

### Knuckling down

The importance of developing powerful base knuckles in both right and left hands for tension-free playing

STEPHEN UPSHAW

Professor of viola at Trinity Laban Conservatoire of Music and Dance, UK, and Junior Guildhall, UK



**BORN**

Atlanta, GA, US

**STUDIED WITH**

Marilyn Seelman, Carol Rodland, Martha Strongin, Katz, David Takeno

**TEACHES**

Junior, conservatoire and amateur students aged 8-80

The size of the viola as an instrument makes the development of powerful base knuckles on both hands particularly relevant to violists. This shouldn't be seen as a luxury or 'the icing on the cake' but rather as one of the essential building blocks for developing a good and sustainable technique.

With the right hand, the power circle in the hand forms the basis of playing any stringed instrument, but within that crucial shape it is the malleability of the circle that is essential to achieve precise articulation, to manage a perfectly smooth bow change, and to create truly lyrical playing. This malleability is achieved by paying attention to the base-knuckle movement, which helps access smaller motions, giving the player much more variation of bow stroke. With the left hand, this promotes good finger independence which enables the player to tackle the demands of the repertoire in a tension-free way – despite the need to play between positions and to use many extensions. A powerful springing action in the base knuckles is the way to access this independence, and to unlock each finger to work separately. Common issues that arise from under-engaged base knuckles, especially in younger students, are an inability to do off-the-string strokes in the right hand, and difficulty with hand tension and locking during passagework in the left.

### EXERCISES

#### RIGHT HAND

- Engage the string firmly, not pressing but making sure all your arm weight is focused into the contact point
- In a single motion of your fingers play single notes on the A string in both directions, starting on an up bow. Check that the entire motion is performed with the knuckles alone with a flick
- Do the same on the C string, starting in a 'shock absorber' position (soft knuckles to absorb the act of putting down the bow, like skier's knees), then changing strings
- Play the Courante from Bach's First Cello Suite making sure that this action is the starting point for each of the gestures. This should give you good 'consonants' and enable you to project your sound well.

#### LEFT HAND

- Imagine your fingerboard is a hot potato
- Work out each finger individually, ensuring that the finger is working as an 'independent contractor'
- Play each finger separately as an acciaccatura from the open string, checking that each motion is initiated from the base knuckle. Think of the knuckle propelling the finger on to the string and listen for a tinge of left-hand pizzicato in each one
- Notice that special attention is needed with the third and fourth fingers; they find it harder to move independently because they share a tendon.

## REPERTOIRE

Here are examples of studies and repertoire where good base-knuckle work is particularly pertinent.

Examples 1, 2 and 3 focus on the right hand, while examples 4, 5 and 6 focus on the left.

**EXAMPLE 1** The simple melodic opening of Etude no.1 from Mazas's 30 Etudes spéciales op.36 offers the perfect opportunity to observe how the right-hand knuckles subtly adjust to absorb the change of bow direction as bow speed and dynamics increase and rhythmic values quicken

**Largo** *sostenuto*

*p* < *rf* > *p* *p* < *rf* > *p* *crescendo* *f* *p* *etc.*

**EXAMPLE 2** The large string-crossings that open Errollyn Wallen's Lavinia present a particular challenge; for the ferocious character to come across, a clear and explosive stroke from the string is needed for each note to make the *sfz* and crescendo at the end of the phrase all the more powerful. Maintaining a structured bow hold while also feeling 'shock-absorber' malleability in the right knuckle line will create the balance necessary to execute this well

**Imperious** ♩ = c. 63

*f* *sfz* *ff* > *pp* *etc.*

**EXAMPLE 3** In the second movement of Bartók's Fourth String Quartet, the pianissimo dynamic, mute and breakneck speed must be combined with sizzling articulation and sparky accents. The stroke needed here is initiated from the fingers with springing knuckles. Any use of the arm will result in physical tension

**Prestissimo, con sordino** ♩ = 88 – 98

*pp* *etc.*

**EXAMPLE 4** Lillian Fuchs's Fantasy Etude no.1 is a wonderful study for developing strength in the left knuckle line while exploring the chromatic motion within a left-hand frame. The recurring pattern that repeatedly references each note against the fourth finger in different keys and positions is particularly useful

**Preludio (Moderato)** ♩ = 100

*mf* *mf* *etc.*

**EXAMPLE 5** In the fourth movement of Florence Price's Symphony no.1, finger independence is essential to ensure that these unusual intervals can be accurately executed at speed. Extensions both upwards with the fourth finger and backwards with the first finger are needed here and loose, limber knuckles will facilitate this

**(Presto)**

*mp cresc.* *ff* *(cresc.)* *etc.*

**EXAMPLE 6** Throughout *Sequenza VI*, Luciano Berio requires the player to switch from three and four-part chords, often in very unusual left-hand chord shapes, to fast passagework. Maximum physical relaxation is needed to achieve maximum volume and, much like the Price, this demands a left hand in which each finger is able to act as a free and individual operative



## IN YOUR PRACTICE

The motivation for practising these right and left-hand exercises should be as part of your quest to find the sound that you are looking for in your playing.

In practice sessions we are always moving from 'technique-driven sound to sound-driven technique' (Marilyn Seelman), so remember that the exercises are devised for a reason; they are tools to help you to learn to play as cleanly as you want to, or to sing through a phrase as you wish but are not yet able at this stage in your musical journey. They will also help you to gain maximum results for minimum physical effort.

When you practise, try to tick multiple boxes at once. For example, when you are doing your scale warm-ups, use this time as an opportunity to focus on the movement of the knuckles of each hand, then on both. It's not about spending four hours concentrating on your knuckles; instead, you might spend half an hour on a Lillian Fuchs's *Fantasy Etude* finding musical impetus for a particular type of articulation.

Even if you have only 45 minutes make sure to work this aspect of technique into what you practise, whether it be scales, studies and/or repertoire, rather than sacrificing something else completely.

## TIPS FOR TEACHERS

If you are finding it difficult to communicate these knuckle movements to students it is sometimes helpful to work away from the instrument. This can be particularly helpful for adult students who may not have as much access to this knuckle motion as younger students.

### RIGHT HAND

- Take the bow away from the student and ask them to perform the motion separately
- Try the motion with a pencil before asking them to take up the bow again

### LEFT HAND

- You might communicate the movement to your students by asking them to rest their arm and wrist on a table or other resonant object and to tap percussively. With the arm and

wrist out of the equation the movement becomes far less daunting and easier to isolate

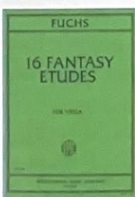
- Bend your right arm to act as the neck of the instrument and practise the exercises on your arm with your left-hand fingers

We as teachers need to remember that we are all different in shape and size, as well as levels of mobility, so we need to tailor our teaching to each student because of its vital importance.

On the topic of viola size, this way of understanding the structure of the left hand means that even a small person can play the viola without tension or injury. But when a student is young it is important to check that the instrument is of an appropriate size to enable the healthy development of these techniques. ●

INTERVIEW BY NAOMI YANDELL

## FURTHER MATERIALS



Lillian Fuchs's 16 *Fantasy Etudes* for solo viola are excellent viola-specific tools to address a number of technical issues in musical and exciting ways.



*The Karen Tuttle Legacy* edited by Alex Teploff is highly recommended as an introductory resource for violists who want a better understanding of body awareness and the mechanics of a layered sound.



You can watch Stephen perform Wallen's *Lavinia* at [bit.ly/3Rfksvt](https://bit.ly/3Rfksvt)

**NEXT MONTH**  
Cellist Herre-Jan Stegenga on sound projection