

Further Thoughts on the Alto Trombone in the Solo Literature of the Eighteenth Century

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In 2005 I published an article in this *Journal* in which I showed that the eighteenth- and early nineteenth-century orchestral trombone section did not necessarily consist of the E \flat alto, B \flat tenor, and F bass that are still today practically ubiquitous in period instrument orchestras.¹ I asserted that the alto trombone was never as widely disseminated as commonly assumed today, and all but unknown in Vienna until close to the end of the nineteenth century, contentions that are contrary to the received knowledge concerning the use of the trombone during the classical period. Although not directly pertaining to the main thrust of my article, I also touched briefly upon the subject of the “solo alto trombone,” opining that the tenor trombone, not the alto, was most likely the proper instrument for the eighteenth-century solo repertoire.² Since especially this last aspect provoked a good deal of controversy in one of the online forums, I have for a long time wanted to take a closer look at the alleged “solo alto trombone.”

The modern alto trombone is in E \flat . This means, with the slide in the closed position, one can play the notes of the overtone series on E \flat . However, until the early eighteenth century, the alto trombone was pitched in D, and the tenor trombone in A. It has been surmised that the transition to the B \flat tenor, at least, first took place in Vienna around 1710,³ when a change in the pitch standard effectively made the A instruments into B \flat instruments. That is to say, the trombones themselves were not altered, but a new mindset was required from the players. However, this change of pitch was apparently not adopted in Salzburg until much later.⁴ Therefore, since I will focus here on the solo trombone repertoire from mid eighteenth-century Salzburg, it makes sense to regard it from the viewpoint of the alto trombone in D and the tenor trombone in A. I will return to the question of pitch in Salzburg below.

There is unfortunately no documentary evidence concerning the type of trombone for which the solo repertoire of the eighteenth century was intended, nor about the type of trombone employed by the few known virtuoso players of the period. It is thus necessary to take recourse to other sources, above all to the music itself, which often enough contains trills that cannot be executed properly on an alto trombone. But before we look at the music, it is useful to examine the issue of trills in general, and on the trombone in particular.

I am well aware that a discussion of eighteenth-century ornamentation can be a veritable minefield of contradictory sources and opinions. Nevertheless, I have chosen Leopold Mozart's *Violinschule* as the most relevant source about trills for our purposes (Figure 1).⁵ The relevance is twofold: first, Mozart's violin method was published in the very year, 1756, in which the trombone unexpectedly appeared as a solo instrument

in Salzburg with the engagement of Thomas Gschlatt as a member of the court musical establishment. Second, during the thirteen years of Gschlatt's employment in Salzburg, Leopold Mozart was one of a handful of composers to create solo parts for the trombone, parts that often require the playing of trills.

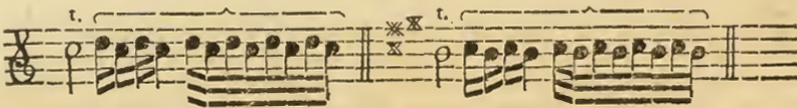
Das zehente Hauptstück. Von dem Triller.

§. 1.

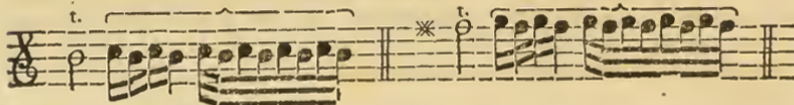
Der Triller ist eine ordentliche und angenehme Abwechslung zweener nächsten Töne, die oder um einen ganzen, oder um einen halben Tone voneinander abstehen. Der Triller ist demnach hauptsächlich zweyerley: nämlich der mit der größern, und der mit der kleinern Secunde. Und diejenigen irren sich, die das Anschlagen der kleinern Secunde mit dem Wort Trillero von dem Anschlagen der größern Secunde, als dem Triller (trillo) unterscheiden wollen: da doch Trillero nur einen kurzen Triller, Trillo aber allemal einen Triller anzeigen; er sey hernach vom ganzen oder halben Tone gemacht.

§. 3.

Da nun aber der Triller entweder mit der größern oder mit der kleinern Secunde geschlagen wird; so hat man genau auf die Tonart des Stückes zu sehen. Es ist ein schändlicher Fehler, den manche haben, die nicht nur allein niemals dahin sehen, ob sie den Triller mit der größern oder kleinern Secunde schlagen müssen; sondern die den Triller entweder gar in der Terze oder im Zwischentone auf gerathewohl machen. Man muß also den Triller weder höher noch tiefer anschlagen, als es die Tonart des Stückes erfordert. Z. E.



Mit der größern Secunde, oder der ganztönige Triller.



Mit der kleinern Secunde, oder der Halbtönige.

Figure 1: Leopold Mozart, *Violinschule*, 217–18.

Mozart wrote:

The trill is a regular and pleasant alternation of two neighboring notes, which are either a whole tone or a half tone apart. The trill is therefore of two main

kinds: namely that with the major second, and that with the minor second....

But since the trill is played either with the major or minor second, one must pay exact attention to the key of the piece [and to the additional modulations to incidental keys]. It is a shameful fault that many have, who not only never look to see whether they have to trill with the major or minor second, but make the trill haphazardly even on a third or an intermediary note. The trill must therefore be played neither higher nor lower than demanded by the key of the piece.⁶

Also note that Mozart's musical examples show the trills beginning with the upper, the auxiliary note, on the beat.

Playing a trill on the violin is rather straightforward: the main note is held down by one finger, while the upper neighboring note, either a half or whole tone higher, is played by the next finger. On the trombone, however, the upper neighboring note is not always conveniently placed where the player needs it.

Figure 2 shows the [modern] slide positions⁷ and corresponding overtone series for an alto trombone in D.⁸ In order to play a trill—in effect, a series of fast lip slurs—the two notes in question have to be on different partials of the respective overtone series.⁹ In the high range, this is not a problem (Figure 3). For example, in first position we have a whole tone between c^2 and d^2 ; in third position, between bb^1 and c^2 , and between c^2 and d^2 ; in sixth position between g^1 and a^1 , a^1 and b^1 , and b^1 and $c^{\#2}$, etc. (Some semitone trills can also be made as simple lip slurs, but for the most part lie above the normal playing range of an alto trombone.)



Figure 2: Alto trombone in D, slide positions.



Figure 3: Alto trombone in D, single position whole tone trills.



Figure 4: Alto trombone in D, trill f' to g'



Figure 5: Alto trombone in D, trills c' to d' and c' to db'



Figure 6: Alto trombone in D, trills e' to f' and e' to $f\#'$

Obviously, the lower you go in the overtone series, the more difficult it is to match the proper auxiliary note to the main note. With the main note f' in second position and the auxiliary note g' in third (Figure 4), an acceptable trill is entirely possible. One can also trill on c' in third position using the auxiliary note d' in fifth position, but trilling to the db' in sixth position can be a bit awkward (Figure 5).¹⁰ Thus, on a D alto trombone, e' probably has to be considered the lowest note on which both half-tone and whole-tone trills can be tolerably executed (Figure 6). The music, as we shall see, demands more, namely trills on notes as low as ab .

From the above, it should be obvious that a truly perfect trill is often not possible on a trombone of any kind. Today at least, there is almost always a bit of sleight-of-hand or rather sleight-of-ear involved: for example, in the above-mentioned trill from c' in third position to d' in fifth, the trill starts on the d' and is perhaps sounded once more, but possibly not even that, after the trill picks up speed. However, especially if the auxiliary note is played on the beat and thus also receives a slight accentuation, the ear continues to perceive the d' throughout the duration of the trill. Whether or not trombone trills were performed in this manner in earlier days, it is surely indicative that this kind of artifice was also known by players of early woodwind instruments, who employed similar tricks in order to execute trills involving awkward (e.g., forked) fingerings.¹¹

As mentioned earlier, another aspect that has to be taken into account is the pitch level in Salzburg. It would seem that at least in some cases the trombones and the organ there played in *Chorton*, that is to say at ca. $a=465$, while the strings and woodwinds were in *Cammerton*, at ca. $a=415$. This made it necessary for the trombones to either transpose down a whole tone or have transposed parts written out. And indeed there exist trombone parts from Salzburg that have been transposed down a whole tone:

- In the autograph score of Johann Ernst Eberlin's oratorio *Christus, Petrus, Joannes, [und] Phönissa* (ca. 1760), the trombone part to the aria "Gleich wie das Küchlein bey der Henne" is notated a whole tone lower than the other parts.¹²
- In the autograph score of Michael Haydn's oratorio *Kaiser Constantin I* (1769), the aria "Stille, stille, Gottes Wille" has both the solo trombone and solo trumpet notated in C major as opposed to the D major of the other parts.¹³
- The trombone and organ parts for the first performance in 1783 of Mozart's C-Minor Mass K. 427 were transposed a whole tone lower, putting the Kyrie into B \flat minor and the other movements into correspondingly lowered tonalities.¹⁴

As far as I have been able to determine, this downward whole-tone transposition of the trombone parts was not standard procedure in all Salzburg venues during this era. In Salzburg Cathedral, it was apparently the other way around: the woodwind parts (flutes, oboes, and sometimes a bassoon) were transposed upward by a whole tone to compensate for the difference between *Cammerton* and *Chorton*.¹⁵ Nevertheless, there still remain enough problematic trills for the alto trombone when the works with solo trombone parts are not transposed downward.

Salzburg, like Vienna, was one of the few places where the trombone remained in use in the eighteenth century, a time in which the instrument had long fallen out of favor throughout most of Europe. We know from the report "On the current situation of the musical establishment of His Princely Grace, the Archbishop of Salzburg," which was published in 1757 in Marpur's *Historisch-Kritische Beyträge*,¹⁶ that the master of the town musicians and two of his subordinates "played alto, tenor, and bass trombones" along with the choir (Figure 7).¹⁷ However, Thomas Gschlatt, who had joined the

**Endlich gebraucht man auch zum Chor
3 Posaunisten.
Nämlich die Alt- Tenor- und Bass-
trombone zu blasen, welches der Stadthürmer-
meister mit zweenen seiner Untergebenen, ge-
gen einem gewissen jährlichen Gehalt, verse-
hen muß.**

Figure 7: Friedrich Wilhelm Marpur, *Historisch-Kritische Beyträge zur Aufnahme der Musik* 3, no. 3 (Berlin: Lange, 1757): 195.

Salzburg Hofkapelle the previous year, was obviously hired for his virtuoso skills and not merely to play *colla parte* with the choir. In Marpurge's report, he is listed among the members of the court orchestra and praised as "a great master on his instrument, whom very few can equal"¹⁸ (Figure 8). Although it can probably be assumed that the Salzburg town musicians played on trombones of the three different sizes—alto, tenor, and bass¹⁹—there is no evidence that Gschlatt, as a soloist, preferred or used an alto trombone.

Posaunist.
27 Hr. Thomas Gschlatt, aus Stockerau in
Unterösterreich. Ist ein grosser Meister auf
seinem Instrumente, dem es sehr wenig gleich
thun werden. Er spielt auch eine gute Violin
und das Violoncell, bläset nicht weniger ein
feines Waldhorn.

Figure 8: Friedrich Wilhelm Marpurge, *Historisch-Kritische Beyträge zur Aufnahme der Musik* 3, no. 3 (Berlin: Lange, 1757): 189.

I have compiled two lists of compositions by Salzburg composers featuring trombone solos. Trill intervals in bold type indicate trills that are either unplayable on an alto trombone, or involve awkward slide shifts over three positions (for example, between d^1 and eb^1 or c^1 and db^1). The first list (Figure 9), of instrumental music, is rather short: three works by Michael Haydn and one by Leopold Mozart,²⁰ in each

	Range	Trills
Michael Haydn (1737–1806)		
<i>Divertimento</i> (in D)		
7. Menuet	b–d ²	$e^1/f\sharp^1, f\sharp^1/g^1, g^1/a^1$
8. Andantino. col Trombone Conc. ¹⁰	g–d ²	bb/c¹, c¹/d¹, e¹/f¹, f¹/g¹, g¹/a¹, a¹/bb¹, bb¹/c²
9. Finale. Presto	f \sharp –d ²	–
<i>Sinfonia</i>		
Larghetto à Trombone Conc. ¹⁰	a–d ²	bb¹/c¹, c¹/d¹, d¹/e¹, eb¹/f¹, f¹/g¹, g¹/a¹
<i>Serenata a piu stromenti</i> (in D)		
4. Adagio	a–d ²	b/c\sharp¹, c\sharp¹/d¹, d¹/e¹, e¹/f\sharp¹, f\sharp¹/g¹, g\sharp¹/a¹, a¹/b¹
5. Allegro molto	d–d ²	b/c\sharp¹, c\sharp¹/d¹, d¹/e¹, e¹/f\sharp¹, f\sharp¹/g¹, g\sharp¹/a¹, a¹/b¹, b¹/c\sharp²
7. Allegro	b–c ²	–
8. Andante	c \sharp ¹ –a ¹	–
Leopold Mozart (1719–1787)		
<i>Serenata</i>		
6. Adagio	g–d ²	–
7. Menuetto–Trio	a–d ²	–
8. Allegro	a–d ²	$e^1/f\sharp^1$

Figure 9: Salzburg instrumental works with solo trombone parts.

case a multi-movement serenade, sinfonia, or divertimento with one or more movements for solo trombone, sometimes paired with other solo instruments. Of the eleven movements, six require trills; of these, four demand trills that are at least awkward, if not impossible, on the alto trombone.

	Range	Trills
Anton Cajetan Adlgasser (1729–1777)		
<i>Die wirkende Gnade Gottes oder David in der Buße</i> Aria: Weinen will ich	a–eb ²	c ¹ /d ¹ , f ¹ /g ¹
<i>Esther</i> Aria: Ich heul', ich weine, seufze, klage	bb–cb ²	g ¹ /a ¹ , bb ¹ /c ² , c ² /d ²
<i>Litaniae de Venerabili Sacramento</i> Agnus Dei	g [#] –d ²	e ¹ /f [#] ¹ , g [#] ¹ /a ¹ , b ¹ /c [#] ²
<i>Litaniae de Venerabili Sacramento</i> Agnus Dei	bb–d ²	g ¹ /a ¹
<i>Maria, schönstes Meisterstück</i>	a–d ²	b/c [#] ¹ , e ¹ /f [#] ¹ , f [#] ¹ /g ¹
<i>Mensch, was tust du</i>	a–eb ²	–
<i>Quae clara lumina</i> Aria: Non retinet frigus	ab–eb ²	f ¹ /g ¹
<i>Regina Coeli</i> Quia quem meruisti	g–d ²	c ¹ /d ¹ , d ¹ /e ^b ¹ , eb ¹ /f ¹ , f ¹ /g ¹ , a ¹ /bb ¹ , bb ¹ /c ²
Johann Ernst Eberlin (1702–1762)		
<i>Christus, Petrus, Debora, Sara</i> Aria: Wie sich die Kraft des Weyrauchs	c [#] /e ²	–
<i>Christus, Petrus, Joannes, Phönissa</i> Aria: Gleich wie das Kuchlein	b–d ²	–
<i>Der blutschwitzende Jesus</i> Aria: Was hat mein Aug' erblickt	g–c ²	eb ¹ /f ¹ , f ¹ /g ¹
<i>Der verlorene Sohn</i> Aria: Nein, der Unflat meiner Seele Aria: Menschen sagt, was ist nur Leben	b–d ¹ a–d ²	– –
<i>Der verurteilte Jesus</i> Aria: Fließ o heißer Tränenbach	g–d ²	–
<i>Die beste Wahl der Christlichen Seele</i> Aria: Die Welt ist eine Rose gleich	a–d ²	g ¹ /a ¹ , a ¹ /b ¹ , b ¹ /c ²
<i>Litaniae de Venerabili Sacramento</i> Hostia	b–d ²	f [#] ¹ /g ¹ , a ¹ /bb ¹
<i>Regina coeli</i> Ora pro nobis	a–c ²	c ¹ /d ¹ , d ¹ /e ^b ¹
<i>S. Sigismund</i> Aria: Kaum läßt sie uns die Wuth gleich	a–eb ²	d ¹ /e ^b ¹ , eb ¹ /f ¹ , f ¹ /g ¹ , g ¹ /ab ¹ , ab ¹ /bb ¹
Michael Haydn (1737–1806)		
<i>Der Kampf der Busse und Bekehrung</i> Aria: Ich komm mit wahrer Reue	f–d ²	c ¹ /d ¹ , g ¹ /a ¹ , a ¹ /bb ¹
<i>Kaiser Constantin I: Feldzug und Sieg</i> Aria: Stille, stille, Gottes Wille	f [#] –c ²	b ¹ /c ¹ , d ¹ /e ¹ , f [#] ¹ /g ¹ , a ¹ /b ¹
<i>Lerne! Lerne schwache Menschlichkeit!</i>	bb ¹ –c ²	eb ¹ /f ¹ , f ¹ /g ¹ , g ¹ /ab ¹
<i>Litaniae de Venerabili</i> Praecelsum	ab ¹ –c ²	bb/c ¹ , c ¹ /d ¹ , d ¹ /e ^b ¹ , eb ¹ /f ¹ , f ¹ /g ¹ , ab ¹ /bb ¹
Leopold Mozart (1719–1787)		
<i>Litaniae Lauretanae</i> Agnus Dei	bb–c ²	c ¹ /d ¹ , d ¹ /e ^b ¹ , eb ¹ /f ¹ , f ¹ /g ¹ , g ¹ /ab ¹ , a ¹ /bb ¹
Wolfgang Amadeus Mozart (1756–1791)		
<i>Die Schuldigkeit des ersten Gebots</i> Aria: Jener Donnerworte Kraft	g–c ²	ab/bb, b/c ¹ , c ¹ /db ¹ , d ¹ /e ^b ¹ , eb ¹ /f ¹ , f ¹ /g ¹ , g ¹ /ab ¹

Figure 10: Salzburg vocal works with solo trombone parts.

The second list (Figure 10) is a bit more substantial. It contains twenty-three compositions, including liturgical and sacred-dramatic works, by Anton Cajetan Adlgasser, Johann Ernst Eberlin, Michael Haydn, Leopold Mozart, and Wolfgang Amadeus Mozart.²¹ Of the twenty-three vocal pieces, seventeen require the trombonist to play trills; however, ten of the seventeen display trills that are not playable on alto trombone.

Thus, from the twenty-four instrumental and vocal movements requiring trills, fourteen feature trills that are problematic on the alto trombone—not an insubstantial proportion. It should also be noted that the sources display the part designation “Trombone,” but never the qualifier “alto.”²² The following excerpts show some of these problematic and/or impossible trills, which however can be played correctly and without any undue acrobatics on the tenor trombone in A.

- Johann Ernst Eberlin, *Regina coeli*, “Ora pro nobis.” Salzburg, Dom-Musikarchiv, Ms A 419 (parts). On tenor trombone in A, trill from d^1 in third position to eb^1 in fifth, or alternatively from sixth to seventh; trill c^1 in second to d^1 in third, or from fifth to sixth (Figure 11).
- Michael Haydn, *Serenata*, 5. Allegro molto. Budapest, Hungarian National Library, Ms. mus. II.82, p. 49 (autograph score). On tenor trombone in A, trill from $c^{\sharp 1}$ in first to d^1 in third, or from fourth to sixth (Figure 12).
- Michael Haydn, *Divertimento*, 8. Andantino. Budapest, Hungarian National Library: Ms.mus. II.84, p. 36 (autograph score). On tenor trombone in A, trill from c^1 in second to d^1 in third, or from fifth to sixth (Figure 13).
- Wolfgang Amadeus Mozart, *Die Schuldigkeit des ersten Gebots* (1766), “Jener Donnerworte Kraft.” Windsor UK, Windsor Castle: RCIN 1140995, fol. 53r (autograph score). On tenor trombone in A, trill from c^1 in second to db^1 in fourth, or from fifth to seventh (Figure 14).
- Anton Cajetan Adlgasser, *Maria, schönstes Meisterstück*. Lambach, Benediktinerstift, Musikarchiv: 1178 (parts). On tenor trombone in A, trill from b in third to $c^{\sharp 1}$ in fourth, or from sixth to seventh (Figure 15).
- Michael Haydn, *Divertimento*, 8. Andantino. Budapest, Hungarian National Library: Ms.mus. II.84, p. 36 (autograph score). On tenor trombone in A, trill from bb in fourth to c^1 in fifth (Figure 16).
- Wolfgang Amadeus Mozart, *Die Schuldigkeit des ersten Gebots* (1766), “Jener Donnerworte Kraft.” Windsor UK, Windsor Castle: RCIN 1140995, fol. 60r (autograph score). On tenor trombone in A, trills from ab in second to bb in fourth, or from sixth to seventh (Figure 17).

Figure 11 is a musical score for Johann Ernst Eberlin's *Regina coeli*, "Ora pro nobis," measures 8–10. The score is in common time (C) and features a key signature of two flats (B-flat and E-flat). The parts are:

- Canto:** A vocal line that is mostly silent, with a few notes in measure 10.
- Violino I:** A violin part that begins in measure 8 with a series of eighth notes and rests.
- Violino II:** A second violin part that begins in measure 8 with a series of eighth notes and rests.
- Viola:** A viola part that begins in measure 8 with a series of eighth notes and rests.
- Trombone Solo:** A solo trombone part that begins in measure 8 with a series of eighth notes and rests, including trills (tr) in measures 9 and 10.
- Organo:** An organ part that begins in measure 8 with a series of eighth notes and rests, including a "tasto" marking in measure 9. Fingering numbers 5, 6, 7, 4, and ♯ are indicated below the staff.

Figure 11: Johann Ernst Eberlin, *Regina coeli*, "Ora pro nobis," mm. 8–10.

Figure 12 is a musical score for Michael Haydn's *Serenata*, 5. Allegro molto, measures 121–24. The score is in common time (C) and features a key signature of two sharps (F# and C#). The parts are:

- Corni:** A horn part that is mostly silent, with a few notes in measure 24.
- Oboi:** An oboe part that is mostly silent, with a few notes in measure 24.
- Violino I:** A violin part that begins in measure 121 with a series of eighth notes and rests.
- Violino II:** A second violin part that begins in measure 121 with a series of eighth notes and rests.
- Viola:** A viola part that is mostly silent, with a few notes in measure 24.
- Corno:** A horn part that begins in measure 121 with a series of eighth notes and rests, including trills (tr) in measures 123 and 124.
- Trombone:** A trombone part that begins in measure 121 with a series of eighth notes and rests, including trills (tr) in measures 123 and 124.
- Basso:** A bass part that begins in measure 121 with a series of eighth notes and rests.

Figure 12: Michael Haydn, *Serenata*, 5. Allegro molto, mm. 121–24.

Figure 13 shows a musical score for Michael Haydn's *Divertimento*, 8. Andantino, mm. 68–71. The score is in 2/4 time and includes staves for Oboi, Violino I, Violino II, Viola, Trombone, and Basso. The Oboi part begins with a half note G4, followed by a quarter note A4, and a half note Bb4. The Violino I part starts with a half note G4, followed by a quarter note A4, and a half note Bb4. The Violino II part starts with a half note G4, followed by a quarter note A4, and a half note Bb4. The Viola part starts with a half note G4, followed by a quarter note A4, and a half note Bb4. The Trombone part starts with a half note G4, followed by a quarter note A4, and a half note Bb4. The Basso part starts with a half note G3, followed by a quarter note A3, and a half note Bb3. Dynamics include *p* (piano) and *tr* (trill).

Figure 13: Michael Haydn, *Divertimento*, 8. Andantino, mm. 68–71.

Figure 14 shows a musical score for Wolfgang Amadeus Mozart's *Die Schuldigkeit des ersten Gebots*, "Jener Donnerworte Kraft," mm. 1–4. The score is in 2/4 time and includes staves for Trombone, Violino I, Violino II, Viola I, Viola II, Christ (Tenore), and Basso. The tempo is marked "Andante un poco Adagio". The Trombone part starts with a half note G4, followed by a quarter note A4, and a half note Bb4. The Violino I part starts with a half note G4, followed by a quarter note A4, and a half note Bb4. The Violino II part starts with a half note G4, followed by a quarter note A4, and a half note Bb4. The Viola I part starts with a half note G4, followed by a quarter note A4, and a half note Bb4. The Viola II part starts with a half note G4, followed by a quarter note A4, and a half note Bb4. The Christ (Tenore) part starts with a half note G4, followed by a quarter note A4, and a half note Bb4. The Basso part starts with a half note G3, followed by a quarter note A3, and a half note Bb3. Dynamics include *fp* (fortissimo) and markings like *Con sordini* and *tr* (trill).

Figure 14: Wolfgang Amadeus Mozart, *Die Schuldigkeit des ersten Gebots*, "Jener Donnerworte Kraft," mm. 1–4.

Figure 15 shows a musical score for three measures. The key signature is one sharp (F#) and the time signature is 2/4. The parts are:

- Violino Solo:** Treble clef. Measure 1: quarter rest, eighth notes G4, A4, B4. Measure 2: eighth notes C5, B4, A4, G4, F#4, E4, D4. Measure 3: quarter note D4, quarter note C4, eighth rest, eighth note B3, quarter note A3. Trill (tr) above the first note.
- Trombone Solo:** Bass clef. Measure 1: quarter rest, eighth notes G2, A2, B2. Measure 2: eighth notes C3, B2, A2, G2, F#2, E2, D2. Measure 3: quarter note D2, quarter note C2, eighth rest, eighth note B1, quarter note A1. Trill (tr) above the first note.
- Soprano Solo:** Bass clef. Measure 1: quarter rest. Measures 2 and 3: whole rest.
- Organo / Violone:** Bass clef. Measure 1: quarter note G2, quarter note A2. Measure 2: quarter rest, quarter note B2, quarter note A2. Measure 3: quarter rest, quarter note G2, quarter note F#2, quarter note E2.

Figure 15: Anton Cajetan Adlgasser, *Maria, schönstes Meisterstück*, mm. 6–8.

Figure 16 shows a musical score for three measures. The key signature is one sharp (F#) and the time signature is 2/4. The parts are:

- Oboi:** Treble clef. Measures 1, 2, and 3: whole rest.
- Violino I:** Treble clef. Measure 1: quarter note G4, quarter note A4. Measure 2: quarter note B4, eighth notes C5, B4, A4. Measure 3: quarter note G4, quarter note F#4, quarter note E4. Trill (tr) above the first note.
- Violino II:** Treble clef. Measure 1: quarter note G4, quarter note A4. Measure 2: quarter note B4, eighth notes C5, B4, A4. Measure 3: quarter note G4, quarter note F#4, quarter note E4. Trill (tr) above the first note.
- Viola:** Bass clef. Measure 1: quarter note G3, quarter note A3. Measure 2: quarter note B3, eighth notes C4, B3, A3. Measure 3: quarter note G3, quarter note F#3, quarter note E3. Trill (tr) above the first note.
- Trombone:** Bass clef. Measure 1: quarter note G2, quarter note A2. Measure 2: quarter note B2, eighth notes C3, B2, A2. Measure 3: quarter note G2, quarter note F#2, quarter note E2. Trill (tr) above the first note.
- Basso:** Bass clef. Measure 1: quarter note G2, quarter note A2. Measure 2: quarter note B2, eighth notes C3, B2, A2. Measure 3: quarter note G2, quarter note F#2, quarter note E2. Trill (tr) above the first note.

Figure 16: Michael Haydn, *Divertimento*, 8. Andantino, mm. 77–79.

Musical score for Figure 17, showing Trombone, Violino I, Violino II, Viola I, Viola II, Tenore, and Basso parts. The Tenore part includes lyrics: "sau - nen - schall mit ih - rem ___ Wi - der - hall".

Figure 17: Wolfgang Amadeus Mozart, *Die Schuldigkeit des ersten Gebots*, “Jener Donnerworte Kraft,” mm. 115–18.

Figure 18: Tenor trombone in A, slide positions for the trills shown in Figures 11–17. The figure shows six trill exercises with slide positions indicated by numbers 1-5.

- d^1 to e^b1 (Slide positions: 3, 4, 5)
- $c^{\sharp1}$ to d^1 (Slide positions: 1, 2, 3)
- c^1 to d^1 (Slide positions: 2, 3)
- c^1 to d^b1 (Slide positions: 2, 3, 4)
- b to $c^{\sharp1}$ (Slide positions: 3, 4)
- b^b to c^1 (Slide positions: 4, 5)
- a^b to b^b (Slide positions: 2, 3, 4)

Figure 18: Tenor trombone in A, slide positions for the trills shown in Figures 11–17.

Naturally, one might surmise that the works demanding these low-range trills were played on tenor trombone, and the others on alto. But if we compare the ranges of the trombone parts, we see that the uppermost note in every case is either c^2 , d^2 , or eb^2 , regardless of whether low trills are present or not; and the lowest note generally lies between g and b . So there is no question of one group of pieces favoring the high range and another favoring the mid or low range. Thus, in view of the fact that all these trills can be played on tenor trombone in accordance with the performance practice of the time—and even with a downward transposition by a whole tone—it stands to reason that these trombone parts were intended for the tenor instrument.

Why, then, are all these trombone parts generally considered to be for alto trombone? It is because the parts are notated in alto clef, and alto clef can obviously only mean alto trombone. Unfortunately, this simplistic reasoning is today firmly entrenched in the minds of many if not most trombonists. Musicologists, too, have succumbed to this false logic—one has only to look in the *Neue Mozart Ausgabe*, for example, to see the trombones designated as “Trombone alto,” “Trombone tenore,” and “Trombone basso.” Yet, Mozart almost invariably numbered them *Trombone primo*, *Trombone secondo*, and *Trombone terzo*, or variants thereof, as is documented in the lists of parts published in the *New Mozart Edition*’s own Critical Reports and by Mozart’s autographs (Figure 19).



Figure 19: Wolfgang Amadeus Mozart, autograph of the *Mass in C Major*, K. 427 (detail).

So what does a modern adherent of the alto trombone do in a situation in which a proper trill is not possible? A frequent solution is simply to trill to the next higher note of the overtone series, keeping the slide in the same position. For example, starting on the beat with the main note d^1 and trilling up a major third to $f\sharp^1$, both in second position on the E_b alto. This is, to put it in Leopold Mozart’s words, “a shameful fault.” It also reveals a common misconception among trombonists, namely that

a trill is merely a melodic ornament. In fact, a trill often has a harmonic as well as a melodic function. Playing the auxiliary note on the beat generally adds a dissonance to the harmony, an intentional dissonance that is lacking if the trill starts on the main note.

Solutions that have been suggested for the problem of unplayable trills on the alto trombone include simply leaving out such trills—which again would eliminate the intended dissonances—or replacing the trills with other ornaments.²³ The latter has been suggested by several authors,²⁴ but is guided by the misinformed assumption of a contemporary performance practice that never existed.

One source in particular has occasionally been pointed out as supposedly condoning the replacement of trills with embellishments and/or trills on a third, namely a short passage in Leopold Mozart's *Violinschule* (Figure 20):²⁵ Mozart writes, "There is one case in which it appears as if one could play a trill on a minor third or augmented second: and a great Italian master teaches his pupils thus. But, also in this case, it is better if one leaves out the trill entirely and puts in another embellishment." The captions under the musical example read: "Here the trill sounds very feeble" and "Is better without trill with another embellishment."

§. 4.

Es giebt nur einen Fall, wo es scheint als könnte man den Triller aus der kleinen Terze oder vergrößerten Secunde machen: Und ein grosser italiänischer Meister lehret seine Schüler so. Allein auch in diesem Falle ist es besser, wenn man den Triller gar weg läßt, und davor eine andere Auszierung anbringt. 3. E.

The image shows a page from Leopold Mozart's *Violinschule*, section §. 4. It contains two staves of music. The top staff is in treble clef and the bottom staff is in bass clef. Both are in common time (C). The tempo is marked 'Adagio.' The music consists of two measures. The first measure shows a trill on a note, marked with a trill symbol (a vertical line with a dot) and a 't.'. The second measure shows an alternative ornamentation, which is a trill on a note a third above the main note, also marked with a trill symbol and a 't.'. Below the staves, there are two captions in German. The first caption reads: 'Hier klingt der Triller sehr elend.' (Here the trill sounds very feeble). The second caption reads: 'Ist besser ohne Triller mit einer andern Auszierung.' (Is better without trill with another embellishment). There are also some asterisks and the number '7' under the notes in both staves. The page number '3a' is in the bottom right corner.

Figure 20: Leopold Mozart, *Violinschule*, 218.

However, those who interpret this passage as allowing trills on thirds obviously have not understood what Mozart was getting at: Jason Oliver, for example, states that Mozart "acknowledges that the trill on the third has been used in the past but sounds 'feeble,'"²⁶ but is obviously unaware that Mozart was not talking about something that was common in the *past*, but was actually criticizing one of his own contemporaries, namely violinist and composer Guiseppe Tartini (1692–1770),²⁷ suggesting that his

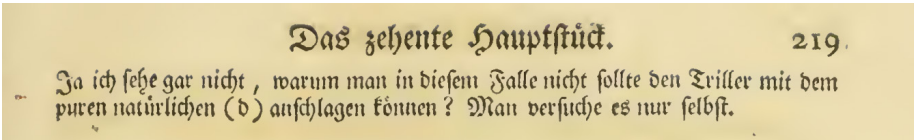


Figure 21: Leopold Mozart, *Violinschule*, 219.

colleague write something else in place of trills of this kind. Moreover, Oliver obviously did not bother to ask himself why this might be. The answer is quite simple: the upper neighboring note, with which the trill should begin, is the (double) octave of the bass note and would not have provided the dissonance that Mozart expected in a trill. And it sometimes pays to turn the page (Figure 21),²⁸ where Mozart continues, “Indeed, I do not see why in this case one could not play the trill with the pure natural (d)? One should try it oneself.” In other words, the very same trill, played with a *d* in place of the *d*[#] appoggiatura, would have been entirely acceptable to Mozart. In short, there is no evidence that trombonists were granted a dispensation from performing proper trills of a whole tone or half tone, starting with the upper note on the beat.

Owing to the unique situation at the Salzburg court, there can be no doubt that Adlgasser, Eberlin, Michael Haydn, and the Mozarts wrote their trombone solos for one specific performer, Thomas Gschlatt, and nobody else. It should be noted that after Gschlatt’s departure from Salzburg in 1769, the production of solo trombone parts ceased there. Indeed, several years after Gschlatt left, Leopold Mozart was to rewrite the trombone solo in the *Agnus Dei* of his *Litaniae Lauretanae* for viola, and several years after that Wolfgang Amadeus revised the part again for oboe.

Having heard and collaborated with Thomas Gschlatt over a number of years, these composers were very much aware of his abilities on the trombone. They therefore supplied him with music tailor-made for his playing skills, music that he undoubtedly performed, trills and all, in their presence and/or under their direction. It stands to reason that if Gschlatt had not been able to execute the trills they desired, they would not have put them into the music in the first place. But since he obviously did render all the trills properly—a feat that is impossible on an alto trombone—we can draw two logical conclusions: first, Thomas Gschlatt played these works on tenor trombone, and second, the alto trombone is clearly the wrong instrument for this repertoire.

Howard Weiner, a native of Chicago, studied trombone with Frank Crisafulli at Northwestern University. In 1978 he moved to Europe where he studied early music at the Schola Cantorum Basiliensis in Basel, Switzerland and established himself as a freelance musician, performing with numerous ensembles and orchestras, including the Edward Tarr Brass Ensemble, the Freiburger Barockorchester, the Cappella Coloniensis, the Basel Symphony and Radio Symphony Orchestras, and Ensemble Aventure Freiburg. Weiner has authored several important articles on the history of the trombone and published editions of early trombone

music. From 1997 he was assistant editor and since 2004 co-editor of the *Historic Brass Society Journal*. Moreover, he is a contributor and editorial advisor to the forthcoming *Cambridge Encyclopedia of Brass Instruments*.

Notes

¹ Howard Weiner, “When is an Alto Trombone an Alto Trombone? When is a Bass Trombone a Bass Trombone?—The Makeup of the Trombone Section in Eighteenth- and Early Nineteenth-Century Orchestras,” *Historic Brass Society Journal* 17 (2005): 37–79.

² *Ibid.*, 65–66.

³ Stewart Carter, “Trombone Pitch in the Eighteenth Century: An Overview,” in *Posaunen und Trompeten: Geschichte—Akustik—Spieltechnik*, Michaelsteiner Konferenzberichte 60 (Blankenburg: Michaelstein, 2000), 53–66.

⁴ Gerhard Walterskirchen, “Die große Orgel der Stiftskirche St. Peter zur Zeit Mozarts und Haydns,” in *Das Benediktinerstift St. Peter in Salzburg zur Zeit Mozarts*, ed. P. Petrus Eder and Gerhard Walterskirchen (Salzburg: St. Peter, 1991), 127–34, here 128.

⁵ Leopold Mozart, *Versuch einer gründlichen Violinschule* (Augsburg: author, 1756) (hereafter: *Violinschule*). Unless indicated otherwise, the translations from Mozart’s *Violinschule* are by the author.

⁶ *Ibid.*, 217–18. Interpolation in square brackets from the third edition [“und die nebenbey vorkommenden Ausweichungen in die zufälligen Tonarten”] (Augsburg: Lotter, 1787), 220–21.

⁷ For the sake of convenience, I refer here and in the following to the modern, chromatic slide positions rather than to the historic, diatonic slide positions. Until the end of the eighteenth century, the alto trombone was described as having three diatonic slide positions (corresponding to six chromatic positions), and the tenor trombone four diatonic positions (corresponding to seven chromatic positions).

⁸ The upper range of an alto trombone extends higher than shown here. The charts display the notes required for the trills in the pieces surveyed (highest trill c^2 to d^2).

⁹ According to Daniel Speer, “The trills are made with the chin” (“Die Triller werden mit dem Kien ... gemacht”). See Daniel Speer, *Grund-richtiger, kurz, leicht und nöthiger Unterricht der Musicalischen Kunst* (Ulm: Kühn, 1687), 111; *idem*, *Grund-richtiger, Kurz, Leicht und Nöthiger, jetzt Wol-vermehrter Unterricht der Musicalischen Kunst oder Vierfaches Musicalisches Kleeblatt* (Ulm: Kühn, 1697), 223.

¹⁰ Concerning the trills c^1 to d^1 and c^1 to db^1 , Neal Andrew Bennett remarks, “Neither of these feats is possible by conventional means on an alto trombone whether the instrument is pitched in E-flat or F.” See Neal Andrew Bennett, “Michael Haydn’s *Ich komme mit wahrer Reue*, his *Stille, Stille, gottes Wille* and Wolfgang Amadeus Mozart’s *Jener Donnerworte Kraft*: an examination of these works, with performance suggestions and critical editions” (D.M.A. diss., University of British Columbia, 2004), 45.

¹¹ See, for example, Johann Joachim Quantz, *Versuch einer Anweisung die Flöte traversiere zu spielen* (Berlin: Voss, 1752), 87 (“Von den Trillern,” section 12).

- ¹² Regensburg, Bischöfliche Zentralbibliothek, Proskesche Musikabteilung: C 151 Cod. 130.
- ¹³ Budapest, Hungarian National Library: Ms.mus II.107.
- ¹⁴ Augsburg, Staats- und Stadtbibliothek: Hl + 10, organ and three trombone parts from the first performance in Salzburg in 1783. See Howard Weiner, "The Soprano Trombone Hoax," *Historic Brass Society Journal* 13 (2001): 150 (Figures 7 and 8).
- ¹⁵ See Arthur Mendel, "Pitch in Western Music since 1500: A Re-examination," *Acta Musicologica* 50 (1978): 1–93, here 34, n. 21; and Bruce Haynes, *A History of Performing Pitch: The Story of "A"* (Lanham, MD: Scarecrow, 2002), 322–23. Unfortunately, Haynes's discussion of pitch in Salzburg during the classical period is tainted by erroneous information provided by Reine Dahlqvist, who informed him that Mozart's Mass in C Minor was transposed into B minor for the 1783 performance in Salzburg. In fact, the trombone and organ parts copied in and for Salzburg were transposed into B \flat minor. Haynes also remarks that the Mass "had originally been given in Vienna," a claim that is unfounded. Meanwhile, it is even doubted that the first performance actually came about in Salzburg, although the orchestral material had obviously already been prepared.
- ¹⁶ "Nachricht von dem gegenwärtigen Zustande der Musik Sr. Hochfürstlichen Gnaden des Erzbischoffs zu Salzburg im Jahr 1757," in Friedrich Wilhelm Marpurg, *Historisch-Kritische Beyträge zur Aufnahme der Musik* 3, no. 3 (Berlin: Lange, 1757): 183–98. This report is often attributed to Leopold Mozart, probably due to the length of the entry devoted to him and his works in comparison to the rather concise entries about the other Salzburg musicians.
- ¹⁷ *Ibid.*, 195. "Endlich gebraucht man auch zum Chor 3 Posaunisten. Nämlich die Alt-Tenor- und Basstrombone zu blasen, welches der Stadthürmermeister mit zweenen seiner Untergebenen ... versehen muß."
- ¹⁸ *Ibid.*, 189. "Hr. Thomas Gschlatt ... ist ein grosser Meister auf seinem Instrument."
- ¹⁹ During the period under discussion, a time in which the trombone had largely fallen out of use, it was rather unusual to find town musicians playing trombones *colla parte* along with the choir. In Leipzig, where this old-fashioned practice was still in place in 1769, it is known that the *Stadtpfeifer* were required to play on four different sizes of trombone—soprano, alto, tenor, and bass (see Weiner, "Soprano Trombone Hoax," 154). Therefore, it is likely that the Salzburg town musicians, too, continued to use alto, tenor, and bass trombones well into the eighteenth century.
- ²⁰ The two remaining eighteenth-century works that could be included in this very short list, the trombone concertos by Johann Georg Albrechtsberger and Georg Christoph Wagenseil, were not composed in Salzburg, nor is there any evidence that they were written with Thomas Gschlatt in mind.
- ²¹ This list is by no means complete. I have knowledge of several pieces to which I was not able to gain access, and there are certainly more waiting to be discovered.
- ²² Eighteenth-century trombone parts from other Austrian collections occasionally do specify "alto trombone," but these do not necessarily indicate the use of the small alto trombone in D or E \flat . As shown in my previous article, there are sources in which the term "alto trombone" is applied to instruments in A and B \flat —one could thus justly speak of "alto trombone in A" and "alto trombone in B \flat " (see Weiner, "When is an Alto Trombone an Alto Trombone," 39, 48–49,

51–53); several recently discovered sources support my hypothesis that many, if not all, of these “alto trombone” parts were in fact intended for “alto” trombone in A or B \flat .

²³ Modern trombonists have come up with other solutions (e.g., using a semitone trill valve that obviously would not help much where whole-tone trills are called for, or equipping an alto trombone with a B \flat valve that, at considerable cost, essentially turns the alto into a tenor trombone just for the trills), which for obvious reasons need not be discussed here.

²⁴ See, for example, Chris Buckholz, “Performance Practice for Eighteenth Century Solo Trombone Literature,” *International Trombone Society Journal* 53, no. 1 (2007): 48–50; and Jason L. Oliver, “The Creation of a Performance Edition of the Georg Christoph Wagenseil Concerto for Trombone with Attention Given to the Surviving Manuscripts and Primary Sources of Performance Practice from the Middle of the Eighteenth Century” (D.M.A. diss., University of North Texas, 2010).

²⁵ Mozart, *Violinschule*, 218 (1756 edition) or 221 (1787 edition).

²⁶ Oliver, “Creation of a Performance Edition,” 54. Oliver quotes the translation by Editha Knocker in Leopold Mozart, *A Treatise on the Fundamental Principles of Violin Playing*, (London: Oxford University Press, 1948), 186.

²⁷ Mozart took this and other examples from Tartini’s *Regole per arrivare a saper ben suonar il violino* (known in English as *Treatise on the Ornaments of Music*). The *Regole* was not published until 1770 (as *Traité des Agréments de la Musique*, trans. Pietro Denis, Paris), but Mozart obviously had access to one of the handwritten copies in circulation after the publication in 1752 of Quantz’s *Versuch* and before that in 1756 of his own *Violinschule*. Two such manuscript copies (one by Tartini’s pupil Giovanni Francesco Nicolai) have been preserved. See Giuseppe Tartini, *Traité des Agréments de la Musique*, ed. Erwin R. Jacobi, (Celle and New York: Moeck, 1961), which contains an English translation by Cuthbert Girdlestone and a facsimile of Nicolai’s manuscript.

²⁸ Mozart, *Violinschule*, 219 (1756 edition) or 222 (1787 edition).