

# Scale Rules

## (because scales rule!)

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### Introduction

The study of scales is a life-long process that can have a huge lasting impact on the health and growth of any violinist. Scales should not be drudgery nor should it be mindless and routine. This is the violinist's chance to say 'good morning' to the violin – your yoga moment for the day with your beloved instrument. A pure and refreshed opportunity to think about balance, gravity, posture, muscle contraction/release, tonal purity, intonation clarity, and who and what you want to be and feel on the violin. Whether your available scale moment is one-hour, 30 mins, or 5 mins in a given day, make the most of undoing tension. Can I shift with less shoulder? Less chin? Can I relieve my thumbs more? Am I squeezing my knuckles? Find a mirror and watch for fluid motion. I like going straight to scales in the morning. Grab a banana, green juice, stretch and go to your scales before you start the rigors of your day!

### Three octave scales

Oh what joy is the three octave scale! Learn to morph 4,6,8,12,16,24 notes to a bow without stopping. Add the Galamian turn at the bottom of the scales to create 24 notes over 3 octaves. Divide the bow evenly starting RIGHT AT THE FROG, so that 4 notes to a bow divides as 2 notes per half bow, 6 is 3 notes per half bow and so forth so that 24 is 6 notes per quarter bow. I like to put the metronome on at half-note (or half-bow) equals 52 (this will make 24 notes to a bow plenty fast). Watch that the elbow doesn't snap at bow changes, and anticipates string levels. Lead with the wrist at the frog and don't droop the elbow at bow change. Shifting is the stepping type and is discussed in the shifting section of my intro to technique. Aim to make shifting inaudible by lifting index when ascending so index drops into new note. The left elbow should always be in motion, leading the shifting and creating fluidity. A common error when descending is to leave elbow out of the shifting motion. Elbow needs to lead back so that the wrist won't contort unnecessarily. Another common error is for the index finger to be weighted too strongly in the string and for the note before the shift to be also too deep into the fingerboard. Also, the left elbow needs to anticipate the new string level – this is very important for intonation.

Take bowing patterns to your scales from your repertoire. Such as challenging ricochets, martelé patterns, or any other bow stunts you come across. For some students it may be an advantage to stay on one key for several days to create comfort and stability.

### **Arpeggios**

I like to practise arps with the Galamian or Flesch inversions, three notes to a bow with a Brahmsian vibrato – rich, slow and relaxed. The vibrato is better when the left hand uses gravity to stop the string. Hang on the string with the weight of the arm rather than exertion from the back of the hand. Feel spongy on the string and discover how little vertical finger pressure is needed. This is also a great chance to get the fourth finger to sound like a million bucks on the top note. Make sure vibrato is really connecting note to note and not stopping before the next note. I also like shifting on the new bow and marry the speed of the shift with the bow speed so the hands work as partners. Drop the shoulder blades and examine how little you need your shoulder and chin to shift and steady the violin. Pick your violin up as you shift. Gravity is your friend! I also practise arpeggios with spiccato in fast tempo. It is also useful to practice the index finger only in all positions to listen for accuracy of octave. Also note the straight line the index makes across the strings and should feel similar in all positions.

### **Chromatics**

Try three octave chromatics four notes to a bow. The fingering I prefer is 012-1234 on the G, D, and A strings, and then 123-123-123's on the E string. When shifting on the E string, I highly recommend cultivating the contraction of the hand. So when shifting up from 3 to 1, the second finger should be out of the way, the index should lift and drop in, the hand assists in a slight pivot inwards. This will make the shifting perfectly inaudible. In order to keep track of the pitches, it is helpful to know that the index finger will outline a diminished chord on G sharp when ascending. So the index finger will shift to G#, B, D, F. When descending, the contraction of the hand is the same with the second finger out of the way so that 3<sup>rd</sup> can drop in – the hand assists in a pivot outwards. The third finger will land on diminished chord of G. So descending it spells E, C#, Bflat, G. Practise slowly for exact intonation. Also practise chromatics on one string with vibrato with these fingerings 1,3,1,3; 2,4,2,4; 1,4,1,4.

### **Thirds**

Please for the love of the violin gods, practise your thirds SLOWLY. As a chamber musician, I like to search for pure thirds rather than tempered tuning that a piano adopts. In pure thirds, a major third is pure (will stop beating and a clear undertone will emerge) when the third is slightly smaller. In minor thirds the opposite is true – they should be slightly wider. Thirds can be practised initially in a broken pattern: play the top note first then place the bottom note. When practising broken thirds, remember you are cultivating a shape that should fall from the knuckles, so don't squirm when you land, simply lift up and replace so that you are LEARNING the shape from above the string. Squirming around laterally on the string will teach you very

little about the shape of the thirds in the frame of your hand. When the intonation is confident with the broken thirds, then proceed to normal two octave scales of thirds, two notes to a bow. The shifting can emulate what was learned in the broken thirds: when shifting upwards, shift on 1 and drop 3; when shifting down, shift on 2 and drop 4. IT IS IMPORTANT TO RELEASE TENSION ACROSS THE KNUCKLE LINE BETWEEN EACH DOUBLE STOP. Don't grind forward from one double-stop to the next, release and lift off to cultivate the feeling of finding the next shape from above the string. The study of double stops is equally a bow study: insist on even bow speed and smooth changes.

### **Sixths**

All of the above rules for thirds apply here as well. For pure intonation a major sixth is slightly wide and a minor sixth is slightly close. A nice way to remember this is if the fingers are supposed to be together – then not TOO together; if the fingers are supposed to be apart – then not TOO apart. In the thirds and the sixths, I like favouring shifting to 3<sup>rd</sup>, 5<sup>th</sup>, 7<sup>th</sup>, 9<sup>th</sup> etc positions. It is a quicker way to stabilize the shifting and security on the fingerboard.

### **Fourths**

Perfect fourths anchor the intonation in so many passages in our repertoire. Practise two octave major scales in fourths with the tonic on the top. The leading note will be a tri-tone. Enjoy with Peppermint herbal tea!

### **Fifths**

Often in the repertoire we are asked to reach a 1-4 fifth on one string in a lyrical way. I have found great benefits in playing 1-4 fifth scales up two octaves and back (repeating each interval at least twice) with legato and full vibrato, relaxing the hand. There is a tritone on the leading tone.

### **Octaves**

OK, big topic. Put the kettle back on! The most important thing to learn in the octaves is the subtle change of the frame as you ascend and descend. In ascending, the index finger is a rather constant angle and the fourth finger is responsible for the contraction of the frame. When descending, the index finger is leading the expansion of the frame. I believe generally that the 2<sup>nd</sup> and 3<sup>rd</sup> fingers should remain resting on the upper string until in to higher positions when the 2<sup>nd</sup> finger can lift off to create room for the smaller frame required. This resting of the middle fingers on the upper string relaxes the back of the hand and also trains the hand to be thinking of the lie of the tetrachord in all positions.

A few important pre-cursor exercises:

1. The silent octave glissando. George Neikrug was religious about this exercise. In an octave formation, make a slow glissando up the finger board (no bowing just yet).

- Find an equal weight of all the fingers, and make sure fingers are sliding like on olive oil. Go very slowly and slide evenly along the surface of the string but keep track of fingertip contact.
2. Airplane octaves. In fortissississimo, take a million bows as you make the slowest octave glissando possible. The glissando will be as slow as necessary to always be perfectly in tune. Hang on the string, bring wrist in slightly so the fingers feel the drag up and down the gliss.

Now practise two octave scale in octaves, two notes to a bow. Hear the glissando between notes, don't jump and jerk the octaves. Cultivate the ease and glide from note to note. Practise octaves in arpeggios and chromatics too. The glorious Beethoven Concerto awaits!

### **Fingered octaves**

The fingered octaves need a pivot in the left hand to get from 1-3 to 2-4. Begin with index on the string only and gently swing the arm as far forward as possible without losing the index finger contact on the string. Then try this pivot with 1 and 3 on the string. The thumb comes forward in the pivot with the arm. Now try a two octave scale. I like to add vibrato to ensure complete ease of the thumb and back of hand. Arpeggios can be terrific here as well.

### **Tenths**

Tenths should always be formed from the fourth finger and then reaching back with the index.

### **Extra ideas:**

Practice thirds and sixths shifting on one string. This is a very important skill that is not trained in normal double stop scales. Refer to chapter IV of Dounis' The Artist's Technique of Violin Playing for shifting in double stops on one string.

Another important element in double stops is learning how to cross strings in different double stop formations. This is a fabulous way to develop intonation. Consider Sevcik's Scales and Arpeggios: Exercises nos.6,14, and 20.

**Etudes:** After your scales it is a good idea to approach an etude or two. The etudes are a wonderful entrée into your repertoire and offer you a moment to be outside of the pressure of perfectionism and focus on challenging your coordination, instincts, musicianship, reading, and sending commands to your hands in a calm medium. I often start with something easy like Kreutzer, Fiorillo, then something a level up such Rode, Gavinies, Vieuxtemps, and then go for some Wieniawski or Paganini. Play once slowly for ease, clean purity of tone and intonation, then once with a challenging tempo.

***ENJOY YOUR SCALES AND FEEL REFRESHED!!***