

The violin-type fingerings and oblique left hand position in the history of cello technique

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“...This is very odd indeed, if you stop a moment to consider the violoncello for what it really is – just a big violin with a bass voice.”

Ray G. Edwards, 1913¹

Introduction

A cellist performing eighteenth century solo repertoire often comes across unusually demanding passages. These sort of passages do not contain big jumps or fast notes. Instead, they include many left hand stretches and atypical fingering combinations. Decoding a particular passage in order to find the most convenient fingerings takes some time. For instance, the works of Jean Baptiste Barrière provide a great deal of very good examples of unusual fingering combinations. His sonatas are full of demanding passages, which explore sonorities that are unique from other cello repertoire. Comparing compositions by Barrière and other cellist-composers often challenges one to consider different solutions. Some of the cases may be explained by using different tunings, a different number of strings or a different sized instrument. A deeper look at cello fingering techniques from the eighteenth century may provide some answers. At that time cello fingering had not yet been systematized. The first attempts to codify cello technique appeared in the middle of the eighteenth century and are not consistent. Furthermore, there are some indications of the influence of violin technique on the cello, and it is these influences that caught my attention. In order to find out more about violin-type fingering systems in the history of the cello left hand technique I decided to conduct my research on this topic. As such I formulated my research question.

Research question

What were the possible reasons for the application of diatonic fingerings and violin-like left hand position in the history of the cello technique?

¹ Edwards, Ray G. “*The Violoncello a Solo Instrument*”, *The Musician*, 18 (13 May 1913), p.345 cited by Walden, Valerie. “Technique, Style and Performing Practise to C. 1900.” In: Stowell, Robin. “*The Cambridge Companion to the Cello*”. Cambridge: Cambridge UP, 1999.p.185. Print

Research process

A natural starting point was to consult the historical sources. I began with the first complete cello method, written by Michel Corrette. When looking at Corrette's treatise, I noticed that the fingering system he proposes is different from the one generally agreed upon today. The system seems to be strongly influenced by violin technique. Further research showed that the fingering system proposed by Corrette had surprising longevity. It was very interesting to discover that the same system was found in several later tutors. This raised questions such as: what could be the origins and reasons for such fingerings? Does it have anything to do with the size of the instrument, the player's personal capabilities, or the performance practises of that time?

In my search for information about the first cello fingerings, I had to go back to the history of the instrument before Corrette published his treatise. Insufficient documentation from those times makes it complicated to draw clear conclusions, nonetheless, some hypotheses can be made.

While examining the cello treatises that came after Corrette's, I observed developments in cello fingering. I looked at the systems proposed by Salvatore Lanzetti, Johan Baptist Baumgartner and John Gunn, and what they wrote about the left hand. Then as much as possible I compared their methods with musical and biographical backgrounds.

I also learned that some fingering systems suggest using a so called oblique left hand position. This oblique left hand position differs from the one used today, which is more perpendicular. From the information I gathered, the oblique left hand position existed until the second half of the nineteenth century, long after the modern square fingering was in common use.

In addition to this musicological study I looked for some practical evidence. I analysed the few existing examples of cello music with fingerings given by the composers, and looked specifically for some indications of using the diatonic fingering.

In this paper I will show the possible origins and reasons for using violin-type fingerings on the cello. As part of this investigation I will look at the dimensions of the instrument (such as body length, size of the neck), background of the composers, and possible connections between them. In the practical part I will examine some of the possible ways in which we can execute earlier fingerings.

The two fingerings systems: chromatic and diatonic

Cello technique consists of two broad aspects: the left hand, which is responsible for determining the pitch, and the right hand, which makes the notes sound. The left hand fingering technique used today was established around two hundred years ago by Jean-Louis Duport, who compiled developments of the French cello school² and wrote his “*Essai sur le Doigté du Violoncelle et sur la conduite de l’arche*”³. The principles of his systematisation are still valid today. Because there is so much to say about this topic, I have restricted the research to the area on the cello fingerboard below the half-string harmonic. This is the space where, on today’s cello, the first four positions are located. The following two illustrations show the four positions on the cello. Fig.1 comes from Duport’s method⁴:



Figure 1

Fig. 2 delineates these four positions on the model of the cello fingerboard⁵:

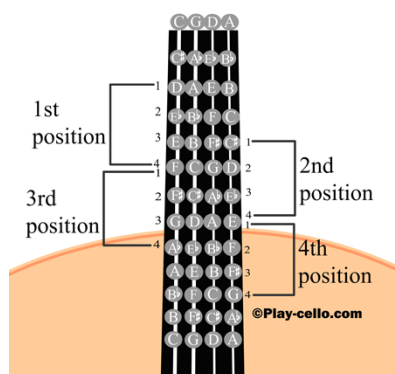


Figure 2

² Amongst others Joseph Bonaventure Tillière's, "*Méthode de violoncelle*" (1764) and Jean Baptist Cupis' "*Méthode de violoncelle*" (1772) show already the division into four positions.

³ The method is dated from ca. 1805 and the English translation of the title is: “*Essay on the fingering of the violoncello and on the conduct of the bow*”.

⁴ Duport, Jean Louis. “*Essai sur le Doigté du Violoncelle et sur la conduite de l’arche*” Publisher Info.: Offenbach: Johann André, n.d. (ca.1809). Plate 2599,140 IMSLP/Petrucci Music Library: Free Public Domain Sheet Music. N.p., n.d. Web. 30 Jan. 2015.

<http://imslp.org/wiki/Essai_sur_le_doigt%C3%A9_du_violoncelle_et_sur_la_conduite_de_l'archet%28Dupont, Jean-Louis%29>.p.33.

⁵ "Cello Fingerboard" Play Cello. N.p., n.d. Web. 03 Feb. 2015. <<http://www.play-cello.com/tag/cello-fingerboard/>>.

Furthermore, Duport organised four fractions for every cello position. The illustration below shows four fractions on all four strings in the 1st position⁶:



Figure 3

These four positions and fractions are used worldwide by cellists today. However, before this system emerged around 1800 there was no standardisation, so cellists did not have a consistent manner for fingering scales. Generally speaking, in the history of the cello technique we can talk about two early systems of fingering:

- “1. Fingering in which semitone spaces occur between each finger (each finger playing successive half steps).
2. Fingering modelled on violin technique in which whole tones may occur between all fingers in the positions of the neck”⁷

I will call the first system chromatic, and the second diatonic. Today the chromatic system is generally applied in the modern cello technique. It is associated with a handgrip in which the fingers fall perpendicularly on the strings. However, in this paper I will focus on the older diatonic system. This system might relate to the position of the fingers slanting backwards at an oblique angle to the fingerboard, and the thumb being placed towards the opposite side of the neck rather than directly beneath it. It will become apparent that there is no uniformity between the sources before 1800, thus one can't specify one diatonic system - there are in fact multiple systems.

Over the past four centuries we can observe evolution in the approach to the subject of cello fingerings. In the next chapters I will demonstrate, in approximately chronological order,

⁶ Duport, Jean Louis. “Essai sur le Doigté du Violoncelle et sur la conduite de l'arche” Publisher Info.: Offenbach: Johann André, n.d. (ca.1809). Plate 2599,140 IMSLP/Petrucci Music Library: Free Public Domain Sheet Music. N.p., n.d. Web. 30 Jan. 2015.
<http://imslp.org/wiki/Essai_sur_le_doigt%C3%A9_du_violoncelle_et_sur_la_conduite_de_l%27archet_%28Duport,_Jean-Louis%29>.p.140

⁷ Slatford Rodney Subject Entry: “Violoncello”, Lindley Mark, et al. “Fingering.” Grove Music Online. Oxford Music Online. Oxford University Press. Web. 29 Sep. 2014.
<<http://www.oxfordmusiconline.com/subscriber/article/grove/music/40049>>.

indications for using violin-like diatonic fingerings and oblique left hand position on the cello. I will start by looking at the methods employed on early bass violin, followed by the much debated system proposed by Corrette. Next I will view Lanzetti's approach, which transitions the diatonic and chromatic systems. Finally I will see how others applied oblique left hand position, even though fingering had evolved to the next level.

The fingering system on bass violin

In this chapter I will look at the first records that can tell us something about cello fingerings, and how evolution of the size and way of holding the instrument may have influenced the left hand position and the manner of fingering. There is not much documentation about cello fingerings before the first half of the eighteenth century. In the seventeenth century there were no contemporary cello methods except one page from Bartolomeo Bismantova's treatise, which is dedicated to the *violoncello da spalla*. The reason for this could be that bass violin players were taught by the apprentice system. Only in the eighteenth century a number of methods describing the technique of the instrument including fingerings were published. For this purpose it is necessary to understand the history of the instrument related to its dimensions and its different playing positions.

Violin consort

The instrument we call a cello today emerged as a member of the violin consort. The beginning of the violin family dates back to the beginning of the sixteenth century, however, due to insufficient evidence, it is difficult to determine a definitive account of its early evolution. At the beginning the violin consort evolved outside the court amongst peasants and citizens it was used mostly to perform dance music (as an accompaniment for lay, folk and street festivals). Therefore, its most important feature was the portability of the instrument - so that the musicians could stand or walk while playing. The variety of ways to hold the bass instrument could require adjustments in left hand position. It is likely that the left hand had to stabilize or even support the instrument while playing. For this reason, shifts would be impeded or even impossible. Violin-type fingering in which each finger stops the following diatonic note might have been very helpful in reducing the amount of shifts⁸. It required the hand to grip around the neck with the fingers falling obliquely on the strings, as Marc Vanscheeuwijck in his article "*The Baroque Cello and its Performance*" writes "...Since the instrument needed to be partly supported by the left hand, the fingers were placed obliquely on the strings, and fingerings was purely diatonic, as it was for the other violins as well..."⁹. This technique was good enough for the simple demands made of the instrument in the sixteenth century¹⁰. The following drawing entitled "*Musicians*" by Leonard Bramer (1596 – 1674) shows the five-string bass hanging on the performer's belt¹¹:

⁸ It is worth mentioning that a bass instrument's fingerboard was much shorter at that time, with its range till a'. Marin Mersenne writes: "*As to the bass (...). Its fingerboard (...) is a third the length of the table.*"

⁹ Vanscheeuwijck, Marc. "*The Baroque Cello and its Performance*" Performance Practise Review 9/1 (Sep 1996).p.81.

¹⁰ Marx, Klaus. "*The Violoncello*" In: Boyden, David D. et.al "*Violin Family*". London: Macmillan, 1989. N.p.1. p.157.Print.

¹¹ Markevitch, Dimitry. "*Cello Story*" Princeton, NJ: Summy-Birchard Music, 1984. p.17. Print.



Figure 4

The Beginnings of idiomatic technique

Over just a few decades the cello resonating body increased in size. In the middle of the sixteenth century the bass violin had already reached its largest size – with a body length of about 80 cm¹². The larger size required playing in a sitting position with the instrument resting on the floor. Around one hundred years later, a revolution in string making allowed the bass violin to reduce its dimensions the current standard size of 75 cm¹³. It became possible to adopt the technique of holding the instrument between the calves. Again Marc Vanscheeuwijck states that “...*Support of the thumb was no longer necessary to carry the instrument, allowing more mobility to the left hand and thus some greater virtuosity...*”¹⁴. Also, because of the length of its strings, the purely diatonic fingering of the violin started to become an obstacle in the evolution of the instrument’s technique. Most scholars agree that Bolognan cellists active in the second half of the seventeenth century were playing in *da gamba* position¹⁵. Although we don’t possess any example of fingerings from that time, Vanscheeuwijck suggests that this group of cellists might have used the technique in which the four fingers are placed perpendicularly on the string and a half tone apart from each other¹⁶. Nevertheless, at that time the standardisation of fingering didn’t exist yet, because there was still a variety in sizes and ways of holding the instrument. Both smaller and larger cellos were made until half way through the eighteenth century¹⁷. In the absence of sources suggesting otherwise, we can assume that two ways of fingering (diatonic and chromatic) could exist at the same time.

¹² Andrea Amati (1505-1577) made this kind of instruments in Cremona between 1564 and 1574.

¹³ In around 1664 Bolognan string makers discovered method of wounding gut strings with metal. This allowed producing thinner and shorter strings.

¹⁴ Vanscheeuwijck, Marc. “*The Baroque Cello and its Performance*” Performance Practise Review 9/1 (Sep 1996).p.86

¹⁵ Amongst others Giovanni Battista Vitali (1632-1692), Giovanni Battista Degli Antonii (1636-1698) and Domenico Gabrielli (1651-1659)

¹⁶ Vanscheeuwijck, Marc. “*The Baroque Cello and its Performance*” Performance Practise Review 9/1 (Sep 1996).p.89.

¹⁷ Almost contemporary with big 75-80 cm cellos were smaller instruments made in Brescia with the back measuring around 71cm. These two sizes seem to have persisted well into the eighteenth century.

One of the earliest descriptions of a violin fingering method can be found in “*Harmonie Universelle*” (1636) by Marin Mersenne. In “*Proposition IV*” from the “*Fourth book of string instruments*” he writes: “...That one can finger the strings (...) that the three fingers of the left hand, that is the index, the middle, and the fourth fingers, must be placed so close to the string one wishes to play...”¹⁸. In his treatise Mersenne talks about the whole violin family, carefully addressing the organological differences (tuning, size, etc.). However, there is no indication of any differences in fingering between the *discant* and the bass. Klaus Marx is of the opinion that it is unlikely that Mersenne would not have mentioned differences relating to the fingerings if any existed¹⁹. One can only speculate that since the violin was the earliest and principal form that represented the family, violin-type fingering was naturally the first and universal system which was used in the consort.

Bismantova’s *Violoncello da spalla* fingering

The earliest source that provides fingerings for the bass member of the violin family is “*Regola p(e)r suonare il Violoncello da spalla* from *Compendio Musicale*” (1677) by Bartolomeo Bismantova. It presents also the gamut of the instrument and the tuning *D-G-d-a*. Bismantova proposes fingers 0-1-2 on the D string, 0-1-2-3 on the G and D strings and 0-1-2-3-4 (for series of sounds a-b-c’-d’-e’) on the A string²⁰. As we can observe on the following illustrations, the fingering is entirely diatonic:

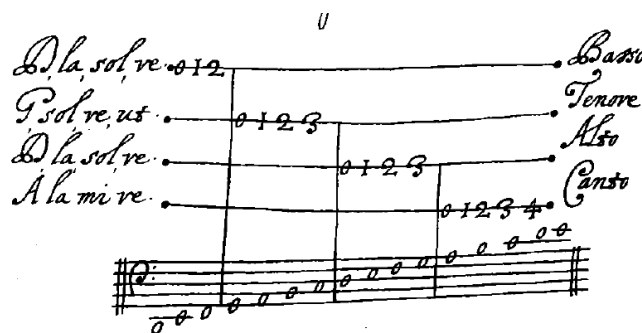


Figure 5

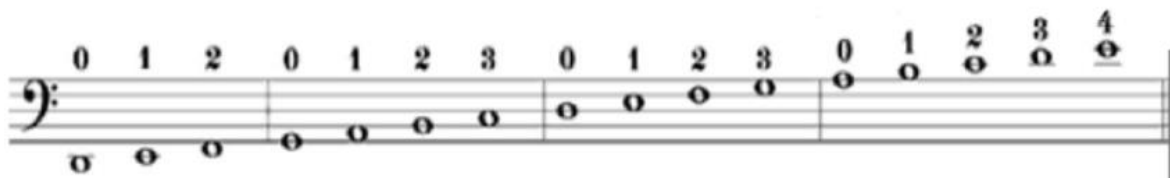


Figure 6

¹⁸ Mersenne, Marin and Roger E. Chapman. “*The Books on the Instruments in the Harmonie Universelle of Marin Mersenne*”. Los Angeles: U of California at Los Angeles, Library Photographic Service, 1979. p.242. Print.

¹⁹ Marx, Klaus. “*Die Entwicklung Des Violoncells Und Seiner Spieltechnik Bis J.L. Duport*”. N.p.: n.p., 1963. p.103. Print.

²⁰ Bismantova, Bartolomeo. “*Compendio Musicale*”: Ferrara 1677. Firenze: Studio per Edizioni Scelte, 1978. p.119. Print.

The question of what the term *violoncello da spalla* really means still needs to be answered. The instrument could be of smaller size, because of the fact, that the player had to cover with his fingers the distance of four diatonic notes in the 1st position, as on violin. The vibrating length of the strings would then be 45 centimetres or less²¹. The term *violoncello da spalla* could also refer to a way of holding the instrument in front of the chest. This manner would call for a violin-type left hand position. However, one must take into consideration that the fingerings provided by Bismantova is also possible to apply on the instrument held in the *da gamba* position. In that case, the name *violoncello da spalla* could simply be one of the names used in the seventeenth century to describe eight-foot bass instrument violin family.



Figure 7

On the illustration above Brent Wissick shows the oblique left hand position on the bass instrument held horizontally in front of the chest²².

The gamut for the Violoncello

The first known English method for diatonic fingering is “*The gamut for the Violoncello*” by Henry Waylet²³ which is also the earliest British instruction for the cello (c.1750). The method demonstrates the range of the cello in the form of an ascending scale. On the C and G strings we can observe the same pattern that Bismantova used, but on the D string Waylet uses 4th finger instead of 3rd. The octave jump in the 4th bar could be a result of an affinity for the diatonic fingering or the author’s desire to avoid repeating the note *d*’ with which measure 5 begins.

²¹ Badiarov, Dmitry. “*The Violoncello, Viola Da Spalla and Viola Pomposa in Theory and Practice.*” The Galpin Society Journal 60 (2007): p.121-45. www.badiarovviolins.com. Web. 10 Nov. 2014. <www.badiarovviolins.com/PDF/GSJ60_121-145_Badiarov.pdf>.p.137

²² Wissick, Brent. “*The Cello Music of Antonio Bononcini: Violone, Violoncello Da Spalla, and the Cello “Schools” of Bologna and Rome*” Journal of Seventeenth-Century Music 12 /1 N.p., n.d. Web. 26 Jan. 2015. <<http://sscm-jscm.org/v12/no1/wissick.html>>.

²³ I decided to put this quite late example in this chapter for two reasons. First of all the history of bass instruments on the British Islands seems a bit shorter (“...the earliest known British reference to the cello comes from 1601...” writes Brenda Neece). Secondly the given source looks very old fashioned.

The 5th measure returns to strictly diatonic approach:



Figure 8

In the article “*The Cello in Britain: a Technical and Social History*” Brenda Neece presents her explanation of the phenomenon of diatonic fingerings on the cello in England. Her starting point is the violin family being one unit, as I also described in the paragraph *Violin consort*. It is likely that musicians performing dance music had to alternate instruments within the family, rather than mastering just one. According to Neece in Britain, “...boys seem to have learned to play the bass fiddle first – even though it may have been cumbersome for a child, it had the simplest part – and then they moved up to the treble....”²⁴. Since it would be easier to use one fingering for the all the instruments in the family, this practise could explain the existence of violin-type fingering in cello technique.

Later in her article Neece points out that avoidance of the 4th finger could be comfortable to play on an instrument with a large neck and thick strings. Such fingerings may have also been related to BB flat tuning of the bass instruments²⁵; it helped teach violin fingerings and transposition: “...The violin open g-string on the treble clef looks exactly like a BB on the bass clef...” She continues “...Having learned to finger a BB flat instrument and read from a BB flat part, a cellist could easily play the melody line as the bass line for any given piece...”²⁶. The following example shows the open strings of the violin and the cello tuned in BB flat:



Figure 9

It is also significant that Neece claims that British bass instruments at that time had the average body length 71 cm. The measure on such instruments is smaller which would make the diatonic fingerings easier to apply.

To conclude, the close relationship between members of the violin consort in the beginning of the sixteenth century might have influenced not only the ways of holding the bass instrument, but also the fingerings used. A diatonic fingering was sufficient when the bass’s role was mainly to accompany, and a smaller, more portable instrument was used. As soon as bass instruments started to increase in size and be played in the sitting position, and the repertoire

²⁴ Neece, Brenda. “*The Cello in Britain: A Technical and Social History*.” *The Galpin Society Journal* 56 (2003): p.80. Web. 21 Apr. 2014. <www.jstor.org/stable/30044410>.

²⁵ B flat tuning was an alternative tuning for the cello. The cello was tuned in fifths: B flat – F – C – G.

²⁶ Neece, Brenda. “*The Cello in Britain: A Technical and Social History*.” *The Galpin Society Journal* 56 (2003): p.82. Web. 21 Apr. 2014. <www.jstor.org/stable/30044410>.

began to be more complicated, the strictly diatonic fingering ceased to be sufficient. A technique distinct from violin technique began to develop. However, there was still no standardisation within the sizes of the bass instruments and smaller basses were also in use. The size of the instrument and playing position had an influence on the fingering used. It is possible that holding the instrument in front of the chest or hanging it on a strap would require violin-type fingering. Smaller instruments would also make diatonic fingerings more comfortable.

Using diatonic fingerings would facilitate the transitioning between instruments within the violin family. The cello's early role could have a pedagogical tradition, which could explain some unusual fingerings, as in Henry Waylet's "*The gamut for the Violoncello*". In the following years the violins influence on cellists was still very strong, as will be discussed in the next chapters.

Michel Corrette and his fingering system

Michel Corrette's "*Methode theorique et pratique pour apprendre en peu de terns le violoncelle*" published in 1741 is the first known guide for learning to play the cello. It was aimed primarily at those familiar with the violin or the *viola da gamba*. The method includes chapters on holding the cello, tuning, bowing and transitioning from the viol for the cello and other subjects. Fingering is discussed in chapters IV-VI and XIV, and there are also examples of fingering in chapter VII, which is devoted to shifting. Chapters IV-VI are intended for those thinking in terms of violin fingerings. I will now look at the system proposed in these chapters.

The system

According to Corrette, the fingers required for 1st and 2nd positions are: 1-2-4, for 3rd position: 1-2-3-4 and for 4th position: 1-2-3. The following illustration from Corrette's method shows fingerings intended for 1st, 2nd, 3rd, and 4th positions²⁷:



Figure 10

There is a striking difference between Corrette's system and modern cello technique. Corrette avoids the 3rd finger in the 1st position, and the 4th finger in the 4th position. He also compresses modern 3rd and 4th positions to one position (measure 3 from the above example).

Especially controversial is the omission of the 3rd finger in the 1st position, where the notes form a major third and a modern cellist would apply fingers 1-2-3-4. The pictures below show the difference between the shapes of hand in the 1st position. Fig. 11 displays my hand after applying 1-2-4 fingers, on fig. 12 the modern fingerings (1-2-3-4) is shown²⁸.



Figure 11 (VIDEO 1)



Figure 12 (VIDEO 2)

²⁷ Corrette, Michel "*Methode Theorique et Pratique pour Apprendre en peu de Terns le Violoncelle dans la Perfection*" Paris: [Undefined publisher], 1741 p.42. Web. 30 Jan. 2015.

<imslp.org/wiki/Méthode_pour_apprendre_le_violoncelle,_Op.24_(Corrette,_Michel)>.p.33

²⁸ Please visit the website of the Research Catalogue to see the videos I made:
<http://www.researchcatalogue.net/view/108734/135948>

What could be the reason for proposing such a fingering? A simple explanation could be that Corrette made a mistake. It is evident that Corrette was not a cello virtuoso himself and his tutor is one of his nearly fifty such books written for various instruments. However, as the work was republished at least three times, it seems unlikely that the same mistake would be reprinted. Moreover Corrette also gives alternative fingerings in chapter XI, which means that he was aware of the possibility to use the 3rd finger.

Some scholars are of the opinion that Corrette might have tried to transfer a violin technique onto a bigger instrument. His method was addressed mainly to mature violin players like himself. According to Charles Graves, it is the most natural for a violinist to retain the slanted position of his hand and his habit of playing a whole step between the 1st and 2nd fingers²⁹. However, the larger size of the cello does not permit him to use the 3rd and 4th fingers as conveniently as on the violin. The biggest problem seems to be the much greater distance between the 2nd and 3rd fingers on the cello than on the violin. It would take a lot of time and effort to train the muscles to be able to execute it. As Charles Graves writes in his thesis, Corrette might have noticed this problem and, “...rather than prescribe practice for the adult violinist whose muscles and bones were already set, suggested his system to overcome it. By positioning the first, second and fourth fingers lightly touching each other in first position, a half step is played accurately (...).”

The pictures below show the difference in the shape of violin hand and cello hand (fig. 13, 14). Fig. 15 and 16 show hand of the violin player holding the cello.



Figure 14



Figure 16



Figure 15



Figure 13

²⁹ Graves, Charles Douglas. “*The Theoretical and Practical Method for Cello by Michel Corrette Translation, Commentary, and Comparison with Seven Other Eighteenth Century Cello Methods*”. East Lansing: Michigan State U, 1971. p.98. Print.

Instrument

Another interesting aspect of Corrette's method is the absence of the 4th finger in the fourth position which he explains by saying that that finger is too short to be made use of in the higher positions on the fingerboard. Later Corrette warns that to use a 4th finger, the left arm would have to be repositioned. To understand this, one should take into consideration the fact that the cello had a thicker neck in the middle of the eighteenth century. The thicker neck in combination with a violin-like oblique left-hand position - with the backwards-pointing thumb - would inhibit the use of the 4th finger. Moreover, cellos made in Corrette's time had a shorter neck, so the use of the 4th finger in 4th position may have been completely unnecessary.

The type of the instrument Corrette had in mind is a question for further studies. However we can speculate that he thought of the smaller cello with the body length of 71 cm. This shorter model was obviously derived from a doubling of the back length of the 35.5 cm violin. It was quite popular as an alternative to the larger model (79 cm) throughout the eighteenth century³⁰. Gertrude Shaw writes that eighteenth-century French cellos in the Wurlitzer Collection had body lengths from 71 till 74.9 cm³¹. Also, after examining many old British instruments, Brenda Neece states that the most popular size for English cellos from the late seventeenth century until c. 1730 was 71 cm. The shorter neck and smaller body results in smaller measure (distances between fingers on the fingerboard). As a result, diatonic fingering is easier to achieve and the passage d'-e'-f'-g' (see Fig. 10) would be possible to execute with the fingering 1-2-3-4. Another consequence of a smaller measure is that the thumb position starts 'earlier' on the fingerboard. Corrette advocates beginning of the thumb position already in 4th position.

"...Thus, one begins to use the thumb, in this position which is 1/3 of the length of the string. Than the cello is played like the violin, since the thumb, in this position, puts the four strings of the cello at the octave below the four strings of the violin..."

³⁰ Body length of 71 cm is nowadays not in use. The standard cello measurements are 76 cm for 4/4 and 68 for 3/4 instruments.

³¹ Shaw, G. Jean. "Introduction" *The Violoncello Sonata Literature in France during the Eighteenth Century*. Washington, D.C.: n.p., 1963. p. 6. Print.

The pictures below show the placement of the thumb position on the modern and the eighteenth century cello:



Figure 17

“Methode theorique et pratique pour apprendre en peu de terns le violoncelle” is a first attempt to define cello fingering. As a violin player, Corrette created a fingering system which is derived from violin technique, with minor consideration for the vertical position of the cello and its size. It is feasible and does facilitate transition from violin to cello. As Charles Graves writes: “... it should be viewed as an early attempt to provide a means of popularising this instrument which was becoming recognised as being more suitable than bass viola da gamba for providing the bass voice in the string ensemble...”³².

Alternative fingering

In Chapter XIV Corrette describes an alternative way of fingering: “a gothic remnant from the bass violins tuned in G which are excluded from the Opera and all foreign countries”. The system presented in this chapter is intended for those who “left the large bas violin without having left its position”³³. Fingerings for the first position are: 1-2-3-4. It is unclear what instrument he refers to. It could very well be a French *basse de violon* tuned B’flat-F-c-g. However, it could equally likely he been intended for Bolognan tuning.

³² Ibid. page

³³ Corrette, Michel *“Methode Theorique et pratique pour apprendre en peu de terns le violoncelle”* translated by Graves, Charles Douglas. *“The Theoretical and Practical Method for Cello by Michel Corrette Translation, Commentary, and Comparison with Seven Other Eighteenth Century Cello Methods”*. East Lansing: Michigan State U, 1971. p.67. Print.

This illustration given by Corrette in the Chapter XIV shows chromatic fingering³⁴:



Figure 18

³⁴ Corrette, Michel “*Methode Theorique et Pratique pour Apprendre en peu de Terns le Violoncelle dans la Perfection*” Paris: [Undefined publisher], 1741 p.42. Web. 30 Jan. 2015.
<imslp.org/wiki/Méthode_pour_apprendre_le_violoncelle,_Op.24_(Corrette,_Michel)>.

The following example from page 2 of Crome's 'gamut for the Violoncello' shows fingerings for the 1st position:



Figure 20

The last of the three sources was published in Florence c.1780. It was Vincenzo Panerai's (c.1750-1780) "*Principj Di Musica: Nei quali oltre le antiche, e solite Regole vi sono aggiunte altre figure di Note, schiarimento di chiavi, scale dei Tuoni, Lettura alla Francese, Scale semplici delle Prime Regole del Cimbalo, Violino, Viola, Violoncello, Contrabasso, Oboè, e Flauto*"³⁷. The following illustration shows the violoncello scale and fingerings according to Panerai:



Figure 21

Interestingly, there is a difference between fingerings given for the same notes (d-e-f-g) in bass and tenor clefs (measures 4 and 7 from Fig.21). In the bass clef fingers 1-2-4 are given and in the tenor clef fingers 1-2-3-4 are given.

A common feature of the examples given here, is that they show the fingering 1-2-4 in the 1st position. Whether they all derive from a single original source is difficult to determine. What we can state with certainty, is that two out of the three sources are English, and one Italian. One of the authors of "*Apollo's Cabinet: or the Muse's Delight*" could be Thomas Arne (1710–1778). There is almost no information about Panerai apart from dates of his birth and death³⁸.

³⁷ Panerai, Vincenzio. "*Principj Di Musica: Nei Quali Oltre Le Antiche, E Solite Regole Vi Sono Aggiunte Altre Figure Di Note, Schiarimento Di Chiari, Scale Dei Tuoni, Lettura Alla Francese, Scale Semplici Dello Prime Regole Del Cimbalo, Violino, Viola, Violoncello, Cantrabasso, Oboe, E Flauto*". Firenze: Presso Giovanni Chiari, n.d. Print.

³⁸ "Panerai, Vincenzo." - IMSLP/Petrucchi Music Library: Free Public Domain Sheet Music. N.p., n.d. Web. 12 Nov. 2014. <http://imslp.org/wiki/Category:Panerai,_Vincenzo>.

The little information I could find about Robert Crome (1740 - 1765) is that he was a violinist at Covent Garden Theatre. In addition to his cello method, he wrote the violin tutor entitled: "*The Fiddle New Model'd, or a Useful Introduction for the Violin, Exemplify'd with familiar Dialogues*"³⁹. He composed mostly patriotic songs; the short minuets added to both tutors are very simple. His description of the cello is significant: "...*The Violoncello is an Excellent instrument, not only in concert, but also for playing Lessons&c. This instrument may be Consider'd as a Large Fiddle only held the contrary way...*"⁴⁰ Like Corrette, Robert Crome was a violin player himself, and his approach to fingering could confirm the theory that the 1-2-4 fingering was designed for violinists wanting to learn the cello.

Based on the available information one can venture to say that the 1-2-4 fingering system was designed either for amateur players or for violin players who wanted to learn the cello. None of these four (including Corrette's method) sources was written by a professional cellist. They are not considered to play an important in the history of cello technique. Both "*Apollo's Cabinet...*" and Panerai's method are dedicated to the most popular instruments at that time and intended to be used at home just for the pleasure of making music.

Given the above, the importance of the works by Corrette, Arne, Crome and Panerai lies mostly in showing us what the state of amateurs' music education looked like, rather than giving us insight into the level of the technique of professional cellists.

³⁹ Highfill, Philip H. "*Crome, Robert.*" *A Biographical Dictionary of Actors, Actresses, Musicians, Dancers, Managers & Other Stage Personnel in London*. Vol. 4. Carbondale: Southern Illinois U, 1975.p.53. Print.

⁴⁰ There is no information about any of the three sources in the Grove Music Dictionary.

Salvatore Lanzetti's principles

"Principes ou L'application de violoncelle, par tous les tons de la manière la plus facile" by Salvatore Lanzetti is not a typical method covering all the technical and musical aspects of playing⁴¹. It is primarily a fingering guide composed of a set of thirteen scales in various tonalities. Every scale is followed by two or three short exercises. He expands the cello range to f'. Although Lanzetti is not completely consistent in the fingerings he gives, some patterns are present.

Lanzetti's fingering in the first two positions is the same one found in Corrette's chapter XIV and also closely approximates today's approach. He applies 0-1-3-4 or 0-1-2-4 fingers with extensions between the 1st and 2nd fingers (to compare Lanzetti's fingerings with Duport's fractions see Fig. 3). This example from page 2 of Lanzetti's method shows the fingering for 1st position:



Figure 22

Lanzetti, like Corrette, compresses 3rd and 4th positions, so that the interval of a fourth occurs between the 1st and 4th fingers (a whole-tone extension is used between the 2nd and 3rd fingers). This similarity can be seen by comparing the 2nd octave of the Lanzetti's G major scale with the 3rd position from Corrette's chapter VII. The following example from page 2 of Lanzetti's method shows compressed 3rd and 4th positions:

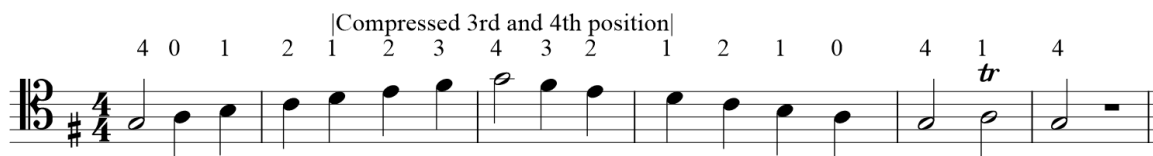


Figure 23

In his time, Salvatore Lanzetti (c.1710–80) was famous and successful cello virtuoso. He was also one of the most innovative cellists of his era, who advanced many aspects of cello technique. His own virtuosity is evident in his solo compositions. In his Op. 1, *"XII Sonate a Violoncello solo e Basso continuo,"* the technique of both left and right hand is highly advanced. It is not surprising therefore to observe an evolution in the approach to fingering for 1st position. Lanzetti uses all 4 fingers with extensions (fractions) in the 1st position, as a modern cellist would. However from the 3rd position on, a diatonic fingering is still given, which might indicate the use of the oblique left hand position.

⁴¹ Lanzetti, Salvatore. *"Principles or The technique of the violoncello, in all keys in the easies manner / composed by Lanzetta"* (before 1760) translated by: Graves, Charles Douglas. *"The Theoretical and Practical Method for Cello by Michel Corrette Translation, Commentary, and Comparison with Seven Other Eighteenth Century Cello Methods"*. East Lansing: Michigan State U, 1971. 98. Print. p.118-132

Method by Johann Baptist Baumgartner

Johann Baptist Baumgartner's "*Instructions de musique, théorique et pratique, à l'usage du violoncelle*"⁴² contains chapters about music theory, and left hand and bowing techniques. The most interesting and valuable part of this method is the chapter that provides very detailed instructions on cello accompaniment, with a table of chords. The chapters entitled "*On the positions of fingers*" and "*On technique and shifting*" are devoted to the left hand, but unfortunately provide no information about the left hand's shape. The only point of reference to the hand's shape as in Lanzetti's case, were scales with marked fingerings added to the method. Baumgartner's approach to fingering is similar to that of Lanzetti. The only difference is that Baumgartner gives an alternative fingering for the 3rd position. As can be seen in the example below from page 4 of the method, he proposes 1-2-1-2 instead of 1-2-3-4 fingerings:

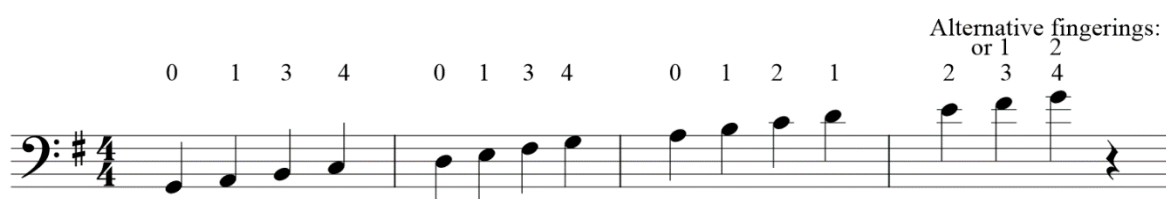


Figure 24

By applying 1-2-1-2-fingers instead of 1-2-3-4, Baumgartner avoids the whole step stretch between the 3rd and 4th fingers. However, based on the following example from page 4 of Baumgartner's method, one can assume that he might have used an oblique hand position. In measure 4 of the following illustration the fingering is diatonic, which is the same as Corrette's compressed 3rd and 4th position. The only difference is that due to the tonality F Major he doesn't have to use 4th finger (note g'). This actually makes the grip much more natural and comfortable:



Figure 25

Like Lanzetti, Baumgartner (1723-1782) was already a respected cello virtuoso during his lifetime. Born in Germany, he was active mostly in Northern Europe, including modern day England, The Netherlands, Sweden, Denmark and Austria. Again we can observe an evolution towards more comfortable and natural cello fingerings.

⁴² Baumgartner, Johann Baptist. "*Instructions in music, theoretical and practical, for the use of the cello*" (The Hague, 1774) Ibid. p.172-215

Micro-shifts

Fingerings proposed by Lanzetti and Baumgartner show the next step in the development of the cello's left hand technique. These methods are written from a cellistic point of view and take into account the distances between the fingers in 1st position. Yet their compressed 3rd and 4th positions demonstrate an attachment to diatonic fingerings. It is significant that playing with the compressed 3rd and 4th positions doesn't strictly require an oblique left hand position. The passage d-e-f-g- with fingers 1-2-3-4 is possible to execute in at least three ways: the first possibility is to keep the hand in one position, which necessitates a slanted shape of the left hand and placement of the thumb at the opposite side of the neck. The other two possibilities involve slight movement of the hand which I'll call a micro-shift. The movement happens between the 2nd and 3rd fingers. It can be executed both with oblique and square hand shapes, and the difference between them is in the position of the thumb. Keeping the thumb in place at the crook of the neck requires a slightly oblique shape. However, moving the thumb along with the fingers allows the hand to maintain a square position.

The role of the thumb is very important: as we know from modern elementary cello technique, the thumb acts as a pivot point for the hand serving as a reliable guide for intonation. When executing a shift, the thumb should move with the other fingers while lightly touching the neck of the cello. Squeezing the neck with the thumb leads to unwanted tension. In each of the three cases I proposed, the thumb behaves differently. An extremely slanted position of the hand requires placing the thumb on the other side of the neck because this position helps keep the fingers closer to the fingerboard. Keeping the thumb in one place at the crook of the neck might help with intonation, but it does not allow the hand to remain relaxed. Moving the thumb together with the hand provides free movement, but from my own experimentation I noticed a slight glissando during the shift.

The videos demonstrating three possible realisations of the passage d-e-f-g on the A string in compressed 3rd and 4th positions are available on the Research Catalogue website. Video 3 shows the hand kept in one position, video 4 shows the micro-shift with the thumb in one place on the neck, video 5 shows the micro-shift with the thumb moving along with the fingers. Link to the videos: <http://www.researchcatalogue.net/view/108734/135965>

Development of chromatic fingering

Alongside methods recommending violin-type fingering, treatises dedicated to the chromatic fingering also began to appear. The earliest French cellists, who were usually trained as viol players adapted viola da gamba technique based on semitones and applied it to the cello. Students of Martin Berteau (ca. 1700-1771), notably J-B. Janson (ca. 1742-1803), F. Cupis (1732-1808), J.B. Tillière (ca. 1750-90), and finally J-P. Duport (1749-1819) established a system of chromatic fingering still used today.

The chromatic fingering in 1st position from Cupis, Tillière and Duport treatises:



Figure 26

The use of chromatic fingering did not exclude the oblique left hand position. Historically there have been cases of cello virtuosos who performed highly advanced passages using the oblique left hand position. More about this subject in the chapter *Oblique left hand position* (p.27)

John Gunn and his critique of diatonic fingering

Not only French methods advocated chromatic fingering. Gunn's *"Theory and Practice in Fingering on the Violoncello"*⁴³ was the most comprehensive English treatise on cello technique of the eighteenth century. It was also the first attempt to systematize cello fingering and the first example of a critical approach to diatonic fingering and oblique left hand position. Gunn (c.1765-c.1824) strongly advocates the use of the perpendicular (square) position for the left hand:

"...Let the fingers be bent into an arch like form; the first joint from their point should be nearly perpendicular to the string (...) In this position of the hand the fingers will be at distance of semitone from each other..."

This illustration from Gunn's method shows the three possible shapes of the cellist left hand (regular, extended and oblique):

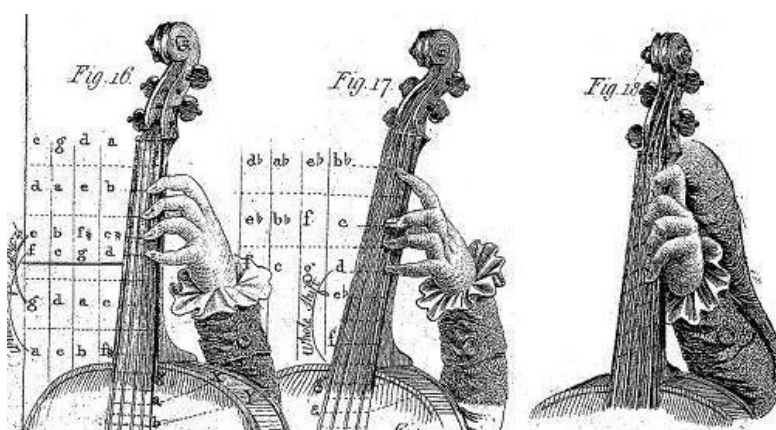


Figure 27

Gunn confirms that earlier cellists held the neck of the cello with the fingers of the left hand at an oblique angle with the thumb behind the first finger.

"... The position at fig. 16 is perfectly calculated to measure the distance of a tone and semitone, which in the system of music, is universally called the interval of the minor or flat third, and therefore we shall call this the MINOR position in contradistinction to the position at fig. 17 which includes two whole tones, the interval of a major or sharp third; and therefore called the MAJOR position. The position at fig 18 formerly much in use, and originating probably from the position of the hand on the Violin, on which it is indeed the best practicable, is given a beacon to avoid; the fingers tending to an oblique direction..."

Further on Gunn argues that neither the hand nor the thumb should grip the neck in such a way as to restrict the free movement of the hand and fingers.

⁴³ Gunn, John Charles. *"The theory and practice of fingering the violoncello: containing rules and progressive lessons for attaining the knowledge & command of the whole compass of the instrument"* (1789) In: Graves, Charles Douglas. *"The Theoretical and Practical Method for Cello by Michel Corrette Translation, Commentary, and Comparison with Seven Other Eighteenth Century Cello Methods"*. East Lansing: Michigan State U, 1971. 98. Print. p.300-400

Gunn's treatise and the activities of French cellists reflect progress in cello playing. Their concept of chromatic fingering forms a basis for modern cello technique. We can observe that the semitone-based fingering with fingers falling perpendicularly onto the string slowly became dominant over the diatonic approach. Soon the diatonic system of fingering would be superseded by the semitone system of fingerings. However, until the nineteenth century examples of Corrette's 'heritage' could be found in the form of oblique left hand position.

Oblique left hand position

While chromatic fingering and the square hand position were already well established in cello technique, there were still some cellists who applied a ‘violinistic’ left hand position. This position was characterized by the fingers slanting backwards at an oblique angle to the fingerboard, and the thumb being placed towards the opposite side of the neck rather than directly beneath it. Another characteristic of the oblique left hand position seems to be that the elbow was kept very low and close to the body. On the two paintings below we can see cellists from around half of the eighteenth century playing with slanted left hand position:



Figure 28 Januarius Zwick (1730-1779) “*De familie Remy Koblenz*” (1776), Nürnberg, Germanisches Nationalmuseum



Figure 29 Thomas Gainsborough (1727-1788) *The Rev. John Chafy in Playing the Violoncello in a Landscape* (c.1750-2) The Tate Gallery, London

Also Bernard Romberg (1767-1841) is clearly displaying oblique hand position in the illustration from his *Violoncellschule*⁴⁴:



Figure 30

His left hand leans back rather than being perpendicular to the fingerboard, and the left elbow is dropped. Romberg also gives a very detailed description of this type of left hand position in the chapter “*The position in which the player should sit*”:

*“The hand should so hold the neck, that the 1st finger should clasp it round, the 2nd should be bent so as to form three sides of a square, the 3rd should be bent half round, and the 4th held straight. The thumb should lie exactly opposite to the 2nd finger placed so as not to project beyond the fingerboard, but on line with its surface. The palm of the hand should not be pressed close to the neck but should be kept hollow, nor must the hollow of the thumb be pressed close to the 1st finger.”*⁴⁵

Numerous facts from Romberg’s biography makes his example extremely interesting. Called ‘*the hero of all violoncellists, the king of all virtuosos*’, he was undoubtedly a highly skilled performer. He met Boccherini, worked with J-L. Duport's, and taught J.J.F. Dotzauer. He also played a Stradivari cello (model from 1711), with a body length of 75.5 cm. Taking into consideration that he learned cello from his father, it can be assume that Romberg developed his own way of playing with the oblique left hand position, which gave him great agility and technical advancement. Another reason for using this hand position could be his strong belief that a square hand position might cause too much finger pressure. He made a rather exaggerated

⁴⁴ Romberg, Bernhard. “*Violoncelle-Schule in zwei Abtheilungen*” Editor: First edition Publisher Info.: Berlin: T. Trautwein, n.d.[1840]. p.8. *IMSLP/Petrucci Music Library: Free Public Domain Sheet Music*. N.p., n.d. Web. 02 Feb. 2015. <http://imslp.org/wiki/Violoncell_Schule_%28Romberg,_Bernhard%29>.

⁴⁵ Romberg, Bernhard. trans. anon. “*Complete Theoretical and Practical School for the Violoncello*”, Boston: Oliver Ditson & Co., n.d.(ca.1880) p.7 cited by Walden Valerie, “*One Hundred Years of Violoncello A History of Technique and Performance Practice 1740-1840*”, Cambridge: Cambridge University Press, 1998, p. 101

claim that excessive pressure strains the muscles, so ...”*that they require whole years of rest before they can again be used for playing...*”⁴⁶. His use of the thumb position has been widely discussed, yet Romberg’s fingering in the first four positions still needs to be analysed. Romberg was famous for using so-called ‘positional parallelism’, which means that he stayed within one position as long as possible, playing on all four strings if necessary. Romberg’s merit was to develop this method to the maximum, enabling musicians to change positions far less frequently.

In her book “*One Hundred Years of Violoncello A History of Technique and Performance Practice 1740-1840*” Valerie Walden writes that some other cellists taught and played with the slanted left hand position. They were Jean Balthasar Tricklir (1750-1813), Jean-Baptiste Janson (1742-1803) and Olive Vaslin (1794-1889)⁴⁷. Tricklir received violin and cello lessons as part of his ecclesiastical training. According to Walden, Tricklir’s hand position is inferred by fingerings notated in his concertos. Both Tricklir and Romberg used all four fingers in the higher register and thumb position. None of the consulted sources had more information about the educational backgrounds of Tricklir and Janson. Fortunately, at the end of his life Olive Vaslin wrote a guide for his students, in which he explained the reasons for applying an oblique left hand position. His case is very interesting because he adopted the oblique hand position in opposition to his teacher Charles Nicolas Baudiot. Despite his talent and eagerness, Vaslin couldn’t make adequate progress while being forced to play with a square hand position. He writes that the change to oblique position helped him achieve greater agility in technique in spite of his double-jointed fingers. The following illustration shows Vaslin holding the cello with slanted left hand⁴⁸:

⁴⁶ Romberg, Bernhard. trans. anon., “*Complete Theoretical and Practical School for the Violoncello*” London: T. Boosey & Co., (1840), p. 97. cited by George Kenneway “School of Music.” *University of Leeds*. N.p., n.d. Web. 29 Dec. 2014. <<http://chase.leeds.ac.uk/article/cello-left-arm-and-hand-george-kennaway/>>.

⁴⁷ Walden, Valerie. “*One Hundred Years of Violoncello A History of Technique and Performance Practice 1740-1840*”, Cambridge: Cambridge University Press, 1998, p. 100

⁴⁸ Lassalle, Emil “*Lithograph portrait of Olive Vaslin*” Bibliothèque National Français, Richelieu Musique fonds estampes 1842 cited by George Kenneway “Cello: Left Arm and Hand.” *University of Leeds*. N.p., n.d. Web. 29 Dec. 2014. <<http://chase.leeds.ac.uk/article/cello-left-arm-and-hand-george-kennaway/>>.



Figure 31

It is important to keep in mind that these cases represent the minority and that cellists who applied an oblique hand position did not constitute a united group or school. Moreover, most cellists at that time were against a violin-like hand position. Keeping the lower joint of the first finger in contact with the neck drastically limits its movement, and makes even occasional ornamental vibrato very difficult, which may explain why Romberg barely discusses this technique. The slanted left hand position requires a small shift with each note of the scale, which might result in a weaker grip, and a *glissando* effect. J.L. Duport, like Gunn a few years earlier, criticises the violin hold with this words:

... "By holding the hand faultily we mean the manner and habit of holding the neck of the instrument as is done with the violin, in the palm of the hand; by this the fingers are shortened, and the stretch from the 1. to the 4. finger [...] will be found almost impossible [...] Those therefore who have adopted this vicious manner, are obliged continually to change the holding of the hand, even while playing one and the same position..."

Although the violin hold did not last, not everyone advocated a strictly square left hand either. Later in the nineteenth century a third shape appears, somewhere between the two. Carl Schroeder illustrates it in his work *"Katechismus des violoncellspiels"*⁴⁹. His left hand is somewhat slanted, but not as much as Romberg's. Schroeder was a succesful cello virtuoso traveling throughout Europe. His didactic output plays a very important role in today's cello education.

⁴⁹ Schroeder, Carl. *"Katechismus des violoncellspiels"* In: Kennaway, George *"Plying the Cello, 1780-1930"* Farnham, Surrey: Ashgate, 2014. p.46. Print.



Figure 32

There are still occurrences of the oblique left hand position in the first half of twentieth century. A number of live video recordings show cellists from the 1930s and 40s playing in such a way. Below are a few stills from the slapstick comedy titled “*Musical nonsense*” with cellist Al Verdi acting and playing an accompaniment to the song “Dinah” very much in tune and without any audible *glissando* effect⁵⁰.



Figure 33



Figure 34

⁵⁰ “Musical Nonsense!” - *British Pathé*. N.p., n.d. Web. 29 Dec. 2014.
<<http://www.britishpathe.com/video/musical-nonsense/query/musical+nonsense>>.



Figure 35



Figure 36

In this chapter I've shown some examples of cellists who played with violin-type left hand position. Even if they didn't play a significant role in the development of cello technique, their presence is quite visible and it is impossible to deny the existence of this phenomenon. The former chapters demonstrate the reasons of playing with slanted hand. It is also very interesting to notice how long the tradition of this technique existed. This knowledge can be one more step in increasing our awareness in historical performance. It might have some influence on our further choices as cello players.

Musical examples

The most explicit proof of fingering practice can be found in a written out fingerings. These are numerals (or other symbols) written above or below the notes indicating exactly which finger is to play each note. In this chapter I'd like to present examples from the cello repertoire with such indications. I'll analyse them in terms of the system used and possible ways of execution.

The concept of adding fingerings above the music comes from tablature notation. However, whereas tablature notation is a literal representation of an instrument's technique, fingering in staff notation can have multiple meanings. For instance as a purely didactic means, it may provide easy technical solutions to make music more accessible for amateur players. Fingering notated by the composer of the piece, can express his intended interpretation. In general, fingerings from a particular time and place provide valuable insights into performance practise. We can find many examples of written fingerings in *viola da gamba* repertoire, for instance in Marin Marais's works. Unfortunately there are few examples of cello repertoire containing fingerings suggested by the composer.

I'll discuss now a few examples of musical works with fingerings. In addition to the illustrations I made the videos. There are two videos for each of the examples: first video shows the original fingerings - as it is written, second video shows the fingerings which I would use. Link to the videos: <http://www.researchcatalogue.net/view/108734/135978>

The first example comes from the "*Sonate pour deux Violoncelles*"⁵¹ by Michel Corrette (1707 – 1795), which appears in his cello method. The piece's level of difficulty indicates its educational purpose. The given fingerings obviously serve to support Corrette's system of diatonic fingering proposed in chapters IV-VI of his method. Unfortunately Corrette only provide fingers for the 3rd position. Here he applies fingers 1-2-3 for the notes d-e-f. In this case, the position of the hand is quite natural and a great stretch is not needed. This reflects Baumgartner's F Major scale (Fig. 24):



Figure 37 *Sonate pour deux Violoncelles*, Allegro (VIDEO 6A, 6B)

In the last part of his life Carlo Graziani (? - 1787) composed 20 cello works⁵². These unprinted manuscripts were found in Friedrich Wilhelm II's royal library, and were edited and published

⁵¹ Corrette, Michel "*Methode Theorique et Pratique pour Apprendre en peu de Terns le Violoncelle dans la Perfection*" (Paris, 1741; facsimile reprint, Geneva: Minkoff, 1972). p. 29

⁵² These are sonatas without opus number. In the years ca. 1760-1780 he wrote cello sonatas op. 1, 2 and 3 published in London, Paris and Berlin.

by Mara E. Parker for A-R Editions⁵³. Some of the manuscripts contain pencilled-in fingerings. It is quite likely that these fingerings were written by the composer for his former student – Friedrich Wilhelm. Most likely the fingerings were added to facilitate execution by an amateur. In the preface to the edition, Mara E. Parker reveals the fragment of the original fingerings. She states that pencilled-in fingerings are not unique to Graziani sonatas. They appear elsewhere in manuscripts owned by Friedrich Wilhelm II and what is significant the fingerings occur only in the cello parts.

According to Marc Vanscheeuwijck, Carlo Graziani may have intended his compositions to be for a small five-string instrument tuned C-G-d-a-e or C-G-d-a-d⁵⁴. This supports the theory that diatonic fingering and oblique left hand position are connected with the size of the instrument.

The fingerings in the following example from the *Sonata G major* (M1956) fingerings indicate compressed 3rd and 4th positions like those in the methods by Corrette, Lanzetti and Baumgartner. This could be a good example of the micro-shift I mentioned in my discussion of Lanzetti's and Baumgartner's systems. It is not necessary to hold the hand in one position in order to execute the passage.



Figure 38 Sonata G major (VIDEO 7A, 7B)

Quite an outstanding example in the whole cello repertoire is “6 Sonate a Violoncello Solo e Basso Continuo” by Jacob Klein (1688-1750). This is because in many places Klein indicates not only fingerings but also strings. Specifying the string with an appropriate amount of dashes above the note is very rare in the repertoire of the violin family, but is more common in the *viola da gamba* tradition (Marin Marais).

⁵³ Graziani Carlo. “Sonatas for Violoncello and Basso”, A-R Editions, Volume 49 (1997), edited by Mara E. Parker

⁵⁴ Vanscheeuwijck, Marc “Violoncello and Violone.” In Carter, Stewart, and Jeffery T. Kite-Powell. A Performer's Guide to Seventeenth-century Music. Bloomington: Indiana UP, 2012. p.474. Print

From the fingering provided with his Op.4 “6 Sonate a Violoncello Solo e Basso Continuo”⁵⁵, we can assume that Klein was using diatonic fingerings and an oblique left hand position:

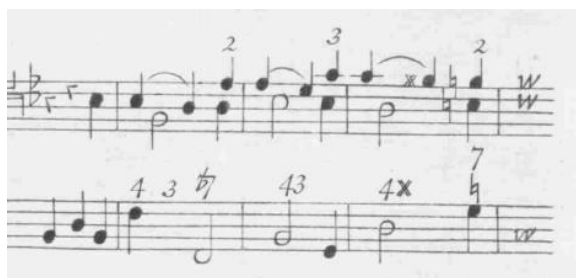


Figure 39 (VIDEO 8A, 8B)



Figure 40 (VIDEO 9A, 9B)

The two examples above (Fig. 39, 40) show fingerings applied to double stops. Particularly interesting fingerings can be found in bars 3 and 4 of Fig. 39 and in bar 2 of Fig.40. Both cases require a wide stretch. Double stops are the most unambiguous cases because the left hand has to stay in one position. This demonstrates the diatonic approach.

Three other examples from Klein’s sonatas (Fig. 41, 42, 43) are possible to execute with a micro-shift.



Figure 41 Hand in 3rd position (VIDEO 10A, 10B)



Figure 42 Hand successively in 4th, 2nd and 1st position (VIDEO 11A, 11B)



Figure 43 Hand in 4th and 3rd position (VIDEO 12A, 12B)

⁵⁵ Klein, Jacob. “6 Sonate a Violoncello Solo e Basso Continuo Op.4” - IMSLP/Petrucchi Music Library: Free Public Domain Sheet Music. N.p., n.d. Web. 29 Jan. 2015.
<http://imslp.org/wiki/6_Cello_Sonatas,_Op.4_%28Klein,_Jacob%29>.Publisher Info.: Amsterdam: Gerhard Frederik Witvogel, n.d.(1746), Catalogue No.82.

These examples demonstrate that the 3rd finger was employed much more often than today. According to modern technique, a cellist should use the 4th finger instead of the 3rd in the examples above.

Martino Berteau (1708-1771) is considered to be the founder of the French school of cello playing. His students included nearly every important French cellist of the succeeding generation, including J-P. Duport, F. Cupis, J.B. Tillière and others. Composers from the French school are considered to have established chromatic fingering. However, the fingering from Berteau's Op. 1 "*Sonate da Camera a Violoncello Solo col Basso Continuo*" is still diatonic in some places. In the case of arpeggios as in the case of double stops, the hand has to stay in one position. The fingerings proposed by Berteau requires a big stretch, which is only possible to achieve when the hand is slanted:

4th position 3rd position 3rd position

The image displays a musical score for a cello and basso continuo. The cello part is written on a single staff with a treble clef and a key signature of one sharp (F#). It features several measures of music with fingerings (1-4) and position markings (4th position, 3rd position) above the staff. The basso continuo part is written on two staves, with the upper staff using a treble clef and the lower staff using a bass clef. It includes fingerings and position markings (3rd position) below the staves. The score is divided into two systems by a double bar line. The first system contains measures 1 through 10, and the second system contains measures 11 through 13. The music is in a 3/4 time signature.

3rd position.....|

Figure 43 Sonata 1 F Major Vivace (VIDEO 13A, 13B)

Conclusion

The relationship between violin and cello techniques was very close over the centuries. In the early history of the cello the influence of the violin was visible not only in the way of playing, but also in the manner of fingering. A common fingering system benefited those who changed from one instrument in the violin family to another. It facilitated the learning process, making it possible to carry over the skills acquired on the cello to the violin. Later, in the eighteenth century, Corrette created his fingering system for educational reasons. This time, however, the fingering was supposed to help a violin player to become a cellist. The fact that his system was repeated in a number of ‘non-cellic’ sources suggests that it was more popular among amateur players. What I personally found interesting is that the whole idea of playing both violin and cello is still present today among amateur players. Reviewing internet forums I’ve come across many questions similar to the following:

*“... Can a violinist learn to play the cello too? Is it possible to be a satisfactory violinist and cellist at the same time, or is this made very difficult by the fact that everything is done the other way round, let alone the sheer difference in size? As an amateur violinist (and violist), I am wondering about the possibility of buying a cello and endeavouring to become an amateur cellist....”*⁵⁶

Both in amateur and professional circles specialization in only one instrument was much less common in earlier eras than it is today. Cellists were often violinists, and a typical violin player usually played viola and cello as well⁵⁷. Similar fingerings and left hand positions would have made the change between the instruments easier. The connection between violin and cello techniques is still evident in the naming of the positions on the cello. The numbering of the cello positions relates to the placement of the fingers on the violin, rather than the cello⁵⁸.

Even after cello fingering was definitively codified, some cellists continued to use violin hand shape. Romberg’s example proves that it was possible to achieve virtuosity with an oblique left hand position. From Vaslin’s case we learn that it could be useful when the ordinary square position is physically not possible to achieve. The semi-slanted position used by Carl Schroeder was probably quite common and existed until the beginning of twentieth century.

The size of the instrument and playing position influenced the fingerings used. It is possible that holding the instrument in front of the chest or hanging it on a strap would require violin-type fingering. A smaller size would also make diatonic fingering more comfortable. I believe that until the end of eighteenth century different ways of fingering coexisted.

The fingering systems proposed by Lanzetti and Baumgartner show the transitional stage in the evolution of cello fingering. As virtuoso-cellists, they adopted square left hand shape in the first position. Their way of thinking led to the idea of using micro-shifts. Moving the hand slightly instead of stretching it is a solution that may have been widely used in the eighteenth

⁵⁶ “Can a Violinist Learn to Play the Cello Too?” *Can a Violinist Learn to Play the Cello Too?* N.p., n.d. Web. 19 Nov. 2014. <<http://www.violinist.com/discussion/response.cfm?ID=12322>>.

⁵⁷ Amongst many others Georg Gottfried Wagner, talented violinist and cellist, who played under Bach in Leipzig between 1723 and 1726.

⁵⁸ For instance, 2nd position on the cello begins where the 2nd finger would be used on violin, even though this is where a cellist would use his 2nd or 3rd finger. 3rd position on cello begins where a violinist would place his 3rd finger and the cellist would place there 4th finger.

century. Some of the musical examples containing fingerings demonstrate this as well. It is certain that in many cases the instrument's size or player's capabilities didn't allow for the use of strictly diatonic fingering. However, application of micro-shifts can be a solution to unusual passages in the cello repertoire.

Based on the material I examined, I concluded that diatonic fingering and oblique left hand position indeed had its place in the history of playing technique. It was an important and indispensable step in developing modern technique. Although it is not commonly used today, we can take advantage of its existence. We can add diatonic fingering to our box of tools and whenever we encounter a strange looking passage we will have one more solution to take into consideration.

Practical example:

In the introduction I wrote that sonatas of Jean-Baptiste Barrière are full of demanding passages. The example below presents the passage which is quite similar to the one from Berteau's sonata (Fig.44). The passage comes from Sonata No.5 in A minor from "*Livre IV de sonates pour violoncelle et la basse continue*"⁵⁹. A modern cellist would use the thumb in order to execute the extremely wide stretch. However, based on the knowledge gathered I can state that the passage from Barrière's sonata can be executed using the oblique left hand position:



Figure 44 Sonata 5 A minor - Andante, bar 9

⁵⁹ 6 Cello Sonatas, Book 4 (Barrière, Jean-Baptiste). N.p., n.d. Web. 29 Jan. 2015.

<imslp.org/wiki/6_Cello_Sonatas,_Book_4_(Barrière,_Jean-Baptiste)>. First edition: Louise Leclair, Paris: The author, Boivin, Leclerc, n.d.(ca.1740)

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Experiments:

My own experiments with diatonic fingerings on the cello

Experiments with violin players holding the cello for the first time