Are you Listening?

Maria Callas has done it, so has Gigli, even Gérard Depardieu has benefited from Listening Therapy, so it seemed only right to investigate one of the best kept secrets in the business.

Josette Lesser lent her ears to Ella Williams.

Based on the published works of Professor Dr. Alfred A Tomatis, Listening Therapy sets out to train the muscles in the ear to identify different sounds and frequencies. The theory is that one can only reproduce sounds which the ear recognises – and for the singer, that means a way of developing the voice to its full potential.

Over the years, Tomatis tested numerous singers and musicians, and discovered that really good singers had one thing in common: they all heard every frequency very efficiently in all zones (i.e., lower, middle and higher). From this, he concluded that it was actually the way that someone listened that made them a great singer, and that any change in listening patterns would automatically change patterns in speech or instrumental output. This was to become known as the "Tomatis Effect" and in 1957, the French Academy of Sciences honoured Tomatis for his work.

Tomatis went on to develop an "electronic listening device" which could restore the frequencies back to the singer, by working and toning the ear muscles with a type of "ear-obics", as opera singer and listening therapist Ella Williams likes to call it.

A former student at the Hochschüle fur Musik in Vienna, Australian born Williams first came across Listening Therapy a couple of years ago, while reading a book on Tomatis called The Mozart Effect: "I certainly wasn't prepared for the benefits of Listening Therapy. I just wanted a little bit of extra pizzazz in my voice – more colour, more dynamics – but what I got was a total opening up of my voice, more colour, more range and a freedom to let go of the technique and sing from the heart. And the best thing is, now I just jump out of bed every morning and my voice is already placed; I don't have to do any warming up."

In fact, Williams was so impressed with the results that earlier this year, she trained as a therapist and set up The Listening (Voice, Music & Language) Centre at her flat in North London. "Every singer no matter how good they are, has one little thing that bugs them, whether it's an intonation problem, or they don't like their high notes, or may sing great Italian repertoire, but their Handel's terrible. And nearly every singer has those extra notes that they can't really use. Listening Therapy can help," she declares. Naturally, I ask

The assessment takes one and a half hours, but before we start the aural tests, Williams asks me to do some drawing, along with a few skill tests, so that she can determine whether I am particularly right- or left- handed or right-or left eyed. She then asks me a series of personal questions.

With those out of the way, we move on to the listening tests. These are similar to those used by Tomatis. The aim is to work out my listening patterns by observing whether I can analyse, control, appreciate and reproduce the sounds I am hearing.

The equipment is set up in Williams lounge where she hands me a set of headphones and tells me she is going to give me a series of very faint tones to listen to. This first test is based on the air conduction: the sound comes from outside, goes into the ear, and vibrates in the ear itself. As soon as I register a tone. I have to raise the hand that corresponds to the ear I hear it in. Williams explains: The idea is to work out exactly how you listen, and listening is a desire to "tune in". But hearing the tones is not easy. Not only are they incredibly faint, but the room has no sound proofing, a deliberate ploy to assess my ability to ignore background noises and focus.

The second test is very similar, only this time the emphasis is on bone conduction: how well I hear sound through my bones. Williams removes the headphones and replaces them with a bone vibrator which she places behind my ear, and then the other. I start hearing some of the higher notes in the opposite ear – very strange.

Afterwards Williams makes a graph from the two tests and tells me that, ideally, the graph should come out in a curve, with the air conduction above the bone conduction. When the bone conduction is on top, it's as if the raw bone is exposed. The air conduction is like a skin, which gives us protection, while the bone conduction is like our skeleton. So, when bone conduction is too exposed, it makes you hypersensitive to sound. For a singer, that can mean that the tone is rather sharp; it has no covering, no protection.

We move on to the next test, which Williams refers to as "selectivity": identifying whether a tone is higher or lower compared to the one before. I know from experience that I am not brilliant in this area, but Williams is reassuring: "A consultant in Vienna told me that musicians who have been with the Vienna Philharmonic for 20 years, get it wrong. Tomatis calls it the "curtain of anxiety". It relates to past trauma, anything from ENT problems in childhood, to moving school, or even a death.

"When something is too painful, we tune out to protect ourselves and so that becomes a habit. After a while we live with that habit for so long that the muscles becomes flaccid and they don't work efficiently anymore – we actually lose the ability to tune in to that frequency. From the test I can work out what year the trauma started, and where the anxiety manifests itself."

For the fourth and final test, I have to talk into a microphone and Williams filters back my voice to me through the headphones. From this, she can determine how I listen to my own voice, and whether I am extremely right-eared, left eared, or more or less in the centre.

But does that matter? Well, according to Tomatis there is only one way to be a singer, and that is to be right-eared. This means that we need to use our right ear as the leading ear, so that a message can go straight to the language centre situated in the left-hand side of the brain. "If we use the left ear it takes longer for the same message to reach the brain. We're only talking about milliseconds, but it makes all the difference because, in that time, distractions can happen and the message can get lost. And this can affect things like concentration and memory."

But there is also another side to Tomatis' work – accurate foreign language reproduction. Apparently, all languages can be classified into 12 distinct frequency bands and, if you don't hear those frequencies, you have no chance of ever really sounding Italian, or sounding French: "When we listen, the bone registers the sound first, that's to say: the bone conduction always precedes the air conduction. And with each language, it takes a different amount of time for the body to integrate the sound.

There is also something called "delay", which is the time the ears take to get ready to listen, and that is also different in each language. So, when you want to learn a foreign language, if you don't have the same precession and delay, you're never going to have the right flow of the language.

To prove her point, Williams puts headphones on me and proceeds to filter back my voice at different frequencies and delays. I am astounded by what I hear. As she alters the frequencies, I can clearly hear the differences: in the Italian frequency there is a definite ebullience, in the German a much denser sound.

"I've now picked up the different frequencies and can sing in all the different languages effectively," enthuses Williams. I think everybody's been to auditions where they've sung an aria in the language that suits them best, and then they've been asked to sing something in a language they're not really suited to. Well, this gives people the chance to perform everything, and that's what I find so exciting."

So, how does it actually work? Well, Listening Therapy is about exercising and retraining your receptors – tuning your ears, if you like. It is not about learning yet another technique. Instead, there are listening exercises based around Mozart and Gregorian Chants, because both exhibit an abundance of high frequency sounds which give the ears the maximum exercise when filtered through the electronic listening device

All courses are tailored towards the clients individual needs, but to give you some idea, a basic package costs £15 per hour and involves two hours of listening training every day for 13 days, a 3-5 week break, and then one

further week of listening practise. The language therapy is similar, but with additional exercises, which involve repeating foreign words, filtered to you through headphones in the appropriate frequencies.

I didn't have the time to try out the remedial side for myself, but I can say with confidence that, from what I know of my voice, Williams' analysis seemed to be pretty accurate (don't worry, I won't bore you with my results!) I was also very impressed by Williams herself, who seemed extremely knowledgeable and gave me some interesting insights. So would I go back and try the full course – the answer is a definite "yes".

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