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Freeing the upper arms

One of the first things for most players to think about, if they want to become freer in the left arm and hand, is what they are doing with the left upper arm. It must remain free and mobile (positioned slightly more to the left for playing on the E string, more to the right for the G string) yet it is all-too-easy to fall into a habit of clenching the left upper arm in towards – or even against – the side of the chest.

One problem this creates is how to play on the upper strings. With the elbow stuck in the G string position, the hand has to bend sideways at the wrist in order for the fingers to reach the E string - an obvious potential cause of tension (Ill. 1). The change in the elbow, when moving between the lower and upper strings, does not have to be extreme: even a small adjustment makes a difference. Equally, you can turn that round and state that only a little fixing of the elbow can detract from the freedom of the hand.

But the main problem is actually something else. One of the chief causes of tension in either arm is a specific muscle that you can feel between the collar bone and the shoulder socket, near the armpit (Ill. 2). Clenching here is the explanation for most of the tension-problems violinists experience in the shoulders and arms, and pulling in with the upper arm makes the problem much worse. To see this muscle clearly, it is easier to look first at the right arm.

Right shoulder and upper arm

Without the bow, suspend the right arm in playing position as though about to play near the middle of the bow on the D string. Notice how no muscles in the arm itself are needed to keep the arm up. This becomes obvious when you consider that to move the fingers, the main muscles or tendons are in the hand; to move the hand, they are in the forearm; to move the forearm, they are in the upper arm; and to move (or suspend) the upper arm the main muscles and tendons are in the front and back of the shoulder. It is always 'the next place up' where the action takes place.

With your left hand squeeze the muscles of the right forearm and upper arm. Notice how the muscles are entirely soft and not in any state of contraction, yet the right arm remains perfectly suspended. This is one of the keys to a smooth, relaxed bow arm – that the arm can have a feeling of weightless suspension, of floating, while the hand and fingers inject articulations and tonal shadings into the bow.

Now, the essential place to become aware of is the thick wodge of muscle near the armpit, between the near-top of the chest and the place where the upper-arm fits into the shoulder-socket.

- Put the fingers of your left hand almost into your right armpit so that you can get underneath the muscle, and place the thumb above it on the other side (Ill 2).
- Find how you can make this muscle contract. Push your shoulder very slightly down and forwards, and
 feel how the muscle becomes rigid with contraction. Let the shoulder return to its normal position and
 feel the muscle release and become soft and pliable again. Learn how to do this rhythmically: tense—
 release, tense—release.

The crucial point is that this muscle is not required to keep the arm suspended in the air. Its job in the body is to pull the shoulder down and forwards, and it must not be allowed to join in the general bowing movements. If it does, the only result is the opposite of what you want, i.e. heaviness and lack of quick, light response in the entire arm and shoulder.

What about moving the upper arm backwards and forwards? Again, there are other muscles that do this, but this particular muscle between your fingers can remain soft and neutral much or most of the time.

 Make backwards-and-forwards bowing-movements with your right upper arm. Do not allow the muscle between your fingers to contract as you do so.

The feeling of release in the bow arm, when you learn to move the bow without this muscle constantly reacting, is extraordinary. However, in many students the muscle sticks out visibly as soon as they bring the bow into playing position, though they could release it; and often you can see the muscle rhythmically contracting and releasing in time with the strokes, though they could minimise this or even get rid of it entirely.

(Ill 1) Bent wrist

Caption:
Bending the wrist
sideways may
cause tension

(Ill 2) Close-up of finger holding muscle.

Caption: Gently squeeze the muscle between your fingers

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At first you might find the muscle difficult to control, and it will want to return quickly to its clenched state, but little by little you can release it for longer and longer until it becomes a habit.

Permanent extreme over-shortening of this muscle (i.e. tension), coupled with poor posture, can ultimately lead to tingling or numbness in the fingertips. Happily, it is not too difficult to remedy by improving the posture, through awareness and the application of will, and by way of simple stretching exercises.

Left upper arm

The same muscle on the left side is equally likely to take part in things when it should be staying quiet, and it is by keeping free here that freedom comes into the whole arm.

It is common for an association to set in between any movement of the left upper arm to the right, and pulling-in with this muscle. Then, if the elbow remains pulled in to the body, the muscle remains permanently contracted. The same tightening is likely also to be associated with any upward shifts, and players with an arm-vibrato are particularly prone to tighten here the more intensely they vibrate. Again, it is easy to prove that this muscular activity or clenching is entirely unnecessary:

Without the violin, hold the left arm in playing position. Hold the muscle between your fingers and thumb as you did before on the right-hand side. Make sure that it is soft under your fingers.

- Slowly move the elbow to left and right, as though moving from the G string to the E string
- Move the hand towards and away from you, as though shifting
- Make the arm- or hand-movements of vibrato

Notice how you can make all these movements without the muscle between your fingers reacting at all.

Learn how to clench the muscle and then release it again. The more easily you are able to do this, the
more you can instantly release it whenever you wish during the course of playing, and the released state
soon becomes a habit.

A good way to disassociate vibrato from pulling in with the upper arm, is to make an intense vibrato while holding the violin away from the body at various angles:

• Vibrate with great energy while holding the violin in guitar position, or while holding the instrument above your head. One of the best positions is to hold the violin pointing as far backwards as possible (Ill. 3). This takes the upper arm to the opposite extreme to that of pulling in to the side of the chest.

The angle of the knuckle joints

The angle of the left elbow also affects the angle of the knuckle joints to the neck of the violin: the more to the left the elbow, the more parallel the knuckles are to the neck. If you pull the upper arm in too far to the right the knuckles may be at 45 degrees to the neck.

The angle of the knuckles to the neck of the violin greatly affects the action of the fingers. One of the principles of good left-hand finger-action is that the shape of the finger on the string, and the shape of the finger when it is lifted, remains more or less the same. Obviously the finger must change shape when extending up or across to another string, but as a rule it should stay the same during the ordinary up and down movement.

Of course, you have to keep in mind that where the elbow should be depends on the tilt of the violin. The flatter the violin, the more to the right the elbow needs to go.

If the elbow is positioned too much to the right when playing on the upper strings, the knuckles become too tilted and the fingers then have to straighten slightly as they drop, in order to reach the strings.

A further knock-on effect of the elbow position, and therefore the tilt of the knuckles, is the amount of space between the fingers: the less tilted the hand in relation to the neck, the more the fingers can widen at the base joints, giving freedom and independence to each finger. The more tilted the knuckles, and therefore the more straightening the fingers as they reach the strings, the less space there can be between the fingers.

Of course there is no one setting that is correct. It depends entirely on what you are playing, and each player has to find the right balance for their hand, between the knuckles being too parallel with the neck, and their being too much at an angle.

(Ill 3) Violin held pointing backwards

Caption: Vibrate intensely with the violin in this position

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All that really matters is that nothing remain fixed or tightened, so that every muscle remains basically springy. Then everything in both arms and hands gains a feeling of lightness, freedom and flow.

Next month's BASICS returns to the left/right hand, with