

How to Practise Scales

Start with the core musical elements

The basic building blocks of music are rhythm, pitch, and sound. When a scale is played well, the pitch is even so all of the notes with the same name in different octaves are in tune with each other. The tone quality and rhythm are even, not disturbed by bow changes or shifts. Evenness does not mean that the scale is robotic. Each note has its own musical character.

Once you have practised your scale so pitch, sound and rhythm are all good, the next thing to go for is to make it feel easy. Simon Fischer suggests that a nice way to do this is that each time you do something well, you should then see if you can achieve the same result with half the effort, then half the effort again. He says that until you can play something well with little effort, there is still room for improvement.

Instead of practising your scales as complete figures, work on the elements of each scale. The scale can be broken down into different components or “problems” such as one octave scales, shifting exercises, exercises for the coordination of left and right hands, finger preparation and finger placement. Rather than repeating a scale mindlessly over and over, search for exercises within the scale to address the particular problems you are having.

Here are some ideas for developing your scale practice...

Developing the Right Hand

Apply rhythms, accents and bowing patterns to all of your scales and arpeggios. This will produce the greatest improvement in the shortest time. Ivan Galamian, the famous violin teacher believed that by learning how to play different rhythm patterns you discover and repair all the weak areas where you don't really know what to do with the bow and fingers, or where your fingers move too slowly.

Practice with different dynamics. This trains the bow for greater control. Combine crescendos and diminuendos within the space of each octave or between the bottom and top of the scale.

Tone

Play long smooth notes on an open string, for example, the A-string. Listen for the smoothness of tone. Now place your fingers on another string, such as the G-string, in a scale sequence whilst still playing the A. Try to keep the tone of the A as even and smooth as before. Build up the left hand activity to include a shift to third position and back down.

Ideas for the Left Hand

Start at the top of the scale instead of the bottom.

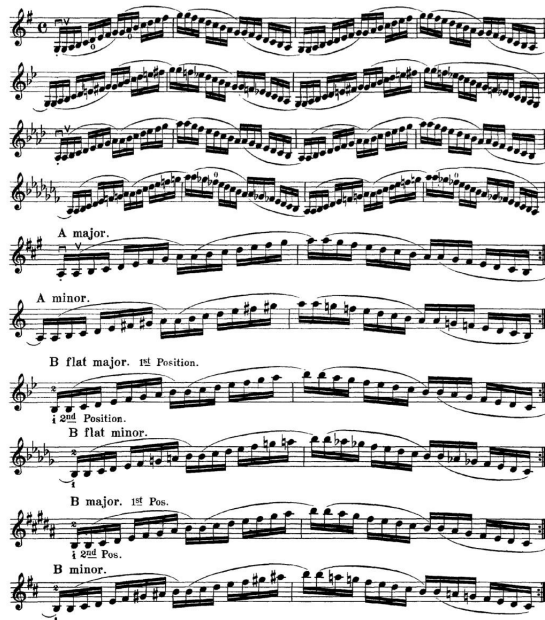
Practice scales within the limits of one position. This exercise is the first in the Schradieck book of scale studies and will teach you the hand positions in every part of the fingerboard.

Schradieck Complete Scale Studies

I.

Scales within the limits of one Position

Play every scale twice, and *without stopping* continue with the next one, as demonstrated in the first four lines. When the minor scale is played the second time, make in descending the change indicated in the 2nd and 4th line. Do not alternate with the fingering. First play all the scales in succession, beginning with the first finger, and then repeat them from B major, beginning with the second finger.



Intonation

The major scale contains five whole steps and two half steps like this: T T S T T T S. If you think of this pattern as two groups of four notes that are joined by a tone, you can see the symmetry of the shape.

A scale should be built so that each note is heard relative to its position in the key. Each note of the scale has a unique hierarchical function and understanding this is important for building good intonation. The great cellist, Pablo Casals, and the famous violin teacher Dorothy DeLay both independently used this idea to devise a system for structuring the scale to hear the tuning within it.

1. Begin with the notes of what are called the perfect intervals. These are the first, fourth and fifth notes of the scale. In A major this would be A D E and A. In G major it would be G C D and G. Play only these notes all the way up your scale and back down again.
2. Then add the leading note, the seventh pitch. In G major this would be F#. This note leads to the key - note. Feel the sense of upward pull towards the key – note or tonic.
3. Next add the second and sixth notes.

Building the scale using this sequence is musically satisfying. Remember to try it in all the major and minor keys you are learning. It is easy to forget to work on all the different keys. In fact, when Carl Flesch first published his system of scales, it was only written out in C major, the idea being that his students would use the exercises in every key. Flesch realised that in reality many students only practised C major, so he wrote out the system in every key and even added bowing and rhythm patterns, and this is how Das Skalensystem was created.

Take a small section of your scale. Notice which fingers you can leave down and which you need to lift. By leaving fingers down you will give strength to the hand shape, making intonation more reliable, and by avoiding unnecessary finger movements you will gain an economy of movement, which is helpful when you want to play faster.

Use as many different fingering combinations as you can find, don't always stick to the same one. By learning different fingerings your intonation will develop and you will have more freedom of expression and musical choice in your pieces.

Speed of Left Hand Fingers

Practice a section of your scale using short, repeated fast bow strokes on each note; say four sautillé notes on each pitch. Learning to sound these short notes will improve coordination between left and right hands and the left hand fingers will learn to move faster.

Shifting

“Trill” the shifts. Take an awkward shift and start working on it slowly, trilling between the two notes. Gradually speed it up to make it sound like a trill.

Practice scales on one string. Take a one-octave scale and learn to play it on one string, keeping a good hand position. Can you play a two-octave scale on one string? This may seem difficult but when you return to your three octave scale it will seem much more approachable.

Practice scales using only first and second fingers, shifting every two notes.

Practice the scale with the note before the shift missed out, instead repeating the previous note.

Identify your problem shift and isolate it. Can you find an exercise in the Sevcik book of Preparatory Scale Studies that will help you improve the shift?

Practice your shifts with “ghost notes.” Work out where the hand is going. Is there an intermediate note you can sound? This is particularly good for downward shifts where the hand is going to a position where it lands on a weaker finger. Practice these ghost notes in dotted rhythms and gradually eliminate the extra note whilst keeping an awareness of how the shift works.

Lagenwechselübungen.

Bei dem Einüben dieser Beispiele wiederhole man in gemässigtem Tempo:

a) jeden einzelnen Takt,
b) jeden Takt mit dem nächstfolgenden (1-2, 2-3, 3-4 usw.)
c) alle Takte, die auf derselben Saite angezeigt sind (im 1ten Beispiele Takte 1-6, 7-12, 13-18, 19-25),
d) das ganze Beispiel in folgenden Tonarten, gebunden und gestossen:

Shifting (Changing the Position).

When practising these exercises repeat in moderate tempo:

(a) Each measure separately;
(b) Each pair of successive measures together; for instance 1 with 2, 2 with 3, 3 with 4, etc.;
(c) All groups of measures marked as to be played on the same string;— in the 1st Exercise measures 1 to 6, 7 to 12, 13 to 18, 19 to 25;
(d) The entire exercise in the keys given below, both legato and *détaché*.

u. s. w.
rit.

1.

Changes of position: From 1st to 2d, 2d to 3d, 3d to 4th, etc.

Wechsel der Lagen: 1-2, 2-3, 3-4 u.s.w.

Saite String IV -

2.

2

Mindfulness

Another benefit of breaking your scales down into their separate elements is to give you a chance to learn to use your body in a comfortable, natural way. Practising long scale sequences in a mechanical way leaves no space for awareness and leaves you vulnerable to strain and injury. Breaking down your scale practice into bite-size exercises leaves the mental space for mindfulness of how the muscles are achieving the end result. This will give you better, more secure, long-term results.

Improving Your Scales

In the introduction to his book of scales, Contemporary Violin Technique, Ivan Galamian explains, "The direct way to ... mastery lies through working procedures which present a constant challenge to the ... thinking processes. For this reason new problems must always be faced and solved."

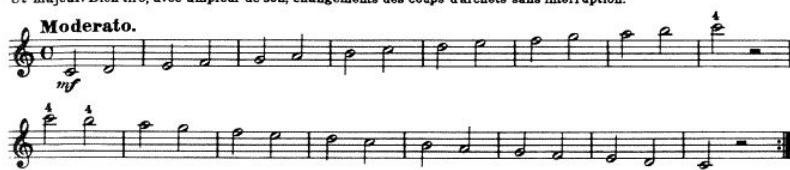
There are various books of scale studies available, the newest of which is [Scales by Simon Fischer](#); a written-out practice full of comprehensive exercises for improving scale practice. There are also the scale studies by Jahnke, Hrimaly, Schradieck and Sevcik which can look a bit intimidating, but many of which contain similar ideas. For less advanced exercises try the Paul Harris series, [Improve Your Scales](#), which are graded by the ABRSM system, so they start right at the beginning.

Scale-Studies.

Tonleiter-Studien. — Etudes de gammes.

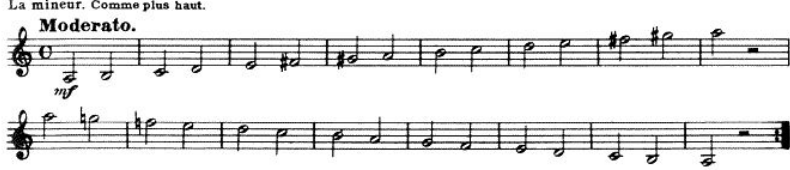
C major. Draw a broad tone and change the bow without pausing.
C Dur. Sehr gezogen, mit breitem Ton; den Bogenwechsel ohne Pausen. J. HRIMALY.
Ut majeur. Bien tiré, avec ampleur de son, changements des coups d'archets sans interruption.

Moderato.



A Minor. As above.
A moll. Wie oben.
La mineur. Comme plus haut.

Moderato.



F major. The piano must be produced in a soft but clear manner

Practice in as creative a way as you can so your mind is always switched on and always learning. By analysing and exploring the elements of a scale and practising it in different ways, the original scale will seem much easier when you return to it, and your enjoyment of your scale practice will increase. There is nothing worse, after all, than practising something you find boring and not getting anywhere!