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Learning to listen to myself:
performing as a conscious act

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Abstract:

For me, as a violin player, it is very important to develop my listening skills when practising and performing. By listening to my playing, I can get instant feedback concerning the parameters of intonation, sound quality and even bow technique. My research is focused on understanding why my listening did not work whilst playing my violin and why I needed to record myself to get some feedback, to get a more objective and instant perception of my playing.

The research methods I have used were both theoretical and experimental. I have learnt techniques that have shown to have a positive effect on other performers. I put them into practice before and during performances. I followed my progress by recording them in order to analyse and compare the results. I have found that I can achieve a more objective perception of my playing when I work on my stress and tension levels. I have also developed a way of practising that includes a performance situation.

I have discovered that my problem of a non-objective perception of my playing was due to high levels of stress, and not a problem with my aural training. From now on, I will try to work not only on technical parameters, but also on mind preparation and performance.

Key words:

Awareness, intonation, sound quality, influence of feelings in performance, performing, practising, violin.

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*What is defeat?
Nothing but education;
nothing but the first step
to something better*

Bruce Lee

1. INTRODUCTION

Being a musician comprises of many aspects in our lives. It is often said about music that the subject of our jobs or studies is a way of life. Among the hundreds or thousands of definitions given to the music throughout the ages, Edgar Varèse stated that music is organised sound.¹ For me, this organised sound gives a chosen and somehow strict structure to my life, and makes decisions on my behalf: I do not care about working time nor working days because it is always a time to think of music in a professional way, to compare and analyse and not just to enjoy, moving to other countries trying to find a job... For me, music is the core of my routine. That means that I link, consciously or unconsciously, the music to everything I do.

I was 18 years old when I was studying my ninth year at music school. Then I was shaken by my first disgusting musical experience in my life. Until that moment, I had always been self-confident, sometimes even arrogant. My teachers always considered me as one of the gifted students at school, and many times they adulated my playing. It happened that I bought a mini-disc recorder which I first used to record a concert I played in with some friends a few days later. I was the first violin, and the piece was a string quartet composed by Haydn. After our performance, we received warm applause and compliments from the audience as well as the teachers. My colleagues and I were also happy. Eager to test my new recorder, I listened to the recording going back home. This was the moment when everything changed in my life.

In the recording, the quality of my playing sounded very poor, not clean enough, quite out of tune and slowing down the tempi. This is bad enough and shocking for anyone, but it is even worse to realise that the idea I had about my playing at the same time we performed had absolutely nothing to do with what the recording showed. Consequently, I realised I had a problem:

¹ Richard Franko Goldman, "The Liberation of Sound. Perspectives of New Music 5," in *Musical Quarterly* Vol. 47, No. 1. (Jan., 1961):133–34.

What I think I am playing ≠ What my recorder shows

As the days went by, I wondered why and how it was possible that what I heard and felt during the performance differed so much from what it sounded like on the recording. I tried to find who was responsible, perhaps myself, perhaps my teacher at that time... or all the teachers I had had until that day. I needed some time to include myself in the list of the guilty party. I started to reconsider whether I should trust my senses, or even my brain. I remember I felt at that time like a cornered sheep threatened by a wolf, so vulnerable and attacked. It was a long and emotionally hurting period of about a year and a half, immersed in a perceptive darkness and hesitation especially about my hearing, which expanded to the rest of my senses. My playing, obviously, did not improve at all. The worst thing that happened to me was to lose my self-confidence. Stupid mistakes and stage fright became “friends” with me, forming a dangerous triangle together with myself and my violin. This problem affected both my playing (left column) and my mind (right column).

INTONATION	CONSEQUENCES OF THE PROBLEM	FRUSTRATION
ARTICULATION		SADNESS
DYNAMICS		RAGE
SOUND QUALITY		CONFUSION

Anyway, it is said that a crisis can be considered as an opportunity to improve. For me, it meant that I had a problem which I had not been aware of, and for that situation I was supposed to face my problem for the first time, which is the first step to overcome it. Only once one has accepted having a problem, is it possible to make plans to find a solution. Some years later, more experienced and mature, I have made the decision of asking questions and trying to find some answers which perhaps will help me learn to listen to myself and to overcome my problems to perceive how I am performing on stage or in the practice room.

1.1 RESEARCH QUESTIONS

I prefer to explain the problem as the first step in order to make the structure of my work 6 more comprehensible. Now that the problem with the differences between my perceptions whilst playing and what I listened to later from the recording has been presented in the introduction, I proceed to formulate some research questions, which will lead and drive the process of giving shape to this thesis. These questions should meet some requirements, such as the possibility to impact in a positive way in my future as a musician, to have a goal, which in this case does not need to solve a problem, but brings out new ways for a better understanding of my individual way of performing, as well as the possibility to work on it from a theoretical and a practical approach.

Considering this information, I would like to “decompose” or formulate the research question through several questions, where the main one would be:

- Why is there a big difference in my perception on stage compared to listening to a recording?
- What steps should I take in order to have a similar perception both when performing and when listening to a recording of my performance?

In order to get a consistent answer, I will need to answer more questions which will help me to drive my investigation in an organised manner and to prepare a useful method to re-educate my hearing. These questions are:

- How does my perception work when I perform or practise my music?
- What kind of actions or application of various techniques can have a positive impact on the ability to have an accurate perception?

1.2 METHODOLOGY

To tackle these problems or research questions, I will try to understand how aural perception works by:

- studying **literature**, and other sources such as **videos, documentaries**, etc., which are accessible to a non-specialist. I am aware of the high probability of finding specialised vocabulary which I might not be familiar with.
- in order to acquire a stronger and wider background and tools to become familiar with the **brain and mental functioning**, I will read studies concerning the physiological scientist field and try to find out a personal way to solve the differences between my “performing” perception and my “analytic” perception.
- I will learn about **Stage presence techniques** and will put them into practice to see what effect these might have on my listening abilities.
- I plan to use **video-recordings** of my own playing to offer examples, to examine the effects of the exercises and make comparisons of the results, and the process of drawing conclusions.

1.3 ORGANISATION OF THE WORK

This work follows a structure organised by following technical or musical problems related directly or indirectly to my listening: attitude and feelings towards the fact of playing the instrument, intonation, legato playing, sound quality, reliability and performance. Thus, each chapter tries to follow the next structure:

- formulate the problem and its relationship to listening problems, causes of the problem and consequences in my playing/performances, possible links to other problems,
- tools, method (or methods) to solve or overcome the issue: study of the literature on the topic and practical work on it,
- solutions and my own conclusions.

When possible, Media files (video-recordings or Sound recordings), as well as links to examples on my YouTube channel complete the chapter and add “live demonstrations” in order to clarify some explanations when only text is not enough.

2.1 PREVIOUS RESEARCH

When I decided to tackle this problem of having the **wrong perception of my playing**, I thought it would be difficult to find information about it. I was both right and wrong, because in the end it has not been so difficult to find a large and important body of literature on the topic. Here in Gothenburg, where I am doing my master education in symphonic orchestral performance at the University of Gothenburg, it is even possible to find books in the library in our school of music, so it is not needed to go to specialised libraries in Psychology faculties or similar places. Nevertheless, I found two problems which did not help me develop my work: firstly, most of the titles in the bibliography I have found discuss **how music affects our brain when we listen to music, not when we play our instrument**. The next problem was that I was not familiar with the idiomatic expressions and scientific vocabulary used in much of this literature. In addition, it was difficult to get comprehensive knowledge on physiological functionalities. Once I have finished my work I would like to be able to express what is contained in my work after a full and deep apprehension. For that reason, I kept this theoretical part of my work on a level which is understandable to me as well as other musicians.

During the last decades, psychologists and neuroscientists have tried to understand how music can communicate and induce **emotions** or which is the role of emotion in memory, reasoning, and problem solving. In the words of W. F. Thomson:

“Emotions are especially difficult to examine because the mental states associated with our feelings are highly variegated and cannot easily be treated as a unified phenomenon”²

This statement could mean in my opinion that, talking about music and emotion, we move in a **subjective field**, where it is difficult to demonstrate common individual responses to certain stimuli or to build a general theory by scientific or empirical methods. In addition, as stated before,

² William Forde Thomson, *Music, thought and feeling. Understanding the psychology of music* (New York: Oxford University Press, 2009), 15.

most of the research works in the field of listening to music rather than performing or playing an instrument.

One of the most important moments when those who choose to become orchestral musicians need an accurate perception is the **audition** to achieve a position in an orchestra, a fact that moves or inspires many of the actual orchestral musicians, as well as “coaches”, to create a personal method to go through orchestral auditions or recitals with success, and then they decide to share their experiences with those interested in following the same path, sometimes disinterestedly, some others as a business. As a result, the literature dedicated to train not only our hearing but also our minds in order to achieve our goals by practical ways is fortunately growing, contradicting my first impression of lack of research in music making fields, psychological and practical. Some of the books contain not only personal musical experiences, but also scientific data re-adapted in order to make this information fully useful for us. Examples which could be highly recommendable would be *Performing in the zone*,³ where the author focus on techniques to improve our performance, based on previous investigations and personal experiences, or *El violín interior*⁴ (The inner violin), where the problem discussed is the same, although basically focused on the violin, and the approach is taken from the experience of the author as a violin teacher and more theoretically than the first example.

According to my aim to use information easily understandable to musicians, most of the theory in my work was taken from three books: the one containing basically theoretical knowledge, *Music, thought and feeling*; a second one contains theoretical information focused on violin problems, *El violín interior*, and finally one book containing theoretical information as well as practical exercises not focused on the violin, to be trained daily to improve our performances *Performing in the zone*.

3 Jon Gorrie, *Performing in the zone. Unleash your true performing potential* (Charleston, SC: Jon Gorrie, 2014).

4 Dominique Hoppenot, *El violín interior* (Madrid: Grupo Real Musical, 2005).

The first step after I realised I did not play my violin as I thought was to accept that I had a problem with my listening and I should change my attitude. Even though my attitude does not seem to have anything to do with the way I listen to myself whilst performing, I want to discover whether or not **stress and performance arousal**⁵ affect my perception, and how in that case.

Now, I will continue by analysing the relation between stress and the inner side of the performance, attitude: why, how and when, and possible solutions.

⁵ Gorrie, *Performing in the zone*, 28.

2.2 ATTITUDE

Attitude is the way one chooses to face any situation. It is, for that reason, part of our personal character and behaviour. Depending on how I decide to deal with, for example, a bad public performance or a period of an unsuccessful learning process, I can overcome the problem and grow as a musician, or I can fall into the deepest depression or even give up. About how I hear, I wonder if I really do listen to the sound coming out of the violin, or my brain works on “covering” and “making up” my mistakes because I am afraid of failing, and that “made up” version is what I listen to.

To give context to the chapter, I should remember that I did not know whether or not I listened to what was really happening with the sound from my violin, affecting my playing and my personality as a musician. I lost my self-confidence after listening to a recording of a concert where I had performed poorly and I thought I played very well. For this reason, it is important in my opinion to include an analysis of how my attitude can affect my hearing and, in case of necessity, to try to change my attitude when practising and performing. A wish of changing what needs to be improved is the first step in changing things, so that is what I did first to have a more accurate listening ability.

Five years after listening to that first recording of my playing, I recovered some energy to face the situation. While I still kept in mind those hesitations about my perception, I was working on my written work to finish my Bachelor degree. My idea was to comment *El violín interior*.⁶ Thus, I tried to do my first research about my problem of false hearing. The book has seventeen chapters, from which chapters' one, two and three, *El mal del violín* (The evil of the violin), *Un nuevo enfoque* (A new approach) and *Armonizar el cuerpo* (Harmonising the body) deal directly with attitudes, while some others chapters also contain related information. What I intend to show is

⁶ Hoppenot, *El violín interior*.

the significance the author gave to the mental training of musicians. To train my mind is to shape it to be opened and ready for better playing.

2.2.1 Comments on *El violín interior*

Dominique Hoppenot was a teacher who decided to write a book to share her experiences after more than twenty years of violin and viola teaching. Her book became a manual for those who, like me, went or go through several problems. Just in the first page, she said that for many students to play the violin was a synonym of suffering, being afraid of playing, making mistakes, or being judged, living a sad and painful relationship or slavery.⁷ Her words can be perfectly brought to our days and schools. Ourselves or our colleagues have probably felt these **fears**.

The second chapter (*A new approach*) was the most important thing I had ever read about violin playing until that moment. She explained how to renovate our approach by considering our body and our mind as a **unity**. To achieve it and the self-knowledge, we should be open to redefine our ideas about our playing, but also about ourselves: "...a deep reassessment is a difficult fact demanding a full passionate decision".⁸

She explains the process as follows:⁹

- 1st, to overcome the fear to change is to allow us to **doubt** about ourselves: to change our habits or even reactions to feelings.
- 2nd, to think of body and mind attitudes and **to draw a plan** to build a new way.
- 3rd, to face the problems. The fear becomes **desire to improve**. She states that, to be aware of a mistake is a launch pad in our search for truth.

Hoppenot adds also that once we have decided to embark on this journey it is very important to become our own subject under study, **without considering any past circumstance or moment**:

“[...]it is possible to change our mentality[...] when we discard
what we know, or we thought we knew...”.¹⁰

7 Hoppenot, *El violín interior*, 9.

8 Hoppenot, *El violín interior*, 20.

9 Hoppenot, *El violín interior*, 21-22.

10 Hoppenot, *El violín interior*, 22.

From reading the book, I made a concerted effort: I changed my mind, and tried to go back to the basics with a new way of practising at a lower level of difficulty, in order to be able to control only one parameter each time, which became an interesting new approach to the violin and the music because I found that way easier to achieve a goal. This benefited my mood and helped to raise my self-esteem, making it more pleasant to work on my playing. One more advantage was to release a bit of the stress level caused by practising, for example, intonation. Nowadays I have realised that so many books about these kinds of problems means that the problems I have suffered are more common than I first thought.

2.2.2. Can other techniques or activities help to improve my perception?

Unfortunately, the process of accepting my weakness, being patient and constant effort suddenly stopped for a while depending on personal problems. I had a period when I did not play my violin at all. Maybe it was a kind of **depression**: I was sad, disappointed and maybe I wondered whether I should have chosen a different profession. It was very frustrating not to enjoy and not to love what I was doing, or **how I was doing with my violin**. As frustrating as not having good results after so much work.

To find an answer to the question about finding different techniques with positive effects on my musical skills, such as perception, as well as help in overcoming my bad moods, I decided to try out Martial arts (Kung-fu and Tai-ji). My idea was to see if they can help me to relax my body in order to listen in a better way. I felt it was the time to do something completely different to playing music, so I began to practise Kung-fu which is considered “external”, it works by releasing energy, it is explosive. Tai-ji is just the opposite: internal and works by moving your body without effort.

By kicking and punching I released and discharged not only muscle tension, but negative feelings such as sadness and rage. At the same time I started practising sports, both aerobic and anaerobic, from which we all know so many advantages and benefits after practising them. After just three weeks my mood turned 180° and I felt much better and optimistic. I even missed playing

the violin. That was the moment to retake my “normal” life. As the weeks went by, my practising time improved considerably: a very **low stress level** and a refreshed and optimistic mood. I threw my fury away with every punch and kick, not any more on my violin. My **hearing** became more efficient and precise. To be calmer and optimistic I gave my hearing the time and support needed to work in a more accurate way. The rest of my body accompanied my hearing: I felt stronger but more flexible at the same time, and this made it easier for my fingers to correct what I played out of tune; my breathing was more conscious, so stress symptoms such as a high heart rate beat or short, superficial breathing became easier to control.

In addition to what I stated before, I found that imitating and adapting the way I learnt our Kung-fu or Tai-chi choreographies, was another possibility to improve my practice, including my work on intonation. The choreography was broken down into **small pieces** of one or two movements, which the group **repeated** many times from slow to higher speed ranges. Then we had to **join two movements and then, successively adding more movements** until we achieved the whole choreography which of course we performed together at the same time and by heart.

I tried to adapt this way of practising martial art choreographies to practising the violin, and so I got a new method to practise, which I still use when practising because I know it is useful for me. I practise details separately, and then join them together successively. No panic and no hurry, some things take time to materialise or improve. Pushing will not make them happen before, but the opposite.

So, the effects of practising martial arts were both mental and physical:

- I lowered the stress levels;
- I overcame the feelings of frustration, rage and sadness;
- I discovered new methods of practising the violin by reinforcing muscle memory;
- I also learnt techniques to control my breathing;
- I learnt to meditate;
- I discovered my need to dedicate two or three hours a day to “refresh” my mind with non-musical

activities;

- my body gained in elasticity and energy, which made me feel more “alive” and spontaneous in performance;

- my posture and movements gained room and speed.

- my perception worked faster and freer without stress, so I was able to correct my intonation much better than before.

2.2.3 Ergonomics and Stage Presence, beyond the instrument

That emotions can affect our performance in both ways, positive and negative, is a fact, but the way they affect our playing is individual and different to the others: shaky hands or knees, sweating, high heart-beat or fast and short breathing. Stage presence and Ergonomics classes are a part of the curriculum of the Master in orchestra performance. The purpose is to teach students why and how this happens.

In these seminars, several teachers show techniques which have been shown to help musicians to solve different problems through exercises based on breathing and being aware of the present moment, in order to gain efficiency and obtain better results with less effort. The seminars about Stage presence gives the possibility of experiencing a real, practical and tangible, “palpable” transformation of my person before and after practising the exercises we were told to do, in a very short time and with the personal advice of the teacher. Obviously, I took advantage to try them in order to include those with positive effect on my playing in my routine.

Some of the topics during the seminars were **signals** or indicators of tension or stress, the use of positive thoughts and to live in the present moment among others, but the first thing I learnt was that we all, musicians or not, are bodily affected by emotions. Jon Gorrie talks about what he calls the “Fight or flight response” (performance anxiety triggered by a primitive urge and responsible for the survival of our species through prehistoric times)¹¹ happens when the

¹¹ Gorrie, *Performing in the Zone*, 38.

hypothalamus¹² tells the Sympathetic Nervous System to take control of the body's functions. It is done by releasing chemicals such as adrenaline¹³ and cortisol¹⁴ into the bloodstream. As a result, you become both physically and psychologically prepared for the enemy, or other situations of perceived danger.

When I play my violin in the practice room I do not feel any fear or stress. My brain works normally, and what I learn goes to the cortex¹⁵, the part of the brain in charge of thought or awareness among others issues. It is also the most developed part of the brain, therefore only present in mammals. The “animal”, more basic part of our brain does not affect the normal learning process or recalling that information in non stress situations, but, as Gorrie states, when we are afraid of being judged, stressed by a performance situation, the “animal brain” (hypothalamus included) takes control and bypasses the normal circuits of connection body-mind, which causes a non reasoned and non analytic, unfavourable performance.

Obviously, my fears nowadays whilst performing have nothing to do with tigers, lions, snakes or putting my life in dangerous situations. Personally, what I do fear the most is the judgement, from the members of the jury in an exam, orchestral audition or from myself. I want to do my best, and it is this will of doing well which triggers the “fight or flight response” or the inner chatting in my mind.

Stage Presence seminars I attended at the University were at the beginning based on **recreating hypothetical situations of stress**, such as making recordings or playing in front of an audience/panel, but shorter than real situations, in order to get used to them and explore how we react to mock auditions, with or without screen. It was the first time I had the possibility to take these performances as a training experience, since during my Bachelor studies I played always in concerts or auditions, so it was quite real, and I never had the support of a teacher during the performance. The seminar always began by exposing a new technique, which could be related

12 <https://en.wikipedia.org/wiki/Hypothalamus>, accessed on 6 th October 2016.

13 <https://en.wikipedia.org/wiki/Epinephrine>, accessed on 6 th October 2016.

14 <https://en.wikipedia.org/wiki/Cortisol>, accessed on 6 th October 2016.

15 https://en.wikipedia.org/wiki/Cerebral_cortex, accessed 7 th October 2016.

directly to the moment we perform, or previous moment, days, even weeks. The teacher always explained and clarified what, how, when and why he recommended to apply that technique, because most of them have scientific proof. It was very inspiring also to see that well-known artists or athletes use them on stage or in the field.

Out of many techniques, some of them are so simple that one does not even need to practice them for a long time, for instance “scanning” whether my facial muscles are relaxed or tensed in order to relax them when needed while looking at a chosen fixed point or to try to take in with our vision the whole hall while on stage. Some other techniques require a longer training period, such as setting/stablishing a ritual,¹⁶ or the method that Jon Gorrie taught.¹⁷ It consists of several steps, ordered from playing alone to using a recorder, and then in front of an audience which is allowed to do whatever except physical contact in order to distract the player, always simulating as much as possible the reality. For that reason, he always recommended going out of the room and fake that we are outside the hall waiting to be called on stage to play our audition.

Eager to find if these techniques were useful for my improvement, I carefully followed the seminars, read the book written by Jon Gorrie and tried all of the techniques. Once I went over each one, together with the advice we got during the course, I chose those I felt fit better to my practice and personality.

Before the audition, test or any situation that can make me feel stressed, I practice these techniques:

- **Breathing:** it consists of breathing consciously, how much air I take and where I send it. It is the first stage of feeling I can control everything that is happening to my body, and my mind has the main role. Thus, the heart beat calms down, the stress level is lower and it is easier to listen to and focus on the music. Once I control my breathing, I can add the “facial muscles scan” in order to

16 Movements conceived to activate the “performing mode” or focus, such as the Haka performed by the New Zealand’s Rugby National team (All black), or tennis player Rafa Nadal’s rituals (https://www.youtube.com/watch?v=D_gk6dRfr9s). Accessed 16 th September, 2016.

17 Gorrie, *Performing in the zone*, 101-107.

look for tension around my eyes, mouth and throat, and then relax. This is also the way my Tai-ji lessons used to finish, before we ended with some meditation.

- **Body posture:** it is said that our mood and body posture are linked together. I know my mind affects my body posture because we all react to emotions, and when I feel good and full of energy, my back is longer and my shoulders are more opened than situations when I feel too tired, sad or “depressed”, when I have observed in myself the tendency to close my chest and go down and forward with my shoulders. To sum up, when I feel good I walk or sit in a more exposed posture than when my mood is not so good. The way posture affects my hearing is the same as for breathing: keeping balance when playing facilitates the ability to focus on fewer things than if I move back and forth. For example, several times I was close to falling on stage while performing due to uncoordinated movements. When I stay quiet, my mind has one activity less to control.

- **Internal chats:** one of the things I discovered during my Master studies was that I cannot stop chatting in my mind, talking to myself while playing alone, after Jon Gorrie dedicated a seminar to this fact, that he calls internal chatter.¹⁸ Later, I read a book, edited some years before, which refers to the same problem, and that book is *The inner game of music*.¹⁹

First of all, it is necessary to present the voice in my mind as Green calls it Self 1. “It contains our concepts about how things should be, our judgements and associations. It is particularly fond of the words should and shouldn’t, and often sees things in terms of what could have been.” Then, the author refers to the Self 2 as the part of our mind listening what Self1 says. In his words, “the vast reservoir of potential within each one of us. It contains our natural talents and abilities [...]”.²⁰

Once both “actors” have been presented, it will be easier to understand how inner chatting works. Green states that “Self 1 is always trying to attract our attention away from the music we are playing or listening to. [...] The first step in coping with our Self 1 voice is to recognise that one

¹⁸ Gorrie, *Performing in the zone*, 121.

¹⁹ Barry Green and Timothy Gallwey, *The inner game of music* (London: Pan Books, 1987).

²⁰ Green and Gallwey, *The inner game of music*, 28.

may not just get up and go away. As it talks to us, we have a natural tendency to talk back [...] Not only is Self 1 talking to us, but our own response is getting in the way of our concentrating on the music.²¹

I was surprised when I read it, because he describes exactly what happens to me and what my voice tells me while performing. He hits the target when he says that the voice likes to talk to me using should and shouldn't, as a policeman style teacher forbidding more than encouraging my playing, or a necromancer telling me what is going to happen in the next bar with their crystal ball. One day, a friend of mine who knew about my research sent me a link to a TED video by Benjamin Zander, called Shining eyes or The transformative power of classical music.²² I decided to find out more about him by looking for more information on Google. I got his web page,²³ where I read some very useful information for my thesis:

“Even talented performers struggle with anxieties about whether they're up to certain challenges. How do leaders move people beyond fear? My job as a conductor, as a leader, is to teach musicians to be expressive performers of great music. The problem is that often they cannot let that music through to the audience -- because of what I call the "conversation in the head." In any performance, there are always two people on stage: the one trying to play, and another one who whispers, "Do you know how many people play this piece better than you do? Here comes that difficult passage that you missed last time -and you're going to miss it again this time!" Sometimes that other voice is so loud that it drowns out the music. As a leader, I'm always looking for ways to silence that voice.”

By reading these books I have understood the complex nature of my problem of hearing/listening to what I am playing or I imagine I am playing. To become a problem of hearing voices and talking back: **discussion plus stress does not allow the music to stand out** because I (the player) cannot listen to the music I am making.

- **Going peripheral:** Jon Gorrie taught this technique²⁴ to affect our performance arousal by physical methods. When we are stressed, our eyes widen among other facts. “This ocular reflex is controlled by the Autonomous Nervous System, [...] but can also come under your conscious control.” Playing an audition if we are stressed, our eyes may be focused on the score. That is the

21 Green and Gallwey, *The inner game of music*, 34.

22 The transformative power of classical music. <https://www.youtube.com/watch?v=r9LCwI5iErE>, accessed 1 st March 2016.

23 Benjamin Zander, latest news, “fast company, leadership”, <http://www.benjaminzander.com/news/item/17>; accessed 1 st March 2016.

24 Gorrie, *Performing in the zone*, 75.

reflex Jon Gorrie explains in his book. The technique he suggests, going peripheral, has the aim of bringing our vision under conscious control. It is possible to influence our mind through our body.

Thus, the idea is to not focus our eyes on a narrow space, like so-called **tunnel vision**, but to be aware of the peripheral vision. I like to look at the furthest corner of the room. This technique has a positive thing I like: it makes me feel in contact with the place I am, to be conscious of the space and room I can enjoy, and to be aware of whether or not my sound is reaching the last row of seats. In the same way, I have adapted this technique to my hearing by listening to the sound rebounding in the furthest corner and filling the room. It is a simple way to focus on hearing the sound coming from the space around me, which avoids any possibility to listen to a “made up” sound.

After my experiences implementing all these techniques, I have noticed that they share some effects, from which I remark:

- **keep my concentration on the** current activity, the **present moment**: my thoughts are driven either on my breathing, on my physical sensation of tension/relaxation or the music I am playing right now. It is not allowed to think of what is going to happen or what has happened before.
- they reinforce the idea of **self-control**: it is not possible to control everything around me (keys falling on the floor, telephones ringing), but it is possible to control my breathing, tightened muscles. In this case, training and different approaches are needed, but it is certainly possible to carry a performance on with lower stress interference.
- the feedback and level of satisfaction about my feelings whilst playing was improving after every stressful situation, such as a mock or real auditions or concerts. Thus, I faced the next situations with less stress. I was able to prepare more efficiently for them and be better prepared.

This chapter includes a video-example (Media 2) called “*Audition simulation*”,²⁵ where I try to show, from the point of view of the panel, whether a member of a jury (if the audition is without

²⁵ “Audition simulation”, Media #2. Also: <https://www.youtube.com/watch?v=L0uyRNfQqCs>, accessed on 2nd September 2016.

screen) could appreciate the techniques I explained in this chapter. Whilst I was “waiting for my turn” I applied the so-called **Power pose**, standing, with opened chest and controlling my breathing, and thinking in a positive way. When I felt ready, I opened the door and came into the room looking forward where the jury was supposed to be. I calmed my breathing, took time to tune while testing my right arm feelings and checked my shoulder rest, which is one of my chosen rituals. After my preparation I started to perform my audition.

Then I realised I was playing in front of a mirror, which I use everyday while practising. On one hand, this helped me to control my playing, posture and so on, but on the other hand, it triggered an internal chat in my mind judging what I was doing. During some places, I lost my concentration and I did not focus on the music. When I finished the piece, I left the room as it was a real audition, judging myself in a negative way because the mirror made me feel unfocused. At the end, this experience was not as useful as it could have been. I did not expect to make this kind of mistakes, but it showed me anyway that concentration can fly by whatever reason.

Now, I will put the focus on the relation between stress and intonation.

2.3 INTONATION

Intonation has been one of my weakest points as a consequence of my poor perception. My intonation was always close, but never “met the target”. At the beginning, my teachers did not teach me to listen carefully to my intonation. Maybe because of the fear of scaring pupils, some teachers never go too deep in fixing some problems, and then after some years it is already too late. It was a general situation with me and my friends that if we played out of tune we were immediately asked if we practised scales every day. First of all, most of the time I did not. Second, if I practised a scale, I played out of tune.

What usually happens when we change a teacher for a new one, as he or she is not used to listening to our playing, suddenly detects hundreds of mistakes or “bad habits”. In my case, with my next teacher I had to systematically play scales, as I had not done it before. What was the system? Playing slowly and repeating several times before I speeded up the tempo was the way to practise the scale my new teacher taught. As a result, the same. The intonation was always approximated, but never exact. Then I decided to record my practice to have a sort of second chance to listen to some excerpts and look for mistakes. At that point, I could hear only few notes that I played out of tune and not all of them, which did not really solve the problem at once. The feedback I got while playing was so poor that I could not compare what I remembered of my playing with the recording. At the end, what we all need is to always play in tune, at once, since there is not second chance during a performing.

During my research I have used the recording device, but I have tried to apply as much information I got from my teachers and books. That means I have approached the recording device in a very different way, and the biggest difference has been the role I give myself and to the device: a few years ago, I played into the device and then listened to the recording to analyse my playing. I was a player, and the recorder was the listener. Now, by applying the techniques I use while playing, I can listen to my playing at the same time I am playing, I am an active participant, and I can compare my thoughts to what I am listening to from the device.

I have learnt many things during my last years, interesting information from some specialised books such as Daniel Levitin's *This is your brain in music*, but particularly in my lessons with my teachers from Gothenburg. To begin with, the book contains a lot of information that I cannot really appreciate, because of my lack of knowledge in neuroscience. It is a book addressed to neuroscientists more than to musicians, because he takes his time to explain or analyse the basics of the music thoroughly (which would help scientists to understand music terms, for example), whilst the scientific contents are not so clearly explained for musicians in my opinion. In other words, the author helps scientists apprehend the artistic part of the matter, but not so much the musicians to understand the scientific one. Nevertheless, I received a very important text which can open a new window to a better understanding of the matter.

“...In Western music -music of the European tradition-these pitches are the only “legal” pitches;²⁶ most instruments are designed to play these pitches and not others. (Instruments like the trombone and cello are an exception, because they can slide between notes; trombonists, cellists, violinists, etc., spend a lot of time learning how to hear and produce the precise frequencies required to play each of the legal notes.) Sounds in between are considered mistakes (“out of tune”) [...] Expert musicians often alter the frequency of tones while they’re playing for expressive purposes [...] sounding a note slightly lower or higher than its nominal value can impart emotion when done skilfully[...] musicians playing together in ensembles will also alter the pitch of tones they play to bring them more in tune with the tones being played by the other musicians, should one or more musicians drift away from standard tuning during the performance.”²⁷

No one told me as clear as Dr. Levitin did (in a theoretical way) what really makes the problem of playing in tune so difficult to solve. To me, the key word in the extract before is **relationship**. Intonation is based on the relation established between two or more notes, but also between the sound we produce and the sound we have in mind as a **model** or played by a piano.

The relationship between two given sounds (for instance F# and A) by a non tempered instrument (or singer) can be different from the relationship between each of them and the same notes played in a tempered instrument. For instance, in a piano, this interval is going to sound exactly the same whether I play them as part of D Major or F# minor. However, in a non tempered

²⁶ The author refers here to equal temperament, used in keyboard instruments.

²⁷ Levitin, *This is your brain on music*, 28.

instrument every note would be tuned differently depending on its harmonic role. This is the reason why it is a mistake to practise scales without being aware of what we must build harmonically. A big mistake I have made for a very long time.

The solution could be, then, to create an intonation model before I practise the piece on my violin. The way of creating it can vary from one person to another, but the aim would be the same: to get a solid reference which can be used to compare with. As Dr. Levitin states, “Intervals are the basis of melody, much more so than the actual pitches of notes; melody processing is relational, not absolute, meaning that we define a melody by its intervals, not the actual notes used to create them.”²⁸ Now, what does it mean? It means that, if we pursue to play a melody perfectly tuned, we should not look for the intonation of every single note isolated from each other, but analyse the intervals formed by each pair of sounds. I have listened the same idea in several violin lessons. Marja Inkinen²⁹ and Vlad Stanculeasa,³⁰ both solid and great musicians, agreed with each other in the importance that intervals have for musical, melodic and harmonic/tension purposes.

I tried to apply the method of working with pairs of movements I learnt in my Martial arts lessons. To do that, I practised with two notes, repeating them many times, focusing on muscle memory. I found out that, if I tried to learn physically and by repetition where two different sounds are located, let say C and F, it is most likely that after a certain amount of time and effort I would always push the string at the same point. The problem was that, if the instrument was not well tuned, the intonation of one or both notes was wrong and I was not able to correct them. That method does not work to improve intonation problems.

Then, if I pay attention to how the interval should sound instead of where every note is physically placed on the instrument, I will not care about positions but **the relationship between these two sounds**, so that my fingers will follow my mental order or command based not on the

²⁸ Levitin, *This is your brain on music*, 30.

²⁹ Second violin leader in Gothenburg Symphony Orchestra and one of my teachers.

³⁰ Alternate first concertmaster in GSO.

place on the fingerboard, but on the sound, and I will move my fingertips if I need to correct the intonation because the violin is not tuned or whatever reason made me play out of tune.

Continuing the line of scientific research, as W. F. Thompson³¹ dedicates some comments on different tuning systems during History. The one I found more related to my work is about **equal temperament**. The "equal tempered scale" is a tuning system developed for keyboard instruments, such as the piano, so that they could be played equally well (or badly) in any key. It is a compromise tuning scheme. The equal tempered system uses a constant frequency multiple between the notes of the chromatic scale. Hence, playing in any key sounds equally good (or bad, depending on your point of view).³² Thompson says that all intervals are tuned identically, and these minor deviations from pure intonation³³ are no greater than the typical tuning deviations observed in the performances of singers or stringed-instrument players. He adds that such small differences from exact intonation have little effect on the perceived consonance of these intervals, which may explain why equal temperament has endured for many years.

By reading this information a new topic for discussion came to my mind. It seems to be a fact that this physical variation between exact and "naturally" deviated intonation might be a clue to support the idea of the subjectivity in our perception of intonation, which can depend on training or even personal background. So to say, once we do not consider the **physic-harmonic phenomenon**, the one present in Nature, we have to take an artificial system which will be used as point of agreement to establish rules for the intonation we look for. These points to agree might be, in our routines, the cello in the string quartet, the piano when performing repertoire for orchestral auditions... I always wondered why the violin and the viola players must adapt their intonation to the cello. I knew that is the base, but I thought it was a sort of hierarchy, until Steven Sloane, guest

31 W. F. Thompson, *Music, thought, and feeling*, 50-51.

32 Physics of music-notes, Scales: Just vs Equal Temperament, accessed 17 th April 2016, <http://www.phy.mtu.edu/~suits/scales.html>.

33 In the text this information is given in percentages, which is useless for us as practical musicians.

conductor in the University of Gothenburg Symphony Orchestra said in a rehearsal that the intonation of the high-pitched instruments must fit with the overtones of the lowest instrument. That was the moment I learnt with scientific reasoning why to adapt to the cello. Nevertheless, many times I imagine I perform with my string quartet and the melody is in my voice. The melody requires from me to mark certain intervals to make it more expressive, for example. What can I do in case the cello, at that moment, is not perfectly tuned? In that case, as in many other similar situations, where not only the cello is involved but every performer, the music can lose its meaning or nuance details, because if every performer tries to adapt to each other, the tonality becomes an “overload” system with too many possibilities for every sound. Thus, the only answer I can give to myself for now is to accept that playing out of tune is possible. To show an example using a piano accompaniment, I have always thought of the beginning of the adagio before the *allegro aperto* in the *Concert for violin n. 5, in A major, KV 219*, by W. A. Mozart.³⁴

³⁴ W. A. Mozart, *Concerto for violin and orchestra in A major, KV 219* (Kassel: Barenreiter-Verlag, 1983).



28Fig., 1 Violin Concerto n.5, KV 219, by W. A. Mozart. First movement, bars 40-43³⁵

The melody in the first three bars is based on an A 7 chord for bars 40 and 41 (with a D Major chord on the second beat of bar 41), and E 7 in the first half of bar 42. Regarding the piano accompaniment, it would be customary to tune every note of the melody with the piano. But tuning with the piano goes against the **physic-harmonic phenomenon** which, in these cases where the melody is constructed by using arpeggios, give a different colour to the melody. It also goes against the natural physics that governs the instrument. When a violin player plays the first note (A), the violin is also resonating the E (third overtone) and the next C# (fifth overtone), which is already different to the one played in the piano part. The same applies to the G, which is the seventh, and is different in the physic-harmonic phenomenon as in the piano. But going even further, because it is one more question I often wonder, the same fact affects the piano itself. By pushing the right pedal and playing an octave in the low register, it is possible to listen to this phenomenon clearly. Is it in the piano that C# (in case the generated sound was A as in my example before) the same as the sounding one by simply pressing the C# key? To sum up, it seems that, if I practise the adagio

³⁵ Mozart, *Concerto for violin and orchestra in A major, KV 219*.

taking care of what function has every note in the melody, or I give expressive meaning to at some point, it will be out of tune for the trained ear of the members of the jury.

Coming back to the not so scientific but more practical sources, Dominique Hoppenot presents a chapter about intonation giving a very prominent role to the intervals. Moreover, as a violinist, she includes another aspect with crucial results and will be developed later on this chapter: **sound**.³⁶

One of the first things that drew my attention was that she thought players mix and confuse two different ideas: the ability to **play in tune** and the ability to “**hear in tune**”.³⁷ In other words, young students cannot improve their skills because they do not have the basis or foundation, since they need this knowledge to reach a goal. Dominique Hoppenot criticises immediately the way many teachers used to work on it. In her opinion, telling the pupil that he or she is out of tune is not useful at all, considering that most of the times the student is not aware of his or her mistakes. If we play out of tune it is not because of a bad hearing, but a poorly educated sense of hearing whilst playing. She includes the **emotion** as an important element influencing negatively, which adds a new parameter we should work out.

Dominique Hoppenot suggested to “restore” listening by firstly focusing our attention, to avoid fears, tensions and worries that “steal” the energy we should put on **keeping our awareness in our performance**. Then, by restoring the body balance we will be able to control our acts and remain focused. Once the musician has begun the process, the next step she suggests is related to what was presented about Levitin's work: to improve our inner hearing, we need references or models. So, she proposed to her students to sing or recall before what they wanted to play.³⁸ As an “extra” she stated that the students have a positive and hopeful mood.

I noticed that the texts by Levitin and Hoppenot defend the idea of “building” or creating

36 In the sense of the top quality of the sound that we can get from our instrument or our way of playing.

37 Hoppenot, *El violín interior*, 106.

38 Hoppenot, *El violín interior*, 107.

memories, as if they were bits in a computer, which should be used as references to establish comparisons with our current playing. Of course, listening to recordings can be an easier way to get models to compare to my playing.

Nevertheless, I have one more method to work on intonation after my teacher, Marja Inkinen, listened to my playing. As an example, a small fragment of any piece or exercise can be used. I choose the excerpt in fig., 2, because is short but enough to explain how I apply the method to work on intonation.³⁹



fig., 2: Ševčík's *School of violin technique, op.1.* exercise 1, bars 1-2⁴⁰

Firstly, I play note by note, without rhythm, and focus on the way I press the string down. How fast and how much pressure should I apply to the movement? The best way I have found to get it is by “milking the cow”,⁴¹ which is a brilliant example of my teacher regarding the left hand tasks. Imitating on the neck of the violin the movements of milking the cow, the “radio station”⁴² sound can appear if the string is completely compressed by the fingertip against the fingerboard. If our pulsation or pressing down is done in a poor way or not till the end, the string will vibrate between our fingertip and the fingerboard sounding more metallic and loosing quality.

Now I will explain how to press the string in the milking way: let’s take the first B in the exercise. Instead of hammering fast and powerfully the fingerboard with the first finger to play the B, let’s try to imagine that the violin neck is the cow’s breast, which we are going to milk. Of course, the movement is not the hammer-like, fast and violent, but the opposite: slow and smooth. I

³⁹ This is only part of the method, since Marja Inkinen do not make distinction between intonation and sound, and the one cannot exist without the other one. To really achieve this kind of sound is needed to work on the bow technique too, but it will be explain in another chapter.

⁴⁰ Otakar Ševčík, *School of violin technique, op.1* (New York: Schirmer, 1905).

⁴¹ See video “Milking the cow”, Media #5.

⁴² Marja Inkinen's word to name the top quality sound we can get from our instrument and way of playing.

try to feel and listen how it sounds when I nearly touch the string with the finger tip. It is an ugly sound, like flageolet or harmonic.⁴³ As slow as possible, I slightly press the string down, trying not to tense the left hand. Every time I press the string a little bit more. What I usually do at this moment is to check if the intonation is OK, and I do by moving the finger back and forwards, looking for the roundest sound. Many people can listen to the harmonics in that case. I cannot yet, but I feel the roundness of the sound when it is in tune, the best quality. It is very instinctive. If I get the best B, I repeat the “milking” movement a few times. Observe now that when I practise this exercise this way it is in order to find the best sound from my violin. When I play a musical phrase, the position of the B, and obviously the intonation, **must change** depending on the sound and harmony it belongs to.

Only once I have got a pure and basic sound, it is time to add vibrato. One of my problems (related also to the intonation), is how to “draw” the waves. Most of the times I use too wide and too slow movements, and the sound has no core. Maybe the beginning of the note is right, but the vibrato moves the core up and down, so that finally it is out of tune. To work on this, I play the F# on the D string with the second finger, because it is the easiest to discover the problems coming out as we play uncontrolled vibrato. To sum up, to keep the core of the sound during these first steps, I try to “sustain” the vibrato not too wide and it is better faster than slower.

It is a discovery and very nice feeling to listen to my violin responding to a perfectly pitched sound. I cannot objectively listen to the overtones, but my ear is receptive to the changes happening when my finger moves from a non-tuned position to the place where the “sound station” waits to make the volume of the instrument much bigger and rounder, and frees the resonance of open strings and wood parts, depending on the sound we are playing.⁴⁴ Since I started this practice, I have become used to obtaining a kind of sound, bigger and rounder, which is very different to the one I

⁴³ Flageolet: technical effect to make the violin sound like a flute by not pressing completely the string to the finger-board.

⁴⁴ Check video file about “Radio Station” sound. Media #6.

had some months before, which I can use as an indicator of correct intonation.⁴⁵ Later on in my studies, I have had the feeling of having improved one step further with my practise on intonation by giving this exercise and the scales a harmonic sense by playing in this order: if I play A major, A open string, A an octave higher, E (Dominant), D (subdominant), B, C#, E, A, G# and F#. With this system I do not hesitate to put for example the B, since I know it is the Dominant of the Dominant, so the interval between second and fifth degree must be the perfect fourth. This is the final result:

A-A'-E-D-B-C#-E-A'-G#-E-F#-E-A'-A

In addition to working on my own playing, I am currently trying to be aware of the intonation of my colleagues. Not as a way to criticise them at all, but to develop a critical and active hearing which could later help to improve my own playing. I find it a very difficult process, since the intonation of my colleagues use to be quite close to the correct one. In other words, I can identify a wrong note, but I am not so sure if the correct note is perfect or just a comma⁴⁶ away from the centre. I do not yet know how to get better at perceiving the variations between good and perfect pitch, because I feel pretty much influenced by my own idea of intonation, and still lacking a model which fits to all the repertoire I listen to.

Especially when preparing for an orchestral audition, **I try to play along on recordings** by the same orchestra I want to apply for. If it is impossible to find material from the same orchestra, I look for several recordings by top orchestras and choose the closer one to the orchestra I apply for, based on my intuition: same country, same conductor, close style or period. As I have recorded some CD's, I know that on stage it is possible to stop and make corrections, and after that there are many hours of editing and so on which usually results in a more than acceptable intonation. To practise in this way, I need to listen to the intonation in the recording first. Then, when I am playing simultaneously along on the recording, I try to play as soft as possible to make it easier to listen to the recording so that I can adapt my intonation to theirs.

⁴⁵ To read about the full method, please check the entry On scales, dated 09 th February, 2016, in my blog <https://tell-meiamnotdeaf.wordpress.com/>

⁴⁶ Comma, please check the link https://en.wikipedia.org/wiki/Comma_%28music%29.

So, playing along to these kinds of recordings helps me **to improve my intonation** while performing, but it also helps me to work on my listening/hearing skills: noticing and adapting my playing to them, changing the sound, or tempo (*ritardandi*, *accelerandi* and so on).

To close the chapter on intonation, I complete the information with two examples, the first one of them in video format. This is a problem I have found many times in string quartet playing, but I apply it with solo violin in the video: all kind of chords containing C, G, D, A or E can present a problem depending on the key, specially C and G, since they are the last strings on the cello and viola (C) and violins (G). D, A and E strings can be fixed by using an alternative position or fingering if the chord allows one to do that, except when double stops requires the playing of one of them on the open string. It is shown in the video example⁴⁷ and here follows an explanation on why, sometimes, harmony might be put in second position for practical reasons.



Fig., 3: J. S. Bach, Ciaccona from Partita 2 in D minor BWV 1004, bar 1⁴⁸

This simple chord in Fig., 3, opening the Ciaccona from the Partita 2 for solo violin, in D minor by J. S. Bach, is for me an amazing piece of evidence for the complexity of the matter. Theoretically, it is not a problem, since it is a simple D minor chord. D should be played on the G string (unison with the D string) considering A the reference because is an open string. The F should then be played the on the D string. I faced a problem trying to find the F, because thirds are not perfect intervals (minor third in this case), so the F might be **flatter or sharper**. Depending on the chosen F, the next problem came when the three sounds chord were sounding simultaneously for a fraction

47 Media #4. Video demonstration Intonation and harmony.

48 J. S. Bach, *Sonaten und partiten* (Kassel: Barenreiter-Verlag, 2001).

of second (around a semiquaver or sixteenth note, what takes the chord attack), and, for the rest of the rhythmical value the F remains with the A. This is because of the violin construction, which makes it hard to play three notes simultaneously. If I tuned the F in relation to the D looking for a minor third, I found out later that the F sounded out of tune with the A, which I played with an open string. The solution that my teacher taught me was to tune the F thinking of the A, since this is the pair of notes that we hold longer and sound together eventually. The harmony was sacrificed in search of beauty in this case, because instead of tuning D minor, I played a D minor “out of tune” looking for a nicer major third (F-A).

Now, after focusing on my left hand, it is time to analyse how the stress affects my right hand technique.

2.4 Legato playing

Learning to listen to myself not only comprises the intonation from a technical point of view of violin playing. Legato playing is a basic task which allows string players to sing a melody as a continuous line, regardless if two or more bows are needed to cover the whole length of the phrase. The example in fig. 4 has been taken from the second cadenza in the Violin Concerto by J. Sibelius.⁴⁹



Fig., 4: Violin concerto by J. Sibelius, Op. 47, first movement, second cadenza. Bars 231- 238.

The purpose of this example is to explain practically how listening to my playing includes right hand skills. In other words, the way I have worked on my listening, focusing on the length of the notes or speed of vibrato, and not only intonation. In the very first steps, my teacher, Marja Inkinen, made me pay attention to the **bow changes**, because it is the most obvious dimension where to listen and to work out the legato technique. In other words, I would venture to say most string players “suffer from” a poor bow change technique, which results in **micro-silences, changes in dynamics, lack of sound quality or undesirable accents** when the bow changes from down to up or vice-versa. My teacher suggested that I work on it as shown in fig., 5:



fig., 5: legato practice.

⁴⁹ Jean Sibelius (1865-1957): *Concerto for violin and orchestra in D minor, op. 47*, 1903 (New York: IMC, 1942).

To achieve a nice legato, a nice connection between these notes, I had to increase the attention on possible gaps or pauses in between the notes and **the feeling in my right hand** such as: how the weight naturally changes due to the differences along the bow stick⁵⁰ or how to change it on purpose by modifying the pressure on my fingers; how the legato can be affected by an even or uneven bow speed in the second before and after the bow change; the angle between the bow stick and the string, which varies the amount of bow hair we use at that moment. An uneven bow speed has, as a consequence a waving intonation, sharper when the bow moves faster; the angle of the bow affects the volume basically.

Therefore, legato is a basic but highly demanding skill with a very difficult solution in my opinion, involving many circumstances we should consider **at the same time whilst playing**. If I often feel disappointed or frustrated by my intonation problems, I feel really proud of being able to listen to this parameter with less effort than I have to make to listen to good intonation.

Legato is about evenness, evenness before, during and after the current bowing, or how the note moves to the next one. **Legato is about connecting two different sounds**: the tiniest variation or difference in volume, vibrato (length or speed), bow speed, amount of bow hair or even how fast or how strong we press the string down is going to make one of the sounds stick out, which will destroy the line and sometimes even the phrasing. My way to practise this legato inside a slur is similar to my intonation practise, working in pairs, first and second note, second and third, and so on, as I did when I started to practise martial arts. The main reason is that working in pairs is the only way to listen to the connection between every note. Otherwise, I would only be able to focus on the bow changes, missing the lines existing in the same bow. Listening to a pair of notes also makes it easier to improve my position changes when they apply. I can listen to the intonation, accents or gaps due to too fast left hand movements. It also helps to choose how to connect and how to go from the first note to the second one.

⁵⁰ The bow stick diameter decreases from the frog to the tip, so the tip is lighter and the sound becomes slightly more piano if the right hand technique does not change.

Just as a curiosity, in fig., 6 I have tried to show how “complex in its simplicity” the legato inside a slur can be.



Fig., 6: J. Sibelius violin concerto, op. 47, 1 st movement, bars 91-93.

The arrow shows the space or connection in between the two first notes played by the solo violin when it takes the second theme from the clarinet. I do not use the suggested fingering, but the same finger for both F and G (1). It means the way I go from second to third position is by sliding, not jumping or using different fingers for different notes. I have spent many hours, and still do, to get a nice and even phrasing where the left hand moves not too fast to make an accent, not too slow to obtain a disgusting chewing gum effect which, also, could make the G difficult to be heard since it would lose any possible **definition**.

A perfect left and right hand technique can be meaningless if they both do not match together on the aim of getting a beautiful sound from the instrument. The way to get it is in the mind, where the idea of the sound I look for must rule the muscles. The technique, the hands are then the tools to develop the best sound the instrument can offer.

2.5 SOUND QUALITY

Sound is what I use to make my music, and I of course knew that before I started my studies here. What I was not really aware of was that I never took care in listening to whether my sound was beautiful or not. I was just focused on trying to play in tune. I will always thank my teacher Marja Inkinen for her detailed work in order to improve my skills as a violin player. After her advice, I have realised I must respect the importance of taking care of the material I work with. I do not refer to my instrument, but the **sound**.

As I have written many times during this work, I used to simply play what is written in the score, yet never perfectly tuned. Maybe I was told years before that my playing did not sound good, but I was not taught how to get a better one. Then Marja Inkinen told me that intonation, left and right hand technique cannot be considered as isolated problems, but part of the sound quality. This diagram shows the various parameters important to sound quality, and to which hand they belong.

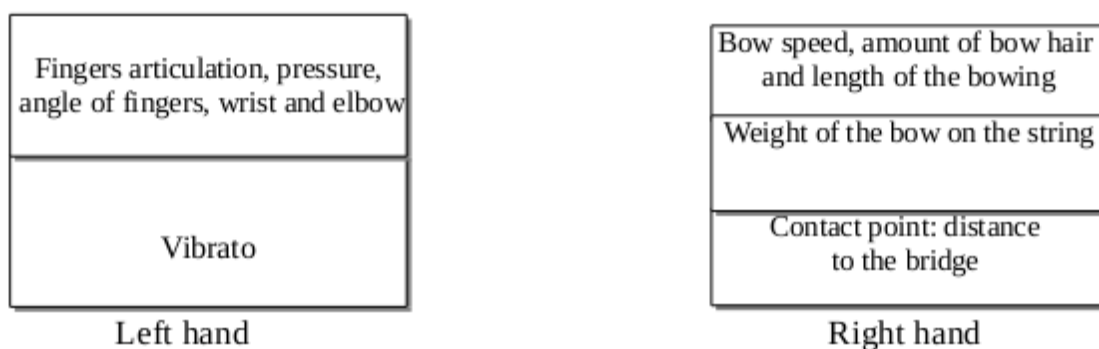


Fig., 7: Parameters in sound quality.

Working out the sound quality has been a daily routine during this time, and, as the rest of the problems I have exposed in this work, they have improved, although they are still present in my playing, especially while I play for the first time in my lessons, or after some minutes in mock auditions, because of the way I listen to myself has not improved in the same way. However, the

best way for me to test my development has been through recordings. Fortunately, I keep recordings older than September 2014, when I began my master studies, which I can use to compare the volume, roundness, intonation and quality in general to my old and new way of playing.

In addition to my training at school, I had some good experience while working at the Jyväskylä Sinfonia, a small orchestra in the city of the same name in Finland. Life for an orchestra musician taught me what to do, **to adapt my playing to the orchestral necessities**, as well as considering my role as a member of a section. I would emphasise that I learnt to play a nice **orchestral piano**,⁵¹ something quite difficult for me to learn when I was alone in my practice room. I learnt all these things by listening to my playing and listening to my colleagues playing, analysing, comparing and making decisions.

In auditions, the jury attributes great importance to the quality of sound an applicant can get from their playing. They look for someone who can easily blend with the sound of the section. This fact has many consequences from my point of view as an applicant, because **I must shape or adapt my playing** by being aware of my sound under some conditions, such as:

- most of times the **audition place** is unknown.
- Personal experiences made me play in very **different halls**. When I applied for orchestras with very good resources, I have played either in studios, rooms where they organise their sectional rehearsals, either in the main hall. Some other times, when I applied for orchestras with more modest resources I have played the audition in the main hall (which used to be smaller or the acoustics is for a theatre, very dry), or even in a big room similar to an office.

For these reasons, I have decided to figure out that I will find the **worst scenario** for the audition, which is in my case the big hall. This is a personal opinion, and my reasons are that I

⁵¹ Dynamics must vary depending on the situation and role. So, the piano a soloist should play will seldom be the same as the tutti player in the orchestra, since the total mass volume should be shared by all the members of the section or group. If the whole orchestra must sound piano, each musician should play pianissimo or even less to reach that desired general volume.

usually practise in very small and dry rooms. Playing in very big halls is not easy for me at the beginning, and I need some time to get used to the reverberation and size, which (the time) is something that an applicant usually does not have in the first round of the audition. I found out that listening to, or trying to listen to the **resonance** coming back from the furthest wall in the hall calls my attention and I cannot keep focused on my playing (for some other player this can be helpful). After my audition for the Tampere Philharmonic⁵² (very big hall), I received some feedback where the concertmaster said that my sound was very small and poor. I cannot know if, in case I would have played in exactly the same way in a small room, I would have had the same feedback. During that occasion, the rehearsal with the pianist was in a very small and dry room, five minutes before my audition, and it was quite good. When I changed to the hall, the situation turned completely inside out, and I felt completely lost. All stress mechanisms, unchained chats had kept me away from a focused feeling. The only thing I can remember from my playing is that the pianist played too fast, but perhaps it was me the one incapable of playing in the right tempo because of my tightened muscles. I did not listen to the music, but to the voice inside my head.

52 Tampere hall. <http://www.tamperehall.com/venues/main-auditorium>, accessed 1st October 2016.

3.1 SUMMARY

This research has taken two and a half years of conscious, focused and always interesting work of analysis of research questions, from which I would summarise:

- Why is there a big difference in my perception on stage compared to listening to a recording?: Because of the stress that I feel while performing, which I do not feel later, when I listen to the recording of my performance. I have demonstrated that stress affects my concentration by triggering mental chattering that keeps my attention instead of putting the focus on the music.
- What steps should I take in order to have a similar perception both when performing and when listening to a recording of my performance?

The answer would be **to perform as an active listener**. To attain that, I need to reach the same kind of calm, relaxed awareness while performing as I feel when I listen to the recording of my playing. To do that, I read some books on the topic, practised exercises to calm my stress and anxiety down and improve my self-control, trained listening with specific exercises, and developed methods to avoid self-talk. The recording device has obtained a new role in my practice, especially during the process of researching for my thesis. I try to have a more objective perception using a recording device, but I am aware that recording my playing should be considered as a tool to **compare** my perception with the recording. Now my perception is active while playing, I try to keep as much feedback as possible to compare with the recording, but before I just played with “passive” hearing, because I waited to listen to the recordings to find any problems. In other words, eight years ago, it was impossible to compare my perceptions whilst playing with the recordings because I had not got any material to compare with the recording.

- How does my perception work when I perform or practise my music?

The first step in solving the problem of a wrong perception was to know its nature. I have finally understood how the learning process works (comparing models, using muscular memory and repetition...) and how stress can bypass the normal function of the mind in performance (fight or flight response), the role of the brain and its hormones in connection to stress and performance arousal, how I practised before that and it did not work on stage and I needed to change in order to include the performance in the daily practice routine. I have also tried to re-educate my thoughts making them useful and supportive instead of “enemies” of my playing.

- What kind of actions or application of various techniques can have a positive impact on the ability to have an accurate perception?

Many of the exercises I have found in books have the aim to minimise the importance of the technical side of playing, looking for enjoyable moments with the instrument. Focusing on the present moment has been my favourite: I do not think of what I did wrong one bar ago or the arpeggios in the next bar. It is only what I am doing now. There is no judgement possible.

- About intonation and sound quality, I have developed different methods of practice, trying to establish previous references in order to improve my intonation, the kind of sound I want to play, etc. I have also included the performance in my practice (visualization, mock auditions) with positive results.

3.2 CONCLUSIONS

The results of my investigation have been extremely positive. Nevertheless, I have found out that the process of learning to listen to myself is still open, and I suspect it is a never-ending subject. It will always be possible to improve my listening, in the same way that my performances are not always progressively better than the performance before. In other words, it is a living, changing process, affected by many different parameters.

Due to my purpose of getting material for this work, I have intensively used my video recording device to record myself practising and performing. It has been useful by itself to improve my results, but now I can compare how I played three years ago for example the Violin concerto in A major by Mozart and how I can play it now, which has been an issue that I did not plan at the beginning and came up to my mind when I realised the amount of recordings I got during this time. Comparing these recordings, listed as Media n.1, Media n.2 and Media n.3, I can say that I play nowadays more in tune because my sound has a better quality and I have a clearer idea of the harmonic tensions and roles of the notes in the phrases. The sound is better and richer after I created musical ideas with several characters, and they have different qualities which I try to show with different sounds. Furthermore, I know my playing is different, because I put into it less stress and tension that I did before, so that the transmission of the musical idea is freer.

As a result of changing my old practice routines, I have noticed a general improvement in each of the parameters I have analysed with a consequent general improvement of my skills and performance on stage. I can prepare my repertoire in shorter time, which allows me to dedicate more time to get a deeper knowledge of it, a wider perspective and a more intense musical enjoyment. The feeling of self-control that I get now most of the times while performing is one more thing I must thank to my personal investigation and work. I have also worked exceptionally

hard on every aspect of intonation (solo, with piano accompaniment, chamber music and orchestra), and I have found that I need a long and constant period of slow practice, and I am not able to work on correcting everything while performing yet. So, I have not been able to put intonation and reliability together yet. I still wonder whether my practice is wrong or I simply must keep on practising until it is finally incorporated into my playing. My goal in this sense is clear, but perhaps I will use a new method.

I am very proud of discovering a piece that keeps what I consider the essence of making music, with a violin in my personal case. The piece is *Spiegel im spiegel*, composed in 1978 by Arvo Pärt. It is a piece for violin and piano, in very slow movement, where the piano part consists of arpeggios (triads) supporting the melody in the violin, played in long notes. I got to this piece because it is part of the soundtrack of a film I watch in the cinema, and I felt something special in it. At the beginning I just played it to enjoy, but then, the more I practised it, the more I discovered as many things I can work with which have been discussed in this thesis and how useful it was for me. It is a perfect piece to work on pure, *sostenuto* sound, but is also a perfect piece to work on the vibrato or the *legato*. But the most important thing: it is a piece to think of music and to love music. It is a piece with any sort of fire works, but it touches my deepest feelings. *Spiegel im spiegel* is my piece to remember that I chose to make music because I love it.

In the same way, to add something out of the violin playing which improved in the same way, diversifying my activities turned out to be very useful to give my musical mind a rest, to release stress and enrich myself as a person. Martial arts, going to the gym or reading books were pleasurable activities which made me feel better and relaxed, and contribute in many ways to achieving better performances and to feel healthier.

To sum up, this thesis work gave me many tools to reset my musical perspective of my goals and helped me to look for a better balance between violin playing and daily life.

3.3 FOR THE FUTURE

When I imagine myself in coming years, I am playing in an orchestra and teaching some pupils. Regarding to my own musical activity, I think I will continue the same path, adapting my routine to cover my necessities. I think I will be responsible of my musical acts, and I will receive their consequences. I know what happens if I do not practise everyday, or I do not show the right attitude and respect towards my instrument. I know what I want and what it takes to get it. I feel I need to continue my work on intonation, to really understand its nature and be prepared for coming problems related to my own playing but also as a member of any ensemble, such is my curiosity to get a better knowledge about intonation.

What really made me wonder how this instrumental playing works is how to teach violin, in my case, without creating present or coming problems in the pupil, how to prepare him or her for days of sacrifice keeping the musical pleasure in mind, in order to not to lose either time, energy or illusion. This is what happened to me when I realised my teachers did not dear to tell me the truth of my playing. It might be that they did not heard my actual playing, as it happened to myself. As a teacher, I would try to be always based on a honest judgement, congratulating successes and never discarding the problems. Why have I made this plan as a teacher? To finish this thesis as I began, I will make mine Bruce Lee's words:

“Mistakes are always forgivable, if one has the courage to admit them”

MEDIA ARCHIVES

MOZART: violin concerto

1- 9th September 2011: Violin Concerto n.5 in A major by W. A. Mozart. Recorded in Royal College of Music Victoria Eugenia, Granada, Spain.

<https://www.youtube.com/watch?v=4GjClvKrWAA>.

2- 2nd September 2016, Audition simulation:

<https://www.youtube.com/watch?v=L0uyRNFoqCs>.

3- 25th September 2016: Violin Concerto n.5 in A major by W. A. Mozart:

https://www.youtube.com/watch?v=xVD-_QTrvq0.

EXAMPLES:

4- INTONATION AND HARMONY: <https://www.youtube.com/watch?v=g7STUTOFWjc>.

5- "MILKING THE COW": <https://www.youtube.com/watch?v=QSBVSUjb54I>.

6- "RADIO STATION SOUND": <https://youtu.be/WXFmxi6Fo6E>.

BIBLIOGRAPHY

BOOKS:

- Gorrie, Jon. *Performing in the zone: unleash your true performing potential*. Charleston, SC, 2014.
- Hoppenot, Dominique. *El violín interior*. Madrid: Grupo Real Musical, 2005.
- Thompson, William Forde. *Music, thought and feeling. Understanding the psychology of music*. New York: Oxford University Press, 2009.
- Levitin, Dr. Daniel J. *This is your brain on music: the science of a human obsession*. New York: Dutton, 2006.
- Lee, Bruce. *El Tao del Jeet Kune Do*. Madrid: EYRAS, 1990.
- Barenboim, Daniel. *El sonido es vida*. Barcelona: Belacqua, 2008.
- Green, Barry and Gallwey, Timothy. *The inner game of music*. London: Pan Books, 1987.

JOURNALS:

- Goldman, Richard Franko. "The Liberation of Sound. Perspectives of New Music 5," *Musical Quarterly* Vol. 47, No. 1. (Jan., 1961):133–34. Accessed 30th October, 2016.
doi:10.1093/mq/XLVII.1.133

WEB:

- Zander, Benjamin. "Fast company, leadership"; accessed 1st March 2015.
<http://www.benjaminzander.com/news/item/17>.

TED TALKS:

- Zander, Benjamin, The transformative power of classical music (27th June, 2008). Accessed 1st March 2015. Video file retrieved from <https://www.youtube.com/watch?v=r9LCwI5iErE>.
- Cuddy, Amy, Your body language shapes how you are (1st October, 2012). Accessed 3rd

September 2016. Video file retrieved from
https://www.youtube.com/watchv=Ks_Mh1QhMc

SCORES:

- Mozart, W. A., Concerto for violin and orchestra in A major, KV 219 (Kassel: Barenreiter-Verlag, 1983)
- Ševčík, Otakar, School of violin technique, op.1 (New York: Schirmer, 1905).
- Bach, J. S., Sonaten und partiten (Kassel: Barenreiter-Verlag, 2001).
- Sibelius, Jean, Concerto for violin and orchestra in D minor, op. 47 (New York: IMC,1942).