

# THE SIXTEEN-FOOT *VIOLONE* IN CONCERTED MUSIC OF THE SEVENTEENTH AND EIGHTEENTH CENTURIES: ISSUES OF TERMINOLOGY AND FUNCTION

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## ABSTRACT

Recent performance projects have called into question the use of the sixteen-foot violone in a wide range of instrumental and concerted vocal works, particularly those by J. S. Bach. In performances of music by Bach and his contemporaries, artists have on occasion opted to exclude sixteen-foot participation in the bass line, often citing terminological issues as a reason. While acknowledging that the use of the term violone in scores and parts from the sixteenth to the eighteenth centuries is problematic, this article casts doubt on the conclusions reached by these performers and on the scholarly writings underpinning them. A careful examination of instrumental designations employed in autograph parts and scores provides important clues as to the proper employment of a sixteen-foot contrabass instrument in many works. Further illumination on this matter is provided by terminology in contemporary treatises. Analysis of this material shows that the function of the bass line to which the term violone (or any of its regional variants) was assigned was a crucial determining factor in interpreting that part as either an eight- or sixteen-foot bass line. In other words, modern determinations should be made according to whether the designation indicates a non-transposing instrument serving primarily as the bass member of an instrumental choir or a transposing instrument whose main purpose is reinforcing the continuo line at the lower octave.

On 15 December 1669 Johann Franz Khuen von Auer, a relative and agent of the bishop of Olmütz, Karl Count Liechtenstein-Castelcorno, sent a letter to the bishop's royal chamberlain (*Kammermeister*), Thomas Sartorius, concerning the delivery of instruments from the Austrian luthier Jacob Stainer (1617–1683) to the bishop's court at Kremsier. After discussing a number of recently procured instruments, Khuen von Auer devotes his concluding paragraph to a particular acoustical problem:

Das die negstmal yberschickte paßgeigen etwas zu klain, auch die resonanz in velliger musica zu subtil, bevorab in ainer großen kürchen, berichtet er, geigenmacher, das, wan er solliches gewust, wollt er gröbere saiten aufzogen haben, und aber der quart-violon wirt soliches alles ersetzen und sich von ganzer music hören lassen, wie er dan verspricht, ain solich stuk zu machen, so sich sechen darf lassen aller orthen.<sup>2</sup>

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- 1 Walter Senn and Karl Roy, *Jakob Stainer, Leben und Werk des Tiroler Meisters*, 1617–1683 (Frankfurt: Bochinsky, 1986),
- 2 Walter Senn, 'Jakob Stainer, der Geigenmacher zu Absam', in Schlern-Schriften 87, ed. Raimund von Klebelsberg (Innsbruck: Universitäts-Verlag Wagner, 1951), 124–125. The letter is catalogued by Senn as U131. Unless otherwise indicated, all translations are mine.

Since the recently dispatched string bass was too small, and its resonance in fully scored music too subtle, especially in a large church, the luthier reports that, had he been aware of this, he would have fitted on more robust strings. But the large *Quartviolon* will make up for all of this and be heard in large-scale music. He has promised to make an instrument that can be heard in all places.

A subsequent letter from Khuen von Auer to Sartorius (8 September 1670) again addresses this issue:

Wöll mich der herr mit wenigen avisiern; und zumahlen ich ihme, geigenmacher, dahin disponiert, das er ihr hochfürstlich gnaden zu gehorsambsten ehren und mir zu gefallen den großen violon oder octafviolon (welicher alberait 2mal größer sein wirt als die vormals yberschickte paßgeigen und sich aus aller musica in pleno hören wirt lassen) . . . <sup>3</sup>

The Count has given me brief notice that, in particular, I should have the luthier do his Royal Grace the most obedient honour and favour, by providing a large *Violon* or *Octafviolon* (which is twice as large as the previously despatched string bass and allows all music to be fully heard) . . .

Both passages demonstrate the perceived necessity of a large sixteen-foot string-bass instrument for the proper performance of concerted music in a burgeoning musical establishment such as that at Kremsier during the late seventeenth century.<sup>4</sup>

Similar praise for the use of the sixteen-foot string bass in concerted music can be found in a variety of sources. Consider the following description of the *violone grosso* from a 1706 treatise by the German organist and theorist Martin Fuhrmann:

*Violone, Bass-Geige. Violone Grosso*, eine *Octav-Bass-Geige* / darauff das 16 füßige Contra C. Eine solche grosse Geige solte billich in allen Kirchen vorhanden seyn und nicht nur beym Musiciren / sondern auch unter den Choral-Liedern immer mitgestrichen werden; Denn was diese grosse Geige von ferne vor einen durchdringenden und dabey süssen Resonanz wegen ihrer 16 füßigen Tieffe giebt / kan niemand glauben / als der sie gehöret.<sup>5</sup>

Violone, Bass-Geige. Violone grosso, an Octav-Bass-Geige having the sixteen-foot contra C. Such a large string instrument should be found in all churches, and not only in concerted works, but always playing along in chorales as well. Nobody apart from those who have heard it can believe the penetrating and sweet resonance this large Geige produces from a distance as a result of its sixteen-foot register.

As we shall see, comparable statements concerning the use of sixteen-foot string instruments in a variety of venues and circumstances are common among the writings of seventeenth- and eighteenth-century performers and theorists from all over Europe.

Certain recent performance projects, however, have claimed that the now standard practice of sixteenfoot participation in concerted vocal and instrumental music from this period results from an incorrect interpretation of the musical sources. Recordings issued in 2007 by Jeffrey Thomas and the American Bach Soloists of the complete Brandenburg Concertos, for example, suggest that at least two of these works are better served by excluding sixteen-foot participation in the bass line. Thomas makes use of a six-string

<sup>3</sup> Senn, 'Jakob Stainer, der Geigenmacher zu Absam', 129. The letter is catalogued by Senn as U140.

<sup>4</sup> Jiří Sehnal notes that 'one of the most brilliant periods in the history of Kroměříž was the period under the rule of Bishop Karl Liechtenstein-Castelcorno (1664–95), who not only rebuilt the residence and the town but also maintained a well-equipped *Kapelle*'. 'Kroměříž (Kremsier)', in *The New Grove Dictionary of Music and Musicians*, second edition, ed. Stanley Sadie and John Tyrrell (London: Macmillan, 2002), volume 13, 933–934. Further information on the instrument collection of Bishop Karl can be found in Jiří Sehnal, *Pavel Vejvanovský and the Kroměříž Music Collection* (Olomouc: Moravia and World, 2008), 95–110.

<sup>5</sup> Martin Fuhrmann, Musicalischer-Trichter (Frankfurt: author, 1706), 93.

fretted instrument commonly referred to today as a 'G violone', with the tuning G¹-C-F-A-d-g. Even more categorical in the rejection of sixteen-foot sonority in the works of J. S. Bach is the Belgian violinist and conductor Sigiswald Kuijken, who has detailed his views on certain aspects of Bachian performance practice in a recent article. His approach with respect to bass instrumentation, discussed below, appears to rest on an incomplete picture of the available historical information. But before we continue, a word about terminology is in order.

When referring to an instrument such as Thomas's G violone, Annette Otterstedt uses the term 'twelve-foot double bass' to indicate a bass instrument that is tuned in such a way that it can reach some, but not all, of the contrabass range. Such an instrument reads notes of the bass line at pitch, as an eight-foot instrument such as a violoncello would. However, I shall borrow Otterstedt's useful terminology and employ it in the sense that she has, setting up a bass-instrument classification system according to three basic categories: eight-foot non-transposing instruments (violoncello, basse de violon and so on), twelve-foot non-transposing instruments (violone da gamba, basso di viola and so forth) and sixteen-foot transposing instruments (violone grosso, Octavviolon, große Quartviolon and so on). The chart provided below in the Appendix details various characteristics of the eight-, twelve- and sixteen-foot instruments – many called violone or some variant thereof – mentioned in numerous manuals from the early seventeenth to the mid-eighteenth century.

Although in the seventeenth century the word *violone* (*Violon* in German-speaking areas) was used in a variety of different contexts, by the turn of the eighteenth century it had come to designate either a twelve-foot non-transposing 'double bass' instrument or a sixteen-foot octave-transposing contrabass instrument in virtually all areas of Europe. From that time on, *violone* was not used to designate an eight-foot non-transposing instrument. The violoncello and French *basse de violon*, the most prominent among these latter instruments at the turn of the eighteenth century, were clearly designated by terminology that applied directly to them, both in treatises and in scores and parts. Thus the term *violone* is not to be understood as a synonym for eight-foot instruments after the first decades of the eighteenth century.

A good deal of modern confusion is a direct result of the eighteenth-century use of the term *violone* for twelve-foot members of string choirs, which were classified, more or less universally throughout Europe, as 'double-bass' instruments. When the term *violone* is encountered in a given work, the function of that particular instrumental line must be taken into consideration. Other factors that may help to determine the correct instrument to employ in a given situation include its presumed lower compass and certain aspects of voice leading that are affected by the presence of a sixteen-foot instrument. However, such factors cannot be relied upon to point decisively to the use of one instrument over another. Only a careful consideration of both contemporary terminology and the function of the bass line in question can provide adequate answers.

In order for us to understand bass-line scoring clearly, certain terminological issues must be clarified at the outset. As we have seen, contemporary treatises provide important clues as to how composers from this period

<sup>6</sup> American Bach Soloists / Jeffrey Thomas, Johann Sebastian Bach: Brandenburg Concertos (Koch International Classics 3–7332–2H1 (1995); rereleased on Masterworks Series Bach Cantata series, volume 5, 2007). Thomas uses a G violone for Concertos 2 and 6: 'For the second [concerto], we utilize a chamber organ rather than a harpsichord (chamber organs were a very popular continuo instrument for secular as well as sacred music, and provide a highly complementary timbre to the solo trumpet); an 8' "G" violone is used, since the violoncello and continuo line are often an octave apart, meaning that the use of a 16' instrument would cause a two-octave separation between it and the 'cello. . . . And for the sixth, with its "royal" instrumentation of two violas da gamba, we call upon two lutes to complete the sonority; an 8' "G" violone is used due to the lowest pitch (Bb<sup>0</sup>) of the part'. The notes are available online at <a href="http://americanbach.org/recordings">http://americanbach.org/recordings</a>. The issue of the two-octave separation that results from employing a sixteen-foot instrument is taken up below.

<sup>7</sup> Sigiswald Kuijken, 'A Bach Odyssey', Early Music 38/2 (2010), 263-272.

<sup>8</sup> Annette Otterstedt, *The Viol: History of an Instrument* (Kassel: Bärenreiter, 2002), 148–150. Otterstedt is in agreement with many of the general principles outlined in this article: 'In a nutshell: the violone of the early period was defined by its instrumental context; and the consort bass viol could appear in the character of a 12-foot "double-bass" in a mixed ensemble' (149).



might have employed instruments designated by the problematic term *violone*. Using such information as a starting-point, I shall consider works by representative composers of the period to see how their use of the term comports with terminology found in various writings. A careful examination of this data reveals that sixteen-foot participation in instrumental ensemble music and concerted vocal works was widely regarded during the late seventeenth and early eighteenth centuries as being essential for adding depth, resonance and grandeur to performances.

## TERMINOLOGICAL ISSUES

The correspondence concerning Jacob Stainer's instruments cited above reveals much about the terminological bifurcation into small and large *Violons* found in sources of the period. Consider the following excerpt from another letter from Khuen von Auer to Sartorius (9 September 1669):

Allain wegen des großen violons stehe ich an, weil anstatt des klienern solicher gemacht soll werden, ob ihm, geigenmacher, die begerte 50 taler darumb zu bezalen. Zwar verspricht er ain solich instrumentum zu machen, so den maister lobt und mit den hall ain ganze kürchen anfillen solle, auch in die weite gehört werden, daryber dan, weil diß die lester arbeit, vernere resolution erwart wirt, ob diser große oder ain kliener violon, maßen der negste gewest, gemacht werden solle, doch ieder in sein pretio.<sup>9</sup>

However, I am standing by concerning the large *Violon*, since, as opposed to the smaller ones to be made, the luthier requires a purchase price of fifty talers. To be sure, he promises to make an instrument that the Master will praise and that should fill an entire church and be heard from a distance. Furthermore, since this latest order awaits resolution as to whether the next instrument should be a large or small *Violon*, the price remains to be determined.

This clear differentiation between small and large *Violons* is reinforced by the detailed payment lists for instruments that frequently accompanied Khuen von Auer's correspondence with Sartorius. The list that supplements this letter includes a *Violon* for thirty talers and a contrabass *Violon* (*Octafviolon*) for fifty talers. Thus the *große Violon* referred to in the letters is a sixteen-foot transposing instrument, and as such was highly desirable for performances in a spacious venue.

The distinction between small and large *Violons* is consistent throughout the letters and other *Kapelle* documents from Kremsier, as is terminological differentiation between the violin and viol families. A letter from Khuen von Auer to Sartorius (27 January 1670) lists, among other instruments, two violins (each at ten talers), four *violen di braccia* (each at twelve talers), one *viol di gamba* (sixteen talers), one *Paßviolen* or tenor-bass viola da gamba (thirty talers), one *Violon* (twenty-four talers) and one *Octavviolon* (forty-two talers). It seems clear that the term *Violon* here refers to both a non-transposing bass-range instrument and, with the proper qualifier (*große* or *octaf* or *octav*), to a sixteen-foot octave-transposing contrabass. Further, much of the information in the following discussion demonstrates that the latter two instruments are members of the viol family. The *Violon* that cost twenty-four talers must have played in the twelve-foot register, embracing some, but not all, of the contrabass range. We will assume a six-string configuration for it,

<sup>9</sup> Senn, 'Jakob Stainer, der Geigenmacher zu Absam', 118-119. The letter is catalogued by Senn as U120.

<sup>10</sup> Senn, 'Jakob Stainer, der Geigenmacher zu Absam', 119. Count Liechtenstein-Castelcorno apparently objected to the prices suggested by Stainer and Khuen; Senn notes that all the prices on the list are crossed out and new prices in the Count's hand are written in. For the small Violon, instead of thirty talers, the Count suggested twenty-four; for the Octafviolon, instead of fifty talers, the Count specified forty-two.

<sup>11</sup> Senn, 'Jakob Stainer, der Geigenmacher zu Absam', 126–127. The price of thirty talers for the *Paßviolen* is what Stainer was asking; again he asked fifty talers for the *Octavviolon*, but only received forty-two. The instrument referred to in the correspondences as *Paßviolen* is identified as a 'Tenor-Baß Viola da gamba' in Senn and Roy, *Jakob Stainer*, 219.



with a tuning of G¹-C-F-A-d-g, as prescribed by contemporary treatises and seen in surviving instruments by Stainer. 12

The use of *violone* (or *Violon*) in this correspondence – with or without modifiers – is representative of the terminology from this period. The term *violone* can be traced to the sixteenth century, when it was used as a general designation for all instruments in the viol family.<sup>13</sup> However, in a 1609 treatise the Italian theorist and composer Adriano Banchieri narrowed the use of the term to include only the two lowest members of the *da gamba* family: the *violone da gamba*, a six-string instrument with the aforementioned twelve-foot tuning (G¹-C-F-A-d-g), and the *violone in contrabasso*, which also employed six strings but was tuned a fourth lower (D¹-G¹-C-E-A-d), thereby embracing the true sixteen-foot range.<sup>14</sup> As members of the viol family, both instruments were fretted.

These are presumably the two types of *violoni* that Stainer was providing to the court at Kremsier, as may be inferred from surviving instruments. A six-string instrument with the G tuning, listed in the inventory of the Musikhistorisk Museum in Copenhagen as a 'Baß-Viola da Gamba', is representative of Stainer's *kleiner Violon*; it bears a printed label reading 'Jacobus Stainer in Absam / prope Oenipontum 1652'. An instrument of the type that Khuen von Auer referred to as *Octavviolon* can be found today in the Church of St Nikolaus in Murnau, Bavaria. This instrument is clearly a contrabass of the viol family, easily twice as large as the smaller *Violon*, with a string length of 114 centimetres. Though it has been converted to a four-string bass, it would originally have been a six-string instrument tuned D¹–G¹–C–E–A–d. This instrument bears a label reading 'Jacobus Stainer in Absam / prope OEnipontum 16[49?]'.¹¹ The exact instrumental types are further clarified by terminology in the correspondence between Khuen von Auer and Sartorius, where a *große Quartviolon* refers to the larger *Violon* (the first term indicating an instrument that is tuned a fourth lower than the normal tuning, in this case a fourth lower than the G *violone*).¹¹

Throughout the course of the seventeenth century, the unmodified term *violone* coexisted in Italy alongside a plethora of composite designations, including *basso di viola*, *violone basso*, *violone da brazzo* and *violone grosso*. Stephen Bonta's excellent work in documenting the various sources in which these terms appear is most instructive.<sup>18</sup> Bonta points out that one use of the term *violone* was as an early designation for a large instrument tuned in the manner of the present-day violoncello.<sup>19</sup> He links this instrument terminologically

- 12 The most pertinent of these treatises is by Johann Jacob Prinner (1624–1694), who had connections to the bishop's court at Olmütz during the period under discussion here. See the material related to footnote 50 below.
- 13 David D. Boyden, *The History of Violin Playing from its Origins to 1761* (London: Oxford University Press, 1965), 15 and 25. See also David D. Boyden and others, *Violin Family* (New York: Norton, 1989), 19.
- 14 Adriano Banchieri, Conclusioni nel suono dell'organo, Op. 20 (Bologna: Rossi, 1609), 53–54. A modern facsimile is available in Monuments of Music and Music Literature in Facsimile, second series, volume 101 (New York: Broude, 1975).
- 15 Adolf Meier, Konzertante Musik für Kontrabass (Prien am Chiemsee: Katzbichler, 1969), 12.
- 16 Meier, Konzertante Musik für Kontrabass, 12–13.
- 17 Alfred Planyavsky, Geschichte des Kontrabasses (Tutzing: Schneider, 1984), 138, states that the term Quartviolon, indicating a contrabass instrument with its compass expanded downward a fourth, often through the addition of a string, was in use by the sixteenth century. Sehnal, Pavel Vejvanovský and the Kroměříž Music Collection, 109–111, acknowledges that there are two distinct categories for string-bass instruments called Violon in the collection of Bishop Karl Liechtenstein. Citing Planyavsky, he assigns the G tuning mentioned above to the Quartviolon. Meier, Konzertante Musik für Kontrabass, 12–13, however, associates that term with the sixteen-foot instrument with the D tuning.
- 18 See especially Stephen Bonta, 'From Violone to Violoncello: A Question of Strings?', Journal of the American Musical Instrument Society 3 (1977), 64–99; 'Terminology for the Bass Violin in Seventeenth-Century Italy', Journal of the American Musical Instrument Society 4 (1978), 5–42; and 'Corelli's Heritage: The Early Bass Violin in Italy', Studi Corelliani 4 (1990), 217–231. These and other relevant essays have been reprinted in Bonta, Studies in Italian Sacred and Instrumental Music in the 17<sup>th</sup> Century (Aldershot: Ashgate, 2003).
- 19 Bonta, 'From Violone to Violoncello', 81. A chart illustrating this point can be found in Bonta, 'Terminology for the Bass Violin', 41.

to the basso di viola, on the strength of the definition for the term violone that appears in the 1729 Vocabolario degli Accademici della Crusca: 'Violone. A large, low-pitched viola, which is also called basso di viola, and violoncello when of smaller size'. This interpretation is substantiated by other contemporary designations. For example, the Bolognese composer and violoncellist Giovanni Battista Vitali (1632–1692) identifies himself on the title-page of his Sonate a due, tre, quattro, e cinque stromenti, Op. 5, as Musico di Violone da brazzo in S. Petronio di Bologna e Academico Filaschise. This is the essence of the term that is expressed in the Vocabolario definition; thus the connection between the two instruments of differing sizes, and between the terms used to designate them (violone and violoncello), was quite strong. 22

Elsewhere in Europe, theorists were describing instruments similar in size and function to the large Italian bass violin (*violone*). In France, the term most utilized in the sixteenth and seventeenth centuries was *basse de violon*, literally the bass of the violin (French: *violon*) family. Philibert Jambe de Fer describes a four-string bass violin with the tuning Bb¹-F-c-g.²³ This instrument is also described several decades later by Marin Mersenne.²⁴ The *basse de violon* was a usual member of the *basse continue* of the operas of Lully, often sharing the bass line with viols. However, like the large Italian bass of the violin family (*violone*), the French bass violin eventually succumbed to the vogue for the more nimble violoncello (*violoncelle*). It seems that the smaller *violoncelle*, with the standard C tuning, had replaced the *basse de violon* in French orchestras by the first decade of the eighteenth century.²5

An instrument similar to the one described by Jambe de Fer and Mersenne could also be found in the emerging violin ensembles in England during the sixteenth and seventeenth centuries. British sources from the late seventeenth century describe the bass member of the violin family as having the same Bb tuning as the French *basse de violon*. This instrument was also replaced by the violoncello in the first decade of the eighteenth century, owing to the influx of Italian cellists recruited for the opera company at the Queen's Theatre in the Haymarket.<sup>26</sup>

The eight-foot *basse de violon* is the instrument to which Kuijken refers in his article. He has used it for the *violone* parts on his recent recording of the Brandenburg Concertos,<sup>27</sup> and also for parts marked either *basso* 

- 20 Vocabolario degli Accademici della Crusca (Florence: Pitteri, 1729), 190: 'Violone. Viola grande di tuono grave, che si dice anche Basso di viola, e Violoncello quando è di minor grandezza'. See also Bonta, 'Terminology for the Bass Violin', 37–38, and 'From Violone to Violoncello', 85. The Vocabolario can be accessed online through Google Books.
- 21 George Houle, ed., Vitali Sonatas for Four and Five Violins or Viols Op. 5, Nos. 10-12 (Stanford: PRB Productions, 1991).
- 22 Vocabolario, 190. The definition for violoncello in the Vocabolario reads simply 'Violone'.
- 23 Philibert Jambe de Fer, Epitome musical des tons, sons et accordz, es voix humaines, fleustes d'Alleman, fleustes à neuf trous, violes, & violons (Lyons: Du Bois, 1556), 61–62. See the facsimile reprint in Renaissance Français: Traités, Méthodes, Préfaces, volume 3 (Courlay: Fuzeau, 2005), 227–228.
- 24 Marin Mersenne, Harmonie universelle II (Paris: Cramoisy, 1636–1637). See Mersenne, Harmonie universelle: The Book on Instruments, trans. Roger E. Chapman (The Hague: Nijhoff, 1957), 242–244.
- 25 Mary Cyr, 'Basses and basse continue in the Orchestra of the Paris Opéra 1700–1764, Early Music 10/2 (1982), 155–170. Cyr (158) also mentions a different type of basse de violon, with five strings and tuned C–G–d–a–d¹.
- 26 Peter Holman, Four and Twenty Fiddlers: The Violin at the English Court, 1540–1690 (Oxford: Clarendon, 1993), 318–319.
  Holman cites two important sources for information on this Bb instrument: John Playford, A Breefe Introduction to the Skill of Musick (London: Campion, 1654), beginning with the 1683 edition through to at least 1697, and the manuscript of the English writer on music James Talbot, prepared during the last decade of the seventeenth century. Talbot's manuscript is discussed further below.
- 27 La Petite Bande / Sigiswald Kuijken, Johann Sebastian Bach: The Brandenburg Concertos (Accent: ACC 24224, 2010), liner notes, 6: 'The score of these concerti . . . suggests that the use of a double bass (the so-called "16-foot" violone) was likely not the composer's intention. In our opinion, the term "violone" indicates the direct "predecessor" of our present cello; that is, what we would consider an "oversized" cello, aptly referred to in France as the "basse de violon". This is a label that can help us today to identify exactly what is being talked about, what is more difficult to know with a "violone"[,] which was in fact a collective name covering both larger bass instruments transposing one octave lower, and instruments of the "basse de violon" type, sounding at the written pitch ("8-foot" instruments). In the kind of scoring encountered in these concertos, the "violone" in the latter sense (occasionally in combination



or *Violon* in the series of Bach cantata recordings currently being issued. In the liner notes to a representative recording from the latter series he states:

The usual instrument given the general bass role (fondamento) was the 'violone', which means 'large viola'. The viola family had two branches: the *viola da gamba* and the *viola da braccio*. Both were made in various sizes, from descant (soprano) to bass. Large instruments of both families were assigned the function of 'violone', often indiscriminately; in the absence of norms, general use was made of instruments of various sizes, forms, tunings and pitches (some sounding at '8-foot' pitch *as written*, others sounded *an octave lower* at '16-foot' pitch).

In the Italy of Corelli (Rome around 1700), the common 8-foot bass was called 'violone' and the octave bass 'contrabasso'. In works demanding large orchestral forces, the instruments were listed as 'violini, violette ( = violas), violoni, contrabassi'. The 'violoncello' clearly did not belong to the usual orchestral arsenal . . .

[S]mall forces (vocal and instrumental) [such as those used on this recording] are best served by an 8-foot 'violone' (but an instrument considerably larger than today's cello). For example, the 8-foot violone of the '*braccio* family' was the instrument that was called 'Basse de Violon' in France; in other parts of Europe it was simply called 'basso' or 'violone'. We use such instruments; the 8-foot violone of the *gamba family* is also used in some cantatas.<sup>28</sup>

In these statements, Kuijken is proposing that the eight-foot basse de violon with a Bb tuning may be equated with the term violone (or Violon) in music from the end of the seventeenth and the beginning of the eighteenth centuries. I would suggest, however, that there are basic flaws in his interpretation of the historical evidence. For example, Kuijken offers as an illustration of this organological equivalence (violone = eight-foot basse de violon) the lists of players in Corelli's Roman orchestras during the late seventeenth and early eighteenth centuries, which consistently provided string configurations using the terminology 'violini – violette - violoni - contrabassi', the contrabassi providing the sixteen-foot registration.<sup>29</sup> Kuijken's source for this information is John Spitzer and Neal Zaslaw's book The Birth of the Orchestra. Those authors are quick to point out that in the orchestras to which Kuijken refers, 'the balance among [violon]cellos, violoni, and contrabasses varied considerably. The players of these instruments overlapped, and often it is hard to tell who was playing which instrument.'30 Amidst this type of terminological uncertainty, it is more than possible that violone was sometimes used to designate violoncello participation, as suggested by the definitions in the Vocabolario. By the time of these Roman concerts, this equivalence (violone = violoncello) was taken for granted. However, even the larger eight-foot violone that Corelli would have employed had the C tuning in common with its smaller relative (C-G-d-a), and thus was not the 'basse de violon' that Kuijken is utilizing in his current ensemble.31 Further, it should be noted that in Rome this equivalence persisted at least until

with the "violoncello da spalla" depending on the indications in the score) provides a very transparent and yet solid support to the whole, without "darkening" it.'

<sup>28</sup> La Petite Bande / Sigiswald Kuijken, *Johann Sebastian Bach: Cantatas, BWV 177 – 93 – 135* (Accent: ACC 25302, 2005), liner notes, 7–9. Kuijken's point concerning the use of the eight-foot violone of the viol family (or G *violone*) in some of Bach's cantatas is shared by other writers discussed below.

<sup>29</sup> This example is also given in Kuijken, 'A Bach Odyssey', 266.

<sup>30</sup> John Spitzer and Neal Zaslaw, *The Birth of the Orchestra: History of an Institution, 1650–1815* (Oxford: Oxford University Press, 2004), 124, note 60. The chart on pages 128–129 of Corelli's orchestral personnel from 1702 to 1705 is also instructive.

<sup>31</sup> Bonta, 'From Violone to Violoncello', 85: 'The fact that the [larger] violone and the [smaller] violoncello doubtless had the same tuning (as did alto and tenor violas as well as both sizes of violins) explains the interchangeable use of the two terms, *violone* and *violoncello*, by a number of Italian composers late in the seventeenth century.'



the 1720s.<sup>32</sup> As the term *violoncello* began to emerge and take hold elsewhere in Europe during the latter part of the seventeenth century, the term *violone*, now no longer needed to designate the bass of the violin family, began to be used routinely as a synonym for *contrabasso*. It therefore became standard practice to designate the sixteen-foot instrument of the continuo bass line as *violone* throughout Europe.<sup>33</sup>

The correct interpretation of terms for instruments was a matter of some importance during this period. The German composer and theorist Johann Mattheson (1681–1764) addressed such issues in his 1752 *Philologisches Tresespiel.*<sup>34</sup> His remarks pertaining to the term *Violon* are instructive. He advocates the retention of foreign (non-German) terminology for musical instruments to prevent any misunderstanding that translation might engender:

Die ausländischen Kunstwörter, deren es ja in allen Wissenschaften der Welt ungleich mehr giebt, als in der Tonkunst, wären den Verfassern schäckichter Bücher gerne zu Gute zu halten, als an deren Erklärung gar kein Mangel ist, wenn auch nur Brossard und Walther da wären....

Violino nehmlich ist ein ausländisches Kunstwort, und heisset nimmer Violine. (Im Welschen und Französischen ist das Wort männlichen Geschlechts; die Deutschen machen ein Frauenzimmer daraus, wenn sie ihre Endigung e hinzusetzen, und die Violine sprechen.) Es bedeutet einzig und allein eine so genannte Diskantgeige. Denn Geige ist ein allgemeines Wort; und eine jede Geige kann nicht Violino heissen, welches ein diminutiuum ist. Wir haben wohl zehnerley Geigen: Violino piccolo; Poccetta; Violino; Viola d'Amore; Viola di Braccio; Viola di Gamba; Viola di Spala; Violoncello, Violone, Violone grosso &c. Klavir ist ebenfalls ein solches allgemeines und gemißbrauchtes Kunstwort: denn es bedeutet eigentlich nur die Tastenreihe, oder das Griffbret; nicht das ganze Instrument. Wir haben Klavikordien, Spinetten, Flügel, Positive, Orgeln u.

*Violon* soll die tiefe Geige heissen. Ja, vielmehr umgekehrt! Es bedeutet eben dasjenige Bogenspiel, welches die Italiener *Violino* und di Franzosen *Violon* nennen. Kein anders. Daß nun solches niemals einen besonders tiefen; sondern vielmehr fast den höchsten Klang habe, ist schon dargethan, *Violone* aber, als ein welsches Kunstwort, welches, einfältiger Weise, mit dem französischen *Violon* vermischet wird, ist auf Deutsch eine so genannte Baßgeige\* (\*Diskantgeige, Baßgeige u. sind lauter geflickte Wörter: das erste insonderheit ist unerträglich. Man muß die ausländischen beybehalten.) und auf Französisch: *Basse de Violon*.<sup>35</sup>

Foreign coinages, of which there are incomparably more in all the world's sciences than in music, would serve the authors of silly books well, causing no difficulty in their explanation, if only Brossard and Walther were there....

Violino is a foreign coinage, and is never called Violine. (In Italian and French the word is masculine; the Germans make a woman out of it if they attach an 'e' at its end and speak of the Violine.) This term designates nothing else than a so-called treble violin. For Geige is a generic word, and not every Geige can be called violino, which is a diminutive. Indeed, there are [at least] ten different kinds of Geigen: violino piccolo, poccetta, violino, viola d'amore, viola di braccio, viola di gamba, viola di spala, violoncello, violone, violone grosso, etc. Klavir is another generic and oft-misused

<sup>32</sup> Bonta, 'From Violone to Violoncello', 80–81: '[T]he two lowest string instruments employed at the Ottoboni court from 1689 to 1722 were the violone and the contrabasso. In this latter year, the term *violone* was replaced once and for all by the term *violoncello*, the term *contrabasso* being retained until at least 1737.'

<sup>33</sup> Bonta, 'From Violone to Violoncello', 81: 'German and Bolognese usages [for the term *violone*] appear to agree after 1681: *violone* in the eighteenth century – outside Rome until 1737 – means *contrabasso*.'

<sup>34</sup> Johann Mattheson, Philologisches Tresespiel, als ein kleiner Beytrag zur kritischen Geschichte der deutschen Sprache (Hamburg: Martini, 1752).

<sup>35</sup> Mattheson, Philologisches Tresespiel, 5-8.

coinage, for it refers only to the keyboard, not to the whole instrument. We have clavichords, spinets, harpsichords, positives, organs, etc.

It might be supposed that *Violon* means a low-range violin. Yet very much to the contrary! The term indicates the same string instrument that the Italians call *violino* and the French call *violon*. Nothing else. That such an instrument never has an especially low register, but instead has nearly the highest one, has already been established. But *violone*, an Italian coinage that is naively confused with the French *violon*, is in German the so-called *Baßgeige* (*Diskantgeige*, *Baßgeige*, etc., are awkward compound words: the first, in particular, is intolerable. One must retain the foreign [terms]) and in French, *basse de violon*.

As confusing as Mattheson's explanation may appear at first glance, his reasoning makes perfect sense. According to him, the term *Violon* is not used in Germany to denote a bass violin; rather, it means merely a normal treble violin. The term *violone*, however, retaining its Italian connotations, is equated with *Baβgeige* in Germany and with *basse de violon* in France.<sup>36</sup> These associations are completely consistent with the definition of *violone* given by Mattheson nearly forty years earlier in his *Das neu-eröffnete Orchestre* (1713), where he relied on the definition of the French theorist and lexicographer Sébastien de Brossard (1655–1730): '*VIOLONE*. This is our *basse de violon* or, more precisely, our *double bass*'.<sup>37</sup>

Therefore, even if the term was translated (or, 'in a simple-minded manner... confused with the French term *Violon*') in German-speaking realms – as it clearly was in Kremsier and in other areas of Germany and Austria as well – the term retained its original Italian connotation, as in Banchieri, of either a twelve-or a sixteen-foot instrument.<sup>38</sup> Just as the term *violone* in Italy eventually came to be utilized primarily for sixteen-foot instruments, so the transplanted term *violone* in Germany came to do likewise, and quite consistently. Thus, as we shall see from various theoretical writings, the modern association of the term *violone* (or *Violon*) in Germany with the eight-foot French *basse de violon* or the eight-foot Italian *violone* is erroneous. These writings also tend to refer to both twelve- and sixteen-foot instruments by the term *violone*, much in the manner of the Kremsier instrumental-inventory lists (*Violon* and *Octavviolon*), but also differentiate between these instruments and those playing in the eight-foot range.

Brossard's definition of *violone*, which for him designates a contrabass instrument, has caused a good deal of confusion for modern readers as they attempt to interpret the various meanings of that term. The complete entry in his *Dictionaire de musique* (1705) offers the following:

VIOLONE. C'est nôtre Basse de Violon, ou pour mieux dire, c'est une Double Basse, dont le corps & le manche sont à peu prés deux fois plus grands que ceux de la Basse de Violon à l'ordinaire; dont les Chordes sont aussi à peu prés plus longues & plus grosses deux fois que celles de la Basse de Violon, & le Son par consequent est une Octave plus bas que celuy des Basses de Violon ordinaires. Cela fait un effet tout charmant dans les accompagnemens & dans les grands Choeurs, & je suis fort surpris que l'usage n'en soit pas plus frequent en France.<sup>39</sup>

VIOLONE. This is our basse de violon or, more precisely, our double bass, of which the body and neck are nearly twice the size of our common basse de violon; its strings are also somewhat

<sup>36</sup> Particularly when modified by *grosse*, *Baßgeige* refers to a double-bass instrument in many of the treatises listed in the Appendix. It should also be noted that the term *Baßgeiger* in modern German is a colloquialism for double bassist; the term is used much as English-speakers use 'bass player', meaning a contrabassist as opposed to a 'cellist'. See Horst Leuchtmann, *Dictionary of Terms in Music: English-German / German-English* (Munich: Saur, 1992), 214.

<sup>37</sup> Johann Mattheson, *Das neu-eröffnete Orchestre* (Hamburg: Schiller, 1713). Sébastien de Brossard, *Dictionaire de musique*, second edition (Paris: Ballard, 1705), 221: 'VIOLONE. C'est nôtre *Basse de Violon*, ou pour mieux dire, c'est une *Double Basse*...'

<sup>38</sup> See, for example, definitions by Johann Philipp Eisel discussed below.

<sup>39</sup> Brossard, Dictionaire de musique, 221.

longer and nearly twice as thick as those of the *basse de violon*, and consequently the range is an octave lower than that of the common *basse de violon*. It produces a very charming effect in accompaniments and in the tuttis, and I am extremely surprised that it is not used more frequently in France.

Brossard is clearly describing the *violone* in France as an octave-transposing double-bass instrument. Despite the somewhat contradictory opening statement of the definition, it is perfectly clear from his detailed description that the instrument known in France as the *basse de violon* is not called *violone*; these are, in fact, two quite different instruments. Yet in an apparent effort to retain the regional terminology he felt was so important, Mattheson assigned the term *basse de violon* to an instrument known in Germany as the *grosse Bass-Geige* and in Italy as the *violone* – that is, the sixteen-foot double-bass. In any case, by the early eighteenth century, this contrabass *violone* was being routinely paired with the newly accepted violoncello in French concerted music to produce the 'charming effect' to which Brossard alludes.<sup>40</sup>

In Italy, the *violoni* described in Banchieri's *Conclusioni* are an early adumbration of a tradition of differentiating between transposing bass-clef instruments that play in the true sixteen-foot range (as with his *violone in contrabasso*) and instruments in the twelve-foot range (*violone da gamba*) that read the bass clef as written but are capable of reaching notes in the contrabass range (to G¹). At the beginning of the eighteenth century, treatises continued to emphasize this pairing of transposing and non-transposing bass instruments; however, as noted above, these were not necessarily from the same family of instruments. For example, under the term *violone* in Filippo Bonanni's *Gabinetto armonico pieno d'istromenti sonori indicati e spiegati* (1723) we find the following description: '*Violone*. One plays [this instrument] in the same manner as the others called *violone*, and it is equipped with six strings' ('Nella stessa forma suonasi l'altro detto *Violone*, e armato di sei corde'). This definition points to a collective term of *violone* for all viol instruments, and while the accompanying illustration is somewhat suspect with regard to organological detail, it none the less clearly shows a fretted instrument, and one that is too large to be anything other than a transposing double bass.<sup>41</sup> Bonanni identifies the unfretted *viola* as

un Istromento simile nella figura, ma di molto maggiore grandezza espresso nell'apposta immagine vien denominato Viola. Si suona sostenendolo dal pavimento; il suo manico è lungo la terza parte dell'Istromento, ed ha quattro corde come il Violino, ma di maggior grossezza, siccome l'arco ancora è più lungo.<sup>42</sup>

an instrument similar in shape, but of much greater size than the [the other instruments] designated *viola*. It is played by placing it on the floor; its neck is one-third the size of the instrument and it has four strings like a violin, but it is much larger and its bow is also longer.

While no specific tuning is given, we can assume that it is the same as that of the modern violoncello. This, then, is the instrument that was also referred to as the large viola or *violone*, clearly not a sixteen-foot

<sup>40</sup> Cyr, 'Basses and basse continue', 158–161: 'The smaller violoncelle (tuned C–G–d–a) probably superseded the basse de violon some time during the first decade of the 18th century. . . . By the beginning of Rameau's operatic career in 1733, the favoured pair of continuo instruments were the cello and double bass, and they remained so for the rest of his career.'

<sup>41</sup> Filippo Bonanni, Gabinetto armonico pieno d'istromenti sonori indicati e spiegati (Rome: Placho, 1723; facsimile edition, Leipzig: Zentralantiquariat der Deutschen Demokratischen Republik, 1975), 121. The illustration is plate 121. The Gabinetto was first published in 1722 with 138 copper engravings, with thirteen more added for the 1723 edition, and was reissued as Descrizione degl'istromenti armonici d'ogni genere (Rome: Monaldini, 1776).

<sup>42</sup> Bonanni, *Descrizione*, 120. The viola is depicted in plate 120, with the written description appearing on page 120. While the Italian version of Bonanni's definition is a bit vague, the French translation he supplies is more direct concerning size as the determining factor: 'La Viole ne differe du petit Violon qu'en grandeur' (The viola is differentiated from the small violin only by its size).



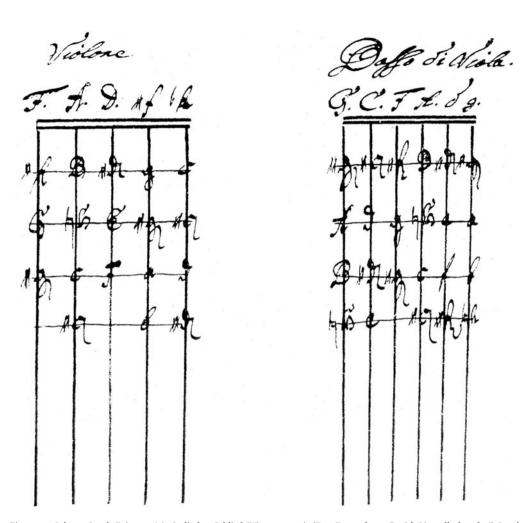


Figure 1 Johann Jacob Prinner, *Musicalischer Schlissl* (Vienna, 1677), 'Das Dreyzehnte Capitl: Von allerhandt Geigen'. US-Wc, 1677. Used by permission

instrument.<sup>43</sup> The prominence of these instruments in Bonanni's treatise suggests that they had become the normal eight-foot/sixteen-foot pair in Europe. As we shall see, Italian musical works of the time reinforce this impression.

In Austria, the pairing of high and low string basses such as those referred to in the correspondence between Khuen von Auer and Sartorius was common, as indicated by a diagram from the *Musicalischer Schlissl* (1677) by Johann Jacob Prinner (1624–1694) (Figure 1).<sup>44</sup> Here the *violone* is a five-string instrument with the distinctive tuning F–A–D–f‡–b‡, an early variant of what is today commonly referred to as the Viennese tuning; contrabass instruments featuring a similar configuration would predominate in the musical establishments

<sup>43</sup> Bonta, 'Terminology for the Bass Violin', 5–7. The same conclusion is reached in Filippo Bonanni, The Showcase of Musical Instruments: All 152 Illustrations from the 1723 'Gabinetto Armonico', ed. Frank L. Harrison and Joan Rimmer (New York: Dover, 1964), 56.

<sup>44</sup> Johann Jacob Prinner, *Musicalischer Schlissl* (Vienna, 1677), unpaginated autograph manuscript in thirteen chapters now in the Library of Congress, Washington, D. C. (US-Wc, 1677).

of Salzburg and Vienna in the mid- to late 1700s.<sup>45</sup> Prinner's *violone* tuning represents a departure from the traditional viol tuning for the octave-transposing contrabasses that Stainer was producing during this period in the Tyrol region. It would seem to reflect a shift that can also be seen in contemporaneous alterations to existing instruments. For example, the luthier Jakob Rauch (1680–1765), working in the Innsbruck area, converted an early Stainer six-string contrabass to five strings around 1713.<sup>46</sup> Though the pitch indications in Prinner's chart leave some doubt as to whether his *violone* was a true contrabass, his text makes this explicit:

Aus den fürgeschribenen Exemples sehet man, daß in dem Violon die erste sätten in das F. das ist daß erste als nemblich unter denen 5. lineas des ordinari rechten bass lähr muoß in die octav tüeffer gestimet werden, dan dise geigen vertritt daß petal oder den Sub Bass einer Orgl. da alles in der octav tüeffer hergehen muoß.<sup>47</sup>

One can see from the foregoing examples that the first string of the *Violon* is F – that is, [the note] under the fifth line [of the staff], but which according to the proper bass teachings must be played an octave lower, since [the *Violon*] represents the pedal or sub-bass pedal of the organ, and therefore everything must function in this lower octave.

Thus, despite the five-string configuration, Prinner describes a twelve-foot/sixteen-foot (non-transposing/transposing) pairing.

An instrument similar to the one that Banchieri called *violone da gamba* and Prinner called *basso di viola* was known in English consort music as the twelve-foot 'double bass'; Orlando Gibbons referred to it as 'The great Dooble Basse'.<sup>48</sup> This instrument, whatever the regional terminology, consistently served as the lowest member of the viol consort. The music manuscript compiled by James Talbot (GB-Och: Music MS 1187) provides descriptions and tunings for a variety of instruments in Britain between 1685 and 1701. Talbot includes as members of the viol family a 'Violone or Double Bass' (six strings, tuned like Banchieri's *violone da gamba*, Gibbons's 'great Dooble Basse' and Prinner's *basso di viola*) and a 'Double Bass' (five strings, tuned in a similar manner to Prinner's *violone*). Talbot states that he obtained information pertaining to these instruments first hand from Gottfried Finger (c1655–1730).<sup>49</sup> Finger, a bass-viol virtuoso, spent many years in London; however, he was Moravian by birth and spent the early part of his career (prior to 1682) in the employ of the bishop of Olmütz, Karl Count Liechtenstein-Castelcorno. Considering his connections to the court at Olmütz, it is not surprising that Finger should describe the exact instruments listed in Prinner's manuscript, since the latter also had some associations with the court musical establishment.<sup>50</sup>

- 45 For more on the music and practices associated with instruments using this tuning see Meier, Konzertante Musik für Kontrabass; Planyavsky, Geschichte des Kontrabasses; Josef Focht, Der Wiener Kontrabass: Spieltechnik und Aufführungspraxis, Musik und Instrumente (Tutzing: Schneider, 1999); David Chapman, 'Tuning Variations as a Guide to Bass-Line Instrumentation in the Orchestral and Solo Literature for the Eighteenth-Century Contrabass "Violon", Ad Parnassum 8/16 (2010), 53–96; and Chapman, 'Historical and Practical Considerations for the Tuning of Double Bass Instruments in Fourths', Galpin Society Journal 56 (2003), 224–233.
- 46 Meier, Konzertante Musik für Kontrabass, 13.
- 47 Prinner, Musicalischer Schlissl, 'Das Dreyzehnte Capitl: Von allerhandt Geigen'. See also Focht, Der Wiener Kontrabass, 24.
- 48 Orlando Gibbons, *Consort Music*, ed. John Harper, Musica Britannica, volume 48 (London: Stainer and Bell, 1982), xxi. Gibbons was not the only English composer to write for the 'great Dooble Basse'; this instrument was also employed by John Coprario, George Jeffries and John Blow. See Peter Holman, *Life After Death: The Viola da Gamba in Britain from Purcell to Dolmetsch* (Woodbridge: Boydell, 2010), 43–47.
- 49 Anthony C. Baines and Darryl Martin, 'James Talbot', The New Grove Dictionary, second edition, volume 25, 29.
- 50 Peter Holman and Robert Rawson, 'Gottfried Finger', *The New Grove Dictionary*, second edition, volume 8, 829–831. Talbot's tuning for the five-string 'Double Bass' is F¹-A¹-D-F♯-A, with an alternative tuning for the lowest string of G¹. His notation next to these tunings reads 'Mr. Finger'. See Robert Donington, 'James Talbot's Manuscript', *Galpin Society Journal* 3 (1950), 27–45, especially 33. The precise nature of Prinner's connections to Olmütz remains unclear. See Hellmut Federhofer, 'Johann Jacob Prinner', *The New Grove Dictionary*, second edition, volume 20, 325–326.

For Prinner, the basso di viola is not the eight-foot bass of the viola da braccio family, as described in the Vocabolario, but rather the twelve-foot bass of the viola da gamba family, the lowest member of the viol consort.<sup>51</sup> Bonta observes that in Italian instrumental prints from the early seventeenth century, the term basso di viola – as opposed to the term basso di brazzo, also found in these publications – seems to call for the instrument we know today as the bass viola da gamba, with the standard D tuning. In Giovanni Battista Buonamente's Il Quarto Libro de Varie Sonate (1626), for example, the title-page calls for 'Due Violini, & vn Basso di Viola'. His Il Settimo Libro, however, calls for 'Basso di viola o da brazzo'.<sup>52</sup> Bonta rejects the notion that these parts could be for Prinner's basso di viola (the G violone); while the basso part in Buonamente's Quarto Libro descends to a low C, which the bass viola da gamba could access through scordatura,53 it never violates that compass, as one would expect if the instrument could in theory descend to contra G.54 Prinner's use of basso di viola – in contrast to that of the Vocabolario and of later theorists, particularly German ones – implies that he understood this instrument to be the bass member of the viol consort, literally the 'basso' of the 'violas' (da gamba). This is confirmed by the fact that both of Prinner's instruments are fretted, linking them, despite any terminological inconsistencies, to the viol family. In Prinner's configuration, as in Banchieri's, these two instruments serve respectively as the contrabass continuo instrument and the low-bass ensemble instrument; this is the case whether the other instruments of the string consort are of the violin or viol family.55

Thus the term violone was used fairly consistently throughout Europe, with only minor terminological variations, to apply to the two lowest members of the string consort: the non-transposing twelve-foot 'double bass' and the transposing sixteen-foot contrabass, used as a continuo instrument. Evidence for the instruments being employed in this manner can be found in the large-scale sacred vocal works of Heinrich Ignaz Franz von Biber. Biber was employed as a violinist at Kremsier from 1668 to 1670, in which capacity he was asked by the bishop to purchase from Stainer some of the instruments mentioned in the correspondence between Khuen von Auer and Sartorius. Though Biber did not carry out this assignment, he was nevertheless personally and professionally acquainted with Stainer. Biber was also acquainted with Prinner; the two served together at the court of Prince Johann Seyfried Eggenberg in Graz in the early 1660s.

Two of Biber's sacred vocal works are of particular interest here: the *Vesperæ à 32* (1674) and the *Missa Alleluja à 36* (*c*1690). In the latter work, the string contingent consists of two violins, three violas and a *violone*. On the title sheet from the only extant complete source of this work, the instruments are listed as '2 Violini, 3 Viole, [Organo con] Violone'. A separate *violone* part exists, along with parts for *tiorba* and *organo*. Biber's autograph score of the *Vesperæ à 32* calls for two violins, two violas and *basso di viola*, with the title-page

<sup>51</sup> Otterstedt, *The Viol*, 148–150. The *violone in contrabasso* was a continuo instrument exclusively, and therefore not part of the consort.

<sup>52</sup> Bonta, 'Terminology for the Bass Violin', 11–12. The partbooks for Buonamente's *Quarto Libro* are available in facsimile as *Il Quarto Libro de Varie Sonate: Venezia 1626* (Florence: Studio per Edizioni Scelte, 1982).

<sup>53</sup> Both Otterstedt and Holman discuss the practice of early eighteenth-century *gamba* players tuning their bottom string down to a C. See Otterstedt, *The Viol*, 182–183, and Holman, *Life After Death*, 101.

<sup>54</sup> Bonta, 'From Violone to Violoncello', 67.

<sup>55</sup> The use of such instrumental mixtures in large concerted works can be seen throughout the seventeenth century; Banchieri describes the performance of a mass scored for both *da braccio* and *da gamba* consorts in which the bass and contrabass instruments described above are employed.

<sup>56</sup> Elias Dann and Jiří Sehnal, 'Heinrich Ignaz Franz von Biber', *The New Grove Dictionary*, second edition, volume 3, 520.

<sup>57</sup> Eric Thomas Chafe, The Church Music of Heinrich Biber (Ann Arbor: UMI, 1987), 9-10.

<sup>58</sup> Chafe, The Church Music of Heinrich Biber, 3.

<sup>59</sup> Heinrich Ignaz Franz von Biber, *Missa Alleluja à 36*, ed. Rudolf Hofstötter and Ingomar Rainer (Vienna: Doblinger, 2005), i–iii. The full list of voices and instruments reads: '8 Voci Concert:[ati]; 8 Voci Ripieni; 2 Violini; 3 Viole; 2 Clarini; 4 Trombe; 1 Timpano; 2 Cornetti; 3 Tromboni; 1 Tiorba; Organo con Violone'.

specifying '5 Viol[ $\mathbb{R}$ ] . . . Et 4: bassi Continui'. In both works Biber is faithful to the terminology codified by his colleague Prinner. The *violone* of the *Missa Alleluja* is clearly a double-bass reinforcement of the organ line. It is the sixteen-foot continuo instrument and not a member of the string consort, hence '3 Viole' and *violone*. But, in the *Vesperæ à 32*, the *basso di viola* – Prinner's twelve-foot fretted instrument – is listed as one of the '5 Viol[ $\mathbb{R}$ ]'; it serves as the lowest member of that consort. We can assume that one of the four *bassi continui* parts is meant for a sixteen-foot *violone*, as dictated by the practice of the bishop's chapel outlined in the official correspondence cited above.

In Germany, the association of the term *violone* with contrabass instruments can be seen early in the seventeenth century. Michael Praetorius presents two such instruments, and several tuning configurations, in his *Syntagma musicum*.<sup>61</sup> In Plate V, Praetorius pictures a five-string fretted instrument that he labels 'Groß Contra-Bas-Geig'; Plate VI depicts a six-string fretted instrument that he labels 'Violone, Groß Violde Gamba Baß'. Tunings for both of these instruments are listed in a table containing configurations for members of the *viole de gamba* family.<sup>62</sup> Thus for Praetorius, the term *violone* is associated with instruments exhibiting characteristics of the viol family, including frets and tuning primarily in fourths. Under the heading 'Klein Baß-Viol de Gamba', Praetorius offers seven different tunings. The first three are variations on the G tuning given for Banchieri's *violone da gamba*, revealing that the distinction between small (twelve-foot) and large (sixteen-foot) bass gambas was already in effect around 1600.<sup>63</sup>

On the other hand, the instrument that Praetorius labels *Bas-Geig de bracio* (that is, bass violin), shown in his Plate XXI, is a five-string bass violin. In a table providing its tuning (F¹-C-G-d-a), he gives the instrument's name as *Groß Quint-Baß*.<sup>64</sup> This is the lowest member of the *viole de braccio* family listed by Praetorius. The qualifier *Groß* identifies it as the largest violin-family instrument (tuned in fifths), while *Quint-Baß* indicates that its range extends a fifth below the standard eight-foot violin-family bass instrument – just as the term 'große quartviolon' described Stainer's largest contrabass viol, tuned a fourth below the smaller *Violon*.<sup>65</sup> The same table provides tunings for two instruments called 'Baß Viol de Braccio', both four-string, eight-foot instruments, one with the standard modern violoncello configuration (the other is tuned F-c-g-d¹).

The terminology used in German organological works from the late seventeenth and early eighteenth centuries reflects the gradual demise of the *französische Bass*, known in France as the *basse de violon*. In a 1695 tutorial on string instruments the composer and *Kantor* Daniel Merck (1650–1713) gives tunings for the six-string G violone we have discussed above, including one based a step higher (A¹–D–G–B¼–e–a). Among the other bass instruments he lists is the 'Französische Bass mit 4. Saiten' with the standard B♭ tuning (Figure 2). He groups these instruments under the heading 'Bass-Geigen', in contrast to Praetorius's (and others') organization according to family.<sup>66</sup> Merck claims that these are the three best types of string-

<sup>60</sup> Heinrich Ignaz Franz von Biber, *Vesperæ à 32*, ed. Rudolf Hofstötter and Ingomar Rainer (Vienna: Doblinger, 2000), i–iv. The full list of voices and instruments reads: '8 Voc[es] in Concertat[o]; 8 [Voces] in Capella; 5 Viol[æ]; 2 Cornett[i]; 3 Trombon[i]; 4 Trombi; Cum Tympano; Et 4: bassi Continui; Voces in Concerto 23'.

<sup>61</sup> Michael Praetorius, Syntagma musicum II: De Organographia (Wolffenbüttel: Richter, 1619).

<sup>62</sup> Praetorius, Syntagma musicum II, 25. The tuning for the five-string double-bass instrument is D¹-E¹-A¹-D-G. The six-string instrument is provided with three different tunings, one of which corresponds to Banchieri's violone in contrabasso: D¹-G¹-C-E-A-d.

<sup>63</sup> As an alternative, Praetorius offers an A tuning like that given in the treatise by Daniel Merck discussed below and used for Gibbons's 'great Dooble Basse'. See Gibbons, *Consort Music*, xxi.

<sup>64</sup> Praetorius, Syntagma musicum II, 26. The table includes tunings for all instruments of the viole de braccio family.

<sup>65</sup> A five-string instrument similar to that depicted by Praetorius can be seen in Johann Christoph Weigel, *Musicalisches Theatrum* (Nuremberg: author, c1722), plate 22. Weigel calls his instrument *Violon* but does not give a specific tuning.

<sup>66</sup> Daniel Merck, Compendium musicae instrumentalis Chelicae, das ist: kurtzer Begriff, welcher Gestalten die Instrumental-Music auf der Violin, Pratschen, Viola da Gamba, und Bass gründlich und leicht zu erlernen seye (Augsburg: Wagner, 1695), 'Caput VIII: Von der Application in die Höhe zu greiffen / und wie die Geigen zu stimmen' (on the principles of fingering in the upper register, and how the string instruments are tuned). This brief treatise is unpaginated.



Figure 2 (Colour online) Daniel Merck, Compendium musicae instrumentalis Chelicae (Augsburg: Wagner, 1695). D-Mbs 4 Mus. Th. 1024. Used by permission

bass tunings available.<sup>67</sup> He does not explicitly describe a sixteen-foot instrument; however, following the discussion of the other string basses, he mentions an instrument with three sheep-gut strings overwound

<sup>67</sup> Merck, Compendium: 'Die Stimmung zu der Bass-Geigen / welche 6. Saiten hat / ist unterschiedlich / die drey beste Arten seynd dise: (N. B. Die Stimmungen sind alle von der kleinsten Saiten anzurechnen)' (The tuning of the bass



with wire, producing a sound close to that of a bassoon. The tuning for this instrument is in fifths: D-A-e.

Mattheson's definition of the term *violone* in *Das neu-eröffnete Orchestre* was influential in the eighteenth century. In addition to adopting Brossard's terminology, he characterizes the *violone* as the rumbling (*brummende*) *violone*, an explicitly sixteen-foot instrument:

Der brummende Violone, Gall. *Basse de Violon*, Teutsch: *Grosse Bass-Geige*, ist vollenkommen zweymahl / ja offt mehrmahl so groß als die vorhergehenden / folglich sind auch die Sayten / ihrer Dicke und Länge nach / à *Proportion*. Ihr Tohn ist sechzehnfüßig / und ein wichtiges bündiges Fundament zu vollstimmigen Sachen / als Chören und dergleichen / nicht weniger auch zu *Arien* und sogar zum *Recitativ* auff dem *Theatro* hauptnöthig / weil ihr dicker Klang weiter hin summet / und vernommen wird / als des *Claviers* und anderer bassirenden Instrumenten. Es mag aber wol Pferde-Arbeit seyn / wenn eine diß Ungeheur 3. biß 4. Stunden unabläßlich handhaben soll.<sup>69</sup>

The rumbling *violone*, French *basse de violon*, German: *grosse Bass-Geige*, is fully twice, often more [than twice], as large as the preceding [instrument discussed, the violoncello]. Consequently the strings are also proportionally thicker and longer. Its sound is [in the] sixteen-foot [range], and it provides an important basic foundation in fully scored works such as choruses and the like, no less importantly in arias and even in recitatives in the theatre, since its thick sound carries and is heard further than the keyboard and other bass instruments. One must be like a work-horse to continually handle this monster for three to four hours.

No specific tuning is given by Mattheson; the number of strings can be either five or six, as with Praetorius. This is established in the previous entry on the small bass instruments (*kleine Bass-Geigen*), 'the excellent violoncello, *bassa viola* and *viola di spalla* are *kleine Bass-Geigen*, as opposed to the [*grosse Bass-Geige*] with five or six strings, on which one can execute with much less effort than on larger machines all manner of diverse fast passages, [such as] variations and ornaments' ('Der hervorragende *Violoncello*, die *Bassa Viola* und *Viola di Spala*, sind kleine Bass-Geigen / in Vergleichung der grössern / mit 5. auch wol 6. Sayten / worauff man mit leichterer Arbeit als auff den grossen *Machinen* allerhand geschwinde Sachen / *Variations* und Mannieren machen kan').<sup>70</sup> Since the number of strings for Mattheson's sixteen-foot instruments corresponds to that given by Praetorius, we may assume that one or more of the tunings provided by the latter writer are applicable.<sup>71</sup> It should also be noted that, in using the term 'Bassa Viola' to describe an eight-foot string-bass instrument, Mattheson's terminology is in line with the contemporaneous *Vocabolario*.<sup>72</sup>

violins with six strings is variable. The three best types are these: (Note that the tunings are all presented from the smallest [that is, highest] string)). Merck also states that another type of bass instrument exists: 'Es wird noch eine Art von dem 6. Chörigen gefunden / halb Chor Ton und halb Cornett' (There is also to be found a type of six-string instrument / [tuned] half to *Chorton* and half to *Kornetton*). The tuning given is A¹-D-G-A-d-g – that is, the G tuning given previously, except that the lower three strings sound in *Chorton* at a pitch level approximately one whole step higher than *Kornetton*.

- 68 Merck, Compendium. The wire-wrapped strings may imply octave transposition, but no specific instructions are given in this regard.
- 69 Mattheson, Das neu-eröffnete Orchestre, 285-286.
- 70 Mattheson, Das neu-eröffnete Orchestre, 285.
- 71 Praetorius, Syntagma musicum II, 25.
- 72 Similar terminology is used for *kleine Bass-Geigen* in the treatises of Eisel, Majer and Walther (see the Appendix). These treatises also discuss the *viola di spala*, which Mattheson (*Das neu-eröffnete Orchestre*, 285) describes in this way: 'Insonderheit hat die *Viola di Spala*, oder *Schulter-Viole* einen grossen Effect beym *Accompagnement*, weil sie starck durch schneiden / und die Tohne rein exprimiren kan. Ein Bass kan nimmer distincter und deutlicher herausgebracht werden als auff diesem Instrument. Es wird mit einem Bande an der Brust befestiget und gleichsam auff die rechte Schulter geworffen / hat also nichts / daß seinen Resonanz im geringsten auffhält oder verhindert' (The *viola di spala*,

By using grosse Bass-Geige as a synonym for violone, Mattheson links the latter term with the contrabass instruments mentioned by Praetorius; große was also used by Khuen von Auer and Sartorius in their correspondence to designate the contrabass Violon. Mattheson also considers basse de violon as an equivalent for the contrabass violone, a term that he never uses to describe the small, or eight-foot, bass. Thus the French term basse de violon had lost its eight-foot connotations as early as the second decade of the eighteenth century. This is confirmed by subsequent German writings, which offer similar descriptions of bass and contrabass instruments.

Like Banchieri's treatise, the *Musicus autodidactos* (1738) of Johann Philipp Eisel (1698–1756) distinguishes between types of *Violons* according to range. Eisel calls the first type 'Bass-Violon' and gives the following description:

Der ausfüllende *Violon*, Französisch, *Basse de Violon*, oder wie ihn die Teutschen nennen, die grosse Baß-Geige, ist unter den mit Saiten bezogenen Instrumenten, so mit Bogen gestrichen werden, das grösseste, und manchmal wol zweymal so groß als ein *Violoncello*, folglich müssen auch die Saiten darauf nach *Proportion* des Corps dicker und länger seyn. . . . Es hat derselbe wie eine *Viola di Gamba* ordentlich sechs Saiten. . . . Die unterste oder gröbste Saite wird ins contra G. die andre ins tiefe C. die dritte ins tiefe E. die vierte ins A. die fünffte ins D. und die sechste, oder oberste, ins hohe G. gestimmet.<sup>73</sup>

The resonant *violon*, French, *basse de violon*, or as the Germans call it, the *grosse Baß-Geige*, is the largest among the string instruments played with a bow and is indeed sometimes twice as large as a violoncello. Consequently the strings must be thicker and longer in proportion to the body of the instrument. . . . It usually has six strings, like a *viola* [*da*] *gamba*, and is tuned [G¹-C-F-A-d-g].

The second type is called simply *Violon*, and is a six-string instrument tuned like Banchieri's *violone in contrabasso* (D¹-G¹-C-E-A-d).<sup>74</sup> Eisel also mentions a third type of *Violon* with four strings and reaching contra C. He states that it is usually tuned in fourths, and that the Italians call it the *violone grosso*:

Dieser Violon führet gleichfalls ein so grosses doch breiteres Corpus, und hat nur 4. Saiten darauf das 16. Füßige Contra C. Wird von vielen wie ein Violoncello (eine Octave tiefer) von der mehresten aber per Quartam gestimmet, schneidet in der Music besser durch denn der 6. saitichte, will auch im spielen mehr Force als alle beyde erfordern, und wird von denen Italiänern Violone grosso genennet.<sup>75</sup>

or *shoulder viola*, in particular produces a great effect in accompaniments, since it is able to cut through [the musical texture] strongly and express the notes clearly. A bass [line] cannot be brought out more distinctly and clearly than on this instrument. It is secured to the chest with a strap and is thrown, so to speak, onto the right shoulder; therefore its resonance cannot be in the slightest impeded or obstructed). Kuijken makes extensive use of the *viola di spala* (or *violoncello da spalla*, as he designates it) in his recordings discussed below.

- 73 Johann Philipp Eisel, Musicus autodidactos, oder Der sich selbst informirende Musicus (Erfurt: Funck, 1738), 47.
- 74 Eisel, *Musicus autodidactos*, 50: 'Der *Violon* von dieser Gattung hat ein weit grösser und breiter *Corpus*, gehet auch eine *Quarte* tiefer als der *Bass-Violon*. Die unterste Saite heisset D. die andere G. die dritte C. die vierte E. die fünffte A. die sechste D. daß also diese Stimmung mit der *Viola da Gamba* vollkommen überein kommet' (The *Violon* of this type has a much bigger and wider body, and sounds a fourth lower than the *Bass-Violon* [that is, the *violone da gamba* with the higher G tuning]. The lowest string is D, the next G, the third C, the fourth E, the fifth A, and the sixth D; therefore this tuning is in complete agreement with that of the *viola da gamba* [that is, the eight-foot member of the viol consort]).
- 75 Eisel, Musicus autodidactos, 50-51.

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This *Violon* likewise has a larger and wider body, and has only four strings, of which one is the sixteen-foot contra-C. It is tuned by many like a *Violoncello* (an octave lower), but by most in fourths. It cuts through the musical texture better than the six-string instrument but requires more strength to play than both [of the other instruments], and the Italians call it *violone grosso*.

Eisel had earlier provided definitions for the eight-foot bass instruments he deemed worthy of inclusion. His description of small bass instruments – the violoncello, the *bassa viola* and the *viola di spalla* – echoes Mattheson almost word for word. He does, however, explicitly link the *bassa viola* with the French tradition: Die *Bassa Viola* ist ebenfalls eine Art einer kleinen Baß-Geige und sonderlich unter den *delicaten* Franzosen sehr gemein' (The *bassa viola* is [like the *viola di spala*] a kind of small string bass, and is particularly common among the delicate French). Eisel goes on to describe the characteristics of the violoncello in great detail: the number of strings (four, but occasionally five or, more rarely, six), its usual tuning (C–G–d–a) and aspects of playing technique. The amount of space devoted to the violoncello, as opposed to the other two *kleine Baß-Geigen*, suggests that it was the one most commonly in use by this time. Eisel also uses the term *basse de violon* at the beginning of his description of the three instruments he designates *Violon*, thus in association with the twelve-foot *Bass-Violon* (G *violone*) and sixteen-foot *Violons*. Like Mattheson, he equates the French term with instruments outside the standard eight-foot range.

Also closely echoing Mattheson's treatise is the 1732 *Museum musicum* of Joseph Friederich Bernhard Caspar Majer (1689–1768).<sup>79</sup> Majer seems to been dependent on material from previous writers, including Mattheson, Johann David Heinichen and Johann Gottfried Walther.<sup>80</sup> His definition for *violone* is almost identical to Mattheson's, even including the adjective 'brummende'. But while Majer states in his text that this is a sixteen-foot instrument, the tuning he gives is for a six-string *G-violone*, like Banchieri's *violone da gamba* or Eisel's *Bass-Violon*.<sup>81</sup> He does not mention a true sixteen-foot instrument – that is, a transposing double bass. Majer's eight-foot basses are the 'Violon Cello', *bassa viola* and *viola di spalla*, and again the definitions are very close to those by Mattheson and Eisel. He provides only one tuning (C–G–d–a), implying that all three *kleine Baβ-Geigen* share this configuration.<sup>82</sup> However, following his entry on the *violone*, Majer notes that

eine *Fagott-Geige* wird auf dem Arm gehalten, und wie eine Viola tractirt, auch ist die Stimung also eingerichtet, nur daß sie durchaus um eine völlige Octav tieffer, u. dieserhalben die Saiten alle starker darzu genommen werden. Deren Ambitus u. Application der Finger und Buchst. ist wie bey der Französ. Baß-Geige oder *Violon cello*.<sup>83</sup>

A Fagott-Geige is held on the arm, and is set up like a *viola*, thus the tuning is arranged in this way as well, only a full octave lower, and because of this the strings are thicker. The range, fingering and note names are the same as for the French  $Ba\beta$ -Geige or violoncello.

Here again, the *französische Baß-Geige* is equated with the eight-foot violoncello, while the term *basse de violon* is associated with the sixteen-foot instrument.

<sup>76</sup> Eisel, Musicus autodidactos, 44.

<sup>77</sup> Eisel, Musicus autodidactos, 45.

<sup>78</sup> Eisel, Musicus autodidactos, 44-46.

<sup>79</sup> Joseph Friederich Bernhard Caspar Majer, Museum musicum theoretico practicum (Schwäbisch Hall: Majer, 1732).

<sup>80</sup> George J. Buelow, 'Joseph Friedrich Bernhard Caspar Majer', The New Grove Dictionary, second edition, volume 15, 645.

<sup>81</sup> Majer, Museum musicum, 80.

<sup>82</sup> Majer, Museum musicum, 79.

<sup>83</sup> Majer, Museum musicum, 80.

The entry for *violone* in Walther's *Musicalisches Lexicon* (1732) also includes the alternative terms *grosse Baβ-Geige* and *basse de violon*, along with the G tuning. <sup>84</sup> However, for the octave-transposing instrument, the true contrabass, Walther offers the following: 'Basse double, oder double Basse (gall.) ein doppelter Bass-Violon, deswegen also genannt, weil er fast zweymahl so groß, als ein ordinairer Französischer Bass-Violon ist, und folglich eine Octav tiefer klingt' (Basse double or double bass (Fr.), a double Bass-Violon, so named because it is almost twice as large as an ordinary French bass-violon, and consequently sounds an octave lower). <sup>85</sup> This is clearly the sixteen-foot contrabass instrument of the orchestra, but what type of instrument it is remains unclear. Walther uses the term bass-violon here, but nowhere else in the dictionary. I consider this double bass to be a contrabass violone, as in Banchieri and Eisel. <sup>86</sup> In this interpretation, which comports with Eisel's definition of a contrabass Violon with six strings, the instrument is literally twice as big as the French bass viol (Bass-Violon meaning bass of the viol family) and sounds an octave lower (D¹-G¹-C-E-A-d). Walther's entry for the kleine Baβ-Geigen, taken directly from Mattheson's Das neu-eröffnete Orchestre, compares the small bass instruments – again the violoncello, bassa viola and viola di spala – to larger ones (der grössern) with five or six strings. <sup>87</sup>

It should be clear from the foregoing discussion of terminology in German dictionaries and treatises that basse de violon was considered the French equivalent of violone. Further, violone (or Violon) is associated with the contrabass register, either as an octave-transposing double-bass instrument, as in Mattheson and Eisel, or as a twelve-foot instrument that encompasses some of the contrabass register, as in Majer and Walther. In no instance is the term basse de violon equated with the smaller bass instruments in the eight-foot range. The contemporary term for the instrument that Kuijken now employs in his ensembles is consistently französische Bass-Geige, as in Merck and Majer. Further, it is clear from all the descriptions of smaller bass instruments that the violoncello was the dominant instrument during this period. The französische Bass-Geige, when mentioned at all, seems to be an afterthought in the examples after Merck, confirming that after 1700 this instrument began to die out in favour of the new violoncello/contrabass violone bass-line instrumentation. 88

The trend towards the violoncello/contrabass *violone* configuration in orchestras is clear during the first decades of the eighteenth century. In Italy, Antonio Vivaldi routinely made use of this instrumentation in the continuo lines of his operas. <sup>89</sup> His concerto instrumentation reflects similar practices: the partbooks for *L'estro armonico*, Op. 3 (1711), include separate folios for violoncello (non-figured, as part of the *concertino*) and *violone e cembalo* (a figured-bass part for the continuo). <sup>90</sup> It has been well documented that in Venice the term *violone*, not *contrabasso*, was used to designate a double-bass instrument. <sup>91</sup>

In London, George Frideric Handel used this bass-line instrumentation for his Italian operas. Figure 3, from an autograph score of Handel's first London opera, *Rinaldo*, HWV7<sup>a</sup> (1711), clearly shows how these instruments were designated. An individual line is given to the *violoncelli* (fifth staff from the bottom of the page), while the bassoon (*Keutholt*; bottom staff) participates in a bass-line duet with the contrabass

<sup>84</sup> Johann Gottfried Walther, *Musicalisches Lexicon oder Musicalische Bibliothec* (Leipzig: Deer, 1732), 637. Walther gives the range of this instrument as 'vom contra G bis ins d. e.' – that is, from G¹ to d¹ or e¹.

<sup>85</sup> Walther, Musicalisches Lexicon, 78.

<sup>86</sup> See Chapman, 'Tuning Variations', 59-60.

<sup>87</sup> Walther, Musicalisches Lexicon, 637.

<sup>88</sup> Cyr, 'Basses and basse continue', 158. See also Holman, Life After Death, 45.

<sup>89</sup> See, for example, *L'incoronazione di Dario*, Rv718, Biblioteca Nazionale di Torino, MS Giordano 38cc, 176r–309v. The bass line at the opening of Act 1 is labelled 'Violone e Viol<sup>lo</sup>: Piano senza Cembalo'. Indeed, the *violone* is prominently featured in this opera, perhaps most famously in the aria 'Non lusinghi il core amante' (Act 2 Scene 17), which is scored for solo *fagotto* and solo *violone*.

<sup>90</sup> See Antonio Vivaldi, L'estro armonico: Concerti Opera Terza (New York: Broude, 1992).

<sup>91</sup> Bonta, 'Terminology for the Bass Violin', 34–35: 'The violone mentioned [in describing the string instruments at San Marco] must be a contrabass – a term never encountered in San Marco during these years, not even apparently as late as 1766. . . . It would appear that violone was the Venetian term for contrabass from at least 1661 on.'



Figure 3 (Colour online) George Frideric Handel, 'Ah! crudel', *Rinaldo*, HWV7<sup>a</sup>, Act 2 Scene 8. GB-Cfm, Mus. MS 254, folio 24r (47). Used by permission

(violone grosso solo; second staff from the bottom). <sup>92</sup> A similar scoring can be seen nearly four decades later in the autograph score for Handel's *Music for the Royal Fireworks*, HWV351 (1749), where the lowest bass line is designated violoncelli e contra bassi. <sup>93</sup>

In German-speaking areas, the connection between the term *violone* and transposing contrabass instruments evident in early eighteenth-century writings is borne out by the musical sources. Georg Muffat's *Außerlesener mit Ernst- und Lust- gemengter Instrumental-Music* (1701), a collection of works in the Corellian

<sup>92</sup> Keutholt or Kortholt was a generic name given to double-reed instruments with bores that double back on themselves. Curtal, a corruption of the term Kortholt, was an especially popular name for the early bassoon in England. See Howard Mayer Brown and Barra R. Boydell, 'Kortholt', The New Grove Dictionary, second edition, volume 13, 827–828.

<sup>93</sup> See Christopher Hogwood's Introduction and Commentary to the facsimile edition of British Library Manuscript R. M. 20.g.7: Georg Friedrich Händel, *The Music for the Royal Fireworks (Feuerwerksmusik)* Hwv351, *Concerti* Hwv335a & 335b (Kassel: Bärenreiter, 2004), 59. The two orchestral concertos (1746) included in this manuscript, which provided the main material for the overture to the Fireworks Music, also contain interesting terminology. The bottom two staves of the score for Hwv335a read 'Violon' and 'Org'.

concerto-grosso mould,<sup>94</sup> offers valuable performance-practice instructions in the Foreword. Concerning instrumentation, Muffat suggests the following:

Hast du mangel an Geigern / oder beliebt nur mit wenigen dise *Concert* zu probieren / wirst auß den drey folgenden Stimmen / *Violino 1. Concertino, Violino 2. Concertino*, und *Basso Continuo e Violoncino Concertino*, ein vollkommen jederzeit nothwendiges Terzetl formiren. Diser Baß aber / wird auff einem französischen Bassetl besser als auff einem diser Orthen gebräuchigen *Violone* außkommen / zu welchem zur grössern Zier der *Harmoni* ein Instrument / oder *Theorba* (so eben auß der selbigen *parte* geschlagen wird) kan hinzugesetzt werden. . . .

Seynd aber noch mehr *Musicanten* verhanden / wollest zu allen vorgesagten *Partibus* annoch die drey übrige / nemblich *Violino Primo*, *Violino Secondo* / und *Violone* oder *Cembalo* vom *Concerto grosso* (oder grossen Chor) darzu nehmen / und derer jede nachdem die Zahl und Vernunfft *dictiren* werden / entweder ein- oder zwey-oder dreyfach besetzen lassen. Alsdann wird zu desto Majestätischer *Harmoni* des Bass ein grosser *Violone* gar wohl taugen.

If you have few violinists, or if you would prefer to try these concertos with only a few, then you will form a complete, indispensible [sic] trio from the following three parts: *Violino 1. Concertino*, *Violino 2. Concertino* and *Basso Continuo e Violoncino Concertino*. It is better to play this bass part on a small French bass than on the *violone* commonly used here; to this is added a harpsichord or theorbo (which is played from the same part), for the greater embellishment of the harmony. . . .

If still more musicians are available, you may add to those parts already named the remaining ones, that is *Violino Primo*, *Violino Secondo* and *Violone* or harpsichord of the *Concerto grosso* (or large choir), and assign whatever number of musicians per part seems reasonable, with either one, two or three players per part. In this case a large *violone* would serve the majestic harmony of the bass quite well.<sup>95</sup>

The terminology and bifurcation according to function is clear: the large, orchestral contrabass instrument is the (grosser) violone, while the smaller, concertino continuo instrument is the eight-foot französischer Bassetl.<sup>96</sup>

In the sonatas and concertos for four-part strings and continuo of Georg Philipp Telemann, all of which were apparently written before 1721 and survive in non-autograph manuscript sources, we find further references to a contrabass instrument designated *violone*. Bass lines in manuscript parts at Dresden are generally given the heading 'Basso' or 'Cembalo'. However, parts at Darmstadt are frequently labelled

<sup>94</sup> Muffat studied in Rome in the 1680s and was familiar with Corelli's Op. 6 concertos. See Susan Wollenberg, 'Georg Muffat', *The New Grove Dictionary*, second edition, volume 17, 361–364.

<sup>95</sup> Georg Muffat, Auserlesene mit Ernst und Lust gemengte Instrumentalmusik (1701), ed. Erwin Luntz, Denkmäler der Tonkunst in Österreich, volume 23 (Graz: Akademische Druck- u. Verlagsanstalt, 1959), 8–9. Translated in David K. Wilson, Georg Muffat on Performance Practice: The Texts from 'Florilegium Primum', 'Florilegium Secundum', and 'Auserlesene Instrumentalmusik': A New Translation with Commentary (Bloomington: Indiana University Press, 2001), 72–73.

<sup>96</sup> Muffat gives his Foreword to the collection in German, Italian, Latin and French. While the German version contains no explicit reference to the *violone* as a contrabass instrument, the Italian and French versions do ('Ed' all'hora Ti potrài moltò benè servir del Violone, ò Contrabasso, per far spicare il Basso del Concerto grosso più Maestoso'; 'Et pour lors afin d'exprimer la basse du grand chœur avec plus de majesté, Vous pourrez fort bien Vous servir de la double Basse, que les Italiens appellent *Contrebasse* ou *Violone*'). Muffat, *Auserlesene mit Ernst und Lust gemengte Instrumentalmusik*, 13 and 21. Thus we may conclude that Muffat equates the German term *grosser Violone* with a contrabass instrument.

<sup>97</sup> Georg Philipp Telemann, Konzerte und Sonaten für 2 Violinen, Viola und Basso Continuo, ed. Ute Poetzsch, Georg Philipp Telemann: Musikalische Werke, volume 28 (Kassel: Bärenreiter, 1995), ix.



'Cembalo' or 'Violone'. That the bass-line scoring for these works is keyboard continuo with contrabass *violone* and a reinforcing eight-foot bass instrument is supported by the presence, in at least two different sources, of the word 'Violoncello' (meaning cello alone) in certain sections of the *violone* part. Thus the widely accepted, by this time, pairing of violoncello and contrabass *violone* is again the preferred instrumentation in these works.

## BACH'S VIOLONE

Considering the evidence presented so far, it would appear that the *basse de violon* was not the instrument Bach employed for his *violone* or *Violon* parts, for it seems reasonable to assume that he would have adopted current and widespread terminology and practices. If this was indeed the case, which instrument or instruments are the most likely candidates?

For the Brandenburg Concertos, the designation of bass instruments is quite clear. In the first concerto, the lowest bass staff is labelled 'Continuo e Violono grosso' and the staff directly above is labelled 'Violoncello'. The remaining concertos use the term 'Violone' or 'Violon' without modifiers, with violoncello parts always notated on a separate staff.<sup>99</sup> Laurence Dreyfus has suggested that the *violone* parts in these concertos call for no fewer than three different types of *violone*: the G *violone* (as described by Banchieri, Eisel, Walther and others, with the tuning G¹-C-F-A-d-g) for Concertos 2 and 6, the D *violone* (as described by Banchieri and Eisel and implied by Walther, Mattheson and others, with the tuning D¹-G¹-C-E-A-d) for Concertos 4 and 5, and the *violone grosso* reaching low contra C (described by Eisel) for Concertos 1 and 3.<sup>100</sup> Dreyfus's argument depends on the idea that Bach consciously avoided certain low pitches in some of the concertos and not others, suggesting that different instruments are needed to perform each part. For example, in Concerto No. 5, contra Ds are present (assuming an octave transposition) in the *Violon*[e] part, but Bach takes great care to avoid the contra C (Figure 4a, third staff from bottom). However, in Concerto No. 2 (Figure 4b, second staff from bottom), no effort is made to avoid the contra C.

But this view does not account for the possibility of retuning, which Bach may well have considered. Thus, rather than three different instruments, as Dreyfus has proposed, it seems more likely that only a single sixteen-foot instrument was used for all the concertos: the D violone, called *violone in contrabasso* by Banchieri and *Violon* by Eisel.<sup>101</sup> In this interpretation, the presence or absence of low Cs would indicate to the contrabassist the best tuning scheme to realize the violone part. Since Concerto No. 5 is in D major, the standard D tuning of this instrument (D¹-G¹-C-E-A-d) suffices. However, in Concerto No. 2, the F major tonality calls for a tuning a whole step lower (C¹-F¹-Bb¹-D-G-c). This not only allows the instrument to access the contra C but also provides a tuning that will maximize the resonance of the tonality and its related key areas. Therefore, Concertos 1 (F major), 2 (F major) and 6 (B flat major) call for the C tuning. The tuning for the G major concertos (Nos. 3 and 4) varies: No. 4 avoids the low Cs, indicating the D tuning, while No. 3 embraces the low Cs, indicating the C tuning. Scordatura tuning of this nature can also explain the presence of the contra Bb at the conclusion of the A section in the first movement of Concerto No. 6. An adjustment to the standard C tuning could easily support a tuning of Bb²-F¹-Bb¹-D-G-c.

<sup>98</sup> Telemann, Konzerte und Sonaten, ix-x.

<sup>99</sup> In Concerto No. 2 the bottom staff reads 'Violoncello e Cembalo ad unisono', while the staff directly above reads 'Violone ripieno'. The bottom staff in Concerto No. 3 reads 'Violone e Cembalo', while the three staves immediately above are designated 'Violoncello 1', 'Violoncello 2' and 'Violoncello 3'. In Concerto No. 4 the bottom staff is designated 'Continuo' and the next two staves up are 'Violone' and 'Violoncello'. The bottom two staves in Concerto No. 5 are the figured solo harpsichord part ('Cembalo concertato'), with the next staves up labelled 'Violon' and 'Violoncello'. Finally, in Concerto No. 6 the bottom staff reads 'Violone e Cembalo', while the next staff up reads 'Violoncello'. See Johann Sebastian Bach, *Brandenburgische Konzerte: Faksimile der Autographen* (Frankfurt am Main: Peters, 1996).

<sup>100</sup> Laurence Dreyfus, Bach's Continuo Group: Players and Practices in His Vocal Works (Cambridge, MA: Harvard University Press, 1987), 165–166.

<sup>101</sup> See Chapman, 'Historical and Practical Considerations', 227–228, particularly note 20.



Figure 4a (Colour online) Johann Sebastian Bach, Brandenburg Concerto No. 5/i, bars 117–125. *Brandenburgische Konzerte: Faksimile der Autographen* (Frankfurt am Main: Peters, 1996). Used by permission



Figure 4b (Colour online) Johann Sebastian Bach, Brandenburg Concerto No. 2/i, bars 24–31. *Brandenburgische Konzerte: Faksimile der Autographen* (Frankfurt am Main: Peters, 1996). Used by permission

Tuning viols to maximize resonance in a particular key by emphasizing open strings seems to have been an accepted practice as early as the sixteenth century. Scordatura tunings for such purposes were an integral part of the solo double-bass literature for the five-string fretted Viennese *Violon* during the late eighteenth century. So it is not unreasonable to imagine that the scordatura tunings suggested above were used by contrabassists during the seventeenth and early eighteenth centuries as well. The possibility also exists that Bach simply expected violone players to adjust the tuning of their lowest strings in the conventional D tuning to accommodate the low Cs in these works, as was often done with the eight-foot bass *viola da gamba*. However, this arrangement would seem less desirable, as it does not address the question of resonance within the work's key and related tonal areas.

Whatever the particular tuning scheme or schemes may have been for the Brandenburg Concertos, I believe an approach that posits the D violone as the only instrument used in these works is more logical than Dreyfus's proposal for a number of reasons. In addition to the points made above, Eisel's *violone grosso* is a problematic instrument. He states in his description of the instrument that 'it is tuned by many like a violoncello (an octave lower), but by most in fourths'. This means that it is either a very large instrument tuned in fifths (like a cello), with all the concomitant problems of a larger instrument tuned in this manner, or it is tuned in fourths with a contra C as the lowest note. <sup>104</sup> If we take Eisel at his word, the latter possibility would indicate an extremely limited tuning scheme of C¹-F¹-B♭¹-E♭, rendering some of Bach's parts in the higher register difficult to execute accurately. <sup>105</sup>

There is another contemporary source that addresses the question of the contra C on a string-bass instrument. The *Kurzgefaßtes musicalisches Lexicon* (1737) by Johann Christoph and Johann David Stössel gives the following definition: '*Violone*, ist eine grosse Baß-Geige, *Violone grosso*, eine Octav-Baß Geige, darauf das 16. Füßige contra C. wird von den meisten per *Qartam* durch und durch gestimmet' (*Violone* is a large *Baß-Geige*, *violone grosso*, a transposing string bass, on which the sixteen-foot contra C [is found], and which is usually tuned in fourths throughout). <sup>106</sup> While the number of strings for this instrument is not specified, the use of the phrase 'throughout' (*durch und durch*) is at least suggestive of more than four strings, and the terminological link to the Italian *violone grosso* certainly implies a six-string *violone*. Perhaps, then, Eisel's description of a four-string instrument is simply an error. <sup>107</sup>

<sup>102</sup> Ian Woodfield, The Early History of the Viol (Cambridge: Cambridge University Press), 142.

<sup>103</sup> For more on the scordatura tunings employed in the literature for this instrument see Chapman, 'Tuning Variations', 74–81.

<sup>104</sup> The main problem associated with the tuning of a large contrabass instrument in fifths involves shifting. The greater the distance in pitch between strings, the more shifting is required. On a man-sized instrument, it is clearly in the best interests of the player to reduce shifting as much as possible. Thus the vast majority of documented contrabass tunings feature a configuration of all fourths or some combination of thirds and fourths. For other difficulties associated with tuning a contrabass in fifths see Chapman, 'Historical and Practical Considerations'.

<sup>105</sup> Dreyfus, *Bach's Continuo Group*, 252, note 26, states, regarding this instrument: 'The violone in C (the "violono grosso") refers to a four-string instrument tuned an octave below the cello, C¹-G¹-D-A, or, alternately, in some species of fourths.' But if the dominant characteristic of this instrument is its ability to reach C¹, then the only species of fourths that can be inferred is the one I give above. Another plausible solution would be an instrument tuned to C¹ on the bottom string, with a gap of a sixth to A¹ and fourths upward from there. This is the arrangement that many historically informed double bassists favour today. However, if this tuning was commonly used in his time, Eisel would probably have described it as some sort of scordatura to an all-fourths tuning, as is the case in treatises and encyclopedias of the later eighteenth and early nineteenth centuries. See Chapman, 'Tuning Variations', 78, note 67.

<sup>106</sup> Johann Christoph and Johann David Stössel, Kurzgefaßtes musicalisches Lexicon (Chemnitz: authors, 1737), 417. Note the similarity in terminology for a sixteen-foot instrument to the other German-language sources cited above, particularly the terms 'grosse Baß-Geige' and 'Octav-Baß Geige'.

<sup>107</sup> The Kurzgefaßtes musicalisches Lexicon draws a good deal of its information from Walther's dictionary, though other theorists, such as Praetorius, are cited by the Stössels. See James B. Coover, 'Dictionaries & Encyclopedias of Music',

There are also problems associated with the use of the *G violone* in the Brandenburg Concertos. Dreyfus has argued for its use in Concertos 2 and 6, citing the presence of low Cs in No. 2 and, more importantly, the low Bb in No. 6, along with some general issues of voice leading and registration. <sup>108</sup> What he does not consider is the role of the *violone* part in the orchestral configuration. Let us take Concerto No. 6 as an example and evaluate the function of the line designated 'Violone e Cembalo' in comparison to other works from roughly the same time and geographical area.

In early eighteenth-century Germany, the G violone described by Walther was still a widely used instrument. However, in keeping with its traditional role as the lowest member of the viol consort, as described by Banchieri, this instrument often functioned as a part of the string ensemble and not as a continuo instrument. Examples of this tradition can be found in the music of Dieterich Buxtehude. As Kerala Snyder notes:

The bass instrument in Buxtehude's ensemble was most often the violone. In this function it plays with the other instruments, deriving its pitches from the basso continuo part and its rhythm from the other strings. When they are silent, it, too is silent; it is by no means another continuo part. . . . There can be no doubt when Buxtehude called for the violone as the bass instrument in his ensemble, he had the 8' instrument [that is, the G *violone*] in mind.  $^{109}$ 

A representative composition by Buxtehude for our purposes is the dialogue *Herr, ich lasse dich nicht*, BuxWV36, the scoring of which appears on the autograph title-page: a bass voice and two violins ('doi [sic] Violini') juxtaposed with a tenor voice and three viols ('tre Viole de gambe'). The autograph parts for the viols are headed 'Viola de gamba ô Braccie 1', 'Viola de gamba ô braccie 2' and 'Violon ô de gamba'. Thus the gamba parts can be performed alternatively by violas, while the *Violon* part can be performed by a bass *gamba*. The part can be performed by a bass gamba.

In addition to the eight-foot G *violone*, the musical establishment at the Marienkirche in Lübeck owned a sixteen-foot *violone* (*großer Violon* or *große Octav-geige*).<sup>112</sup> This last instrument appeared most often in Buxtehude's large-scale vocal compositions; its function in these works would have been to double the

section 3, part 2, *The New Grove Dictionary*, second edition, volume 7, 310–311. However, the authors clearly depart from Walther in regard to terminology for the *violone*. While Walther calls the G *violone* by that name, the Stössels reserve the term *violone* for the sixteen-foot instrument described above and call the G *violone* the *Baβ-Violon* (*Kurzgefaβtes musicalisches Lexicon*, 17), as does Eisel.

- 108 Dreyfus, Bach's Continuo Group, 149-151.
- 109 Kerala Snyder, Dieterich Buxtehude: Organist in Lübeck, second revised edition (Rochester: University of Rochester Press, 2007), 374–375.
- 110 Peter Wollny, ed., Herr, ich lasse dich nicht (BuxWV36) (Kassel: Bärenreiter, 2007), ix, dates the work to 1680. Numerous additional examples of the eight-foot G violone's use in Buxtehude's sacred vocal works can be found in Dietrich Buxtehude, Dreizehn Kirchenkantaten für zwei Singstimmen, ed. Gottlieb Harms, Dietrich Buxtehudes Werke, volume 3 (New York: Broude, 1978). See particularly Ich suchte des Nachts (BuxWV50), 41–58, and Laudate, pueri (BuxWV 69), 58–64.
- 111 Wollny, ed., Buxtehude, *Herr, ich lasse dich nicht*, ix. Another alternative scoring calls for trombones to perform the *viola de gamba* parts.
- 112 Snyder, *Dieterich Buxtehude*, 375: 'St. Mary's Church purchased a violone in 1667 for the use of the cantor; this was probably the "großen Violon" for which strings were purchased in 1671. In 1672 the church bought a "große Octav-geige" for 30 Lübeck marks (10 rixdollars) from Zacharias Cronenberg, one of the municipal musicians who played regularly at St. Mary's. He died that year, and Peter Grecke applied for his position, claiming that he could play "Clavier, violdegambe, Bassviolone, und violone". It is clear that both sizes of violone were known in Lübeck.' It should also be noted that in Grecke's list of the instruments on which he could perform, the terminology for the bass and contrabass instruments coincides with that of Eisel. See the Appendix for Eisel's terminology.

continuo line at the octave. <sup>13</sup> An example of such a composition is Buxtehude's *Alles was ihr tut*, BuxWV4, the extant parts for which indicate a scoring of *Violino I, Violino II, Viola I, Viola II, Viola II, Violone, Soprano, Alto, Tenor, Basso* and *Basso Continuo*. <sup>14</sup> In this work, different sources yield two distinct *violone* parts. One functions much as in the previously discussed Buxtehude work: it is a separate and distinct bass line, not a doubling of the basso continuo. The other *violone* doubles the basso continuo part, and may have been copied directly from it. <sup>115</sup>

Thus Buxtehude's terminology is clear: in *Herr, ich lasse dich nicht*, the *Violon* indicated in the autograph parts is the twelve-foot non-transposing 'double bass' of the viol consort, with an independent bass line that does not merely double the continuo line. However, in *Alles was ihr tut*, one *violone* serves as the twelve-foot bass of the string choir; the terminology used in the cover title for the parts is, in fact, similar to that used by Biber in this regard, calling for 'C. A. T. B. Con 5 Viole'. The other is the sixteen-foot continuo string bass (*großer Violon* or *große Octav-geige*), doubling the basso continuo in that range; the part for this *Violone* is clearly not included in the string group. Such contextual differentiations in terminology would have been very clear to contemporary composers and performers. How the instrument functions in any particular work determines which instrument is employed, even if they are both designated by the same term.

In Brandenburg Concerto No. 6, the instrumentation is reminiscent of Buxtehude's in *Herr, ich lasse dich nicht*. Bach writes for pairs of violas (*Viola 1 & 2 da Braccio*) and gambas (*Viola 1 & 2 da Gamba*), *Violoncello* and *Violone e Cembalo* (the last two parts given separate lines in the autograph score). The violoncello functions much as the *Violon* in Buxtehude's *Herr, ich lasse dich nicht*: it serves primarily as an accompaniment during solo episodes, functioning as the bass instrument of the *concertino*, as in the Muffat works discussed above. The *violone* plays only as part of the continuo; it is the bass of the entire ensemble, or concerto grosso. Thus the function of Bach's *violone* is not analogous to the general usage of the G *violone* in Germany at this time. Here, and indeed, in all of the Brandenburg Concertos, the *violone* is always the continuo instrument (the bass of the large ensemble), regardless of how bass lines are designated or arranged in the score. It is never functions as part of the solo group. The evidence points to this instrument as the sixteen-foot reinforcement to the tutti bass line; an eight- (or twelve-)foot doubling of this line seems superfluous, no matter the relative size of a particular instrument or the nature of its sound.

With regard to the *violone* parts in Bach's cantatas, Dreyfus is instructive.<sup>119</sup> A number of extant parts labelled 'Violone' or some variant thereof provide clues as to what instrument Bach had in mind. For certain early cantatas, particularly from Bach's time in Mühlhausen (1707–1708), Dreyfus argues that the G *violone* 

<sup>113</sup> Snyder, *Dieterich Buxtehude*, 381–382, notes that 'in a large space, such as St. Mary's at Lübeck, [the] 8' [string bass] line will not be heard without 16' support, either from 16' pedal stops or from 16' instruments such as the large violone. . . . In a large space [16' doubling] should be used in addition to, but certainly not in place of, a strong 8' continuo line. The bass member of the instrumental ensemble, whether [G] violone or dulcian, plays in addition to the continuo instruments.'

<sup>114</sup> Dieterich Buxtehude, Sacred Works for Four Voices and Instruments, Part 2, ed. Kerala J. Snyder, Dieterich Buxtehude: The Collected Works, volume 9 (New York: The Broude Trust, 1987), 3.

<sup>115</sup> Buxtehude, Sacred Works, 273.

<sup>116</sup> Buxtehude, Sacred Works, 272.

<sup>117</sup> The effect is the same, for example, in Concerto No. 2, where the bottom staff, reading 'Violoncello e Cembalo ad unisono', still allows the cello to act as the *concertino* bass, in this case along with the continuo instrument. The 'Violone in ripieno' line designates the *violone* as the bass (that is, contrabass) of the large ensemble.

<sup>118</sup> Dreyfus, Bach's Continuo Group, 165–166, agrees with this basic point but draws conclusions different from mine. Otterstedt, The Viol, 149, notes that 'the [sixteen-foot] violone played the bass line. Nothing else. It was not part of the consort of viols, but of the basso continuo faction, representing the core of this fundamental force, and sorely missed in its absence.'

<sup>119</sup> Dreyfus, Bach's Continuo Group, 151-165.

is indicated. He cites *Gott ist mein König*, Bwv71 (1708), as a supporting example.<sup>120</sup> This work features four instrumental choirs, with the *violone* serving as the bass of the violin group (Violins 1 and 2, Viola and *Violone*) and the violoncello accompanying two recorders; the organ provides the keyboard continuo. While this configuration may suggest the use of a twelve-foot violone, as in Buxtehude's *Herr, ich lasse dich nicht*, an examination of the autograph parts suggests a different interpretation.<sup>121</sup> The autograph *Violon[e]* part (Figure 5) contains music for movements 1, 6 and 7 only; the other movements are marked 'tacet'. While nominally a member of the violin choir, the *violone* plays only when all instruments of all choirs are involved. It is, in effect, the sixteen-foot continuo instrument of the entire orchestral configuration, never stepping outside that role. This function is reinforced in the fugal conclusion to the last movement, when the sixteen-foot *violone* makes its imitative entrance with the first appearance of the tutti vocal basses; the violoncello, on the other hand, enters four bars earlier with the tutti tenors and goes on to provide eight-foot reinforcement for the *violone* at its entrance, in the standard violoncello/contrabass pairing that was already commonplace throughout Europe at the time.

It is easy to imagine that the young J. S. Bach was familiar with the sixteen-foot *violone* that Buxtehude employed in his large-scale concerted vocal works. As is well known, the composer undertook a journey to Lübeck in the autumn of 1705, while employed as organist at the Neue Kirche in Arnstadt. According to the *Nekrolog* compiled by C. P. E. Bach and Johann Friedrich Agricola in 1751, J. S. Bach expressed 'an overwhelming desire to hear Buxtehude'. Bach's sojourn in Lübeck apparently lasted three months, providing him with ample opportunities to hear a variety of compositions by Buxtehude. It is likely that certain features of the the older composer's instrumentation, such as the employment of a sixteen-foot *Violone* in festive pieces, were absorbed by the young Bach as a result of this trip.

In addition to BWV71, Dreyfus discusses other extant autograph scores and parts; many of these unequivocally call for a contrabass *violone*, both early in Bach's career and well into his time at Leipzig. Dreyfus cites Cantata 208 (1713): in movement 11 of this work, the two bass staves of the autograph score are labelled 'Violons e Bassons' and 'Cont. e Violono grosso', again clearly differentiating between the eight- (or twelve-) and sixteen-foot *Violons* according to function.<sup>123</sup>

Kuijken suggests that many of the bass parts in Bach's music contain passages that are simply too difficult to be performed accurately and effectively on a double-bass instrument.<sup>124</sup> But the *violone in contrabasso* with the standard D tuning or alternative C tuning, the instrument most appropriate for the Bach works discussed above, is an extremely nimble instrument capable of performing complex parts far more efficiently than the four-string double bass that is now standard. Its strings, particularly the top three, are of a thinner

<sup>120</sup> Dreyfus, Bach's Continuo Group, 151-152.

<sup>121</sup> The instrumental choirs are: *Tromba* 1, 2 and 3 with *Timpani*; *Violino* 1 and 2, *Viola* and *Violone*; *Oboe* 1 and 2 with *Bassono*; *Flauto dolce* 1 and 2 with *Violoncello*. Most of the instrumental parts are autographs; others are partially in the hand of an unknown copyist. The *Violon(e)* part is in Bach's hand except for the tacet instructions and the musical notation. The parts can be found on the Bach Digital website, <www.bach-digital.de/receive/BachDigitalSource\_source\_0000256> (3 August 2012). See also Johann Sebastian Bach, *Ratswahlkantaten I*, ed. Christine Fröde, Johann Sebastian Bach: Neue Ausgabe Sämtliche Werke, series 1, volume 32/1 (Kassel: Bärenreiter, 1992), 3–65.

<sup>122</sup> Christoph Wolff, 'Johann Sebastian Bach', *The New Grove Dictionary*, second edition, volume 2, 309–382, especially 309 and 312.

<sup>123</sup> Dreyfus, Bach's Continuo Group, 153. Dreyfus concludes that, in this context, the term Violons 'must probably be understood to indicate cellos, as is clear from the idiomatic passages in Movement 13'. The early version of Brandenburg Concerto No. 5 (Bwv 1050a) could also be used to support the idea of contextual use of the term violone. In that version of the piece, the violone is the only string bass designated; in such a case, the G violone, described by Walther – a close relative of Bach's – is presumably the instrument that is called for. See Richard Maunder, The Scoring of Baroque Concertos (Rochester, NY: Boydell, 2004), 108–110, particularly 109. Though Maunder does not agree with my conclusions, much of his information is pertinent to this discussion.

<sup>124</sup> Kuijken, 'A Bach Odyssey', 266.





Figure 5 (Colour online) Johann Sebastian Bach, *Gott ist mein König*, Bwv71, *Violon* part. D-B, Mus. ms. Bach St. 377, Faszikel 1. Used by permission

gauge, and this, combined with the employment of frets, gives the instrument a very warm and resonant presence in the ensemble. This is a very different effect from the one produced by using a fretless, four-string contrabass with gut strings. The six-string *violone in contrabasso* – in the sixteen-foot range – provides an excellent foundation for the concerted music that Bach and his contemporaries produced in the seventeenth and early eighteenth centuries.

Another argument frequently made by defenders of the eight-foot-only position concerns the registral gap that would occur between certain vocal and instrumental lines if a sixteen-foot instrument were employed. Kuijken, for example, posits that in cases where the (octave-transposing) *violone* line is notated an octave below the vocal bass line, the two-octave gap that results from this scoring casts doubt on the efficacy of a sixteen-foot instrument; Jeffrey Thomas has also cited this as a concern.<sup>125</sup>

Let us again consider the cantata *Gott ist mein König*. In the sixth movement, all instrumental choirs and tutti voices participate. Recall that the *Violone* part does not reinforce the violin choir but doubles the basso continuo line (*Organo*) in the sixteen-foot register. The violoncello part functions as part of the recorder choir to which it is assigned, and the same is true of the eight-foot *bassono* part, which embellishes the figurations of the double-reed choir to which it belongs (Figure 6a). Label Kuijken and Thomas would consider it a problem that there is a two-octave gap between the sixteen-foot *violone* part and the tutti bass voices. A dramatic moment occurs six bars from the end of this movement: while the tutti voices sing a unison middle C, all four bass instruments – violoncello, *bassono*, *violone* and *organo* – play the same figure (Figure 6b, bars 32–33). If we assume a sixteen-foot *Violone*, then at this point Bach has scored the same figure in three different octaves and four different instrumental timbres (including the keyboard continuo, which is primarily providing the eight-foot register). When played in this manner, the effect is striking, contrasting significantly with the unison Cs in the vocal parts and adding a depth to the texture that repetitive iterations of an eight-foot bass line in the *bassono*, (non-transposing twelve-foot) *violone* and *organo* would not produce.

Even in works where the scoring is not this elaborate, the presence of an eight-foot organ part, not to mention an eight- (or twelve-)foot string bass in addition to the sixteen-foot *violone*, mitigates any gaps between the vocal bass line and the double-bass part. Manuscript parts seem to bear out this interpretation. Kuijken cites Bwv48 as an example of a work where two-octave gaps between the instrumental and vocal bass lines are problematic. Extant sources for this piece, however, include three separate continuo parts (all labelled 'Continuo'), one figured and two unfigured.<sup>127</sup> It seems likely that one of these was for a sixteen-foot *violone*, even if it is not specifically designated as such. Again, the duplication of the eight-foot bass line by several different instruments seems unlikely.

This type of scoring is found in a great deal of music involving double-bass instruments in a variety of genres throughout Europe in the eighteenth century. Mary Cyr points to instances of a two-octave separation between eight- and sixteen-foot instruments in the music of Jean-Philippe Rameau.<sup>128</sup> Indeed, this issue will

<sup>125</sup> Kuijken, 'A Bach Odyssey', 266: 'If we presume Bach intended a 16' instrument when he used the word "violone", it leads to some highly questionable musical consequences; for instance, in his vocal works whenever there are passages where this instrumental bass line is notated an octave lower than the 8' vocal bass line (and this occurs quite often). There is reason to doubt the sense of a two-octave gap between these lines, yet this is what would happen if one considers the term "violone" to refer to a 16' instrument. This occurs in instrumental works as well, where the violone part is notated an octave below the normal continuo in some passages.' Kuijken cites several examples in both vocal and instrumental works. Thomas's objection to the two-octave gap is quoted above in note 6.

<sup>126</sup> In Figures 6a and 6b the score reflects Bach's use of *Kammerton* for the wind parts and *Chorton* (a major second higher) for the string and organ parts. On Bach's use of *Kammerton* see Dreyfus, *Bach's Continuo Group*, 118–122.

<sup>127</sup> Kuijken, 'A Bach Odyssey', 266, note 7, cites bars 3–4 of the third-movement chorale in particular. The autograph parts for Bwv48 can be accessed through the Bach Digital website: <www.bach-digital.de/content/index.xml>.

<sup>128</sup> Cyr, 'Basses and basse continue', 162–164. Also see Maunder, The Scoring of Baroque Concertos, 19–23, who points to passages in the works of Giuseppe Torelli where separate lines, designated 'Violoncello' and 'Tiorba ò Violone/Organo',



Figure 6a Johann Sebastian Bach, *Gott ist mein König*, Bwv71/vi, bars 1–3. *Ratswahlkantaten I*, ed. Christine Fröde, Johann Sebastian Bach: Neue Ausgabe Sämtlicher Werke, series 1, volume 32/1 (Kassel: Bärenreiter, 1992), 29. Used by permission

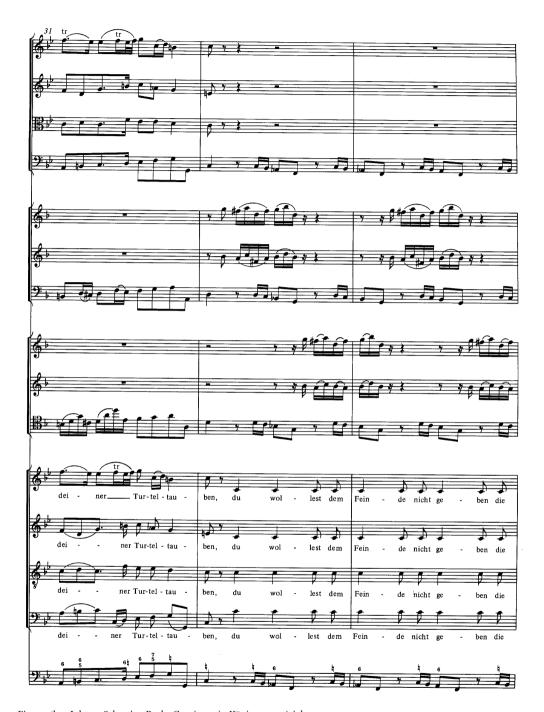


Figure 6b Johann Sebastian Bach, Gott ist mein König, BWV71/vi, bars 31–33

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no doubt sound particularly familiar to present-day contrabassists engaged with music for the Viennese *Kontrabass* in the mid- to late eighteenth century. A great deal of double-bass music from that time was routinely given over to the violoncello in the late nineteenth and early twentieth centuries by well-meaning scholars and performers. One famous example of this is the reassignment of the *violone* solos in the trios of Joseph Haydn's Symphonies Nos 6, 7 and 8 to the cello.<sup>129</sup> Often the justification for this change of scoring – particularly in regard to the 'serenade quartet' (two violins, viola and double bass) – was the presence of a 'registral gap' between the viola and contrabass in such a configuration.<sup>130</sup> This instrumentation is simply a reflection of the tastes and preferences of the time; it should not be viewed as some sort of aberration simply because we in the twenty-first century may find it unusual or 'questionable', as Kuijken puts it with reference to Bach's music.

Indeed, many of the views expressed by Kuijken, Thomas and Dreyfus concerning register, terminology, instrumental compass, technical difficulty and timbre were marshalled at various points during the twentieth century to discount the use of the contrabass in solo, chamber and orchestral works of the Viennese classical period. When the available evidence is viewed from a broadened perspective, the elimination of contrabass instruments from the works of Bach and his contemporaries appears similarly misguided.

play in octaves. He does not rule out the idea that in such instances the term *violone* could mean a sixteen-foot instrument, despite the fact that utilizing a transposing double-bass instrument would result in that part sounding two octaves below the violoncello line.

<sup>129</sup> See, for example, Joseph Haydn, *Symphony No. 7, C Major (Le Midi)*, ed. Ernst Praetorius (New York: Eulenburg, 1936). In the third-movement trio, the violone line is designated *Vc.* for violoncello.

<sup>130</sup> On the serenade quartet see Carl Bär, 'Zum Begriff des "Basso" in Mozarts Serenaden', *Mozart-Jahrbuch* (1960–1961), 133–155; James Webster, 'Towards a History of Viennese Chamber Music in the Early Classical Period', *Journal of the American Musicological Society* 27/2 (1974), 231–242; Webster, 'Violoncello and Double Bass in the Chamber Music of Haydn and His Viennese Contemporaries, 1750–1780', *Journal of the American Musicological Society* 29/3 (1976), 423–437; and Webster, 'The Scoring of Mozart's Chamber Music for Strings', in *Music in the Classic Period: Essays in Honor of Barry S. Brook*, ed. Allan W. Atlas (New York: Pendragon, 1985), 273–281. See also Webster, 'The Bass Part in Haydn's Early String Quartets and in Austrian Chamber Music, 1750–1780' (PhD dissertation, Princeton University, 1974), 168–207. For information on the registral gap and its effects on bass line instrumentation in the music of Mozart, Haydn and their contemporaries see Chapman, 'Tuning Variations', 67–74.

APPENDIX Descriptions of the violone in selected writings, 1556–1738

Source	Author (place, date)	Instrument name(s)	Number of strings; tuning	Registera	Fretted	Instrumenta family
Epitome musical	Philibert Jambe de Fer (Lyons, 1556)	basse de violon	four Bb¹–F–C–g	8	no	violin
Conclusioni nel suono	Adriano Banchieri	violone da gamba	six G¹-C-F-A-d-g	12	yes	viol
dell'organo, Op. 20	(Bologna, 1609)	violone in contrabasso	six D¹-G¹-C-E-A-d	16	yes	viol
Syntagma musicum II: De Organographia	Michael Praetorius (Wolffenbüttel, 1619)	Bas-Geig de bracio (Groß Quint-Baß)	five F¹–C–G–d–a	12	no	violin
		Baß Viol de Braccio	four C–G–d–a F–c–g–d¹	8	no	violin
		Groß Contra-Bas-Geig (Gar groß Baß-Viol)	five D¹-E¹-A¹-D-G	16	yes	viol
		Violone, Groß Viol-de	five E¹-A¹-D-G-c	16	yes	viol
		Gamba Baß	six D¹-G¹-C-E-A-d	16	yes	viol
		•	$E^{1}$ - $A^{1}$ - $D$ - $G$ - $c$ - $f$			
Harmonie universelle	Marin Mersenne (Paris, 1636–1637)	basse de violon	four Bb¹–F–C–g	8	no	violin
Musicalischer Schlissl	Johann Jacob Prinner	Basso di Viola	six G¹-C-F-A-d-g	12	yes	viol
	(Vienna, 1677)	Violone	five F¹− A¹−D−F♯−B	16	yes	viol
GB-Och: Music MS 118	James Talbot (Great Britain,	Violone or Double Bass	$six G^1 - C - F - A - d - g$	12	yes	viol
	1685)	(Gibbons: 'great Dooble Basse')	$(A^{1}-D-G-B-e-a)$			
		Double Bass	five $F^1(G)^1 - A^1 - D - F$ - $\sharp$ – A	16	yes	viol
Compendium musicae	Daniel Merck (Augsburg,	Französische Bass	four $Bb^1 - F - c - g$	8	no	violin
instrumentalis Chelicae	1695)	Bass-Geigen	six $G^{1}$ – $C$ – $F$ – $A$ – $d$ – $g$ $A^{1}$ – $D$ – $G$ – $B$ – $e$ – $a$ alternatively: $A^{1}$ – $D$ – $G$ – $A$ – $d$ – $g$	12	yes?	viol

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Source	Author (place, date)	Instrument name(s)	Number of strings; tuning	Register <sup>a</sup>	Fretted	Instrumental family
		Bass-Geigen	three $D - A - e$ (possibly an octave lower)	16?	not speci- fied	not specified
Dictionaire de musique	Sébastien de Brossard (Paris, 1705)	Basse de Violon	not specified	8	no	violin
		Violone or Double Basse	not specified	16	yes?	viol?
Musicalischer-Trichter	Martin Fuhrmann (Frankfurt, 1706)	Viol di Gamba	not specified presumably: $D - G - C - e - a - d^{1}$	8	yes	viol
		Violone (Bass-Geige, Violone Grosso, Octav-Bass-Geige)	not specified (with Contra C)	16	not speci- fied/yes?	viol?
Das neu-eröffnete Orchestre	Johann Mattheson (Hamburg, 1713)	kleine Bass-Geigen (Violoncello, Bassa Viola and Viola di Spala)	presumably four not specified	8	no	violin
		Violone (French: Basse de Violon, German: Grosse Bass-Geige)	five or six presumably: D¹-E¹-A¹-D-G or D¹-G¹-C-E-A-d	16	not speci- fied/ yes?	viol?
Musicalisches Theatrum	Johann Christoph Weigel (Nuremberg, <i>c</i> 1722)	Violon	five presumably: F¹-C-G-d-a	12	no	violin
Gabinetto armonico pieno	Filippo Bonanni (Rome,	viola	four not specified	8	no	violin
d'istromenti sonori	1723)	violone	six not specified	16	yes	viol
Vocabolario degli Accademici della Crusca	(Florence, 1729)	violone (basso di viola or violoncello)	not specified	8	no	violin

Source	Author (place, date)	Instrument name(s)	Number of strings; tuning	Register <sup>a</sup>	Fretted	Instrumental family
Museum musicum theoretico practicum	Joseph Friederich Bernhard Caspar Majer (Schwäbisch Hall, 1732)	kleine Baß-Geigen (Violon Cello, Bassa Viola, Viola di Spala)	four presumably: C–G–d–a	8	no	violin
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Fagott-Geige	C-G-d-a	8	no	violin
		Violone	six G¹-C-F-A-d-g	16?	yes	viol
Musicalisches Lexicon	Johann Gottfried Walther (Leipzig, 1732)	Violone (Grosse Baß-Geige, Basse de Violon)	six G¹–C–F–A–d–g	12	yes?	viol
		Basse double	six possibly: D¹-G¹-C-E-A-d	16	yes?	viol
Musicus autodidactos	Johann Philipp Eisel (Erfurt, 1738)	kleine Baß-Geigen (Violoncello, Bassa Viola, Viola di Spala)	Violoncello: four, sometimes five or six; usually C–G–d–a. others not specified	8	no	violin
		Bass-Violon	six G¹-C-F-A-d-g	12	not speci- fied/ yes?	viol
		Violon	six D¹-G¹-C-E-A-d	16	yes?	viol
		Violon	four possibly: C¹-F¹-B♭¹-E♭	16	yes?	viol?

<sup>&</sup>lt;sup>a</sup>8-foot; 12-foot, non-transposing; 16-foot, transposing.