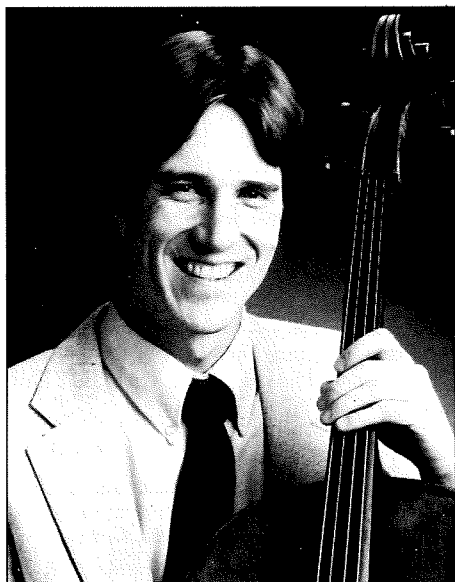


Choice of Fingerings

David Starkweather



Since 1983, David Starkweather has been on the faculty of the University of Georgia, where he teaches cello, chamber music, and music literature. He attended the Eastman School of Music and SUNY Stony Brook, and his major teachers include Bernard Greenhouse and Pierre Fournier. He was declared by Fournier to be "one of the best cellists of his generation." Dr. Starkweather was a semifinalist in the 1986 Tchaikovsky Competition and has been featured on the National Public Radio show Performance Today. A reviewer in the Atlanta Constitution praised "the sensitive phrasing and Starkweather's obvious technical facility."

The perfect fingering for a given passage should maximize both musical content and technical facility. Unfortunately, these two characteristics

Jeffrey Solow, Editor
 Esther Boyer College of Music
 Temple University
 Philadelphia, PA 19122

are often found in opposite fingering choices. If you decide to play a phrase entirely on one string, the unity of tone color and possibility of expressive connection between notes can enhance the performance. Another result, however, may be excessive and awkward shifting. If the fingerings cross strings a great deal, the result might be very clean playing. But excessive string crossings may lack the emotional content of expressive shifts, the continuous projection from remaining on a brighter string, or the unified dark sound of a lower string.

For beginning cellists, an initial reason to look for alternative fingerings is to avoid the harsh sound of the open A string. The sound is one that most players would rather not sustain for very long. In orchestra playing, to promote a uniform blend of sound in the cello section, it is best to avoid the open A whenever possible. In solo repertoire, however, where volume and projection are of more concern, it is often more appropriate to use open strings while attempting to produce a timbre for stopped notes that approaches the sound of the open string.

Facility of the left hand is certainly improved with the use of some open strings, yet care should be taken to do this within the realm of good taste. For instance, you would normally avoid a situation in which the open string is the only note used on the next higher string (see the notes indicated with arrows in measures 5 and 6 of Example 1). In addition, an open string fingering usually should not be used twice in a row when separated by only a few notes. If both notes are played on the open string, they stick out more noticeably and disrupt continuity of the phrase. One or the other of the two notes should be fingered on the lower string, as shown in the bracketed segments of

Examples 1 and 4. Exceptions to this principle occur when a composer intends the effect resulting from alternation with the open string, as in J. S. Bach's Prelude and Courante of *Suite no. 1 in G Major* and Prelude of *Suite no. 6 in D Major*.

Rhythm and Other Influences

The rhythmic placement of the shift is of great importance in planning fingerings. With dotted rhythms, the shift should come at the end of the dotted note, placing the short note and the following dotted note in the same position (Example 2). The left-hand movement can be slower and more relaxed when the shift is at the end of the longer note. The same logic holds true in any passage with alternating fast and slower notes.

Rhythmic shifting, in which the shifts coincide with the beats of a passage, provides rhythmic clarity and an organized approach that is particularly helpful when sight-reading. On the other hand, non-rhythmic shifting may cause an entire run to sound more fluid and unified. This is a matter of personal preference in any given passage. Compare the effect of the two fingerings in Example 3.

Other aspects besides rhythm can have great influence on the selection of a fingering. A shift both before and after one note should be avoided. Sometimes this situation cannot be avoided, and one of the shifts should then be made as cleanly as possible. Another fingering principle is to shift on the half step when changing position on one string. When shifting on one finger, shifting on the half step is very reliable, giving excellent control of half-step intonation. This fingering is demonstrated on the first two notes and the sixth and seventh notes of Example 4 (see page 68). Application of

Example 1. Johann Sebastian Bach: *Suite no. 1 in G Major, BWV 1007; Allemande, mm. 4-7*

Musical notation for Example 1, showing two staves of bass clef music. The first staff includes fingerings (0, 1, 0, 2, 1, 3, 4, 1, 2, 1, 3, 2, 0) and an accent 'fr'. The second staff includes fingerings (0, 1, 2, 4, 3) and an accent '↑'.

Example 2. Antonio Vivaldi: *Sonata no. 3 in A Minor, Largo (1st mvt), mm. 29-34*

Musical notation for Example 2, showing two staves of treble clef music. The first staff includes fingerings (4, 2, 1, 4, 2, 4, 0, 4, 3, 1, 2, 0) and accents 'V'. The second staff includes fingerings (4, 4, 2, 1, 4) and an accent 'V'.

Example 3. Antonin Dvorák: *Concerto in B Minor, op. 104, Finale (3rd mvt), mm. 187-189*

Musical notation for Example 3, showing two staves of bass clef music. The first staff is labeled 'Non-rhythmic: 1' and 'Rhythmic: 1' with fingerings (1, 1, 0, 1, 1) and a 'cresc.' marking. The second staff includes fingerings (0, 1, 1, 1, 2, 3, 1) and dynamics 'ff' and 'br'.

What! for Cello?

Contemporary Music For Today's Teachers And Students
BY
SEAN GRISSOM

A collection of 5 duets that will expand and enhance your present teaching repertoire. Designed to reinforce basic cello pedagogy and to introduce improvisation through an expandable system.

****RECOMMENDED** - A cassette tape that presents the above material for practice and listening.

Book - \$9.00 Cassette - \$8.00

• Book and Cassette - \$14.00 •

Make Checks Payable To:

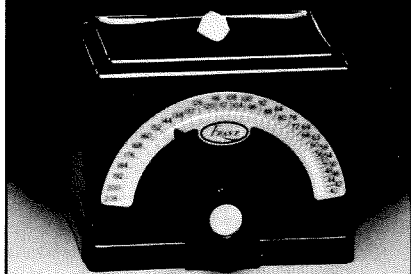
ENDPIN Music Publishing

60 West 66th Street #11-G

New York, New York 10023



THE GREAT AMERICAN TIME MACHINE.



Several characteristics set the FRANZ ELECTRIC apart from other metronomes. First is its bright, clearly audible, unfailingly even, accurate beat. Second is its utter reliability; the FRANZ Electric comes with a five-year warranty, lasts for years, and can be repaired at our factory. Third, working off house AC current, the FRANZ Electric never requires rewinding or battery replacement.

Easy to understand, simple to use, the FRANZ Electric metronome is available at all better music shops.

FRANZ
MANUFACTURING

Building quality metronomes
for over a half century.

the half-step shift to a scale passage results in the rather unorthodox yet very fluid fingering shown in Example 5.

Choice in Scale Fingerings

Many scale fingerings are possible, although most string players choose to practice only the one they first learned for each key. In a musical situation, the choice of fingering should depend on musical reasons, such as making or avoiding rhythmic shifts, shifting with the change of bow, obtaining a particular color by the choice of string, or drawing attention to a certain note. Scales and arpeggios should therefore be practiced with the entire range of practical fingerings to improve flexibility for playing a musical work.

Starting Fingers

Different fingerings obviously result from different starting fingers, as shown in Example 6. This results in the upper fingering using extensions while the lower fingering avoids them. Individuals use extensions according to their own personal preference; some cellists are more likely to use 1-3 for a whole step, while others prefer an extension with the second finger. In scales on one string, an extension fingering has the desirable effect of reducing the distance of the following or preceding shift by a half step. If the previous finger is released as the extension is made, this type of fingering does not necessarily add tension to the hand. On the contrary, it can promote a flexible "walking" of the hand toward the next position.

String Crossing Shifts

A different principle applies to string crossing shifts needed in most scale passages (1 to 4 and 4 to 1). In this case, the string crossing should be planned on a whole step so that the hand can make a brief extension plus half-step shift to the next position. Using a brief extension that opens the hand in the direction of the next position generally produces a cleaner execution than would a longer shift with a closed hand. Referring to Example 6, the first 4-1 string crossing in the lower fingering occurs on a whole step, while the upper fingering crosses on the more awkward half step. Cellists with large hands are more likely to use the scalar 1-4 or 4-1 string crossing on a half step; in Example 4, some cellists avoid the first open A by using the lower fingering

Example 4. Ludwig van Beethoven: *Sonata no. 4 in C Major, op. 102, no. 1*
Andante (1st mvt), mm. 1-3

Same finger half-step shift Same finger half-step shift

teneramente

P dolce cantabile

The notation shows a scale passage in C major on a single string. Fingerings are indicated above the notes: 4, 4, 2, 0, 1, 1, 2, 4, 2, 1. A 'V' symbol indicates a bow change. The instruction 'P dolce cantabile' is written below the staff.

Example 5. Ludwig van Beethoven: *Sonata in A Major, op. 69*
Allegro ma non tanto (1st mvt), mm. 38-45

The notation shows a scale passage in A major on a single string. Two different fingering options are presented. The upper fingering uses extensions (e.g., 2-4, 1-1, 2-4, 1-1). The lower fingering avoids extensions (e.g., 1-1, 2-2, 3-3, 4-4). A 'V' symbol indicates a bow change.

Example 6. Scale in F# Major (three octaves)

The notation shows a three-octave scale in F# major on a single string. Two different fingering options are presented. The upper fingering uses extensions (e.g., 1-2, 4-1, 2-4, 1-2, 4-1, 2-4, 1-2, 4-1, 2). The lower fingering avoids extensions (e.g., 2-4, 1-2, 4-1, 3-4, 1-3, 4-1, 3-4, 1-3, 4). A 'V' symbol indicates a bow change.

Example 7. Robert Schumann: *Adagio and Allegro*, op. 70
 Rasch und feurig, mm. 61-65

The image shows two staves of musical notation for Example 7. The top staff is in treble clef with a key signature of one sharp (F#) and a 3/4 time signature. It contains a sequence of notes with fingerings (1, 2, 3, 4) and dynamics (f, p). The bottom staff is in bass clef with the same key signature and time signature, also showing fingerings and dynamics. The notation includes slurs, accents, and dynamic markings like 'f' and 'p'.

with an extension and string crossing to the first finger on C.

Intervals of a perfect fourth or larger can often be more easily played by crossing to the next string. You can choose to use such a string crossing, reaching the note cleanly with the left hand but causing a slight bow articulation and change of color. Or the interval can be played on one string with a shift. Fifths are perhaps the most awkward melodic interval. They cannot be reached on the same string within one position without either shifting or using the thumb. Between two strings, you must bar across with one finger, inhibiting the vibrato, or replace one finger with another. Example 7 shows two possible fingering solutions for a passage involving a series of large intervals. A combination of the two fingerings is perhaps the best choice.

Large Intervals

Some fingerings for large intervals are possible only for an individual with large hands. The upper fingering in Example 8 makes dramatic use of a shift up the A string to the E harmonic. The thumb-3 interval of a perfect fifth (marked with an arrow), however, is not possible for all cellists to reach. In that case, the lower fingering—moving to the D string—can be used. The D string fingering may also be preferred by some for its reliability or elegance. For cellists with smaller hands, some passages are made possible simply by moving to the position a fifth higher on the next lower string, as seen in Example 8 and Example 9 (see page 70).

Thumb Position

The stability of intonation and rhythm is often improved by staying in one thumb position as much as is musically appropriate. For example, the fingering in Example 9 goes to the G

Example 8. Peter I. Tchaikovsky: *Variations on a Rococo Theme*, op. 33
 Variation 1, mm. 6-8

The image shows two staves of musical notation for Example 8. The top staff is in treble clef with a key signature of two sharps (F# and C#) and a 3/4 time signature. It features a complex sequence of notes with many fingerings (1, 2, 3, 4, 0) and dynamics (p, f). The bottom staff is in bass clef with the same key signature and time signature, also showing fingerings and dynamics. The notation includes slurs, accents, and dynamic markings like 'p' and 'f'.

William Moennig & Son, Ltd.

DEALERS IN RARE VIOLINS, VIOLAS, CELLOS, & BOWS



2039 LOCUST STREET
 PHILADELPHIA, PA. 19103
 TEL. (215) 567-4198/4175

ART AND ANTIQUE DEALERS OF AMERICA, INC.



INTERNATIONAL SOCIETY OF VIOLIN AND BOW MAKERS

string and stays in a very reliable position, with only a little sacrifice of the more brilliant tone available with the upper fingering. In fact, the lower fingering has the advantage of the G harmonic resonance. In Example 10, the thumb remains on F# throughout the bracketed segment, and the shift to the high D# in measure 125 takes advantage of the greater extension possible at the thumb joint.

Harmonics

Shifting to or from a harmonic generally improves the reliability of a position change. Fingerings should thus be designed to utilize available harmonics on shifts. The fingering in Example 11 is strengthened by the shift to the harmonic E, where treble clef begins. This harmonic serves as a common note for a substitution shift bringing the thumb to the same E.

It is helpful to examine the many fingering alternatives available, weighing the many factors which influence our choices. Determining the most satisfactory fingering in a passage is frequently a very individual decision, but the factors entering into the solution are not necessarily empirical guesswork. Choosing fingerings is a learning experience involving the interplay of our instrumental technique and musical sensibilities. ♪

Example 9. Joseph Haydn: *Concerto in C Major, Hob. VIIIb:1*; Moderato (1st mvnt.), mm. 39-42

Musical score for Example 9, Joseph Haydn's *Concerto in C Major, Hob. VIIIb:1*, measures 39-42. The score consists of two staves of music in C major, 2/4 time. The first staff begins with a first finger (1) and includes fingering notations II, III, and I. Dynamics include *f* and *cresc.*. The second staff continues the passage with various fingering notations (II, I, II, I) and a *cresc.* marking.

Example 10. Johannes Brahms: *Sonata no. 1 in E Minor, op. 38*; Allegro (3rd mvnt), mm. 123-127

Musical score for Example 10, Johannes Brahms' *Sonata no. 1 in E Minor, op. 38*, measures 123-127. The score is on a single staff in E minor, 3/4 time. It features fingering notations II and I, and dynamics *mf* and *dolce*. A bracketed segment is marked with a box containing the number 125.

Example 11. Peter I. Tchaikovsky: *Variations on a Rococo Theme, op. 33*; Variation VII, mm. 21-24

Musical score for Example 11, Peter I. Tchaikovsky's *Variations on a Rococo Theme, op. 33*, Variation VII, measures 21-24. The score is on a single staff in E major, 3/4 time. It includes fingering notations II and I, and dynamics *[cresc.]* and *ff*.