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Thirty scales for cello

These scales, starting on C sharp major and ending on A flat minor are to be performed without stopping as this is the main goal of this exercise.

Why 30 scales one might ask? Six scales from the total of the 24 are enharmonic variants:

C sharp major – D flat major
A sharp minor - B flat minor
F sharp major – G flat major
D sharp minor – E flat minor
B major – C flat major
G sharp minor - A flat minor

The above scales (with the exception of A sharp minor) are used widely in music.

Purpose of this study is to introduce scales with 4, 5, 6 or even 7 key signatures (which often are neglected), improve security of finger patterns and to widen tone variety.

In comparison to the C major scale, similar finger pattern is used in the C flat major and the C sharp major (both a semi-tone lower and higher, respectively) - a very good reason to bring awareness to their importance in order to nurture intonation and good tone quality in a spectrum of different keys.

The above technical benefits of this are far from the real aim.

Deeper musical understanding must prompt us to further the inner musical feelings and in all keys.

What do E flat, C, A or F sharp majors mean as a musical reality? The same applies to minor scales.

Different musical experiences can be found in:

C major - 'Jupiter' Symphony (Mozart);

D minor in Quartet 'The Death and the Maiden' (Schubert);

G flat major in Adagio from String Quintet in F major (Bruckner);

F sharp major in Largo from String Quartet in D major op.76 no.5 (Haydn);

D flat major in Largo from 'The New World Symphony (Dvorak);

C minor in the 2nd. movement (Marcia funebre) from Beethoven's 3rd Symphony.

In Schubert's String Quintet in C we find 19 different keys.

In the Introduction (Le Malinconia) of the last movement - Quartet op.18, no.6 (Beethoven) - 12 minor keys are found in fewer bars!

Why is the above mentioned Haydn's Largo in F sharp and not in G flat major?

Why Bruckner's Adagio in G flat major is not in F sharp major?

In 'Siegfried's Idyll' (Wagner), bar 71, the key is E sharp major and not F major.

This phenomenon underlines the importance of the use of sharps and flats - a polarity of light and dark, extrovert and introvert differences.

The 30 scales are connected by reversed 'mediant modulation'. After a major key, a relative minor follows with a modulation to the subdominant of the previous major scale.

Following this order we begin with C sharp major ending on A flat minor. The final enharmonic notes - G sharp and C sharp - lead again to the beginning. The last note in every scale builds a transition to the following one (supertonic, leading note).

Naturally, this order must be approached with great musical awareness.

All the scales can be played in two or three octaves. The beginning of each scale is to be played with relatively little emphasis. Time signature, rhythm, articulation, bowings and fingerings, can be chosen freely. The melodic structure of the scales is to be treated as a starting point. An

improvised piano part can re-enforce and enhance the changing nature of tonality. Tempo and dynamics should be moderate at first. It is also a good idea to apply this method to arpeggios.

Why do we practice scales?

Because scale is a 'cell' of melody - the first musical element we experience.

Step by step we are moving upwards from the tonic towards the octave and back again to the tonic.

Every degree of the scale has a different feeling and tension.

What are the roles of the second, third, fourth, fifth, sixth and seventh degree - also being the leading note. And finally the octave? These are all different stages of one musical process.

A perfect example of this is the second theme from Beethoven's Violin concerto:



The unforgettable violinist Issac Stern said - "How is it possible, that Beethoven takes six notes out of a scale and creates the most heavenly melody ever written"?

The melody, in D major, starts with a 'sparkling' F sharp (a third) and climbs to the octave (a final degree of the scale). Following that, it returns to A (a fifth and a dominant). An ascending and descending 'journey' in a space of 4 bars.

In the fifth bar the same repeats, but this time with the culmination continuing until B natural in bar 7 (third of the subdominant) then finally resting on D (bar 8).

Understandably, we must practice the technical demands of scales as well. Without this basic foundation we could not be able to experience 'musical miracles'.

The undesired aim is to perform scales with the correct notes yet in an indifferent and unmusical way.

The main priority here is to present a 'resurrection' of this musical structure. Scale is much more than a technical warm up exercise.

The purpose of the above study is to reclaim recognition and appreciation of this very important musical 'cell'.

Scales in Two Octaves

Violoncello

Violoncello

C# major

a# minor

F# major

d# minor

B major

g# minor

E major

c# minor

A major

f# minor

D major



III

b minor

Musical notation for the B-flat minor scale on a bass clef staff. The key signature has two flats (B-flat and E-flat). The scale consists of eight measures. Fingerings are indicated by numbers 1-4 above notes. A double bar line appears after the third measure.

C major

1
III

The bass line for 'a minor' is written on a single staff. It begins with a treble clef and a key signature of one flat (B-flat). The melody consists of several measures, each containing eighth notes. Fingering numbers (1, 2, 0) are placed above the notes to indicate finger placement. The piece concludes with a double bar line and a repeat sign.

d minor

The musical notation shows the d minor scale in bass clef. The notes are: D (finger 1), E (finger 2), F (finger 3), G (finger 4), A (finger 5), Bb (finger 4), Cb (finger 3), D (finger 2), Eb (finger 1), F (finger 2), G (finger 3), A (finger 4), Bb (finger 5), Cb (finger 4), D (finger 3), Eb (finger 2), F (finger 1), G (finger 2), A (finger 3), Bb (finger 4), Cb (finger 5), D (finger 4), Eb (finger 3), F (finger 2), G (finger 1), A (finger 2), Bb (finger 3), Cb (finger 4), D (finger 5). The scale is marked with a '1' at the end and a 'III' below the final note.

[illegible]

g minor





Scales in Three Octaves

Violoncello

[illegible]

The musical notation for the a# minor scale is presented in two staves. The top staff shows the ascending scale in bass clef, and the bottom staff shows the descending scale in treble clef. Both staves include fingering numbers (1-4) and breath marks (x) to guide the performer. The key signature is a# minor, indicated by three sharps (F#, C#, G#) and the label 'a# minor' at the beginning of the first staff.

[illegible]

E major

Two staves of music for the E major scale. The top staff is in bass clef and the bottom staff is in tenor clef. Both staves are in the key of E major (three sharps: F#, C#, G#). The top staff starts with a bass line and a treble line, with a double bar line and a repeat sign. The bottom staff starts with a treble line and a bass line, with a double bar line and a repeat sign. Fingerings are indicated by numbers 1-4. A 'II' is written below the bottom staff.

c# minor

Two staves of music for the c# minor scale. The top staff is in bass clef and the bottom staff is in tenor clef. Both staves are in the key of c# minor (three sharps: F#, C#, G#). The top staff starts with a bass line and a treble line, with a double bar line and a repeat sign. The bottom staff starts with a treble line and a bass line, with a double bar line and a repeat sign. Fingerings are indicated by numbers 1-4. A 'I' is written below the bottom staff.

A major

Two staves of music for the A major scale. The top staff is in bass clef and the bottom staff is in treble clef. Both staves are in the key of A major (three sharps: F#, C#, G#). The top staff starts with a bass line and a treble line, with a double bar line and a repeat sign. The bottom staff starts with a treble line and a bass line, with a double bar line and a repeat sign. Fingerings are indicated by numbers 1-4. A 'III' is written below the bottom staff.

f# minor

Two staves of music for the f# minor scale. The top staff is in bass clef and the bottom staff is in treble clef. Both staves are in the key of f# minor (three sharps: F#, C#, G#). The top staff starts with a bass line and a treble line, with a double bar line and a repeat sign. The bottom staff starts with a treble line and a bass line, with a double bar line and a repeat sign. Fingerings are indicated by numbers 1-4. A 'III' is written below the bottom staff.

D major

Two staves of music for the D major scale. The top staff is in bass clef and the bottom staff is in tenor clef. Both staves are in the key of D major (two sharps: F#, C#). The top staff starts with a bass line and a treble line, with a double bar line and a repeat sign. The bottom staff starts with a treble line and a bass line, with a double bar line and a repeat sign. Fingerings are indicated by numbers 1-4. A 'III' is written below the bottom staff.

b minor

Two staves of music for the b minor scale. The top staff is in bass clef and the bottom staff is in treble clef. Both staves are in the key of b minor (two sharps: F#, C#). The top staff starts with a bass line and a treble line, with a double bar line and a repeat sign. The bottom staff starts with a treble line and a bass line, with a double bar line and a repeat sign. Fingerings are indicated by numbers 1-4. A 'III' is written below the bottom staff.

G major



e minor



C major



a minor



F major



d minor



B $\flat$ major

g minor

E $\flat$ major

c minor

A $\flat$ major

f minor



D $\flat$ major

1 1 1 1 1 1 1 1 1 1 1 1

1 2 2 4 4 4 4 4 4 4 2

I III

b $\flat$ minor

1 1 1 1 1 1 1 1 1 1 1 1

1 2 2 3 4 4 4 4 4 2

II II

G $\flat$ major

1 1 1 1 1 1 1 1 1 1 1 1

1 2 2 4 4 4 4 4 4 3

I I

e $\flat$ minor

1 1 1 1 1 1 1 1 1 1 1 1

1 2 2 4 4 4 4 4 4 1

III III

C $\flat$ major

1 1 1 1 1 1 1 1 1 1 1 1

1 2 2 3 4 4 4 4 4 3

I III

a $\flat$ minor

1 1 1 1 1 1 1 1 1 1 1 1

1 2 2 4 4 4 4 4 4 3

I III