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The Violoncello, Viola da Spalla and Viola Pomposa in Theory and Practice

In the opening paragraph of his article,¹ Ulrich Drüner noted that the discussion of the violoncello piccolo, viola pomposa and their relationship to the music of J.S.Bach has continued for half a century. Many authors have proposed hypotheses about these instruments. What could be left to add? The present writer is a performer on the violoncello piccolo da spalla as well as a maker of those instruments which were called violoncello, viola da spalla, viola pomposa etc. It is likely that only a few of the earlier writers had access to practical experimentation with the instruments, but this article combines the work of researchers with a testing of theories in real concert situations.

PREVIOUS RESEARCH AND PRIMARY SOURCES

There has been little agreement regarding the precise meanings of the following terms: viola pomposa, viola da spalla and violoncello piccolo. The viola pomposa is referred to in several late-eighteenth century sources in connection with J.S.Bach. Unfortunately, no source from Bach's immediate circle or time is known to survive, nor is there any music from Bach's hand containing such a designation. Eighteenth century sources are listed below:

- Ernst Ludwig Gerber, *Historisch-Biographisches Lexikon der Tonkünstler*, 1790-92, col. 90.
- *Bach Dokumente III*, pp. 186-87. Hiller's report on Pisendel's visit to Leopold Weiß, during which he accompanied the violinist Benda with his Viola Pomposa. He gives a description of an

instrument sized like a large viola, but tuned in the cello range C-G-d-a-e'.

- *Bach Dokumente III*, pp. 349-50. Forkel's text (Göttingen, 1782) on Bach's invention of the Viola Pomposa. The tuning is that of the common violoncello with an extra e'-string, the same as given by Hiller.
- Hiller, in 1784, cites Forkel's text literally (p. 45, 'Lebensbeschreibungen berühmter Musikgelehrten und Tonkünstler'), thus they agree regarding the tuning of the instrument.
- *Bach Dokumente III*, pp.312-22. Köhler's reference to the instrument.
- Johann Nicolaus Forkel, *Musikalischer Almanach für Deutschland* (Leipzig, 1781-8); partially reprinted and trans. in Hans T. David and Arthur Mendel, eds., *The Bach Reader*, rev. ed. (New York, NY: Norton, 1966), 261-2.

Since these sources have been widely quoted I omit doing so here. According to these documents the viola pomposa was tuned in the range of a cello C-G-d-a-e'. However, many later researchers reject this possibility and assume that the instrument had to be tuned in another way - higher than was given in primary sources. Their mistrust of the sources may be attributed to the short vibrating string lengths of surviving instruments (which have been classified as violas pomposa or violoncellos piccolo), and the complete absence of any surviving original strings. The vibrating lengths of these instruments are roughly comparable to those large violas which are sometimes referred to as tenors, but have the

¹ Ulrich Drüner, 'Violoncello piccolo und Viola pomposa bei Johann Sebastian Bach Zu Fragen von Identität und Spielweise dieser Instrumente', *Bach-Jahrbuch* vol 73 (1987), pp.85-112.

normal viola tuning c-g-d'-a', an octave higher than violoncellos. Some scholars accept the tunings found in historical sources, other reject them and consider the sources to be erroneous. There is also a myth about Bach's invention of the viola pomposa, which recurs from the early nineteenth century until the present, despite substantially documented refutations.

GENERAL OVERVIEW OF PAST STUDIES

The following quotations show the views of earlier authors.

In 1834, Georges Kastner² accepted the late-eighteenth century myth about Bach's creation of the viola pomposa. He assumed that it was tuned in the cello range but played like a viola, as explained by eighteenth-century writers, and that it was closely related to the violoncello at least in terms of its musical function.

VIOLA POMPOSA - This instrument was invented by the famous Johann Sebastian Bach. It was taller and higher than the ordinary viola, but it was held it in the same position as the viola; it had a fifth string in addition to the four strings of the viola, tuned to E, which was also called the fifth. As the violoncello was being perfected little by little and the artists improving there day by day, the viola pomposa was all the more easily forgotten since it was heavy, and thus, inconvenient to manipulate.³

Kastner also gives interesting information about the viola da spalla, and the da spalla tradition in nineteenth-century France.

VIOLA DA SPALLA (shoulder viola) There is no information on the way that this instrument was

tuned; only that it was quite sought after and that it was very often used for accompaniment, because of its piercing tone. It was suspended from the right shoulder with a ribbon, which gave the instrument its name. It is to be presumed that the viola da spalla was an approximate equivalent to our current violoncello, because one still finds village musicians who suspend the violoncello from the right shoulder with a strap, whereas our artists hold it between the knees.⁴

So Kastner presumed the viola da spalla to be 'an approximate equivalent' to the violoncello, which in current French practice was suspended from the right shoulder. This contrasts with Leopold Mozart's statement (1756) that 'In our days also the violoncello is kept between the legs.'⁵ If Kastner and Mozart are both correct, the violoncello was not always held between the legs, and the term violoncello did not imply a particular playing position.

An encyclopedia of 1844 lists both viola da spalla and viola pomposa. The invention of the latter is again attributed to J.S.Bach, but the practicality of its tuning is not discussed. This suggests that such instruments were probably known for popular music-making as reported by Kastner, if not in professional circles, and that octave-transposing strings were probably available:

...the shoulder viola, while corresponding to the tenor viola is so named because its dimension forced it to be placed on the shoulder while being fixed to the chest by the means of a belt. There was also a viola pomposa, whose invention was attributed to J.S.Bach; it was tuned in fifth like violoncello, with a fifth string above.⁶

Despite the fact that Bach did not explicitly indicate *violoncello* in his basso continuo parts, it is generally

² Patricia Jovanna Woodward, 'Jean-Georges Kastner's *Traité Général D'instrumentation*: a Translation and Commentary', Thesis Prepared for the Degree of Master Of Music (University of North Texas, May 2003).

³ Kastner, *Traité*, p.66: LA VIOLA POMPOSA - Cet instrument fut inventé par le célèbre Seb. BACH. Il était plus grand et plus haut que la viole ordinaire et pourtant on le tenait dans la même position; outre les quatre cordes de la viole, il en avait encore une cinquième accordée en Mi, et qu'on appelait aussi la quinte. Le violoncelle s'étant peu à peu perfectionné et les artistes y gagnant de jour en jour, on oublie la viola pomposa d'autant plus facilement qu'elle était lourde et par cela même incommode à manier. (translation by Woodward, op. cit.)

⁴ Kastner, *Traité*, p.72-73: VIOLA DI SPALA (viole d'épaule) On ne trouve nulle part la manière dont on accordait cet instrument; on raconte seulement qu'il était très recherché et qu'on s'en servait fort souvent pour accompagner, à cause de son ton perçant. On le suspendait avec un ruban à l'épaule droite, ce qui lui a fait donner son nom. Il est à présumer que la viola di spala était à peu près notre violoncelle actuel, car on trouve encore des musiciens de village qui suspendent le violoncelle à l'épaule droite avec une courroie, tandis que nos artistes le tiennent entre les genoux.

⁵ Leopold Mozart, *Versuch einer gründlichen Violinschule*, (Johann Jacob Lotter; Augsburg, 1756), p. xxii: 'Heut zu Tage wird auch das Violoncell zwischen die Beine genommen.'

⁶ *Encyclopédie des gens du monde: répertoire universel des sciences, des lettres et des arts;...* (Librairie de Treuttel et Würtz; Paris, 1844), p. 625: '... la viole d'épaule, répondant à la viole ténor et ainsi nommée parce que sa dimension forçait à la placer sur l'épaule en la retenant fixée à la poitrine au moyen d'un ruban... Il y a eu aussi une viola pomposa, dont l'invention est attribuée à Jean-Sébastien Bach; elle s'accordait en quinte comme le violoncelle, avec une cinquième corde à l'aigu.'

assumed that by *Basso Continuo* he meant a violoncello combined with a keyboard instrument.

Like J. Rousseau, J.-R. A. Texier makes a link between the viola da spalla and basse-de-violon.

Basse-de-violon. Ancient instrument which was also called a viola da spalla, because it was suspended at the shoulder by means of a belt. It served to accompany the voice.⁷

Charles Sanford Terry writes:

Bach's violoncello was normally a continuo instrument. For obbligato purposes he preferred the violoncello piccolo...⁸

Terry was one of several twentieth-century scholars who feel there is insufficient evidence to establish that Bach invented the viola pomposa. When discussing the violoncello piccolo he writes (pp.135-136):

Bach certainly regretted the absence of an instrument of bass quality adequate for solo *obbligati*. The violoncellist had not developed the necessary technique... But, as Dr. Kinsky observes, Bach's association with the instrument is mentioned by no writer during his lifetime. Moreover, its identification and quality are confused by nearly contemporary writers, who, as is probable, miscall it 'viola pomposa'. ...Bach's so-called 'viola pomposa' was designed to make good the deficiencies of a *bass* instrument, particularly in rapid and high-pitched passages. To that end it had the violoncello stringing, with an additional fifth string sounding *e'*.

Terry questions the existence of an instrument 'so named and strung' because Hiller did not describe the viola pomposa as a new instrument in his report of Franz Benda's visit to Dresden (just before Lent 1738), and because Bach never used the term 'viola pomposa' in his scores. Unfortunately Terry was misled by Galpin's 1931 article (see below) and adopted his doubts of the correctness of late-eighteenth century writers regarding the tuning of the viola pomposa, at least for the pieces by Telemann, Pisendel and Lidarti. Extant examples of viola-violin range pomposas are listed by Terry (p.137) as follows [numbering is added]:

1. The Bach Museum at Eisenach exhibits one (No. 56), made 'Mitte 18. Jahr.', with the following dimensions: total length about 30 inches (75cm.), length of body about 18 inches (45.5cm), upper breadth about 8¼ inches (21.5cm), lower breadth

about 10¼ inches (26cm), and the depth of ribs about 3 inches (8cm).

2. Another example is in the Brussels collection (Allemagne, 1445). It was made by Hoffmann himself. Its dimensions accord closely with those of the Eisenach specimen: total length 31½ inches (80cm), maximum width about 10½ inches (27cm), depth of ribs about 3 inches (75mm).
3. Two examples, also by Hoffmann, are in the Heyer Collection at Leipzig. One is dated '1732': total length about 30½ inches, body length about 18 inches, and depth of ribs about 3½ inches.
4. The other is dated '1741'.
5. Dr. Kinsky instances another example, also by Hoffmann, dated 1732, and at present in the possession of Herr Albin Wilfer, violin-maker, Leipzig, who claims that it can bear the *c, g, d, a, e'* tuning alleged by Gerber and Forkel.

These are the instruments which the present writer agrees with Drüner, Smith, Smit and others who say they are tuned in the cello range which should be called violas da spalla or violoncellos piccolo. Terry obviously did not agree with Wilfer that instruments like No.5 above can be tuned as a violoncello – but why? The reason is the strings. It would be interesting to discover what sort of strings were used by Wilfer, and why apparently neither Closson nor Galpin had access to those strings. It is not improbable that adequate strings were available, but there are so many factors involved in appreciation of a novelty that it is impossible to deduct what exactly caused their rejection. Thus, for Terry a viola pomposa was an instrument sized between viola and violoncello, it could be played on the arm and it was tuned an octave above the tuning given in eighteenth-century sources; a violoncello on the other hand was wholly different from a viola pomposa, being '10 inches longer than the smaller instrument, some 7 inches longer from nut to bridge, and about 1 inch thicker in rib-depth'.

Terry assumes that an 'authentic viola pomposa varied in total length from about 29½ inches to 31½ inches' (c75-80cm) (p.137). He deduced that Bach's violoncello piccolo must have been at least 10 inches longer, that is approximately 39½–41½ inches long (c100-105cm).

Manifestly such an instrument could only have been

⁷ Jacques-Rémi A. Texier, *Dictionnaire d'orfèvrerie, de gravure et de ciselure chrétiennes* (3. Encycl. théol., tom.27), 1857. p.170: 'Basse-de-violon (inst.de.mus.). Ancien instrument qui portait aussi le nom de viole d'épaule, parce qu'on le suspendait à l'épaule droite au moyen d'un ruban. Il servait à accompagner la voix.'

⁸ Charles Sanford Terry, *Bach's Orchestra*, (Oxford University Press; London, 1932), p.124.

played between the knees. Equally certainly, its lower strings can have had little sonority. It is, therefore, not surprising that in the nine movements Bach wrote for the violoncello piccolo the lowest string is needed in only four (cantatas Nos, 41, 68, 115, 175).

We can disagree with both these assertions: ascribing the instrument to a *da gamba* position, and that the lower strings had little sonority. That a violoncello of c100cm can be held on the arm may be seen in several pictures (see below). However, practical experiments show that Bach solos, even the relatively simple ones in cantatas, are not playable on an instrument with a string-length longer than those of Hoffmann-type instruments (c43cm), and in any case, not using the diatonic fingering given by Bismantova in 1694. Analysing the notation and performance materials of several cantatas, Terry correctly concludes that the violoncello piccolo parts in cantatas Nos. 41, 49 and 85 notated in the treble G-clef were played by the first violin rather than by a violoncellist. The same applies to cantata No.6, where the piccolo part was first written in the first violin part, and only later given to the viola. Terry nonetheless assumes that the players would have to play the violoncello vertically: 'Both players, however, would be more inconvenienced than a violoncellist by the 'à gamba' position.' (p.139) It is the present author's opinion that we should not exclude *da gamba* as one of the possibilities, since today we have violinists who mastered equally well both playing postures, but Bach's musical evidence talks in favour of *da spalla* approach to playing on instruments of Hoffmann's type.

On the basis of erroneous practical experiments reported by Galpin, Terry denied that these instruments could be violoncellos piccolo. Galpin bases his conclusions largely on the following experience (p.356):

Meanwhile M.Closson, the Curator of the Museum of the Royal Conservatoire de Musique at Brussels, has been experimenting with the large viola by Hoffmann in that collection (No. 1445, labeled by the late V.Mahillon as a viola pomposa).

The length of the vibrating strings from bridge to nut is on this instrument 17¼ in. (45cm.), the greatest depth of the ribs is 3 inches (75mm.). On stringing and tuning it as a violoncello with an additional e'-string he found it lost all sonority; on stringing and tuning it a whole octave higher (like the violino pomposo) he had the unpleasant experience of continually breaking the little e"-string, which, owing to the vibrating length, would not stand above e", as was to be expected.⁹

This passage needs comment because Closson's

problem is identical to the problem I encountered with my first piccolo (that is, viola pomposa = small viola da spalla, violoncello piccolo) - the strings. For the first of four instruments I experimented with strings on a large student-grade viola, whose bridge I placed closer to the tail-piece in order to obtain the necessary string-length, 42.8-43cm (not 45cm as incorrectly reported by Galpin in the quotation above). These experiments suggested that Closson tried common cello strings, or something similar. Predictably, these would not work because they are too light for a string-length of c43cm. These small instruments are definitely not optimized to match the physical characteristics of strings including the range of tensions within which they work effectively, and their inharmonicity. Consequently, the acceptable range of use is very narrow for common strings. This conundrum needs a solution. Of the many string makers I contacted, only three found effective solutions, and this only after a discouraging number of unsuccessful trials. Some string makers declined even to try, believing such a string was physically impossible and denying the existence of instruments that required it in the past. If Closson's contemporary stringmakers thought such strings were inconceivable, he would have had no access to working strings. This impelled him to conclude that the instrument was tuned F-c-g-d'-a', in contradiction to the eighteenth-century evidence. In addition, Closson was skeptical about the possibility of playing such an instrument on the arm like a modern viola (p.356):

His friend, M.Jadot - the talented viola player - pronounced also that the instrument could not have been held artistically on the arm... he preferred playing it between the knees.

Consequently Galpin assumed that the instrument can be tuned neither to C-G-d-a-e' nor to Closson's F-c-g-d'-a'. He criticised Mendel (1870-83), Sachs (1913) and Rielmann (1929) for identifying this type of instrument with the violoncello piccolo:

Mendel in his *M.-Conversations Lexikon* (1870-83) treats the viola pomposa as a 'Bass Viola', tuned e'adGC, and later writers have either avoided the subject or taken for granted that the instrument was identical with the violoncello piccolo as, for instance, Curt Sachs in his *Real Lexikon* (1913) and *Handbuch der Musikinstrumentenkunde* (1920); whilst the editor of Rielmann's *Musik Lexikon* (1929) boldly places the misleading 'Viola Pomposa' under the heading 'Violoncello Piccolo' and states that Bach's Sixth Violoncello Suite was really written for this

⁹ Francis Galpin, 'Viola Pomposa & Violoncello Piccolo', *Music & Letters*, Vol.XII (1931), p.354-365.

unfortunate instrument, tuned as above. (pp.355-6)

However, Closson's F-string did not vibrate satisfactorily at that pitch, and Galpin came up with a completely new tuning and a new interpretation of the term, on the basis of the results of Closson's misleading experiments and on his analysis of compositions for *Viola pomposa o violino* by Telemann, Lidarti and Graun.¹⁰ He concluded that the instrument was tuned d-g-d'-g'-c", admitting that the viola pomposa could have been played on the arm without the chin-support, albeit awkwardly, and agreed with Koch, who attributed the disappearance of the viola pomposa to its playing posture:

The question, therefore, has been raised whether so large an instrument could have been played 'on the arm', yet, as Dr.Kinsky informs us, the Fagottegeige, tuned an octave below the viola, was so played and an arm-violoncello is not known. But we should also recollect that, up to the middle of the eighteenth century and later still, these instruments, as other bowed instruments, were held really 'on the arm', and not 'under the chin'... Players, however, even in Bach's day, evidently found it awkward, and Koch, as we have seen, attributed the disappearance of the viola pomposa to this fact; but it could also be held 'in front of the breast' - to modern players a still more difficult undertaking. (p.362)

Historically-evidenced tuning requires particular strings, but many contemporary string-makers still consider them to be impractical to make. Together with the views of Galpin, Closson and Terry described above, this helps to explain why such tuning is commonly rejected. In the second quarter of the twentieth century Galpin had no alternative but to separate the viola pomposa, violoncello piccolo and *violoncello a cinq cordes* into three different size categories: the total length of a viola pomposa was considered to be 75-80cm, violoncello piccolo 99-105cm, and *violoncello a cinq cordes* 124cm. As an example of a five-stringed cello Galpin cites a Stradivari instrument dated 1684 (p.364.)).

This division is artificial and contrary to numerous sources. As the viola pomposa was tuned in the cello range, the term might have been used as a joke by J.S.Bach, but in scores it was invariably called a violoncello piccolo. Bach's violoncello piccolo / viola pomposa is an instrument of a type made by Hoffmann, tuned in the cello range, as referred to by Forkel and Gerber, and most likely identical with Speer's fagottegeige. Fagottegeige, on the other hand, is yet another colloquial expression for instruments like the viola pomposa which have a particular sound. The lower register of the instruments I made resemble the sound of a bassoon, regardless the type of strings used. Viola da spalla is probably one of several professional jargon terms used by the Italians in the seventeenth and eighteenth centuries, but violoncello was the most common and formal term used by publishers and composers.

Arthur Mendel writes that Adlung: '...in his *Anleitung zur Musikalisches Gelahrheit* (1758, pp.690ff), tells the story as he claims it was told him by Bach'.¹¹ While this concerns the meeting of Louis Marchand with J.S.Bach at Dresden in 1717, the whole anecdote suggests that the young organist, composer and organ-builder Jakob Adlung, at that time only 18 years old, might have met Bach when he wrote: 'Violoncello is also called Viola di Spala'.¹²

The idea that Bach's invented the viola pomposa survives into the twentieth century, for example Theodore Finney writes that the instrument was invented rather than adopted by Bach.¹³

Similar trends are reflected in the literature intended for general public. Such are the articles by Merzanoff and Dolejsi. Mertzanzoff associates viola da spalla with a large viola 'suspended from a strap over the right shoulder', hence, tuned in the viola range.¹⁴ In the same publication Robert Dolejsi writes that the Viola di Fagotto had various tuning systems and sizes, which sounds credible, but also that one of the smaller members was possibly the forerunner of the viola d'amore, which is now known

¹⁰ The three surviving compositions for viola pomposa are written in the violin G-clef. This could be transposed for an instrument tuned C-G-d-a-e', but some undesirable harmonic inversions would result. Additionally, an instrument known as quinton, tuned c-g-d-a'-e", 'a five-stringed compromise between the violin and the viola, achieved some degree of popularity during the eighteenth century' (Stowell, *The Early Violin and Viola: A Practical Guide*, (Cambridge University Press, 2001), p.177.) If Lidarti or Telemann wanted a viola pomposa tuned an octave higher, they could have used one of these.

¹¹ Arthur Mendel, 'More for the Bach Reader', *The Musical Quarterly*, Vol.XXXVI, No.4, October 1950, pp.485-510 at p.503.

¹² Jakob Adlung, *Anleitung zu der musikalischen Gelahrtheit*, 1758, (Erfurt, 2nd edition, 1783; facsimile Kassel, 1953), p.599: 'Violoncello heiß auch Viola di Spala'.

¹³ Theodore M. Finney, *A History of Music*, (New York, 1935) . Reprint 1947, p.354, Footnote 9.

¹⁴ C. E. Mertzanzoff, 'Large Violas', *Violins & Violinists*, December 1943.

to be false.¹⁵ He also suggests that the viola da spalla was slightly smaller than the viola pomposa and that the viola pomposa has a total length of 30½ inches (77.5cm). The source of his extremely questionable information is unclear.

Wolf describes both viola da spalla and viola pomposa independently from previous research and documents and with surprising details:¹⁶

Viola da spalla - The large-sized viol of lower tenor range, having six strings. The name derives from the fact that it was played upon the knee or suspended across the chest, the head of the instrument being placed over the left shoulder. Smaller than the viola da gamba, it ultimately developed into the viola.

Viola pomposa - a bowed-string musical instrument of Europe; the name given by Bach to a large viol having five strings. It has been entirely obsolete for more than a century, although compositions for it, said to have been written by Bach, are extant.

The story of Bach's invention, or more likely his participation in the invention, of the Viola pomposa is likely to impress the minds of music-lovers for a long time to come. In Bodky's *Interpretation of Bach's Keyboard Works*, we read (p.32):

We know well what a keen observer of all advances in the construction of musical instruments Bach was; indeed, it is reported that he consulted with instrument makers on problems of the viola pomposa and the lute-clavecymbal.¹⁷

Confusion arises from conservative approaches to playing large, high-held instruments and from the lack of practical experimentation with them. Schweitzer offered a practical 'solution' to these seemingly unsurmountable problems:

The viola pomposa and the violoncello piccolo can easily be dispensed with. Bach employed them to bring out the bass more clearly. This can be done in other ways; it is partly secured, indeed, by the perfection to which the contrabass has now been brought. The violoncello piccolo solos can be played by any good cellist on his own instrument; when necessary they can be divided between the cello and the viola.¹⁸

Forsyth is considerably more cautious in her wording (p.302):

The Viola Pomposa was a small Cello to which a fifth top-string, or chanterelle, had been added. It is probably the 'Violoncello Piccolo' of Bach's 6th Solo for the Cello, and is said to have been either invented or suggested by him.¹⁹

The work which makes a considerable advance in our understanding of the issue is that of Dreyfus. He writes that the viola pomposa is tuned in the cello range, and follows Schrammek in describing the violoncello piccolo and the viola da spalla as related to each other, though distinct in their morphology. Both Schrammek and Dreyfus deduced that the viola pomposa must have been played more or less on the shoulder, probably with a chinrest, and therefore must have had considerably lower ribs than a violoncello:

As far as organology is concerned, Schrammek maintains, there can be no doubt that the two instruments, although related to each other, are wholly distinct. While both are tuned like a cello with an added fifth string ascending to e', the height of the ribs of the viola pomposa must be considerably less (around 3 to 4cm) so that it can be held on the arm.²⁰

However, this is not supported by practical experimentation with the high-sided instruments of the Hoffmann type. The height of their ribs does not impede holding the instrument on the arm, on the contrary, it is helpful. There are numerous ways of holding such an instrument on the arm, although only a few are convincing. Dreyfus accepts Bach's participation in the development of the viola pomposa, though he limits it to the addition of the fifth string:

Assuming that Bach indeed invented this viola pomposa, his achievement was to have added a fifth string to an instrument of this type that was already known: the so called viola da spalla or shoulder viola, which was also tuned like a cello.

This is not impossible because Drüner's instruments 2 and 6 (see table 1) are essentially large tenor violas with an extra e'-string, presumably, in accordance with Dreyfus' hypothesis, added by Bach to instruments with 3-4cm high ribs. However, there is another possibility: Bach might have suggested

¹⁵ Robert Dolejsi, 'What Size Viola? Viola Experimenta', *Violins and Violinists*, December 1943.

¹⁶ Martin L. Wolf, *Dictionary of the Arts*, (Philosophical Library; New York, 1951), pp.761-2.

¹⁷ Erwin Bodky, *The Interpretation of Bach's Keyboard Works*, (Harvard University Press, 1960).

¹⁸ Albert Schweitzer, *J. S. Bach*, (Dover Publications, 1967), p.431.

¹⁹ Cecil Forsyth, *Orchestration*, (London, 1914; 2nd edition London, 1935; here cited from Dover Publications, 1982).

²⁰ Laurence Dreyfus, *Bach's Continuo Group, Players and Practices in his Vocal Works*, (Harvard University Press, 1987), pp.172-3.

mounting ordinary tenor violas with octave-transposing (double-wound²¹) strings which would enable them to sound an octave lower.²² If, according to Dreyfus, the violoncello piccolo is distinguished from the viola pomposa by its higher ribs, then the Hoffmann instruments in Leipzig and Brussels are violoncellos piccolo and not violas pomposa. Dreyfus therefore concludes that Bach's solos for violoncello piccolo were played on the arm, but:

...Bach actually intended his solo parts labeled violoncello piccolo to be played on the viola pomposa. (p.173)

And:

The anomalous continuo part for violoncello piccolo dating from Bach's later Leipzig period ... may therefore have been played by the viola pomposa. The part could have been shared with an organist, since the viola pomposa player could stand next to him and still see the music. (p.174)

Experiments have shown that, despite Dreyfus' doubts, instruments with ribs higher than 3-4cm are quite convenient for playing on the arm or across the shoulder.²³ Nevertheless, while Hoffmann's violoncellos piccolo are not wider or longer than ordinary tenor violas, they have double the volume of air in their bodies due to their higher ribs (>7cm), which is advantageous for the tuning an octave lower. Dreyfus also adds the further interpretation:

It may seem odd that any part called "violoncello" should be played on an arm-held instrument *da braccio*; yet Walther's description of the shoulder viola, the *viola da spalla*, occurs under the entry *Violoncello*. Evidently he considered the low range of the instrument a more important feature than the position in which it was held. (p.258, endnote 86)

We should conclude from the contradictory information reported above that we are trying to draw a distinction where there was never any clear line, and that this is why we are so uncomfortable with the terminology and concepts of instruments. According to the primary sources the viola pomposa is an instrument tuned in the cello range and held on the arm; it requires double-wound strings in order to function satisfactorily. Viola pomposa is probably an

informal name for the violoncello piccolo. A viola da spalla is an instrument tuned in the same range, but of any size between approximately 70-124cm or even larger; it does not necessarily have double-wound strings. A fagottegeige is an instrument held on the arm, tuned like a violoncello, and probably mounted with double-wound strings to which it owes its bassoon-like sound; morphologically it is closely related to the violin family. Baroque composers, including Bach, did not concern themselves with how instruments were held, or what size they were. The acoustic and symbolic properties of instruments and their tessitura were given absolute priority over the way they were handled by performers, which was left up to the personal preferences of the players.

Viola pomposa and fagottegeige have yet another colloquial term, albeit much less known; the *viola da collo*. According to Eleanor Selfridge-Field:

The contradictions [in assigning parts to particular instruments] that can occur are illustrated by the existence of multiple materials for Palavicino's famous opera *La Gerusalemme Liberata*, which was given in Venice near the end of 1687 and in Dresden early in 1688. ... Of the five string parts preserved in Dresden (Saxon State Library MS 1813-F-2), the three highest were clearly made in Dresden, but the two lower, emended here and there, are equally clearly Venetian in origin. In this group the lower instrument is designated a *viola da collo* [my italics]; its lower note is E. Although its exact identity is open to question, it undoubtedly belonged to that class of unfretted bowed instruments that played nimbly and in a generally higher range than the violone.²⁴

Viola da collo (neck-violin) is an Italian term for a bass instrument held against the player's neck must have been one of many flavours of *viola da spalla*, violoncello, fagottegeige. Most likely, the term was not written out in the player's part by Palavicino himself, therefore the creation of the term-joke is out of performer's wit, drollery of the moment.

The evidence and analysis collected so far suggests that much of the 'cello' repertory, from the second half of the seventeenth century until the first half of the eighteenth century can be effectively performed by violists or violinists on a relatively large, arm-

²¹ The practice of double-winding might have been known in the seventeenth century, although I know of no reference to it before Tolbeque, 1903. See Patrizio Barbieri, 'Roman and Neapolitan Gut Strings 1550-1950', *GSJ* 59, pp. 147-182 at p.176, Table 12.

²² In this case, instruments with the double volume of air have an undeniable acoustic advantage over "pompose" tenor-violas with its ribs conceived for a higher pitch.

²³ It is notoriously difficult to describe this playing posture unambiguously. Refer to the figures of this article.

²⁴ Eleanor Selfridge-Field, *Venetian Instrumental Music from Gabrieli to Vivaldi*, 3rd edition (Dover publications, 1994), p.298.

held instrument. The appropriate size of instrument is chosen by the players according to the technical demands of the piece to be performed. Although Italian archives give the names of those who played on arm-held bass instruments, the repertory they played can be performed equally well on much larger instruments than Bach's violoncello piccolo.²⁵ Selfridge-Field gives the names of some of these players in her Appendix 'Maestri de' Concerti and instrumentalists. Basilica of San Marco':

- Rossi, Lorenzo, viola da basso, 6.7.1648, paid 15 ducats, left in 1675
- Valletta, Francesco detto Serina, Viola da braccio, 23.04.1685, departed after 1708, paid 15 ducats.
- Caldara, Antonio, viola da spalla, violoncino and contralto, 29.04.1688...
- Tonini, Bernardo(?), cello 19.01.1689, viola da spalla 11.1.1692, violone 19.1.1689
- Moro, Francesco, viola da spalla, 2.10.1689, paid 15 ducats, left after 1694
- Trachiero, violoncino 15.2.1694
- Tanesche, Gasparo viola da braccio, 15.7.1720 paid 25 ducats, left after 1729
- Trevisan, Francesco, viola da braccio, 15.7.1720 (p.335-346)

It is important to remember that 'viola da braccio' in Italy generally stood for any member of the violin family, but in Venice after 1620, it meant an alto, tenor or bass violin.²⁶ A *viola da* or *di spalla*, according to Selfridge-Field was a shoulder violin or a smaller-than-normal cello with an optional fifth string. She seems uncertain as to whether it was held horizontally or vertically: 'Its name may have derived from its being rested on the shoulder or hung by a shoulder strap in processions.' (p.355)

Kory's article on the Tenor Violin²⁷ describes what is essentially a bass-violin smaller than a cello, which can be played either on the shoulder, or against the chest, or da gamba. However, a fundamental aspect of Kory's work has been challenged by Segerman:²⁸

There is a major problem of terminology in Agnes Kory's article... It seems rather inappropriate for a name that almost always applied to a different

instrument at the time, to be applied to an instrument which almost always had a different name. Kory's tenor violin was usually called a bass violin and was used as such. (p.181)

This instrument, held with the back against the right shoulder, was called 'viola da spalla' in the eighteenth century. It had four or six strings. With six strings it was tuned like a bass viol, presumably for playing chords in continuo more easily. Lewis's bass violin mentioned in the Talbot MS (c.1694) could have been a version of it. (p.182)

The careful choice of words by Ulrich Prinz on the subject of viola pomposa and violoncello piccolo reflects the condition of the contemporary scholarship on this subject:

Viola pomposa. A string instrument resembling a large viola, played on the arm. At least six documents dating from 1766-90 refer to J. S. Bach as the inventor of the viola pomposa... Five-string instruments by Bach's friend J. C. Hoffmann have survived, two of them dated 1732 and 1741 (in the Musikinstrumenten-Museum, Leipzig) and one undated (in the Musée Instrumental, Brussels). Equating the viola pomposa with the VIOLONCELLO PICCOLO has given rise to many misunderstandings and controversies, especially as the latter is named in the Bach sources, while the viola pomposa is not.²⁹

Dilworth gives an illustration of a five-stringed violoncello piccolo attributed to Antonino and Hieronimus Amati, Cremona c1615-20, and writes that the violoncello piccolo and the five-stringed cello are possibly the same instrument. A five-stringed instrument needs to be smaller than an ordinary violoncello in order to bear an e'-string, but there is also a possibility of a four-stringed violoncello piccolo (omitting the e'-string). Instruments similar to the Amatis illustrated by Dilworth were also made by British makers:

This [the Amati violoncello piccolo – D.B.] may have been the prototype for other such instruments made elsewhere - notably the extant English examples by William Baker (dated 1682), Barak Norman... and Edmund Aireton (as late as 1776). All that can be said with certainty about the role of such instruments is

²⁵ Archival documents, especially lists of payments to instrumentalists, can be frustratingly vague and even misleading when scribes and notaries who had no particular knowledge of music or interest in the details of organology entered incorrect names for instruments in their account books or arbitrarily chose the name of an instrument simply to indicate that instrumentalists were paid. See the article at http://sscm-jscm.press.uiuc.edu/jscm/v8/nol/Kurtzman_I.html

²⁶ Selfridge-Field, op.cit., p.355.

²⁷ Agnes Kory, 'A Wider Role for the Tenor Violin?' *Galpin Society Journal* XLVII, 1994, pp. 123-153.

²⁸ Ephraim Segerman, 'The Name "Tenor Violin"', *Galpin Society Journal* XLVIII, 1995, pp.181-187.

²⁹ In Malcolm Boyd (editor), John Butt (consultant editor), *J.S. Bach*, (Oxford University Press, 1999), p.492.

that they seem to fit the requirements of Bach's sixth cello suite (BWV1012).³⁰

The *New Grove* entry for *viola da spalla* suggests, based on Mattheson and Majer, that in Bach's circle the violoncello, and certainly the violoncello piccolo, which depending on musical context may be interchangeable, was played primarily on the shoulder, and could also be held between the legs:

Johann Mattheson followed Tevo's usage [1706], but added considerable details - including the playing position and the use of a strap to keep the instrument in place - in his account of the *viola da spalla*, which he described along with the violoncello and *bassa viola* as small bass violin. J.F.B.C.Majer, *Museum Musicum* (1732), added that the *viola da spalla*, taken now as an equivalent of the cello, may also be held between the legs.³¹

Following this, we read that the *viola di fagotto* is:

A bowed string instrument of south German/Austrian origin, in use from 1670-1782. It was probably the bass equivalent of the treble *schalmei geige* ... and most likely was also the *viola piffero* encountered in instrumental pieces by J.H.Schmelzer. Its gut strings were wound with silver or copper wire, thereby producing a buzzing sound like a bassoon, an effect most probably caused by the strings striking the fingerboard when bowed. Leopold Mozart wrote that some people inaccurately called the instrument *Handbassel* (apparently the same as *Viola da spalla*).³²

This needs comment because we have seen that the reconstructed Hoffmann type of *viola pomposa* / *violoncello piccolo* strongly resembles a bassoon in the lower register without any buzzing resulting from the wire striking the fingerboard, despite the description of the instrument given by Daniel Speer in 1687:³³

welche ... hernach im Streichen schnurren, und werden solche Violen, um dieser schnurrenden Saiten halber, *Violae di Fagotto* tituliret.

which may be translated approximately as those [instruments] which *schnurren* [purred/buzzed] when bowed, were called *Violae di Fagotto* because of the strings.

The fact that such an instrument resembles the bassoon so evidently suggests to me that the terms *viola di fagotto* and *fagottegeige* were colloquial names for a smaller *Viola da spalla* or *violoncello* and *violoncello piccolo*. It also suggests that the many seventeenth century Italian publications which call for either *violoncello* or *bassoon*, may call, in effect, for a small shoulder- or leg-held *violoncello* of suitable size: somewhat larger for bigger ensembles and simple parts, *tutti* and *continuo*, or somewhat smaller for smaller ensembles and more elaborate solo parts or *continuo* in chamber settings. This requires further research.

New Grove very conservatively describes the *viola pomposa* as: 'A five-string viola, tuned either *e-g-d'-a'-e''* i.e. like a regular viola with an additional *e''*-string, or possible *d-g-d'-g'-c''* as Galpin suggested.³⁴ The attribution of the invention of the instrument to J.S.Bach is acknowledged to be erroneous, and the *viola pomposa* and the *violoncello piccolo* which 'J.Ch.Hoffmann of Leipzig made for Bach' are held to be wholly distinct. The following surviving music for the *viola pomposa* is listed, although it needs to be re-assessed whether the *viola pomposa* parts in these pieces are written out in octave transposition, as is the case in several *violoncello piccolo* parts by J.S.Bach.

- two duets for flute and *viola pomposa* or violin by G.P.Telemann (from *Der getreue Music-Meister*)
- double concerto by J.G.Graun
- two *sonate da camera* by J.G.Janitsch
- solo sonata with *continuo* by C.J.Lidarti.

Stowell takes account of recent studies in considering that the *viola da spalla* was 'a small cello with four or six strings and held across the player's chest by a strap over the shoulder' and the *viola da fagotto* was 'a viola with the tuning range of a cello but played on the arm', but for the *viola pomposa* he relies on Galpin: 'a five-stringed instrument used c.1725-70 and tuned either *c-g-d¹-a¹-e²* or possibly *d-g-d¹-g¹-c²*, as Galpin suggested.'³⁵

The idea of a *viola pomposa* tuned in the cello range is once again resurrected by Boyd:

³⁰ John Dilworth in Robin Stowell (ed.), *The Cambridge Companion to the Cello*, (Cambridge University Press, 1999), p.13.

³¹ Gregory Barnett in *The New Grove Dictionary of Music & Musicians*, (2001), p.700.

³² Howard M. Brown and Stephen Bonta, *ibid.*

³³ G.D.Speer, *Grundrichtiger ... Unterricht der musicalischen Kunst*, Ulm 1687, p. 91; here quoted from U.Drüner, *op.cit.* p. 86.

³⁴ Howard M. Brown in *The New Grove Dictionary of Music & Musicians*, (2001), p.701.

³⁵ Robin Stowell, *The Early Violin and Viola*, *op.cit.*, p.177.

Spitta (ii, 100) states that this suite was composed for the viola pomposa ... and instrument said by Franz Benda to have been invented by Bach. Benda described it as somewhat larger than a viola, tuned like a cello with an extra e' string, and fitted with a supporting strap so that it could be held 'in front of the chest' and 'on the arm'.³⁶

Boyd hypothesises that if 'Bach did invent the instrument it was after he wrote the cello suites', but he does not cite any instance when Bach or another composer first wrote some music and subsequently sought suitable instruments.

Late twentieth-century research has not resolved all these issues. For example, Little and Jenne write:

As for Suite VI (BWV 1012), scholars are not certain whether it was intended for the 'viola pomposo', the violoncello piccolo, or some other similar instrument. (p.107)

and:

The sixth cello suite (BWV 1012) is problematic because scholars are still debating what instrument Bach intended it to be performed on. Instrument specialist Klaus Marx believes that it could have been either a violoncello piccolo or a normal-sized cello with an extra e' string.³⁷ (p.59)

These authors may have adopted Marx's mis-interpretation or possibly a misunderstanding of gut's physical limits, because it is well known that a cello of normal size cannot hold an extra e'-string. There is also an inherent acoustic problem with the e'-string, which is always thin even on large violoncellos piccolo, with the result that the sound is too harsh in comparison with the lower strings. In contrast, the problem of the e'-string is effectively solved on the Hoffmann type of instrument, where the string length is c43cm and the gauge of the e'-string is c1.04-1.08mm - nearly twice the thickness of strings used on conventional violoncellos piccolo.

What Marx (referred to by Little and Jenne, above) had written in the previous edition of *Grove* was that there are 'good reasons not to confuse it [viola pomposa] with the violoncello piccolo', but without

specifying what these reasons are and adding:

Whether the five-string cello for which Bach wrote his sixth unaccompanied suite (BWV 1012) was this same violoncello piccolo or simply a normal-sized cello with an extra e' string is difficult to determine.³⁸

Wolff too rejects Galpin's vision of the viola pomposa, identifying it as a small bass instrument:

His [Bach's] estate catalog lists no fewer than eight harpsichords, one pedal harpsichord, two lute claviers, one spinet, two violins, a piccolo violin, three violas, a Bassetchen (viola pomposa), two cellos, a viola da gamba, and a lute.³⁹

Elson's equation of the viola pomposa with a large viola does not help to clarify matters:

He [Bach] wrote also sonatas and other works for violin, flute, or viola da gamba (large 'cello-like viol), with clavier, as well as similar pieces for violin, viola pomposa (large viola), or 'cello alone.⁴⁰

Jackson is content with Galpin's interpretation of the viola pomposa:

Viola pomposa (eighteenth c.). String instrument sometimes confused with a violoncello piccolo, but actually tuned about an 8ve above it, c-g-d'-a'-e" (in 5th) or d-g-d'-g'-c" (in 4th. It was presumably played on the arm. Telemann composed two duets for flute and viola pomposa that have incorrectly been attributed to Bach [by Galpin 1931].⁴¹

Moreover, Jackson proposes a progressive idea of the violoncello, which could have been of a smaller than the modern size:

Tenor violin (16th-eighteenth c.)... Corelli's first three concertos in his op.6 may have had a concertino consisting of two violins and a tenor violin (rather than a cello), considering the virtuosity required in the lower part. Bach sometimes called not only for a cello but for a violoncello piccolo, i.e., a tenor violin. (p.386)

One of the most complete accounts of the small bass instruments in J.S.Bach is based on a wide range of publications, most of which have been referred

³⁶ Malcolm Boyd, *Bach*, (Oxford University Press, 1983). Reprint 2001, p.95, Footnote 14.

³⁷ Meredith Little and Natalie Jenne, *Dance and the Music of J. S. Bach*, (Indiana University Press, 1991). Here quoted from the reprint of 2001.

³⁸ Klaus Marx, 'Violoncello' in *The New Grove Dictionary of Musical Instruments*, ed. Stanley Sadie (London: Macmillan, 1984).

³⁹ Christoph Wolff, *Johann Sebastian Bach: The Learned Musician*, (Oxford University Press, 2002), p.411.

⁴⁰ Arthur Elson, *The Book Of Musical Knowledge: The History, Technique, and Appreciation of Music, Together with Lives of the Great Composers, for Music-Lovers, Students and Teachers*, (Boston and New York, Houghton Mifflin Co., 1927), p.73.

⁴¹ Roland John Jackson, *Performance Practice: A Dictionary-Guide for Musicians*, (New York, London; Routledge, 2005), p.447.

to above.⁴² While he attends closely to eighteenth century documents, Drüner views the probability of Bach's contribution to the creation of the viola pomposa in a new, non-literal, sense: that is, Bach took what was available and adapted it according to his specific needs. It is unclear what adaptations could have been carried out on Bach's instruments, but it is not impossible that Bach showed inventiveness in his comments to makers, probably including to Hoffmann, which helped the latter to improve his instruments. Among the instruments whose form contributed to Bach's improved Viola pomposa Drüner cites the Fagottegeige and the Viola da spalla. Both of these were tuned in the cello range and were held on the arm. Based on reports of Speer and Mattheson, Drüner concludes that they had 'no particularly noble sound'.⁴³

What did Speer mean by the buzzing strings of the fagottgeige? In my experience, double-wound strings do not buzz unless there is a mechanical problem with them, for example the gut core may dry up or the wire winding is not tight enough. However, these strings do have a peculiar tone quality which some might describe as 'buzzing'. A viola da spalla, particularly a large one, might have had either single-wound or double-wound strings; a smaller instrument is more likely to have double-wound strings and therefore to sound like a bassoon. Drüner draws attention to the fact that a modern 'violin' and 'viola' are expected to be held on the arm, while a 'violoncello' is invariably held between the legs. This expectation, however, did not exist from the seventeenth to the first half of the eighteenth centuries. Drüner therefore suggests that the organologic names of bowed instruments include no implications about the way the instruments are to be held, but only about their morphology. Composers never seemed to concern themselves with mechanical aspects of playing; their scores never specified the sizes of instruments or the ways they should be held, and technical details of performance were left to performers.

Drüner lists 24 surviving instruments, which he classifies into three groups (see Table 1). The first

group comprises wide but low-sided violas pomposa, some of which are nearly identical to certain tenor-violas. The second group contains violoncellos piccolo suitable for music by J.S. Bach, such as the Suites and all of the violoncello piccolo parts, which are similar to violas pomposa but have considerably deeper ribs. The last group brings together violoncellos piccolo da gamba. Drüner assumes that a violoncello piccolo with a string length above 43.1cm and body length above 46cm can not be played on the arm. However, there are pictures of instruments considerably bigger than Hoffmann's being played on the shoulder. These seem to be unfit for the technical complexity of Bach's parts, in the experience of the present writer when attempting to perform the Suites on an instrument with a body length over 49cm. However, this does not exclude the possibility that some players would be able to overcome the problems posed by the excessive size of the body as well as by the extremely large stretches of the fingers of the left hand. Drüner's classification of the viola pomposa is somewhat artificial, for there is no reason to list the Nos. 3-5 separately from the violoncellos piccolo of Bach. Nos. 2 and 6 are essentially tenor-violas, though, exceptionally, with five strings. Unfortunately, it is impossible to confirm that the rib-height of Nos. 2,3 and 6 is unaltered, which is as true for other instruments in the list (see Table 1).

I have added nine instruments to those cataloged by Drüner, including some from Russian collections. The Moscow example is probably the only known six-stringed instrument which, as Segerman suggested without referring specifically to it, was most likely tuned as a viol.⁴⁴

The most recent work about the violoncello da spalla in the Italian tradition, previously discussed by Barnett (1998), is that of Wissick.⁴⁵ His work is not only musicological but is also based on practical experimentation with playing seventeenth-century north Italian repertory on a large violoncello, as can be seen some Italian pictures in Crema and Venice.⁴⁶ However, being a violoncello da gamba player Wissick does not actually perform da spalla in concerts.

⁴² Ulrich Drüner, 'Violoncello piccolo und Viola pomposa bei Johann Sebastian Bach Zu Fragen von Identität und Spielweise dieser Instrumente', *Bach-Jahrbuch* vol 73 (1987), pp.85-112. On p.85 he cites: Kinsky, Galpin, Arnold, Terry, Husmann, Borighieri, Schrammek, Prinz and Smith.

⁴³ Drüner, op.cit., p.86: '...keinen besonders edlen Klang gehabt haben'.

⁴⁴ Segerman, 'Tenor Violin', op.cit., p.182.

⁴⁵ Brent Wissick, 'The Cello Music of Antonio Bononcini: Violone, Violoncello da Spalla, and the Cello "Schools" of Bologna and Rome', *Journal of Seventeenth-Century Music* 12, no. 1 (2006); <http://www.sscm-jscm.org/jscm/v12/no1/wissick.html>. I am grateful to L.Smit for drawing my attention to this work.

⁴⁶ See Figure 10 Andrea Celesti's *The visit of papa Benedetto III to the monastery*, The church of St.Zaccaria in Venice, ca.1684, and Figure 11 *Sanctuary of Madonna delle Grazie*, Gian Giacomo Barbelli, ca.1641-43.

Smit (who played an important part in stimulating the present study and making several instruments) combined a traditional analysis of original sources with practical study of Bach's music.⁴⁷ He is one of the few players who can play these instruments. He concluded that the appropriate type of violoncello for Bach's suites is that made by Hoffmann, and that the number of unavoidable shifts is no more than average for baroque music: 'We would find that the number of unavoidable shifts of position is limited, even in Suite IV.' (p.49) This is true, but some of Smit's ideas are more questionable. As one of his arguments in support of Hoffmann's violoncello, Smit assumes that thumb technique was not used in Bach's time. This is probably correct, as there is little evidence of use of the thumb technique at Bach's time although it was used extensively later by Boccherini and Duport. Nonetheless, the thumb technique is mentioned by Corrette, in 1741 in the first cello treatise, and another source is Martin Berteau (1708-71) who:

composed violin and cello sonatas; six of the latter, first published under the pseudonym 'Sgr. Martino' in 1748, make particular use of thumb technique, chords and harmonics.⁴⁸

According to the violoncellists Hidemi Suzuki and Rainer Zipperling,⁴⁹ the occasional use of the thumb is such an obvious matter that the cellists (da gamba) would have used it without talking about it. Thus, according to Zipperling: 'the 2nd book of Barrière (f-sharp minor) 1733 and Lanzetti op.1 1736 (f-sharp minor) are NOT playable without digit. So are some gamba pieces by the way...'. Zipperling adds that if a cellist has 'big hands like mine', the thumb is needed less, though it is so comfortable to use that he considers it possible that 'musicians just used it and never talked about it'. Suzuki's hand is decisively smaller than Zipperling's. He writes:

I hardly use the thumb for Bach's suites except where I cannot reach due to my 'exceptionally small' hand. The stretchy spots are in the middle of 3rd prelude where the organ point appears, and the 2nd Bouree of the 4th suite, beginning of the second half. The rest, even with my child-size hand, I can manage without. My cellos string length is between 68 and 69cm, which is supposed to be a sort of normal. If I had not 2cm, but just a centimeter longer fingers, as so many players do including you, I would have been a happy witness that

you don't need the thumb for Bach's Suites. It is just a question of how to relax, stretch and bend.

Another argument used by Smit against the use of thumb technique and in favour of Hoffmann's type of violoncello piccolo is the following:

It is hardly likely that Bach would have kept to this upper limit when writing for his *Violoncello* for no particular reason, since he generally made use of the entire compass of instruments; for example, he uses the whole range of the violin, right up to a tenth or eleventh above the top string. (p.45)

However, neither Bach nor any of his contemporaries including Pietro Locatelli (who occasionally climbed to the highest positions of the violin, for example, in the compositions such as *Capriccio, prova dell'intonazione* from the Sonata op.6, no. 12, where Locatelli reaches b⁶ in the 22nd position), 'generally made use of the entire compass' in every piece they wrote. On the contrary, they mainly stayed within the middle range of instruments. When Bach requires high positions on the violin or the violoncello, it seems that he does it for musical reasons rather than to explore the technical, virtuosic potential of the instrument; virtuosic and richly musical content are always intermingled in his music. As for the Suites, whenever he goes up to the higher positions, he does so according to the logic of harmonic progression. This is what happens in the Suite I, Prelude, bars 37-39; in the Suite VI, Prelude, bars 19-22, 25-32, 59-69 and 70-83.

THE PROPOSITION

Consideration of the evidence and studies presented above suggests the following analysis: Viola pomposa: a colloquial term for the violoncello piccolo of a type made by Hoffmann. It is effectively a large viola; it has double the normal volume of air because the ribs are roughly twice the normal height. Due to its short vibrating string length, the C, G, and possibly d-strings must be double-wound. Such strings in combination with an unusually deep body (for a viola) and short vibrating string are responsible for the bassoon-like sound. Reflecting this, the viola pomposa is sometimes called fagottgeige. It is held across the chest.

⁴⁷ L.Smit, 'Towards a More Consistent and More Historical View of Bach's Violoncello', *Chelys* 32 (2004), pp.45-58.

⁴⁸ Julie Anne Sadie, *Companion to Baroque Music*, (Oxford University Press, 1998), p.107.

⁴⁹ Personal correspondence, 20/08/2006 and 19/08/2006.

Fagottegeige: a colloquial term for both viola pomposa and violoncello piccolo of the smallest possible size, the type made by Hoffmann. It is a bass instrument mounted with double-wound strings, which contribute into its bassoon-like sound. It is held across the chest. The type of violoncello piccolo made by Hoffmann was played on the arm or across the chest and is the type of violoncello which is suitable or expected for Bach's suites. Its double-wound strings make it sound like a bassoon. Because it is held on the arm, across the chest, the left hand position resembles that of a lute or guitar player, and the fact that the string length is greater than on other *braccio* instruments (violin, viola) does not impede the performance.

The precise form of such instruments deserves a separate article, so it will not be discussed here, except to mention that it has been a pleasure to discover how intelligently such instruments were conceived by their original makers.

New and satisfying aspects of music by J.S.Bach are revealed by the use of this instrument which was been known in Bach's circle, and for which he wrote. The response of its small body is fast and accurate. The dynamic range is greater than a large violoncello, especially at the *piano* end although, while the instrument is capable of powerful *forte*, it is not absolutely as loud as a large violoncello. A player can rapidly become accustomed to the fingering, which is almost identical to that of the violin. The right-hand technique is more challenging; it requires the avoidance of near-vertical movement for *up-* and *down-bows* in which the weight of neither the arm nor the bow are in balance with the rest of the player's movements.

REPERTORY

There are two ways to approach the repertory that is appropriate for these instruments.

1. Focus exclusively on works, which specify 'violoncello piccolo'. With this method repertory narrows to the few masterpieces by Bach - the nine cantatas BWV 6, 41, 49, 68, 85, 115, 175, 180 and 183, and the six suites for unaccompanied violoncello BWV 1007-1012.

2. The second approach is more complex, reflecting the fact that baroque performers enjoyed

considerable freedom in choosing mediums for their performance. There is a repertory which performers and musicologists can explore for whether these instruments are practical, musically convincing and historically justifiable (see Wissick). For example, Giuseppe Jacchini played the violoncello da gamba, though his pupil Carlo Buffagnotti played it on the arm, across the chest. The list of composers with apparent links to the *da spalla* tradition is limited: Giovanni Battista Vitali, Domenico Gabrielli, Giuseppe Jacchini, Giovanni and Antonio Maria Bononcini, Antonio Caldara. There are facsimile editions by Marc Vanscheeuwijck of Gabrielli and some Jacchini. A-R editions published the cello sonatas by Antonio Maria Bononcini, edited by Lowell Lindgren. Those pieces are wildly virtuosic. Apart from Jacchini, Op. 1 & 3, there are duets for violin and cello (without continuo) from the late 1680s and 1690s that treat the cello as an equal partner to the violin and, in a few cases, contain cello sonatas: Giuseppe Torelli, Op. 4; Bartolomeo Laurenti, Op. 1; Attilio Ariosti, Op. 1; Tomaso Pegolotti, Op. 1; Giacomo Cattaneo, Op. 1. Also, some of Giovanni Bononcini's Op. 3 sinfonie (1685) contain obbligato cello parts.⁵⁰

Just one instance linking the violoncello piccolo and da braccio is known to me. Both violoncello piccolo and violoncello da braccio appear together in a catalogue of Breikopf which lists 27 compositions, all of which are now lost, for: 'Violoncello Piccolo & Violoncello da Braccia'.⁵¹ This catalogue includes two sonatas by anonymous composers, and compositions by Beyer, Schachhofer, Foerfter, Speer, Graun, Tartini, Hering, Riedel, Goerner, Schwalbe, Rondinelli and Wiedner.

MODERN CELLO

The modern cello is ordinarily held between the legs like a bass viol. As has been shown above, in the seventeenth and eighteenth centuries (at least until c1762, Drüner suggests) this was not the only possible hold. Bonta⁵² has shown that the word violoncello, at least in eighteenth-century Italian, is explained by the *Vocabulario degli Accademici della Crusca*, where *violone* is defined as 'a large low-pitched viola, which is also called basso di viola, and violoncello

⁵⁰ I am thankful to Gregory Barnett for this introductory information on these composers and editions.

⁵¹ *Catalogo delle Sinfonie, che si trovano in Manuscritto Nella Officina Musica di Giovanni Gottlob Immanuel*, Vol. 1 (Breitkopf, Leipzig 1762), p.44-5.

⁵² Stephen Bonta, 'From Violone to Violoncello: A Question of Strings?' *JAMIS* III, 1977.



Figure 1. Bernard Picart, *Print of a Musician*, 1701 (detail). The instrument in this picture is clearly smaller than a full size modern cello, and as Drüner explains, the picture means that such instruments cannot properly be designated 'children's cellos'. The full print is illustrated in Maurice Riley, *The History of the Viola*, vol.1, (Ann Arbor, 1993), p.96.

when of smaller size.⁵³ Pictures, writings, and surviving instruments show that early violoncellos were made in different sizes, ranging from the size of a large viola to the modern full-sized violoncello. Unlike the present day, when small instruments are made only for the use of children, these smaller instruments were played by professionals. This was noted by Drüner who cites a picture by Bernard Picart that he calls 'Violoncello player' (Figure 1). The instrument in this picture is clearly smaller than full size, and as Drüner explains, the picture

means that such instruments cannot properly be designated 'children's cellos'. He draws a parallel with the development of the double-bass which is known to have evolved into smaller 'solo basses' and larger 'tutti basses'.⁵⁴

Walden, supported by the evidence of Quantz and Mozart, comes to the conclusion that the eighteenth century knew two categories of instruments of various size and type of stringing, namely that it was required to use smaller instruments strung with thinner strings for solo parts, and larger ones with thicker strings for the orchestra. She also observes that Henry Burnett⁵⁵ came to the same conclusion with the viol family.⁵⁶

It is apparent from pictures and from playing instructions that techniques of violin-playing were not standardised in the seventeenth and eighteenth centuries. As Tarling writes: "There is no area where the "methods of practitioners" differ more than in the manner of holding the instrument",⁵⁷ citing no less than eighteen sources 1556 - 1761, including violin-playing treatises (pp.64-67), which are far from consistent.

Due to its variable size and playing technique (as was the case with the violin), large bass instruments were held in at least three distinct ways:

1. Suspended vertically with the aid of a belt, scarf or a rope
2. Supported vertically against the floor, or a stool, near or between the legs with or without a spike or an end pin.
3. Suspended horizontally against the shoulder or across the chest, usually with an aid of belts, buttons or other devices, though these devices are not always mentioned.

1. *Suspended vertically.*

1556 Jambe de Fer. The Italians call this instrument the violone, or violon da braccio because it is supported by the arm, although some people use scarfs, cords, and other things to aid in holding them. (Tarling p.64)

The bass [member of the violin family] is very difficult to carry because of its weight, for which reason

⁵³ Vocabulario degli Accademici della Crusca, 4th ed. (Florence, 1729), V, 281: 'Violone, Viola grande di tuono grave, che si dice anche Basso di Viola, e Violoncello, quando e di minor grandezza.' quoted by Bonta, footnote 81.

⁵⁴ Drüner, op.cit. p.91, footnote 19.

⁵⁵ Henry Burnett, 'The Bowed String Instruments of the Baroque Basso-Continuo (ca. 1680-ca.1752) in Italy and France.' *Journal of the Viola da Gamba Society of America*, 8 (1971), 36-37.

⁵⁶ Valerie Walden, *One Hundred Years of Violoncello. A History of Technique and Performance Practice, 1740-1840*, (Cambridge UP; Cambridge, 1998), p. 50.

⁵⁷ Judy Tarling, *Baroque String Playing for ingenious learners*, (Hertfordshire; Corda Music Publications, second ed. 2001), p. 63.

it is sustained with a small hook in an iron ring or other thing, which is attached to the back of the said instrument... (Tarling p. 70)

2. *Supported vertically* (the most familiar hold).

An instrument held while resting on a stool can be seen in Figure 1.

3. *Suspended horizontally*.

Rousseau's report of the basse de violon in Italy may indicate that it was held horizontally:

One cannot say that the Basse de Violon which is presently played in Italy is a true Basse de Violon, of the same type as that which is played in France, since in Italy it is held in one way, which is here the lower part and with the Italians the upper part, because they hold it on the arm as opposed to in France one rests in against the ground.⁵⁸

Bismantova's violoncello, which was probably but not necessarily smaller than Rousseau's Basse de Violon, was held horizontally, hence his use of the term 'Violoncello da spalla alla moderna'.⁵⁹ Bismantova's diatonic fingering chart for the instrument suggests that the vibrating string length was 45cm or less .

We can assume that Walther's violoncello was held horizontally, because it was played 'like a violin' and the violin was always played horizontally:

The Violoncello is an Italian bass instrument resembling a Viol; it is played like a violin, i.e. it is partly supported by the left hand and the strings are

stopped by the fingers of the left hand, partly however, owing to its weight, it is attached to the button of the frockcoat [...] It is tuned like a Viola.⁶⁰

Mattheson's description is clearer than Walther's:

The excellent Violoncello, the Bassa Viola, and the Viola di Spala are small bass violins in comparison with the larger ones with five or six strings, upon which one can play all manner of rapid things, variations, and ornaments with less work than on the larger machines. Additionally, the Viola di Spala, or Shoulder-Viola produces a great effect when accompanying because it cuts through strongly and can express the notes clearly. A bass [line] cannot be brought out more distinctly and clearly than on this instrument. It is attached by a band to the chest and thrown at the same time on the right shoulder, and thus has nothing that in the least holds back or prevents its resonance.⁶¹

Barnett notes that German writers simply copied Mattheson's use of *da spalla* to mean 'shoulder-held' more or less faithfully for the violoncello, bassa viola and viola da spalla.⁶²

Brossard (1705), though quite imprecise in his wording, echoes other documents by drawing similarity between a large viola, tenor-violin, and the violoncello: 'VIOLONCELLO, this is properly speaking our *Quinte de Violon* or a small bass violin with five or six strings'.⁶³ The entry on the Viola enables us to deduce that *Quinte de Violon* is a viola.

⁵⁸ '...on ne peut pas dire que la Basse de violon dont on jouë présentement en Italie ne soit une véritable Basse de Violon, de la mesme espece que celle dont on jouë en France, quoy qu'en Italie on la tiennent d'une maniere, que ce qui est icy la Partie Inferieure, est chez les Italiens la Partie Superieure, parce qu'ils la tiennent sur le bras, au lieu qu'en France on l'appuye contre terre', J.Rousseau, *Traité de la Viole*, (Paris, 1687), p.9.

⁵⁹ Bartolomeo Bismantova, *Compendio Musicale*, MS, (Ferrara, 1677), facsimile edition, (Florence: Studio per Edizioni Scelte, 1978). The chapter on the violoncello was added in 1694. G.Barnett, 'The Violoncello da Spalla: Shouldering the Cello in the Baroque Era', *JAMIS XXIV* (1998), pp.81-106. p.83).

⁶⁰ Johann Gottfried Walther, *Praecepta der Musicalischen Composition*, Weimar, den 13 Marty Anno 1708, reprint in *Jenaer Beiträge zur Musikforschung*, 2 (Leipzig, 1955), p.161: 'Violoncello ist ein Italiaenisches einer Violadigamba nicht ungleiches Bass-Instrument, wird fast tractiret wie eine Violin, neml. es wird mit der lincken Hand theils gehalten, und die Griffe formiret, theils aber wird es wegen der Schwere an des Rockes Knopff gehänget [...] Wird gestimmt wie eine Viola'.

⁶¹ Johann Mattheson, *Das Neu-Eröffnete Orchestre*, (Hamburg: Benjamin Schiller, 1713), 285: 'Der hervorragende Violoncello, die Bassa Viola und Viola di Spala, sind kleine Bass-Geigen / in Vergleichung der grössern, mit 5 auch wol 6. Saiten / worauff man mit leichterer Arbeit als auff den grossen machinen allerhand geschwinde Sachen / Variationes und Mannieren machen kan; insonderheit hat die Viola di Spala, oder Shulter=Viole einen grossen Effect beim Accompagnement, weil sie stark durchneiden und die Tohne rein exprimiren kan. Ein Bass kan nimmer disticter und deutlicher herausgebracht weden als auff diesem Instrument. Es wird mit einem Bande an der Brust befestiget, und gleichsam auff die rechte Schulter geworffen / hat also nicht / daß senem Resonanz im geringsten auffhält oder verhindert.'

⁶² G.Barnett, op.cit., p.89, n. 23 cites Majer, 1732; Walther, 1732; and Eisel, 1738.

⁶³ Sebastien de Brossard, *Dictionnaire de Musique, Contenant une explication des Termes Grecs, Latins, Italiens, & François, les plus usitez dans la Musique... Seconde Edition, Conforme à celle In-Folio, faite in 1703*, (Paris: Christophe Baliard, 1705), p.221: 'Violoncello. C'est proprement nôtre Quinte de Violon ou une Petite Basse de Violon à cinq ou six Chordes.' His *Quinte de Violon* is a viola. Ibid. p.219.



Figure 2. Sketch by Giovanni Pistocchi, c.1669, in the violin partbook of Giovanni Maria Bononcini, *Varri Fiori del Giardino Musicale, ovvero Sonate da Camera a 2.3. e 4. Col suo Basso Continuo, Op. 3* (Bologna: Giacomo Monti, 1669) (tracing by the author). The inscription above the drawing says 'Bononcini'. Pistocchi was not a capable draughtsman, however, the silhouette corresponds to what can be seen in other pictures. The full page is illustrated in Gregory Barnett, 'The Violoncello da Spalla', *op.cit.*, p.96.

Naturally, playing the violoncello on the arm or the shoulder was adopted by violinists rather than cellists, a situation resembling today's practice of playing the viola by violinists or viola da gamba by cellists. The Bolognese violinist Giovanni Maria Bononcini held the violoncello on the shoulder, as can be seen in the drawing by his fellow violinist Giovanni Pistocchi⁶⁴ (Figure 2). Carlo Buffagnotti, one of the founding members of the Bolognese *Accademia Filarmonica* played the violoncello on the shoulder, too⁶⁵ (Figure 3). Although Buffagnotti's violoncello is a piccolo-sized instrument, it is not designated as piccolo in the part. Consequently,

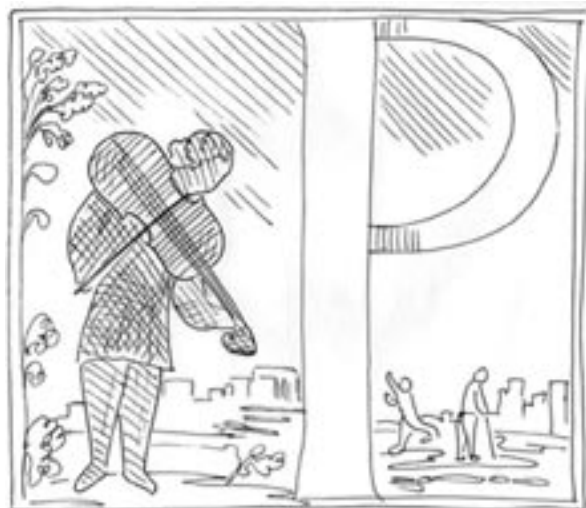


Figure 3. Giuseppe Torelli *Op.4*, detail from violoncello partbook, page 1, engraved by violoncellist Carlo Buffagnotti (tracing by the author). Note the similarity of the size and posture between this and other pictures. The instrument on the shoulder is probably smaller than the modern cello, however, the part does not call for a violoncello piccolo. The diatonic fingering given by Bismantova suggests that his cello was smaller than the modern, nonetheless, Bismantova does not call it a piccolo. For the original image see G.Barnett, *op.cit.*, p.95.

this shows again the freedom that seventeenth- and eighteenth-century players enjoyed, in that the standard size of the violoncello was not yet established, and the choice of instruments and playing technique was left up to the performers. However, as Quantz wrote, performers would favour the smaller instruments for solos, in order to contrast between solo and continuo parts. Figure 4 is a detail of an anonymous Italian drawing of c1700 that offers visible evidence of the high hold, although we do not know what is being played.⁶⁶

Buffagnotti was one of the founding members of the *Accademia Filarmonica*. His membership card states that he learned violoncello from one of the most famous violoncellists of his time, Giuseppe Jacchini, who played the violoncello *da gamba*, and although we do not know what his attitude towards *da spalla* technique was, apparently it was accepted for the pupil to play it otherwise (i.e. *da spalla*). The *spalla* technique for playing large instruments, known already during the Renaissance, was applied by those whose *gamba* (the position, not the instrument) technique would restrict using the instrument from

⁶⁴ G.Barnett, 'The Violoncello da Spalla: Shouldering the Cello in the Baroque Era,' *JAMIS* XXIV, 1998, p.7, 'Figure 7. Sketch by Giovanni Pistocchi, c. 1669, in violino primo partbook of G.M.Bononcini, Op.3...'

⁶⁵ Barnett, *op.cit.*; p.95, 'Figure 6. Torelli *Op.4*, detail from violoncello partbook, page 1.'

⁶⁶ I thank Federico Löwenberger, luthier in Génova, for this picture. Unfortunately its location is unknown.



Figure 4 (above). An Italian drawing, c.1700, present location unknown. (detail). An instrument held like this must be attached with some kind of belt. Unfortunately, it is not shown, and we do not know what is being performed. The setting suggests that it is a sonata 'a Quattro', for two treble instruments, a bass, and Basso Continuo. I am grateful to Federico Löwenberger for sharing this picture.



Figure 5. *Minstrel Agnes in the Bible of Vaclave IV, Bohemia, ca. 1340; BU, ms. 412, fol.72 (tracing by the author). The line going behind her left shoulder looks like a belt, though this is not known for certain.*

within the gamba perspective — such players probably consisted of violinists or viola players, whose *spalla* technique was advanced, and this was confirmed by several fellow musicians — while cellists or gamba players were unable to play an instrument *da spalla*, violinists or viola players could do it immediately or with little practice. On the contrary, violinists and viola players are generally incapable of playing the same instrument *da gamba* without a great deal of practice. This is not apparent in the sources, but the author came to this conclusion as a result of practical experience. There is a picture showing Minstrel Agnes (Figure 5) playing relatively a small instrument, where one can see something like a belt, though it is not certain. Depictions of instruments, which are definitely supported by belts, are vanishingly rare. The belt described in several documents can be

Figure 6 (left). *Andrea Celesti's 'The visit of papa Benedetto III to the monastery', church of St. Zaccaria in Venice, c.1684 (detail, photographed by the author). The instrument with c-holes is five-stringed. A feature (here two parallel lines) from the left shoulder of the player towards the pegs could be a belt, although it is far from certain. The size of the instrument is similar to that of Buffagnotti's in Torelli's Op.4 as well as in other pictures, except for the picture in Crema. The waist of the instrument, as compared to the width of the right hand palm seems to be rather narrow.*



Figure 7. Sanctuary of Madonna delle Grazie in Crema, Gian Giacomo Barbelli, c.1641-43 (detail, photographed by the author), it can also be seen in G.Barnett's cited work. While the accuracy of this painting is questionable, the instrument is evidently big. It remains unclear whether this is the instrument, which has been called *Basse de Violon* by J.Rousseau in *Traité de la Violle*. It is also unclear whether this instrument is as big as the modern cello, or somewhat smaller. The width of the waist, as compared to the width of the right hand palm, seems to be rather narrow.

seen only in a few pictures. Minstrel Agnes is one of these. Another picture is a fresco in the Church of St.Zaccaria in Venice (Figure 6). The *violoncello* or *violone* in the fresco by Giacomo Barbelli in the sanctuary of Madonna delle Grazie in Crema near Cremona (1641-43) (Figure 7) is *probably* held with a belt like the instrument in the Venetian picture, but this cannot be certain since the belt can not be seen – this hypothesis is prompted by an attempt to play an instrument as large as a common violoncello on or near the shoulder.



Figure 8. Procession "La Fête Dieu" in Aix-en-Provence, early eighteenth century (detail). Museum of Old Aix, Aix-en-Provence. I am grateful to Graham Nicholson and Joseba Berrocal for informing me about this picture.

A few paper patterns for making large violoncellos with handwriting attributed to Antonio Stradivari are preserved at the Museo Stradivariano in Cremona. Stradivari's instruments are probably larger than shown in the Creman picture. In fact, large instruments *da spalla* seen in paintings are probably smaller than Stradivari's surviving instruments. These painted instruments are arguably smaller than they appear.⁶⁷ However this can not be certain due to the nature of pictorial evidence. It remains to be studied whether instruments like Stradivari's have ever been played *da spalla* in

⁶⁷ If one prints the Venetian picture and measures the distance between the eyes of the player, one discovers that the width of the middle bouts is roughly three times the distance between the eyes. If we consider that the IPD, interpupillary distance, is c.63mm, then the width of the waist is 189-190mm, whereas the waist of a typical modern cello is c.24cm. In the same manner, though highly debatable, we can estimate the body length as 68-70cm. These estimates are indeed lacking credibility, however the purpose of this calculation is to demonstrate that we do not know what was the size of these large shoulder-held bass instruments, whether they were of the same size as the common modern cello (body length 75-77cm) or if they were smaller.



Figures 9a and 9b. Abraham Bosse, *La Rhétorique des Dieux*, MS 78C12, Staatliche Museen, Preussischer Kulturbesitz, Berlin, ca. 1652. 'Mode Ionien' (left, top) and 'Sous Ionien' (left, bottom) (details). There are similar instruments and postures in several of this series of illustrations.

extremely simple continuo parts or, due to their size, they were played only or mainly *da gamba*. There are at least three French pictures, which suggest that the *da spalla* approach did exist to some extent in France (Figures 8, 9a, 9b and 10) as well as in England, though, the identity of the instrument in an English picture (it has variously been designated a viol and a violin) is contentious (Figure 11).

Walther, who certainly knew and saw how the violoncello was played, did not mention the violoncello played *da gamba*, although it certainly was played as such. The evidence cited indicates that the cello was often played on the shoulder. No surviving music calls specifically for the *violoncello da spalla* apart from the Breitkopf catalog of 1762 cited above (assuming that violoncello da braccio



Figure 10 (above). Daniel Rabel, *Ballet des fêtes des forêts de Saint Germain*, 1625. Design for a theatrical dress (tracing by the author). The ribs of the instrument are low, but the string length suggests that this is a bass. I am grateful to Marco Tiella for sending this to me.



Figure 11. Painted frieze, High Chamber, Gilling Castle, Yorkshire, c.1590 (detail). The size of this instrument, comparable to that of violoncellos piccolo by Hoffmann, suggests that it could be a small bass or a large tenor violin, probably performing a bass line with the lute. Similar large instruments of an unclear nature are frequent in sixteenth and seventeenth-century pictures.

means violoncello da spalla). This is because composers referred to this instrument inconsistently, using a variety of names including *bassetto*, *violone piccolo*, *violoncino*, *violonzino*, *violoncello*, *violoncello piccolo*, etc.⁶⁸ They never used the modifier *da spalla*, as it refers to the method of holding the instrument, rather than to the instrument itself. Composers did not pay attention to how the instruments were held: they never indicated, for example, if a piece were written for a violin supported with the chin or not. If modern performers adopt the ideas proposed here (and by others such as Drüner, Dreyfus, Smit, Barnett and Wissick) and show a flexible approach to handling instruments that matches that of their baroque predecessors, their performances will become closer to the performances of that time.

THE SUITES BY J.S.BACH: ONLY THE SIXTH?

Anna Magdalena's is one of the most important sources for the cello solo suites by J.S.Bach. Although

many modern violoncellists use a violoncello piccolo for the last suite, Anna Magdalena did not use the term piccolo, but wrote 'à cinq cordes'. J.S.Bach never used this term in any of his works, so it is possible that Anna Magdalena is entirely responsible for it, as the use of a small violoncello piccolo in the sixth suite is the choice of modern players. Due to the loss of the original Bach manuscript, and the possibility of input from Anna Magdalena, it is feasible that all six suites were meant for the violoncello piccolo with four or five strings, and could have been performed by the player who played the Sonatas and Partitas for the violin solo. Johann Sebastian, being proficient on both the violin and viola could have been one of the first to play the Suites for an unaccompanied violoncello on a horizontally held violoncello piccolo of Hoffmann's type: the Suites I to V on four-stringed and Suite VI on five-stringed instrument. Likewise, violoncellists *da gamba* could consider using ordinary violoncellos piccolos with four and five strings for performing the entire cycle of J.S. Bach Suites as they are accustomed - *da gamba*.

Bach possessed violoncello piccolos with both four and five strings. Between October 1724 and November 1726, he composed the cantatas BWV Nos. 5, 6, 41, 68, 85, 115, 175, 180, 183 and 199, in which he specified the *violoncello piccolo*. This article suggests that such an instrument would have been played on the shoulder. Instruments of this nature were made by Johann Christian Hoffmann, a contemporary of Bach in Leipzig, and by several other instrument builders (see Table 1). The majority of such instruments have been lost, and others were rebuilt into violas or into violoncellos for children, but the scarcity of surviving examples does not imply they never existed.

THE POSTURE

There are several possible ways to hold a large bowed instrument against the right shoulder, as well as several methods of attaching it with a rope. The method which after many experiments was found the most convenient is illustrated on Figure 12. It does not apply to the instruments of a considerably larger size.

The position of the left hand is natural and relaxed. The wrist is held like the wrist of a lutenist although the whole arm is considerably lower. Holding the neck higher up, towards the left shoulder, makes the instrument difficult to hold. The string-length and the height of the ribs makes it painful to play anything

⁶⁸ For these and other names see Bonta, 'From Violone to Violoncello...', op. cit.

technically complex (including some Bach). Thus, holding such an instrument on the left shoulder puts the left wrist into such a position where one can not cope with many of the large stretches in Bach solos, unless one is lucky to have hands of a formidable size. However with the posture as it is illustrated on the Figure 12, the left hand fingers have more space to stretch without effort. In that position, the length of the vibrating string does not pose a problem. A violinist can become accustomed to the string-length in only a few weeks. The first CD using the illustrated instrument was recorded in February 2006 with Bach Collegium Japan.⁶⁹ This will enable readers to hear it in use and draw their own conclusions about the arguments presented above.

I would like to express gratitude to Lambert Smit for many invaluable comments, to Mia Awauters, the curator of Brussels MIM, who provided access to the violoncellos in that collection, and to Michael Fleming who helped to make this article publishable. Several string companies have provided assistance with the development of the strings; some of them succeeded in this complex task brilliantly. Mimmo Peruffo of Aquila Corde Armoniche reconstructed the first strings of the right type for the instrument, closely followed by Damian Dlugolecki. The modern strings were developed by John Cavanaugh of Cavanaugh Company.



Figure 12. *The playing posture as currently adopted by the author. A belt or rope attached at the tailpiece and neck supports the instrument in a convenient position.*

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⁶⁹ J.S. Bach Cantata *Bleib bei uns, denn es will Abend werden*, BWV 6. Violoncello piccolo part in the choral *Ach bleib bei uns, Herr Jesu Christ*, performed by the writer. Bach Collegium Japan, dir. Masaaki Suzuki. Due for release on the BIS label probably in Summer 2007 (serial number not yet known). The author is recording four cello piccolo solos for Bach's cantatas BWV 68 (*Also hat Gott die Welt geliebt*), 85 (*Ich bin ein gutter Hirt*), 175 (*Er rufet seinen Schafen mit namen*) and 183 (*Sie werden euch in den Bann tun*). An MP3 sound sample of Bach's d-minor cello suite may be found on the author's website <http://violadabraccio.com>

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Table 1. List of surviving instruments (from Drüner, op.cit.; pp.109-111, with additions by the author)

No	Collection, Attribution	Total length (cm)	Body length (cm)	Rib height (cm)	Vibrating string (cm)	Number of strings
Viola Pomposa						
1	Halle, Händel House MS.247 Probably Bohemian. labeled A.Poluska, Roma 1753.		45.5			5
2	Nürnberg, German National Museum MIR.836 Bohemia, 2nd half of the eighteenth century.	77	43.2	5.3-5.5	ca. 42	5
3	Berlin, Institute of Music Research 2479 Germany, late eighteenth century.	78.6	45.4	6.4-7.2	41.9	5 (?)
4	Berlin, Institute of Music Research 4240 Saxony, around 1800.	79.1	47.2	7.7	43.8	5 (?)
5	Leipzig University Music Instrument Museum, 917 J.Ch.Hoffmann, Leipzig 1737.	75.5	43.5	7		4
6	Ex A.Wilfer J.Ch.Hoffmann, Leipzig 1732.	76.3	45.5	3.8 (?)	41.5	5
Violoncello piccolo of J.S.Bach						
7	Brussels Music Instrument Museum, 1445 J.Ch.Hoffmann, Leipzig. Classified as Viola pomposa.	76	45.6	7.7	42.5	5
8	Leipzig University Music Instrument Museum, 918 J.C.Hoffmann, Leipzig, 1732.	78.5	45.5	9	43.1	5 (?)
9	Leipzig University Music Instrument Museum, 919 (lost) J.C.Hoffmann, Leipzig, 1741.	78	45.5	8.75	41.1	5
10	ex Ulrich Koch, S.Hunger, before or ca. 1750.	77.5	46	8	41	5
11	Eisenach, Bachhaus. (Buhle 56, Heyde 70) Saxon or Bohemian, mid eighteenth century.	75	45.5	8	42.8	5
12	Leipzig University Music Instrument Museum, 921 Mosch, Borstendorf, 2nd half of the eighteenth century.	75	46	8.3	40.8	5

<i>No</i>	<i>Collection, Attribution</i>	<i>Total length (cm)</i>	<i>Body length (cm)</i>	<i>Rib height (cm)</i>	<i>Vibrating string (cm)</i>	<i>Number of strings</i>
13 & 14	New York 2716 'Two private owners' (according to W.Schrammek).					
Violoncello piccolo (da gamba)						
15	Leipzig University Music Instrument Museum, 920 Klinger, Klingenthal (?), mid eighteenth century.	87.5	50	9.3	47	5
16	Haslemere, England, Dolmetsch Collection. J.Stainer, Absam, before 1683.	96	47.5		45	5
17	Munich, Stadtmuseum, 40-243 J.P.Christa, Munich 1735.	102.5	62.9	9.9-10.2	58.2	5
18	Amsterdam (?), C. van Leeuwen-Boomkamp Collection, 17 J.Boumeester, Amsterdam 1676.	92	53	9.7	52.8	4
19	Eisenach, Bachhaus, Buhle Nr. 207 'Saxon or Bohemian work', 17th or 18th century.	97.5	57.3	10.9	51.5	4
20	Berlin, Institute of Music Research, 4241 J.A.Reichel, Neukirchen, 17..	88.1	49.2	7.6-7.8	48	4
21	Vienna, Kunst-historisches Museum, C.110 Germany, eighteenth century.	93	56	8		4
22	Leipzig University Music Instrument Museum (?), 932 attributed to J.Ch.Hoffmann, 1st half of the eighteenth century.	103	59.5	11		
23	Leipzig University Music Instrument Museum (?), 934 Italy, attrib. To Brescian school, eighteenth century.	91.5	58	9		4
24	Leipzig University Music Instrument Museum (?), 933 A. Hoyer, Klingenthal 1759.	105.5	59.5			
Additional surviving instruments (added by the author)						
A1	Paris, La Villette E980.2.495 Anonymous, Germany eighteenth century. Classified as Viola pomposa.		47.5	7	43	4
A2	Paris, La Villette E692 Anonymous, Italy seventeenth century, labeled Grancino, 1697. Classified as Tenor violin.		43.5	4.5	48.5	5
A3	Paris, La Villette E980.2.471 Anonymous, France eighteenth century. Classified as Tenor violin.		52.5	8	47	4

<i>No</i>	<i>Collection, Attribution</i>	<i>Total length (cm)</i>	<i>Body length (cm)</i>	<i>Rib height (cm)</i>	<i>Vibrating string (cm)</i>	<i>Number of strings</i>
A4	Brussels Museum of Music Instruments M2853 Aegidius Snoek, Brussels, 1714. Classified as Violoncello piccolo.		> 45	ca. 7-8	ca. 43	4
A5	St.Petersburg State Museum of Theater and Music, No 1504. Labeled Puncraty Reber fecit Mogonty A° 1785. Classified as Violoncello piccolo.	77				
A6	St.Petersburg State Museum of Theater and Music, No 1994 Labeled Marcus Stainer Bürgerl... Geigenmacher in Lauffen A 1675. Classified as tenor violin.	75.3				5
A7	St.Petersburg State Museum of Theater and Music, No 2260. Labeled Rudolf Höss Churst Hof-Lautenmacher in München, 1699. Classified as tenor violin, and described as an intermediate between cello and viola.	78				5
A8	Moscow State Collection of Music Instruments, No 395 Attributed to Antonio and Girolamo Amati 1611. An instrument shaped like cello, and classified as tenor viol.		ca. 51(?) (53.6 with the stock (end of neck foot)			6
A9 ⁷⁰	University of California, Berkeley, Department of Music, Morrison Hall. Labeled: Joh. Christian Hoffmann, Leipzig, 1734(? 1732?) Classified as viola pomposa.	77	45	9	43	5

⁷⁰ I am grateful to Michael Uy of University of California, Berkley, for information about this instrument.