What is talent?

The brain: the ultimate super-computer

A few years ago, during a workshop on tone production for ESTA, I was provided with a young student to use as a guinea pig. She was about ten years old, and her name was Sarah. The idea was to teach her a few tone exercises, but first I needed her to play something, so that the participants could see what the starting point was. The tone exercises have an immediate obvious effect, so it's always good to have a 'before' and 'after' for everyone to hear.

She was a typical, lovely, sweet girl with shining eyes and lots of enthusiasm. She launched into an extremely enthusiastic but very scratchy rendition of the first few lines of the Vivaldi A minor concerto. I decided to scrap the idea of taking her through some tone exercises, even though they always have a good effect, and try a different approach.

'Thank you very much,' I said, when she finished. 'Lots of that was really good. But tell me, why do you make all those scratchy sounds? It all sounds very tearing and scratching!'

(Please don't think that I said it in any sort of nasty way. I said it gently, and with a smile, and she smiled back, though of course she didn't know what to say.)

Then I pointed out to Sarah that her brain, enclosed inside that little skull, was cleverer and more powerful than the biggest super-computer in the world. In fact, I said to her, if there were a super-computer as big as a skyscraper, it still wouldn't be able to do a fraction of what her brain can do.

She looked up at me with her shiny eyes and nodded, though obviously she didn't know what I was talking about yet.

'You are so clever,' I went on, 'that you can pick up a delicate object like an egg, or something very fragile and expensive, without breaking it by squeezing it too hard, and without dropping it because you're not holding it tightly enough. You know exactly the right amount of holding it, don't you! And you can put it down again, on a hard surface, without smashing it.'

She nodded and smiled and agreed.

'And when you're moving around your house,' I said, 'you don't bash into things, and constantly knock things over, and break things all the time, do you?'

'No!' she giggled.

'And when you stroke a cat, you know how to do it, don't you!' (I demonstrated gentle stroking, and then a sort of beating-up-the-cat kind of stroking.)

'Yes!' she agreed, laughing at the thought of the poor cat.

'Okay,' I said. 'Then why do you take this bow thing, with this hair stuff on it, and do <u>this</u>?' - I demonstrated on my violin, cutting into the string with the bow to make a scratch - 'instead of stroking the string sensitively like this!' - I played a few singing strokes.

Sarah stopped smiling and stared at me. Now she was thinking hard. I asked her to start again.

As soon as she began, she scratched the first note, the up-bow, just as before. But this time, she immediately stopped playing. Then she started again, and the up-bow was purer, but she scratched the down-bow, and stopped again. I didn't say anything, but just stood and watched.

She paused for a moment. Then she started again from the beginning, and this time managed two or three whole bars with the loveliest, stroking quality in the bow, the sound pure, and the violin ringing.

Question: 'Why does an average ten-year old scratch and play out of tune?' Answer: 'Because they're ten!'

No! It is not necessary!

Looked at from one angle, you could say that Sarah didn't seem very talented at first; and then she did seem talented. How can that be? The question is, what is talent? The word suggests that some people have it, others don't; or some have more, while others have less. But I'd like to propose that many or most of the attributes of 'talent' are nothing more than ordinary, marvellous, human sensitivity of touch, and innate ability to *measure*.

Picking up a fragile object and putting it back down again on a hard surface without breaking it requires astonishing sensitivity and control, but it is not seen as 'talent'. Then, when that same person feels the string with the hair of the bow, in the same sensitive way, everyone exclaims, 'Oh, how talented!' I would suggest it is just human to have that wonderful sense of touch.

In case you think I might be exaggerating the progress Sarah made in those few minutes, a couple of years later I was doing another workshop on tone production for ESTA in the same venue. I told the story of Sarah, exactly as I have done here, and asked if anyone in the audience had been at that workshop. A man put his hand up. I asked him if it was as I had represented it. He said yes, it had been exactly like that!

An adult beginner with a super tone

In that later ESTA workshop, I tried out another idea to illustrate the point about 'talent' being just a fancy name for ordinary human faculties. There were various children and teenagers there as guinea pigs, escorted by their parents. I asked if by chance there was any parent in the room who had never played a musical instrument, and in particular had never played a string instrument.

A woman put up her hand. I asked a few questions to confirm her lack of string-playing history, and she assured me that she had never even held a violin in her hands before.

I invited her up to the front. I laid my violin flat on a table, and kept it securely in place with both hands. The woman took my bow and held it at the frog in her fist. Then she rubbed the G string with the bow, up and down. They were mainly short strokes, but some were a little slower and longer, and she did them midway between the bridge and the fingerboard. Looking down at the bow, she automatically corrected the angle of it to the bridge. After two or three scratchy or fizzy strokes, she got the hang of it, and made the open G vibrate widely. The violin sounded great. The tone she was producing was as good as many of my senior students bowing an open G string.

How is that possible? What is it that's going wrong, then, if after years of lessons and practice, students still struggle to make a sensitive sound? I think at least one of the answers lies in the problems caused by trying to do things *correctly*.

Trying to play correctly

The trouble starts if, the moment someone picks up a violin, they are immediately hampered by the need to do it 'right', to do as their teacher has told them to do, and they try to do it all with sheer mental control and effort.

My favourite example to illustrate our brilliant internal super-computer is simply to whistle a note, and then sing the same pitch. Then up a semitone, then another. How is it possible that we can shape our lips to within millionths of a millimetre, to produce a particular pitch, and then shape our vocal chords to within millionths of a millimetre, to produce an identical pitch? It's a miracle!

It makes sense to consider that every action in violin playing should be occurring in the same way. Just as we cannot possibly consciously shape our lips or vocal chords to produce a particular pitch, so we cannot possibly play the violin using mental control.

I often ask students to spell their name out loud, or recite their address, or tell me about their last family holiday, while they play a scale, or a passage from a piece. The Russian teacher Zakhar Bron says that unless you can play something super-fast, you haven't really learnt it yet. Perhaps the same could be said about being able to play while talking.

The fist bow hold

A great example of not getting in your own way is the 'fist' bow hold, where you simply hold the bow tightly in your fist like the non-violinist parent in the workshop, and make a good sound anyway. I discovered this a few years ago when I had a very advanced 14-year old student. Well, his left hand was worthy of a little envy, the way he could get around the violin so easily. But his bow arm never equalled his left hand, and in particular his spiccato was never quite clean or controlled.

I tried everything I could think of to help him – simple exercises, simple explanations of the curves and proportions involved, all without any improvement. After quite some time, I finally realised what the problem was, and asked him to do spiccato while holding the bow in his fist.

Guess what! It was instantly just about perfect – or at least, certainly so much more even and clean. Why would that be, when he couldn't do it with a fine bow hold? Surely it's obvious, that as soon as he held it in his fist, he stopped trying to do it *correctly*. Just as you don't need to learn much to bounce a ball, or to skip stones across the pond, but do it all instinctively and through rapid trial-anderror corrections, so it suddenly feels 'easy' to bounce the bow in a spiccato if you're not trying to do what somebody told you to do.

Trying to play consciously

Imagine a footballer in the heat of a match consciously drawing back his leg to kick the ball. His coach has told him that he must do this or that with the lower leg, or such-and-such with his toes, meanwhile doing whatever it is with his upper leg...of course not! He or she simply fixes their eye and their mind on the target, and all the physical movements happen by themselves as a result.

Okay, they will have had some training, some instruction, some practice, in how to kick better; but at the end of the day, it's still an instinctive kick which simply cannot be done with conscious control.

Sometimes, the more training somebody gets, the less 'talented' they seem. That's almost inevitable if the initial problem is that they think too much, i.e. they direct individual actions too much, and in the process defeat their own internal supercomputer; then, with more instruction, they think even more.

Kicking a ball is a somewhat simpler procedure than playing the violin; and yet we try to get our students to do this or that with the upper right arm, and more of this, or less of that, with the forearm, and meanwhile tell them – just by the way – that they must get the bow straight, and so on.

So how are we meant to do it, so that the student does get trained in what matters, and yet retains their natural feel and instinct?

The things that truly matter

I always remember something Emanuel Hurwitz said. I had gone to see him to give him a present of my *Basics* book, which had just been published.

Mannie took it from me and turned it over in his hands a few times, judging the weight of the heavy volume. Then he said, 'Very good, but how can you call it *Basics*? The things that truly matter in violin playing are actually rather few!'

I thought it ironic that he questioned the title when he had already seen pre-publication drafts of it, and had never said anything like that before. I protested that, actually, I had cut over a hundred pages, and that I had got it down to as little as I could!

Still, I have had his comment at the front of my mind ever since, because of course it is so true.

The Science of Violin Playing

I like to suggest to students that what they need to do is to study the *science* of violin playing. I often pick up my copy of the wonderful book by Raphael Bronstein of that name, and show them the title. The students always look at me very seriously, and nod gravely.

But then I explain that if they were to study a 'real' science, like DNA, or physics, or chemistry, or anything, really, and if they were to study that subject all day every day for fifty years, at the end of fifty years they would know only *this* much (I put my thumb and forefinger a millimetre apart) compared to all there is that they *could* know about that subject.

But when it comes to the science of violin playing, *this* much (I put my fingers close together again) *is all there is to learn*! How can you study the mechanics of the bow arm for years and years, or the mechanics of vibrato, or of shifting, or how to move the left fingers freely? There simply isn't enough to learn.

But if you were to study *music* all day every day, at the end of fifty years you would know only a fraction of all there is that you *could* know about music.

Coming back to the question of how to train without putting out the flame of instinct, the first thing is for no technical point ever to be made without reference to the music. One great tip for understanding technique in general is that it should *look* like the music you are playing.

In other words, if the phase is *legato* and seamless, the bow arm must not look jagged in its actions, but emulate the music. If the passage is serene, you can't achieve it with 'choppy' left fingers, raising too high or thudding too hard. Vibrato is not an empty physical motion, but always part of the expression, colour and atmosphere. Neither is a shift an empty, physical motion, but part of the seamlessness of the phrase, or part of its expression. If the music is 'large' you can't achieve it with small-scale, contained strokes; if the music flows, there must be no 'stops' in the physical playing of it, left hand or right; and so on.

Mechanical and musical technique

Mechanical technique – i.e. the angle of the violin to the body or the floor, the left fingers moving from the base joints, left thumb and fingers not squeezing together, fingers not pressing the strings too hard, sensible use of the three levers of the bow arm – none of these things get any better just by concentrating on the music.

These small mechanical matters are actually quite easy to correct. It's just a matter of making new habits unconscious through repetition. As Mannie said, there aren't even very many of them to instil.

But the bulk of technical ability comes from *playing the music*. You don't get music out of technique, but you do get technique out of playing music. It is in the search for the musical expression that what you could call *real* technique and ability comes. By going for the sound, the phrase, the passage, the technique comes. Or, not to dress it up in fancy words, you find a way to do it.

Talented versus gifted

One understandable view of talent is that it begins with the shape of your hands and fingers. If, the first time a child puts their hand on the violin or bow, their hands and fingers already look perfect, they are talented. If not, they're not. But even if there's a logical truth in that, surely a more appropriate word to use is 'gifted'. To be born with good hands and fingers for the violin is one of the ultimate gifts.

Then there's musicianship. For Yehudi Menuhin to be able to play the Beethoven Violin Concerto *with understanding* at the age of nine is unexplainable. (Of course, now there are hundreds of children around the world who can play the *notes* of the Beethoven Concerto.)

On perhaps a less elevated level than Menuhin, I have been fortunate to have had many wonderful students from Korea, but one stands out in particular. In her first lesson, when she was 14, she played the last movement of the Lalo *Symphonie Espagnole*. It was superb. I remember I told her that in my opinion everything her teacher in Korea had taught her about technique was 10/10 correct; and everything she understood and had learnt about music was 10/10 correct.

By the age of sixteen, this student reached the semi-final of the Wieniawski competition in Poland. At seventeen, she won the top scholarships to all the main London music colleges.

Here's the point: she took up the violin at the age of twelve. She had never touched a violin before that.

Talented? Certainly, but no more really than most of the rest of us, in terms of having fantastic human sensitivity of touch, and the innate ability to measure. But gifted? Absolutely! It all came to her almost for free. From the outset, she was able to do immediately what others have to work for to achieve.

So while talent can be viewed as just a normal human faculty, without which we wouldn't be able to function, some players are certainly more gifted than others. (Unless, that is, you see difficulties themselves as a 'gift'. It's telling that the Chinese sign for crisis and opportunity are the same.) Some people receive more physical presents than others!

However, as everybody knows, including the gifted themselves, without hard work, discipline, focus and organisation, being gifted on its own is not enough. But if you do have those qualities – plus a modicum of the right information and guidance – and add them to the talent of your innate sensitivity and your love of music, almost anything is possible in advancing your playing and music-making.