## **Baroque Instruments**

# The Baroque Cello and Its Performance

## Marc Vanscheeuwijck

The instrument we now call a cello (or violoncello) apparently developed during the first decades of the 16th century from a combination of various string instruments of popular European origin (especially the rebecs) and the *vielle*. Although nothing precludes our hypothesizing that the bass of the violins appeared at the same time as the other members of that family, the earliest evidence of its existence is to be found in the treatises of Agricola, Gerle, Lanfranco, and Jambe de Fer. Also significant is a fresco (1540-42) attributed to Giulio Cesare Luini in Varallo Sesia in northern Italy, in which an early cello is represented (see Fig. 1).

Martin Agricola, Musica instrumentalis deudsch (Wittenberg, 1529; enlarged 5th ed., 1545), f. XLVII., f. XLVIII., and f. LVr..

<sup>&</sup>lt;sup>2</sup> Hans Gerle, *Musica teusch* (Nuremberg, 1532; enlarged 3rd ed., 1546), A4r., B1r., and H4v.

<sup>&</sup>lt;sup>3</sup> Giovanni Maria Lanfranco, Scintille di musica (Brescia, 1533), 142.

<sup>&</sup>lt;sup>4</sup> Philibert Jambe de Fer, Epitome musical des tons (Lyons, 1556), 61-62.

Figure 1: G. C. Luini (?)

Varallo Sesia (VC), Cappella della Madonna di Loreto in Roccapietra, Assumption of the Virgin (1540-42), detail of the fresco.



The baroque cello differed in form only slightly from the modern instrument: it had a shorter and slightly more upright neck, a shorter fingerboard, a shorter and thinner bass-bar, a thinner sound post, a lower and differently shaped bridge, and usually no end-pin. Shape and measurements of the resonance box were not standardized until around 1707-1710, when Antonio Stradivari decided on a medium length of 75-76cm. Before that time instrument-makers made mostly larger cellos (77-80cm). In the 18th century, however, some violin-makers still made larger types.

The term "Violoncello" was first used in Italy in 1665 in a printed edition of Giulio Cesare Arresti's Sonate A 2.& a Tre Con la parte di Violoncello a beneplacito, Op. IV. Before that date, and indeed for quite a long time after, such terms as basso da braccio, violone, violone da braccio, violoncino, and bassetto viola indicated the instrument of the bass part, if any was specified. In France the name Basse de violon was more uniformly used until c. 1710, when the Italian term (and instrument) appeared; then we encounter the terms violoncel(le), violon de chelle, (petite) basse des Italiens, or basset.<sup>5</sup> In a similar way violoncello was adopted in England at the beginning of the 18th century to replace the bass violin. In German-speaking countries the situation is more confused; Italian terminology such as Bassa Viola, Viola da Spalla, Basse Viola de Braccio, or Violoncello was adopted, as well as such translations as Bas-Geig de braccio, Violonzell, Bassetl, or Bassette.

<sup>&</sup>lt;sup>5</sup> See, for example, Jean-Baptiste Sébastien Bréval in various chamber and orchestral works.

<sup>&</sup>lt;sup>6</sup> Johann Mattheson, Das Neu-Eröffnete Orchestre (Hamburg, 1713-21), Tome I, Pars III, §23.

<sup>7</sup> Michael Praetorius, Syntagma musicum, De Organographia (Wolfenbüttel, 1618).

<sup>8</sup> Idem., fig. XXI.

<sup>&</sup>lt;sup>9</sup> Leopold Mozart, Versuch einer gründlichen Violinschule (Augsburg, 1756).

### The Sixteenth Century

No parts written specifically for bass violin survive, but from iconographical sources and written indications<sup>10</sup> it is possible to reconstruct that the instrument was used exclusively in popular contexts (in contrast to the more noble instruments of the viola da gamba family) such as processions and dance music for weddings, village parties, fairs, etc. 11 Tuned in fifths (generally  $B^b$ -F-c-g), the instrument was played seated or standing and was held between the legs of the player on the floor or on a stool, or supported with a strap over the shoulder (in processions). Since the instrument needed to be partly supported by the left hand, the fingers were placed obliquely on the strings, and fingering was purely diatonic, as it was for the other violins as well. Bowing technique was rudimentary, and both underhand and overhand grips appear in iconographical sources.

#### The Seventeenth Century

The first documented use of the basso da braccio was in Monteverdi's Orfeo in 1607, in which another tuning C-G-d-a (described by Gerle in 1532), seemed more suitable to ensemble playing. In Italy as well as in Germany (Praetorius) this last tuning became standard, whereas the lower tuning was kept in use on the large English and French Basse de violon (see Fig. 2).12 The most acute problem during most of the 17th century is the choice of instrument in Italian and German music, especially when violone is mentioned. general this term was used to refer to the whole viola da gamba family in Italy during the 16th century. Toward the second decade of the 17th century the viols went out of fashion in Italy, 13 except for

<sup>10</sup> Jambe de Fer, Epitome, Lodovico Zacconi, Prattica di musica (Venice, 1592), and Pedro Cerone, El melopeo y maestro (Naples, 1613).

<sup>11</sup> See Peter Holman, Four and Twenty Fiddlers: the Violin at the English Court 1540-1690 (Oxford: Clarendon Press, 1993), 1-31, and Karel Moens, "De viool in de 16de eeuw (I & II)," Musica antiqua 10 (1993), 177-83, and 11 (1994), 5-12 for further details and sources on the violin family in the 16th century.

<sup>12</sup> See Marin Mersenne, Harmonie universelle (Paris, 1636), IV, 184-5.

<sup>13</sup> According to André Maugars, Response faite à un curieux (Paris, c.1640).

Figure 2. M. Mersenne, Harmonie universelle (Paris, 1636), IV, 184.

#### PROPOSITION IIII.

Expliquer la figure & l'estendué de toutes les parties des Violons, & la maniere d'en faire des Concerts, & les pieces de Musique propres pour ce suies.

EN COR E que l'on puisse quelques sois toucher deux chordes de Violon En mesme temps pour faire vn accord, neantmoins il en faut plusieurs pour faire vn Concert entier, comme est celuy des 24 Violons du Roy, c'est pour quoy ie mets icy trois sigures des Violons en taille douce, asin de representer toutes les parties ensemble, car la Haute-contre, la Taille, & la Cinquiesme partie sont semblables au Dessus MN, dont l'archet est OP; il faut



the lowest instruments. Banchieri14 describes the basso viola or violone de gamba, tuned G1-C-F-A-d-g, and a violone in contrabasso, tuned  $D_1$ - $G_1$ -C-E-A-d. The question is: is the violone a bass (8') or a double bass (16') instrument? Bonta suggests that between 1610 and 1680, the violone was a large cello strung with four gut strings which, because of their lesser sound qualities, required a bigger instrument.<sup>15</sup> Thanks to a Bolognese invention of the 1660s, the silver-wired gut strings—thinner strings with a higher tension, giving the instrument a clearer tone—the shorter type called violoncino offered more satisfying sound performances; from then on it was named violoncello, and gradually superseded the large cello (first in Bologna and later in Rome and elsewhere). The term violone was then used exclusively for a 16' instrument of the viola da gamba family, whereas contrabbasso designated a cello-shaped four- or three-string double bass. Recent research, however, has demonstrated that this interesting theory cannot be maintained as a general rule.16 A possible solution could be to accept that in some cases violone can indicate a large bass violin (especially in chamber music and most often in Rome), but that in other cases it can be a double bass viol (e.g., in church music) or even a third type of instrument, perhaps Banchieri's violone da gamba (G<sub>1</sub>-C-F-A-d-g)<sup>17</sup> or Praetorius's Gross Quint-Bass (F-C-G-d-a). 18 (See Figs. 3, 4, 5). In a few cases, violone could even refer to a regular bass viol (D-Gc-e-a-d'). Moreover, it now seems that bass parts were only rarely-except in large-scale church music-doubled on the lower octave (16') during the 16th and most of the 17th century. Large

<sup>14</sup> Adriano Banchieri, Conclusioni nel suono dell'organo (Bologna, 1609), 53-54, and L'Organo suonarino, op. 25 (Venice, 1611), 43.

Stephen Bonta, "From Violone to Violoncello: a Question of Strings?," Journal of the American Musical Instrument Society 3 (1977), 64-99; "Terminology for the Bass Violin in 17th Century Italy," Journal of the American Musical Instrument Society 4 (1978), 5-42; "Corelli's Heritage: the Early Bass Violin in Italy," Studi corelliani 4 (1986), 217-31.

<sup>16</sup> Tharald Borgir, The Performance of the Basso Continuo in Italian Baroque Music (Ann Arbor, 1987); Alfred Planyavsky, Der Barockkontrabass Violone (Salzburg, 1989).

<sup>17</sup> See also Francis Baines, "What Exactly Is a Violone," Early Music 5 (1977), 173-6.

<sup>18</sup> Praetorius, Syntagma, II, 26.

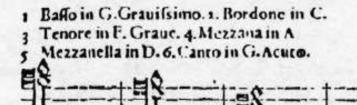
## Figure 3. A. Banchieri, L'organo suonarino Op. 25 (Venice, 1611), [43].

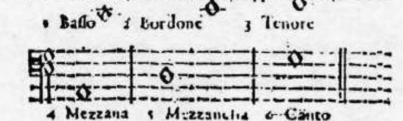
## REGOLA PER ACCORDARE STROMENTI DA CORDE BVDELLATE

Infieme con l'Organo ouer'Arpicordo.

Concerto di viole da Gamba.

PRIMA VIOLA, BASSO





Seconda Of , Viole, Tenor & Aleo.

- 1 Baffo in D. Graussimo a Bordone in G. Grauc.
- y Tenore in C:4: Mezzana in E. 5 Mezzanella in A. Acuto. 6. Canto in D.



Quarta Viola Soprano.

- a Balle in G, Graue. 2. Bordone in C.
- 3 Tenoto in Faorilla.4. Mezzana in A. Acuto. Megzanella in 1).6. Cento in G. Sopr'acuto.



Quella corda G Granissimo detta di sopra, non esfando fopra la l'affatura Organica fi deue intendere vn'Ottava beto il G. Graue, chrofara quatro talli fottoil C. es infime della Tallatora, & fimilmente meende fi il Re, mi fa, nel Chierarroue.

Concerto di Violette da Brazzo.

PRIMA VIOLETTA, EASSO

- 1 Baffo in G. Granc 1. Tenore in D.
- 3 Mezzana in A. Acuto 4.1 auto in E.



Seconda & 3. Violette, Tenor, & Alto.

- 1 Baffo in D. Graue. 2. Tenore in G. Acuto.
- 3 Mezzana in D. 4. Canto in A. Sopt'acuto.



VIOLINO IN CONCERTO ET SOLO.

- 1 Baffo in G. Acuto 2. Tenore in D.
- Mezzana in A. Sopr'acuto. 4. Canto in E. Acutifs

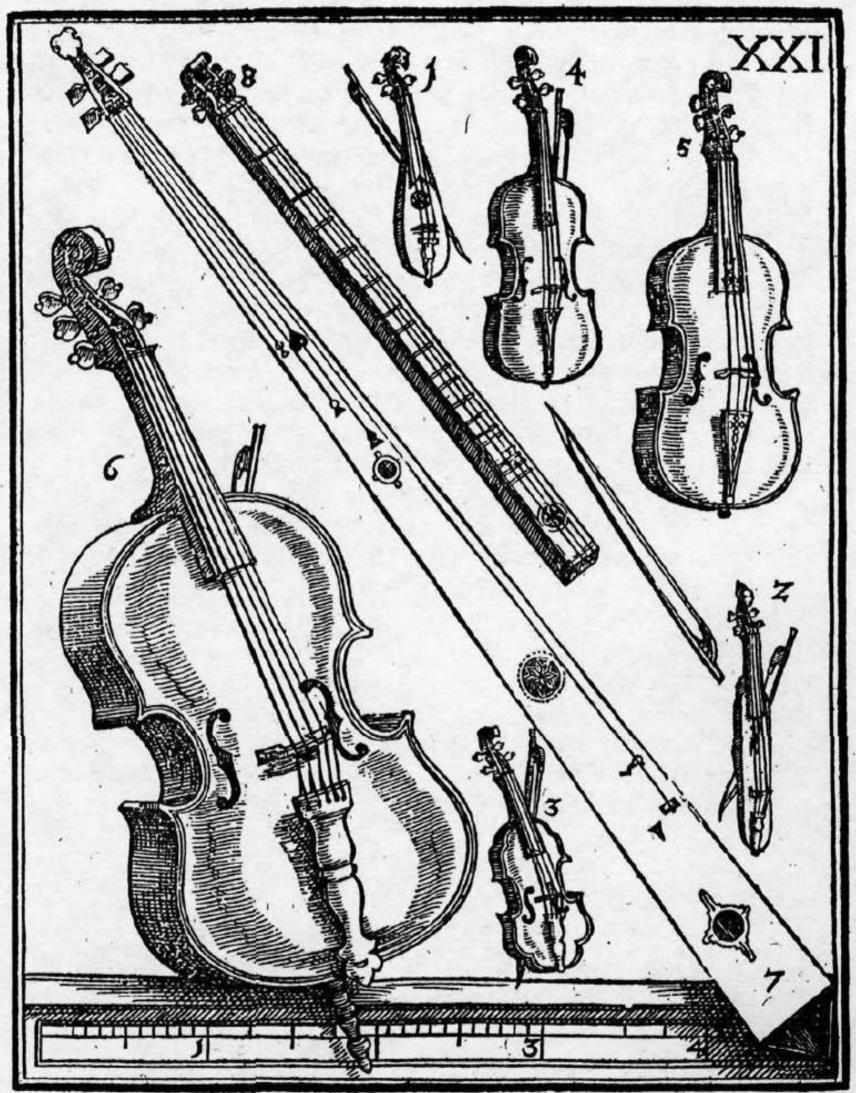


- I Fein G. Grauissimo 2. Mi, in A.
- 3 Fain b. molle.
  - 4. bolin C.
- 6. Fain b. E.molle. 5 Lain D. Qui entra il Liuto con settima.
- 7 Settima in F. Graue.
- Qui entra il Liuto dafci corde.
- 8 Baflo in G. Graue
- 9 Bordone in C. Graue
- I L. Mezzana in A. Acuto



Mezzana, Mezzanella, Canto onero Ottaua fotto G 2 Organo Suonarino

Figure 4. M. Praetorius, Syntagma musicum, De organographia (Wolfenbüttel, 1619), Illustration XXI.



1. 2. Richne Poschen / Geigen em Octav bober. 3. Discant-Beig ein Quart bober. 4. Rechte Discant-Beig. 5. Tenor-Beig. 6 Bas-Beigde bracio. 7. Erumscheidt. 8. Schridtholtt. E

liji

bass viols and bass violins were more frequently played at real pitch without transposition, in order to add depth and volume rather than a lower octave. Before the introduction of wirewound strings, the larger cello might actually have been used less often than small double basses; this could explain the generalized application of the term violone, referring in the first place to a 16' or 12' five- or sixstringed and fretted viola da gamba instrument. The small bass violin (called violoncino or violoncello, the terms synonymous) could have been used for more soloistic bass parts, supported by a full continuo (Fontana, Sonate, 1641; Cavalli, Musiche sacre, 1656; Freschi, Op. I, 1660). The introduction of the wirewound bass strings particularly affected the development of that instrument, when Bolognese composers such as Giovanni Battista Vitali, Giovanni Battista degl'Antonii, Domenico Gabrielli, and Giuseppe Jacchini (all musicians in S. Petronio) wrote their first solo Ricercari and sonatas. The juxtaposition of violoncello, violone, and contrabbasso in the partbooks of Gabrielli's and Torelli's concertos, or Colonna's and Perti's masses and psalms, proves a clear distinction between the three instruments.

Once the bass violin was more regularly played in theaters and churches, and less in processions or in dance music, the support of the thumb was no longer necessary to carry the instrument, allowing more mobility to the left hand and thus some greater virtuosity (e.g., the violone part in G. P. Cima's 2 Sonate in the Concerti ecclesiastici, Milan, 1610).

Figure 5. D. Speer, Grundrichtiger Unterricht der musikalischen Kunst oder Vierfaches musikalisches Kleeblatt (Ulm, 1687/97), 199.

# BASS-VIOLON.

Die wird ein Bals - Violon gestimmet/ und wie viel hat er Saiten?
In Bals - Violon hat auch secht Saiten/ wird aber auf folgende Beise gestimmet : Die grobste und eist Saiten kommt ins conera tieffe G. die andere ins tieffe C. die dritte ins tieffe F. oder E. die vierdte ins A. die fünffte ins d. die sechste oder Quint ins g. wie in folgender Borstellung zu ersehen/ und wie viel Buch staben unten zu finden/ so vielhat jede Sait auch Briffe.



No fingering methods from the 17th century are available, but Mersenne unequivocally indicates the similarity in technique for all the instruments of the violin family: fingering is still diatonic (0-1-2-3), and bowing is overhand, which we can deduce from Mersenne's instruction that "on every first note of a measure, the bow should be pulled downwards." 19 His note on trills is also very useful: "One should use as many bow strokes as the trilling finger hits the string,"20 whereas he recommends "to soften the string by slightly shaking the finger closest to the one that holds the note on the string," in other words a sort of a flattement. In Italy the earliest indication is to be found in Zannetti,21 in which regular musical notation on staves is juxtaposed with tablatures for the four instruments of the violin family. Conclusions on technique are identical to Mersenne's and also to Bismantova's.22 In this last treatise, the author provides some interesting bowing rules. As he states that they "are the same for the cello as for the violin" (p. [120]), we notice the rigorously observed rule of downbow on the downbeat.

Example 1. Bismantova [112-115]. The dot over the note indicates v. The dot under the note T.



<sup>&</sup>lt;sup>19</sup> Mersenne, IV, 185.

<sup>20</sup> Ibid., 182.

<sup>21</sup> Gasparo Zannetti, Il Scolaro (Milan, 1645).

<sup>22</sup> Bartolomeo Bismantova, Regola p[er] suonare il Violoncello da Spalla, ms. appendix to Compendio musicale (Ferrara, 1677).



In the same period Muffat<sup>23</sup> explains the difference in bowing used by the Italians and by Lully in France, where underhand bowgrip was still in use following the example of the viol players.



<sup>23</sup> Georg Muffat, Florilegium Secundum (Passau, 1698), "Préface: Plectrum, de la manière de tenir l'Archelet."

Although theoretical works still suggest a completely diatonic fingering up to the beginning of the 18th century,24 the music itself again, after the introduction of the wirewound strings in Bolognaindicates a much more advanced technique. The hybrid diatonicchromatic fingering technique, i.e. the modern cello-technique, was according to Corrette,<sup>25</sup> introduced in France by Giovanni Bononcini (in Paris in 1733), who had studied the instrument with his father Giovanni Maria and with Domenico Gabrielli in Bologna. Gabrielli, or even his predecessors in San Petronio (Giovanni Battista Vitali and Petronio Franceschini) might have been one of the first cellists to make a generalized use of the new technique in which the four fingers were put perpendicularly on the string, and a half tone apart from each other. This allowed these first violoncello players to introduce frequent position shifts, double stops, chords, virtuoso ornamentation, fast scales, more passages in the high range (e'-c"), tremolos, batteries, slurs, arpeggios, and skipping over two strings, to their technique. Giuseppe Jacchini was particularly famous for the way he accompanied singers in their recitatives: he seems to have made broad use of chord and melodic ornamentations in his continuo parts.26

By the end of the century tuning was almost standardized to C-G-da, although a performance of Gabrielli's 7 Ricercari will be easier on a cello tuned C-G-d-g (otherwise many chords, e.g., c-e-g, are not realizable). Later on, this way of tuning the instrument became more marginal, since it was designated as scordatura.27 On the use of five-string cellos, no documentary evidence is left from the 17th century. Mattheson<sup>28</sup> mentions five-string cellos, but he obviously is referring to the violoncello piccolo (C-G-d-a-e') or violoncello mezzo which was used in Germany-J. S. Bach wrote for the in-

<sup>24</sup> Peter Prelleur, The Modern Musick-master (London, 1731), 8-9; Joseph Friedrich B. C. Majer, Museum musicum (Schwäbisch Hall, 1732), III, §7.

<sup>25</sup> Michel Corrette, Méthode théorique et pratique pour apprendre en peu de tems le violoncelle dans sa perfection (Paris, 1741), 42.

<sup>26</sup> See Giovanni Battista Martini, Serie Cronologica de' Principi dell'Accademia de' Filarmonici di Bologna (Bologna, 1776), 15.

<sup>27</sup> Luigi Taglietti, Suonate Da Camera A' Trè due Violini, e Violoncello solo, e nel fine due Sonate à Violoncello solo, op. I (Bologna, 1697).

<sup>28</sup> Johann Mattheson, Orchestre, Tome I, Pars III, §22, 285.

strument in six of his cantatas and in the Sixth Suite in D-Major (BWV 1012).<sup>29</sup>

### The Eighteenth Century

Very soon after the innovations made by the first cellists in Bologna, other Italian musicians popularized the instrument elsewhere in Italy and throughout the rest of Europe. In France the introduction of the new *violoncello* (as opposed to the old *basse de violon*) was a real threat to the existence of the bass viol. It generated an important controversy, culminating in the publication of Le Blanc's pamphlet,<sup>30</sup> which was promptly answered by Corrette's cello method (1741).

In this earliest systematic treatise on how to play the cello, Corrette first describes how to hold the instrument (see Fig. 6 as opposed to Fig. 7).

The cello must be placed between the calves of the legs. Hold the neck with the left hand and slant it a little to the left side and hold the bow in the right hand. See that the instrument does not touch the ground, since that would dampen the sound.<sup>31</sup>

No endpin is to be used, although some theorists recommend it for beginners.<sup>32</sup> For the bow grip, Corrette (see Fig. 8) recommends three different violin-related ways, even if cellists like Martin Berteau (originally a viol player) kept using the underhand grip (see Fig. 9).

<sup>&</sup>lt;sup>29</sup> See also Agnes Kory, "A Wider Role for the Tenor Violin?," Galpin Society Journal 47 (1994), 123-53.

<sup>30</sup> Hubert Le Blanc, Défense de la Basse de viole contre les Entréprises du Violon et les Prétentions du Violoncel (Amsterdam, 1740).

<sup>31</sup> Corrette, Méthode, Article 1, p. 7.

<sup>32</sup> See R. Crome, The Compleat Tutor for the Violoncello (London, c. 1765).

Figure 6. M. Corrette, Méthode théorique et pratique pour apprendre en peu de tems le violoncelle dans sa perfection (Paris, 1741), frontispiece.



Noble Soutien de l'harmonie Qu'avec Majesté tu nous sera, Par ta divine melodie Tu donne L'Ame a nos Concerts.

Figure 7. P. L. Ghezzi, Il virtuoso del Sig.r de Bacqueville Drawing, Rome ca. 1720



# Chapitre II.

De la maniere de tenir et conduire l'Archet.



Il faut prendre l'Archet de la main droite. On peut le tenir de trois façons différentes: la premiere qui est la maniè re la plus usitée des Italiens, est de pover le 2°. 3°. 4°. et 5°. doigts sur le bois ABCD. et le pouce dessous le 3°. doigt E. La Seconde manière est de pover aussi le 2°. 3°. et 4°. sur le bois ABC. le pouce sur le crin F. et le petit doigt posé sur le bois vis avis le crin G.

Lt la 3º maniere de tenir l'Archet est de poser le 2.3º et 4º doigte du côté de la hausse H.I.K. le pouce dessous le crin L. et le \_ petit doigt a côté du bois M. Ces trois façons différentes de tenir l'Archet sont également bonnes, et il est bon de choisir celle avec la quelle on a plus de force: Car pour joiier du Violoncelle il, faut de la force dans le bras droitpos tirer duson.

Figure 9. P. L. Ghezzi, S. Pietro Sterlichi sonator di Violoncello bravo, il quale è stato in Spagna per molto tempo fatto da mè Cav. Ghezzi il dì 10 Xbre 1742. Drawing, Rome 1742 (I-Rvat, Ottob. Lat. vol. 3118, f. 162r.)



Corrette describes fingering in chapters IV to VI, still showing an old diatonic system (0-1-2-4), although he mentions "another Position" (in chapter XIV), which is the modern 0-1-2-3-4 chromatic fingering. This system was used by the Italians (see Fig. 10), but Corrette does not really recommend it, since it is also the standard viol fingering! Totally new is his description of the thumb position. This technique was certainly used by virtuoso cellists before 1740; for example, in Lanzetti's Sonatas Op. I (1736) the use of the thumb is indispensable (range C-a"), a technique which he himself later codified in his undated Principes. 33 Developed more and more as a solo instrument during the 18th century, the cello was still largely used as a continuo string bass. If Quantz still forbids cellists in 1752 to embellish or to play chords in a bass part, it certainly means that most of them did so whenever they could, according to the tradition initiated half a century earlier by Jacchini. Thus the practice of playing chords, especially in recitatives, is certainly something that modern baroque cellists should do. Moreover, Baumgartner<sup>34</sup> writes that in a recitative the bass note should be "relatively loud" and the other chord notes should be "slightly touched," 35 which also implies that the bass note was rarely played in its full written length. In an appendix he gives a method concerning how to play chords on the cello, even when reading only the figured bass.

<sup>33</sup> Cf. Salvatore Lanzetti, Principes ou L'Application de Violoncelle par tous les Tons (Amsterdam, c. 1760?).

<sup>34</sup> Jean Baumgartner, Instructions de musique, théorique et pratique, à l'usage du Violoncello (The Hague, c. 1774).

<sup>35</sup> Ibid., Chapter XII.

Diotoncelle.

## Figure 10. M. Corrette, Méthode (Ch. XIV, 42).

#### Chapitre XIV. Contenant une autre Position. 42 Cette position ne differe d'avec celle que nous venons de démontrer dans les Chapitres précèdens que dans la s'éposition que ses partisans appellent i manche: Et cette difference n'estque de mettre le 3º doigt au lieu du recond pour faire le mi sur la 4° Corde; les i sur la 3° le fax sur la 2º. Et l'ut \* sur la 1 equi est toujours en progression dequintes, comme dans l'autre maniere dedoigter : ainsi seloncette position, les doigt sera comme dans l'autre position a la distance du Sillet d'un ton, le second doigt étant pour faire le demi-ton d'après, Et le 3. doigt a la distance du 1. doigt d'un ton, et le petit doigt à celle d'un demi: ton du 3º doigt: Par cette Règle tous les 4 doigts rervent. Exemple. 0 -0 \* 0 0 a Remarque sur cette Position. 1. Ceux qui jouient du Dislonne peuvent presque point s'accoutumera cette position qui est toute contraire a celle du Diolon: au lieu que l'autre position lui est semblable; ce qui est demontré clairem! aux Chapitre! IV, V, et VI avec cette difference seulem ; que sur le Violon on faitle la sur la Chanterelle ous Corde du 3º doigt: le l'évur la 2º le sol sur la 3 et ut sur la 4. Conde aussi du 3 doigt Ctqu'au Violoncelle, aulieu dus doigt on met le petitoigt pour faire l'Esur la 1. Corde, le sol sur la 2º. L'utsur la 3º etle fasur la 4º Corde: Car il faut Remarquer que la Chanterelle 1 corde du Dioloncelle est à l'Octave au des vous de la 2º du Violon. A.B II! Que ceux qui jouënt du Violon en se vervant de notre 1 position Copliquée aux Chapitres IV. V, et VI. n'ont que la 4º Corde du Violoncelle a connoibre, les 3 autres étans a l'Octave audes sous des 3 dernières du Diolon. la 1 . Corde du Violoncelle, B, etant a l'Octave de la 2º du Violon. A. la 2º du Violoncelle C. a l'octave de la 3º du Violon. D. et la 3º Corde du Violoncelle E. aussi a l'Octave de la 4º du Violon F. . 2º Corde 3: Corde . Violon. DO Fo 3º Corde . Accord du at. Corde. 4º Corde .