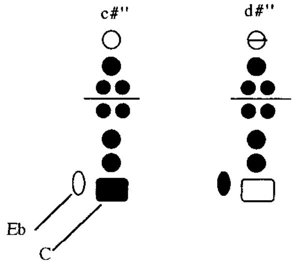
The two- and three-keyed oboe remained unchanged until 1760, when a few modest alterations were made.[13] Exact details of the instrument used in Italy at the beginning of the eighteenth century are not known, since no instructional materials appeared in Italy before the 1770 treatise by Vincenzo Paneraj of Florence. [14] Earlier treatises and instructional material, do not exist because the oboe was not successful in amateur circles,[15] probably due to the technical difficulties of the instrument and the need for reeds.

Although the baroque oboe could fully play chromatic pitches from c' to d''' (with the omission of c#'), the fingerings were often complicated. Bruce Haynes explains that with only eight holes, some of the semitones can only be obtained "by using 'cross-fingerings,' i.e. lowering an open-fingered note by closing holes further down the bore."[16] Cross-fingerings have a darker, more veiled tone quality. Special fingerings, which must be used for some trills, further affect the tone quality.[17] Higher pitches are produced by overblowing and tightening the embouchure, which also changes the tone quality by making it brighter. While a change of tone color might be intentionally called for by a composer's choice of pitches, one would not want the changes in tone to be random.

Fingering problems make music pitched in some tonalities much easier to play on the baroque oboe than others. Tonalities with up to three sharps and flats are generally recognized as the outer limits of the instrument. Haynes has demonstrated that a preference exists in the literature for tonalities with no accidentals to two flats.[18]

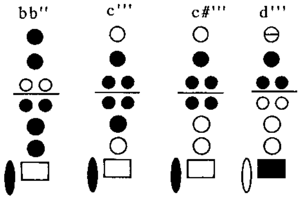
Even so, some finger combinations are impossible to effectively execute, while others are simply clumsy. Many of the trills that can be played on the baroque oboe require special fingerings. For example, as seen in example 2-1 moving between c#" and d#" is not possible. The keys on the baroque oboe used to play these two notes are both played with the right hand fifth finger and, because of the distance between the two keys, playing these two notes consecutively is impossible without inserting another note between them. This fingering problem also emphasizes the difficulty of playing in tonalities with four sharps or four flats.

Example 2-1



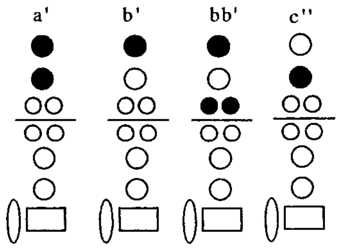
Similar fingering combinations occur in the upper range of the instrument involving the same Eb and C keys of the oboe. As can be seen in example 2-2, pitches bb", c"', and c#"' all use the Eb key, while d"' uses the C key. This situation makes it difficult to reach the d"' in any diatonic scale. The usual alternative is to leave the c key off for the d"'; however, this results in an even sharper and brighter tone on a note that is already quite bright.

Example 2-2



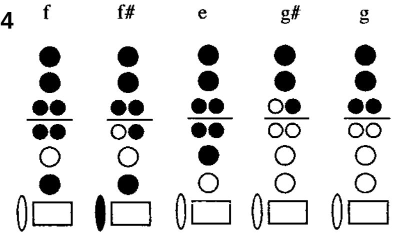
Many fingerings are simply quite clumsy to execute. Fingering combinations as simple as b' or bb' to c", or a' to bb' are difficult to play without creating extraneous pitches. As can be seen in example 2-3, the performer must lift one or two fingers while putting down a different finger, which often results in other pitches being heard in between.

Example 2-3



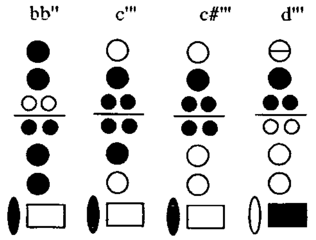
This same problem occurs in both octaves when going from f or f# to e (one finger coming up while another goes down, or, in the case of f#, the finger sliding half-way off a finger-hole seen in example 2-4). The alternative fingering for f# to e eliminates the difficult half-hole but creates a brighter and sharper sound.[19] A similar half-hole is used in both octaves to produce g# or ab, which makes going to g or bb difficult.

Example 2-4



High-note fingerings look complicated because more holes must be covered, but they are no more complicated than the cross-fingerings of b' and bb' to c". In fact c"' to c#"' is easier to play in this upper register, not only because fewer fingers move, but one is not moving over the "break" of the instrument (see example 2-5).

Example 2-5



Leaping across the break of the instrument is difficult to control. The break comes between c" and c#" (one finger down to all fingers down in examples 2-1 and 2-3). Not only are more fingers involved, the air stream must be intensified and the embouchure slightly tightened. The intensity and tightening are increased as one ascends. Large leaps over the break are quite difficult to control, especially descending. Leaps using g'' and higher will often create both extraneous pitches and a sag in pitch as the upper note drops to a lower one. Tonguing these leaps greatly improves the chance of success.

Other technical problems occur when playing trills. The cross fingerings discussed above make trilling between these notes impossible with standard fingerings. Alternate fingerings are used, but these fingerings are usually out of tune and change the color of the notes. For example, to trill from b' to c'' one plays b' and then adds one of the lower two fingers in the right hand (the finger added depends on the particular instrument being used). The result is a slightly dulled b' and a sharp and bright c''. Another bad cross-fingering trill is e to f. Although easy to play by simply lifting the second finger in the right hand, the resulting f is very sharp. In fact, the f is so sharp that the e to f# trill can be played using the same fingering by playing with more reed in the mouth. There are also problems with trills such as bb to ab, db'' to c'', all other cross-fingering combinations, and over-the-break trills. In fact, the fingerings one chooses for these trills depends entirely on the instrument being used and even instruments constructed by the same maker may require different fingerings.

Although there were acknowledged intonation problems such as those found in the lower register of the baroque oboe, players had to adjust to play in tune.[20] Intonation also varied not only from country to country, but also from church to church in the same city.[21] For example, the organ at San Marco in Venice was tuned higher than other organs in the city. In addition, there were two acknowledged pitch levels in Germany (Chor-ton or "choir pitch" and Cammer-ton or "chamber pitch").[22] Cammer-ton was lower than Chor-ton by anywhere from a whole step to a minor third.[23]

In addition to the tuning problem there was the added problem of temperament, which in the eighteenth century was closer to just or mean-tone intonation.[24] Just temperament meant that there was a difference between enharmonic tones, with flats sounding higher than sharps.[25] In fact, harpsichords were developed with split keys so that these differences could be voiced.[26] Fingering charts for the baroque oboe also support this tuning system. In Eric Halfpenny's collection of six different baroque oboe fingering charts, one sees fingering differences for the g#' and ab', a#' and bb', and f#'' and gb''.[27] When playing keyboard instruments without split keys, the solution to ensemble tuning was varied.[28] Generally, when the keyboard was a solo instrument in an ensemble such as in a trio or solo sonata, the other instruments tuned to the fixed semitones of the keyboard. However, when the keyboard was part of the continuo as in an orchestral work, then the group tuned to the temperament of the oboe.[29]

History of Marcello's *Concerto*

The second movement of Alessandro Marcello's oboe concerto provides an excellent example to discuss the effect of the baroque oboe on ornamentation choices. Before considering the ornaments one must first decide on the key. Both the composer and the key of this concerto have been mistakenly identified for more than 200 years. Bach originally included his Marcello transcription in a collection of *XVI Concerti nach A. Vivaldi.*[30] When the model for Bach's transcription was found with the name Marcello attached, it was assumed to be the work of Alessandro's renowned younger brother, Benedetto.[31] Not only was Benedetto more famous than his older brother, but Alessandro usually used his Arcadian name of Eterio Stinfalico in his publications.[32] Not until 1950 was Alessandro credited with the Concerto through Frank Walker's discovery of the c.1714-17 Jeanne Roger print housed in the British Library.[33] However, music historians continued to mis-attribute the work as late as 1967.[34]

Establishing the original key of the Concerto has also generated much confusion. There were two published versions of the work, one in C minor and another in D minor.[35] There is a statement found in the print of the C minor version that the work is notated in transposed Dorian with two flats. The original untransposed key then appears to have been D minor. C minor is also a difficult key to play on the Venetian baroque oboe. Finally, there are a number of mistakes in the C minor version.

Explanations for the existence of the C minor version is that it was transposed to C for the Bb oboe.[36] Modern baroque oboist and historian Bruce Haynes believes that the concerto was transposed to C minor because of the high pitch used in Venice which was closer to modern bb[37]. Local variation in pitch was not unusual at this time. For example, in France the pitch standard for "a" was often the equivalent of today's ab or g,[38] while in Germany it was closer to bb.[39]

The Ornamentation of Marcello's *Concerto II, Adagio*

The adagio second movement of the *Concerto II in d minor* by Alessandro Marcello is a large-scale slow movement. It contains no *tutti* sections and requires a great deal of ornamentation. The accompaniment is a repeated eighth-note figure providing the harmony under a simple skeletal melody.

Bach's ornamentation of this movement works well on the harpsichord, but there are problems when using these keyboard ornaments for the original oboe concerto (of course, there is also the issue of how appropriate Bach's North German ornaments are for the work of a Venetian composer). While one might be inspired by Bach's ornamentation, one should not be restricted by it when composing ornaments of your own.

One way to ornament this movement might be as follows (all examples come from the music at the end of the article). The first eight bars of the solo line, measures 4-11, consist of four two-measure statements of a sequence. When this author writes ornaments, the first statement of a sequence is kept simple, as in many examples of Italian ornamentation from the period. In fact, the Bach ornamentation works well here except for the *mordent* in measure 5, where an impossible finger combination is created. The second statement of the sequence in measures 6 and 7 uses a few more ornaments with two neighboring tones in measure 6 and a lower neighbor figure in measure 7 (the Italian version of the *mordent*). In the third statement of the sequence in measure 8 and 9, ornamental activity increases. Although a cross fingering is created from e'' to f'', the slow tempo should minimize the problem. In the final statement of the sequence, measures 10 and 11, the most ornaments are added. The faster part of the ornament avoids the use of forked-fingerings, although when it slows on beat three the e" to f" is used. The *mordent* suggested by Bach in measure 11 is not practical here where the e" to f" moves more quickly.

A similar procedure is used in the next three measures which each contain a statement of a sequence. Each statement starts on the second sixteenth note of the second beat. The first sequence in measure 11 is unornamented except for the slow, written-out *mordent* on the first beat of measure 12. The second sequence adds a few more ornaments, but they are still slow-moving with a slide, upper neighbor figure, and a suspension. The third statement of the sequence in measure 13 is the most highly-ornamented, with a scale pattern followed by a suspension on the down-beat of measure 14.

The next four bars, measures 15-18, appear to be the start of yet another sequence. However, at the end of measure 17 the figure takes a different turn and acts as a bridge to the sequences of measures 19-21. These measures also have a more complicated harmonic progression with a circle of fifths/secondary dominant sequence in measures 14-16 (V7/vi to V7/ii to ii7) and a V6/iii to iii in measures 17 and 18. Any ornaments added to these measures should avoid covering the harmonies; in fact, the ornaments should emphasize the harmony. Since the first three measures start as a sequence, the ornamentation of measure 15 is kept simple and the only ornaments are chord tones. The ornament on the first beat of measure 16 echoes the d minor seventh chord by using the c" and a'. Choosing these two notes also avoids the cross-fingering of c" to b'. Measure 17 is the beginning of a second statement of a sequence and should receive more ornaments. However, with the exception of one passing tone, all ornaments are chord tones because of the complicated harmony. The use of chord tones also helps eliminate any problems with g# (which requires a half-hole fingering). Approaching and leaving the g# from above further eliminate the half-hole problem which exists when coming from below. Measure 18 is no longer part of a sequence and is kept simple with only an elongation of the lower neighbor on the third beat.

Measures 19-21 represent yet another sequence with three statements. Unlike earlier sequences, this contains a longer tied note which must be taken into account. The sequence actually starts with the third beat of measures 18. Ornaments are avoided on each of the tied notes, with only a few notes being added at the ends of the quarter-tied-to-eighth-note durations. In the first statement, the ornaments that Bach wrote are usable on the baroque oboe; however, the *mordent* on the third beat is written-out in keeping with the Italian tradition. The ornamentation of the second statement of the sequence is also similar to Bach's, although personal taste changed the g" on the second sixteenth of the first beat of measure 20 to an a''. The Bach ornamentation in the third statement of the sequence in measure 21 does not work as well with the back and forth from c" to b' and e" to f". Instead, the e" to f" motion is limited to one statement and the movement from c'' to b' is slowed and articulated, making the cross-fingering easier to play.

Measure 22 is a transitional measure from the sequence to the cadence of measures 23 and 24. More ornamentation is required in measure 22 because it contains no long durations and a simple harmonic progression from vi to IV. The ornamentation Bach uses loses a feeling of improvisation and with all of the bb's, creates fingering problems on the baroque oboe. To avoid the bb problem on the first beat, d" to a" is used. On the second beat a scale would be effective, but the bb to c and the e'' to f'' move too quickly to be performed on a Baroque oboe. An arpeggiated figure is used which is easier to finger quickly. The third beat starts slowly, while the e'' to f'' is played. The ornamental activity can easily progress, giving the passage a more improvisatory feel. The next two measures move to a cadence and modulation. A hemiola, typically used at cadences, is established with the dotted quarter- and eighth-note figure starting in measure 23. The ornaments must not detract from the hemiola and the dotted quarter note must maintain its duration. Measure 23 is left unornamented, except for the appogiatura on the first beat. A turn is added to the first beat of measure 24, playing it slowly to minimize the e'' to f'' problem. Because of the cadence, tradition dictates that the second beat of measure 24 be a trill which resolves to the f''. Unlike most cadences, however, the work immediately moves to a brief section in Bb major. To avoid the abruptness of this modulation, an ornamental figure similar to Bach's is used.

The next four measures again contain dotted-quarter notes which need to maintain some length. In measures 25 and 26, ornaments similar to Bach's are used, but the rhythmic motion is slowed so that any fingering problems are overcome. The ornamentation of measure 27 is also similar to the Bach's; however, Bach uses a faster-moving ornament. Fingering problems of the baroque oboe must be taken into account, like the e'' to f#'' thirty-second notes at the end of the second beat as ornamented by Bach.

Measure 28 has the important role of re-establishing the key of D minor with its dominant-seven chord. To emphasize this chord, the ornament is arpeggiated at the beginning of the measure. The third beat is left alone to avoid the f'' to e'' problem, and in measure 29 the same problem is avoided with the leap of a third from g'' to e''. On the second beat of measure 29 a trill is dictated because the second violin part, playing in unison with the solo part at this point, also uses one. The long tone of measure 30 is left alone until measure 31, where the Bach ornament is used for the first two beats, but a more improvisitory-sounding ornament is added on the third beat. The first beat of measure 32 is unornamented, with a *mordent* on the second beat, and an arpeggio leading to measure 33.

The Bach ornamentation in measure 33 with all of its g#''s and f#''s is unplayable on the baroque oboe. In its place, an arpeggiated figure is used which avoids this problem. In measure 34 the Bach ornament is used, omitting the e'' for fingering purposes. The second beat sounds a dominant chord before an authentic cadence requiring a trill. However, since the second violin dictates a trill and its anticipation (c#'' trill to d''), the same is used in the oboe part.

In conclusion, the characteristics and technical problems encountered when playing the baroque oboe would have influenced the choice of ornaments used in any concerto or sonata written in the first half of the eighteenth century. The second movement of the *Oboe Concerto in d minor* by Alessandro Marcello has been used here as a source to explore ideas of ornamentation as influenced by the physical and acoustical structure of the baroque oboe. If one desires to play these works on the modern oboe, the baroque oboe's characteristics and limitations should keep in mind if one wants to use ornaments that could have been heard during the period.

Footnotes

[1] Rebecca Harris-Warrick, "A Few Thoughts on Lully's *hautbois," Early Music,* XCIII No. 1, February 1990: 102.

[2] Philip Bate, "Oboe," *The New Grove Dictionary of Music and Musicians*, 6th ed., vol. 13, ed. Stanley Sadie (London: Macmillan, 1980) 465.

[3] Bruce Haynes, "Lully and the Rise of the Oboe as Seen in Works of Art," *Early Music,* XVI No. 3, August 1988: 324.

[4] Haynes, "Lully," 328, 330.

[5] Haynes, "Lully," 326.

[6] Haynes, "Lully," 330, 331.

[7] Alfredo Bernardini, "The Oboe in the Venetian Republic, 1692-1797," *Early Music,* XVI No. 3, August 1988: 374.

[8] Bernardini, 374.

[9] Janet K. Page, "The Hautboy in London's Musical Life," *Early Music*, XVI No. 3, August 1988: 362.

[10] Haynes, "Lully," 325-6.

[11] Haynes, "Lully," 326.

[12] Haynes, "Lully," 326.

[13] Erick Halfpenny, "The French Hautboy: A Technical Survey, Part I," *The Galpin Society Journal* 6 (1953): 26-27.

[14] Bernardini, 376.

[15] Bernardini, 376.

[16] Bruce Haynes, "Tonality and the Baroque Oboe," *Early Music* 7 (1979): 355.

[17] Haynes, "Tonality and the Baroque Oboe," 355.

[18] Haynes, "Tonality and the Baroque Oboe," 355.

[19] In a fast tempo the pitch would go by quickly so that the change of sound would be less obvious, but in a slower passage this sound would be too noticeable to use.

[20] Erick Halfpenny, "The French Hautboy: A Technical Survey Part I," *The Galpin Society*, No. VI, July 1953: 31-32.

[21] Bruce Haynes, "Bach's Pitch Standards: The Woodwind Perspective," *Journal of the American Musical Instrument Society,* XI, 1985: 109.

[22] Mary Cyr, *Performing Baroque Music,* (Portland: Amadeus Press, 1992) 61.

[23] Cyr, 61.

[24] Bruce Haynes, "Beyond Temperament: Non-keyboard Intonation in the 17th and 18th Centuries," *Early Music* XIX no. 3 August 1991: 358.

[25] Haynes, "Beyond Temperament," 358.

[26] Haynes, "Beyond Temperament," 362.

[27] Halfpenny, 53-53.

[28] Haynes, "Beyond Temperament," 362.

[29] Haynes, "Beyond Temperament," 362.

[30] James A. Hobbs, "Marcello's Concerto in D Minor for Oboe, Strings, and Basso Continuo: A View of its origin and use in J.S. Bach's Concerto III for Solo Harpsichord, BWV 974," *Journal of the International Double Reed Society* 10 (1982): 1.

[31] Hobbs, 1-2.

[32] Eleanor Selfridge-Field, *The Music of Benedetto and Alessandro Marcello: A Thematic Catalogue with Commentary on the Composers, Repertory, and Sources.* (Clarendon Press: Oxford, 1990) 7.

[33] Frank Walker, "A Little Bach Discovery," *Music and Letters* 31 (1950): 184.

[34] Norman Carrell, *Bach the Borrower* (London: Allen and Unwin, 1967): 246.

[35] Hobbs, 3.

[36] Hobbs, 3.

[37] Bruce Haynes, "Johann Sebastian Bach's Pitch Standards: The Woodwind Perspective" *Journal of the American Musical Instrument Society,* 1985, 110.

[38] Haynes, 59.

[39] Haynes, 67.

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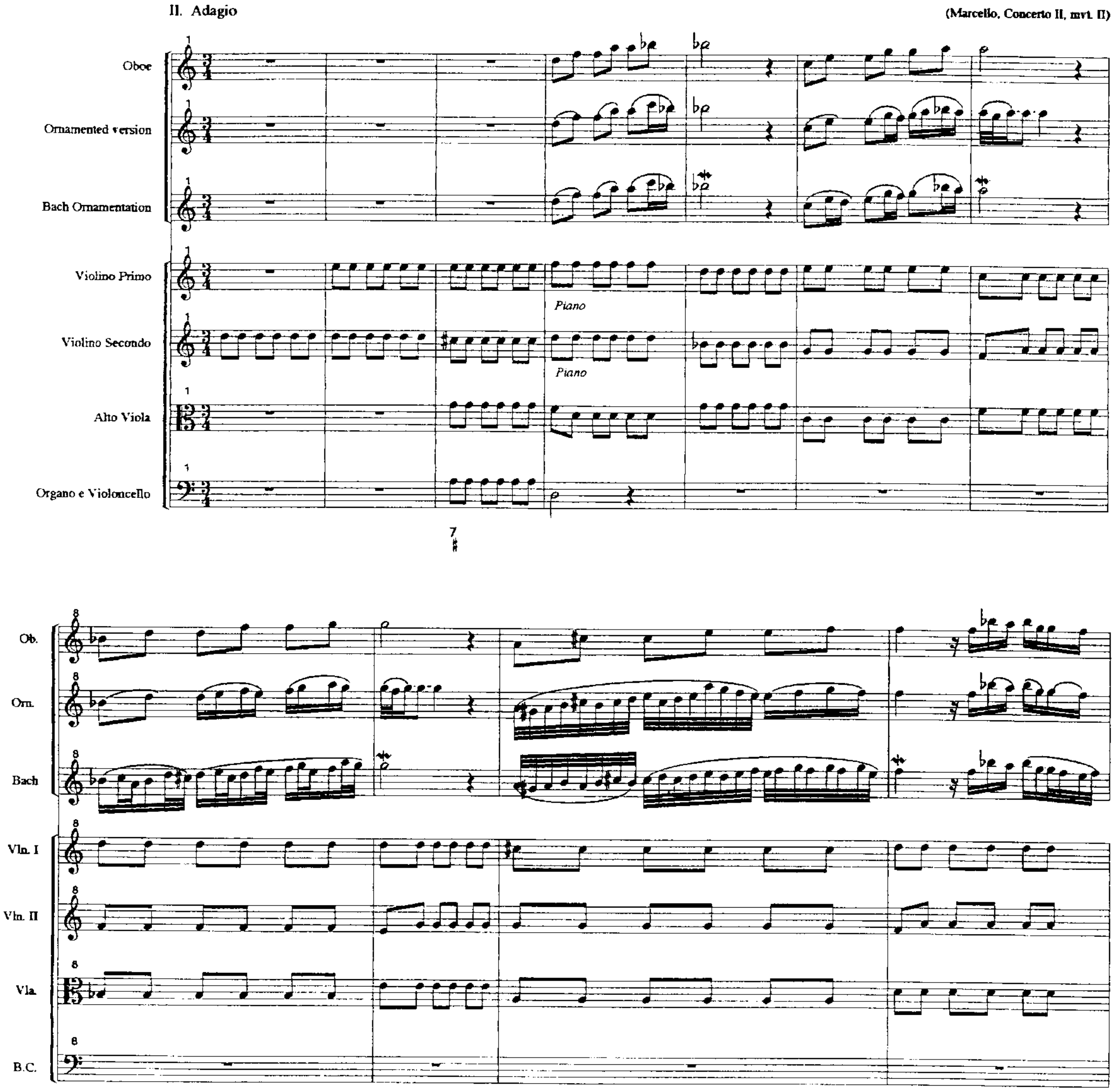
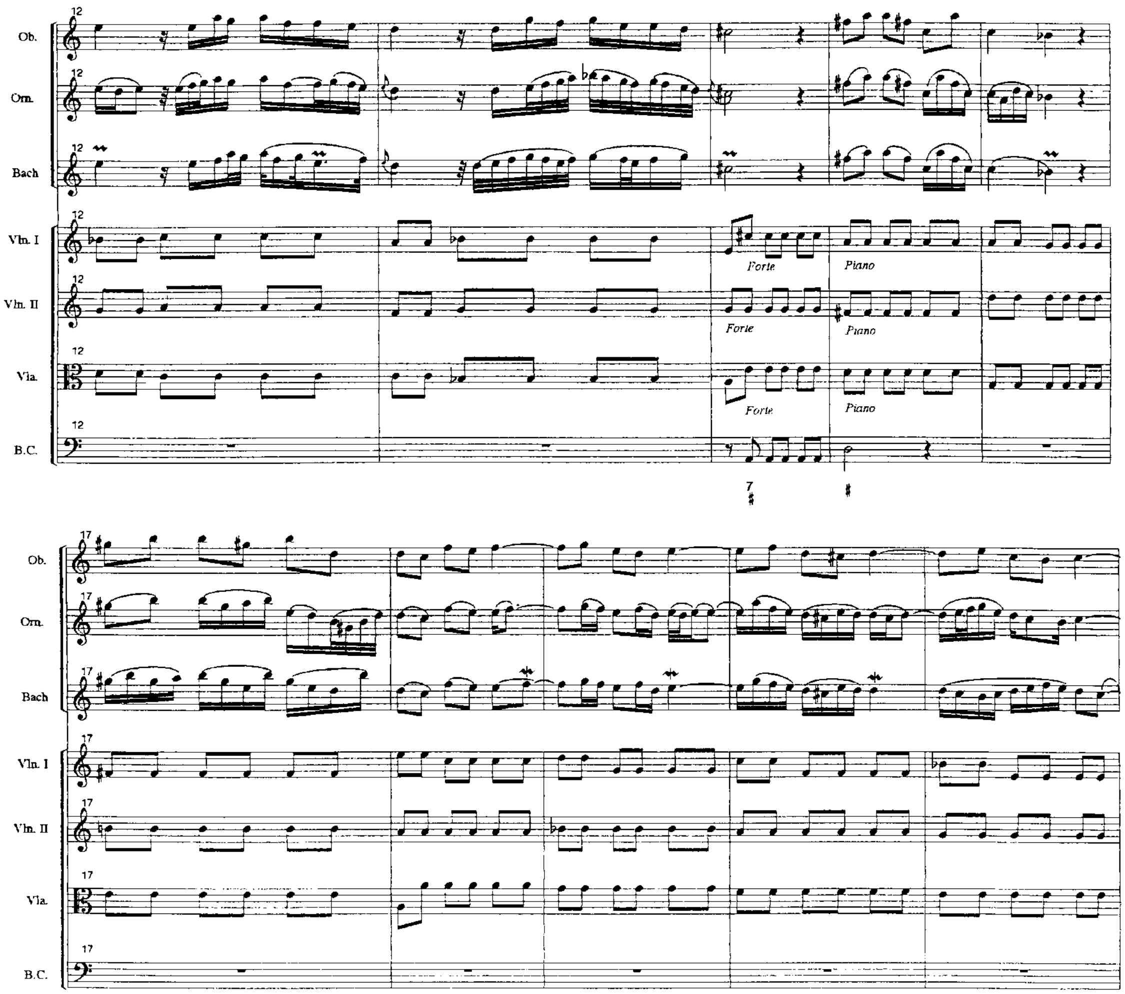

II. Adagio
(Marcello, Concerto II, mvt. II)
Oboe
Ornamented version
Bach Ornamentation
Violino Primo
Violino Secondo
Alto Viola
Organo e Violoncello
Piano
Piano
Ob.
Orn.
Bach
Vln. I
Vln. II
Vla.
B.C.

-2-

(Marcello, Concerto II, mvt. II)


Ob.
Orn.
Bach
Vln. I
Vln. II
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17
Forte
Piano
7
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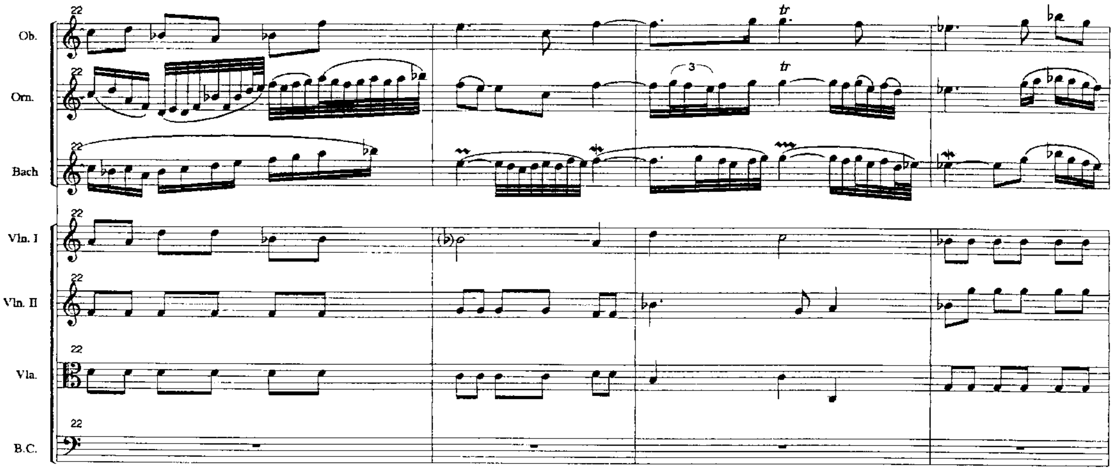
-3-

(Marcello, Concerto II, mvt. II)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22
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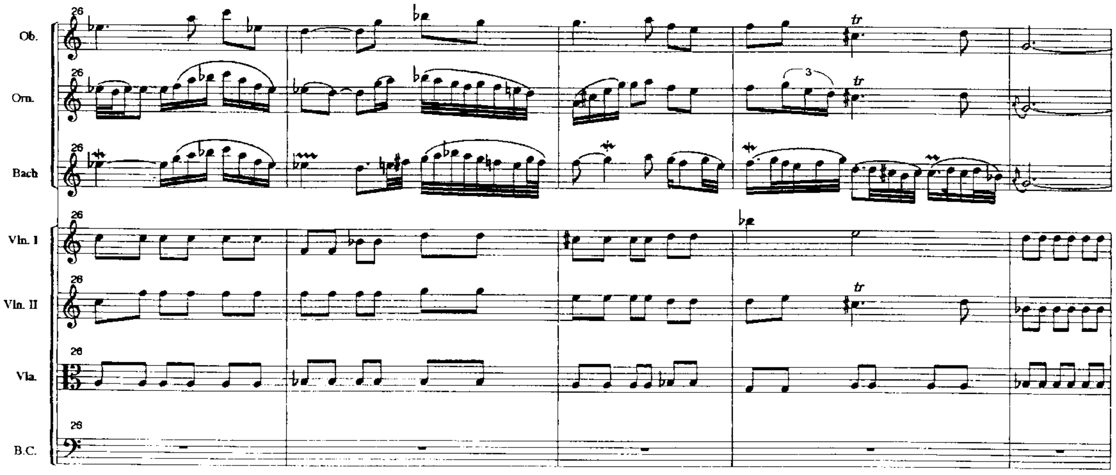
Ob.
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Vln. I
Vln. II
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B.C.
26
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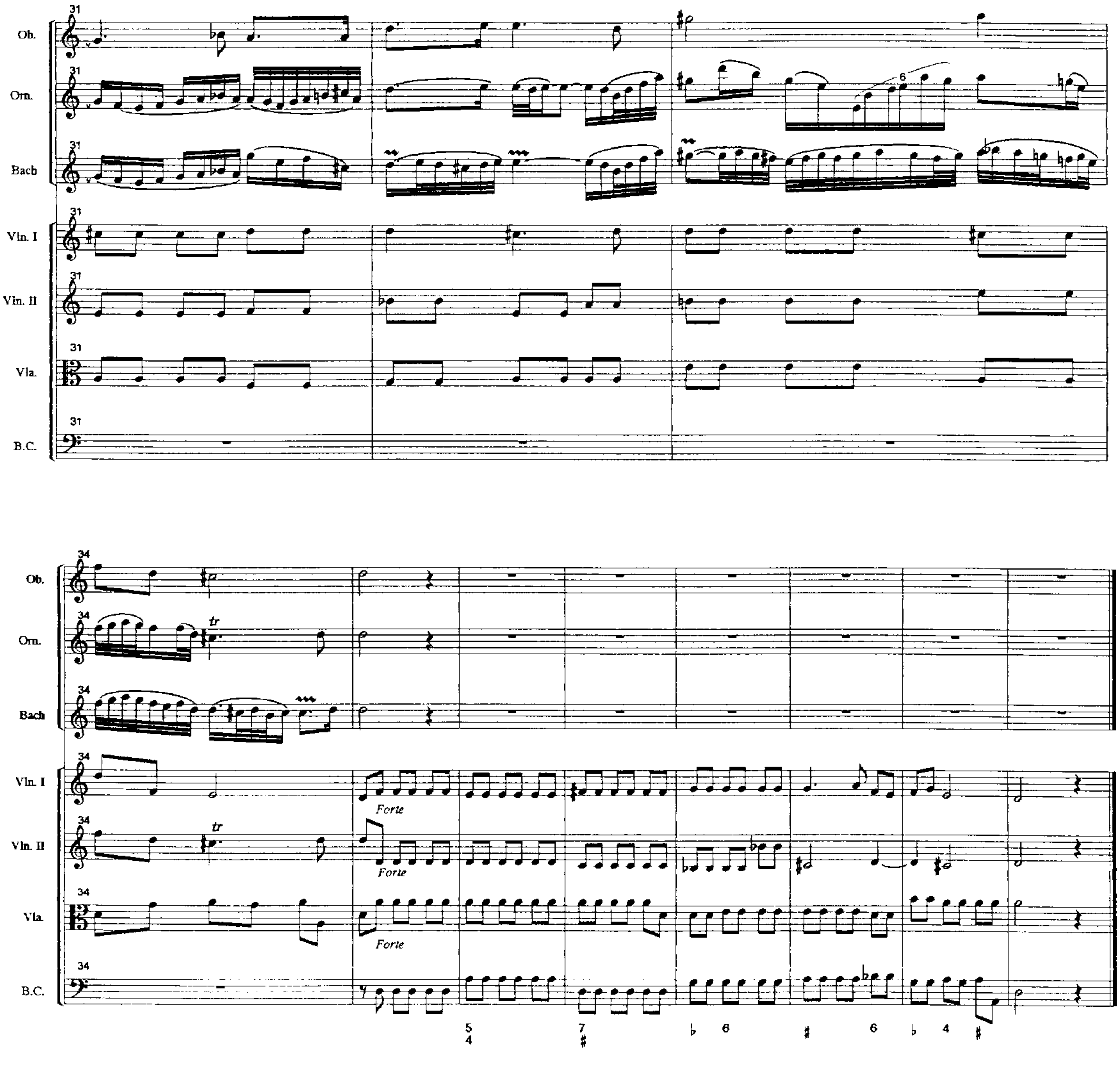
3

-4-

(Marcello, Concerto II, mvt. II)


Ob.
Orn.
Bach
Vln. I
Vln. II
Vla.
B.C.
31
6
34
tr
Forte
Forte
Forte
5
4
7
♯
♭ 6
♯
6
♭ 4
♯