

EXAMPLE 3-52. Hindemith, *Kleine Sonate*, second movement, mm. 14-37

CD-1/TR. 72

14 *Sehr langsam*

Viola d'amore

18

23

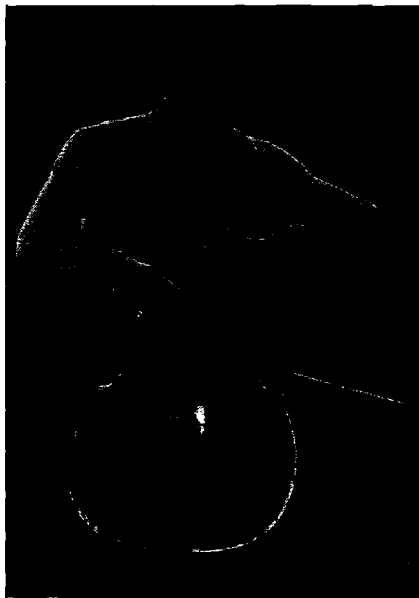
28

33

VIOLONCELLO OR CELLO

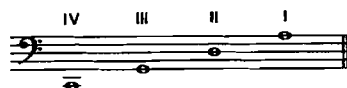
Violoncello (It.); *Violoncelle* (Fr.); *Violoncell* (Ger.)

The cello is both the tenor and the bass of the string section. Whereas the violin and viola rest on the left shoulder and are supported by the chin, the cello, because of its larger size, is held between the knees while the player sits; additional support is provided by an adjustable peg that slides out of the bottom of the instrument and reaches to the floor. The neck of the cello points over the player's left shoulder.

ROBERT SYLVESTER,
CELLO

Tuning, Range, and Fingering

EXAMPLE 3-53. Tuning



All music for the cello is written in either the bass, tenor, or treble clef. Example 3-54 gives the suggested clef changes to avoid multiple ledger lines:

EXAMPLE 3-54. Clefs



A warning to score readers: In some older editions of orchestral scores, cello parts notated in the treble clef were meant to sound an octave lower than written. Today, all cello parts, whether notated in the bass, tenor, or treble clef, sound as written.

EXAMPLE 3-55. Range

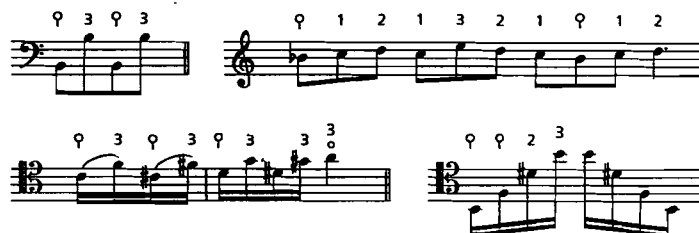


CD-ROM
CD-1
FINGERING/
SHIFTING
ON THE CELLO

Fingering

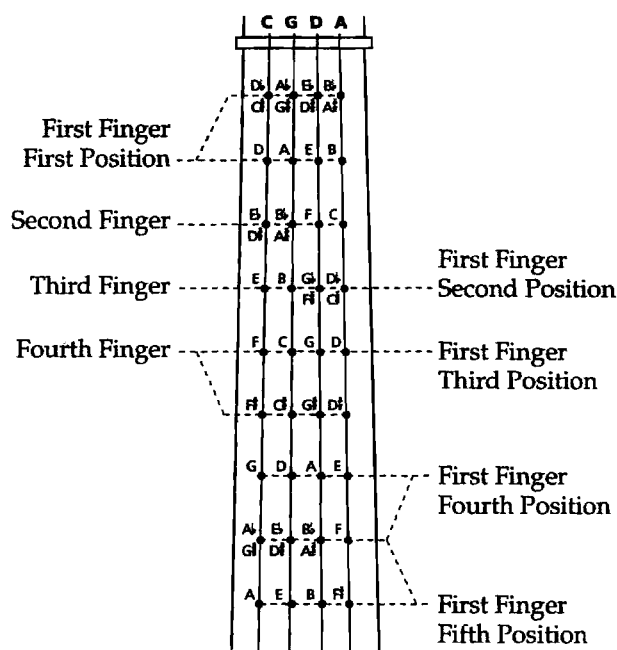
Because of the greater length of the cello strings, a different fingering system from that used on a violin or viola is employed. In first position, the normal compass between the first and fourth fingers is a 3rd, with the second finger used only for chromatic intervals. As the hand moves to higher positions the physical distance between the intervals diminishes and all four fingers are used more often, similar to the fingering on the viola. Because the cellist's left hand is freed from the burden of supporting the instrument, the thumb can be used in higher positions. In seventh position, the left thumb leaves its position around the neck and therefore is able to finger higher notes. With the additional use of the thumb, the cellist can stretch to octave double stops on adjacent strings with relative ease, although double stops larger than a sixth are difficult in the low register. The sign in the score that indicates to the performer to use the thumb is ♯.

EXAMPLE 3-56. Fingering with the Thumb



The following fingering chart shows some thumb positions.

FINGERING ON THE CELLO



Tone Quality

Ecstatic descriptions of the cello's tone quality cannot convey the singular beauty of this instrument's sound in passages that feature the entire section as well as those in which the cello acts as one voice within a contrapuntal texture. The D is the most musically captivating string on this instrument, exuding a warm and lyrical quality. The A is the most brilliant and piercing; the G is the least strong and carries less well than the others. Because of its weight and thickness, the C, the lowest string, is a richly sonorous bass. Berlioz once said that the cello is not "capable of extreme agility." This statement cannot but appear completely erroneous today, for the cello can execute practically any technical feat possible on the viola or the violin.

Here are some representative passages:

EXAMPLE 3-57. Wagner, *Tristan und Isolde*, Prelude, mm. 17-32

17 Slowly

Vlc. *p* *f*

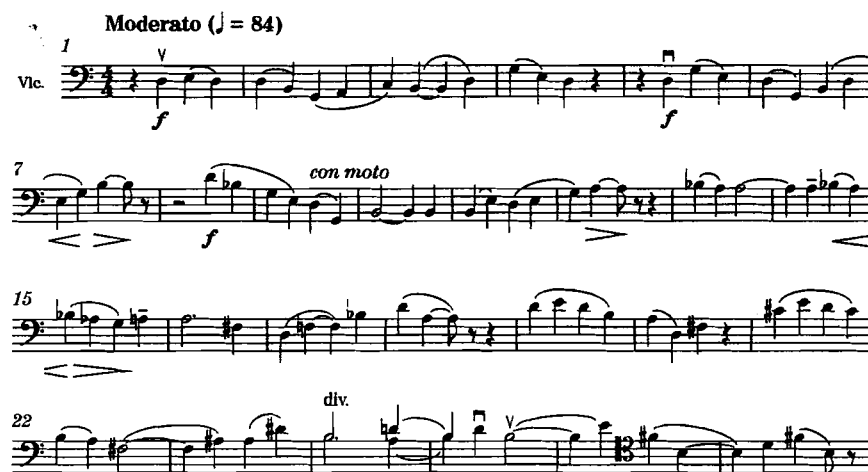
21 *p* *cresc.* *f* *dim.*

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INDEX 1 / 0:00



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EXAMPLE 3-58. Harris, Symphony No. 3, first movement, mm. 1-27



ADDITIONAL PASSAGES FOR STUDY

Beethoven, Symphony No. 3, first movement, mm. 1-8

Brahms, Symphony No. 3, third movement, mm. 1-12

Brahms, Symphony No. 2, third movement, mm. 194-202

Cellos are frequently used *divisi* to create a very rich effect, as in the following example:

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EXAMPLE 3-59. Rossini, *William Tell*, Overture, mm. 1-10



6

1
2
3
4
5

5 Cello soli

ADDITIONAL PASSAGES FOR STUDY

Debussy, *La Mer*, first movement (throughout)

Mahler, *Das Lied von der Erde*, fifth movement, mm. 1-4 at **10**

R. Strauss, *Also sprach Zarathustra*, 18 mm. before **10** to 1 m. before **10** (divided cellos and basses)

Multiple Stops

Here is a partial list of double, triple, and quadruple stops possible on the cello.

EXAMPLE 3-60. Double Stops

0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

0 1 1 2 3 4 4 0 1 1 2 3 4 4

0 0 0 0 0 0 0 0 0 1 1 1 3 4 4

0 1 1 2 3 4 0 1 1 2 3 4

0 0 0 0 0 0 0 0 0 0 0 0 0 0

0 1 1 2 3 4 0 1 1 2 3 4

0 0 0 0 0 0 0 0 0 0 0 0

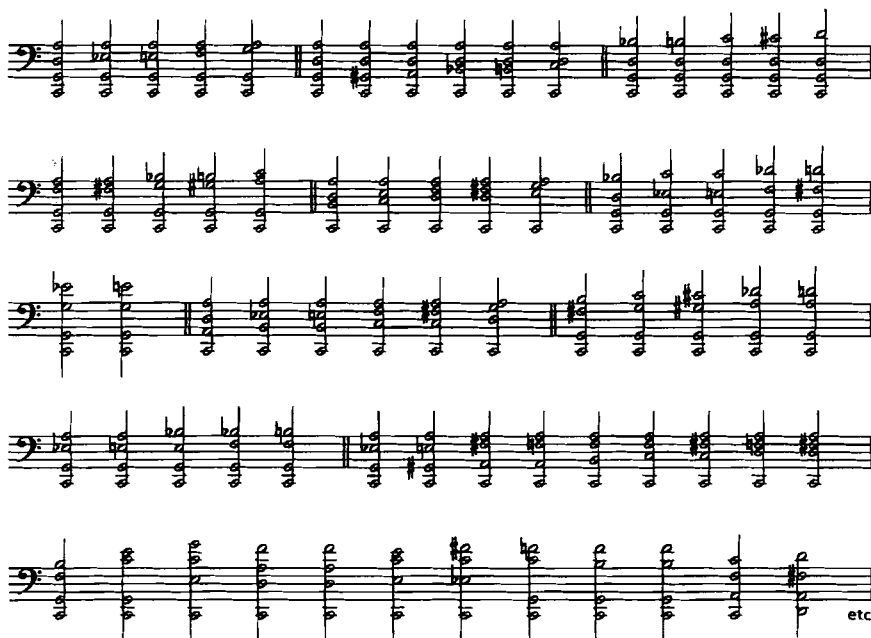
1 3 4 1 2 3 4 4 1 2 3 4 4

4 1 3 4 1 1 2 3 4 1 1 2 3

EXAMPLE 3-61. Triple Stops



EXAMPLE 3-62. Quadruple Stops



Harmonics

The ways of obtaining natural harmonics on the cello are identical to those for the other string instruments; cello harmonics are even more secure because of the greater length and weight of the strings on this larger instrument. The "touch 4th" technique is the most successful for orchestral writing and produces the best quality of artificial harmonic. These artificial "touch 4th" harmonics are played with the thumb (on the fundamental) and the third or fourth finger throughout the entire range of the instrument.

EXAMPLE 3-63. Harmonics on the Cello

a. NATURAL HARMONICS

Actual harmonics

Third string

Lightly touched note

Fourth string

Lightly touched note

b. NATURAL AND ARTIFICIAL HARMONICS

Actual harmonics

■ ADDITIONAL PASSAGE FOR STUDY

J. Corigliano, *Phantasmagoria* (beginning)

The Solo Cello in Concertos and within the Orchestra

The cello literature is rich in concertos by the major composers of the Baroque period through the twentieth century. Some outstanding examples are by Boccherini, Haydn, Beethoven (triple), Schumann, Brahms (double), Dvořák, Tchaikovsky (*Rococo Variations*), Lalo, Victor Herbert, Milhaud, Bloch (*Schelomo*), Hindemith, Barber, Walton, Lutosławski, Penderecki, Stephen Albert, Christopher Rouse, and Joan Tower.

Frequently, the cello is used as an occasional soloist in an orchestral work, such as in the following famous passage:

EXAMPLE 3-64. R. Strauss, *Don Quixote*, mm. 163–176

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Andante con moto

Vlc.

165

168

171

174

grazioso

p

cresc. *f*

■ ADDITIONAL PASSAGES FOR STUDY

Brahms, Piano Concerto No. 2, third movement, mm. 71–86

Haydn, Symphony No. 95, second movement (throughout), third movement (Trio)

The Cello in Combination with Other Instruments

This subject will be discussed in greater detail in later chapters. Suffice to say that the cello doubles well with many instruments in all the orchestral choirs. The most widely used doublings are cello and double bass, cello and bassoon, cello and clarinet or bass clarinet, cello and horn, and pizzicato cello and timpani. In the following example the second cello doubles the first viola.

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EXAMPLE 3-65. Barber, *Essay for Orchestra* No. 1, mm. 1–10

1

Vla. *div.* *p espr.* *poco più*

Vlc. *div.* *p espr.* *poco più*

D.B. *div.* *p* *unis.* *poco più f*

6

Vla. *f*

Vlc. *f*

D.B. *poco più f*