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A. IDEAL VIOLIN SOUND

 SOUND AS AN INSTRUMENT OF VIOLIN EXPRESSION

B. "SIGYN SINFONIETTA"CHAMBER MUSIC DUOPERFORMANCE

(Appendix 1.)



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IDEAL VIOLIN SOUND

Nowadays, becoming a prominent violinist is not an easy task to achieve. There are thousands incredibly talented musicians performing every day all around the world. The secret that makes them special is very simple, it is their singing nature that comes out through their violins.

I will present my observations upon the ability to hear, understand and assimilate different methods. Being a student myself puts me, many times, in the situation when I felt helpless whatever I do and the way out was usually very simple. But I could not know it without a help of an experienced teacher.

That is why my thesis will consist of two parts: concert performance as part of the "Sigyn Sinfonietta" and a written thesis, which, in my opinion, both have the same level of importance to the emphasis points of my thesis.

How to develop a full sound was a question mark for all the most famous violinists at all times. Through the years, they all developed their own individual tune that could be recognized anywhere. Of course, their sound didn't consist only from the pleasant audible frequencies, it is a combination of various aspects including vibrato, timbre, bow pressure and strokes, nuances and expressivity, and last but not the least, a stable and relaxed posture. All this together establish a guaranteed base for a brilliant violinist. Another, very important phase is to develop and actively use the inner ear, namely, the sense of musicality. Unfortunately, this aspect of teaching is usually remain forgotten because in the ordinary teaching process mainly all the attention is concentrated on basic techniques.

I will underline the most important topic of the written part, which is emphasizing the leading role of teaching in the complex process of sound and violin artistry. Unfortunately, in these days there are lots of teachers who usually don't understand the meaning of a great pedagogue and harm that they might cause to their pupils. That's why it is very important to develop in each student the need of achieving a beautiful sound, the interest in developing its expressional sides, to teach how to listen to each played note. I will also reflect upon the fundamental problems that might surface during the learning process and tips, taken from the most exceptional violinists and teachers that brought to the world many other brilliant talents.

KEYWORDS:

Ideal violin sound, tone production, expressive performance, bow skills, problems of sound, Leopold Auer.

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IDEAL VIOLIN SOUND

Nykypäivänä tie lupaavaksi viulistiksi ei ole helppo. Maailmalla esiintyy joka päivä tuhansia erittäin taitavia muusikkoja, joiden menestyksen salaisuus piilee heidän soittonsa laulavassa luonteessa, joka välittyy kuulijoille heidän viulunsa kautta.

Esitän havaintoni eri soittometodien kuulemisen ja ymmärtämisen pohjalta. Opiskelijana ollessani olen usein joutunut tilanteeseen, jossa olen kokenut olevani neuvoton, vaikka ratkaisu käsillä olevaan soitannolliseen probleemaan olisikin ollut varsin yksinkertainen. Ilman kokenutta opettajaa tämän ratkaisun löytäminen olisi ollut kuitenkin huomattavan vaikeaa.

Tästä syystä opinnäytetyöni koostuu kahdesta osasta: konserttiesiintymisestä osana "Sigyn Sinfonietta" -konserttia ja kirjallisesta opinnäytetyöstä. Molemmat ovat mielestäni yhtä tärkeitä opinnäytetyöni painotuksien kannalta.

"Täydellisen" soinnin kehittäminen on aina ollut kysymymysmerkki jopa maailman kuuluisimmille viulisteille. Heillä kaikilla on tunnistettava, oma persoonalinen sointinsa, joka ei pelkästään koostu hyvän kuuloisista äänentaajuuksista. Vibrato, viulun ominaissoinnin hallinta, jousen kautta kieleen kohdistuva paine ja vedot, nyanssit, äänen ilmaisullisuus, sekä hyvä soittoasento ovat kaikki erinomaisen viulistin perustavanlaatuisia tunnusmerkkejä. Tärkeä piirre on edellä lueteltujen lisäksi myös kuuloaistinvarainen musikaalisuus. Valitettavasti tämä näkökulma usein unohtuu soitonopetuksen puitteissa huomion keskittyessä perustekniikoiden hiomiseen.

Tästä syystä olen myös alleviivannut tärkeimmät asiat sisältöluvuissa korostaakseni opettamisen huipputärkeää roolia viulutaiteen saralla. Valitettavasti näinä päivinä useat opettajat eivät ehkä tarpeeksi ymmärrä pedagogiikan tärkeää merkitystä. Jotkut opettajat saattavat jopa aiheuttaa vahinkoa oppilailleen. Siksi onkin tärkeää, että viulunsoiton opiskelijoille kehittyisi tarve tavoitella kaunista sointia sekä kiinnostus ilmaisullisiin asioihin. Viulunsoiton opiskelijoille tulisi opettaa kykyä kuunnella tarkkaavasti ja kuulla jokainen soitettu nuotti. Käsittelen tässä kirjallisessa opinnäytetyössä myös viulunsoiton perusproblematiikkaa, joka saattaa nousta esiin oppimisprosessin aikana. Lisäksi jaan oppimiani vinkkejä huippuviulisteilta ja opettajilta, jotka ovat kouluttaneet monta maailman huippuviulistia.

ASIASANAT:

Ihanteellinen viulun sointi, äänentuotto, ilmaisullinen esitys, jousenkäyttötaidot, soinnin ongelmat, Leopold Auer

CONTENT

INTRODUCTION	5
1. THE GREATEST VIOLINISTS OF OUR TIME	7
2. METHODS FOR DEVELOPING SOUND SKILLS	12
3. PROBLEMS OF SOUND	15
3.1 The education of expressive performance	16
3.2 The development of bow skills as an instrument of expression	17
4. THE IDEAL VIOLIN SOUND	18
5. TONE PRODUCTION	21
6. CONCLUSION	25
7. SOURCE MATERIAL	30

APPENDICES

Appendix 1. "Sigyn Sinfonietta" Chamber Music Duo Performance. Poster Appendix 2. "Sigyn Sinfonietta" DVD recording of the Concert Performance

PICTURES

Picture 1. Mutter, A.S. and Karajan, H. von. at her first recording session with Berlin	
Philharmonic, 1978.	8
Picture 2. Menuhin, Y. and Oistrakh, D., 1958	9
Picture 3. Stradivarius instruments are considered by many to be the ideal model for	
violins.	18

INTRODUCTION

First of all, I would like to ask you to stop for a second, look around you and listen. Now, imagine our world without any sound, how would it be? It would be pale, grey, boring. And that is exactly why I decided to write about an ideal sound, of a violin.

My thesis has two parts, one is the written text and the other one consists of my graduation concert as part of the Sigyn Sinfonietta project week, 27th April, 2014 where, with Miriam Tuominen, I am going to perform a piece composed by bass virtuoso Giovanni Bottesini called "Grand Duo Concertante".

This thesis and the concert are related to each other because of the coherence of its main subject: how to achieve a meaningful and pure sound and perform it on stage. As a member of the chamber music group affiliated with the concert, I experienced a totally different way of getting the right tone. Since this was my first experience of performing with a double bass player I needed double the amount of attention and carefulness in my own playing.

In the written thesis I will try to describe different methods of how to develop a beautiful string sound, a sound that can make people cry and laugh, a sound that will bring any listener to the other world, a sound that any violinist can achieve. Nowadays, many people confuse a brilliant musical interpretation with a perfect technique, which makes teaching and learning process as a whole lead to the wrong direction.

The major reason why I used mainly Russian school methods and sources is because for some time, I have been following the main international competitions and at some point I realized one incredible fact: almost over half of the winners were Russians or had a Russian teacher. That inspired me to study more profoundly this certain school of technique and share my findings with other violinists who are interested in improving their playing and sound quality.

Through the works of multiple exceptional teachers as Joachim, Yampolsky and Auer, I will disclose various ways on traditional and modern methods of mastering a beautiful and rich tone. I will attempt to describe different techniques of developing the right timbre, well-balanced bow pressure, relaxed body position to name a few. All these need an everyday practice and perfection, otherwise all you get is a loose sound without any meaning or direction.

I will talk about the major artists and their individual tone, the way they created their own style and musical characters. I should say from the very beginning that improving and perfecting violin sound is a process of a lifetime - a daily job that requires a lot of inner strength and patience.

Lastly, I would like to mention one more thing. Any musician knows that without enough musical background and training all these mentioned above will do no good for the interpreter. That's why it is very important to have a qualified and experienced teacher who had at least a couple of years of work proficiency. Unfortunately, nowadays it is a very difficult task to get a professional pedagogue, especially in the private schools or musical institutions.

Sound is a living organism and needs to be threated the right way. And that is exactly the key that will open the gates to the successful and established performance.

1. THE GREATEST VIOLINISTS OF OUR TIME

Mastering sound while playing the violin is the basis of an expressive music performance and the principal means to influence the listener in an artistic way. Asafiev said: "When people talk about the violin: his violin sings, that's the highest praise for him. Then, the audience is not just listening, but they are also trying to hear what the violin sings". As he also said, to have a nice sound is not just "[...] keeping constantly the same sound quality, but surely translating thoughts and feelings into musical language, making it the art of human communication." (Asafiev 1971, 85)

In today's world, musician has many high requirements so the highest level of craftsmanship sound is necessary for full content and creative interpretation of music. Nowadays, forming a beautiful expressive sound is one of the most pressing problems of the violin pedagogy. Working on the sound is not only important, but also one of the biggest problems in a violinist's education.

What kind of complex performing traits should a violinist have, to define the concept of violin sound culture?

First of all, the sound should be "expressive" and "meaningful". In practice it often happens that a violinist can have quite good sound from the beginning, but he doesn't give much of an artistic impression, because of the sounds inherent monotony. So, when it comes to sound in an expressive context, (not only the quality of a violin's tone, such as brightness, saturation, scale and tonal colors) the main thing is the ability to find the subtle sound, to "paint" the music and to relate it to the author's style and time period, the nature of artistic picture of his performed work.

Second of all, a musician should also strive for something more: the flexibility of sound nuances, phrasing and accentuation, which will allow musicians to perform their own "vision" of the music, their original interpretation concept.

Therefore, if we talk about the content of sound, I would mention that each major performing artist has their own special and distinctive character. In the memory of the audience still lives the original voice of Shalyapin, piano sound and tone of Sergei Rachmaninov, Jacques Thibault, Pablo Casals, David Oistrakh, Leonid Kogan, Yehudi Menuhin and many others. Each of these great musicians had a special, distinctive sound that characterizes their individuality. Of course, there is a great generation of modern violinists that in fact is changing the entire approach of violin as an instrument. While listening to them, to their sound, most of the time you don't realize that there is a human being behind that violin, you think of them as one organism that breaths together. When thinking of this phenomenons straight away comes to mind virtuoso Itzhak Perlman, Joshua Bell, Janine Jansen, Maxim Vengerov, Anne-Sophie Mutter, Hilary Hahn and others.



Picture 1. Mutter, A.S. and Karajan, H. von. at her first recording session with Berlin Philharmonic, 1978.

When thinking of Oistrakh's violin sound, who owned the infinite skill of making musical sound, in all cases he remained that lyric and melodic style of his musical expression. The warmth of his violin tone had a great richness.



Picture 2. Menuhin, Y. and Oistrakh, D., 1958

About Gutnikova's playing they said: "Gutnikova's style has an impressive beauty and clarity of profound thoughtfulness on each level of performance concepts."

In the third place is vibrato. Its special role in violin tone expressivity is very important, because the manner of playing and the vibrato technique, with a kind of individuality define the unique character of the sound palette of every major violinist. Another important tip is to know when to use it and how much. Depending on the piece, the composer and the time period, vibrato can vary from the full hand motion to the wrist or finger's oscillation in pitch. It is a known fact that even 150 years ago it was a matter of bad taste to use any kind of vibrato, especially in the Baroque era. It became more and more popular in the early 20th Century: "Against this are cited sources which are said to prove that early 19th-century Viennese string players like Franz Clement and Joseph Mayseder were noted for their tasteful use of vibrato. These musicians (and the two Hellmesbergers) are said to represent the school on which Fritz Kreisler based his stylistic approach." (Wikipedia)

There are plenty of different methods that can be used to perfect vibrato skill. They vary between different schools of violin pedagogy and own experience. In my opinion it is very important to know when and why to use it; if it's overused it

disturbs the listener and it also affects the intonation and of course the sound quality. The best way to master vibrato is to use the right combination of the hand, wrist and finger oscillation and to vary it depending on the musical content and to listen to the each played note.

Considering the historical retrospect, outstanding violinists looked forward to solving the sound problem. It is interesting to note that the integrity of these three factors in the training was marked by many authors of violin schools and tracts of Geminiani, Tartini, Campagnoli.

In "The Proceedings" by Tartini is an outlined series of teaching methods, which strength didn't lose its value until recently but it significantly helped to improve the quality of sound. This work was intended to develop acoustic, rhythmic and motoric skills.

But already in the 19th century, the integrity of the approach of music education had changed. According to the "Methods of the Paris Conservatory" which includes teachers as Rhodes and Bayo, begins a long period of separation of the elements of violin playing to their detailed study and then combining them in the act of playing.

This attitude led to the fact that even the most advanced pedagogical works of the 19th century such as Spohr, Beriot, Joachim and Moser couldn't achieve harmony between the methods of musical and technical skill.

In the 20th century, an individual approach how to learn a piece of music reached a whole new level with the emergence of new large scale works by Prokofiev, Shostakovich, Bartok, Hindemith, Berg and Ysaye's "Solo Sonatas for Violin". These required a completely new approach to the sound production and creation of new images. These composers taught what modern expressive sound means. They strongly made violinists reconsider their attitude to the methods of traditional performing.

I would like to mention and particularly give huge attention to the harmonious upbringing, artistic consciousness and violinist skills, which are typical to the

pedagogical aspirations of Zeitlin and Yampolsky, Eidlin and Vaiman, Oistrakh, Cohen and others, who raised a generation of great violinists. In the center of such an approach, there have always been issues in making hard work for the sound, in each individual case receiving a creative solution.

Against the backdrop of these developments, we can notice significant deficiencies which are typical for a broad violin teaching. Indeed, in ordinary schools, those who start playing with a bad, toneless sound, don't develop their musical performance skills for a very long time.

About Leopold Auer teaching they said: "The acquisition of a pure, beautiful tone is a study case". Especially we need to pay attention to the development of the right hand, which "[...] serves the main function, identifying the sound of the instrument and the qualitative result of the left hand" (Mostras 1949, 24)

However, the quality of a violinist's sound is ultimately determined by the tight, well coordinated interaction of his/her hands. Therefore, we cannot ignore the role of the left hand in getting the full violin sound. In broad terms, perfection of all the elements of the left hand affects the high quality sound. As for the direct impact on the sound, we should notice three things. First is finger technique. This is a complex finger technique of falling or/and rebounding the horizontal, "chromatic" movements and overrunning from one string to another. Secondly, the purity of pitch intonation is practically inseparable from the timbre of sound. Finally, the third factor is vibrato, one of the most important elements of musical expression.

Laying the groundwork for a full sound requires harmonious work on the violin, on the professional performing techniques on every level of education - from beginners to the more advanced. This is only possible from the first steps when the violin training is closely associated with musicians broad personal education as well as familiarizing himself with the wealth of artistic culture through comprehensive and purposeful learning activities.

2. METHODS FOR DEVELOPING SOUND SKILLS

Once the student has mastered the way of holding the bow, he has his first experience of the string. And now it is very important to teach a sense of his own weight, the weight of his hands and the weight of the bow (just to prevent the "cruel snatch of the bow"), because this is the foundation of sound. Awareness of sensations of weight can achieve the desired freedom of the joints and links from the hand to the bow.

How the basic sound skills on the violin are usually learnt?

In the formation and development of sound skills, the musical ear should actively participate in all the stages of practice. Unfortunately, in teaching practice this factor is overlooked; usually, attention is placed on the development of the right hand technique with the bow, considering that the sound depends only on the correctness of this. Since the work on the sound is drifting from listening skills, the student almost doesn't link the feeling of his muscle weight with the view of beautiful and expressive violin sound, melodiousness, shaped characteristic.

Meanwhile, the history of violin pedagogy retained many statements from the greatest artists and teachers, strongly emphasizing the leading role of hearing in the complex process of sound and violin artistry. Among them are Tartini, Mozart, Spohr, Beriot, Joachim and Auer. Prominent educator Abraham Yampolsky wrote: "The basis of the correct method of a sound culture must be made in the systematic development of "the inner ear" (he reffered to the intuitive comprehension of music by hearing), which is the most valuable quality of a musician." It was stressed that "we think that mainly, "the inner ear" is an area that is related to the expressive side of sound, with a sense of sonic colors, corresponding to a specific musical way". For internal auditory education, a

student must develop his "musical ear". The concept of a "musical ear" is based on two factors.

Firstly, the pitch of sound representation has the parameters of height, volume, timbre and duration. Secondly, it contains emotional perception of music. In order to form a full, expressive sound student needs to develop both sides of his hearing. However, in theory and practice, auditory perception is associated only with the forming skills of the left hand and therefore develops more the ear's pitch. Other sides of hearing, associated with bow technique, colors of sound and expressiveness almost don't develop.

Secondly, education is very important in the timbre perception of hearing, which must be developed. Because of the rhythmic, timbral and loud dynamic characteristics of hearing, interpretation compared to performers pitch and use of the bow is primarily related to the requirement of aesthetic taste and style of the piece. Therefore, in terms of developing methods of sound production, it becomes possible to make a couple of creative elements in the learning process of each violinist. Many musicians and teachers tried this approach, perfecting the traditional teaching methods. And here we can find a successful solution which can solve this problem with the interpretation and performing movements in the creative process. Artists movements are not only personal artistic intentions of the music interpreter, they are actively involved in the process. Many musicians from other specialties usually talk about "hearing" the hands of the performer (as well as "thinking", "feeling"). The art of a violinist is not only a way of feeling the violins neck and pitch intonations, but is essential for a productive right hand. The most important task is to "hear" the other side of an expressive violin sound and its intonation as an expressive phrasing of a speech.

Another, important criteria in the sound production is the left hand. In the following examples I reflected thoughts of my first teacher Valentina Kotorov:

- 1. "Sound criteria is relied upon in the formation of motoric bow technique. This principle is implemented through the establishment of connections of each of the developed motion with auditory perception.
- 2. Conscious ability to relax trained muscles as a starting point of work on motoric skills of the right hand techniques. From relaxation to muscular energy required for playing and then back to the relaxation this is the principle of development of each playing motion, which must be realized as early as possible.
- 3. Constant direction in feelings of weight, when playing using different parts of the bow.
- 4. Mastering the techniques of sound production, first using short segments of the bow (lower, middle, and top of the bow). Only after the development of short segments, violinist should start using the length of the whole bow. The presence of pauses between the continuous sound lets us evaluate the results and presents an image of the subsequent tone.
- 5. Development from the very beginning of the bow technique, including countinous hand motion up and down, the connection between sounds when the bow changes string and using different parts of it."

A full range of professional techniques early on, allow the student to reach the initial stage of melodiousness, secure intonation and expression. This is the key to a successful establishment and development of musical style and performing. This is only possible under one condition if the violinist has to have motoric freedom of the right hand in order to adapt correctly to the instrument and bow.

3. PROBLEMS OF SOUND

For a student, it is difficult to overestimate the importance of perfect motoric playing for mastering a full sound. Mastering the techniques of the initial sound production is directly dependent on the formulation. The following examples are taken from my lessons with Alexander Vinnitsky. In my opinion, the concept of production consists of two components:

- 1) The system of simple movements of the left hand on the fingerboard.
- 2) The basic playing movements of the right hand with the bow.

The major role of the violinist's performance is the formation of correct support from the body, standing on both feet which are situated slightly apart from each other. It is not only necessary to teach the student to distribute the weight of his body between left and right, but specifically to teach how to transfer weight from one foot to another. This ability plays a significant role in the development of sound and professional violin playing. The foundation of bowing technique is especially related to the general idea of balancing the weight.

For a qualified, full sound on the violin and perspective development of the bow, instrument stability is required. When the position is unstable, the right hand experiences great difficulties in changing strings and it is hard for the left hand to change position, which ultimately leads to uncertainty and inaccuracy of all the playing movements. During the work on sound production it is useful to incorporate a conscious attitude of freedom.

The sound quality also depends on the position of the right hand. Its right hands thumb is vital to achieve a good violin sound. Many sound errors (especially typical for students who have poor bow skills, strangled and colorless sound) are caused by poor attachment and stiffness of the thumb.

Speaking about the violinist general formularization, most of all, we must not forget the enormous role of the left hand in the production of high quality sound. Well formed left hand and playing skills directly affect the sound production techniques and strokes. Freedom and accuracy of all the movements of the left hand is particularly important for the coordination of both hands. Among the numerous coordination skills, perhaps the major role is played by the fingers skill on the fingerboard. In other words, before the student can get any sound from his bow, he should practice placing his finger on the neck in a very short amount of time.

Many significant coordination problems also refer to vibrato and bow sound. It is known that students often use vibrato, trying to cover up their mistakes. This also endangers the natural way of performing, from the formation of high grade or high quality sound to the enrichment of playing with vibrato.

3.1 The education of expressive performance

Turning to the work on the artistic way of making an expressive sound, first of all we must notice the gathering of musical impressions and detailed study of the techniques. Directions that could help both, the teacher and the student, to create student's base are: playing to the student (showing examples of execution which must contain the highest standards and include the full range of musical expression), playing some other recordings, giving the student singing, conducting, musical and rhythmic exercises, followed by a simple analysis of the material. The progression of elementary motoric skills and basic bow techniques on the open strings can be linked to rhymes, poetry and melodic songs with a verbal nature.

The sound techniques are connected to the musical and imaginative thinking, musical and rhythmic pitch in the present time and in the future.

As motoric skills and technical capabilities of the violinist develop, so does their artistic development. When a student begins to play a new piece, he should

start to learn its artistic image and then reflect this image. It can help if we compare the melody with a speech and explain it through the pitch tunes, its rhythmic structure, architectonics and repetition, contrast between motives and phrases, the distribution of semantic accents, climaxes, and everything else that belongs to the realm of musical expression.

3.2 The development of bow skills as an instrument of expression

It is difficult to overestimate the importance of the strokes in violin performing. A profound impact on the audience depends on the melodic and expressive playing of the violin and the skillful use of various methods of stringed melodies that in combination with the vibrato defines the violinist's style. A dash of articulation has, perhaps, one of the richest expressive possibilities. Bow strokes are one of composer's "visions" of the musical line, on the other hand they represent the possibility of an original choice of sound solutions, the way how players perform their work.

How hard is it to understand the meaning of human speech?

No comprehension of an individuals pronunciation and tone of the voice are inseparable from an instrument's intonation and the formation of a musical idea and the peculiarities of the instruments character. There are never two identical interpretations of the same piece of music. Whatever you are trying to achieve and how much you practice you can never play in exactly same way as another violinist. Consequently, the concrete bowing decisions should be regarded as artistic creativity. Therefore, conventional notions of musical practice such as detaché, legato, martelé, sautillé, etc. refer to non-specific, complete images of sound, and some typical, generic versions of a clear violin sound which depend on the artistic objectives and can be accomplished in various ways.

What is a stroke?

We can say that the bow is "an expressive element of instrumental techniques" and the nature of sound depends on the way how we play. Another definition: "The bow is a display of sounds on the instrument", so rightly stresses that "the choice of movements are determined by the stylistic features of music, its figurative character, as well as interpretation."

There are basic principles of the development of bow strokes:

- 1. The development of each stroke should be based on the realization of the student's artistic and expressive capabilities.
- 2. The presentation and feeling of the quality of execution of each stroke should be done in advance.
- 3. Development of certain movements and their combinations should be associated with intonation analysis, featuring tunes and working on creative interpretation. We make close interaction with the bow for sound design with all other means of expression.

4. THE IDEAL VIOLIN SOUND

In essence, there are a lot of objective as well as subjective parameters of instrument sound. One of the best contemporary American violinmaker Joseph Curtin described them as: tone quality, projection, response, evenness, sensitive vibrato and dynamic range. Anyway, it is essential to separate these as much as possible to be able to evaluate an instrument objectively. There is far more than one factor involved in instrument sound creation and they all interact.



Picture 3. Stradivarius instruments are considered by many to be the ideal model for violins.

Therefore it is essential to be very cautious in an objective analysis of the sound qualities of an instrument and to separate these factors. As a violin maker, Dr. Kul mentioned below "[...] described parameters are objective. However, there are always important subjective aspects as well." In this context at least five major factors must be considered:

"1. Timbre.

Very often timbre is named as 'tone'. It seems that it is much simpler to evaluate: "This violin's timbre is bad, or poor, or nasal, or terrible..." More problems appear when somebody tries to describe a good timbre. This parameter varies strongly with different bowing techniques (which is well known to players) and also to some extent depends on the bow itself. Additionally – the most essential aspect for timbre evaluation is that players definitely hear a different timbre from what listeners do. Again, listeners hear different timbres in different rooms or depending on their position in the room. So, along with objective characteristics, timbre has a lot of subjective features. Closely related to timbre is a phenomenon known to musicians as playing-in an instrument. As it is proved in objective experiments, human memory for sounds is defective. So, it was only assumed, that playing-in has an influence on timbre. However, some recently performed objective experiments clearly showed influence of prolonged playing on some voice-determining instrument parameters.

Evidently timbre strongly depends on materials used and design applied. These are almost impossible to change in a finished instrument. But it can be changed to some extent by replacing and/or adjusting some accessories – the bridge, sound post, pegs etc. Experienced Luthier knew how to move to the desired sound characteristics.

2. Responsiveness.

It is difficult even to imagine that all musicians would like the same violin's timbre. However, every player prefers an effortless response or easy speech of an instrument. The term 'playability' is usually used to describe this feature in an instrument.

3. Carrying power.

This parameter is sometimes named as projection. It is the ability of a violin sound to fill a space, which can be up to a concert hall. Just because of this feature, a solo violinist can be heard while an orchestra plays forte. Instrument projection can be quite easily tested by two or more players, testing several good instruments, looking for best approximation to the ideal violin sound.

4. Dynamic range.

Players know it as the distance between the quietest and loudest 'musical' sound that can be produced with every instrument. Obviously, the more responsive the instrument is, the wider its dynamic range is. Also, the better the player, the bigger the dynamic range he or she produces from the instrument.

5. Evenness.

No violin can produce the same output power on all notes. Even quite simple modern measurements and techniques show lots of peaks and dips in a violin's frequency range. To some extent it is caused by generated harmonics (overtones). It is also well known, that ear sensitivity varies to different frequencies. Acceptable evenness is achieved when the volume of all notes sounds similar. This is affected by violin design and to some degree by proper setup, strings and playing. Regretfully, some instruments cannot produce equal loudness on all notes or even strings. It is better to reject such an instrument, as usually the unevenness is caused by poor design – that cannot really be improved." (Kul 2005-2010)

Nowadays there is a large scale of instruments that gives the opportunity to choose depending on the violinists requirements. I should say right from the start that it is not easy, for some it might take years. Getting a violin that corresponds to all the main factors described above might solve most of the problems, but lack of technique cannot be hidden behind the most brilliant instrument.

5. TONE PRODUCTION

The problem with producing a really beautiful sound, in other words, which sounds so melodious, that makes the listener forget the physical process of its formation, is one of those problems for which finding the solution must always remain the most important task for all who devote themselves to the music.

The issue of sound, I'll admit it right from the beginning, doesn't depend neither on the bow's hair, nor on the rosin, or the bow changing strings, or on position changes of the left hands fingers. All of these factors have absolutely no value when it comes to making crystal-clear sound. To achieve this tone quality, the

violinist must not only sacrifice necessary time for this, but he must also be willing to invest in dealing with this problem with all his ingenuity and mental concentration that he is capable of.

These features must be specified in detail: how to hold the bow, how to get used to the finger pressure, which of the fingers at each moment increase the pressure on the bow stick and how to learn to use it as a brush – all these are difficult to master. But what is important in all other arts is also true for the violin: a natural instinct, physical predisposition and built muscles on the both left and right hands. All the above enumerated have a significant role in a violinist's development.

The ability to hear and understand, to grasp and assimilate methods, as shown by my observations are the only practical way to achieve a beautiful sound, which is the pride of every violinist.

Valuing presented theory is the way to double the ability. The most important merit is the ability to combine these two factors and compose the theory that brings practical benefits. The best advice, written on paper as if it may be useful for any kind of scientific principle or basis will never replace the spoken word, followed by a demonstration of its practical application.

Returning to the detailed consideration of the question, I intend to specify some tips in the most suitable form for those who are playing violin, suggested by a renowned Hungarian teacher Auer who's students were Jascha Heifetz, Efrem Zimbalist and Nathan Milstein.

- "1. Take a bow with your fingers, lower your arm so that it naturally and spontaneously gets the right position. In this way you can avoid the forcing feeling, which makes you cling tightly to the bow cane.
- 2. Hold on lightly to the bow, but with sufficient strength to manage it without restraint. Don't try to get a strong sound by pushing the bow on the strings. The power of sound is a special skill which can be developed only by experience and hard work.

- 3. Do not press the bow with your hand, because the whole essence of a beautiful tone is hidden in light wrist pressure, slowly and gradually increasing the pressure until it will not cause a complete, perfectly clean and uniform in strength sound from the head to the bow and back.
- 4. Start the sound conducting with a slow bow over its entire length, spend up to ten or twelve seconds for each bar up or/and down, and stop as soon as you feel tired. The muscles and ligaments of the hand need to rest after long-term effort.
- 5. The level of pressure on the fingers on the bow stick is the result of experience, self-discipline, as well as teacher observations.
- 6. To achieve strength and long sound by the whole line of the bow, you should balance the pressure in the low pressure side of the bow and right hand wrist, because the hand has a natural tendency to press harder on the bow due to the greater severity of this side of the bow and, conversely, to reduce the pressure of the head which is the weakest part.
- 7. Play as slowly as possible "long" notes in scales as follows: initially in two octaves, and when you feel more confident, take a third octave in the key of G major. Pay close attention to the fact that, amplifying the sound of one finger up of pressure on the bow stick, not the pressure of the entire hand, because of this you will avoid forcing the sound, which otherwise will be sharp. Play in different keys. As soon as you learn how to draw a bright clean sound, you can start "long" double notes, playing them in accordance with the principles outlined above.
- 8. Play in the middle, between the bridge and the fingerboard because at this point the tone is obtained by the most comprehensive and resounding way. Only in cases where it is desirable to obtain a soft, seductive sound in pianissimo, you can play near the fingerboard even on the fingerboard. In addition, as soon as you get closer to the bridge with some effort, the tone becomes harsh. Playing absolutely pianissimo, barely touching the strings, you will achieve the effect, known as flautato, because it is used to imitate the flute's

timbre. Each time the student moves the bow up or down, he should move it in a straight line parallel to the bridge." (Auer 1949, 32)

Unfortunately, worldwide music education is not subject to monitoring. It is also right for those countries where the government supports special music schools, to set a high level of education, as excellent as private teaching. The private teacher is free from liability for their students, and they can do their "business" as they like. They set the rules, develop their own teaching methods, and there is no organization or monitoring system that ensures a violinist and his teacher is qualified for his work during a period of time in one of the major musical institutions.

In countries where there are no public schools, anyone who wants to give music lessons, can, but only if they get students. I am not trying to say that all the private teachers knowingly and deliberately may cause harm. Some of them, certainly, think that they are doing the right things. In this case their victims are innocent and helpless students. That's why I insist on the importance of well qualified teachers in relation to the recovery of sound. The acquisition of a pure, beautiful tone should be a study case and so it is the teacher's actions that develop or destroy a student's possibilities. Therefore, a good teacher can be an important factor contributing to student's achievement. If there were more violin departments in public musical institutions whose duty was to prepare good teachers, as well as if it were possible to enforce publication of private instruction - the sound produced by all violinists in the world would have improved!

6. CONCLUSION

"Because of the difficulties in playing an instrument we often are quick to look for ready-made solutions – we are constantly searching for the 'perfect setup' or various 'tips' and 'shortcuts' to make our life easier. However, in order to achieve complete freedom in mastering the instrument it is much more effective to activate the appropriate conditional reflexes that correspond to what we need in the long run. This means creating an uninterrupted pathway between musical thought ('pre-hearing' the music in our head), the movement of our muscles, and the resulting sound that is verified and regulated by our ear. If these pathways are developed from the beginning, we are better equipped to adapt to all the subtle nuances that artistry requires." (Yankelevich 2014)

Mastering the violin is a complex job that requires years of intensive training. Violinist must be able to transmit his feelings to the listener while feeling perfectly at ease with the instrument, feel it in the accuracy of each note or in the use of the numerous sound capacities of the violin.

There are millions and millions of different ways to practice and learn the beauty of the sound, but every musician should remember one thing. A great violinist once said "One of the most important elements in teaching, conducting, and performing, all three, is listening" (Perlman, I.)

Purposeful formation of the skills and large scale of violin strokes can build a base for the development of the craftsmanship. In general, its formation occurs in vividly process of learning and creative interpretation of a variety of musical works while performing them on stage. Precisely on stage, mastery the artistic and creative work with a real sound incarnates a wide range of feelings and tools of violin expression, acquiring genuine cultural features. Finally I would like to recall the words of Yampolsky: "Nothing embellishes musicians playing as melodious, meaningful and pithy tone - one of the most impressive means of transmitting images, feelings and moods, the expression of warmth, depth and relevance of performance." (Yampolsky 1968, 157)

Another very important step for achieving a sensuous violin sound is to choose the right strings for each instrument. The differences in all string instruments result from a certain combination of the following moments: string gauge (thickness), specific manufacture (preferably handmade), material that it has been made of, qualified bow hair, bow itself and its age, raisin. Each string has its voice, its timbre. I can't ignore the fact that a poorly made strings can ruin any violin's voice. The same thing is about the poor quality of the bow hair or the raisin. An old bow which was badly maintained through the years also could cause a wafting sound just because its stick isn't flexible enough. All this should be chosen very carefully and sometimes it could even take years to find the perfect combination for a specific instrument. Nowadays there are various palettes of choices and different brands that can satisfy any violinist, even the most fastidious expert.

Sound itself is a mirror of musician's soul. This is a psychological part of refining the skill of the eloquent sound. It is a fact that without enough poise nothing will work in the right way. It is very important to have a peaceful state of mind to perform a piece. Balance and equilibrium were a header for the bright carrier of all the great violinists of our time.

In the end I would like to mention that musician is the one who can express his emotions through music and nobody can teach that or take it away. The text presented below can only guide and give some directions for those who are in the searching process. The real work can be successfully done only when the violinist is ready to sacrifice his free time and effort to get supreme results.

Appendix 1.



The performance: Sigyn Sinfonietta annual project week, "Grand Duo Concertante" by Giovanni Bottesini, 27th of April 2014, Sigyn Hall: chamber music duo accompanied by a chamber orchestra.

For many interprets, musicians and simple people who love music, name Giovanni Bottesini is almost unrecognizable. But in his own time, he was prased as one of the most talented musician, virtuoso of the double bass, talented composer that among his works for the bass he composed a large scale of operas and chamber music works, also he was an internationally known conductor. Even Rossini said about him: "Bottesini is the most well-rounded talent that we have in Europe today."

From the start I should say that this was one of the most exciting chamber music adventures I've ever had. I never thought that a duo could be as challenging as this was. I thought that the combination between such an elegant instrument as violin and tremendous as double bass could be quite peculiar, but actually these two instruments complement each other very well.

Playing with Miriam Tuominen was always an exciting event for me. The power of her instrument, remarkable technique and marvelous passages on the grief and even over its rage seem to sound unreal. Playing the "Duo Concertante" requires a lot of attainment and experience.

Listening to it, remembers me a lot of Italian inner spirit which you can sense through every dialogue, through each phrase. It is a challenging piece, it requires a lot of detailed work as intonation perfection, building direction for each section of music, make the music sound entertaining by adding our own thoughts.

Grand Duo Concertante was composed by a great italian virtuoso G. Bottesini in 1880. Originally it was written for 2 doublebasses and a chamber orchestra, but then, another italian virtuoso and student of N. Paganini, Camillo Sivori transcribed one of the double bass parts into a violin part, accompanied either by piano or an orchestra. Nowadays, his version is actually more known then the original one.

The piece doesn't have any particular form, it is written in one movement and is more of a "fantasia". It has three distinctive parts, connected by the orchestra tutti. In the entire piece you can feel sort of a emotional dialog, a competition between completely different instruments in both size and ambitus, which makes it a fun piece to listen.

"It's very popular among double bass players," notes Tramontozzi, "but it's a real challenge. It's quite a showcase for both instruments." [from the program book of the San Francisco Symphony] (Thomason 2001)

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