TEACHING VIOLIN TO HIGHER LEVEL STUDENTS: THE ANALOGY AND BENEFITS OF VOCAL APPROACH

Oksana Solovieva

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DOCTORAL THESIS

Oksana Solovieva

Teaching Violin to Higher Level Students:

The Analogy and Benefits of Vocal Approach

Universitat Rovira i Virgili

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DOCTORAL THESIS

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Tarragona, 2017

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I STATE that the present study, entitled "Teaching Violin to High Level Students: The Analogy and Benefits of the Vocal Approach", presented by Oksana Solovieva for the award of the degree of Doctor, has been carried out under my supervision at the Departament *d'Història i Història de l'Art* of this university.

Paris, 27 June 2017

Doctoral Thesis Supervisor

Mary (Masha) Lankovsky

Acknowledgments

Regular contact with great singers and voice teachers inspired the creation of this work. I would like to thank all inspiring personalities who crossed my path and specially the voice professor and soprano Pilar Páez, who initially motivated, inspired and enormously contributed to the creation of this work.

I would like to thank with particular appreciation the supervisor of this thesis, Dra. Masha Lankovsky, whose enthusiasm made this work possible to be finished.

With gratitude I would like to enormously thank Virgil Simons and Goretti López Heredia for many hours of hard work on corrections and structure of this thesis.

Without the convincing encouragements of Joaquim Icart and Eulália Polls to continue the elaboration of this work at the critical moments this work would not have been finished today.

I would like to thank for their time and understanding all the professionals and students who have collaborated during the observations of the vocal classes, the interviews, the questionnaire and the experiments.

Abstract of the thesis

For the last fourteen years I have been working as a professional violinist at the Liceu Opera House in Barcelona and as a violin teacher in different High Conservatories of Music. This professional experience gave me the opportunity to observe and work with the most important lyric singers and voice professionals of today while at the same time working with a large amount of violin students who desire to finish their higher education in order to soon enter in the professional world.

During each opera production I have listened to the different vocal techniques used by the singers and observed them produce different expressive effects with their vocal instrument. This experience brought me to the idea to try to reproduce their phrasing intentions, the *legato* and every single subtlety expressed while playing my own instrument. My aim was to improve and become closer to the human voice, the first and the most natural of all instruments. Thus, the professional development provoked by contact with prime singers, pushed me to implement this learning in my violin recitals and pedagogical activity.

The results immediately were very interesting. Therefore, I took the decision to make a more precise, exhaustive and deeper research employing this work with my students and finding vocal repertoire for the violin.

The aim of this thesis is to investigate and share the results with other musicians and professionals interested in this subject. Moreover, it aspires to raise a new consciousness among string interpreters and professors who would like to implement this work in their professional activity. This thesis intends to open new paths of understanding the violin as well as helping to solve certain barriers or technical problems by adopting an innovative point of view. This research consists of the compilation of all the technical and interpretative resources suggested by voice teachers and other vocal professionals by means of

observation of their classes and interviews to finally implement these materials into the violin lessons and experiments.

In conclusion, this thesis lies within the framework of psycho-pedagogy and interpretation, since the interdisciplinary approach aims to improve common deficiencies in violin performance. This investigation about the relationship between artistic and technical approaches inside the specialties of voice and violin will lead to practical and innovative teaching in violin classes.

Abstract of the thesis. Spanish

Resumen de la tesis. Castellano

El hecho de haber trabajado durante catorce años como violinista profesional en el *Gran Teatre del Liceu* de Barcelona y como profesora de violín en Conservatorios Superiores de Música, me ha llevado a tener contacto muy asiduo y directo con los grandes cantantes líricos y profesionales de la voz actuales, y al mismo tiempo, con gran número de los alumnos de violín, que aspiran a terminar sus estudios superiores para entrar en el mundo profesional en un futuro próximo.

Estando en cada ópera, escuchando a los cantantes con técnicas de canto diferentes y sintiendo que cada noche pueden hacer cosas diferentes con su instrumento, hizo que comenzase a plantearme la posibilidad de reproducir esos sonidos, esas intenciones de fraseo y *legato* y todos los matices de su canto a la hora de tocar mi instrumento, para mejorar y poder acercarme más a la voz humana, ya que es el primer instrumento que hizo música en el principio de los tiempos y el más natural.

El aprendizaje profesional -como consecuencia de la escucha diaria y del contacto con cantantes de primera línea- me condujo a intentar aplicar todo lo que había aprendido con ellos en mis recitales de violín, y en el campo de la docencia a la hora de impartir clase.

El resultado que he obtenido fue realmente interesante y por ello decidí realizar una investigación más precisa, exhaustiva y detallada del trabajo con los alumnos y del repertorio vocal para violín. Este trabajo incluye todas aquellas facetas que están relacionadas con la voz como instrumento en el canto, y en el violín a nivel educativo, en lo referente a su ejecución.

El objetivo y el propósito principal de esta tesis es investigar y compartir todo este estudio y aprendizaje con otros músicos y personas interesadas en el tema, así como despertar otra conciencia para todos aquellos instrumentistas de cuerda que deseen incorporar este trabajo en su vocación de músico y de profesor. Es decir, abrir una nueva línea de trabajo que facilite y engrandezca al violinista como tal, que pueda hacer desaparecer esas barreras o impedimentos que técnicamente a veces no logramos superar, si no desde otra visión totalmente diferente e innovadora.

El trabajo de campo de esta tesis se concreta en: la búsqueda de todos aquellos recursos que tienen que ver con la técnica y la interpretación del canto a través de entrevistas a cantantes; la asistencia a clases de canto; la escucha atenta de cantantes; la lectura de literatura específica y, finalmente, la aplicación de todo ello al trabajo con los alumnos de violín, registrando los resultados.

Así, el presente trabajo podría clasificarse dentro del ámbito de la psicopedagogía y la interpretación, considerando que el enfoque interdisciplinario pretende mejorar las deficiencias comunes en la ejecución del violín. La investigación de la relación entre los enfoques artístico y técnico en las especialidades de voz y violín, conducirá a su aplicación práctica e innovadora en el aula de violín.

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I. PART ONE. INTRODUCTION

1. Statement of the Problem

This thesis is the result of 5-year intense observational study and experience of teaching the violin in several higher and professional conservatories in Spain and abroad while the base is the experience and knowledge gained throughout 14-years of working in the symphonic orchestra of the Liceu Opera Theater, accompanying the world's leading singers.

The techniques of tone production, vibrato, legato and projection are the most essential elements of successful interpretation on a lyric instrument such as the violin. The question to be investigated here is: can the approach borrowed from vocal training help the higher level violin students in their performance improvement?

The present teaching methodology lies within the framework of psychopedagogy and personalized learning. This evolving concept stems from the work of Dr. Diana Burton, who posits: *"*If we teach today's children as we did yesterday's, we rob them of tomorrow!"[1]

Nearly every known violin method nowadays somehow refers to singing. In the class for violin beginners, the student first has to sing the melody and then try to play it. But if we keep this in mind, rarely do the violinists study in depth the tone production, phrasing or general concepts of singing. The Higher level Conservatory students sometimes play virtuoso fantasies based on opera themes but only occasionally do they listen to the

[1] (Burton, 2007)

original opera itself or imagine what character or voice should be imitated. If a violin student nowadays finds the time to attend a concert, it hardly ever features a famous singer, but even if so, he doesn't know what to look for while listening to the voice, what should he pay attention to, what can be useful for his own skills development and what will accelerate the musical maturity.

We will attempt to show how the teaching protocols of Campbell[2] can be particularly effective and impactful upon higher level violinists, whose education provides the best case example of how the theory of personalization might work in practice. This investigation about the relation between the artistic and technical approaches in the specialties of voice and violin will lead to a practical application in the violin classroom.

While the importance of the psychological aspect in studying or playing the string instrument is immense, this thesis will try to show the importance of considering furthermore the physiology of the singer which can summarize multiple issues at once: the approach to the tone and to the sound in general, and other multiple artistic aspects related to technique and expression.

The comparison between the voice and playing string instruments is not new, but the specific voice resources applicable to violin playing have been detailed not long ago and are not well disseminated nor used within the classrooms.

Most of violin students are concentrated on technical aspects of improvement such as clean playing and fast reactions; however, listening to the singers creates an opportunity

[2] (R.J. Campbell , W. Robinson , J. Neelands , R. Hewston & L. Mazzoli, 2010, p. 135-154)

to detect and resolve the problems, not only in lyrical parts, but also in virtuoso passages. The lack of intuition for the correct voice leading, the approach to the tension in the intervals, colors and timing, could be drastically improved by training the ear with the vocal repertoire.

Training the violinists' ear to follow the leading singers will emphasize the deficiencies in their violin playing and possibly lead to self-criticism. The singers have undoubtedly brighter stage presence, enhanced communication with the audience, clearer understanding of musical colors and articulation, features always attached to the specific word and character, whereas the violinists should improve consciousness towards all these widely neglected issues. These important artistic qualities and many others are often missing in the violin performances, hence, it becomes a special challenge attempting to teach these skills.

¨Today, it has become more difficult to differentiate one violinist's tone from another. The individual quality of the singing tone, which was the hallmark in violin playing by the golden age generation (Ysaye, Kreisler, Heifetz, Menuhin, Oistrakh, etc.) has deteriorated¨, writes Vladimir Dyo in his thesis ¨The application of the *bel canto* principles to violin performance.¨[3]

Many violin students graduate every year with the high diploma. The arts have become a reachable goal for a larger percentage of population. The unification of teaching systems and approaches has created an undistinguished mass of players. Which were the qualities that distinguished one violinist from the other in the past generations and

[3] (Dyo, 2012, p. v)

how would it be possible to fight against the impersonal unexpressive playing in graduated students today?

The concentration of a singer during the moment of the delicate *cantilena* often does not exist in violin students. The violin performer can watch TV while playing, whereas it is merely impossible for the singer, as the mind can never be absent not only for the sake of the text, but for the tone production itself. This behavior is not usually addressed in violin class or even during the performance. Nevertheless, the concentrated consciousness during the tone production is precisely what made the old school violinists' sound so individually special.

Some of the present leading singers recall having studied violin in the past. Among them, Krassimira Stoyanova, soprano and former violinist, has the most exact intonation and agility and purity in her voice. Another top singer, Lidia Vinyes-Curtis, mezzo-soprano, is also a violinist today. She reflects on some of the differences, similarities and

deficiencies of both instruments in her interview:

"These two instruments require extreme technical excellence. Both have predominant soloistic roles and the sensation of being totally exposed in front of the public, but in my experience it is even greater while singing. The melodic line on the violin is determined by a good legato with the bow, the contact with the strings and the bow changes (good balance of the arm weight on the bow, etc.), this would respond in the voice to a continuity and diaphragmatic support to maintain the famous ¨singing line¨. The violinists tend to fall into the excess of self-control and over other musicians. While singing as a soloist with the orchestra, the principal deficiency that I have observed, on one hand, is that the violinists do not breath with me. On the other hand, they tend to make shorter or longer musical phrases than mine by purely technical issues such as the quantity of notes on the bow or strings crossings, hence neglecting musical criteria."[4]

This interview overlooks once again the necessity to bring the consciousness of the violinists back to the reality of expression. Music is the sound and therefore obtaining beautiful and unique tone together with the correct phrasing must be the main goal throughout the studies.

Glenn Gould, the famous Canadian pianist, is known for singing during his recording sessions. Even with advanced technology, it is still difficult to remove his singing from

[4] Son dos instrumentos que requieren de una excelencia técnica extrema. Los dos tienen un lado solista muy marcado y la sensación de estar totalmente expuesto ante el público es casi la misma, siendo ésta (según mi experiencia personal) mayor en el canto. La línea melódica viene determinada en el violín por un buen legato de arco y contacto del arco con las cuerdas y sus cambios (el buen balanceo del peso del brazo sobre el arco, etc...), que es lo que correspondría en la voz a la continuidad en el apoyo diafragmático para mantener la famosa "línea de canto". Los violinistas tienden a caer en el exceso de control técnico sobre sí mismos y los demás. La principal deficiencia que he observado cantando de solista junto a orquestas, es que los violinistas no respiran conmigo. Por otro lado, suelen hacer frases musicales más cortas y a veces mucho más largas que yo por cuestiones puramente técnicas de cantidad de notas en un solo arco, o por un cambio de cuerda y no por una cuestión musical. (Translation Oksana Solovieva)

the recordings. Moreover, his multiple voice leading is impressive and the phrasing unique. This demonstrates that the harmony of the whole body with the instrument must be unified, while many violinists consider that their playing depends entirely on hand motions' control.

Can a violinist explore the possibilities and methods of ¨remembering¨ the vocal origins of the instrument by bringing back the necessary consciousness to the tone production and legato? This question will be explored in this thesis through practical experiments and research.

This thesis will not focus on all possible voice resources available, but rather on the most neglected and important aspects that can be applied in violin courses today. Hopefully it will inspire further investigations on the subject. While observing the matter over a long period of time, the important questions for the violin interpretation and teaching has been raised in the necessity of prove.

2. Overview of the existing materials

¨For centuries, —emulating beautiful singing has been a model for violin performers. Since the late Renaissance and early Baroque periods, a trend toward homophonic style, melodious songs, and arias, had a tremendous influence on pre-violin and violin performers, and even on luthiers.¨
-Vladimir Dyo[5]

The comparison between the voice and the string instrument is not new, but the precise vocal resources applicable to the violin playing have not been classified up until today.

The importance of imitating the voice on the violin has been stressed in the past, but the examples are brief and sporadic. The core question that this thesis is trying to investigate is how to bring back some of the voice consciousness that is missing in violin students today. The practical work with violin students throughout many years helped us to determine a method that should be used today. Innovative ideas could be based on the already existing materials or suggestions from present leading teachers and interpreters, and on the teaching experience.

An overview of the existing literature on the subject and dissertations will be listed below as well as some recent articles in professional magazines.

Musicology materials:

[5] (Dyo, 2012, p. 2)

One of the most respectful books today on the violin origins is a work by David D. Boyden, *The history of violin playing from its origins to 1761 and its relationship to the violin and violin music*. Boyden states that the origins of the violin are deeply rooted in the voice doubling and its imitation. At a certain point it has separated from voice and became the ¨voice¨ in itself. “The violin in its earliest stages served two principal functions: to play for dancing or entertainment and to double vocal music or to accompany it.” [6]

The strong vocal influence on the violin performers is evident from its roots. ¨Apart from its role in dancing, the sixteenth-century violin lived under the overpowering shadow of a dominant vocal music. Much of the time the violin served anonymously, doubling the parts of the voices or sometimes playing the vocal pieces with instruments alone - one reason why a substantial amount of music actually played by instruments does not appear as instrumental music.¨[7] Boyden adds: ¨The practice of doubling voices led, naturally enough, to a notion of playing vocal pieces by instruments alone. In this way instrumental forms like the *canzona* sprang from vocal models and began their separate instrumental existence.¨[8]

F. Geminiani, in his 1751 treatise *The Art of Violin Playing*, wrote: ¨The intention of music is not only to please the ear, but to express sentiments, strike the imagination, affect the mind, and command the passions. The art of playing the violin consists in giving that a tone that shall in a manner rival the most perfect human voice.¨[9]

[6] (Boyden, 1990, p. 50)
[7] (Boyden, 1990, p. 52)
[8] (Boyden, 1990, p. 53)
[9] (Geminiani, 1751, p. 1) [Translation Oksana Solovieva]

In her notable book on stylistic roots of Paganini´s art, Tatiana Berford devotes one of the five chapter entirely to the instrumentalism of Paganini in relation to the Italian vocal art of his epoch, and their mutual influences: ¨In big part this problematics is one of the biggest questions in the history of music and philosophy - the question about the relation between the vocal and instrumental beginnings.¨[10] She refers widely to Asafiev´s thesis *Humanising the instrumentalism*, where the relation between the vocal and instrumental music is overseen through the evolutionary positions in which the vocal origin is predominant. T. Berford indicates that the beginning of the repertoire interchange between the violin and the voice occurred at the end of XVII - beginning of XIX centuries, starting from some of the Viotti´s violin concertos.

According to T. Berford´s book, Paganini had multiple personal affections for singers. He even paid the vocal studies for some of them: ¨it would be natural to suppose that this big interest of Paganini to the vocal art became realized in his compositions. Artist sometimes even sang in friendly circles.¨[11]

Clive Brown, in his widely read book today, compares the types of vibrato that have existed in the violin playing of the XIIX century and the singing types of vibrato: ¨Like so many string-playing effects it [vibrato] had clear parallels with singing - in this case with the confusingly named singer's vibrato. It is also closely related to *portato*, being the most extremely legato form of that technique.¨ And he adds: ¨Whether such effects in singing were produced by the chest or by the throat is unclear. Equation of a pulsation without variation of the pitch with left-hand vibrato on string instruments, rather than bow vibrato, implies that this was the most common type of string vibrato. The

[10] (Berford, 2010, p. 261)
[11] (Berford, 2010, p. 271)

continuation of such vibrato techniques in XIX singing is attested by diverse sources..¨[12] The chapter on the vibrato gradually overlaps with the violin techniques, mentioning Luis Alonso violin method, Hermann Schroder *Die Kunst des Violinspiels*, Dotzauer *Methode de violoncelle*. Then, he applies these references to the most renowned vocal method by Manuel García *New treatise*.

In relation to the ornaments, Clive Brown compares the vocal music with the violin interpreting: ¨Thought vocal music, and opera in particular, may have exhibited the most extreme manifestation of artistic freedom in the late eighteenth century and nineteenth century, a similar approach was by no means excluded from the performance of solo instrumental music. Violin music, which allowed the closest approach to the eighteenth and nineteenth-century instrumentalist's ideal of emulating the human voice, provides some illumination examples.¨[13] Regarding the similarities of the articulation, he states: ¨Many nineteenth-century writers of instruments and vocal methods contented themselves with general statements about articulating phrase divisions that were not specifically marked by the composer. In most part the musician must let himself to be guided by his correct feelings. The violinist Pierre Baillot, having made the obligatory connection between music and speech, observed that the musical equivalents of punctuation marks are crotchet, quaver, and semiquaver rests, his assumption being that these would have been included by the composer, but he recognized that there were also light separations, silences of very short duration that were not always indicated.¨[14] This is a fantastic quote in order to realize the necessity of awakening and cultivating the violinist's taste in order to create the correct feeling and hearing reflexes

[12] (Brown, 1999, p. 539 - 540)
[13] (Brown, 1999, p. 436)
[14] (Brown, 1999, p. 152-153)

in order to take the correct and tasteful decisions for the ¨unwritten¨ interpretative purposes. The realization of the close connection between singing and natural speech, introduces the necessity of the application of this parallelisms in violin interpretation and teaching.

Curiously enough, the publication of quite a few novels on this subject, such as *Voice and Violin, Sketches, Anecdotes, and Reminiscences*[15], *The Voice of the Violin*[16] and *The Black Violin*,[17] where the main characters debate about the similarities between the human body and the violin.

Violin methods and biographies:

A New History of Violin Playing: The Vibrato and Lambert Massart's, by Zdenko Silvela was created in 2001. In this book, the violin is referred as ¨another human voice, its model, being able to reproduce all kinds of moods, that go from the sorrow and pathetic to lyrical happiness and exhilarating joy.¨[18]

In the specific methodological literature, one can find suggestions and interesting references to the union of both instruments. The most distinguished violin professor of Franco-Belgian violin school and composer of important violinistic repertoire, Charles-Auguste de Bériot, was married to one of the most renown singers of the nineteenth century, the mezzo-soprano Maria Malibran. He brought to the violin the *bel canto* style

[15] (Phipson, 1978)
[16] (Camilleri, 2003)
[17] (Maxence, 2003)
[18] (Zdenko, 2001)

of his wife. His violin method[19] focuses on 'imitating the accents of the human voice' and betrays the influence of the singing treatise by Malibran's father, Manuel García. ¨He recommends introducing *messa di voce* over an entire phrase rather than on individual notes… He discusses each in turn, clarifying his instruction with duet arrangements of opera arias, complete with texts, and consistently providing analogies with vocal performance. He believes violinists should aim to match singers' diverse shades of articulation (particularly of consonants), points of repose and expression in the phrasing of melodies, and natural 'method of separating words and syllables to give them more emphasis and accentuation' according to the prevailing sentiment or character. Viewing the bow as the violinist's equivalent of the singer's breath, or even larynx, Bériot observes the hierarchy of the bar and the traditional rule of down bow by marking 'all the long syllables with a down bow, and the short with an up bow'. Bériot considers *portamento* as an important effect for facilitating cantabile.¨ And he adds: ¨He aligns them with the singing of 'two notes joined by the same syllable in vocal music'.¨[20]

The most renowned violin professor, conductor of the opera theater orchestra, composer for both voice and violin and interpreter, violinist Louis Spohr (1784-1859), not only wanted to get close to the beauty of the voice and imitated it successfully, but he pretended to become the best interpreter on the performance of his 8th violin concerto in A minor op. 47. He is also the author of a number of operas, songs and duos for the violin and the voice.

[19] (Bériot, 1857)
[20] (Stowell, 2014)

Twentieth century violinists and pedagogues, such as Isaac Stern in his book *My first 79 years*, recognizes that singers naturally possess ¨unbelievable possibilities incorporated in the sound and phrasing.¨[21]

The founder of the famous Russian violin school, Yury Yankilevich, was one of the strongest defenders of the necessity to use the voice techniques on the violin and himself ¨had a small but very nice voice. Often he was up for singing.¨[22] ¨Now it is hard to say exactly if it is due to the influence of Ershov [singer] or by any other reason, the love of the art of singing was born in Yury Yankilevich, which he carried throughout his life and that explains a lot in his pedagogical art. Although the professional study of singing was not possible due to the poor health of his vocal cords, to his students it was extremely valuable when he sang the musical phrases, it gave much more than explanations or examples. He was a master of the vocal sound coloring and had a nice baritone voice, not big but with a warm quality. Yuri Yankilevich understood very well the vocal art and was recognized for it. Not many people know that he had been involved in few vocal competitions and his opinion was valued by important specialists.¨[23]

This legendary teacher insisted that a concept such as beautiful sound does not exist

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[21] (Stern, 2001)
¨невиданных возможностей, заложенных в звуке и фразировке¨ [translation by Oksana Solovieva]

[22] (Yankilevich, 2002, p. 239)
¨Обладая небольшим, но очень приятным голосом, Юрий Исаевич не прочь был спеть.¨ [translation by Oksana Solovieva]

[23] (Yankilevich, 2002, p. 239)
¨Сейчас уже нельзя сказать точно, под влиянием ли Ершова или в силу каких-то иных причин зародилась у Юрия Исаевича великая любовь к пению, к вокальному искусству, которая многое объясняет в его скрипичном педагогическом творчестве и которую он пронес через всю свою жизнь. И хотя профессиональным занятиям Янкелевича вокалом помешали не совсем здоровые связки, его ученикам очень помогало, когда он пропевал музыкальные фразы — часто это давало гораздо больше, чем объяснения и показ. Он мастерски владел звуковой вокальной палитрой, и надо сказать, что баритон был у него хотя и не очень большого объема, но приятнейшего, теплого тембра. К тому же Юрий Исаевич очень хорошо понимал вокальное искусство и был признанным в этой области авторитетом. (Мало кто знает о том, что Юрий Исаевич принимал участие в работе нескольких вокальных конкурсов и к его мнению прислушивались крупные специалисты вокала).¨
[translation by Oksana Solovieva]

abstractly, detached from the piece, and the most important is to perceive the violin as a singing instrument, a feature that comes from its nature: ¨Comparing the tone of the violin with the human voice, Yury Yankilevich insisted not only on its beauty. He was saying that the best sound is the one that passes some kind of meaning her.¨[24]

This issue is better developed by understanding the union between the sound and the word, that is to say - by singing. Apart from the benefits of the study methods, concentration, aesthetics and goals concerning the tone and overall connection with the body, singing provides the instrumentalist a closer understanding of the general meaning of the work and sound production specifically.

Often, Yankilevich complained that many modern violinists have lost singing qualities in their playing, and some performers avoid long legato by changing often the direction of the bow: "In my opinion it is a mistake. One can not take away from the violin its most important quality - singing- because among all instruments, violin stands out as the one that has the best singing qualities."[25] Yuri Yankilevich also linked the singing tone with the capacity of slowly drawing the bow on the string.

"Performances with Shaliapin and Ershov [singers] remained forever as a deep emotional experience. From these magicians of the vocal art, Yankilevich has been taught the mystery of *bel canto*, expressiveness of dramatic *parlando*, and richness of the artistic intonation."[26]

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[24] (Yankilevich, 2002, p. 272)
¨Сравнивая звук скрипки с человеческим голосом, Юрий Исаевич добивался не просто красивого звука. Он говорил, что наилучший звук — тот, который выражает то или иное содержание.¨ [translation by Oksana Solovieva]
[25] (Yankilevich, p. 205)
[26] (Yankilevich, p. 170)

Reporting one of the few examples on how to use the voice methods on the violin, Yury Yankilevich expresses: ¨In *Melody*, by Gluck, I propose not to start the sound but rather continue it. The hand makes a circular motion above the string in order to avoid the accent. It will create something like and *auftakt*, as if a singer takes a breath. In this way the sound appears naturally.¨[27]

In an interview with Frederick Martens (published in 1919), another renowned violin pedagogue of the franco-belgian school, E. Ysaye, states something that is still true nowadays: “too many technicians of the present day do not sing any more. They overcome their difficulties - more or less happily; but the effect is too apparent, and though, at times, the listener may be astonished, he can never be charmed.”[28]

On the contrary, in the voice literature there are practically no references to the violin.

The voice director of Shakespeare’s company, Cicely Berry, refers to the violin in her book *Your Voice and How to Use it* in these terms: ¨Let us go back to the analogy of the violin for a moment, so that we are quite clear about the reasons for the exercises. We saw that the breath acted as the violin bow, in that it strikes the vocal cords which act as the strings and vibrate making the initial sound, and that sound then resonates in the cavities of the chest, neck and head, as the violin sound resonates in the box of the violin… Just as with the violin you can hit the strings too hard, or not hard enough, so with the breath.¨[29]

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[27] (Yankilevich, p. 204)
¨В "Мелодии" Глюка я предлагаю звук не начинать, а как бы продолжать. Для этого рука делает круговое движение смычка над струной, чтобы не было толчка. Это как бы ауфтакт, как певец берет дыхание. Тогда звук возникает естественно.¨ [translation by Oksana Solovieva]
[28] (Martens, 2006, p. 4-5)
[29] (Berry, 1995, p. 54-55)

In 1825 James Rennie writes: ¨Some have compared the voice to the wind instruments. M. Ferrein and others, on the contrary, have compared it to a violin, the vocal chords being in this instance supposed to perform the office of strings.¨[30] It is worth comparing the vibrato of the voice with the vibrato of the violin, especially on the final notes.

Articles

In recent years, focusing on the necessity to study and imitate the voice, the number of articles in professional journals devoted to string players has shown notably increased. Nearly every recent issue of *The Strad* magazine contains highly interesting articles referring to the subject. Many refer to finding their personal sound, the way of interpreting or finding their ¨voice¨ as string players, others discuss the importance of the tone production for beginning students and how it is related to the human voice, others look for improving their playing by interdisciplinary associations.

Some great violinists refer to their instrument as their ¨voice¨ and how difficult it is to have to change one instrument for a new one: ¨It is like a person who wants to sing and is looking for a perfect voice. Losing the 'Lady Inchiquin' violin was like someone had taken my voice away¨[31], comments the violinist Frank Peter Zimmermann comparing the violin with the voice.

The issues fully listed in the bibliography attached to this thesis reflect what has been published only in the past few years. Searching through the issues of *The Strad* professional string magazine earlier than 2014 there were fewer articles on the subject.

[30] (Rennie, 1825, p. 204)
[31] (Zimmermann, 2016)

In 2015, the violist Nobuko Imai published an article ¨The viola should sound like a human voice¨ [32]. Also, the double bass player Matthew McDonald in 2017 evokes the idea that ¨players should use the bow not only to sing, but to speak¨[33]. Very interestingly, in his article Matthew proposes to his students not only to sing or to play the *lieder* on the instrument, but also to invent the words for the instrumental pieces in the composer's language. Cellist and baritone Matthew Sharp also wrote an interesting article on March 1, 2017, ¨Connecting, communicating and playing with character¨[34], where he reflects on the integrity of being a musician and communicating with the audience.

In another article, ¨How to bring 'grain' to your sound¨, from February 3, 2017, Matthew Sharp also comments on his teaching method and his own process of starting to sing: ¨I encourage my students to bring their 'inner body' – with all of its unplanned, unpredictable, unforeseen authenticity – to the sounds they make. Singing, moving to and through, inhabiting and incorporating the spirit of the music, are well-documented ways to make this connection. Some years later, studying singing with Ulla Blom, the notion of 'grain' arose again. Through an engaged body, what she called a 'hooking up' of support (from the pelvis and the genitals) with the physical sensation of the voice resonating in what some people call 'the mask' – that fizzing, buzzing place around and behind the cheekbones, sinuses, eyes – she encouraged me towards creating a 'tone' not just a 'sound'. At the sonic level, this 'tone' was shimmering with upper partials as well as rolling with a free, open resonance. At the level of meaning and expression, it was brimming with intention and therefore inflection – you can't tell a story without either. In my mind, it was Ulla's version of revealing 'the grain of the voice'. [...] SING! Connect

[32] (Imai, 2015)
[33] (McDonald, 2017)
[34] (Sharp, 2017)

with your pelvic floor, lungs, spine, everything that is the fuel, engine and resonating chamber of human sound. Bring THAT to your string tone.[35]

Following the same patterns, the British violinist and Royal Academy of Music professor violinist, Jack Liebeck, in his article from *The Strad* magazine published in January 23, 2017, says: ¨Sing your way to string playing perfection. [...] Breath control is very much like bow control. We naturally know how to manage our breath to create crescendos, to naturally develop the sound and color of a long note, and to use consonants at the beginning of notes – 'pa, la, da, ca' etc. I increasingly find that the way to bypass many minutes (hours, weeks, months) of explanation is to get the students to sing the phrase before they try and play it. [...] The more I teach my students at the Royal Academy of Music, the more I realize how my singing lessons and singing in various choirs as a child played a part in my philosophy of playing the violin.¨ [36]

¨I love the specific color of each string – it's not always about making the sound as equalized as possible. Each string has a different voice.¨[37], reflects Kronberg Academy professor, Frans Helmerson, while giving a cello masterclass that was published in *The Strad* magazine on July 6, 2016. String players as well as singers usually look for the unification of registers in their instrument, but here Professor Frans Helmerson proposes to treat each string as a different human voice.

¨The biggest problem with today's playing is that people want to sound smooth and nice; everything is ironed out flat¨, says the cellist Raphael Wallfisch. ¨Because

[35] (Sharp, 2017)
[36] (Liebeck, 2017)
[37] (Helmerson, 2016)

instrumentalists make sounds without words, we often forget about telling a story. We get so bogged down with technical aspects of playing that we forget to give that big, open, direct message, which a singer does much more naturally. I use songs, speech and gesture every day in my teaching and practicing, because when you listen to music, you want to be told something. The singing voice, breathing, all the things singers do naturally – these are what we should aim to emulate as string players.¨[38]

Violinist Itzhak Perlman and his wife Toby Perlman discuss about the importance for string players to study how to sing: ¨When you play a stringed instrument, breathing and phrasing are so important [...] Everything has got to be vocal. Once you sung something you have a sort of double connection to the piece¨.[39]

¨The great string players of the past embodied the 'singing' style that signifies their relationship with vocalists of the time. Why can't today's stars capture the same atmosphere" asks Tully Potter in article at *The Strad* magazine from February 19, 2016 entitled ¨More string players of today should listen to singers past and present¨[40]. This is one of the most fantastic articles about the subject, which not only emphasizes the necessity for string players to listen more to singers work today, but also gives some wonderful examples of recorded duets of the past, such as Kreisler and John McCormack. He also mentions all the vocal techniques that were used by some string players of the past, such as *messa di voce* and *parlando*.

¨Vibrato is like a human voice – we never speak without a degree of natural vibration. But if you use just one type of vibrato in your playing, it is the same as speaking in a

[38] (Wallfisch, 2016)
[39] (Perlman, 2016)
[40] (Potter, 2016)

monotone voice¨[41], says renowned violinist Isaac Stern in *The Strad* magazine issue where he gave some Bach masterclass on January 7, 2016. He also defends the point that ¨[you] must play as naturally as you sing¨ during the masterclass in China documented in the movie *From Mao to Mozart*. ¨One sings very naturally. You must figure out how to make that sound on your violin¨[42] This thesis intend to find out exactly how one can this be figured out and which methods should be used.

A number of leading cellists today agree on the importance of incorporating vocal features in their playing. A very interesting experiment by the Argentinean cellist Sol Gabetta was performed at the Night of the Proms 2016 as an encore.[43] This experiment incorporated singing and playing the cello at the same time.

Another present young cellist, Alisa Weilerstein, also comments on the usefulness of singing while memorizing the material: ¨If I'm memorizing something intricate, I will take a small chunk and sing it, because the ear always has to lead. Then I play with the left hand alone.¨[44]

A New England Conservatory professor, cellist Laurence Lesser, reflects on very interesting analogies of the string playing and singing: ¨In my playing I aim for a vocal quality. This is not necessarily always a singing cantabile line, though, since the voice is also used to speak. I begin by singing a phrase and studying what I hear myself do. However, learning to listen to your own voice constructively is not easy. With practice it is possible to observe nuances such as the relative intensities of one note to another,

[41] (Stern, 2016)
[42] (Stern, 2016)
[43] (Gabetta, 2016)
[44] (Weilerstein, 2015)

articulation, intonation, tone color and vibrato. 'Thinking' the shape of the phrase can teach us a lot about structure, and is a necessary component of playing, but singing is the best way to be in touch with one's natural intuition. The voice can become the manifestation of combined intuition and rational musical thinking. It works particularly well because each person's voice is unique and that is what we look for in an artist. Singing also has the advantage of elevating the process from mere thought into the realm of doing. Somehow we can link the physical motion of the vocal chords to the physical motions of arms more easily than by trying to turn mental singing into physical playing: one set of muscles of the body is being related to another. As a practice tool I have built a personal repertoire of syllables that conform to varying bow strokes. For instance, I would never use the same syllables to sing the opening of the Brahms E minor Sonata as for the opening of the Dvorák Concerto. Some notes will be hard consonants (ta, pa), some will be softer (ba or da) while other are vowels. Then I work to capture these characteristics with the bow.¨[45]

Another cellist, Heinrich Schiff, compares the way singers and string players warm up: ¨Consider other musicians. All singers certainly begin the day with basic vocal exercises: an arpeggio, scales, exercises for tone and for intonation. They practice their routine in every key, making sure their voices are properly supported. Wind players hold long notes for endurance and breath control. We string players don't do this enough – especially young players, who should be trying to find their own voice.¨[46]

In a popular internet Violin channel, the 'Young Artist' Italian-German violin virtuoso Augustin Hadelich in his work "Training Your Left Hand to Think Like a Singer" provided

[45] (Lesser, 2014)
[46] (Schiff, 2016)

some great insights into sound production – and the importance of "training your left hand to think like a singer": ¨When you think about how a singer vibrates, you will instantly notice that the vibrato doesn't just switch on and off from note to note but rather it grows from nothing and blooms throughout the note changes and phrasing. I believe this is extremely important to do on the violin as well. I find that what often happens on a violin is that each finger has its own way in which it wants to vibrate. I typically find with violinists who the 2nd and 3rd fingers want to vibrate with a wider and faster vibrato, whereas the 1st and 4th fingers often produce a smaller vibrato - or sometimes little at all. I believe it is extremely important for you to will your hand to do exactly what you want it to do in a phrase - and in such a way that it will sound more like a singer. A good example is in the Bruch violin concerto opening where the 2nd finger falls on a lot of weak notes, but often I hear people vibrate the 2nd finger the most - where the vibrato should, in my opinion, be growing towards the suspensions.
Being aware of this, I feel it helps the phrasing hand together much better and allows us to produce a more singing-like quality.¨[47]

Other Doctoral thesis:

Investigating on the existence of dissertations about the connection between the violin and the voice, I searched in most of the existing thesis databases, although many of them belong to the universities with a restricted access for the students.

[47] (Hadelich, 2014)

In her thesis *Biagio Marini and the Meanings of Violin Music in the Early Seicento*, Rebecca Schaefer Cypess quotes: ¨Of all the musical instruments how truly marvelous is the nature of the violin: for none other, with such a small body, and so few strings, contains such a great diversity of sounds, harmonies, and melodic ornaments; and expresses the human voice, not only in song (in which other wind instruments may also succeed) but in speech itself; this one imitates so well in those quick [virtuosic] passages, when the adept hand comes to manage it, that it is a thing of wonder.¨[48] According to her quotes, the violin as an instrument is capable of imitating the human voice in its expression, shading of tone, and even sound as if spoken.

In the chapter five of her dissertation, she explores the vocal influences and models referring to instrumental literature and, in this case, violin literature. She writes: ¨Instrumental music is simultaneously more abstract and more material than vocal music; it is disconnected from the specific meanings of words, but it exploits physical acrobatics and concrete objects. In its embodiment of this contradiction, it may have aroused a sense of maraviglia in the listener.¨ [49]

Among the number of dissertations published on this subject that could be consulted, only one is directly related to the application of vocal techniques to the string instruments playing, more precisely to the violin: *The Application of Bel Canto Principles to Violin Performanc*e, by Vladimir Dyo, 2012 .[50]

This work, studied in depth by the author of this thesis, is the most exact theoretical contribution in terms of thought and approach. Vladimir Dyo mostly speaks about the

[48] (Cypess, 2008, p. 1)
[49] (Cypess, 2008, p. 5)
[50] (Dyo, 2012)

vibrato techniques, *portamentos*, the finger pressure and *glissando*. He also observes the great violinists of the past and compares them to the singers. He primarily focuses on tone production and tone formation, breathing, resonance, vibrato, *messa di voce* and the ranges, blending of positions. His study on the disappearance of the *portamento* technique and its link to the use of the shoulder rest is extremely interesting and the author of this thesis totally shares most of his points of view as they coincide with her personal observations and experiments. His analysis of the material is thoroughly done in multiple languages and therefore will not appear again in the present work, which will remain on a practical level.

The other thesis that connect both instruments do not really focus on the application of voice and the violin techniques as a valuable exchange of resources.

As partially related to the subject of the present work, it is worth mentioning the thesis by John Paul Rutland, where he explores the violin and the voice as partners in the English repertoire of the twentieth century. This thesis explores an unusual grouping of repertoire for voice and violin and concentrates in particular in three works by Gustav Holst, Rebecca Clarke, and Ralph Vaughan Williams.[51]

Norton, Cassandra Elizabeth, as a part of her graduate program in York University of Toronto writes in 2016 the thesis, *The Integration of Violin and Voice for the Solo Performer: A Set of Exercises, Studies and Short Pieces*, in which she creates an interesting method, by which a performer can learn to play the violin and sing simultaneously.[52]

[51] (Rutland, 2005)
[52] (Norton, 2016)

Music therapy specialists also have found useful to compare both instruments. The thesis by Tsz Hei Fatima Chan at the University of Evansville, 2012, *The impact of violin playing techniques specifically designed to simulate the human voice on anxiety reduction of college students*¨[53] addresses a questionable issue, as it intends to analyze if a violin imitating the human voice and breath has more effect on the anxiety levels in healthy individuals than a violin music that does not imitate it.

As a conclusion, it is necessary to notice that even though the application of vocal approach to the violin was described in Bériot´s *Méthode de Violon* written in 1857, no specific literature exclusively devoted to this subject has been published ever since. As it has been reported, among the number of consulted thesis, the doctoral dissertation by Vladimir Dyo, *The Application of Bel Canto Principles to Violin Performance*, defended in 2012 at Temple University, is the only one that specifically addresses the connection between both disciplines. Nevertheless, the increasing number of articles published in the last few years by prominent performers and teachers directly point out to the connection between both instruments and stress the necessity for string players to address the subject in practice. This thesis intends to fill this gap and follow the way leaded by Vladimir Dyo, completing the practical side of the matter.

[53] (Chan, 2012)

3. Motivation

The choice of the subject of this thesis came out from a real necessity in the didactics of music field to review the teaching process. Many great players, singers and luthiers recognize and justify the growing need for detailed investigation about what can be practically applied to the violin playing from the field of singing in order to enrich and improve the development of violin students. Apart from one existing thesis by Vladimir Dyo, who compares many aspects of both fields through the analysis of the existing methodological materials, this thesis seeks urgent detailed and practical development.

After a complete review of existing materials, articles, books and after conducting some interviews with notable specialists in both fields - the violin and the voice - the necessity to apply voice method to violin teaching became clear. The uniqueness of the doctoral thesis on this subject by Vladimir Dyo shows a gap in the research done in this area. His profound theoretical work proves the necessity to investigate and demonstrate the practical side of the matter.

The lack of concentration in violin students towards their sound, the ignorance about what are exactly the tone components, not to mention the insensitivity regarding the importance of breathing and expressive phrasing, becomes apparent while teaching violin at the conservatories today. The questions singers address while developing their technique in tone production and interpretation, is a frequently a missing concept in the violin lessons.

Why did the violinists stop experimenting and searching for *bel canto* sound and qualities in their playing? In his thesis Vladimir Dyo comments how this search occurred in the past: ¨In 1780s Francois Tourte perfected the design of the bow. From this moment on violinists were able to achieve full balance and absolute control over the pressure and speed of the bow and then emulating *bel canto* singing became possible. However, the violinists had to experiment for a few centuries with various kinds of bows to get closer to the desired tonal quality.¨[54] The desired tonal quality today is too vague and unclear. The vibrato, essential part of the expressive sound, is also being neglected. ¨Golden Era Violinists were able to control freely the width and speed of vibrato employing finger, wrist, and elbow independently or in combination. Unfortunately, in present pedagogical practice the careful and thorough study of vibrato is neglected.¨[55]

In the recent posts published in ¨Violin Channel¨ popular web magazine and in the important string players' magazine ¨Strad¨, the number of articles about the importance of singing or listening to the singers by the string players has grown. The necessity to find alternative ways to improve the phrasing, stage presence, articulation, sound and many other aspects became more evident. The extraordinary number of graduated violin students who tend to sound too similar has increased. The lack of individuality and personality in interpretation has risen proportionally with the number of music students. An increasing amount of articles that are emphasizing the concepts such as: ¨Players should use the bow not only to sing, but to speak¨ or ¨Singing during practice can help improve sound and characterization¨ proves the necessity of finding alternative solutions for the enrichment of violin students' concept of expression.

[54] (Dyo, 2012, p. 13)
[55] (Dyo, 2012, p. 26)

¨What does singing have to do with string playing? Everything.", states Tully Potter in his article published by *The Strad* magazine in February 19, 2016, entitled: ¨More string players today should listen to past and present singers¨. He describes his fascination with singers - "their beautiful legato and range of tonal shadings, the way they carried their phrases on the breath.¨ He adds: ¨Nowadays, if I go to a concert involving string players, I am bound to see other string players in the audience - often the same people each time - because many present artists seem too busy to go to listen to their colleagues. Yet I rarely see any of them at the opera, or at choral concerts, unless they are playing in the orchestra. Is it just coincidence that we are enjoying a superb generation of string players right now, but none who induce that 'vocal' feeling in me? Yes, they all play with excellent technique, and fine tone as far as it goes, but many of them could be interchanged without affecting the quality of the performance.¨[56]

¨On records by Kreisler, Busch or Jacques Thibaud you will hear many vocal effects: not just the *parlando*, but the *messa di voce*, in which the volume is gradually increased and then diminished, the *mezza voce*, or half-voice, and the *sotto voce*, a vocal kind of *pianissimo*¨ - reflects Tully Potter. ¨What I miss is the feeling that I am hearing well-rounded personalities, whose lives do not begin and end with their own careers. I realize that players of the old school did not have to cope with such a wide, deep repertoire, and we have acquired a century of new music, plus centuries of rediscovered old music. Players nowadays have a lot to cope with.¨[57]

¨Unfortunately in today's violin pedagogy too much attention is focused on finger agility and speed. However, the best violinists excel by their sound, and not enough attention is

[56] (Potter, 2016)
[57] (Potter, 2016)

accorded to lyrical pieces and phrasing. A proper investigation of vocal techniques applied practically and directly to violinists would be a great asset to all teachers and performers of the instrument,¨ reflects Masha Lankovsky, violin professor at Conservatoire de Versailles, France.

The concertmaster at Liceu Opera House of Barcelona, violinist Kai Gleusteen, comments on the following questions during his interview:

Do you think it's important for the violinists to listen to the singers in order to resolve the sound and legato issues?

Kai: Yes, I do think it is important. However I think it is even more important to sing oneself. I believe that listening to a singer can help us develop a concept of sound and phrasing but I don't think it is the only way.

Is there any specific feature the violinists should master that can be copied from the singers? Sound colors, different expressive attacks, vibrato, projection…?

Kai: Absolutely: phrasing, accents, timing, breathing, projection, stage presence.¨

Francesc Rodoreda, violin professor at professional conservatory of Lleida who has prepared many notable students for the Higher Conservatory, replies to the following question during the interview:

Do you think that listening to singers helps your playing? Do you sing while playing or teaching?

Francesc: Without any doubt. I have studied singing to solve the voice problems while giving classes. This need became a very useful tool. I play and then sing or vice versa,

or I sing while the student plays. It helps the intonation, the rhythm and the phrasing in this difficult task of learning how to play violin.[58]

What kind of benefits could violinists get from listening to vocal classes?

Francesc: During my vocal studies I was surprised by the amount of parallelisms between the voice and the violin related to the sound production and the technical aspect in interpretation. Additionally, the text associated with the music gives another dimension that could be difficult to understand for the instrumentalist. That is why I encourage my students to study voice.[59]

Another strong advocate of teaching singing in violin class was the renowned Russian violin professor Yuri Yankilevich. A student who was starting to study, for example, the Mozart violin Concerto, was obliged to listen to piano concertos, sonatas, chamber compositions. Insisting on the vocal nature of violin, he gave a special emphasis on listening to operas, romances and songs. He shared with his students the rare recordings collected for many years in his fonoteca. He loved listening to the singers, pianists, readers and the voices of the birds.¨[60] Working on Glazunov Concerto

[58] Sin ninguna duda. Estudié canto para solucionar problemas de voz durante las clases; esta necesidad resultó ser una gran herramienta. Toco y luego canto, o al revés, o canto mientras tocan… ayuda a la afinación, al ritmo y al fraseo en el difícil aprendizaje del violín. [translation by Oksana Solovieva]

[59] Durante mis estudios de canto, me sorprendieron los grandes paralelismos del canto con el violín en referencia a la producción del sonido, tanto en el aspecto técnico como luego en el interpretativo; además el texto asociado a la música le da a ésta una dimensión a la que a un instrumentista le puede ser más difícil percibir. Por eso anímo a muchos de mi alumnos a estudiar canto. [translation by Oksana Solovieva]

[60] (Yankilevich, 1993, p. 241)
Студент, начинающий учить, скажем, концерт Моцарта, обязан был послушать его фортепианные концерты, сонаты, камерные сочинения. Постоянно подчеркивая вокальную природу скрипки, особое значение Юрий Исаевич придавал слушанию опер, романсов, песен. Он щедро знакомил учеников с редкими записями из его замечательной, любовно собранной за долгие годы фонотеки. Он сам обожал слушать певцов, пианистов, чтецов, голоса птиц. [translation by Oksana Solovieva]

¨Yankilevich was extremely inspired... with big inspiration he could a few times sing the concerto from the beginning to the end.¨[61]

From the beginning of his studies the child plays on a reduced size instrument, normally of poor quality. Before the development of ear criteria to understand the beauty of the tone the student has already about ten or more years of playing experience behind. Nevertheless, the learning process that includes the coordination, memorization of long pieces, concentration, musical concepts and epochs, interpretation, reflexes and finally the comprehension of the process of practicing, all these aspects are highly necessary and should be applied to violin classes from the beginning. As a result, the aesthetics of the sound desired by the student getting to the higher levels of studies can be poorly formed in the inner ear or not exist at all. Apart from listening to the other violinists or instrumentalists, the best way to correct this situation is to listen to the singers, since one can learn many other valuable important tips in order to become a naturally expressive mature artist.

¨For young children, the tone produced by the instrument usually has a direct relation to the singing voice. Even if they aren't ready to analyze and then negotiate sound points, or complex relationships between arm weight and bow speed yet, they can be encouraged to sing through their instruments. They can start to think about where they are, who they might be playing to, how they feel about the piece and what it means.¨[62]

[61] (Yankilevich, 1993, p. 250)
Работая над этим сочинением со студентами (Концерт Глазунова), Юрий Исаевич необычайно вдохновлялся. Он мог, как рассказывала Ирина Бочкова, с большим вдохновением несколько раз пропеть концерт от начала до конца. [translation by Oksana Solovieva]
[62] (Bunting, 2016)

comments the Royal Northern College of Music senior lecturer in music education, Philippa Bunting.

The sound of a string player a lot depends on the work previously realized at the luthier's workshop. The ¨voice¨ that is placed in the hands of a player is actually pre-created by another master - this is the one he will have to deal with and work with throughout years of development and career.

Not only the fabrication of the instrument depends entirely on the luthier, but also its maintenance. Every professional string player knows that it is necessary to visit periodically the luthier for the sound adjustment. The older the instrument, the more sensitive it is to the changes of weather, pressure or humidity. The correct proportional placement of the soundpost and the bridge, that can differ imperceptibly, alters the sound drastically. The projection in the hall, the balance of four string registers and sweetness of the sound, the articulation and response to the bow, all this depends on the luthier's work in his workshop. Of course, it raises the question, how can the performer influence and improve all this factors throughout a long period of time?

Needless to say that a violinist in most of the cases may have financial access to a valuable instrument with an ¨important voice¨ or sound, luckily towards the middle of his career. The difficulty of obtaining a valuable piece is obvious while the necessity to learn and grow exists from the very early age. How to improve one's art of violin playing, concerning sound qualities such as projection, sweetness, power and richness of harmonics, with the restricted possibilities?

It is obvious that the tone quality is something that needs to be cultivated from the early age but it is not an easy task having an instrument that often does not permit the desired effect. When students enter in Higher Conservatories they usually keep developing the left hand and the bow technique, they enrich their repertoire, develop all the necessary components, but the most important one - the sound quality - is often neglected since they do not even consider it as important.

This thesis raises a question: how could violin students start to reconsider the most important goal for a musician - to produce a good sound. Can the most important qualities of the musicianship, such as the art of tone production, legato, phrasing and expressivity be brought back to violinists' primary attention through association between the voice and the art of singing.

In his interview the violin luthier Giuseppe Tenneriello considers that if violinists would have gotten back to work with luthiers more often, as it was done in the past centuries, in order to improve their tone, to balance the registers, among other important features, the general concept of sound ideal in the musician's head would improve automatically. There is a huge distance between the luthier and the interpreter nowadays while both work towards the same goal and with the same instrument. Tenneriello considers that today the luthiers are unfairly put aside while it is them who create the sound that the violinist modifies later on stage. He regrets sometimes having to adjust the violins without the violinists since it is their common search that creates precisely the vibrations and resonance called as ¨the instrument's tone¨ previously being created in his and player's mind.

The violinist Tasmin Little commented in the December 2016 issue of *The Strad* magazine: ¨At one point Menuhin took my violin and played a great chunk of the first section [of the piece]. I was astonished by the sound he made. There was such concentration and intensity; he was locked into the music and I had the very powerful experience of standing next to somebody whose entire body was being used to create this incredibly powerful music. One very important thing I learned that day is that it is the player who makes the sound. A very fine violin will make a difference to your playing, with no doubt, but a really great player can make any instrument sound reasonably well.¨[63]

One of the most common students' deficiencies today is the poor approach to tone, the lack of concentration on the sound and the loss of contact with the string. The students often do not recognize the problem because in fact they do not seek the beauty and fullness of tone, they rather concentrate on technical difficulties or something else, whereas with the imitation of the voice many things would come naturally. The whistling sounds or impure changes on bow direction, strings or positions, often do not bother the students because they really do not realize that their voice is being ¨cracked¨ or interrupted. If they thought about it consciously they would see that the notes sound often like a ¨smoker - singer¨, or a ¨weak - singer¨, or as a too wide vibrato opera singer. Not to mention that students often do not know exactly what they should look for about the tone and what are its qualities. If they were singers they would look for potential, sweetness, projection, metal, overtones and all other adjectives that come to mind while trying to determine why some singers touch our heart and some do not.

[63] (Little, 2016)

Voice students, unlike violin students, start to sing normally when they have grown up. Moreover, their instrument is an integral part of their body, they do not buy it nor exchange it, they adjust it with their teacher. Their study process is devoted to its correct use and the search for resonance improvement. The sound or the tone production is addressed constantly when making vocal exercises in every voice lesson and it is progressively modified by the teacher who acts as a luthier with a violin.

Analyzing both class structures, violin and voice, in higher conservatory, it becomes evident that one of the main deficiencies of violin students that might be improved adopting singers methods is the work on tone production. It is unfortunately too rare that the question of tone as such comes up in a violin lesson. Quite often the students merely demonstrate the repertoire work realized at home and are normally given new musical ideas, the methodology for putting into practice and some development instructions.

Apart from musicologists and violin professors, professional violinists also reflect on the close connection with singers. The opera orchestra violinist Oleg Spohr comments in his interview that most of the opera orchestral musicians have experimented that following closely by ear the vocal line easily leads to the sore throat. He believes that this phenomenon is explained by the fact that violinists naturally breath together with the voice line they accompany. Furthermore, any violinist who has hold once a very long note in the piano dynamic, which is very common in orchestral practice, knows that soon enough one gets as if ¨out of breath¨. This can be explained only by the fact that the bow is the violinist ¨air¨ and one should learn how to keep the air and distribute it with

controlled speed. The correct use of the violinist ¨air¨ - the bow - can greatly help the violinists not to suffer through similar passages.

Before the concert any singer warms up stretching and loosening up the body. The violinist simply runs the fingers. Pamela Franck said on the master class conducted in Longy School of Music in 2000 that more than warming up the hands before playing the most important thing would be to relax the body, focus and tune the ear to concentration. A violinist can play with cold hands because he will reproduce what he expects to hear.

Some new CDs for repertoire devoted to violin and voice duos come out last year, once again detecting the necessity to explore in this direction. Hilary Hahn and Joshua Bell have been the most celebrated.

In the trailer for her CD ¨Bach - Voice and the Violin¨ a soloist - violinist Hilary Hahn-, while performing with singers, mentions: ¨The fact that someone was treating [singing] the same music I was playing like notes with the meaning of words, was just illuminating¨, even though ¨I have always been aware of how singers sing, project and produce music.¨[64] We can see that great present violinists recognize the importance of applying the vocal approach on violin. Moreover, the results do not come easily without a large capacity of imagination and great experience throughout the years.

Another internationally acclaimed violinist, Joshua Bell, said in a famous quote: ¨when you play a violin piece, you are a storyteller, and you're telling a story.¨ Unfortunately, this is very often forgotten by the students and hence their interpretation and the

[64] (Hahn, 2016)

communication with the audience greatly suffers. It is worth noticing that the impression a musician makes on the audience is not merely technical but also depends on the way he *tells a story*.

Together with Hilary Hahn, Joshua Bell is one of the few violinists who has experimented with the vocal repertoire in his recording ¨Voice of the violin.¨ Among the historically renowned violin-voice duos are Perelman and P. Domingo, F. Kreisler and J. McCormack. The new ensembles of voice-violin like Duo Cortona also has been developed in recent years.

¨Concertgoers [argued Kurt Sassmannshaus in his masterclass] can expect a certain 'professional minimum': the notes will all be in tune and in the right place." Beyond that, "It's the quality of the sound that brings the audience back." Of course, that is what is all about. And yet, do we always keep the sound at the forefront of our teaching, and encourage the development of the individual voice? Aren't we sometimes responsible of pursuing a technical point stubbornly, with no reference to the demonstrable improvement of sound? That is, after all, the only true motivation for technical change. First and foremost, "if it doesn't sound any better, why should we do it?¨, says Philippa Bunting, a Music senior lecturer in musical education at Royal Northern College.¨[65]

Italian-German violin virtuoso Augustin Hadelich in his Violin channel interview comments: ¨For this video, I would like to focus on the first kind [of sound] - the singing sound - as I feel it is an aspect that perhaps in not often mentioned.¨[66]

[65] (Bunting, 2016)
[66] (Hadelich, 2014)

The importance of copying or learning from singers can be justified by the multiple references in methodological materials devoted to violin technique. But is it really applicable today? From the performance point of view, reading violin methods does not give as much result as being confronted to musical examples given by the teacher in the classroom. Another possible solution would be to work on a vocal based repertoire choice to be covered during conservatory education.

Searching for the artistic excellence in areas such as music, dance or theater is a never-ending process. The excellence can only be maintained by continuous learning and performance enhancement. It is important that students learn the possibilities offered by interdisciplinary approaches and consider them as an alternative source of inspiration for a constant progression throughout their career. The voice and singing are endless sources of inspiration for all instrumentalists, especially for string players.

4. Hypothesis

Nowadays, the violin playing has reached completely different dimensions in technical and virtuoso dimensions. Only in the last century, the expressivity and quantity of effects have increased twofold. Nevertheless the most important singing features have been neglected, the beauty and individuality of the interpretation have diminished. The approach as if a singer to the violin performing augments and improves its expressive qualities.

The observation of vocal classes as a violinist might bring useful ideas and methods that can be applied in violin classes. It will inspire further investigation about the correlation of both disciplines. The reflection on vocal methods will lead to improve violin teaching approach and will point out the necessity to open up to other disciplines such as voice in search of solutions.

The statistical questionnaire made to Spanish higher conservatory students that will be presented in this thesis, has detected the general awareness towards vocal repertoire and vocal performers. The general lack of interest showed by violin students towards voice expressivity creates insensible, mechanic and uninteresting players.

The violin students' lack of voice repertoire knowledge is reflected in their expressive capacities and imagination development. ¨Yet surely a little lateral thinking would not come amiss? If you really love music, do not relax gratefully when you have a day off, but challenge yourself with something different, on the basis that a change is even better

than a rest. Try to listen to the great singers of the past – Caruso, Lucrezia Bori, Giuseppe De Luca, Tito Schipa, Friedrich Schorr, Frida Leider et al. You might find something amazingly applicable to your own playing.¨[67] reflects Tully Potter in his article published in *The Strad* magazine in February 19, 2016: ¨More string players today should listen to singers past and present.¨

A basic presentation of vocal principles provided by the teacher creates a distinctive approach to violin classes which arises students awareness and creates immediate multiple improvements in violin technique and general interpretative approach. Many aspects improve significantly violin performance through simple associations with singing provided by the teacher.

The best *bel canto* principles include multiple aspects listed below. When being applied to violin playing they highly enhance student's technical and interpretative maturity. All these issues represent a group of common aims that faces the teacher while teaching violin in Higher level Conservatory.

Searching for *bel canto* qualities in violin playing and understanding the vocal nature of many compositions in violin repertoire will correct important issues and facilitate the students understanding of their deficiencies. Hopefully all this process will lead to the creation of a teaching method that will resolve various aspects of violin higher student's development.

In his theoretical work comparing the existing written methods, Vladimir Dyo states that ¨tone production and tone formation (breathing, resonance, vibrato etc.), tonal shading (*messa di voce*), and range (blending positions), through understanding the *bel canto*

[67] (Potter, 2016)

principles of singing and applying those principles to violin performance, one would have more means to give the tone its distinctive qualities.¨[68]

This thesis aims to prove that violin students would better learn and create brighter musical personalities by understanding and transmitting the context of performed works and by producing a personal and more beautiful tone through the singer's approach. The necessity of studying, understanding or becoming interested in voice techniques as a violin player will activate the imagination and attentive tone listening, a method based on vocal analogies.

Frequent listening to vocal performances rises up students´ criteria and awareness to make them understand their own deficiencies. This practice makes an important step towards improvement.

Violin students learn a great deal faster and create brighter musical personalities by understanding and transmitting the context of performed works and by producing personal and more beautiful tone through the approach learned from singers. The studying, understanding or becoming interested in voice techniques as a violin player activates imagination and attentive tone perception among other aspects.

By inventing the words to go along with the musical phrase and imagining real opera characters, the students will make their playing much more personal by ¨telling the story¨ rather than just focusing on correct score reading or technical perfection. Imitating the

[68] (Dyo, 2012, p. v)

singers on the violin the students´ playing increases expressive resources and resolves multiple interpretative issues.

The general and global negligence by higher level students towards their tone and different kinds of articulations is not likely to happen by imitating the voice and vocal continuity of the vowels and the articulation of different consonances. This musical criteria comes from frequent voice listening. This method raises the violinist's need to articulate while sustaining the ever-changing expressive flow of sound and musical line.

Accessing the same consciousness as a singer during tone production helps the students to be in contact with the present and therefore to have the power over it, in order to observe and control the sound flow and change. The development of a new type of consciousness in students by creating analogies with singers produces a high concentration on sound without interruptions and therefore it is managed with greater art.

While imagining the violin tone as a singer's one, the violin students will look for potential, sweetness, projection, metal, overtones, all features that one expects to hear from a good singer. For violin students who do not seek their personal ¨voice¨ or their personal tone of expression, the new proposed method can help to find a more individual and even more mature sound.

While the singers look for their tone formation in multiple body resonators, exploring this points as a violinist greatly improves the instrument resonance and helps the student to

reach an overall understanding of the vibration created by the sound which is being shared between the violin, the player's body and the public.

Listening to the meaning and the strong effect made by singers in the piano sections will inspire violin students to make effective *pianissimos* and give a concentrated meaning to these passages, instead of thinking abstractly of the difficulty of sustaining the bow. Furthermore, by resolving body tensions while looking for a bigger and freer tone may also help the violinist, as it does to the singers.

Extensive definitions of resonance are described in V. Dyo's thesis[69], as we can appreciate: ¨summarizing these statements, resonance could be described as a simple but essential principle—vibrations upon vibrations.¨ Vladimir Dyo considers that vibrating waves of strings transmit in both directions. Consequently, not only does the violinist's bow serve as a resonator to the strings but so does body of the player.
Imagining that the violinist's body serves as a resonator as well as the singer's body contributes greatly to the projection of sound by the violin students.

Projection into the hall and to the public can not be better described as in S. Marchesi's words: "Resonance is caused when a sounding body communicates its vibrations to another body...in other words, the second body is thrown into co-vibration with the first body."[70] It is a fantastic image that can inspire students' work for projecting and transmitting the vibrations to the listeners.

[69] (Dyo, 2012, p. 17-19)
[70] (Marchesi, 1978, p. 102)

The careful observation and care that a vocalist provides to his instrument, which is his body, gives a great example to any instrumentalist. Often the violinist forgets about his body and only pretends to dominate the external instrument through mind control. The musical intentions that naturally flow through the body are often the keys to reach a free interpretation. Vocal techniques of unblocking tensions or physiological barriers through body movements give a great resource to violinists in order to reconnect to their expressive being as a whole.

One of the most important expressive resources of *bel canto* is the *vibrato*. As it is produced by a human voice it has to be listened by a human ear. A correct *vibrato* should be "digestible" for the ear. When a violinist is used to listen to the voices and considers the violin his own ¨personal voice¨, he does not depend on only finger actions, but rather demands the hand to vibrate constantly with a variety of expressive tensions in order to match the vocally cultivated ear.
By listening and copying the singers, whose voices vibrate by nature as they are directly connected to words and emotions, a violinist can develop many possible variations of sound coloring.

Analyzing together with the students examples of singers with a high musical perfection will be much more useful for them than explaining the importance of the use of *messa di voce* and its interpretative purpose. This example of the sound shades of expression is what the violin student will learn from singers. He will strive to fit as much personal expression into one sound as the singers do depending on their roles' demands. Introducing in the violin classroom the audio or video recordings of great singers can be beneficial and inspiring for the students.

¨Understanding natural principles of the respiration system would lead violinists to a different and more natural approach in sound production, helping to achieve greater tonal quality.¨[71] Breathing during playing is a widely neglected issue in violin playing today whereas the correct use of it can help greatly to solve some technical and expressive demands.

The work of the singer with the air is a true art. Its control can be adapted by violin teachers in order to teach the students the continuous weight of the bow on the string, the conscious speed control and the intelligent distribution in order to approach its mastery.

The understanding of the vocal nature of ornaments and *melismas* that are found in violin lyrical repertoire will greatly improve the pasting, timing and its expressivity on the violin. If a violinist explores, for example, the trills made by a singer and is used to listen to the distribution of their speed and the moments when he begins or stops trilling, therefore it as well will come naturally while playing.

Adopting the singers' approach or consciousness towards the intervals and big leaps will create in violin students better understanding of the overall composition and create better legato and phrasing.

As a violinist, listening to the singers' work on the interpretation will greatly help to develop a natural feeling of the time flow within the storytelling, even if abstract. It especially helps to understand transitions, cadenzas and fermatas.

[71] (Dyo, 2012, p. 13)

Becoming familiar with the general vocal repertoire, and especially the operatic material, can provide to the violin students a better historic feeling. They can also develop a visual taste and get closer to understanding the stylistic nuances in different epochs. The knowledge of vocal repertoire and frequent listening to vocal recitals and operas improves the musical taste and aesthetics in overall individual playing.

The analysis and overview of existing violin repertoire in Higher Conservatories claim for the readmission of long-ignored vocal-based works. Its correct approach under teacher's guidance improves the student musicality and increases its musical knowledge of expressive resources. The work in class on these pieces will develop the necessary aspects of *legato*, *tenuto* and *cantabile* and will help to improve the tone quality, which is so important for a predominantly lyrical instrument such as the violin. It will also develop the general knowledge of vocal repertoire in higher level violin students, and finally it will develop the taste and the inner ear expectations from their own instruments.

5. Goals

The aim of this thesis is to examine the theoretical and aesthetic connections between two instruments: voice and violin. A new teaching method for violin will be developed by applying vocal techniques, such as relaxation, breathing, concentration and concepts of sound production, phrasing, interpretation and learning. We shall explore the idea that many concepts from singing, such as projection, *portamento*, *legato*, corporal techniques, and stage presence, among others, can inspire the violinist to attain a higher level of performance. This research is specifically addressed to students from Spanish Higher Conservatories.

There is a long existing and widely neglected nowadays connection between the two main melodic instruments, such as the voice and the violin. In this thesis we intend to point out what we can learn from the vocal metaphor and we support with many examples some of the aspects of teaching methodology that should be brought back into contemporary practice. This work aspires to increase the awareness towards this subject among violin performers, music specialists and violin professors, who could possibly be inspired by this investigation.

The main purpose of this thesis is to inspire violin professors by bringing back to the consciousness of violin students the origins of their instrument as a voice doubling and imitation. The experiments and interviews presented prove the importance to call attention to voice training methods as the key to improve many important violin issues, such as voice leading, phrasing and tone production. To summarize, this thesis invites to explore the possibility of increasing the expressivity of violin interpretation by the use of

imagination and adopting a new creative method that would reopen a chapter in violin teaching.

The objective of this research is to investigate and analyze the voice techniques that could be applied to the violin playing and to detect the most common points that can be improved in the violin playing by applying interdisciplinary approach.

This thesis aims to fulfill a gap in the Spanish education system for violin higher level students and support the necessity of using vocal techniques and images as valuable tools in order to improve the student's tone production, voice leading and legato, among other aspects.

To accomplish such objective, this thesis will not analyze all existing possible voice resources applicable, but rather focus on the variety of mostly neglected and important issues that can be applied in violin classroom today. It also aims to inspire further investigations on this subject and to create a catalogue of violin scores based on vocal compositions that should be incorporated in violin higher studies.

This research has been conducted to show evidence that to approach violin problems through vocal methods will give new possibilities to find rapid pedagogical solutions. To sum up, these pages intend to offer new ideas and therefore contribute to the improvement of actual violin teaching methods.

One of the objectives of this thesis is to defend the necessity of studying, understanding and/or becoming interested in voice techniques as a violin player. Through the

investigation it be will discussed whether this new method will allow to resolve faster and more efficiently some of most common violinistic deficiencies and make the students´ playing more unique.

The purpose of observing vocal classes as a violinist is to summarize all the similarities, detect the violin deficiencies determining the useful parallelisms that can be beneficially used in the violin classroom at a Higher Level Conservatory and to create a new line of pedagogical approach directly associated with another discipline.

The objective of the questionnaire presented in part II of this thesis is to gain statistics from a number of violin students from the Higher Conservatory. Through the general questions, it aims to detect and analyze the general situation related to the vocal and lyrical repertoire in general and to understand the origins of the most common deficiencies among the students in order to create an overall picture of the matter.

The objective of the work with violin students is to conduct a number of experiments by using the vocal imaginary and vocabulary that will be borrowed from the previous observation of the vocal classes and to analyze the results by comparing the audio extracts.

The objective of the research of the violin repertoire related to the voice is to suggest a catalogue of works that could be adopted by the Higher Conservatories. It intends to detect the important and rare pieces that are excluded from the violin repertoire today. All this work can be of a great benefit to violin students today. As its objective, this research pretends to inspire further investigation towards the vocal-origin repertoire for the violin and will propose

to the violin professors to encourage their students to cover more of such works during the academic year.

After finishing the investigation and experiments realized for this work, and by managing the obtained results, this thesis intends to justify that the students´ development should be based on the activation of the imagination and attentive tone listening, among other aspects based on vocal analogies. It also desires to show how to implement the suggested new method in the violin pedagogy and interpretation. The possibility to discover the voice techniques as violinists will conceivably open a new dimension for the interpretation and performance of the violin.

The objectives of the new teaching method are: to improve auto-consciousness about the student's' deficiencies, to improve the stage behavior and presence, to improve many artistic and technical aspects and to create new ideas to be applied in the violin classroom by offering a method that aims not only to coordinate both hands, but rather to coordinate the musical purpose with its physical realization. The accomplishment of all these purposes aspires to inspire the curiosity among the violin students for the investigation of other musical genres and, therefore, contribute to the development of the open-minded flexible artists.

6. Methodology and work plan

This work will use various methods, such as induction, theoretical and practical and will have a investigation-action characteristics.

Induction method will derive from the general overview of the current situation in the Superior Conservatories in Spain based on the professional experience of the author and supported by the multiple interviews and articles. The students´ survey will be conducted and multiple experiments realized and evaluated. From this analysis there will be generated a synthesis of the results in order to support the hypothesis and create the new violin teaching approach for the High Conservatories.

The theoretical method will be applied while supporting the proposed method general direction. The work with the existing bibliography will give an overall overview of the references in the existing materials and will be synthesized as a unique idea to apply. The observed vocal classes will be analyzed and interpreted for the particular use in the violin classroom.

After a complete overview of the existing materials, articles, books and after conducting the interviews to the notable specialists in both fields - the violin and the voice, it will provide evidence of the necessity of the voice method application in the violin classroom today. The unique doctoral thesis on this subject by Vladimir Dyo[72] shows the gap in the research towards this direction. His profound but theoretical work with the materials results in the necessity to investigate and demonstrate the practical side of the matter.

[72] (Dyo, 2012)

Therefore this thesis will be using practical method that is applicable by the teachers in their classrooms today.

The participative character of the thesis makes it an investigation-action work. The research and the experiments aim to result in the creation of the theory in order to justify the necessity of the application of the voice techniques in violin playing today.

The research will be based on the proposed objectives and its hypothesis. In the introductory chapters, the work with the bibliography, the research of the existing materials, interviews of the voice and violin teachers and performers serve as the justification of the necessity to investigate the chosen subject. The core of this thesis will consist of four parts that investigate and try to prove the proposed hypothesis resulting in the conclusive chapters, which intend to lead to the creation of the new teaching approach in the violin class of Superior Conservatories today.

All four parts of the body of work are a fluid process, where the work on one of them proves the necessity of and flows into the next chapter. In this manner the observation of the voice classes as a violinist and a violin professor logically will lead to the incorporation of valuable vocal techniques into the violin class experiment with students and the need for the statistical questionnaire; the experiments with the students will result in the proposition of the new list of works to be incorporated into the regular repertory of the High Conservatories today.

Observation of vocal classes	Questionnaire	Experiments with the students	Overview of the vocal based violin repertoire

The observation of the vocal classes as a violinist and violin professor will be conducted throughout the doctoral study years by attending the multiple vocal masterclasses and multiple open lessons with various professors. The different vocal schools would be addressed and represented by the American, Swiss, Spanish, Argentine and Russian teachers. There will be also observed online teaching classes by the world's leading singers of today and the past: Elisabeth Schwarzkopf, Grace Bumbry Plácido Domingo, Montserrat Caballé, Luciano Pavarotti and Ileana Cotrubas.

The observation will be done in order to detect and synthesize the similarities in vocal and violin deficiencies and create useful parallelisms after what only the relevant to the violin teaching ideas will be synthesized and presented in the thesis. Additionally there will be conducted numerous interviews with the notable voice professors and singers in order to get the maximum information and ideas specifically useful for the violin teaching.

The vocal teaching that can be applied in the violin lessons at the High Conservatories today is summarized from the observed vocal classes in a collection of quotes. Each quote will be ¨translated¨ into the violinistic technique concepts or the general

musicianship suggestions. In the vocal ¨language¨ it often communicates an important message in lesser words and it becomes imaginative and fresh for the mind of a violinist. In this way, creating the shortcuts towards the improvement in the mind of the violin students, this interdisciplinary co-relation serves as the main work part of this thesis.

The statistical questionnaire to 30 superior level students and recent graduates will consist of ten questions that will detect the common consciousness towards the vocal discipline among violin students today and the awareness of the relevance between the voice and the violin in general. It will detect the general awareness of the violin students towards the vocal repertoire and vocal performers.

The experiments with the students will be realized in the setup of violin lessons, where the students will be offered to find the solutions to their deficiencies through a different angle and by association with the singers. Each student with his or her different demands, such as, sound projection, intonation or interpretation, will be proposed an alternative vocal idea to find the solution.

The lessons will be entirely recorded, and in order to support the hypothesis of this thesis, and the audio examples of ¨before¨ and ¨after¨ would be included in the audio CD attached. The method used to provoke the changes in the student's interpretation will be written in the corresponding chapter.

A number of the important aspects of violin performing, that generally represent a common work in the violin classroom, will be addressed during the experiments. Each one or a few of these specifics can be applied to one or multiple students, and the

choice of the work with each one will be based on the demand of the student himself, or on the demand of the solution from his or her professor, or on the pedagogical experience and knowledge of the author.

The proposed work with the experiments will serve as a general overview of the existing possibilities. This thesis will not stress one or the other aspect in depth, rather it will defend the usefulness of the general method that is intended to be explained in the conclusive chapters.

The following ideas, proposed below, will intend to improve the violin students´ interpretations during the experiments:

1. The capacity of abstract understanding of the context of the violin pieces. The augmentation of the expressive resources that makes the playing more personal will be associated to the amount of information a singer introduces in one word.
2. Development of the imagination and better phrasing will be worked on by creating the text for the abstract phrase. The vocal concept of the continuous vowels and articulated consonances will be applied to the violin in order to improve the articulation and the tone at once.
3. Search for the beauty of the tone and improvement of the tone production, as well as finding personal sound and pre-hearing of the desired tone, will be explored by the association and attentive listening to the singers.

4. Focus in piano dynamics and quality forte dynamics will be linked to the intonation and the greater resonance with the projection into the hall and will be associated with the singers striving for the projection and looking for resonators.
5. Unblocking tensions or psychological barriers in the interpretation will be addressed through the idea of the singers´ body movements.
6. Control and use of the vibrato will be experimented through the direct association with naturally vibrating voice.
7. Use of vocal effects, such as *messa di voce* and *son filé,* will be intended to be associated with and reproduced on the violin.
8. Breathing during playing the violin will be introduced as an important alternative resource borrowed from the use in the voice discipline.
9. Control of the bow weight, speed and distribution will be directly associated with the identical work with the breathing and air of the singer. The diaphragmatic support will be associated with the left hand support.
10. Ornamentation and trills will be addressed on the violin as it is done with the voice.
11. Better consciousness of the violinists towards the intervals will be developed with the association to the singers´ preparation to the leaps.
12. Timing in transitions, cadenzas and fermatas will be imitated on the violin.
13. Development of taste and aesthetics through the general knowledge of the vocal and operatic repertoire and as a long educational process will be suggested.

The choice of the specific vocal idea or a concept will mainly depend on the receptiveness of the students, their personal needs and possibilities. The experiments will be conducted by first using the scales (in order to introduce the new angle of general vocal ideas applicable to the violin), and then by using the standard violin repertoire with

the voice originated pieces. Verbal use of the vocal imaginary and vocabulary for technical, melodic and expressive improvement will be applied.

Catalogue of scores

The students´ response to the work on the vocal-origin repertoire, as well the previously conducted questionnaire, will determine their general knowledge of such. The lack of knowledge in its turn will result in the necessity to investigate and create a new catalogue of scores that will consist of the vocal-based violin pieces, violin-voice chamber music pieces and furthermore - the vocal pieces composed by the violinists interpreters of the past. It all will serve to inspire the students to become more involved with the vocal repertoire and the violin professors to introduce these pieces in the habitual list of works to be covered during the study years.

Creation of the new method

Depending on the results of the conducted experiments in class with the violin students the new methodological idea will be proposed to be incorporated into the habitual didactic unit in the violin class for the High Conservatory. The description of the general idea of the method and its details will be described together with the comparison of the habitual didactic unit and the proposed new one. The conclusion will also provide possible contributions such as suggested lines of future investigations or complimentary articles.

II. PART TWO. THE WORK PROCEDURE

1. Obser vation of vocal te chniques applicable to the violin playing

1.1. Ob servation of vo cal classes as a violinist and violin teacher

¨The bel canto "best in singing" means that the singer should possess immaculate cantilena, smooth legato, a beautiful singing tone that exhibits a full palette of colors, and evenness of tone throughout the entire vocal range. Furthermore, the singer should be able to "carry the tone" expressively from one note to another, maintain long lasting breath, flexibility, and brilliant virtuosity. Without these elements, the singer's mastery is not complete… For centuries, —emulating beautiful singing has been a model for violin performers. Since the late Renaissance and early Baroque periods, a trend toward homophonic style, melodious songs, and arias had a tremendous influence on pre-violin and violin performers,¨
-Vladimir Dyo[73]

During the years of the doctoral studies I have been observing many vocal classes to learn from them as a violinist and violin professor. These experiences have been decisive for the composition of this work. In this chapter, the voice learning methods that can be applied to the improvement of violin lessons in Higher Conservatories are summarized in a collection of quotes coming from the observed vocal classes. Each quote is ¨translated¨ into the violinistic technique concepts or the general musicianship suggestions. In the vocal class language often expresses an important message in few words and it becomes imaginative and fresh for the mind of a violinist. Therefore, creating the shortcuts towards the improvement of the violin students' mind, this interdisciplinary co-relation becomes the main contribution of this thesis.

[73] (Dyo, 2012, p. iv)

Many valuable concepts from the vocal classes, such as the resonance, the breathing, the stage presence or the bow distribution, the work on sound and tone production together with practicing or performing tips, are observed as suitable to be adopted by the violin teachers in their lessons.

The vocal classes quoted below are only a selection of many lessons that were observed during the five years of study throughout this thesis and were chosen as examples that contain the most diverse issues about the subject. First of all, the lesson given by Tricia Pine is one among many others that were observed on-line. She was chosen as a representative of the *American vocal school,* although more lesson taught by other members of this school, for instance, by Julliard's School professor and mezzo-soprano Cynthia Sanner, were observed. The particular interest offered by Tricia Pine´s classes for the violinists is the focus on resonance and projection.

As part of an international overview, the classes by Swiss baritone and professor of *la Schola Cantorum De Bassel* Kurt Widmer[74], the Argentinean soprano Natasha Tupin,[75] and the *Russian vocal school* representative, the soprano and professor Inessa Prosalovskaya**,** were observed. The particular interest for this thesis in terms of breathing techniques that can be adopted for violinists were expressed during the classes of the professor Prosalovskaya and therefore the resumed ideas appear in this chapter in the collection of quotes from the four lessons observed in St. Petersburg, Russia.

[74] http://www.bach-cantatas.com/Bio/Widmer-Kurt.htm
[75] http://agente-artistico.blogspot.com.es/2011/09/natasha-tupin.html

The *Catalan vocal school* is represented by the soprano and professor Anna Ollet and the tenor and professor Vicenç Esteve. Anna Ollet, an active professor who has taught in both Higher Conservatories of Barcelona, ESMUC and Liceu, has granted the permission to observe her vocal classes in the *Palau de la Música* of Barcelona in a two days course. Even though other distinguished Catalan professors´ classes were observed as well, such as the classes by the soprano and professor Enriqueta Tarrés, the overall general line of Anna Ollet´s teaching is applicable to the violin in many aspects and is captured through the quotes listed below. The tenor and professor Vicens Esteve was chosen as a male voice frequent singer at the Liceu Theater today.

The last class that is chosen as a reference of this thesis, is an on-line observation. It is a compilation of some internationally acclaimed leading singers teaching suggestions. The authority of this professors and singers can not be questioned since they are the main representatives of the *world's singing heritage*. Among the six teachers are such renowned figures as Elisabeth Schwarzkopf and Grace Bumbry**,** who has recently visited Barcelona as a jury member of Viñas Competition 2017 and was an invited teacher to a masterclass in the Liceu Higher Conservatory, Barcelona. In this occasion, it was taken the opportunity to observe the classes and interview her in person. Other singers whose pieces of advice are included in this chapter are Plácido Domingo, Montserrat Caballé, Luciano Pavarotti and Ileana Cotrubas.

1. LESSON OBSERVED

Professor Tricia Pine[76]: ¨Resonance - How are you using your vocal resonators?¨[77]

Tricia Pine is one of the brightest representatives of the *American school of vocal teaching*. She holds a Master of Music Degree in Voice Performance from the Manhattan School of Music and is an award-winning performing, international public speaker, and experienced singing instructor and vocal coach. The set of various classes that one can find on internet are well structured and clearly explained. Very clear explanation of the resonance and its use is of great utility for violin students.

Tricia Pine: ¨Feel the nasal resonator as a cathedral where you observe the space and let the resonance happen. Do not drive or push the air there.¨

What can be applied to violin:

This suggestion helps the violin students to think about the resonance as a concept, start associating it with what they are imagining by this word with the actual results. It gives the idea to avoid pushing or driving the sound towards the resonance, just observe the space in order to obtain a sound that is not pushed or pressed, and rather fill a big space.

Tricia Pine: ¨Coupling the resonators is not using one or the other, rather all of them are working together.¨

What can be applied to violin:

[76] http://rejoiceinyourvoice.com/about/
[77] (Pine, 2017)

Thinking of multiple resonators being it the hall, the imaginative space, the violin itself or the head and the chest of the player, and the concept of them working together, can increase and free the sound of the violinist. The tension of the muscles will decrease as well because the resonance implies the harmonious co-vibrations. When multiple resonators are at work, the body relaxes and shares the vibration with the instrument and the space.

Tricia Pine: ¨Question yourself: am I allowing an optimal resonance?¨

What can be applied to violin:

A great question to be asked by a violin student. Often the violin student's sound is not free or alive. Many students struggle with the projection. Thinking about all the resonators of the violinist and allowing the optimal resonance while playing, will adjust the pressure on the string and relax the body of the player.

Tricia Pine: ¨The most important first resonator is the larynx. The last one is the chest.¨

What can be applied to violin:

As the voice resonators are multiple, the most important ones correspond to the larynx and the chest, being the other ones - the nose, the front and the top and the back of the head. By the direct association, the violin can serve as a continuation of the larynx and the chest resonators. Involving the body of the violinist into the tone production vocal resonance is a new concept that can be used to suggest future research lines that might indicate the usefulness of incorporating all resonators for violin playing.

Tricia Pine: ¨Back away to let things vibrate instead of looking at the bird in its cage. Do not be too involved. Become a sound observer.¨

What can be applied to violin:

This is one of the most important suggestions for the interpretation, especially in public. The person involved in the performance often drives to over control and the lack of spontaneity whereas being the observer creates the necessary distance in order to follow the happening. This is an important sentence the teachers can use to prepare their violin students.

Tricia Pine: ¨In order not to push or drive the sound, use the concept of allowing. Back off and find the flexibility within the body to support the resonance. Create awareness of feeling the sound.¨

What can be applied to violin:

Concept of allowing is one of the most important for free interpretation. Many students need to learn to back off as they consider that they are doing an effort to play an instrument, whereas the artistic interpretative approach would be the opposite by allowing the sound happen and back off. Creating awareness is a learning process towards performer's maturity, but feeling the sound is a process to become a mature artist.

Tricia Pine: ¨By relaxing the tang support the tone quality that you want to create. But make sure that your tone is balanced, supported and has not too much or too little of the air mass that is moving through.¨

What can be applied to violin:

Relaxing the tang or the facial features is an important relaxation tactic for the whole violinist's body. If any tension emerges on the violinist's face, it appears in the body as well. The balanced tone and perfect amount of the air mass (or bow) is an important technique to be mastered by a violin student.

Tricia Pine: "Recapture the sensations. The sensation of moving the sound through vocal mechanism.¨

What can be applied to violin:

Violinists often focus on sensations to get the correct posture or relaxation. But the sensation of moving the sound through the violinistic mechanism is a new concept. In general, the violin sound is not normally seen as something that an interpreter can move, it rather comes out of the violin abstractly. With this concept the sound would become movable and therefore avoid a starting point or an end. It becomes circular and continuous.

Tricia Pine: ¨Different vowels resonate in different places.¨

What can be applied to violin:

The concept of vowels and their resonance, is often ignored by the violin students as the idea of the sound as a color. If the idea of one continuous vowel is understood, the work on various vowels and their colors implies an advanced technique, which is currently only experimented by the great string players as cellist Misha Maisky playing Lieder by Schubert.[78]

CONCLUSIONS FROM THE LESSON 1:

The concept of resonance in the space allowing it to happen is a valuable suggestion for the violinists. Often the students look for bigger sound while applying more pressure into the string whereas allowing the optimal resonance is just the opposite. This concept might help to adjust the right amount of pressure just by introducing this vocal idea in class. Multiple resonators in this sense will imply not only the instrument as a resonating object, but the whole body of the violinist together with the instrument and space. Backing off as an observer not only greatly helps to calm the nerves and the interpretation in general, but it also creates resonance with the space.

Moving the sound by feeling it as an air mass that flows will create a direction of the sound that can be then adjusted or amplified. Often the violin students´ sound stays inside the violin, even if the instrument is of a good quality. Learning to project and send the sound into a big hall is an art to be learned from this vocal lesson by Tricia Pine.

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[78] (Maisky, 2017)

2. LESSON OBSERVED

Professor Inessa Prosalovskaya[79] is one of the leading vocal teachers today in St. Petersburg, Russia. As a past winner of the Viñas competition in Barcelona, she has been singing in the best world opera theaters in leading roles. She teaches today a big class of pupils, themselves international competition winners.

This lesson was observed at the Baltic Theater Institute, Saint Petersburg, Russia, on April 9, 2012.

Inessa Prosalovskaya: ¨The breathing is vertical and the sound is horizontal¨

What can be applied to violin:

The idea of vertical and horizontal space is a great one for a violinist in general, for whom a bow is horizontal, like the sound of the singer, and its support and pressure on the string is vertical. Adding the concept of breathing to it will help to eliminate the excess of pressure and free the vertical body.

Inessa Prosalovskaya: ¨One has to breath in the tempo of the music¨

What can be applied to violin:

This can be a great advise for the young violinists who start to lead in a chamber group or orchestra. Very often the initial breath does not appear in the tempo or the character of the piece. For instance, in the soft slow pieces in four quarter note subdivisions the initial breathing can not be too active. The same happens in those pieces of eighth note

[79] http://www.kino-teatr.ru/teatr/acter/w/ros/388967/bio/

subdivision or other uneven proportion. Moreover, the presto movement can not have a mild slow unclear breathing before the start.

Inessa Prosalovskaya: ¨Start singing from the height to which you have breath¨

What can be applied to violin:

This advice can be used as a breathing exercise for the violinists, especially to eliminate tension before the start and dead points. Breathing towards the height of the following note will help to get the right concept of sound in mind before starting and to control the speed and the pressure of the bow in order to create the desired color.

Inessa Prosalovskaya: ¨All notes should be sang on the same air. The notes are consonances but the tone and the sound are vowels and are inside each note.¨

What can be applied to violin:

This is probably the most valuable concept for the violin students to be learned from singers. The consonants are easily understood by students as the notes or bow or string changes, but it is difficult to feel the vowels and sound inside each note. Once the continuity of the sound inside each note is understood, the possibility to create different sound qualities and resonances becomes real.

Inessa Prosalovskaya: ¨Do not take too much breath! You won't know where to use it!¨

What can be applied to violin:

The air distribution is the art of singing. And ¨the art of the bow distribution is not taught any more¨, deplored Dmitry Sitkovetsky[80], violin soloist and conductor, at the violin open lesson at his home in London, March 2014. By the means of intelligent bow distribution, as well as intelligent fingerings, one recognizes an analytical mature interpreter's mind at work.

Inessa Prosalovskaya: ¨To start the note in piano dynamic, one has to hold the breath, but not tense it. How much breath to hold depends on the individual. Simply little by little start expulsing it out.¨

What can be applied to violin:

The use of the breath is far underestimated in the violin performance, especially in the delicate and accurate moments of precision. To start softly and without the accent, the long sustained bow is a common difficulty for the violin student. The proposed vocal technique may be applied as a solution for the violinists.

CONCLUSIONS FROM THE LESSON 2:

The breathing as an important resource can be explored by the violinists while taking as a reference this vocal class. ¨Breathing into¨ the right hand to create the sensation of freedom, or feeling it as a continuous breath applied to the strings, both concepts can work depending on the student's particular problem. While breathing in tempo of the piece before starting and creating the concept of the desired sound in the mind are important techniques in general, the particularly innovative approach in terms of violin

[80] https://en.wikipedia.org/wiki/Dmitry_Sitkovetsky

performance is starting piano dynamics with approaching the breathing technique suggested in this vocal class.

The bow distribution seen as a distribution of the singer's air throughout the phrase can be used as a great association in the violin class as well as the concept of filling in the consonances with the sound. Both can help to create a true legato, which is a common difficulty for many students and that can be solved by using the concepts of the Inessa Prosalovskaya´s class.

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3. LESSON OBSERVED

Professor Anna Ollet[81] is one of the leading professors in Catalonia today. She has taught in both Higher Conservatories of Barcelona, *ESMUC* and *Liceu*, and teaches at the *Palau de la música Catalana* by preparing the voices of *Orfeo Català* Choir.

Throughout two consecutive days there were observed a few 30 minutes classes at *Palau de la Música*, Barcelona, in October 2016. The voice students were all of different ages and with different needs, but the general idea about the sound work and the corporal awareness surely can be applied to the violin students.

Anna Ollet: ¨Balance the notes on the same air pressure¨

What can be applied to violin:

[81] http://www.revistacambrils.com/index.php?c_noticia=21311

Literally translated to the violin students: balance the bow pressure (or weight) so that all the notes have the same response from the string. For the violin students the difficulty in this case is to balance the bow weight equally through all the parts of the bow, where the tip weights less than the frog.

Anna Ollet: ¨The end of the phrases should not have falling direction, it should be rather as if it was coming back to the space.¨ ↺

What can be applied to violin:

Many violinists do not pay attention to the end of the phrases. The very last instant of the piece and the concentration on the sound until it disappears is an important quality for any mature musician. The vocal students are taught to pay attention to it in the class, whereas in the violin class there is too much information and complicated techniques and pieces to cover. Therefore, such important interpretative detail is rarely addressed.

Anna Ollet: ¨Never lose a good tone throughout different intervals and vowels. ¨

What can be applied to violin:

Losing a good tone throughout the intervals is a primary violin deficiency in higher violin students today. The tone is uneven throughout the phrase because of the interval shifts, string crossings and finger changes. Never lose a good tone throughout this changes is a valuable advise, that can add a concept of feeling the interval throughout its distance creating tension or distension.

Anna Ollet: ¨The face needs to have a happy expression. If we wrinkle the brow, we lose the possibility to resonate there. The bones of the face and the jaw must be relaxed. Feel the vibration on your face.¨

What can be applied to violin:

Apart from the attitude that this advice suggests, the awareness of the facial relaxation and resonators is also important for the violinists. A tension in the face is always an indication of tensions in some part of the body. There are multiple examples of violinists who play with the jaw tensed or open-tensed mouth. As a result, the arms and therefore the sound are also in tension.

Anna Ollet: ¨To be a singer is a lifestyle. When you get stressed you may be out of condition.¨

What can be applied to violin:

In general the concept that singing is a lifestyle and that the signer's condition has a strong connection with the sound produced is very important for the violinists. The violin students often do not connect their condition to the performance results. To be connected with the body and to consider that playing implies more than a mental process is an important step for the artistic maturity of the students.

Anna Ollet: ¨If you do not feel well with your voice at the moment of your solo, simply change the cadence! Practice different versions.¨

What can be applied to violin:

Few violinists have been taught to use flexibility when reading the score in the cadences. They are trained to fulfill the expectations written by the composer which take over all their attention. If a student does not feel comfortable approaching the cadence, he still has to play it the way he has learned. To experiment score flexibility during the performance in the sense of timing and musical score, it is important to practice performer reactions according to performance situations.

CONCLUSIONS FROM THE LESSON 3:

To create a balanced pressure of the air-bow all throughout the phrase is a difficult task for many violinists, since the bow weight is not the same in the different parts of it. The general violinistic technique addresses this issue from the beginning of the studies of a violinist. But once a pupil enters the Higher Conservatory, the imaginary often is a faster solution to improve the technical issues. Such is the case with the balanced bow weight or pressure all throughout that can be associated directly with the balanced air pressure of the singer suggested during this vocal class observed.

Attention in the end of the phrase is a musical suggestion that often is not attended by the violin teachers as well as it is practically never suggested to experiment with timing or the text in the cadences or ornaments. But even within this freedom, often rigid playing occurs with the best musical decisions, since many violinists consider playing the violin as an intellectual process and do not consider it as the body performance. Suggested ideas from the observed lesson by Anna Ollet provided important concepts to experiment with in the violin class.

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4. LESSON OBSERVED

Professor Vicenç Esteve[82], a leading singer and professor. He frequently sings major roles at the Liceu Opera House. His masterclass was observed at Josep Buforn music studio in Barcelona, the 7th of May, 2016. The pupils were mainly studying at Higher Conservatory level. The intervals approach explained by Vicenç Esteve contains the most valuable suggestions for the violin students, as this is not a usual string method .

Vicenç Esteve: ¨On the note before the big interval, you should not tense or reduce the sound. Try to make any physical movement so that you keep your mind off and therefore avoid increasing the tension.¨

What can be applied to violin:

Very important approach to be learned by the violinists. It is important not only to keep the contact with the string on the last note before the shift, but a very useful idea is also to put the mind in a different place while trying to overcome habitual behavior.

Vicenç Esteve: ¨Do not start to contain before the high note or climax. Think as an upbeat.¨

What can be applied to violin:

[82] http://www.baluarte.com/espec.php?idi=cas&id=678

The violin students incredibly often anticipate the climaxes or the important notes and play loud or tense the pick up notes towards it. In these cases, the point of arrival is often wick and unsatisfactory. Thinking as an upbeat or pick up is a great strategy.

Vicenç Esteve: ¨Support the note just before the big jump of the interval. And take the high note with freedom.¨

What can be applied to violin:

It is worth listening to the note before the big interval or shift. The suggestion of the vocal teacher can be absolutely applicable to the violin students as well. Not listening to the note before the shift comes from the stress caused by the leap and the high note. Hence, the high note is approached too soon and often it is not exact.

CONCLUSIONS FROM THE LESSON 4:

The vocal concepts from this lesson by Vicenç Esteve might be of great use to the violin professors. Putting the students mind in the different place to unblock the tensions can be experimented throughout all the violinist's repertoire. For instance, the violin professor J. Silverstein[83] suggested in the Mendelssohn violin concerto's, while octaves difficulty in the left hand, to place the mind in the right hand exactly at the same moment.

Not to have the satisfactory arrival points of the phrases is a very habitual issue in the violin class. How the singers resolve it, as well as their approach to the intervals may greatly help the violinists.

[83] https://en.wikipedia.org/wiki/Joseph_Silverstein

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5. LESSON OBSERVED ¨Great Opera Stars teaching how to sing¨[84].

This video was chosen in order to listen to the lesson given by some singing stars and to understand what and how do they teach. What is the secret of the exceptional artistry that is being passed to the other vocal students? The violinists will greatly appreciate the key subject and imaginative tips of each professor in order to mature as a rounded musician.

Elisabeth Schwarzkopf ¨was among the foremost singers of lieder, and was renowned for her performances of Viennese operetta, as well as the operas by Mozart, Wagner and Richard Strauss. After retiring from the stage, she was a voice teacher internationally recognized. She is considered one of the greatest sopranos of the 20th Century.¨[85]

Elisabeth Schwarzkopf: ¨Search for the sound by pre-hearing what you want to reproduce. Listen to yourself and remember yourself in a good acoustics.¨

What can be applied to violin:

It's great suggestion for the psychology of performance preparation. Remember your good experience with a good sound and pre-hear it in the future performances. A violinist can pre-hear the voice of a great singer and adapt all other aspects to his or her

[84] (2017, April) Great Opera Stars teaching how to sing
[85] https://en.wikipedia.org/wiki/Elisabeth_Schwarzkopf

playing. This method works by association, such as, for example, the color of the tone, the line of the phrase or the expressivity. That would also improve the stage presence.

Elisabeth Schwarzkopf: ¨Do not allow the notes to stick out anywhere. A violinist would not do it.¨

What can be applied to violin:

The notes that stick out from the homogeneous phrase line are produced by the poor changes (changes of positions, strings and bow direction) and by an unsuitable choice of fingering, where one note of the whole phrase lies on the different string and has a different color. The idea of the singers searching for the ¨notes that do not stick out anywhere¨ will help the violinists to realize that it is a default that needs to be polished.

Elisabeth Schwarzkopf: ¨Do not hit the consonants, make them vocal as well.¨

What can be applied to violin:

When thinking about the different consonances on the violin it is also possible to search for its vocal approach. Non-hitting attacks can be applied in the vocal - based music or lyrical passages, whereas other kind of attacks can be applied to the dance - based music or modern music.

Elisabeth Schwarzkopf: ¨Give me a crescendo then you can make a breathless [color] voice¨

What can be applied to violin:

Supporting the colors in the sound, specially in a soft dynamic effect, is an incredible idea for the violinists. Finding a relaxed right hand arm comfortably resting on the string producing the deep tone, greatly facilitates the technical aspects for the upcoming effective piano. The support and the bow's weigh in piano dynamics is often missing and therefore it prevents the projection and the good tone quality.

Grace Bumbry[86]**,** a renowned soprano and voice professor, still active today and a jury member of the Viñas Competition, Barcelona, Spain. Her vocal masterclass, conducted on January 19, 2017 in the Higher Conservatory of Liceu, Barcelona, were observed throughout.

Grace Bumbry: ¨Do not stay too long on the [inappropriate] note. Everybody does that, they want to hear their voice.¨

What can be applied to violin:

When a violin student finds a great sound on the instrument or possesses a solid technique, the musical maturity is still to be developed. This student finds himself at a great risk to enjoy the sound abstractly and out of the context of the piece.

Plácido Domingo ¨is a Spanish tenor, conductor and arts administrator. He has recorded over a hundred complete operas and is well known for his versatility, regularly performing in Italian, French, German, Spanish, English and Russian in the most

[86] https://en.wikipedia.org/wiki/Grace_Bumbry

prestigious opera houses in the world.¨[87] His great output in all directions that also includes teaching is an inspiration and reference worldwide.

Plácido Domingo: ¨Everyday is about expression. The voice is not only one, it has so many different colors!¨

What can be applied to violin:

Often when a violin student finds a good sound, the next step is to have multiple colors and expressions. The lack of imagination in relation to the sound can be fulfilled by the frequent contact with the singers. They consider that the sound is never abstract as it relates to the words and the role.

Montserrat Caballé[88] is a worldwide known soprano who possesses the most unique control of *fiato*. Her pedagogical output is varied from competitions to masterclasses and cannot be overseen. Her performing technique is particularly a great resource while looking for expressive effects applicable to the violin.

In the video previous to Montserrat Caballé´s class, it is shown an amazing example of her control of the piano in the high notes. It is a fantastic effect to be search for in the violin repertoire. She shows an endless *fiato* control, which is another effect in a long note in piano dynamic while ending the phrase with.

What can be applied to violin:

[87] https://en.wikipedia.org/wiki/Plácido_Domingo
[88] https://en.wikipedia.org/wiki/Montserrat_Caballé

Endless fiato on the violin would directly be referred to the endless bow control of its speed while maintaining the sound quality. The long bow is one of the techniques that are rarely practiced but give incredibly productive results in terms of sound production. Today the violin students often neglect its importance since the sound is not their first priority.

Montserrat Caballé: ¨The sound is born with you and therefore you have to master yourself and know your body.¨

What can be applied to violin:

It is understood that the voice in an internal instrument is closely related to the whole body's condition. Nevertheless, the violin students often treat the violin as an external object that they try to dominate. The concept of the sound that is born within one's body and then transmitted to the public through the instrument, whichever it might be, is an important concept to be learned by a musician.

Moreover, getting to know one's body as a violinist is an important task while creating the muscle reflexes or avoiding tensions.

Luciano Pavarotti ¨was an Italian operatic tenor who also crossed over into popular music, eventually becoming one of the most commercially successful tenors of all time.¨[89] His experience has such a big baggage rooted in his performance suggestions, that can be also applied to violinists, become simple, short and practical.

[89]http://en.wikipedia.org/wiki/Luciano_Pavarotti

Luciano Pavarotti: ¨The words you have to bite¨

What can be applied to violin:

The clear articulation is essential in order to project the sound clearly in a big hall. Both sharp immediate effect and smooth expressive articulation are often a problem of technique in the violinist's right hand together with unwillingness to project. Vocal understanding of ¨biting¨ the words might help not only to project the consonants but also the vowels.

Luciano Pavarotti: ¨The music has a quick subdivision which is done in the orchestra, but you have to phrase over it.¨

What can be applied to violin:

Feeling the subdivisions while making a long phrase is one of the most difficult tasks for a violinist. While the rhythm is clearly pronounced by the accompaniment and has a stable vertical pulse, the horizontal musical line in legato with a good phrasing is an artistic challenge for such lyrical instruments as the voice and the violin.

Luciano Pavarotti: ¨You did too much during the whole aria and you lost your concentration on the last note.¨

What can be applied to violin:

Saving the energy is an important suggestion, since losing the attention on the last piece's note is a common mistake by music students. In this sense violinists and singers share the same learning goals.

Ileana Cotrubas is a Romanian opera soprano whose career spanned from the 1960s to the 1980s. She was much admired for her acting skills and facility for singing opera in many different languages.¨[90] The acting skills for the violin interpretation are exactly the qualities that should be deeply explored.

Ileana Cotrubas **(**on interpretation): ¨It is not only the virtuosity! It´s also a pleasure of singing... Imagine as if you were writing the music now.¨

What can be applied to violin:

The idea of composing the music at the moment of the performance is a great resource for the inspiration and spontaneity especially in the cadenzas, where the timing and dynamics depend upon the speed of the imaginative mind. It helps the violinists to take better artistic decisions. It can be suggested to the student to write his/her own cadenza and then play the original cadenza understanding its creative process.

CONCLUSIONS FROM THE LESSON 5:

The concept of pre-hearing of what one wants to reproduce we have already seen in the class of Inessa Prosalovskaya and Elisabeth Schwarzkopf reinforces it in this lesson, therefore it can be considered as an important issue to address by the musicians and violinists. Listening to oneself and remembering oneself in a good acoustic, actually refers to the same issue - prehearing what one wants to reproduce. It once again points

[90] https://en.wikipedia.org/wiki/Ileana_Cotrubaș

out to the necessity of in the first place cultivating the ear in order to create the correct and elevated expectations in the mind of the violinist to be able to pre-hear it and reproduce. One of the ways to cultivate the ear of the violinist is definitely listening to a lot of great singers of today and of the past.

Not hitting the consonances while looking for the clear articulation or, as we will see in the interviews, not hitting the instrument in general, is a concept that serves the violin students especially well. Violin as an external object often lucks the direct connection with the body of the violinists and hitting it is a common problem among the students. The sound relation to the state of the whole body of the player should be more explored in general.

While paying close attention to the last notes of the phrases was already pointed out by Anna Ollet class, the observation of this sixth lesson adds up to it the idea of also paying attention towards the last note in the whole piece and pasting the energy all the way through. The air-bow distribution addressed earlier in the Inessa Prosalovskaya´s class can be enriched by the Montserrat Caballé´s suggestion to learn the endless control of the bow, its speed with the sound quality. Ileana Cotrubas and Anna Ollet seem to agree on the idea of cultivation the spontaneity in the cadenzas and it's an innovative and interesting approached to be experimented during the classes with the violin students. Supported multiple colors with expressivity in the long phrases over the stable rhythm and always linked to the musical meaning of the piece, can be a great maturity sign towards which the violin students should strive.

The inputs taken from the number of classes observed over the last five years, are resumed in the overall general lines of teaching that are presented above. The resonance and the work on the tone, the breathing techniques, the corporal work, the

interpretation and the performance suggestions among other concepts, can be found in the classes quoted above. It is important to realize that on every different level of the vocal learning process, an open-minded violinist can find a fruitful and inspiring information for his own career and for his pupils' development.

1. 2. Interviews with vocal professors and other specialists

Participating as a violinist in the conducted investigation has lead to interview some outstanding violinists and violin teachers, as well as singers and vocal teachers. In order to fulfill the investigation purpose of this thesis, on one hand, the interviews to the violin specialists were used to justify the necessity of the present research. On the other hand, the interviews with the vocal specialists, together with the observation of vocal classes, served as inspiration for this work and constitute its main body.

The interviews were conducted with the following specialists: repertoire pianist Josep Buforn, tenor and medical doctor Beñat Egiarte, soprano Pilar Páez - vocal professor at the Higher Conservatory of Alicante and graduated in voice rehabilitation, soprano and professor Enriqueta Tarres, soprano and professor Grace Bumbry, soprano and professor Gloria Fabuel and many others. Only the most relevant and interesting interviews from the point of view of its input to violinistic approach are described below.

1. INTERVIEW with vocal repertoire pianist Josep Buforn[91], conducted in March 2017, Barcelona.

Josep Buforn: ¨The diaphragm movement is instinctive. The singer's work is not to put impediments that could bother diaphragm's work."

What can be applied to violin:

If a violinist thinks of his instrument and the bow as naturally prepared for vibration, the only thing to do would be not to stop its vibration.

Josep Buforn: ¨Only the higher level singers can modify the resonators and add sweetness to the sound by their will.¨

What can be applied to violin:

If the violin student thinks about sweetness in the sound, as well as about other criteria, such as metal or body, he will start to be able to verbalize the desired tone qualities.

Josep Buforn: ¨To look for a specific tone one needs to have the ear formed. The only thing that would never stop working, even under stress, is the ear. A good teacher would be the one that helps the student to form his ear.¨

What can be applied to violin:

Playing the violin is not gymnastics for fingers but rather the realization of formed musical ear demands. Practicing the ears and the quality of sound is a shortcut to correct the technique.

[91] http://www.josepbuforn.com/About/

Josep Buforn: ¨Never hit the instrument while looking for forte dynamics. In general the body does not like the sudden changes of air pressure. Start soft and augment very quickly the sound and energy.¨

What can be applied to violin:

Violin students sometimes hit their instruments. This happens because of the erroneous effect that is desired to be shown and the corporal tensions that come from a poor bow arm technique. Violinists should think of never hitting his instrument as singers do.

Starting the forte sound from the amortization in right hand fingers before giving its full potential, produces a pleasant and full tone, while the attack with the whole stiff right arm motion produces unpleasant effect.

Josep Buforn: ¨The way to work on finding the supported piano with sound quality, the singer first has to make a forte with the maximum of resonators to make sure that the voice does not diminish, that is when the air starts to be heard. Then with the same air pressure and keeping all resonators at work, especially the one just above the nose, near the eyebrows, gradually take away the volume. That will produce a good piano with the body involved in sound.¨

What can be applied to violin:

Translating it into violin students words, the experiment would be first making a forte sound to make sure that the violin rings and resonators are also involved in player's body. The right hand is free and not stiff in any point. Keep these sensations while starting to use less quantity of bow and move to further contact point from the bridge to reduce the volume.

Josep Buforn: ¨The singer cannot make changes when the sound has started. That is why if you have not start well the interval's lower note, the following high note will not come out either.¨

What can be applied to violin:

If the violinist loses the bow contact during the shift, the sound stops reproducing harmonics and the ear cannot help the left hand to arrive at the right place. On the other hand, if the violin student has a good bow weight and contact on the interval's lower note and can hear it, the shift itself becomes cleaner and the left hand is liberated.

Josep Buforn: ¨Projection is the amount of high harmonics. Projection is produced in the resonator just above the nose. This is what is called *brillo* o *squillo.* The typical low and wide voices will not project even two meters. In order to traverse the 50 meters distance of a big theater hall the best thing a voice can do is to use the nose resonators which are near the eyebrows.¨

What can be applied to violin:

The lower notes also need high harmonics to be projected. On the other hand the top notes should not have too many high harmonics as they produce a screaming effect.
The violinists also need to use the head resonators to project the sound upwards from the violin at the soundpoins. However, students normally look for volume by applying more pressure on string and reducing the string vibration.

Josep Buforn: ¨The singer learns how to manage the stage presence in voice lessons. It is true that a small number of students would be satisfied just employing the right notes.

But strangely enough once they adopt a brighter stage presence, all technique becomes proportionally better automatically.¨

What can be applied to violin:

The lack of stage presence in violin students is immense. Corporal language when one comes on stage and starts to play determines in many occasions the result and the public's overall impression. It is important to address it in violin classes.

Josep Buforn: ¨If one thinks where he comes from before singing an aria, even from a technical point of view, the interpretation gets better immediately.¨

What can be applied to violin:

Inventing words for abstract violin compositions can be an excellent technique to be more personally involved in pieces and predetermine artistic condition before starting to play. The vocal-based repertoire is not enough explored in conservatories, whereas it is useful in order to understand the original words.

Josep Buforn: ¨The body is the machine based on reflexes. It is possible to rewrite the muscle information by distracting the mind. Some voice professors do it through the use of the ball or applaud during the moment that needs reprogramming of the muscles.¨

What can be applied to violin:

Programming muscle reflexes is an important concept for violin students to understand and to be practiced. The slow practicing is an intelligent tactic to develop a conscious solid programming, whereas correcting faults takes a long while and is hardly possible. In this sense, distracting the student's mind at the points that need to be corrected is a good approach to be used in class by violin professors.

Josep Buforn: ¨For good singers who have listened to a lot of music the ornaments and timing in cadenzas do come naturally. The proportion at the cadenzas' endings is very important. To be able to change this proportions, one has to have been listening to a lot of music.¨

What can be applied to violin:

The ornaments and timing in cadenzas, especially in vocal-based repertoire, are a weak point of many violin students. Unproportional ritenuto, intervals without tension, unnatural use of dynamics... All this points linked with lack of intuition can be corrected by listening to singers and music in general.

Josep Buforn: ¨While warming up vocalization, the main goal is to find as many resonance points as possible: just above the nose, the front, the chest, menton, just above the lips, the skull and even behind the head. This search for resonators serves to calm down the nervous system, because the instrument in itself is internal and the singers cannot perceive its condition when they have to use it. An instrumentalist, on the contrary, can see the instrument's state with his eyes. The warming up itself, as an instrumentalist's concept, doesn't exist in vocalists, because mobilizing the air and checking the resonance points are common actions working in normal living conditions.¨

What can be applied to violin:

Through vocal association it is evident that violinists do need to warm up their fingers because in normal life conditions the muscle group that is used while playing the instrument is not mobilized in the same manner. Nevertheless, checking resonating points while warming up as a violinist can add greatly auditive concentration as well as liberate the body by focusing the mind on sound

production quality and can increase the resonating consciousness when playing in a hall.

CONCLUSIONS FROM INTERVIEW 1:

Allowing free vibrations is actually the resonance reference we have already seen in Tricia Pine´s class in the previous chapter. By using head resonators to project while playing the violin together with the search for high harmonics will increase the desired projection into the hall space. Moreover, the stage presence, jointly with projection, plays a great part in overall performance result.

Never hitting the instrument was also expressed in the lessons observed in the previous chapter. Starting the forte sound from the amortization in the right hand fingers may greatly help solving this issue.

Verbalize the desired qualities in tone actually refers to the idea of pre-hearing or imagining the sound before starting to produce it. If a student can verbalize the desired tone qualities, it would activate imagination and permit further formation of musical ear.

Finding supported piano with the sound quality is the idea expressed in the six vocal class observed. Elisabeth Schwarzkopf, for example, suggests supporting colors with sound.

The bow contact while shifting can be applied in the relation between intervals and lower note support, earlier expressed by Vicenç Esteve in the fourth lesson observed.

Distracting the mind at the points that need correction is another technique used for muscle re-programming. In the observed class given by Vicenç Esteve we have already seen another suggestion to place the mind in a different place during this points that have to be corrected.

Inventing words or using a vocal-based repertoire can develop the general intuition to phrase, while developing intuition in ornaments and timing in cadenzas corresponds to the spontaneity and stage freedom earlier suggested in Ileana Cotrubas and Anna Ollet´s observed classes.

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2. INTERVIEW with the tenor and medical doctor Beñat Egiarte[92]. Barcelona, May 2013

Beñat Egiarte: ¨Do not make strong attacks with consonants. You can hurt yourself. I would advice to sing through consonants, it is much more healthy. Never hit your instrument. Imagine the whole opera singing by attacking! It is so easy to hurt oneself!¨

What can be applied to violin:

Hitting the violin is common among students. Lack of amortization in the right hand fingers creates hard attacks, which are often accompanied by a poor intonation, partly because there is no pre-hearing of the following note. With a good violin in hands one can pre-hear each note's harmonic before the public hears it. When the attack is direct and immediate, the violinist can also hurt himself.

CONCLUSIONS FROM INTERVIEW 2:

[92] http://www.egiarte.com/bio/

Never hitting the instrument is a widely repeated suggestion given by vocal professors and, as we have seen, supported by medical doctor and tenor Beñat Egiarte. He suggests singing the consonants for smooth attacks.

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3. INTERVIEW with soprano and professor Pilar Páez[93], graduated in voice pathologies and rehabilitation. Alicante, 2014

Pilar Páez: “To start a note, let the air fall on you. Do not hit to attack the note, in this case the vocal strings will block.¨

What can be applied to violin:

The string blocks or stops vibration while changing the bow’s direction. Smooth bow changes are one of the most difficult techniques on violin. When the string stops vibration the change is heard. When it vibrates in one direction and immediately in the other, the bow change is perfect.

Pilar Páez: ¨Legato is perfect when the notes are the pearls and the phrase is the collar.¨

What can be applied to violin:

Perfect legato on violin has the same analogy: the fingers of the left hand would be the pearls and the bow with many notes would be the collar. Some violin teachers recommend quality practicing to their students by using the same image. Every note needs to be as pure as the pearl, and therefore the collar will shine.

[93] http://www.musica.sanpablo.es/02_autores_detalle.php?id_autor=95

Pilar Páez: ¨One of the most typical statements to be heard in vocal classes is that students should make *legato* as a violinist passes the bow.¨

What can be applied to violin:

The visual externalization of vocal process is often linked to violin, particularly to cello. On the contrary, the violinist can internalize the process by imagining that the instrument sings and this would actually become his voice. Therefore, he has more direct responsibility on coming out results.

Pilar Páez: "Resonance in piano dynamic is one of the major themes in the art of singing, its production varies widely depending on singers. Some of them seek air continuity with the same speed and a lot of resonance; others, seek more piano sound elevating the soft palate and bringing air into this area. In our opinion a soft piano without accent should be done with great air control and speed at a constant air pressure with high maintenance of air column from the diaphragmatic-abdominal support.¨

What can be applied to violin:

To translate this process into the violin terminology it would sound like this: in order to start the soft piano without accent, control the bow with the speed and constant bow weight with a firm violin support from the left hand.

Pilar Páez: ¨The voice or sound projections are being looked in different ways. One of them would be through invented images: the sound is being produced far away from the singer, at the end of the hall where he is singing. Technical work to achieve this projection is totally different from what we expect. One can try to find lots of space inside

the mouth so that the sound can come out without any strength or tension. Students often think that singing louder and with more pressure will produce a stronger sound, but what actually happens is the opposite of what is expected.¨

What can be applied to violin:

Big tone and projected forte sound is often difficult to achieve for violin students as well. Playing louder with more bow pressure gives the opposite results since the string is not free to vibrate and therefore does not project. Imagining that the sound is produced at the end of the hall is a great example of applying vocal suggestions on violin and a good experiment for violin students.

Pilar Páez: ¨When creating or forming the sound the mould is different for each vowel and consonant, but one should try to create a sensation as comfortable as possible so that it would not change mouth and tongue positions to obtain a sound that can be round and homogeneous for each vowel. It should maintain its identity and be clearly understood.¨

What can be applied to violin:

The position of the right arm or left fingers is different for each note, but one should create the correct sensation in order to find homogeneous sound.

Pilar Páez: ¨The sound is actually created inside our vocal apparatus, but it is the mission of the resonance technique to make the sound projection as free as possible.¨

What can be applied to violin:

Projection is a result of resonance, which is created by instrument and player.

The close work on adjustment of the violin together with the luthier may rise sound awareness in violin students and create some expectations of purer and more resonating sound. This comparison between both disciplines shows that singers the work of violin luthier and performer at the same time.

Pilar Páez: ¨When the pitch is perfect and all harmonics are resonating in harmony, it creates a perfect tone. The vibration that occurs in the head depends on the number of harmonics that exist in a note.¨

What can be applied to violin:

One of the most famous teachers and concertmasters nowadays, J.Silverstein[94] said that intonation and tone are the same thing. If the note is out of tune some harmonics are not available for resonance and the tone becomes small and shallow.

Pilar Páez: ¨A note has three parts, beginning, middle and end. For example, Maria Callas in the opera *Tosca*, aria *Vissi d'arte*[95], sings notes with multiple different nuances in their development, middle and end. This is real art!¨

What can be applied to violin:

This possibility to create expressive diversity within one single note should be closely looked by violinists. Not only the criteria of softer, louder or less vibrato should be applied. Expressive performance resources can vary from one expressive inner state to another, from anger to shame. This can be learned only by listening to great singers within their roles.

[94] https://en.wikipedia.org/wiki/Joseph_Silverstein
[95] (Callas, 2017)

Pilar Páez: ¨One of the biggest searches in vocal classes is to unify different registers. This is a complicated search because human voice has by definition two different registers - the chest voice and the head voice or *falsetto*. By the long and exhausting working process, one can get to learn to mix the notes that are on the border of both registers so that it is barely noticeable.

What can be applied to violin:

The color difference between the four strings of violin has to be used as an advantage to known how to be avoided. For instance, when a homogeneous phrase has to be played on two or more strings, it is the bow-art of the performer that will mix the string color in such a way that the difference is not perceived by the listener. On the other hand, another phrase can be played on various strings because the violinist wants to change the color. For instance, lighter colors would be played on higher strings and deeper tone on lower strings.

Pilar Páez: ¨Turbulent and linear air have a big difference in singing. Turbulent air has too much pressure and strength. As its name indicates, it produces turbulent and unstable sound flow, while linear air is totally the opposite. The air flows fluently with the adequate pressure and speed without any type of forcing.¨

What can be applied to violin:

The concept of linear sound flow on violin is linked to constant bow weight on string and controlled speed, whereas the turbulent sound flow would be the unstable right hand elbow position. It has been suggested by the violin professor J. Silverstein that the habit of playing double stops on violin produces a correct and linear distribution of bow weight and therefore one practices its tone or the sound production.

Conclusion from the interview 3:

Associating violin playing with actual voice and singing may refine the student's consciousness and responsibility towards the reproduced tone.
The concept of resonance is again stressed in this interview by analyzing sound in forte and piano dynamics, stressing projection as a result of resonance and perfect intonation. While already explored during the observation of vocal classes, some concepts, such as the union of registers and expressivity of all three parts of the note, are reinforced in this interview. ¨Purl¨ legato concept and turbulent versus linear air-bow concepts are new.

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4. INTERVIEW with soprano Abigail Horro. Graduated as violinist and singer.

Abigail Horro: ¨In reality, the music is created from silence. This is something that singers and wind instrument players understand intuitively. The silence is when the breathing happens. For the singer it is obvious that one has to breath before each phrase, for the more dramatic passages the breathing has to be more intense and for the sentimental passages one needs subtle breathing. The air is the matter from which the singer constructs its sound and it is only possible out of silence. While one takes the air the voice does not function.¨

What can be applied to violin:

The breathing with different intensities depending on the character of the passage is a very important concept to be adopted for violin playing. It will greatly help to produce the desired sound expression from the start and will help to play with other people.

Abigail Horro: ¨In singing, the air and the support are not only technical issues related to sound production, they are also expressive issues. Taking the breath is an impulse of the whole phrase, whereas support gives consistency and permits to play with the dynamics.¨

What can be applied to violin:

The sound of a string instrument should follow the same pattern: to breath in order to prepare the phrase; to support the sound adjusting the bow's pressure on string; to play with the dynamics controlling the ends of the phrases. The air, after all, is the singer's bow and the bow is the violinist's air.

Abigail Horro: ¨The purity of tone production comes from air control. The air that comes out without control would never lead to clean or homogeneous results. On the contrary, controlled and conducted air would do it.¨

What can be applied to violin:

It is exactly the same type of work as the violinist's bow. The better the bow's control, the more the possibilities to obtain a desired tone.

Abigail Horro: ¨In order to sing freely, any singer needs to liberate jaw, neck and shoulders' zone.¨

What can be applied to violin:

Even though the violin playing does not usually have a natural body position as jaw, neck and shoulders are frequently stiff. The teacher's work is to relax all possible tensions that might exist in the student in order to make the violin playing process as natural as possible. Free mobility avoids possible tensions. The static positions that are often created by the use of shoulder rest can develop permanent tensions.

CONCLUSION FROM INTERVIEW 4:

While such concepts as breathing with different intensity before starting the phrase, or purity of tone production as a result of controlling the bow were already explored to some extend in the previous chapter, two new concepts are introduced by Abigail Horro during her interview: ¨breath-support-controlled endings of the phrase¨ chain and the freedom in jaw-neck-shoulders zone to avoid tensions.

During the conducted interviews many vocal tactics that can be used for violin teaching were detected, from general musicianship maturity suggestions to specific technical advises to follow. Therefore, together with observed vocal classes, all points detected applicable to violin teaching will be resumed and listed together in order to use them later as a guide during the experiments with violin students

2. Statistical questionnaire

¨Catalani had a fantastic personal contact with Paganini, who attended her concerts in every possible occasion.. The singer even offered joined performances in London, but Paganini... refused.. Paganini´s elevated interest in vocal art was determined in particular in the air of the artist to attend every possible concert by the famous singer.¨[96]

Tatiana Berford

The statistical questionnaire was conducted as a supporting material towards the main part in this thesis, which is observing the vocal classes as a violinist, the interviews to vocal specialists and the experiments with some violin students using vocal ideas and concepts. This survey expects to determine the real situation towards the vocal discipline among the violin high-level students today.

A total of 30 students have participated, among them Higher Conservatory level violin students and recent graduates.

The overall statistical group is as follows:

16 were boys and 14 girls

9 participants have graduated within the past five years

8 students will graduate this year (2017)

11 will graduate in the near future

3 participants occasionally work at the Liceu Opera Theater

2 gained work in symphonic orchestras elsewhere

1 participant has graduated in violin pedagogy whereas all others in violin performance

[96] (Berford, 2010. p. 268) [Translation by Oksana Solovieva]

3 students are currently studying to obtain Master of Music degree

Most of the students have studied or are currently studying at Liceu Higher Conservatory; some others come from Superior Conservatory of Cataluña (ESMUC) and Zaragoza (CSMA).

25 participants are Spanish and 5 come from abroad - Cuba, Romania, and Canada.

7 of these students have participated afterwards in the experiments conducted as part of the investigation process for this thesis. Their answers will be correlated with the their playing and receptivity towards the experimented ideas.

The results of the questionnaire are expected to show whether or not the vocal methods, ideas or concepts are lacking among Conservatory's violin students today.

The choice of ten questions described below was based on the necessity to find out the relation the violin students might have with vocal discipline and singing art in general and also to determine if this experience might be useful for their personal musical improvement.

The first question *¨How often do you go to vocal concerts or recitals?¨* is expected to determine the overall interest of violin students towards vocalists and its appreciation of vocal art.

Answer options:

-always when possible

-sometimes

-rarely

-never

The second question *¨Do you go to the opera?¨* serves the same purpose. This two questions are asked separately considering the specificity of this particular group of students, where nearly all of them study at the Liceu Conservatory of Music, which neighbors the Liceu Opera House. Most of them have teachers who play at the opera's orchestra.

Answer options:

-never miss one

-sometimes

-rarely

-never gone

The third question *¨If you listen to a singer, do you analyze the applicable qualities to your violin playing?¨* tries to understand for which reason violin students attend vocal performances - because the singer is famous, because the tickets were given by the teacher or because the students intend to learn from it by the close observation in order to apply it in his playing.

Answer options:

-always

-sometimes

-never

The fourth question *¨Do you listen to singers recordings?¨* is proposed in the questionnaire in order to detect if the students recognize the richness of musical heritage through the recording of great singers in the past.

Answer options:

-often

-sometimes

-rarely

-never

Their overall musical education will be shown through the fifth questions: *¨Are you familiar with the vocal repertoire?¨* and it is aimed to detect the student's´ openness towards a repertoire different from their principal instrument of study.

Answer options:

-no

-yes

The sixth question is aimed to detect if violin students realize the connection between the repertoire they play and the vocal pieces, fantasies on opera themes or vocal arrangements in which it is based on: *¨Do you listen to the vocal pieces and arias that are the basis of the violin repertoire you might play?¨*

Answer options:

-no

-yes

¨When you warm up before the performance, what do you concentrate on?¨ was asked as the seventh question. This question in particular was thought to detect if violin

students before the performance share with singers the focus on the same points or they rather concentrate on the warming up of their finger muscles.

Answer options:

please specify

¨Do you feel like telling a story while playing? Do you invent the words to go along with the pieces?¨ This eighth question is asked as a reference to the possibly applied method in violin class where creating a story or words for some passages or the whole piece in order to unify clear imaginary and to improve the communication with the public. The students´ responses are supposed to clarify whether or not they already apply these techniques.

Answer options:

-it is helpful to have images, characters or words

-I have a sketch of the piece's general picture and I stick to it

-never thought of it. I play as it comes at the moment

The ninth question, as well as the eighth, serve to determine if one of the possible methods for the improvement, in terms of understanding the phrase, might already be used by the students or not: *¨While practicing, do you sing the phrase to understand better the direction and expressivity?¨*

Answer options:

-always

-sometimes

-rarely

-never

And finally, the last tenth question: *¨When you see some indication in the repertoire such as cantabile, how is it reflected in your playing?¨* This question implies only one of the possible vocal indications that appear in violin repertoire, the most frequent one. For instance *canzonetta*, aria or *ballade* are frequent names for a violin piece, whereas *parlando*, *bien chante* or *cantabile* are interpretative indications. How do the students react to such indications and how their playing actually changes. This question aims to determine what would really happen if t this indications were not written in,

Answer options:

-I know exactly how to react. Please, specify

-I imagine what should be changed, but I am not able to make it sound different

-it does not change my playing

The results of this questionnaire will be examined in Part III of this work. But the overall idea of the general situation among violin students will be first taken into consideration during the experiments. For instance, if most of the students sing their phrases before playing them, it will not be proposed to be experimented. If many of them are already looking for the resonance while warming up, this proposal will be replaced by the other vocal idea to experiment with.

3. Experiments in class with violin students

¨It is wonderful to see them find the link between using their vocal chords and the violin's ability to be naturally expressive.¨[97]

Violinist Jack Liebeck

¨If we put sound at the heart of what we do, it suddenly makes sense. We can focus on quality right from the beginning and invite our pupils to hone their individual voice, giving them a reason to improve.¨[98]

Royal Northern College of Music

senior lecturer in music education Philippa Bunting

¨When the design of the violin bow attained a perfect balance between elasticity and strength, the ability to give tone a wide range of shadings placed violinists next to the greatest singers of the nineteenth and early twentieth centuries. The art of violin performance had reached such a peak that it astounded even the singers, who began to refer to violinists in their practices.¨[99]

Vladimir Dyo, Doctoral Thesis

After careful study of the existing materials on the subject it became evident that none of the existing materials include practical approaches towards the subject and none of the experimental researches were conducted to prove the real usefulness of the vocal techniques for the violin playing and teaching. Therefore, the author of this thesis took the practical position, since the experiments with the students occupy the central part of this research.

[97] (Liebeck, 2017)
[98] (Bunting, 2016)
[99] (Dyo, 2012, page 65)

After the observation of the vocal classes as a violinist, there were detected multiple possible associations that can be useful for the violin professor in order to better guide the students´ progress towards the performance mastery. While it is clear that the multitude of those possibilities can not be addressed at one time, only several vocal images, suggestions and reflections will be experimented within the following chapters, while at the same time it expects to inspire future detailed investigations.

The specifics proposed in this chapter of the teaching work with the High Conservatory level students throughout the past 10 years have been formed and influenced by the simultaneous listening of the singers. During the professional experience playing in the opera theatre and teaching, it was quite usual in the same day to hear a leading world singer in the best moment of his/her career and a higher level violin student of the conservatory. As a consequence of the analysis and observation of the vocal classes, a specific line in teaching was developed. The most characteristic cases, which exist in practically every violin studio, have been collected throughout the doctoral research years.

The experimented ideas include various innovative teaching techniques, such as: to create with words or invent a text in order to help the students shape their phrases and increase their capacity to attain an abstract understanding of the pieces, to realize and search for *bel canto* qualities in their playing, to search for the ideal bow speed and distribution, to create focused tone in piano dynamic, to search for the big tone and free forte sound, to realize the importance to look for perfect resonance, to work on sound projection in the hall, to prepare the intervals and feel the tension between the notes, to attain the continuity of the vibrato, to play the continuous vowels and differently articulated consonants, to understand the importance of breathing during playing, to play

with timing in cadenzas and fermatas, and many others. All this techniques are applied according to the specificity of each student.

Although the actual practical approach was applied during all the doctoral study years, only several examples approaching some of the standard violin repertoire are described below.

Examples of work during the academic year with some High Conservatory students:

1. Class with M. I., 4th year student at Liceu Conservatory, graduation year 2017

Assistant professor Oksana Solovieva

J. Sibelius, violin concerto, 2 mvt.

Problem: The student doesn't feel the continuity or the tension within the phrase.

Solution: Before playing the phrase, breath in and distribute the breath like a singer. The inner intensity will pass to the hand and the ear will desire a controlled continuity.

Problem: ¨Unfortunately, many students hold their bows with a stiff bow-arm and fingers. This "hinders the vibrations" of the bow and, consequently, the strings lose their natural vibration. As a result, the natural flow of the bow, obstructed by stiff muscles, loses its fluent quality affecting tone production.¨[100]

Solution: Free use of muscles by singers is a perfect analogy to understand how violinists' free hands allow the maximum resonance.

[100] (Marafioti, 2010, p. 70)

2. Class with S. M. M., 4th year student at the Liceu Conservatory, graduation year 2014

Assistant Oksana Solovieva

F. Mendelssohn, violin concerto, 2 mvt.

Problem: Tense and spasmodic right hand

Solution: Imagine the right hand is your lung that has to breathe and its breath is continuous, not like a singer who suffers from asthma

Problem: The big intervals are not filled in and felt

Solution: Imagine when a singer prepares a big interval, the first note can not disappear, it prepares the jump to another tessitura and range.

Problem: Vibrato is too eclectic, too narrow and unnatural

Solution: The student is proposed to listen to the singers in order to realize that ¨electric¨ type of vibrato does not exist in nature. Vibrato is produced by a human voice and has to be listened by a human ear.

3. Class with D. M., 2nd year student at the Liceu Conservatory, graduation year 2019

Assistant Oksana Solovieva

A. Khachaturian, ¨Song-poem¨

Problem: Too shy and unexpressive interpretation. If the student feels something, it does not come across in his playing.

Solution: ¨You have to know the expressive capacity of your body. Bring the wildness, savagery, relation of that physical pastime to your playing and see/hear and accept what arises in your tone. SING! Connect with your pelvic floor, lungs, spine, everything that is the fuel, engine and resonating chamber of human sound. Bring THAT to your string tone.¨[101], says the cellist and baritone Matthew Sharp.

4. Class with D. F., 1st year student at the Liceu Conservatory, graduation year 2020

Assistant Oksana Solovieva

S. Rachmaninov, Vocalise

Problem: great technical ability of the student which is nevertheless meaningless. The student does not recognize the direction of the phrase, the necessary sound for each piece. He plays solid and good without any artistic imagination involved.

Royal Northern College of Music senior lecturer in music education, Philippa Bunting, reflects: ¨We all know pupils who, despite having the sort of quirky physical habits that cause us to wake up screaming, nevertheless produce a wonderful sound. Mercifully for our sleep patterns, they are in the minority. The rest conform to the common laws of physics that state that tension in the body results in a tense, weedy sound. And what about the technician who can produce streams of utterly accurate musical gestures, impressive but almost entirely bereft of meaning?¨ [102]

Solution: In the case of this kind of students the most important is the right choice of the repertoire. If the technical repertoire is covered and progresses well, it is important to give vocal repertoire, especially the one that is attached to the words. Make the student

[101] (Sharp, 2017)
[102] (Bunting, 2016)

sing and realize the expressive possibilities that exist in each word. Educate the student in the sense of ¨feeling in a role¨ by insisting on the frequent opera listening and by playing the opera fantasies on the violin.

5. Class with J. P., 4th year student at the Liceu Conservatory, graduation year 2017

Assistant Oksana Solovieva

P. I. Tchaikovsky, violin concerto, 1 mvt.

Problem: The student articulates too much, every group of notes has an accentuated beginning and then it disappears without sustaining. Very quick and very nervous playing.

Solution: It is useful to work on imagining that the student sings through the violin. It is important to make the student recognize by himself that the consonants that he uses are all of the same quality, while the vowels are not sustained and do not form the line.

6. Class with A. F. 3rd year student at the Liceu Conservatory, graduation year 2018

Professor Corrado Bolsi

S. Prokofiev, violin concerto, 1 mvt.

Problem: Beginning doesn't come out ¨*soñando*¨ like it is suggested in the score by the composer. The student could not make the piano dynamic together with the continuous line, at the same time with focused and soloistic projection.

Solution: It was proposed to the student to breathe in the air and not breathe out totally, have the lungs full of oxygen during the whole phrase. It helped greatly! Also it has affected the sensation in the hands. The same effect helped in the last page of the same movement.

7. Chamber music class with the piano trio:

Professor Catherine Ordronneau

D. Shostakovich, Piano Trio n. 1, 1 mvt.

Problem: The cellist of the trio could not start up-bow in piano dynamic delicately and at the same time give the cue to the pianist and have controlled and transparent sound throughout the passage.

Solution: It was proposed to experiment with breathing. Take the air fully by opening the chest and without creating the ¨dead point¨ start the sound with the controlled speed as the air flows out, without producing any consonant at the beginning of the note. It was also experimented with breathing out halfway and then starting the sound. As a result, the first idea was admitted as being more useful.

Problem: Some musical ideas in the piece that needed to be transparent and sustained, but at the same time with lots of life and light in the sound that did not technically come out.

Solution: It was proposed to imagine an enormous quantity of oxygen in the lungs and the feeling of having it placed in the head resonators. This idea has resulted in the feeling in the hole body of a continuous line with controlled bow speed and lightness at the same time. The whole body has participated.

Experimental *bel canto* joined masterclass for violinists and singers

An experimental joined masterclass for violin and voice students in Higher Conservatory of Alicante, Spain, was conducted in February 2017. Two conservatory professors, violin - the author of this thesis- and voice professor Pilar Páez, were joined by experimenting ideas for the benefits of interdisciplinary approach.

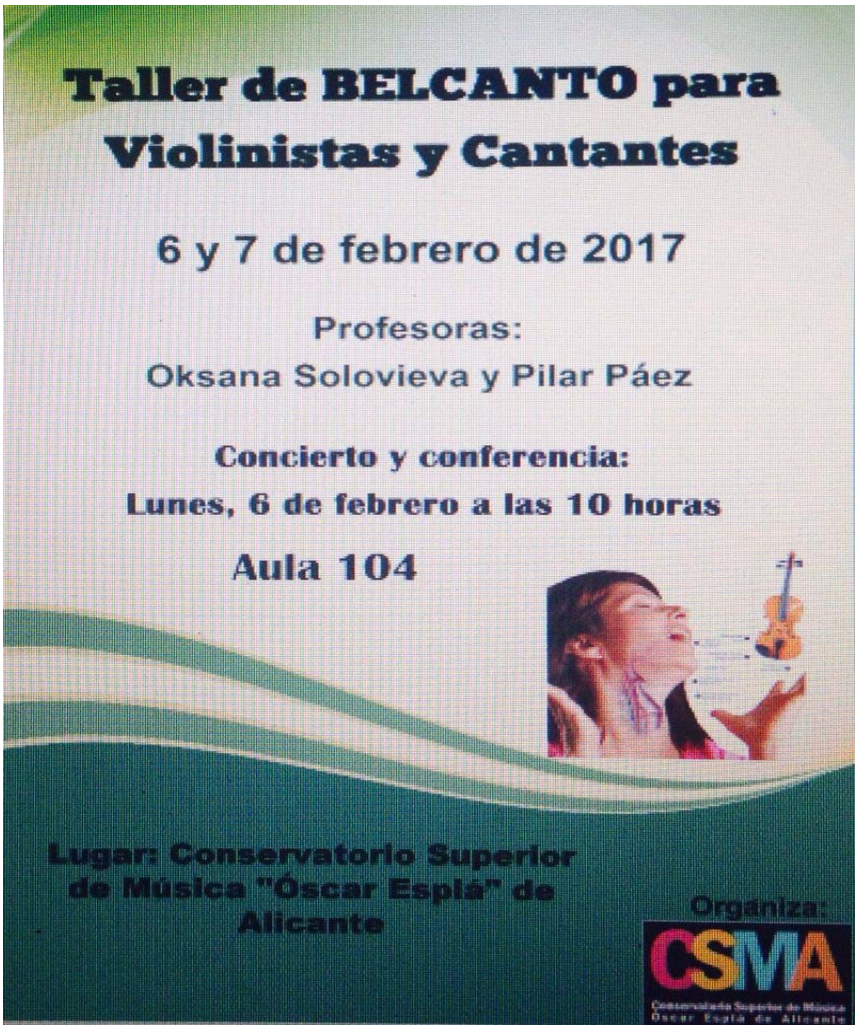
About 20 students attended the masterclass, 5 violin and 5 voice students were active participants.

The presentation of the *bel canto* technique to violinists was addressed through deep study of G. B. Lamperdi book ¨*Bel canto* technique¨[103] and through the definition of this term to the participants. ¨The singer should possess immaculate cantilena, smooth legato, a beautiful singing tone that exhibits a full palette of colors, and evenness of tone throughout the entire vocal range. Furthermore, the singer should be able to blend the tone expressively from one note to another, maintain long lasting breath, flexibility, and brilliant virtuosity. Without these elements, the singer's mastery is not complete.¨[104]
"*Bel canto* does not apply to just one stylistic era, nor is it a single way of using the voice or a specific set of stylistic conventions. Rather, it is based upon certain irreducible vocal techniques that set it apart from other kinds of singing. These techniques can be

[103] (Lamperdi, 2013)
[104] (Dyo, 2012, p. 1)

adapted to a wide variety of musical styles from several historical epochs without losing their integrity as fundamental vocal principles."[105]

The highest goal of the *bel canto* singer was not only to astonish the listener with brilliant virtuosity, but primarily to affect the listener with the beauty of tone and expression.[106]



The experiment consisted in applying innovative approach: both professors coming from different disciplines, the violin and the voice, taught the same student. Therefore, the violin student received comments from the vocal teacher and vice versa.

[105] (Stark, 1999, p. xxv)
[106] (Dyo, 2012, p. 2)

Vocal students prepared the variety of works to be performed and have shown to be very open to receive the comments from the violin professor. It was surprising to notice that the work on timing and expressivity was very much similar to the work with the violin students, whereas legato or colors were vocal technique issues.

Violin students prepared the repertoire they use to play during the academic year and it mostly had no connection with *bel canto*. Nevertheless, a work on the general concepts, sound and stage presence was possible.

The experiment, in which an audience watches two disciplines performing in a mixed order, was important for both categories. On one hand, violinists became aware of their poor stage presence and poor sound attention, in comparison to the singers. On the other hand, the voice student's became aware of the technical limits and difficulty for violinists to be able to cover a huge repertoire range.

The learning process, especially during the masterclass setting, is very subtle. The ideas that have been planted at this point may one day bear fruit.

Examples of experiments with the violin students and recent graduates from the High Liceu Conservatory:

The conducted experiments aim to demonstrate to what degree the playing of a student changes while he/she assimilates new vocal concepts, such as: how to practice scales using breathing techniques, how to imagine the right hand as the air of the singer, how

to care of the tone quality, how the timing and approach to the intervals changes while imagining them as a vocal product, and how the intonation together with the sound quality and projection improve while focusing on continuous resonance.

Three out of seven audio recorded conducted experiments are presented in this work in a form of detailed description and comparative audio examples. These experimental lessons use the terminology and quote the ideas taken from the voice classes earlier observed.

The description of the experimental lessons is divided into four sections. The first one presents an overview of the questionnaire in relation with the student, the second one addresses the general questions and evaluates the overall student's receptiveness to the subject. The third part consists of the scale practicing and the last section is devoted to the work on the vocal repertoire, inspired from the voice or directly adopted for the violin, that represents different composers, arrangers and language groups: M. de Falla, arr. P. Kochansky, *Jota*, G. Fauré, arr. C. Liégeois, *Les Berceaux*, Op. 23, n.1, J. Brahms, arr. J. Heifetz, *Wie Melodien zieht es mir*, Op. 105 and N. Paganini, *Cantabile*. As the violin lessons are always private and individually adjusted to each student, the goals were different depending on every violinist. Some ideas might have a long lasting process period of assimilation, which is normal in the performance learning process.

1. General questions - knowledge of the repertoire, posture, warm up systems, etc.
2. Scale - different ideas and concepts are introduced for each student depending on individual necessities
3. Work on the chosen repertoire depending on every student's personal needs and possibilities.

The audio examples are divided into two comparative parts: the student first reads the score and then plays again after a deficiency is detected and the corresponding vocal method is applied. The method applies a variety of techniques, such as: singing the phrases, listening to the singers, copying the ideas on the violin, playing together with the singer while having the headphones and using *messa di voce* ideas for the violin and others.

3.1. Experiments in Class 1 - duration: 54 minutes

8th of May 2017

Student 1 - graduated student from Liceu Higher Conservatory, 2014

Assistant professor: Oksana Solovieva

QUESTIONNAIRE

According to the questionnaire Student 1 rarely goes to vocal concerts, opera and seldom listens to singer's recordings. Sometimes he thinks what he can apply to his playing. He is familiar with some opera and vocal repertoire that he has to play on violin since in some occasions he plays in the opera's orchestra. While warming up, Student 1 concentrates on sound and body relaxation. He has a general structure of the piece in mind and sticks to it, without inventing words or characters. He sometimes sings the phrase for better understanding of its direction. When it is written *cantabile*, Student 1 plays very soft without bow pressure, exaggerating the phrase and becomes aware of his vibrato.

Keeping in mind Student 1´s answers from his questionnaire, the class begun.

GENERAL PART

All the questions addressed to the student refer specifically to his personal deficiencies observed throughout the years of study.

Student 1 plays with shoulder tension. When asked about his association with the continuation of vocal cords he confirms this sensation, which is one of the conclusions from Tricia Pine´ s vocal class previously observed.

To calm down Student 1. thinks about relaxing only the right arm as he thinks this will spread across his body. Bone stability and muscle relaxation has been proposed to him as a better way of connecting with the whole body, the idea of voice professor Anna Ollet.

-What is the diaphragm function in violin playing?

Student 1: ¨ *it is a weight of the right arm.*¨

The question was asked to make Student 1 think about the lack of support and weakness of his left hand in order to lift up his instrument and to give the support to his colors, which is Elisabeth Schwarzkopf´s idea from the observed class. The weakness of the left hand is produced because Student 1 did not think of the right arm as the air that needs to be supported.

-What *son filé* means in violin technique?

Student 1: ¨*I have never heard it and do not know which studies can help me to develop better sound control*.¨

As the professor Pilar Paez talks in her interview about the possibility to create the expressive diversity within only one note, the concept of *son filé* is addressed in nearly every methodological violin book, such as, for example, in Ivan Galamian´s *Principles of violin playing and teaching*.[107]

-How would you study or teach the permanent continuous vibrato in one phrase?

Student 1: ¨I would not know. Probably by accelerating the bow for encouraging the vibrato.¨

The new concept of continuous vowel is proposed to the student. Student 1 never thought about consonants or vowels on violin in general, but he understands the idea and seems interested in it. Continuous vowel is linked to the state of hand as a continuous expressive sensation, rather than vibrating note by note.

SCALE

While the student was playing the scale, several deficiencies were detected and addressed through vocal approach.

Problem detected: Continuous *portato* and lack of *legato* in the bow arm.

Solution through vocal images: The true *legato* when vowels are not interrupted is proposed to the student. It is especially appropriate to Student 1, because he always plays *portato*, rearticulating every note with the bow. As professor Pilar Paez comments in her interview: ¨Legato is perfect when the notes are the pearls and the phrase is the collar.¨ As an example of working on legato technique N. Paganini, Caprice n. 20, with the open string in double stop, is proposed .

[107] (Galamian, 1962, p. 60)

MUSICAL EXAMPLE 1

Problem detected: Continuous changes of pressure on the strings.

Solution through vocal images: Elisabeth Schwarzkopf: ¨Do not allow the notes to stick out anywhere¨

The innovative breathing is proposed while playing the whole scale on one down bow and breathing out on doing down. The student is offered to feel the rising or opening of the chest, which helps to maintain the good bow contact with the string at the tip of the bow, which makes it lighter at the frog. Student 1 was offered to try and experiment with the contrary breathing as well to analyze the effects.

Problem detected: Very poor intonation and no resonance in the sound

Solution through vocal images: Idea from Tricia Pine´ s vocal class is introduced - intonation and resonance as a united concept. Tricia Pine: ¨Question yourself: am I allowing an optimal resonance?¨ Pilar Paez in her interview also referred to *intonation and tone* as a unified concept. Josep Buforn reflects: ¨Projection is the amount of high harmonics."

The work with the student included opening all the harmonics of each note, what means perfect intonation, constantly comparing to open strings as the ideal. The search for not ¨fallen¨ notes but supported together with the perfect harmonic focus that resonates in the head, like a singer, was experimented with the student. Therefore, next step was avoiding notes that have a falling direction □, and searching, as do singers, for a brighter and narrower intonation with resonance ↺.

Problem detected: airy and not supported sound

Solution through vocal images: Abigail Horro: ¨When singing, air and support are not only linked with technical questions of sound production, they are also expressive questions.¨

The student is proposed to concentrate in the string and bow's contact point, where the air should not escape, as if the right hand was lung breathing. Hear the air that escapes from the hole in your imaginary lung. Excess of air in singer's sound is a defect. As violinists we should be able to fix it, since it is an external visible instrument. The most important is to hear it as a defect.

Problem detected: very audible big difference in four string's colors.

Solution through vocal images: Pilar Paez: ¨One of the biggest searches in vocal classes is to unite the registers.¨ The student is encouraged to try to equalize registers like a singer would do. While playing the scale the change of strings should not be audible, making sure that it is like one singing voice with no notable changes of registers.

REPERTOIRE

While the subject of different types of vowels and consonants appeared earlier in the class, the different language aspects that affect the articulation and the color are also addressed. Therefore the Spanish work is chosen on purpose to start from, as it should come more naturally for the Spanish student.

Problem detected: The beginning of L. van Beethoven, Violin sonata n. 5, 1 mvt.

MUSICAL EXAMPLE 2

The sound is airy and unclear, or with accent. Student 1 starts breathing in as his solution. But since he doesn't listen to himself, he doesn't evaluate his playing and doesn't hear that his method doesn't work. While he breathes his body moves. At the moment of maximum concentration his body is not still.

AUDIO EXAMPLE 1

Solution through vocal images: experiment with the breathing techniques and try not to move the body at the moment of the first string catch. Therefore, it is proposed to hold the breath in one moment just before starting the piece. It is important not to create the death point. Professor Inessa Prosalovskaya recommends: ¨in order to start the note in piano dynamic, one has to hold the breath, but not tense it. ¨ The student is encouraged to try and experiment. The idea not to start from ¨dead point¨ was reinforced, since there can be observed a clear tendency. During the associative explanations, the word ¨bow¨ is always replaced by the word "air."

AUDIO EXAMPLE 2

M. de Falla, arr. P. Kochansky, Jota
MUSICAL EXAMPLE 3

First reading of the piece: Surprisingly, since it is quite standard violin repertoire based on the Spanish song, the student does not know the piece and its tempo.
Problem detected: The lack of phrasing, inner expression or intuition towards its possible direction.

AUDIO EXAMPLE 3

Solution through vocal images:

Plácido Domingo: ¨Everyday is about expression. The voice is not only one, it has so many different colors!¨ It is proposed as a solution to listen and watch the video by soprano Teresa Berganza[108][109] while looking to the score and thinking what the student would change in his own playing. It is also proposed to observe the singer's face as well as to perceive the changes of expressiveness for each phrase depending on the words and sometimes during one note. The transformation occurs not only in the sound, but in all her being.

When the student gets back to play the piece, the results are better. Intonation still suffers and it is still little imaginative.

The work of score's analysis previously realized by the author of this thesis is showed to the student. The words are written under the notes and phrasing together, breathing points are marked from the voice interpretation.

The student listens again to the soprano performance. It sounds much better but the general sensitivity towards the phrase ¨painting¨ in not detected. What is missing is the general musical intuition. Finally, the assistant professor plays to show the student the intonation the violin is capable of in order to verify if imitation method works.

The student tries again and asks to have the words in his mind while playing. Finally he achieves much better result.

[108] https://en.wikipedia.org/wiki/Teresa_Berganza
[109] (Berganza, 2017)

AUDIO EXAMPLE 4

Before finishing the work with this piece, another experiment is conducted in order to demonstrate the necessity of developing pre-hearing or create clear sound desired in the inner ear before playing. As professor Elisabeth Schwarzkopf suggested in her class: ¨Search for good sound by pre-hearing what you want to reproduce.¨

While listening to the singer in the headphones, the student is asked to play the violin at the same time with a big mute. The student does not hear himself and plays very out of tune and with no expression. But the idea is that his inner ear improves and when he gets the mute and headphones off he keeps on hearing the singers´ voice in his head, while playing. As Josep Buforn reflected in his interview: ¨To look for a specific tone one needs to have the ear formed.¨ After the experiment is conducted, the interpretation is much better.

AUDIO EXAMPLE 5

Conclusion from class 1:

The vocal references that were used during this lesson included quotes from the observed vocal classes and interviews by Pilar Paez, Josep Buforn, Inessa Prosalovskaya, Elisabeth Schwarzkopf, Anna Ollet and Tricia Pine.

The concept such as violin placements as a continuation of vocal cords was confirmed. The concept of consonants or vowels applied on violin was unknown by the student but it was quickly understood and able to be applied immediately. The weakness of the left hand was improved as the student started to imagine the necessary support for the right

arm's weight. Therefore, the air/bow can freely function on top of something solid and stable. It immediately helped to bring up the instrument and to improve his posture. The breathing in and out during the scale on one bow is confirmed as helpful by the student. Looking for harmonic resonance and purer intonation also gave fruitful results but the student still doesn't play in enough tune, which points out to untrained ear and the need of an auditive focus.

As the questionnaire has shown, Student 1´s answers were not exact but rather clever, and during the experimented class many deficiencies were detected. While Student 1 says that he exaggerates the phrases when he sees the *cantabile* in the score, the phrasing in general is not his strong point; sometimes he thinks of what vocal technique can he apply for his playing, but actually he used none of them.
The general knowledge of vocal-based repertoire for violin is lacking and the internal ear is not trained to be able to create high musical expectations.

3.2. Experiments in Class 2 - duration 1 hour 42 minutes

Student 2 - graduated student from Liceu Higher Conservatory, 2013
Professor: Olga Aleshinsky

QUESTIONNAIRE

According to the questionnaire, Student 2 rarely goes to vocal concerts, sometimes goes to the opera, since she occasionally works with the opera's orchestra. She sometimes analyses applicable singers' qualities to be used in her own playing, often listens to singers recordings, while preparing for the rehearsals at the opera, and is familiar with a

wide range of vocal repertoire. Student 2 doesn't listen to vocal works that might be a base for the violin repertoire she plays. While she warms up before playing in public she thinks of her body weight, her feet and her breath and then she plays long notes focusing on the sound. It is helpful for Student 2 to have images and words while playing and she sometimes sings the phrase before playing it. When she sees the indication *cantabile*, Student 2 tries to find long phrase as if painting a long line.

While keeping in mind Student 2 ´s answers from his questionnaire the class begun.

GENERAL PART

All the questions addressed to the student refer specifically to her personal deficiencies observed throughout the years of study.

When asked, Student 2 confirmed that she does not know what does the vocal origin work for violin mean. She only recalled W. A. Mozart´s connection to the opera in violin concertos, evoked some arrangements by J. Heifetz.

Student 2 confirms to be shy singing in violin class. Although she has studied singing previously she doesn't see how this method can help to violin interpretation.

The idea of saving the bow and having the control over its distribution is introduced to the student by recalling the master of breathing the tenor E. Caruso[110]: ¨Caruso was the follower of the singing method of notable masters of *bel canto*: he breath in, holded the breath and afterwards distributed it.¨[111] The student is encouraged to imagine how

[110] https://en.wikipedia.org/wiki/Enrico_Caruso
[111] (Fuchito, Beier, 2012)

singers manage the speed, pressure and consciousness towards the air control. Student 2 tried to hold the long note on one bow with no interruption to observe how long it can last. At first it lasted 16 seconds, which is a very short time, what determines that the student has never practiced this technique. Student 2 is explained that 40 seconds is a normal time frame for comfortable sustained bow. After trying again, she gets to 40 seconds with some difficulty.

After being asked if she knows the technique of *son filé* Student 2 answers that she has never heard about it. The concept of two different types of technique, virtuoso and sound, has been explained where the sound technique is precisely addressed through *son filé* and long bows practice. The example given by the professor Pilar Paez: ¨A note has three parts, beginning, middle and end¨ served the purpose. Together with the student it has been consulted the complete book on violin technique by Simon Fisher *Basics*[112], where this term *son filé* and some exercises are clearly explained. As a remind, it has been recalled to Student 2 the common F. Kreutzer study n. 39 dedicated to the technique on tone quality, bow distribution and different dynamic changes on the same bow.

MUSICAL EXAMPLE 4

SCALE

While the student was playing the scale, several deficiencies were detected and addressed through the vocal approach.

[112] (Fisher, 1997, page19)

Problem detected: the posture and the direction of violin f-holes do not address the listener, but rather point towards the wall. It becomes evident that the student does not think about the sound direction.

Solution through vocal images: Professor Pilar Paez reflected in her interview: ¨The projection of the voice or the sound is being looked in different ways. First, through imagining that the sound is being produced far away from the singer, at the end of the hall where they are singing.¨ This idea that the singer has his mouth in front of the public pointing towards it should correspond to violin. In this case, f-holes should look towards the place towards which it is expected to project. This vocal association seems to help immediately to adjust the student's posture in relation to the place where the public is supposed to be. At this point it is worth recalling the interview with Josep Buforn: ¨The singer learns how to manage the stage presence in voice lessons. It is true that a small number of students would be satisfied just employing the right notes. But strangely enough once they adopt a brighter stage presence, all technique becomes proportionally better automatically.¨

Problem detected: Right arm changes irregularly bow speed all throughout the scale.

Solution through vocal images: The student is proposed to imagine that the bow is the singer continuous air together with its controlled speed. This advice helped to improve the consciousness towards this aspect immediately.

REPERTOIRE

MUSICAL EXAMPLE 5

N. Paganini, Cantabile

AUDIO EXAMPLE 6

First playing

Problem detected: Wrong notes while sight-reading and poor intonation.

Solution through vocal images: It is explained to the student that N. Paganini made numerous joined recitals with singers and had a great interest towards the vocal world; therefore it is not strange that this work is composed with vocal influence.

Student 2 is asked not to think about violinistic issues again, rather imagine that her voice is singing at this very moment and resolve the performance ideas as if she were a singer. The student plays again and it sounds much better as it involves artistic dimension.

Problem detected: The choice of fingerings does not suit the musical idea or desired color unity or effect as it always changes the register or stops vibrating.

Solution through vocal images: As the professor Elisabeth Schwarzkopf suggested: ¨Do not allow the notes to stick out anywhere,¨. Hence, it was proposed to the student not to use the open string because it results in just one note whose natural vibration differs from the others. Another suggestion is to unify registers by choosing the fingering on the same string. Pilar Paez: ¨One of the biggest searches in vocal classes is to unify the registers.¨

Problem detected: Unnatural timing in *melismas* which tends to be too fast.

Solution through vocal images: The student is asked why there is *melisma* before the high note? Done by a singer, it would never be so fastly done. The reason is that it exists all together in order to support and prepare the jump towards the higher register, which for the violinist is the shift to another position. It is explained that the rest of the work

consists of more ideas coming from vocal world. At this point it was suggested to the student to adopt the idea expressed by professor Anna Ollet during her observed vocal class: ¨If you do not feel well with your voice at the moment of your solo, simply change the cadence! Practice different versions.¨

As a result, the student played with much more art and natural freedom.

Problem detected: the sound has too much air nose and is not pure enough.

Solution through vocal images: The student is proposed to imagine that it is the singer that produces the sound on her violin. Having so much air, the singer must be a smoker. Having all this in mind, the student plays again.

AUDIO EXAMPLE 7

Problem detected: the intonation is too low, while the vibrato is around the note and has no clear center.

Solution through vocal images: In her interview, the professor Pilar Paez points out: ¨When the pitch is perfect and all the harmonics are resonating in harmony, it creates a perfect tone. The vibration that occurs in the head depends on the number of harmonics that exist in a note.¨ The student's violin is expected to ring and resonate better while searching for purer intonation. The auditive exercise is shown to the student, it consist on to divide the tone between two neighboring notes until the minimum subdivision. This exercise makes it possible to improve auditive concentration. In this way adding the vibrato would not alter the intonation. The student plays again.

AUDIO EXAMPLE 8

J. Brahms arr. J. Heifetz, "Wie Melodien zieht es mir" Op. 105

MUSICAL EXAMPLE 6

The discussion about the original scores, where the arranger-violinist indicates *portamento* between notes in multiple occasions, refers to whether or not the violinist is supposed to imitate the voices of the past or it is done for purely violinistic expressivity.

AUDIO EXAMPLE 9

First reading of the piece

Problem detected: The student reads the original score with some indications of *portamento* form the arranger J. Heifetz. It sounds like *glissando* and not *portamento*. The left hand finger has too strong pressure on the string and it is not sensible.

Solution through vocal images: treat the audible shifts in the old manner style and do not treat it as a glissando with continuous speed and finger pressure. Imagine that the *portamento* is there simply to travel from one note to the other while not losing the continuous and alive vowel. This explanation is an extract from conducted audio interview with soprano and professor Grace Bumbry about the true legato technique.

The student plays again while the vibrato is still stopping in some selective notes distracting the continuity and legato. As the professor Pilar Paez replied in her interview: ¨Legato is perfect when the notes are the pearls and the phrase is the collar.¨

Problem detected: G-string on the student's instrument has too dark sound comparing to the other strings.

Solution through vocal images: as an interpreter one has to know the tone limits and strong points of his instrument in order to control the desired effect applicable to each piece. In this particular work, on the G-string one should look for the high harmonics and projection. Technically it can be done by adding more bone support to the finger pressure on the string and keeping in mind the idea of soprano, not mezzo-soprano. But the image can be imported from the Josep Buforn´s interview: ¨Projection is the amount of high harmonics.¨

It is proposed to listen together with this violin student the recording of "*Wie Melodien zieht es mir*", by J. Brahms[113], by the Canadian soprano Edith Wiens[114] who represents an example of perfect legato and multiple colors that might be intended to be copied on violin. The student is shown the score that has been previously studied with words written underneath the melody and the breath marks copied from the recording. Student 2 follows the score while listening and focusing on vowels, consonants and the colors produced by the singer.
Before the second listening, we talk about the different consonants and vowels in German language, while looking at the poetry's text before listening.

Student 2 speaks German, so she is asked to imagine the words before trying to play it again on the violin.

Problem detected: all the phrasing arrival points have the same inclination force. The narrative qualities are underdeveloped.

[113] (Wiens, 2017)
[114] https://edithwiens.com

Solution through vocal images: Student 2 is proposed to think about different consonants at some different points of the phrase, less or more strong, with more light or more decisive. The vowels are not the same every time, at one moment it is ¨I¨ and in another ¨Ei¨. So they have to be different on violin as well. The different types of resonance points of the speech in different languages can be imagined to be applied on repertoire as well. As Tricia Pine declares: ¨Different vowels resonate in different places.¨

Final interpretation seems to be much better in terms of expressive resources.

AUDIO EXAMPLE 10

M. de Falla arr. Kochansky, Jota

MUSICAL EXAMPLE 3

AUDIO EXAMPLE 10

First reading of the piece

Problem detected: Student 2 makes all the score indications without evaluating them artistically and independently.

Solution through vocal images: It is immediately proposed to listen to the Teresa Berganza recording, look at her face transformation. The text is given to the student and it is analyzed to keep in mind the expressive possibilities in each word.

While listening twice, the student is proposed to note how the direction and the color of each phrase changes depending on words. It is also asked to be observed the approach to the end of the phrase, especially in terms of time spacing. Josep Buforn has reflected in his interview: ¨For good singers who have listened to a lot of music the ornaments and timing in cadenzas do come naturally. The proportion at the cadenzas' endings is very

important. To be able to change this proportions, one has to have been listening to a lot of music.¨

The student plays again

AUDIO EXAMPLE 11

The result is a much better performance. The student recognizes that with the words in mind it is easier to interpret. As Plácido Domingo said: ¨Everyday is about expression. ¨

The choice of N. Paganini's Cantabile as the first example was specially selected for the lack of words. At this point of the class It is proposed to get back to that work and try to invent some words and the context, to decide in which part of the opera this piece is more likely to appear and what is the message a performer tries to communicate to the public. Josep Buforn reflects during his interview: ¨If one thinks where he come from before singing an aria, even from a technical point of view, the interpretation gets better immediately.¨

AUDIO EXAMPLE 12

Problem detected: too controlled ideas during the interpretation.

Solution through vocal images: back up and observe the moment of performing, hear as the music comes at the moment and follow it. As professor Tricia Pine comments during her vocal lesson: ¨Back away to let things vibrate instead of looking at the bird in the cage. Do not be too involved. Be the observer of the sound.¨

Conclusion from the class 2:

The student is very receptive to the new ideas, understands them quickly and after each association changes the way of playing immediately.

The vocal references that were used during this lesson included the quotes from the observed vocal classes and interviews to Pilar Paez, Josep Buforn, Placido Domingo, Elisabeth Schwarzkopf, Anna Ollet and Tricia Pine.

Comparing Student 2´s questionnaire to the class it became evident that even if in the questionnaire the student replied that she does sing to understand the phrase better, during the lesson she seemed too shy to apply this technique. Student 2 has studied voice earlier but she doesn't make the link with her violin playing today. Nevertheless, in the questionnaire she answered that while listening to the singers sometimes she analyses what can be applied to her playing. Both mismatches indicate the relative unreliability of student's answers in the survey.

In terms of repertoire, the questionnaire has shown that Student 2 only recalls W. A. Mozart´s violin concertos relation to opera and some vocal pieces arrangements for violin by J. Heifetz. During the lesson she confirms that students always play the same pieces and doesn't remember any opera fantasies. The lack of vocal repertoire in violin courses is clearly shown during these experiments.

Nevertheless, it was a very interesting class, since it was possible to try a few different experiments and apply multiple ideas to see and analyze whether the vocal method could improve student's interpretation.

Three different violin pieces were worked on: ¨Cantabile¨ by N. Paganini, which has not a vocal origin but contains a voice idea behind, J. Brahms, Lieder arrangement by J. Heifetz, and ¨Jota¨ by M. de Falla, arrangement by P. Kochansky. The purpose of this particular choice was to select pieces from different origins and languages groups. The student did not show any difference in sound production while playing these pieces but the idea of different resonance and different consonances depending on composer's language seemed to motivate her and must be taken into account for further investigation.

When Student 2 played *Cantabile* by Paganini at first sight, it was absolutely non-vocal and therefore the tone and the intonation were poor, with no musical ideas nor intuition. The typical violin class would most likely focus on intonation, rhythm and shifts technique. But during this experiment it was proposed to address the student's difficulties only through vocal associations and by listening to the singers.

The results have shown success of vocal techniques applied in the violin class. Imagining that the bow is the continuous air with the controlled speed and pressure helped greatly to improve consciousness towards the bow technique. Furthermore, another vocal association seems to help to adjust the student's posture in relation to the place where the public is supposed to be. In terms of interpretation, after listening to the singer perform the same piece and applying vocal concepts verbally, the student played with much more art and expression. The different expressive search is the true artistry and this new approach seems to convince the student to apply it in the future.

3.3. Experiments in Class 3 - duration 1 h. 27 min.

13th of May, 2017

Student 3 - 3rd year student at Liceu Higher Conservatory, graduating in 2018

Assistant professor: Oksana Solovieva.

The student in general needs to clear his sound and improve the tone. Before this experiment he played in a masterclass where it was noticed by his teacher that he has to develop the tone's aesthetics in general and try not to sound ¨primitive¨.

The experiments conducted with this particular student intent to discover the possible relation between the concepts of ¨cultivated¨ violin tone in general and the potential to improve it to a satisfactory level by the association with the vocal concepts.

QUESTIONNAIRE

According to the questionnaire Student 3 goes sometimes to vocal concerts and to the opera. While listening to singers' piece he occasionally analyzes what can be applicable to his playing. Also, he rarely listens to singers' recordings and is not familiar with vocal repertoire in general. He doesn't listen to vocal works that may lie as a base of the violin repertoire he might play. Finally, when warming up he thinks about the left hand, the bow contact and the sound quality. Student 3 has a general sketch of the piece before the performance and sticks to it. He sometimes sings to better understand the phrase before playing it. Student 3 states that he knows exactly how to react when the word *cantabile* appears in a violin score. He plays soft and with the slow vibrato.

While keeping in mind Student 3´s answers from his questionnaire, the class begun.
All the questions addressed to the student refer specifically to his personal deficiencies observed throughout the years of study. Student 3´s teacher placed a petition to work specifically on the improvement of his tone qualities and this is what has been intended.

GENERAL PART

When asked what does the student know about the vocal repertoire applied to violin, he says that this are all the slow pieces and names not applicable works. He cannot recall any more pieces. He is not familiar with the repertoire directly arranged from the voice or any opera fantasy for violin.

The student is asked what does he think about the sound qualities in general. He looks puzzled and replies that it should be pure. It is proposed to the student to observe some vocal classes in the future and to focus on how much work on sound is done during this lesson in proportion to the standard violin lesson. The student is also encouraged to read the book about Stradivari in order to realize what was the luthier's search in terms of ideal sound for his instruments.¨ To achieve the [violinists] full effect as soloists in front of large audiences they needed violins with a stronger tone. Stradivari set about trying to meet this demand.¨[115] At High Conservatory the student is expected to create his own pre-hearing of the desired tone. One method to achieve it, proposed in this thesis, is to listen to singers' tone production while always analyzing the applicable qualities.

[115] (Faber 2004, p. 46)

SCALE

The purpose of the experiment, which is to improve the sound, was explained to the student before playing the scale. While the student was playing, several deficiencies were detected and addressed through the vocal approach.

Problem detected: the ear of the student is not trained and he is not enough particular about its quality. All changes (bow, positions, string) are heard, intonation is poor and the sound is not focused.

Solution through vocal images: The student is asked to feel the responsibility towards the sound just like the singers do. If one note of a singer does not sound we perceive it right away, but the violin allows too many things. He is asked to play feeling the maximum responsibility towards his sound.

“While working on the sound’s quality, Yury Yankilevich pointed out that the student should have the conception of the good sound, this goal needs to be followed. The violinist has to know how to listen and analyze not only his own sound, but also the one made by the others. It is important for the teacher to provide a tactical inside that will inspire the student towards research. It is necessary to cultivate from the early age the urge for a quality sound production, the violinist should always stay unsatisfied with himself.¨[116].

The student plays again.

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[116] (Yankilevich, 2002, p. 206)
¨В работе над качеством звука, указывал Юрий Исаевич, у студента должно сложиться представление о "хорошем" звуке — той цели, к которой следует стремиться. Скрипач должен уметь слушать и анализировать не только свой звук, но и чужую игру. Важна тактичная подсказка педагога, внушение ученику чувства поиска:.Надо, чтобы скрипач был всегда недоволен собой, воспитывать у него стремление с малых лет к извлечению качественного звука.¨ [translation by Oksana Solovieva]

Problem detected: very poor intonation

Solution through vocal images: The concept of intonation-sound-projection is explained. Comparing, when possible, to open strings´ resonance, a very slow work is done. The question is whether or not the student perceives the difference.

Problem detected: the tone lacks unification in color and does not possess attractive qualities.

Solution through vocal images: The student is asked to play the scale so that it is understood what kind of voice he might have. The voice itself should be interesting in its qualities or simply have perceivable beauty in its tone.

Problem detected: The student plays too loud and with too wide vibrato.

Solution through vocal images: First, he must find the resonance, which is not always related with higher intonation playing. He should try to avoid playing with primitive sound, if he can repair it. When he would find a good resonant tone, he should try to keep it for all notes, as vibration increases the projection and distinctive qualities.

It has been suggested to Student 3 to practice at home while always using the exigent ear. As professor Inessa Prosalovskaya suggests: ¨All notes should be sang on the same air. The notes are consonants but tone and sound are vowels placed inside each note.¨ After finding the perfect intonation and resonance, keep this sensation for the rest of the repertoire. New technique is proposed to be practiced: gradually augmenting the tempo while not losing the achieved resonance in a slow tempo.

REPERTOIRE

Some work has been done on the repertoire the student has played during the academic year: H. Wieniawski, Scherzo-Tarantella. Student 3 is asked to play slowly and to look for the resonance and the good sound in each note and also in all the intervals while finding with patience the sound that he likes.

Problem detected: Missing musical notation training, which is what precisely develops ear attention.

Solution through vocal images: If the note doesn't ring or is out of tune, the reason for this is the rush in studying and the lazy ear. The author of this thesis suggests: ¨If it doesn't sound- you will find the reason by logical thinking or asking your teacher, but you have to hear and evaluate the quality of the produced sound in your ear.¨

G. Fauré arr. C. Liégeois, Les Berceaux Op. 23, n.1

MUSICAL EXAMPLE 7

Student 3 plays it for the first time

AUDIO EXAMPLE 13

Problem detected: the student cannot read the rhythm at first sight. He says he thinks too many things at the same time and cannot concentrate on what he does.

Solution through vocal images: It is explained to Student 3 the responsibilities of the different components that participate in the learning process - physical, analytic, auditive. When studying music the auditive center is the guide for other centers. The article about the learning centers and the importance of the ear in relation to the vocal repertoire is attached in a contribution chapter of this thesis.

The student is explained the responsibility of the physical-motoric center to create the correct reflexes. When one can rely on reflexes then it is possible to concentrate on the auditive center. As Josep Buforn reflects in his interview: ¨The body is a machine based on reflexes. It is possible to rewrite the muscles' information by distracting the mind.¨

The student plays again.

Problem detected: Student 3 plays everything only in the first position, as he says, "for security reasons".
Solution through vocal images: The unification of registers as a singer and the necessity of to use fingerings in a rational way as a violinist is explained. As professor Anna Ollet commented in her lesson: ¨Never lose a good tone throughout different intervals and vowels. ¨

Problem detected: long notes lack of expressivity and are empty of musical sense.
Solution through vocal images: The *son filé* technique is explained in relation to the vocal *messa di voce* concept. Student 3 observes the demonstration of how to treat the transitions between the sections through variety of dynamics on one note.
He plays much better.

Problem detected: missing musical meaning of overall phrase.

Solution through vocal images: It is proposed to imagine some words while playing and entering in the role of the person who might sing it. Since it is a lullaby, the images are clear and demand regularity of pulsation, calm small notes and tender colors. The vibrato should not be so active. While playing for his observation, the author of this thesis communicated verbally the possible imaginary.

¨Yankilevich believed in the necessity to separate the working process over the sound in different phases. The first phase, he believed, was the control over the basic elementary sound production. The next phase would be the focus of the student's attention on the quality of the sound and the student's ability to listen to themselves (bringing out not only the notes that are out of tune but also the ones that do not sound with quality). The third phase would be the search for the sound dynamics and colors, tone characters that correspond to the thematic material and the style of the piece. And finally, the highest phase - the search for the individual sound language, the violinistic tone - the quality that determines the artist's facial expression.¨[117]

The student played again and it sounded much better

AUDIO EXAMPLE 14

[117] (Y. Yankilevich, 2002, p. 206)
¨Янкелевич считал необходимым разделять на этапы процесс работы с учеником над звуковой стороной. Начальным этапом он полагал овладение основными элементами звукоизвлечения. Следующей задачей становилась концентрация внимания ученика на качестве звука (на первых порах — хотя бы .скрипит или не скрипит.), затем выработка умения себя слушать (выделять не только фальшивые, но и плохо звучащие ноты). Третий этап — поиск звуковой динамики и колорита; поиск красок, характера звучаний, соответственно тематическому материалу, стилю произведения. И наконец, высший этап — нахождение собственного индивидуального звукового. языка, скрипичного тона — качество, которое определяет лицо артиста.¨ [translation by Oksana Solovieva]

While listening to the audio by the singer Barbara Hendricks[118] interpreting this piece[119] the student's attention was driven towards the type of vowels that exist in this poetry - a, o, u, and the soft consonants - sch, ch. How to do it with on violin was experimented with the angle of the left hand finger that presses the string, by putting less bone on the string and more finger pillow with a lighter pressure.

The student played again.

Problem detected: vibrato dissimulates the poor intonation

Solution through vocal images: Find the tone's natural resonance first, and then vibrate to augment the projection and its beauty. As professor Tricia Pine suggests in her open lesson: ¨Question yourself: am I allowing an optimal resonance?¨

Conclusion from the class 3:

As the questionnaire has shown, Student 3 answered most of the questions as ¨sometimes,¨ he uses the vocal approach towards his sound and interpretation, whereas in reality he has never done it. As for the warm up, Student 3 responded that he focuses on the sound among other issues. Nevertheless this is the aspect he has neglected the most in his playing. It is not clear why this student wants to play slow and soft when he sees the word *cantabile* in the violin score. When asked about the violin repertoire that has inspired or has been the base for vocal pieces, the student did not name one. In general it is evident that the questionnaire responses do not reflect the reality of the matter.

[118] https://en.wikipedia.org/wiki/Barbara_Hendricks
[119] (Hendricks, 2017)

During this class one of the most difficult aspects of teaching arise. How to start to improve the violinist's ear in order to refine and enrich the sound. It is clear that this is a process that has to be conducted over many years and can be gained with the experience and extensive listening only. Nevertheless, it was attempted to initiate the process to see if there was an improvement through the vocal approach. It is probably the only method that a teacher can use in order to activate the hearing, expressive and interpretative qualities of the student.

Speaking about the resonance, intonation and harmonics in the sound were expected to initiate the student's search towards the idea of beautiful sound and individual voice, two qualities that a violinist has to look for and desire in his inner formed ear. By listening and analyzing together with the student a singer's performance and by using verbal explanations, some results were immediately achieved, very little perceivable though. Learning is rather based on the student's future reflections.

This particular student has showed a deficient musical notation knowledge and psychological disorientation in general. Therefore, it was difficult to evaluate the results since the reading of the piece was not correct and the concentration was switching from place to place.

The vocal references that were used during this lesson included some quotes from the observed vocal classes and interviews by Josep Buforn, Inessa Prosalovskaya, Elisabeth Schwarzkopf, Anna Ollet and Tricia Pine.

The tone's improvement started when finding the perfect resonance of each note. That is related to the perfect intonation and the narrow harmonic center's concept. It was used from singer's method the concept of all ¨open¨ harmonics and resonance in the player's head. It helped immediately to create purer tone, which became round and with much projection.

The concept of vibrato that does not alter the intonation but rather augments the natural vibrations of a created perfect tone, increased the sound's quality. The student himself realized that he used the vibrato to cover up imperfect intonation, which is a very common practice among the students.

To create a pre-hearing and more artistic approach to the tone, we have listened together to few different singers and observed many possibilities of tone coloring in the same aria. We tried to name what was the difference between a good singing and a genius interpretation. The purpose of this experiment was to make the student reflect on all these issues for the first time and to question, what is my tone like? What do I desire to find in it?

In general, the work with this student continued during the academic year and the result has shown fruitful process initiated by this experiment. The result of final exam of the year was a much better quality playing recognized by other violin professors.

4. Research of the violin repertoire related to voice

¨In the art of Paganini [...] the presence of the most characteristic bel canto style effects, [start to appear] in his personal instrumental (violin and viola) compositions.¨[120]
Tatiana Berford
[translation by Oksana Solovieva]

¨Today, it has become more difficult to differentiate the tone of one violinist from another. The individual quality of the singing tone, which was the hallmark in violin playing of the golden age of Ysaye, Kreisler, Heifetz, Menuhin, Oistrakh etc. has deteriorated.¨ [121]
Vladimir Dyo

The necessity to add the variety of vocal works to the actual violin repertoire in the High level Conservatories (that has no precise structure or established list of works to cover, in Catalonia, Spain) became evident from the research realized in the previous chapters. The non-existent work on the tone and the lack of knowledge by the students of how to work on pieces based on vocal repertoire is striking, just as the general lack of knowledge of how to approach the lyrical repertoire. Therefore, this chapter is devoted to the repertoire research that can add new ideas to the students and their teachers in order to enrich their possibilities to be included in the yearly repertoire to cover.

The overall research conducted until this chapter stresses the necessity for the violin teachers to explore and incorporate the vocal-based repertoire into the student's yearly repertoire. The results from conducted experiments have shown that the questions to all

[120] (Berford, 2010, p. 272)
[121] (Dyo, 2012, p. v)

participants about the vocal origin repertoire for the violin resulted in a sporadic list of works that are all short and slow. There was often confusion among the students: sometimes, they did not know if any vocal work exist on the violin at all or they have listed some works that have nothing to do with the voice. The necessity of creating a catalog of vocal-based violin repertoire applicable to violin High level Conservatory studies arises from the aim of increasing awareness of the vocal understanding and interest in the students, as a largely neglected field today.

The objective of the research in this chapter is to create an online catalogue with multi tags where one can find, for example, the list of all the fantasies on the same opera or all the variations on one song's theme and search by the composer or arranger.

In general, some selected works already catalogued online exist on the following webpage: http://imslp.org. Nevertheless, many works are not yet classified, and the aim of this research is to complete this work by creating a specified catalogue on this subject, which will be found on **https://www.librarything.com/catalog/oksanasolo**.

All the respective repertoire can be included in one of these categories:

1. Vocal works arranged for the violin

2. The violin repertoire - variations and fantasies - based on vocal themes: operas, arias, songs and hymns

3. Chamber music with voice and violin (with or without the piano)

4. Vocal works written by violinists

The last category is included in order to inspire young performers towards the composition of vocal works. In general, the study of this catalogue aims to arouse interest among actual young violinists in recreating a similar contact with the vocal world as it has been done in the past by some great violinists and virtuosos.

The analysis of multiple compositions and arrangements made by a number of famous virtuoso violinists of the past, may surprise many students and also their teachers. N. Paganini, F. Kreisler, J. Heifetz, L. Auer, H. Vieuxtemps, H. Wieniawski, V: Sher, J. Hubay, H. Ernst, L. Spohr, C. de Bériot, F. David, F. Vecsey, A. Wilhelmj, E. Zimbalist, P. Sarasate, M. Castelnuovo-Tedesco - all of them have explored the vocal repertoire throughout their compositions. The number of variations on popular songs, the multiple opera fantasies, adaptations of arias and even variations on the hymns of different countries they have visited during their tours is immense and inspiring for any violin performer today.

What is specially interesting for this thesis in particular, is the focus that this great model-interpreters of the past have devoted to composition and arrangements. Their knowledge of operas and vocal repertoire was immense and resulted in an incredible amount of notable compositions and arrangements for the violin. Unfortunately, this repertoire is largely forgotten today. Worrying enough, when the students perform it, they do not possess the artistic improvisational understanding of the work that is actually a result of the genius inspiration.

A great number of composers, such as M. Glinka, C. Saint - Saens, G. Holst, A. Beach, R. Strauss, F. Waxman, I. Frolov, have also successfully explored the composition of violin works based on vocal repertoire or voice/violin duets.

The operas that inspired the biggest number of the violinists-composers for the creation of their fantasies and variations are Ch. Gounod´s *Faust, Otello* and *Romeo and Juliet*, G. Bizet´s *Carmen*, W. A. Mozart's multiple operas, G. Verdi and G. Rossini, among others.

Other operas, such as *Golden Peacock*, by N. Rimsky-Korsakov, *War and Piece*, by S. Prokofiev, *Fledermaus*, by J. Strauss, *Porgy and Bes*s, by G. Gershwin, and so on, have inspired multiple virtuoso compositions for the violin.

For instance, *Carmen Fantasy*, based on G. Bizet's opera *Carmen*, by P. Sarasate is widely performed, whereas *Carmen Fantasy* by F. Waxman is rarely played and *Carmen fantasy* by J. Hubay, is not played at all. The *Faust Fantasy* by H. Wieniawski, based on the opera *Faust* by C. Gounod, is often played but other works based on the same themes by F. Vecsey, P. Sarasate or H. Vieuxtemps are not known or unpopular.

Operas by G. Rossini and W. A. Mozart have inspired multiple compositions throughout many centuries. P. Paganini has been inspired by both composers, as well as P. Sarasate, H. Ernst, L. Spohr and H. Vieuxtemps. Opera by G. Gershwin *Porgy and Bess* as well as operas by S. Prokofiev or D. Shostakovich have also inspired violinists to experiment in their compositions and write great works for the violin.

Veniamin Sher composed other unknown fantasies based on opera themes, coming, for instance, from *Ruslan and Ludmila*, by M. Glinka, *War and Peace*, by S. Prokofiev, or J. Strauss´ operetta, *The Bat*.

Some of the most difficult and exciting pieces for the violin are the ones by F. Waxman. Apart from the *Carmen Fantasy* he also wrote *Tristan Fantasy*, based on the themes from Wagner's opera, both written for movie scores.

Variations on hymns or songs were also very popular among traveling virtuosos. They include multiple compositions, not to mention the outstanding ones by N. Paganini. Firstly, most of this works, as they were written for a specific violinist or by a violinist, are highly virtuosic and sometimes too long. This is possibly the reason why they are not performed today. For example, the variations on the F. Schubert's Lieder *Erlkônig*¨were notably explored by H. Ernst in his virtuoso solo studies for the violin. His variations on the song *The last rose of summer* are also extremely difficult to be performed. It is particularly interesting to compare two performances: on one side, by the great singer J. Sutherland[122], and, on the other side, the extreme virtuoso arrangement for the violin and the variations on this songs performed by Hilary Hahn.[123]

The arrangements of the vocal works require not only a virtuoso technique, but the extremely high demands on the performer in terms of tone, tonal shades, vocal effects and phrasing. Probably the most notable arrangers are J. Heifetz and F. Kreisler. It is important to notice that J. Heifetz´s teacher, L. Auer, has also arranged many vocal pieces for the violin that include Beethoven, Chopin, Tchaikovsky, Glinka, Schumann

[122] (Sutherland, 2016)
[123] (Hahn, 2016)

and Wagner's compositions. One of the wonderful performing examples of such arrangements is the violinist Arthur Grumiaux, who has the most control over the *cantilena*, highly appreciated in his performance of G. Faure *Berceuse*.[124]

The violinists of the past had a unique and special personality that lead to a bright artistic presence in their tone and interpretations. Where did their understanding of perfection, mental brightness and emotional control come from? What about their intuition and spontaneity, their moment of inspiration and naturalness? Who were their role models and how their psychologies were formed? The artistic completeness of the most renowned violinists and violin professors of the past is highly inspiring.

One of the important abilities that a teacher has to develop in every student is the capacity and the necessity to inspire a continuous improvement setting personal example. The great interpreters of the past were also frequently distinguished teachers - Auer, Spohr, Bériot, Hubay and others. But the most striking thing is that despite an enormous load of playing and teaching activities, they were highly conscious of the new compositions of their epoch, the possibilities of other instruments, the orchestration or conducting, not to mention other fields of interests.

The investigation of the original compositions based on the vocal repertoire has lead to the realization of the incredibly large amount of vocal works written by these composers. The songs, the operas, operettas, masses and cantatas written by violinists is striking.

[124] (Grumiaux, 2016)

The most productive have been, of course, Louis Spohr and Jeno Hubay, both important violin performers and teachers. L. Spohr, for instance, was also a conductor of an opera theater, G. Viotti used to be the director of the Opera de Paris whereas N. Paganini was always in contact with singers and performed multiple joined recitals. As a consequence, they all wrote for voice as much as for violin.

One of the most notable compositions of L. Spohr is his *Concerto N. 8* ¨In the form of an operatic scene¨, which he wrote while anticipating a concert in Italy in a period where the country was ¨voice mad¨. The premiere of his ¨singing concerto¨ at La Scala de Milan had an absolute success.

While studying the compositions for the voice, violin and piano in the internet free scores collection http://imslp.org/wiki/Category:For_voice,_violin,_piano a large number of unknown and contemporary composers appeared. Some of them treat the violin as an instrument to accompany voice performances, others as a balanced duo. Only few composers will probably sound familiar to most of the violinists and will arouse curiosity for the pieces, such as: *Où voulez-vous aller?,* by Charles Gounod, *Les premiers aveux* and *La fille aux oiseaux*, by Charles Dancla, *Der Erbvertrag* and *6 Gesänge*, by Louis Spohr, *150 Scottish Songs*, by Joseph Haydn, *Il Sogno di Tartini: Ballata*, by Charles-Auguste de Bériot, and *Violons dans le soir*, by Camille Saint-Saëns. Some entries in this library do not refer to the correct scoring, as it is the case of the *Ballade de Villon*, by Max Vogrich, which is written exclusively for violin and piano.

In the same digital library the category for voice and violin has just five entries out of which probably only two composers would result familiar: *4 Songs for Voice and Violin, Op. 35*, by Gustav Holst, and *Along the Field*, by Ralph Vaughan Williams.

Voice, violin and piano as arrangements listed on the library have thirteen entries. But the known works are probably only the ones by J. S. Bach, *Also hat Gott die Welt geliebt*, by Edvard Grieg, *Peer Gynt, Op.23*, arranged by E. Morgenstern, by W. A. Mozart, *Il rè pastore, K.208,* arranged by J. Lauterbach, and a rare edition of *6 Romances, Op.4*, by S. Rachmaninoff, arranged by F. Kreisler.

Among the notable duets whose recordings are still available we can find: F. Kreisler and J. McCormack Duet, I. Perlman and P. Domingo, J. Heifetz and B. Crosby.

As a historical overview of this repertoire it must be added that ¨the practice of doubling voices led, naturally enough, to a notion of playing vocal pieces by instruments alone. In this way instrumental forms like the *canzona* sprang from vocal models and began their separate instrumental existence.¨[125] T. Berford explores in her book[126] the exchange of the repertoire that had begun at the end of the XVIII century. Some of the most interesting examples are G. Viotti *concerto n. 2 Polonaise*, which is arranged as a number for the opera by G. Sarti, *Wedding of Dorina*, and also for the opera *Gipsies on the fairy*, by Paisiello. Furthermore, *Polonaise*, from the *concerto n. 13*, was arranged by G. Viotti himself for the opera *Rare thing*, by Vicente Martina-Soler. The *Air vairé* op. 10

[125] (Boyden, 1965, p. 53)
[126] (Berford, 2010, p.263, 264)

n.1 for violin and orchestra in G major, by Rode, has been a part of the vocal repertoire nearly until the middle of the XX century.

A. Rolla has used in many occasions in his instrumental duets some vocal numbers from popular operas. *Adagio* from the *Duet op. 15 n. 1* in *Es dur* includes an aria from the opera by Meyerbeer, *Margherita d'Anjou*. We can also add the slow movement from the *Concerto in A dur*, by Rolla, mentioned above, marked by the composer as ¨*Cavatina presa dall´ Opera intitolata La Giulietta*¨.

Also the backwards exchange, states T. Berford, has occurred. ¨The polonaises and the variations that were used by the singers, in the first place had to demonstrate the mobility, strength and the instrumentalism of the voice. In this way the voice was equivalent of the instrument. ¨[127]

In her book, T. Berford widely explores the exchange between violin and voice in P. Paganini´s compositions, where the transformations from the vocal form to the instrumental occur without frontiers.

While it was a common practice to dedicate violin works to singers -for instance, N. Paganini *Sonata MS 9 and MS 10*, both dedicated to women singers,- the marriage ties between violinists and singers were also frequent. Paganini was known for his relations with many singers and to some of them he even taught vocal lessons. Charles Bériot and Maria Malibrán´s marriage entered in the history as the most fruitful for the vocal ideas introduced in a violin method. Felice Radicati and Teresa Bertinotti-Radicati, Charles Filip LaFon and wife are among many other examples.

[127] (Berford, 2010, p. 264)

What strikes the most, while investigating this repertoire, is the knowledge of the opera and vocal repertoire by the concert violinists of the past. They also had the capacity to improvise on the instrument and imitate the singers and were able to maintain an outstanding composing productivity while traveling, practicing, performing and teaching. The number of published compositions and arrangements and the variety of their activity indicate the completeness of their musical personalities, which made them such notable figures remembered through centuries.

This research aspires to inspire further investigation towards the violin repertoire based on vocal works, and encourages the violin professors to cover more of such works with the students during the academic year. The work in class on these pieces will develop the necessary aspects of *legato*, *tenuto* and *cantabile* and will help to improve the tone quality, which is so important for a predominantly lyrical instrument such as violin. It also intends to develop the knowledge of the vocal repertoire in general among Higher level Conservatory violin students, which will develop the taste and the inner ear expectations from their own instruments. The teacher's explanation on how to work on this type of compositions and listening to the original works can develop the student's understanding of the vocal nature of their instrument. All this can lead towards more personal research in this direction, hopefully more compositions and, therefore, will create more accomplished future artists.

III. PART THREE. EVALUATION AND CONCLUSION

1. Evaluation of interviews and observed vocal classes

From the multiple vocal classes observed and the interviews to vocal specialists, only points and tips relevant to violin teaching were documented in this thesis. Most of the vocal ideas and images were extremely useful in terms of pedagogical violinistic input. The comparison of vocal classes to violin classes created clear parallelisms and pointed out many common deficiencies such as tone quality, projection, air or bow control, general musicianship development and others.

After observing the work that has been conducted during vocal classes and analyzing teachers´ suggestions to their students, the whole process can be divided into two lines of learning process applicable to violin classes: the general artist development in which many issues as resonance, sound and tone, breathing, corporal awareness, free interpretation, practicing and learning tips, listening, articulation, phrasing, performing and expressivity are addressed; and the instrumentalist development that can be summarized by the following issues of resonance, instrument treatment, posture, bow control, intervals and leaps, unity of registers and sound.

The association with great singers can accelerate the musicianship development in violin students, whereas vocal students strive for improvement in some surprisingly similar directions. Sometimes a reference to a great violinist can be heard in vocal class. As a

conclusion, it becomes clear that great artists of both disciplines can inspire both disciplines´ students.

During violin classes, which include an enormous number of repertoire to cover, with not only singing-nature pieces but also dancing-nature ones, the complex violin technique goals often distract the attention from the most important development as a musician which is expressivity, stage presence, multiple colors and nuances linked to piece understanding, self awareness, timing and taste. Moreover, in the development as an instrumentalist some issues, such as tone production, intervals consciousness and breathing, are missing.

What strikes even more a violin teacher while observing vocal classes is the similarity to technical suggestions that vocal teachers address to their students. The purely violinistic aspects, such as bow pressure or weight, bow speed and bow concentration, articulation or continuity, among other aspects, translated into vocal terms such as breath control, speed of the air and its pressure and distribution, are almost exactly correlated. Other aspects with enough imagination can also be associated and benefit both areas.

As to the students predisposition during vocal classes, it was observed that a vocal student who comes to class normally projects total confidence towards the teacher and is ready for shaping and adjusting the voice and the body in order to remember later the new produced sensations.

Violin students, on the contrary, often lack the confidence attitude towards their teacher and usually dislike physical interference with their body, such as holding their right arm weight or adjusting their right elbow while moving the bow.

Unlike violinists, voice students start studying normally when they are old enough, and they have an instrument within their body that it is not possible to buy nor exchange, but can only be adjusted by their teacher. Their study process is really devoted to the correct use of their instrument and the search for its improvement. Sound and resonance are constantly addressed in vocalization during most of voice lessons and they will be modified by the teacher, who acts as if a violin luthier.

The main difference between the work with voice or violin is that the voice is an internal instrument and the violin is external one. The singer's improvement is based on imagination abilities and abilities to remember sensations in order to reproduce them again. The images that singers use for their improvement are often something physical as an object, body movement or even a violin bow. Violinists improvement is approached through physical sensations and its remembrance in connection to the sound reproduced. Violinists can interiorize sensations, linking the instrument with musical intentions, through imagination and association with the voice.

Voice - internal instrument	**Violin - external instrument**
Visual associations and sensations remembered	Sensations remembered in connection to the sound reproduced
Exteriorize	Interiorize

One of many things that strike while observing voice classes as a violinist is the structural similarity between both instruments. The voice is an instrument within the human body. The violin, on the contrary, is an external object with a very complex structure of "some 70 pieces, which require the skill of a master craftsmanship to cut and assemble,¨[128]. Nevertheless the similarities are innate. Violin strings can be referred as the vocal cords. Furthermore, the use of speed and pressure of the bow makes them vibrate as the singer's air. The use of resonance box of the singer's head and chest can be identified with the violin structure all together.

The Italian violin luthier Giuseppe Tenneriello, in the conducted interview in Barcelona in November 2016, considers from his experience and observation that violin was invented for people who did not have a good voice and could not express themselves by singing, so the modeled structure and ideal sound has its obvious roots on vocal inspiration.

Through observation of vocal classes, it became evident that vocal students spend a

[128] (Boyden, 1990, p. 5)

great part of their practicing time during the lesson on shaping and managing the sound of the already existing instrument within the body. The violin student has often to practice physical reflexes without decent instrument for a great part of his childhood. The violin tone or “voice¨ therefore often remains undeveloped and stays as the lather’s alchemy. Violinists do not have to enter in the physics of violin construction, as the singers do need to understand their apparatus.

The realization of the similarities in voice and violin structure can be helpful for both instruments. For a singer it can help to externalize the idea of the instrument, and for a violinist it can create a direct and personal association with the violin as a part of his body. This association helps the violinist to create a direct expressive link between his inner feelings and the sound created, whereas normally the student tries to dominate ¨the external object¨ with his hands that externally creates a sound.

Each vocal class observed and each interview presented in this thesis suggested a variety of ideas and pieces of advice that have been translated into the language to be understood by the violinists. These associations often offer in brighter images rapid solutions to multiple violinistic problems. For example, the sustained vowel on the same air contributes to the understanding if the idea of uninterrupted bow and it adjusts multiple technical aspects - true legato, smooth string changes and continuous vibrato. The different bow articulations can be associated with different consonants within many languages or expressivities. The articulated words can be compared as well with active left hand fingers. The direct association with personal voice, breathing and resonant

body helps the violinist to auto-adjust many technical violinistic aspects regarding the sound quality and projection.

Each aspect of technical or musical development that relates voice with violin can be in itself a subject of independent study and therefore will appear in the suggested future lines of the investigation listed at the end of this thesis. This particular work may serve as a general opening or reopening call to obtain a closer communication and attention by the violinists to the vocal world by the means of teaching techniques, interpretative effects or repertoire. Some of the observed aspects, such as tone production, sound and phrase shaping, body awareness, vibrato, flexibility during the performance, bow control, registers unification and ornaments, are evaluated in the comparison below.

One of the principal deficiencies of violin students that might be adjusted with singers' method is the work on tone production. It is extremely rare that the question of tone as such comes up in violin lessons since the students come to demonstrate the work realized at home and are normally given new musical ideas, methodology for practicing and some development directions to follow.

The work on the violin tone production is mostly done in the luthier's workshop and the tone production is rarely addressed in classroom. The violinist mostly asks to listen more carefully to oneself to make purer or more interesting artistic tone. But the references of this tone features are often poorly determined in class. In the voice class, on the contrary, the tone is described with specific terms such as metal, projection or sweetness. Violin professors should encourage their students to pay close attention to

actual leading singers of the present and the past to be able to find their own references in order to produce the tone that is being demanded.

Singers start to comprehend the sound shape and its direction from their work with the teacher**.** Often hand or body gestures are invented to increase the comprehension of the created image and to add a flow movement. In the violin class the sound has no specific shape idea, its flow is not a frequent image or aspect to be considered. The bow hand movement is horizontal and for a student to imagine something more then a line is difficult. This often results in a small sound that does not project. Even the smoothness of the string crossings, which is rounded as the bridge, is an issue and the students frequently change the strings with the angled movements in the right arm.

In the violin class the sound direction rarely follows a specific direction. Many students close their eyes while playing; others look at the left hand fingers or even look at the floor. This is their sound production direction. The vocal idea to direct the air towards the higher corner of the room is a necessary concept to be adopted in violin classes.

The idea that singing is a lifestyle and that the singer's body condition has a strong connection to the sound produced should be learned by violinists. Violin students often do not connect their body condition to their results. For example, they often suffer from tendinitis problems caused by practice, dehydration, stress or bad sleep. Playing violin implies not only a mental process but also a correct use of the body as an instrument in itself. Body awareness is an important step towards the artistic maturity of students.

Some of the vocal teachers suggestions may strike violinists. Singers are taught flexibility during the performances to change the notes at the cadences or ornamentations, depending on their voice state, overall tiredness, public receptiveness and other influential aspects such as acoustics. It creates brighter and freer performance at the moment while singers determine which artistic decision they will make at the moment. Classical violinists, on the other hand, never make such decisions and are simply trying to fulfill the composer's expectations. Of course, depending on the performed style it can be allowed or not. Often this rigidness results in tense performances where the connection between sound, instrument, public, performing space or general musical flow is not fluent. Together with the visual appearance, this could be the definition of the stage presence that has momentum. It is dramatically missing among the violin student's today. They do not take any risk, they hardly ever improvise, and they only fulfill the score and professor expectations.

At early stages of violin studies the birth of vibrato is considered as the turning point where the child has a natural necessity to ornament and color the tone. This natural impulse and some few exercises provided by the teacher are pretty much all one can count on as a guide for a good vibrato that the student will use throughout his artistic career. The vibrato is considered as part of violinist's' tone or "voice¨ and can not be neglected. Not only the study of different types of vibrato needs to be addressed more intensely in violin Higher Conservatory classes, but also the expressive and imaginative approach to it.

The violin has the capacity to play with different registers like tenor, mezzo-soprano, lyrical, dramatic or coloratura soprano. Clearly imagining all this types of voices and its characteristics greatly helps violin students to create the associative images to obtain

the desired colors and character, especially in such a repertoire as Mozart violin concertos. The use of different strings and different positions greatly contribute to the choice of the phrases tone color. The vocal image of one singular voice type for a phrase creates the auto-demand from the student's ear for an ¨intelligent bowing and fingering choices¨, which determines maturity and is especially valuable in lyrical pieces. Unfortunately, it is a great deficiency in violin students today.

The ornaments commonly used in vocal repertoire are often borrowed by the composers who write for violin, although it is rarely recognized as such by the violinists who interpret this works. The timing in the ornaments used by the singer is generally slower than the violinist's finger motions, the approach to the big lips is fuller and leans on the note before the big jump, the trill in the voice starts from slower to fast whereas the violinists trill goes normally too fast mechanically and continuously.

The work the singer does with speed, distribution and pressure of the air, is an art of concentration on the sound production that produces unique artistic moments on stage. It can be a great example for any violinist of how to work and concentrate on the speed, distribution and weight of the bow arm. The created consciousness will benefit to the overall concentration and higher performance results.

Finally, the physiological aspect has been also very interesting to compare in both disciplines, voice and violin. The amount of psychological coach training provided to the student during the vocal class greatly exceeds the violin one. Curiously, before an important concert or an exam the typical stress provokes similar effect in both. The violin

stops sounding - a luthier might help - and the voice disappears - the doctor must be visited for help. In fact, the cause explained by vocal teachers is the high adrenalin coefficient in the organism that blocks the way the sound makes to get to head resonators. If one considers that violinists also use their head resonators, this cause becomes common. Therefore, rather than visiting the luthier before the concert, the concentration on freeing the head resonators while playing resolves the sound issue and therefore also the nervous tensions. A suggested further line of investigation about this subject is listed in the conclusion of this work.

The warming up before the concert for voice students serves exactly to check the resonance points and recreate the physiological reliability on their instrument. On the violin the warm up should not only serve to mobilize the fingers, check the memory and concentration, but also should be devoted to find a perfect and constant ring in the instrument and in the head. Not losing this ring during the performance will provide the perfect continuous intonation and a highly personal and projecting tone.

Finally, in terms of repertoire, whereas singers have a specific repertoire that is applicable to their type of voice and personalities, violinists usually have to play completely different styles and musical forms in every recital. Violin students and professionals are required and expected to play all types of repertoire coming from a all historical epochs and all possible expressive forms. The necessity of adaptation and imagination requires difference ranges of vibrato, bow control and articulations among other distinctive techniques. This particularity can provoke stressful situations where a violin student would have to play a repertoire, which can be his weak point, but throughout his studies he is expected to fulfill the expected requirements. It is important that the violin teacher works on weak and strong repertoire types for each student’s

personality. Voice concepts and artistic goals studied in this thesis are identically correlated especially in lyrical passages within the violin repertoire. Unfortunately, the direct association with vocal world is not established yet because of the lack of attention towards the significant existing vocal repertoire for violin, such as opera fantasies or variations. The necessity of enriching the repertoire in Higher level Conservatories demands the creation of a new catalog which would include suggested works.

2. Comparison of didactical units

Revising the Student Handbook by Juilliard School of Music voice department[129], one can realize the work distribution among teachers in order to form mature singers and performers. Vocal coach helps to shape the voice as an instrument, repertoire pianist revises repertoire and is also responsible for intonation and musical notation, drama teacher addresses stage presence and performance transformation, diction and multiple languages teachers work on pronunciation and articulation. The string department violin catalogue[130] only includes theoretical classes, orchestra and chamber music. The question that arises is how a single violin teacher can attend all necessary aspects of violinist development?

Observing voice classes as a violinist it was noticed that the voice lesson is organized in a different way compared to a standard violin lesson. Exercises devoted to vocalization, sound production, body awareness and relaxation take the biggest amount of time. After

[129] http://catalog.juilliard.edu/preview_entity.php?catoid=29&ent_oid=2116&returnto=3120
[130] http://catalog.juilliard.edu/preview_program.php?catoid=29&poid=2929

all, a small part of vocal class is devoted to repertoire and interpretation. Of course, the amount of training time and its distribution depends greatly on student's level and on approaching performance. But out of a great number of vocal classes observed over the study years devoted to this thesis, the standard lesson plan was similar.

During the first part of the vocal class, that takes approximately half of the lesson time, the vocalization is done. Different vowels and consonants are sung in many note patterns and tonalities. All registers are explored under close observation of student's progress by the teacher. The posture is addressed at any time, together with relaxation techniques and breathing exercises. The usual vocal lesson plan is: 10 minutes body awareness and relaxation exercises, 15 minutes breathing exercises, 20 minutes vocalization exercises, and 15 minutes work on vocal repertoire. As we can appreciate, very little part of the class is devoted to the compositions to be performed.

Observing this vocal lesson plan as a violin teacher, many questions arise. One of them is whether or not enough time is devoted to tone production work in standard violin classes. Should the posture and body awareness take more time in violin didactical units? And should breathing exercises be adopted in violin classes?

The amount of time that a vocalist devotes to the actual work on *lieder* or aria, from the point of view of violinist, is not enough. The stylistic aspects of interpretation, as well as overall comprehension of the opera were nearly never addressed in observed classes. Therefore, to conclude the observation, vocal technique is normally addressed during vocal class and repertoire is worked with the repertoire pianist or other specialists. The violin teacher who needs to attend all aspects at once cannot follow this alignment. Nevertheless, the attention to sound production and corporal awareness can be

increased, as it is a mainly missing point in violin education today.

When the work comes to posture, violin teacher normally finds great inflexibility in students, little will to change their habits and stiffness while applying physical contact. To change muscular habits that are programmed in the body from childhood is a long process that needs total student confidence towards the teacher, patience and a lot of time. Very rarely it is done during higher violin studies.

Compared to vocal class, violin didactical unit is mostly focused on work with the repertoire that is expected to be performed. Tone production is only addressed during some lyrical passages of the composition. Posture and body awareness are addressed only with most stiff students few times a year, since covering the diverse repertoire stays the priority.

Of course, all the classes depend on the student's level and on each professor personal approach, but nevertheless, violin teacher finds himself in need to combine both vocal professorial tasks - voice teacher who shapes the tone and the pianist who works on repertoire and the role. Quite often violin teacher decides to function as repertoire pianist whereas the role of voice teacher is minimized.

It has to be recognized that depending on the period during academic year, the violin class can include scale or exercises addressed to posture, intonation, technique and sometimes sound quality. This type of work is generally done before the first semester

technical exam and appears only a few times throughout the year when the priority still stays covering the repertoire.

Many times higher level student proposes him or herself what he/she has prepared for the class and what he/she would like to work on. Over the year violin student has a variety of different musical forms and epochs to cover. One single movement of a concerto can last 45 minutes. Many times in violin class it is not possible to cover all repertoire regularly and some pieces or parts are just overseen. Therefore, the student is responsible for his own progress, specifically in higher level studies.

Violin student is supposed to find the ways to study by himself, body awareness and relation to the instrument is mostly a self-realization process that occurs while practicing at home. The lesson is a weekly check up on the advancement of the repertoire and gives slight tips on more practicing. To summarize, an ideal violin lesson at higher level Conservatory consists of the work on music and interpretation, musical and artistic development.

While singers work on shaping their voices and learning the optimal usage of their instrument together with the teacher in class, the violin students normally come to class to demonstrate the work realized at home. While this work is in process the class can be described with the statement: ¨play through the piece in order to get some feedback or practicing tricks¨. Violin students expect from teachers formulas to solve problems and home practicing techniques.

Comparison of didactical units	voice	violin
Work on tone	Most of the class	Little or neglected
Work on breathing / bow distribution	Primary importance in each class	Can be addressed in class a few times a year
Coloratura / virtuoso passages	Only approached with the adequate voice and role	Frequently addressed in class
Resonance and projections	always	Very rare

Vocal class process is driven towards the correct relation between the performer and the voice.

Performer ↔ Voice

Violin class process is based and driven towards the relation between the performer and the composer of the work

Performer ↔ Composer

In professional and elementary levels, violin professor shapes the violinistic position of hands from which it will be possible further realization of the best tone if the student's ear

will demand it. In Higher Conservatory studies, almost all violinistic work regarding the performer and the violin is done at home and figured out by the student himself. The professor's work is not to shape or place the sound, rather to bring up a mature artist capable to adapt to any repertoire or circumstances and ready for the job market. As a result, the most important quality that determines the actual violinist level -sound quality- rarely falls into attention in violin classroom, and the desired tone that must be pre-heard before its realization is not systematically trained.

What can violin teachers incorporate to their classrooms from vocal classes:

- The attention with which sound and tone production are approached
- The work on body awareness, posture and relaxation exercises
- Breathing techniques
- Associative examples with singers and verbal use of vocal terminology
- Audio and video examples of great singers that can be shown in class
- The use of vocal-based repertoire
- Singing phrases during the class
- Inventing words for abstract violin compositions
- Devote more class time to projection
- Warming up techniques that include resonance
- The idea of different consonants as attacks and vowels as continuous process with changing sound colors

What can be add to violin study Handbooks for Higher level Conservatories:

- Acting for violinists
- Breathing techniques for violinists

- Voice literature for violinists

3. Evaluation of the statistical questionnaire

¨Nowadays, if I go to a concert involving string players, I am bound to see other string players in the audience – often the same people each time, as many of today's artists seem too busy to listen to their colleagues. Yet I rarely see any of them at the opera, or at choral concerts, unless they are playing in the orchestra. Is it just coincidence that we are enjoying a superb generation of string players right now, but none who induce that 'vocal' feeling in me? Yes, they all play with excellent technique, and fine tone as far as it goes, yet many of them could be interchanged without affecting the quality of the performance... Yet surely a little lateral thinking would not come amiss? If you really love music, do not relax gratefully when you have a day off, but challenge yourself with something different, on the basis that a change is even better than a rest. Try to hear the great singers of the past - Caruso, Lucrezia Bori, Giuseppe De Luca, Tito Schipa, Friedrich Schorr, Frida Leider. You might find something amazingly applicable to your own playing.¨

-Tully Potter[131]

30 violin students of Higher Conservatories and recent graduates have participated in the following questionnaire.

Although students have answered to the questions with many details, the following

[131] (Potter, 2016)

questionnaire conducted experiments have proved that actually they rarely put their ideas into practice. Unfortunately, most of the time all these ideas reflected in the questionnaire remain in their imagination.

While many students have provided ¨correct¨ answers in their questionnaires, from a practical point of view, the understanding of vocal approach applied to the violin or the results of such method are not evident. The results of every question in relation to the student and other aspects, together with a general overview, are stated below.

Question 1: *¨How often do you go to vocal concerts or recitals?¨*

Answer results:

-always when possible: 1

-sometimes: 11

-rarely: 15

-never: 3

As professor at the Liceu Conservatory, it was observed that violin students are often missing at the distinguished recitals or vocal masterclasses that are frequently conducted in the Conservatory's hall or in the neighboring opera theater. Nevertheless, many students answered in their questionnaire that they do go to singers' recitals but rarely.

Relation with other questions:

2 students who ¨never¨ go to the vocal recitals have never gone to the opera neither. 1 student who answered ¨never¨, ¨sometimes¨ goes to the opera.

Question 2: *¨Do you go to the opera?¨*

Answer results:

-never miss one: 0

-sometimes: 17

-rarely: 11

-never went: 2

Out of 17 ¨sometimes¨ answers, 13 come from students who study or used to study with the violin teachers who actually work at the Liceu Opera House. Curiously enough, 3 people who have answered ¨sometimes¨ are currently on the replacement list of the opera orchestra and work there frequently. 1 recent graduate who is currently on a tenure-track one-year position for a permanent job at the opera orchestra also has answered that he goes to the opera ¨sometimes¨.

Out of 11 ¨rarely¨ answers, 6 come from students studying with members of the Opera orchestra.

Relation with the other points:

The students who ¨rarely¨ go to vocal recitals - rarely or sometimes go to the opera and vice versa.

The students who ¨never went¨ to the opera have never gone to vocal recitals neither.

Question 3: *¨If you listen to a singer, do you analyze the applicable qualities to your violin playing?¨*

Answer results:

-always: 5

-sometimes: 20

-never: 5

Again, most of the students and recent graduates have chosen the middle answers.
Among the 5 students who ¨always¨ analyze applicable qualities for their playing while listening to the singer, 2 of them occasionally work at the Opera House orchestra.
4 out of 5 students who have answered ¨always¨ are or were students of opera theater's orchestra members.

Relation with other questions:

Surprisingly, all of 5 people who ¨always¨ analyze singer's qualities to apply in their playing ¨rarely¨ or ¨sometimes¨ go to vocal recitals and the opera.

2 people who ¨sometimes¨ analyze the applicable vocal techniques for his/her violin playing, have ¨never went¨ to a vocal recital and ¨sometimes¨ go to the opera.

Question 4: *¨Do you listen to singers recordings?¨*

Answer results:

-often: 3

-sometimes: 14

-rarely: 10

-never: 3

3 people who answered that they ¨often¨ listen to singers recordings are girls, 1 of whom plays as a substitute at the Liceu theater, and therefore probably prepares for productions by listening, and 2 currently study to obtain their Master's Degree in music abroad.

Relation with other questions:

3 students who ¨often¨ listen to vocal recordings ¨sometimes¨ or ¨rarely¨ go to concerts or operas.

The 2 students who ¨never¨ listen to singers recordings, they ¨sometimes¨ or ¨rarely¨ go to concerts or operas. 1 student, who never listens to vocal recordings, never goes to the opera or vocal recitals.

Question 5: *¨Are you familiar with vocal repertoire?¨*

Answer results:

-no: 20

-yes: 10

The answers of the students who are familiar with vocal repertoire vary. 2 students declare to be familiar with the choral music, another one is familiar with some operas

that he has to play as a substitute orchestra member, other 4 students are familiar with some *lieder* and famous opera arias, 1 student seems to know the baroque vocal repertoire.

Relation with other questions:
2 students made a list of existing vocal genres they are supposed to be familiar with, but they both ¨sometimes¨ or ¨never¨ go to concerts or listen to vocal recordings.

2 students, who are currently on the replacement list of the Liceu opera orchestra, point out that they are not familiar with vocal repertoire, although he/she listens to this repertoire every time they work with the orchestra. This seems to be a clear mismatch.

Question 6: *¨Do you listen to vocal pieces and arias that are the basis of the violin repertoire you might play?¨*

Answer results:
-no: 15
-yes: 15

Only half of the questioned students do listen to the pieces that lie in the base of the repertoire they have to play for their violin higher studies.

4 people who occasionally work at the opera theater orchestra do listen to arias that might be their repertoire's base.

Half of graduated students from Higher Conservatory answered ¨no¨ and half ¨yes¨ to the question number six.

Relation with other questions:

1 of the students who does listen to works on which his violin repertoire might be based, indicated earlier that he is not familiar with vocal repertoire in general.

Question 7: *¨When you warm up before the performance, what do you concentrate on?¨*

Students were asked to specify their answers. The replies vary greatly:

-intonation

-feeling of the tempo

-thinking about some parts of the piece

-relaxing and sound

-relaxing

-long notes, some exercises and remembering the piece images

-muscle warm up and getting into the mood of the piece

-scales and sound

-feeling comfortable with the violin, bow contact, clear sound

-intonation, sound quality, *spiccato*

-muscle relaxation, open strings exercise, constant vibrato and breathing

-scales and bow strokes

-sound and intonation

-hand control and scales

-left hand flexibility, sound quality and bow contact

-intonation, sound quality and articulation

-sound and intonation

-breathing

-relaxation and pure sound

-left hand and sound

-playing slow different places of the piece

-mobilize fingers, tempos and character

-scales, playing slow some passages, relaxation

-playing long notes, sound, body stability

-sound, continuous vibrato, relaxation of the left hand

-intonation, sound and flexibility

-good sound and intonation

As it is shown from the answers above, most of the students concentrate on their intonation and sound, try to stay relaxed and enter in the character of the piece, play slowly some passages or open strings and mobilize their left hand fingers´ muscles.

None of the students concentrate on or with violin resonance and only 1 student tries to feel the body stability.

Only two students think of their breathing before coming on stage.

Question 8: *¨Do you feel like you tell a story while playing? Do you invent some words to go along with pieces?¨*

Answer results:

-it is helpful to have images, characters or words: 19

-I have a draft of the general picture's piece and I stick to it: 7

-never thought of it. I play as it comes at the moment: 4

1 student who is currently working on developing better musical line and expressivity, has never thought of having images or inventing words in order to learn and feel the phrase.

Another student who has exactly the same deficiency, answers that ¨it is helpful to have images, characters or words¨ but it does not mean that he actually uses this technique in practice.

Relation with other questions:

2 students who have never thought of it also have never gone to the opera or voice recitals and are not familiar with vocal repertoire.

Question 9: *¨While practicing, do you sing the phrase for better understanding its direction and expressivity?¨*

Answer results:

-always: 12

-sometimes: 12

-rarely: 5

-never: 1

It is difficult to believe that nearly half of questioned students sing at home while practicing to a better understanding of the phrase. This is a well-known practice among instrumentalists, but seldom adopted. Most students while asked to sing the phrase in class felt embarrassed. During the experiments conducted with 7 students who have also responded to this questionnaire, 4 were asked to sing the phrase they were working on. None of them was able to do so clearly, reproducing tune or expressive features similar to their instrument.

Relation with other questions:

The student, who has ¨never¨ sung a phrase before playing it, never goes to vocal concerts or operas and does not know vocal repertoire.

Question 10: *¨When you see some indication in the repertoire such as cantabile, how is it reflected in your playing?¨*

Answer results:

-I know exactly how to react: 24

-I imagine what should be changed, but I am not able to make it sound different: 4

-it doesn't change my playing: 2

The most diverse specifications appeared in the last question about how students react to *cantabile* indication in violin score. Nearly all students have stated that they know exactly what to do but everyone had a different and very vague idea about it. The answers are so diverse that they raise the question: where does this knowledge come from?

24 positive answers ¨I know exactly how to react¨ specified:

-singing

-more expressive and sweeter sound

-softer without pressure, exaggerating the phrase, being aware of vibrato

-more beautiful, feel all notes

-more direction and expressivity

-smooth legato and more vibrato

-softer and not too slow

-more lyric and easier

-softly, with more expression and vibrato

-more expressive in some way, narrower and constant vibrato

-something like singing

-more vibrato

-softer and more vibrato

-intense and more difference between piano and forte

-phrase tension and distension

-playing carefully all the notes

-taking time with natural vibration and rich sound

-sing with the bow all notes

-on the way of discovering it

-legato and connected

-lyrical, flowing, warm sound

-looking for long phrase like painting the line

-exaggerating everything, sound quality and bow's distribution

-good sound and intonation

-play in tempo one can sing it with warm sound

As a result, it is evident from these answers that students only imagine what can mean the indication *cantabile* and how to react. Many answered that maybe they do not know exactly, but they deduce its meaning in a certain way. 1 student also answered that he ¨knows exactly how to react¨, but in specifications he wrote that he is on the way of discovering it. Many students think that they should vibrate more and only one described a narrower vibrato.

Relation with other points:
Students who answered that they were not familiar with vocal repertoire replied that they know exactly what to do when they see the indication *cantabile*. This seems a clear mismatch.

4 students who ¨imagine what should change but can not make it to sound different¨ state that they sometimes go to vocal concerts and operas and know some repertoire.

1 student who never goes to vocal concerts, operas or listens to vocal recordings states that he knows exactly how to react to the indication *cantabile* in the violin score.

Curiously, another student who indicated that he/she never goes to concerts or listens to singers has given the most correct reply: “I play it in a tempo that I can sing with a warm sound and expressivity.¨

Only two students who do not have any close relationship with the author of this thesis, answered honestly - their answers were mostly negative in the variety of questions that demonstrate total absence of knowledge on the subject.

Comparative overview of the questionnaire results and experiments conducted in violin classes point up some mismatches. For instance, some students who have responded that they always sing the phrase before playing were not able to do so in class. Others, while playing a fantasy on opera themes, as part their academic repertoire, could not respond to which role or type of voice every part of the piece was related to. Therefore, certain dishonesty in questionnaire responses was detected.

In the multiple-choice options that included answers as ¨rarely¨ and ¨sometimes¨, students tended to choose these items, although ¨never¨ or ¨always¨ more probably reflected their beliefs.

The students having orchestra members as teachers tended to be more open-minded towards new ideas and more aware of the subject.

More specific observation with some particular students also took place. A recently graduated student, who has been working during the classes through the years on his usual problems with the phrase shaping, legato and vibrato, states that actually he rarely goes to vocal concerts and never listens to singers' recordings. Another student, familiar to the author of this thesis, in spite of the fact that he never listens to violin recordings and is not familiar with the repertoire of his own instrument, answered that he does listen to singers recordings sometimes in order to analyze what can be useful for his playing.

As a conclusion, we see that all answers are not exact since human factor conditioned the questionnaire reliability. Students who have studied or are currently studying with the author of this thesis, mostly answered to questions in a clever way, applying rational

thought and imagination. But since their playing is familiar to the author, sometimes it appears to be evident their wish to answer "correctly" more than honestly, even though the questionnaire was anonymous and did not state their names.

4. Evaluation and results of work with the violin students

¨To be able to play well one has to sing well.
This Corelli´s motto was a guide for violinists-composers during the XVIII century
which Yury Yankilevich regarded as an invitation to master the true bel canto
as an invitation to create bright and logical complete images¨[132]
- Yury Yankilevich

The positive results have been shown from all the explored ways to incorporate vocal images into the violin classroom: listening to singer's interpretation in class, verbal communication of the ideas, singing the phrase before playing it, imagining words while playing and breathing techniques.

The realized work was divided through all doctoral years. First of all, vocal approach was experimented during the academic year with students of the High Conservatory of Liceu, joined masterclasses with the voice teacher and specifically conducted audio-recorded

[132] (Yankilevich, 2002, p. 243)
¨Чтобы хорошо играть, нужно хорошо петь.. Этот девиз, провозглашенный Корелли и бывший путеводной звездой скрипачей-композиторов XVIII века, Юрий Исаевич рассматривал как призыв овладевать настоящим bel canto, создавать яркие, логически завершенные образы.¨

experiments with some students. It has been observed that practically any violinistic repertoire might have an improvement while applying vocal images. Therefore, additional vocal based repertoire must be incorporated in academic programs in order to better develop students' performance techniques.

The work during academic year with many violin students have applied vocal approach depending on specific needs of every student. The overall observation is that students showed a great receptiveness towards this association with another discipline that created a shortcut towards their deficiencies.

The masterclass conducted jointly by violin and voice professors at High Conservatory of Alicante, can be considered as experimental and had interesting results. Singers shared common problem with violinists, but the last showed much greater inattentiveness towards tone, projection and stage presence. The problems addressed to violinists, in terms of general search for legato and colors unification, were also shared by vocal students. The voice students had common deficiencies with violinists such as legato, *tenuto*, attention to small notes and timing. They also shared with all other music students the need to increase musical comprehension and maturity.

Voice students showed willingness to learn from the violin professor, whereas violin students were in general less receptive to learn from lyrical discipline and considered their playing more difficult and virtuoso. Violin students did not bring vocal repertoire to work on the masterclass and considered lyrical works as easy and not deserving serious consideration. Violin students found themselves in great need of sound production consciousness and learning. Stage presence was not considered by them and while compared to voice students gave striking results. Even a weak voice student was able to

defend his/her presence on stage, whereas even the strongest violin student was not conscious of the importance of communication with the audience.

After conducting multiple audio-recorded experiments with violin students, three were chosen to be described in this thesis. They appeared to be the most representative and diverse in terms of violinistic problems since student's level was very different.

It has been difficult to see immediate results in learning process, since the new ideas needed to be assimilated and every student showed different levels of receptivity. Therefore, it was not possible to observe fully immediate results. Nevertheless, some rapid changes and responses were registered.

The experiments were conducted in three parts:

1. Introduction to the general ideas and general questions - knowledge of repertoire, posture, warm up systems and others.
2. The scale, where were approached the individual needs of the students, such as articulation and sound, intonation, resonance, string crossing, shifts, colors on different strings and positions, breathing and others.
3. The work on repertoire. Depending on the student’s needs, some pieces were chosen to be experimented with, in order to register if the vocal approach could improve their interpretations.

1. On the three parts of the experiments, the general question part was similarly responded by all participants, and did not differ much from mainstream students in High Conservatories. General concepts and the idea of experiments were grasped by all

participants from the very beginning and easily assimilated. They didn't consider the type of work and violinistic goals presented as something new, but the approach focused on self listening and new images proposed by the vocal method immediately have created a shortcut in their minds and lead to realize some problems that were long addressed by their violin teachers but not really understood by the students themselves. The realization of a deficiency in each violinist, is a halfway towards its correction, whereas the correction itself can be done afterwards by standard violinistic approach.

Almost all students who came for conducted experiments did not think before about the possible relation between voice and violin. Even violin students who have taken voice lessons previously did not realize the connection.

The questions conducted to all the participants about the vocal origin repertoire for violin have created a long reflection time and finally resulted in listing a few pieces, all short and slow. There was often confusion as to whether vocal works exist at all on the violin. Some listed works had nothing to do with voice.

Therefore, we may conclude that knowledge of vocal repertoire on violin is absolutely not significant enough in high-level studies. This indicates that the list of works to be performed is not rich enough since such pieces are missing. The teacher's explanation on how to work on this type of compositions can develop the student's understanding of the violin vocal nature and lead in further more personal research in this direction, which would create more curious artists.

According to the conducted experiments, the overall posture of violin students is not connected or created towards the resonance in the space where they play. Quite often, students are not taking into consideration the existence of the listener and the necessity of playing for an audience, as the opposite would be ¨playing for oneself¨. This is reflected in the closed shoulders posture, the conjunction of the solar plexus, the angle of the instrument and the direction of the violin f-halls. The connection between singing and speech, which has words and is addressed to someone, immediately created the necessity to adjust or reflect on the existence of the listed deficiencies.

According to the experiments, the students who play without using the shoulder rest are able to feel the instrument's vibrations next to their vocal cords and create perceivable resonance between the player’s body and the instrument.

The warm up system for violinists, according to the questionnaire and the experiments, consist generally on finger warm up movements, memory check of the text, repetitions and abstract relaxation to avoid stress. None of the students has previously considered the necessity to create a resonance with the space. Warming up for violinists can be used more often to recreate auditive attention and establish resonance point of concentration, as singers do, rather than to consider only physical muscle-training motion.

2. The experiments individual goals have differed from violinist to violinist and were addressed in the scale work as a part of the experiment. The scales were chosen because it is easier to introduce new ideas abstract from the musical material and the

demands of a specific piece. The observation of the scale's practicing general condition in high level students and recent graduates was striking. Intonation and tone had very poor quality. Moreover, the general idea of smooth changes of all kinds (strings, bow direction, positions) was not addressed neither. Therefore, it became evident the absence of the idea and purpose of the scale practicing. In conclusion, the concepts proposed in the first general part of the experiments can be considered as a new innovative guide towards the scale practicing.

3. The work on vocal-based repertoire in the third part of the experiments showed that the work on violinistic tone in general as well as expressive formulas are missing. Expressive effects in lyrical pieces or its parts, such as *portamento* or audible shifts, subito pianos, expressive articulation, tone coloring are generally not explored by violin students.

Technical aspects that increase the expressivity of a piece resulted to be much better understood through vocal ideas. As an example, the *legato sostenuto* is thought of as a *bel canto* aspect, and through vocal analogy, filling in the interval is ¨sung through¨ after comfortable support on lower note. The different contact point regarding the distance between the bridge and the fingerboard, the finger's angle of the left hand together with more or less bow's weight or speed can be related to the composer's language. French music, for example, needs more speed and less bow's weight, whereas Russian music needs more weight and less speed.

Another expressive aspect such as vibrato should support the type of music that the student plays. The imitation of a type of voice such as light or dramatic soprano, baritone, mezzo-soprano or coloratura would totally differentiate the type of color and

vibrato in use. But then, of course, it is necessary to have enough experience listening to vocal music to be able to imitate it.

Ornaments in violin repertoire are often borrowed from voice repertoire. Fast trills or *melismas* are often pointed out by violin teachers, especially while studying W. A. Mozart violin concertos. Developing the trill from slow to fast and other techniques of ornamentations are suggested in this thesis to follow the singers' strategy depending on the passage's difficulty and vocal technique needs.

The concept of consonants or vowels applied to the violin was unknown by students but it was quickly understood and able to be applied immediately. The weakness of the left hand was improved as the student imagined the necessary diaphragmatic support for the right arm. Therefore, the air/bow can freely function on top of something solid and stable. The breathing in and out during the scale on one bow is confirmed as helpful to violin student in terms of the contact with the string at the tip of the bow. Looking for harmonic resonance and purer intonation also gave fruitful results for students' intonation. General concepts of resonance, intonation and harmonics in sound were expected to initiate the student's search towards the idea of beautiful sound and individual voice, two qualities that a violinist has to look for and desire in his inner-formed ear. By listening and analyzing together with students a singer's performance and by using verbal explanations, some results were immediately achieved but very little perceivable due to short time. Nevertheless, one could expect the continuity of learning based on students' further initiative and reflection.

The audio results of experiments in class have been attached to the hard copy of this thesis and the list of these examples is attached in annexes. The musical scores used during the experiments are attached in annexes.

5. Conclusion and creation of a new teaching method

¨The great string players of the past embodied the 'singing' style that signifies their relationship with vocalists of the time. Why can't today's stars capture the same atmosphere?¨[133]
-Tully Potter

The new teaching method defended in this thesis proposes multiple solutions for the most common violinistic and interpretative deficiencies. For instance, if the student doesn't feel the continuity or the tension within the phrase - it is possible to improve it through the breathing technique, in order to create an inner intensity and continuity. If the student holds the bow with a stiff bow-arm and fingers, the free use of muscles by a singer is a perfect analogy to free the violinist's hands of the violinists. This will allow the maximum resonance. When a violin student does not feel a big interval, it can greatly help to imagine that the singer prepares a big tessitura change. If a violin student has a vibrato that is too narrow and too fast, it is recommended to listen to the singers in order to realize what type of vibrato exists in human nature. When the student has a great technical ability, which nevertheless is musically meaningless, the most important for a

[133] (Potter, 2016)

teacher is to have the right choice of a vocal based repertoire in order to educate the student to reference the abstract piece or the operatic role with words.

When violin students receive some comments from the vocal teacher the aspects on which they focus are totally different compared to those evoked with the violin teacher. This is a very interesting interdisciplinary approach that should be available to conservatory students and encouraged by their violin teachers.

Continuous *portato* and lack of *legato* in the bow arm is a frequent deficiency among violin students and can be resolved by the association with the vowels that are not interrupted. If a student plays with very poor intonation and no sound resonance it can be solved by meticulous listening work of opening all the harmonics of each note, constantly comparing to the open strings as the ideal and searching for the firmer left finger touch on the string and the angle of the bow.

By the means of close associations with the vocal approach many violin aspects can be attended: airy and not supported sound - with the singer's air escape, audible difference in four string's colors - voice registers, lack of phrasing, inner expression or intuition - with the text and different words. Posture and stage presence can be improved by the association with singers who have a role to perform in front of an audience. These psychological connections immediately correct the communication problems of some introverted violin students who have difficulties connecting with the audience.

Knowing the singers´ studying goals can also adjust some violinistic goals as, for instance, the consciousness towards the air control will transform to the bow control and

its distribution. Speed and weight can copy the way that singers manage the speed and pressure.

The most difficult aspect to improve with a violin student is the pre-hearing of the desired note and its effect before playing it. This is a long maturing process that happens after listening to a lot of music and especially to singers' performances, while at the same time it creates a demand in one's ear. Apart from challenging the students to listen to the vocal repertoire and suggesting that they should improve by themselves, another experiment was conducted, which had some success. While listening to a singer in the headphones, the student was asked to play the violin at the same time with a big mute on. This has created the feeling of playing the violin while hearing the singer's voice in the head. The hands adjusted to the auditive result, as well as to the timing and expressions, seemed to be as if they were the result of violin player's work. While repeating it for a few times the student was expected to have muscle memory connected with what he/she has heard - the singer. After a while the headphones and the mute on the violin have been taken away. The student is expected to repeat the piece with the same muscle movements that he/she has done and keep on hearing the singer in the inner ear. This experiment was conducted in various occasions and showed some great results.

One of the most important aspects to master, on a lyrical instrument such as the violin, is the true legato technique. Apart from the standard methods to improve this technique, such as playing the open string together with the phrase and control its continuity, the associations to create the correct idea in the student's mind are necessary. It is proposed in this thesis to communicate to the students the association with the continuous, uninterrupted and alive vowel created by the bow, full with the unified

vibration and the color. This will lead the student to unify the vibrato all throughout the phrase and to control the register, the bow and position changes.

To conclude, apart from all the technical control over the sound, creativeness in the images and high expressivity in the communication with the audience, the attention to the small details this is what makes one artist different from the other. Some of them are the care of phrases' ends, ornaments and time spacing in cadenzas. Usually, these aspects are approached through imitation of the violin teacher or recordings, or as something that is supposed to come naturally. This thesis proposes to encourage the students to listen to a lot of great singers while associating directly with their singing. It can be done not only through playing records in class or giving the students some tickets to the opera, but also by insisting on the coverage of the wide range of repertoire related to voice, opera fantasies, arias, great arrangements and variations on the themes. As a final project, the students can be encouraged to elaborate their own variations on the opera themes, on the country's hymn or on a song, considering the analogy with the activity of the great violinists of the past.

The realized investigation as a whole has detected the general lack of investigation on this subject and therefore some further investigation lines are suggested. The general line that determines the interdisciplinary approach for the singers learning from the violinists can be called as ¨how the vocal pedagogy can benefit from the violin school and its pedagogical heritage.¨ ¨The analysis of the registrars balance on the violin vs. registrars of the voices. Four strings and positions of the string instruments¨ can be an interesting investigation for interested in acoustics or the luthiers. For the performers, one of the important lines of the investigation can be ¨the application of the vocal interpretative effects on the violin¨ or ¨the singing approach to the embellishments and

cadenzas on the string instruments.¨ ¨The comparison of the stage presence. Singers and instrumentalists¨ can also be extremely enriching for the violin interpreters and the teachers. ¨Luthiers vs. interpreters. Who is really responsible for the sound quality?¨ is a great question to ask to conduct the practical investigation, whereas ¨the Implication of the body of the violinist into the tone production and resonance¨ is rather an investigation line that can have many perspectives. To research about the ¨vowels and consonants on the violin¨ will enrich the narrative approach, while ¨the breathing for violinists¨ can open another innovative chapter in teaching and interpretation.

APPENDICES

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B. Didactical unit of the Vocal Class - Higher Level Conservatory - 60 minutes

10 minutes: Body consciousness

The teacher gives some tools for self-massage and relaxation techniques

15 minutes: Breathing exercises

20 minutes: Vocal exercises

Placing the voice by exploring different resonators and projection while singing different vowels in the same resonance place. Different melodic shapes with different vowels are sung in order to unite the vowels and equalize the registers. Exercises for the different articulations.

10 minutes: Work on a musical composition

Italian baroque or any other simple aria. Different exercises, such as singing with mouth closed or others, can be applied if necessary.

5 minutes: Psychology and feedback

Didactical unit of the Violin Class - Higher Level Conservatory - 60 minutes

20 minutes: might include scales or exercises, depending on the moment during the academic year. The hand's position might be addressed, posture, intonation and rarely the sound quality.

40 minutes: Repertoire. Over the year the student has a variety of different musical forms and epochs to cover. The student is responsible for its progress and overall preparation.

C. Glossary of terms and abbreviations

Ballade: A form of trouvre poetry and music. The poem usually has three stanzas,each of seven or eight lines, the last one or two of which are identical in all the stanzas, thus forming a *refrain. The musical form of the stanza is: a b a b c d E or a b a b c d E F [capital letters indicate the refrain], a scheme which, as far as the music is concerned, can be simplified as follows: AAB (A = ab; B = the remaining lines). This form is identical with that of the Provencal (troubadour) *canzo and of the German (Minnesinger) Bar [see *Barform], which, however, lack the refrain. Sometimes the form is enlarged to A A B B, usually in connection with enlarged stanzas of 12 or more lines.

Bel canto: [It., beautiful singing]. The term denotes the Italian vocal technique of the 1 8th century with its emphasis on beauty of sound and brilliancy of performance, rather than dramatic expression or Romantic emotion. In spite of the reactions the bel canto against peated (Gluck, Wagner) and in spite of the frequent exaggeration of its virtuoso element (coloraturas), it must be considered as a highly artistic technique and as the only proper one for Italian opera and for Mozart. Its early development is closely bound up with that of the Neapolitan opera (Al. Scarlatti, Porpora, Jommelli, Hasse, Piccinni).

Cadenza: An extended section in free, improvisatory style inserted usually near the end of a composition where it serves as a retarding element, giving the player or singer a welcome chance to exhibit his technical brilliance shortly before the piece closes. Its traditional place is in the concerto, between the six-four chord (marked with a fermata) and the dominant chord of the final cadence [see Ex.]. Such cadenzas make ample use of highly virtuoso passage work, but also draw from the thematic substance of the movement, presenting its subjects in artfully devised modifications or combinations. They usually close with an extended trill on the dominant chord.

Cantabile: [It.]. Singable, singing.

Cantilena: (i) A vocal melody of a lyrical rather than a dramatic or virtuoso character; also an instrumental passage of the same nature. (2) In medieval writings the term is loosely used to denote addition of contrapuntal voices. As re- secular vocal compositions, homophonic gards their origin, the cantus (or cantt) as well as polyphonic (ballades, rondeaux, etc.) [cf. ReMMA, 294, 322]. Cantilena romana is the Roman (i.e., Gregorian) chant.

Canzonet*:* [from It. *canzonetta*, little song] Short vocal pieces in a light vein, much in the character of a dance song, written by the English madrigalists about 1600.

Diminuendo: [It., diminishing] Abbr. *dim*. or *dimin*.

Falsetto *(or falsette):* [It.] An artificial method of singing used by male singers, particularly tenors, to obtain notes above the normal range of their voices. These tones, being nasal and somewhat weak, are little used today other than for comical effects. In early music prior to 1600, singers especially trained in falsetto were normally required for the high parts of Masses and motets. Today this use of falsetto survives only in some English glee clubs and church choirs.

Fiato: [It.] Breath. *Fiati* or *stromenti da fiato*, wind instruments.

Forte: [It.] Loud, abbreviated *f*; *fortissimo* (*ff*), very loud; *fortississimo* (*fff*), extremely loud; forte-piano (*fp*), loud followed by soft.

Legato: [It., bound] Term used to indicate performance without any perceptible interruption between the notes, as distinct from *leggiero* or *nonlegato*, *portato*, or *staccato*. *Legatissimo*, indicated by the word and not with notational symbols, is either a more forceful indication of legato, or a sort of super-legato in which the preceding note is held for a moment together with the following one. *Staccatissimo* is a very short and forceful staccato, often indicated by the sign · placed over the note.

Lied, Lieder: [G., sing. and pl., song.] Generally, a song with German words, e.g., the minnersinger songs of the 13th century or a German folk song (Volkslied). Specifically, the "German lied" of the 19th century as represented by Schubert, Schumann, Brahms, Wolf, and R. Strauss. October 19, 1814, has been called "the birthday of the German lied," because on that day Schubert, then 17 years old, wrote his *Gretchen am Spinnrad* (Gretchen and the Spinning-wheel), which opened a new era of songwriting.

Messa di voce: [It., placing of the voice] In vocal technique, particularly of the 18th century (see *Bel canto*), the sustaining of a long note at an unwavering pitch, often combined with a crescendo and diminuendo on that note.

Mezza voce: [It.] Half voice with a subdued tone quality.

Mordent: A term used (very confusingly) for two or even more ornaments involving the alternation of a main note with its upper or lower neighbor.

Parlando: [It., speaking] In singing, indication that the voice should approximate the character of the speech. It occurs particularly in connection with fast declamation, especially in recitatives. In instrumental music *parlando* means almost the opposite, i.e., expressive rendition suggestive of speech or song.

Piano: [It.] Soft; *pianissimo*, very soft. Also, word commonly used for pianoforte.

Portato: [It., carried] A manner of performance halfway between legato and staccato. The use of the term *portamento* for this is misleading and should be avoided.

Ritenuto: [It.] Same as *ritardando*, but often suggesting a marked reduction of speed.

Shift: The change of position in the playing of violins, etc., or of the trombones.

Sotto voce: [It.] In an undertone, with subdued sound.

Squillo - *brillo en la voz en resonators above the nose*

Tenuto: [It.] Fully sustained, occasionally even a bit longer than the note value requires.

Vibrato: [It.] On violins, cellos, etc., a minute fluctuation of pitch produced by a shaking motion of the left hand. Modern players use it as a basic technique in order to increase

the emotional quality of the tone, although some great violinists have insisted that it be reserved for moments of heightened expression, as it was in the earlier days of violin playing. In singing, the term usually denotes a slight wavering of pitch, an effect which corresponds to the violin vibrato since it increases the emotional quality of the tones without resulting in a noticeable fluctuation of pitch. Cultivated by many singers, it is avoided by others as likely to degenerate into a real wobble, which is then called *tremolo*. In singing, therefore, *vibrato* and *tremolo* are essentially the same effect, varying only in degree, while in violin playing they denote two entirely different effects, *vibrato* denoting a fluctuation of pitch, whereas *tremolo* denotes a rapid reiteration (or pulsation) of an unchanged pitch or rapid alternation between two pitches. The *Bebung* of the clavichord is a *vibrato*. The Tremulant stop on organs produces a *tremolo*, the Voix Céleste stop a vibrato.

Vissi d'arte: Aria from the opera *Tosca*, by G. Puccini.

D. List and CD with audio examples of work with violin students

Student 1 - Class 1

Audio example 1: starting *Beethoven Sonata n. 5*
Audio example 2: starting *Beethoven Sonata n. 5* - after applying vocal concepts verbally
Audio example 3: M. de Falla, arr. P. Kochansky, *Jota* - first playing
Audio example 4: M. de Falla, arr. P. Kochansky, *Jota* - playing after listening to the singer
Audio example 5: M. de Falla, arr. P. Kochansky, *Jota* - playing after listening to the singer in the headphones and playing with the mute

Student 2 - Class 2

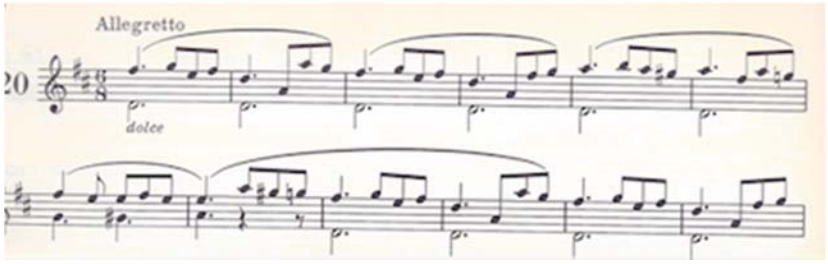
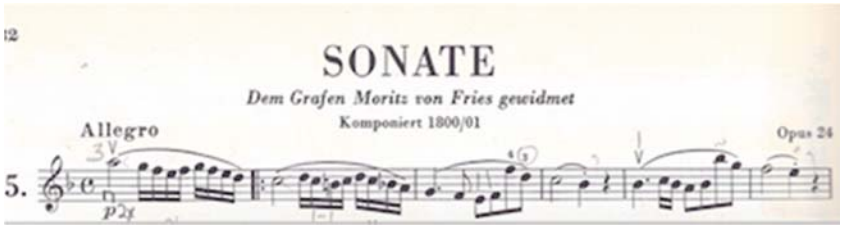
Audio example 6: N. Paganini, *Cantabile* - first playing
Audio example 7: N. Paganini, *Cantabile* - playing after applying vocal concepts verbally
Audio example 8: N. Paganini, *Cantabile* - playing after applying more vocal concepts
Audio example 9: J. Brahms arr. J. Heifetz, *Wie Melodien zieht es mir* - first playing
Audio example 9: J. Brahms arr. J. Heifetz, *Wie Melodien zieht es mir* - playing after listening to the singer and applying vocal concepts verbally
Audio example 10: M. de Falla, arr. P. Kochansky, *Jota* - first playing
Audio example 11: M. de Falla, arr. P. Kochansky, *Jota* - playing after listening to the singer and applying vocal concepts verbally
Audio example 12: N. Paganini, *Cantabile* - playing while inventing the words and the context

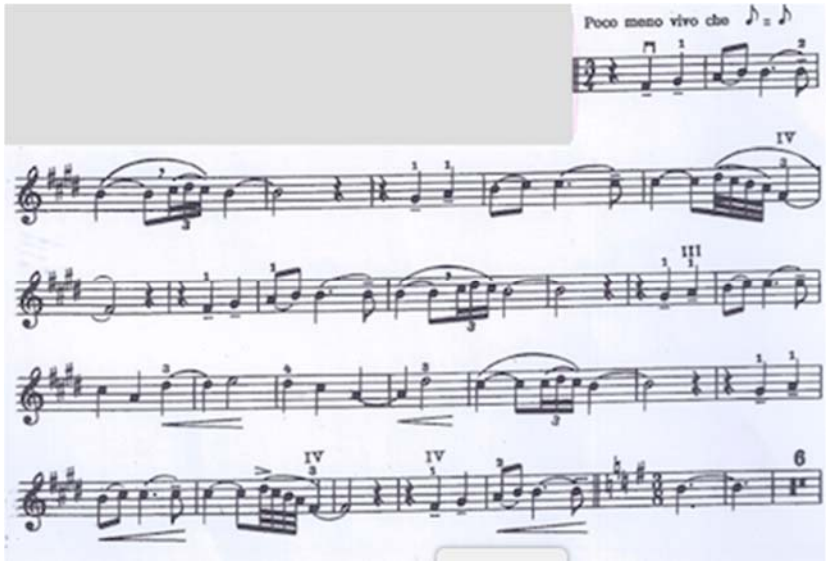
Student 3 - Class 3

Audio example 13: G. Fauré arr. C. Liégeois, *Les Berceaux* Op. 23, n.1 - first playing
Audio example 13: G. Fauré arr. C. Liégeois, *Les Berceaux* Op. 23, n.1 - playing after applying vocal concepts verbally

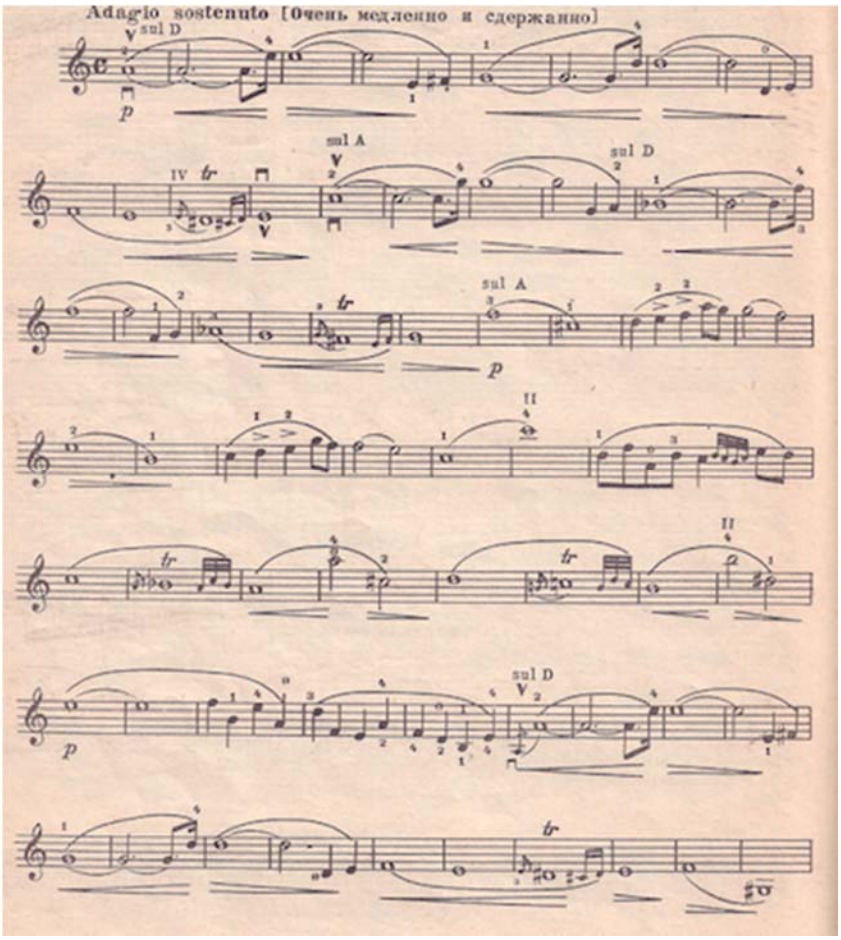
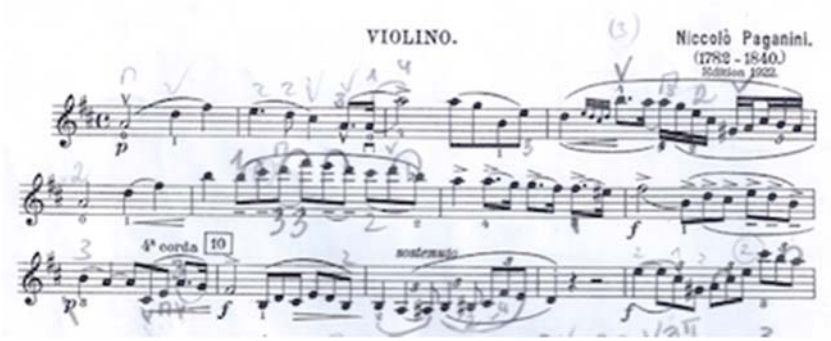
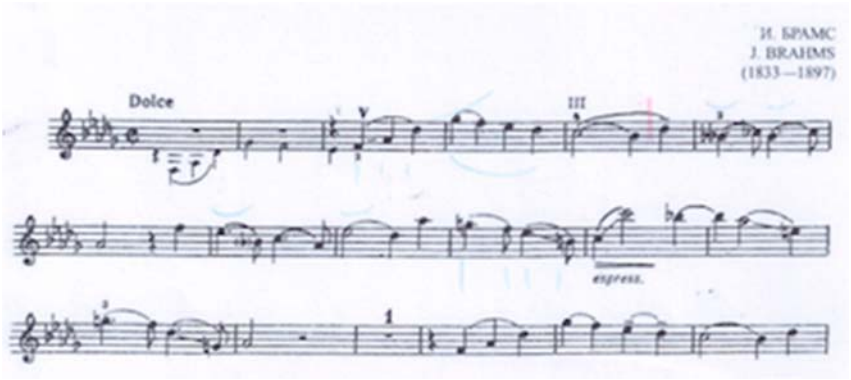
E. List of musical examples

Student 1, Lesson 1

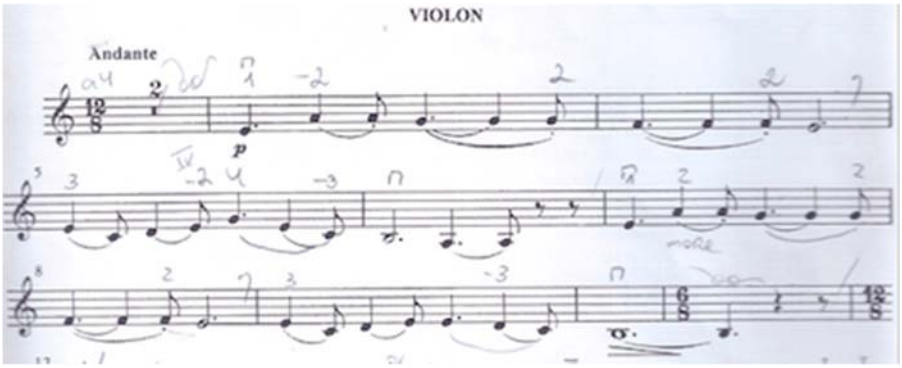
Musical example 1
N. Paganini, *Caprice n. 20*

Musical example 2
L. van Beethoven, *Violin sonata n. 5, op. 24, 1 mvt.*

Musical example 3
M. de Falla, arr. P. Kochansky, *Jota*



Student 2, Lesson 2

Musical example 4
R. Kreutzer, *Study n. 39*

Musical example 5
N. Paganini, *Cantabile*

Musical example 6
J. Brahms arr. J. Heifetz, *Wie Melodien zieht es mir Op. 105*

Student 3, Lesson 3

Musical example 7

G. Fauré arr. C. Liégeois, *Les Berceaux Op. 23, n.1*

F. List of summarized ideas applicable to a violin teaching

Resonance

- Concept of the resonance and the space
- Backing off approach to performing and feeling the resonance of the sound
- Allowing the optimal resonance concept
- Resonating in piano dynamics
- Projection and forte
- Projection as a result of resonance
- Intonation and the tone resonance
- Multiple resonators at work
- Larynx and chest principle resonators
- Not to put impediments to the free vibrations
- Augment the resonating consciousness with the hall
- Different vowels resonance
- Checking the resonating points while warming up as a violinist
- Use of the resonators of the head by extracting the sound upwards from the violin

Sound and tone

- Move the sound
- Being the observer in the sound
- Verbalize the desired qualities in the tone
- Not too much and not too little air mass moving for balanced tone
- Not to lose a good tone through out the technical changes

Breathing

- Breath in tempo of the music before starting
- Breathing with the different intensity before starting the phrase
- Breathing to eliminate the excess of bow pressure
- Breathing before stating the soft notes

Corporal awareness

- Awareness of the facial reactions and resonators
- Connection with the body as it is not only the head the plays
- Instrument related closely to the state of the whole body
- Freedom in the jaw-neck-shoulder zone and avoiding tensions

Freedom of the interpretation

- Free the performance reactions and freedom with the text and timing
- Developing the intuition in the ornaments and timing in cadenzas

Practicing and learning tips

- Put the mind in a different place to unblock habitual tensions
- Thinking as an up-bit for arrival points in the phrases
- Programming the reflexes and distracting the mind at the points that need correction

Listening

- Pre-hearing what you want to reproduce
- Listen to yourself and remember yourself in a good acoustics
- Cultivated formation of the musical ear and its realization

Articulation

- Clear articulation
- Consonant and vowel concept for the violin
- Do not hit the consonants

Phrasing

- Phrase over rhythmical subdivisions
- Inventing the words or using the vocal-based repertoire for clearer phrasing
- No falling sound direction at the ends of the phrases
- Attention on the last note of the piece

Performing and expressivity

- Multiple colors and expressions
- Distributing the energy until the end of the piece
- Musical maturity and risk to enjoy the sound abstractly
- Chain of breath-support-controlled endings of the phrase
- Three parts of the note and expressivity
- Stage presence

Instrument treatment

- Never hit your instrument

Bow control

- Bow distribution
- Balance the bow pressure throughout a passage in all parts of the bow
- Endless bow control of its speed keeping the sound quality
- Creating the bow support for the colors
- Purity of the tone production as a result of controlling the bow
- Smooth bow changes without stopping the string vibration
- Search of homogenous sound while changes of the bow, string of finger or position
- Turbulent and the linear bow
- Starting the forte sound from the amortization in the right hand fingers
- Singing consonances as smooth bow attacks

Intervals and leaps

- Interval approach by supporting the note before the jump
- Bow contact while shifting towards big intervals

Unity of registrars

- Notes should not stick out anywhere
- Union of registers between the strings

Sound

- Finding the supported piano with the sound quality
- High harmonics and projection on different strings
- Association of the instrument with the actual voice for quality tone