

## Summary of doctoral dissertation

### **"The role of breathing in the process of creating a conscious work of art based on selected Hungarian viola compositions"**

In my opinion, the process of breathing is an organic phenomenon, but inseparable from the conscious artistic process of the instrumentalist musician.

The main motive for writing this work was a series of questions that had arisen from certain misunderstandings in professional musical training. My responses come, therefore, from many years of musical and pedagogical experience, synthesizing the technical aspects of viola playing, and the emotional sense of creating music in its most appropriate artistic form.

This dissertation, with the exception of the obvious summary section, consists 14 chapters and is arranged in the following order:

In addition to Chapter 1, I attempt to give exhaustive answers to my questions; in Chapters 2 to 5 my attention focuses on natural processes and phenomena, such as breathing, movement and symmetry, and then turns to the historical and cultural background of breathing, returning finally to breathing as a phenomenon, but in a physiological dimension. Chapter 4 includes content on the role of air in instrumental play, while the following presents the physiology of respiration and the relationship between psychological aspects in different breathing techniques and traditions. Chapter 6 presents the relationship between music and nature, and the elementary role of breathing in musical creation. This in the context of historical change. In Chapter 7, I examine the relationship between breathing and the body during viola playing, and with this I also summarize the first part of my dissertation, which aims to present breathing in terms of artistic creativity. In the next five chapters I present the process of the artistic creation of the selected Hungarian musical works and their interpretation by breathing. In the last two chapters, sections 13 and 14, I share my experiences of working with breathing in different musical situations.

And now I will present the content of my dissertation more thoroughly, prompted by these worrying questions in the first chapter:

- a) Why don't I feel as free and as good at viola playing as I do at tai chi exercises?
- b) What system would provide me with a better connection between viola and music?
- c) How can I play the violin without stress and pain?
- d) How can I use my breathing and body so that they participate in the process of conscious artistic creation?

After searching for answers to these questions for many years, my experience as a musician and teacher has shown that breathing is the best medium by which my body and viola playing can become one. By consciously using my breathing, I became more efficient on stage. I have successfully applied the soothing effect of conscious breathing during rehearsals and performances as a soloist, chamber musician and orchestral musician.

In Chapter 2, I explain the problem of naturally uniting my instrument with my body. Thanks to the processes taking place in nature, I observed and analysed my play, which was based on the traditional instrumental technique. Eventually, over the years, I managed to create a renewed viola technique based on breathing. Playing string instruments is not based on breathing, at first glance, unlike wind instruments. However, in my opinion, breathing is a catalyst for movements for

all musicians. Just like the composer's breathing, as the connection between pen and her/his feelings, breathing is a key element of a work of art.

In Chapter 3, I describe the historical background of respiration and the physiological and anatomical details of this process, in order to better understand and control this wonderful thing that connects our inner and outer worlds.

Unfortunately, nowadays, artists playing string instruments often do not pay enough attention to proper breathing while making music, which results in their body functions becoming uncontrollable, and which - combined with stress - can easily lead to serious problems.

Properly applied conscious breathing is a very effective tool in such situations, contributing both to stress-relief and better self-control - all a part of the artistic and creative processes.

Chapter 4 is a section where I describe the role of breathing in the relationships between posture and movement, and their combinations during instrument playing.

Attitude is important in any physical activity, which is especially true when playing an instrument.

Only the right attitude allows for optimal freedom of movement, thus creating the right technique for the instrument. Posture and breathing are highly interdependent. Improper posture of the spine and chest can impede proper use of the breathing muscles. In addition, proper breathing technique can have a positive effect on posture.

Since the viola players sit in orchestras or chamber music groups a lot, a proper posture is very important to them. This is a prerequisite for effective posture during play, the movement and proper coordination of the arms and body movement, and the consequent creation of the technique of the instrument. This is important to prevent pain and overload.

Movement is a tool of human expression. Viola playing is a movement that eventually turns into sound. In this way, the movement is transforming into music. Of course, during the movements of the viola playing, our focus should be primarily on producing sounds as efficiently and with as little effort as possible.

The goal of instrumental play is to perform the most accurate and efficient movements with our body, with a properly balanced posture and optimally tense muscles. And what can help with this complex coordination is breathing.

Proper use of breathing can change the properties of movement. This is especially important for dancers and actors, but musicians can also benefit from it. The movement of viola playing can have different properties and thus different sound effects can be achieved, depending on the moment of the breathing cycle. That is to say, with the proper use of breathing, the properties of the movement can be changed, and thus various sound effects can be achieved.

Proper breathing and viola playing can interact particularly effectively.

There is a connection between:

- bowing and breathing - when we are using down bow, the right arm opens and thus the chest, so we inhale

- conscious movement of the chest and deepening the expression of emotions during playing
- opening or closing the chest depending on the movement of the inhalation or exhalation and the movements of the arms

- lack of coordination of breathing and poor sound (e.g. if the bowing starts shortly before breathing begins)

The flexibility and fluency of breathing should be promoted to ensure that it adapts optimally to a particular phrase or piece of music. This depends, among other things, on the direction of the phrase and musical intentions, as well as on the degree of emotional involvement.

In the next Chapter 5, I present the relationship between breathing and the musician's consciousness, in different breathing techniques.

The emotions that dominate an individual's life definitely shape her/his breathing habits. Another important factor that affects an individual's breathing style is the strong interaction between breathing and posture.

The artists on stage are exposed to stressful situations and are under great pressure. These situations can result in bad breathing and can even cause a block of the breathing flow. If this phenomenon occurs regularly and is not treated, it can permanently disrupt the breathing rhythm and can negatively affect the quality of music making.

On the other hand, the breathing curve that I have examined with the help of a polygraph clearly calms the proponent down as I begin to focus my attention on synchronizing my breathing and my movement during viola playing. Concentrating the mind on this automatically results in a greater harmony in breathing.

Listening to music can also have a big impact on your breathing. For most people, there is a relationship between the breathing curve and the rhythm of the music. The respiration curves thus reflect the inner emotional world of the test subjects. Music can also have a harmonizing effect on breathing. This has been confirmed by most test subjects. Pneumatic measurements by musicians playing string instruments showed a strong chest activity during respiration, which was clearly related to the emotional interpretation of the piece they played, and which was not present during a purely technical practice.

Breathing thus also greatly affects the concentration and confidence of musicians.

According to Eastern wisdom, breathing is a spiritual practice designed to achieve complete silence, surrender and to give up all will. This condition also supports music.

In the rest of this chapter, I present four selected breathing schools. All four breathing methods are equally suitable for musicians because with these techniques we can make our breathing more efficient while making music. Some of these methods are already taught in music schools, but primarily for singers and actors. In my opinion, the awareness of body and breathing can open new doors for instrumental professionals because breathing and music are connected in many ways.

The relationship between breathing and music is detailed in Chapter 6.

Here I describe how music was inspired by nature, and only became audible through breathing. The first music came from imitation of nature. The initial sounds later became a system, a melody, and then later people created the first instruments. At this point, I explain the elementary role of breathing in musical creation. As part of the transformation of history, I also present the relationship between music and breathing.

There were different correlations between singing, language, dance, and instrumental music; between thinking, feeling, and movement in different ages, which also had different effects on the breathing, posture, and movement of people who practiced music.

In Chapter 7 is about the physiology of viola, I describe in detail my own experience with the use of breathing while viola playing. In my opinion, the starting point for an even more efficient and perfect way of viola playing is conscious interaction with the autonomic nervous system of our body. In order to properly shape sound and consistent, conscious creativity, we need to derive all our movements and postures from the autonomic nervous system that is necessary to preserve life. These intuitive features work unconsciously in the background. Movements during viola playing should not interfere with these intuitive functions, so it is advisable to consciously adapt these movements to them. To do this, we must first recognize what movements we are talking about: these are those using natural body weight. The life energy provided by the law of gravity is free and usable, so if we can use this, we don't have to produce sound through muscle work and pressure. During viola playing, we must place both hands on the instrument with the natural weight of our arms.

In my experience, if we want the viola to sound beautifully and freely, we need to perform these five steps, based on the symmetry of our body:

1. Put the bow to the required place by reaching the appropriate amount of air in the lungs
  2. Place the bow on the desired part of the string and then "land" the weight of both arms on the string
  3. Start the vibrato (optional)
  4. Prepare the bowing by starting to breath (inhale or exhale, depending on the desired bowing: up or down)
  5. As a result of breathing (see point 4) our chest deforms, our hands start to move, and the bowing starts automatically
- In case of a down bow we start to inhale, our chest starts to grow, so our hands start to move away from each other and as a result our bow starts to move automatically towards the top.
  - In case of an up bow, we start to exhale, our chest starts to narrow, so our hands start to get closer to each other and as a result our bow starts to move automatically towards the frog.

It is important to maintain points 2 and 3 also after the start of our bowing, to keep our arm weight continuously down during the playing of the piece, to keep our hands hanging and to continue our vibrato as long as the piece requires it.

After presenting breathing as the basic of artistic creativity, in the next five chapters I will describe the creative process of selected Hungarian compositions and their interpretation by breathing.

**Ferenc Farkas "Romanian Folk Dances"** is the first of a total of 5 analysed works. It was written for violin and piano, for viola and piano, and for clarinet and piano. It is basically a piece of music based on folk music, but it has surprising and emotional parts as well as lyrical melodies sometimes that are uniquely beautiful. Due to the fact that we can talk about a dance music in this piece, the role of breathing is even more important here, not only because of the physical support to the diversity of the music, but also because of the performer's psychological preparation to interpret the dance. Since the work begins with a dance, it is important to properly prepare the body. Before the start of the first note, one should concentrate and actively breathe so that the performer's body is not surprised by the very dynamic movement required during the piece, followed by a transition to a slower and melancholy part, a place of memories and remorse. Because of the deeper nature of the

music, I inhale much more slowly and deeply here so that the heavier narrative nature of the middle part can be experienced physically as well, emphasizing the sadness and seriousness of the message of the piece of music. So I clearly separate two very different characters of the Hungarian soul. The first is a fast, expressive and dynamic dance, and the second is a rubato, with bitter resignation and free tempo.

The next piece I write about is the very emotional and moving "**Adagio**" written by **Antal Doráti**.

In this work, the most important element in creating the mood is the correct breathing speed, which is optimally associated with the musical message. The technique used in this way helps to evoke the deep feelings that the audience can also know from their own personal lives: depression, doubt, prayer and madness that Doráti composed so beautifully in this piece. The work seems to depict an elderly man with heavy and slow breathing who is already tired in life. As you can see in the attached video, breathing clearly reflects the severe and depressive nature of "Adagio" and plays a decisive role throughout the playing of the work. In my opinion, the composer is full of doubts and becomes increasingly angry, which is clearly audible in the music. Consequently, these feelings spread to me as a performer and my pulse becomes more and more restless. As the piano accompaniment appears, an emotionally calm and passive state of mind occurs, thereby slowing my pulse. We are witnessing a real spiritual roller coaster in which the composer struggles with the idea of inevitable death, among other things. Mostly fear, despair and anger dominate. At the end of the piece, these emotions end with a lethargic resignation and acceptance of the situation. The slow breathing at the beginning of the work becomes faster and more restless in the middle, in which the performer's breathing takes over the anger caused by inertia, so the speed of breathing increases, along with the number of heartbeats under constant stress. In his last works, Doráti loved to use the viola. This composition is staggering and, in my opinion, proves the viola's "human" character. In my interpretation, I try to reinforce this natural property of the viola with breathing techniques that allow for physical and mental synchronization.

**Ferenc Farkas's** early "**Arioso**" work is melodic and beautiful in contrast to the previous work, a reflection of the composer's love.

This short work of art with a simple structure definitely requires designing the right mood and thus finding the right colours, as the harmonious and rhythmic structure of the composition is very simple. Analysing this music, I show how breathing should work as meditation.

"Arioso" demonstrates very well the soothing and healing effects of breathing, which has a positive impact on both the performer and the audience. The accompanying experimental film also shows how slow breathing is required when playing this work and how a transformation of the dramaturgy can be achieved thanks to constant and stable breathing. Controlling deep breathing provides calm, long phrases, and an intimate world of devotional emotion that you would not be able to exert in such an intense way with a normal breath. Conscious breathing makes this wonderful work a spiritual experience. In my opinion, the conscious technique of breathing is also important because it allows for a more sophisticated musical experience by synchronizing music with our body and being, thereby forming a living unit.

What role does breathe play in **Lajos Szücs's** artistic work "**Romance**"?

It is a very charming work with a clear melodic line and romantic character. Analysing the diagrams on my polygraph video, I came to the conclusion that playing "Romance" caused a lot of technical difficulties, however, applying my breathing technique, as the attached video shows, helped solve these problems. I tried to combine the beginning and end of the sounds with conscious breath, thus guaranteeing a continuous connection, the coherence and dramatic depth of the work.

I begin the analysis of **László Weiner's Sonata** with a short presentation of the content.

The beginning of the first movement, called "**Fantasy**", is calm and intimate; interesting, almost complaining music with great emotional moments. The next part is "**Intermezzo**," which is a quick and easy virtuoso movement. The third and final movement, "**Adagio**," is defined by a melancholic melody.

The first, wonderfully hopeful theme of fantasy is worth playing with so much air to serve as the basis for an unusual, floating sound. As a result, the sound leaves the instrument faster, flies further and generates a reverb, evoking simple and hopeful feelings in the audience. Technically, during the play, the two hands do not work with the same intensity: while the vibrato is slow, the bow speed is fast.

The contrasting second movement is the light, humorous and dancing "Intermezzo". The composer here expresses the euphoric state of a young man.

With the rubato beginning of the last movement, the composer seems to have felt the impending misfortune. I try to reflect this state throughout the viola play with a deep, almost sobbing breath. Adagio joins the next part of the "Allegro un poco agitato" with an accelerando. In my opinion, this part reflects deep and restless feelings and doubts.

The theme eventually turns into a hymn melody and is then abruptly interrupted. From a technical point of view, this work is a big challenge. Because of such a complex structure, it is necessary to coordinate the viola playing with the movement of the body, in addition to which many emotional changes must also be brought into effect. Fortunately, breathing again provided an answer to how this is possible. Thanks to my breathing technique, I am able to emotionally and creatively shape the character of the opposing parts. It is important that I assign different breathing techniques to the topics so that I can fine-tune my movements.

I would like to share those thoughts that came to my mind when writing this dissertation. Well, they come from the interesting assumption that wind players combine their music making techniques in a more direct way with their breathing, resulting in a more intense emotional expression. If we musicians playing string instruments were as aware of the role of air in our play as musicians playing wind instruments, this fact would bring us closer to the music being performed and intensify the listeners' experience. While writing my dissertation, I experimented several times with performing a work without conscious breathing. Then I played the same work breathing consciously and asked the listeners for their impressions. All reviews unanimously confirmed that the play mode without breathing technique sounds flat, both in terms of its emotional and tonal variability. In addition, the sound was not as prominent and projective as when using the breath-based technique. The dynamic differences were also much smaller, making the whole musical production less expressive and drier. The technique without conscious breathing held the music as if it were in a box, reducing the audience's direct and intense musical experience. Thus conscious breathing techniques had a greater impact on the music performed and also to the audience. The musician involuntarily takes over the atmosphere around her/him, which is even stronger in the case of a concert. The emotions of the sounds conveyed by the artist coincide with the quality and essence of breathing. The artist passes this energy on to the listeners, and the physical presence of the sound elicits similar breathing in them. Therefore, as a musician, it is our job to convey on the stage emotional tensions that the audience recognize and understand, that they encounter and struggle with every day, or that that give them happiness and hope.

In the next Chapter 13, I focused on the role of breathing when I play as a soloist, a member of a chamber music ensemble or a member of a symphony orchestra.

In my opinion, all three types of playing modes are based on breathing but have a different hierarchy. While in a solo piece the activities of the conductor and the orchestra are primarily determined by the soloist's breathing, the individual opinion of each member of a chamber music ensemble is decisive in interpreting the music, especially when a particular musician plays a solo. While playing in an orchestra, ideally, the musicians take over the conductor's breathing and sync their own with it. Therefore, it is very likely that all musicians together and simultaneously may experience similar physical and mental processes while playing music. Therefore, in this type of music making, breathing is the common denominator that controls, coordinates, and thus creates the unity of performers.

To play a concert as a soloist requires a well-thought-out plan, tactics, and an excellent physical condition. In addition to managing stress, the musician has other important responsibilities:

- to carry out the work faithfully by overcoming technical difficulties
- a musical message that reflects the intentions of the composer
- balance, confidence and a positive visual experience, which, however, must definitely serve the music
- coordination of the soloist with the accompanying orchestra and conductor, and ensuring the correct acoustic and emotional balance during the performance of the given work

How can you pay attention to everything and control it all at once? By direct breathing. By mastering and synchronizing breath, we will be able to slowly control this very complex system and coordinate these many external and internal factors.

What is the breathing problem in chamber music and orchestral music?

True chamber music is built on equality because every sound has its own meaning and every function has its own importance. This democratic work begins with the development of shared musical breathing, based on the actual breathing technique of each member of the ensemble. Breathing together not only guarantees a perfect team play, but also the coherence of musical expressions and plays an essential role in shaping the ensemble. By breathing, the individual sentences of the work intertwine and support each other, thus creating the whole.

Once we have understood and mastered these breathing techniques as soloists and chamber musicians, we can try to understand probably the most difficult degree of musical activity, playing in a symphony orchestra. All the instruments in the orchestra must be compatible, open to common breathing, thus guaranteeing a common musical experience. Openness in this case means an overall simultaneous focus on music and the orchestra, which is nonetheless able to change constantly. The experienced conductor breathes in such a way that even the musicians furthest from her/him can feel unity with her/him, regardless of distance. To do this, the conductor must be aware of the limitations and possibilities of the particular instrument as well as its acoustics.

Concluding this part of my dissertation, I would like to emphasize that in all three methods of play, breathing is the connecting and coordinating medium, so I consider it necessary to use it for musical realization.

The question of the role of respiration in the educational process has yet to be briefly presented in Chapter 14.

My pedagogical experience has shown that explaining the importance of breathing to students leads to a wonderful result, namely to an easier viola playing, and to the solution or elimination of many technical and musical problems.

When learning string instruments, the emphasis is mainly on achieving "good technique." Until recently, there has been an opinion that technique and expression are two completely separate areas in instrument playing that also need to be acquired separately, starting with technique. The technique of playing an instrument should not be chosen separately from music: passages or even individual notes can be shaped musically, with specific sound characteristics and dynamics, on a particular string, and the expression associated with it. All this is regulated by breathing. Breathing connects the player's movement with the music one would like to express.

At the end of my work, I would like to emphasize that the most important goal of my life is to serve classical music, because in my opinion it is the purification of the human soul and psyche that indirectly liberates, develops and emphasizes empathy in us. As a result, my work is an ongoing research that I hope will renew the playing of viola (and all string instrument), identify its new perspectives and opportunities for further development. Thanks to my knowledge of newly discovered and existing techniques, I want to reduce and eventually eliminate the distance between instrument and player.

Breathing is one of the pillars and driving forces of nature, so I believe that artistic creativity should also be based on breathing which is based on symmetrical movement.

The technique I have developed comes from the laws of nature that already exist, that is, it tries to deliberately imitate the instinct, in the musical work.

I see breathing primarily as part of the autonomic nervous system and I use it as such. In my technique, innovation is an attempt to consciously control the subconscious and visceral processes in my body, to change delayed or indifferent instinctive functions, directing and supporting them without losing their natural "visceral identity". I try to unite, coordinate, and sync the tangled and often blocking conscious and instinctive networks that work side by side when I play the viola. The resulting harmonious operation, even in stressful situations, allows for calm, balanced and stable breathing, because with synchronization our limbic and autonomic nervous systems our bodies do not detect danger. In such an "idyllic" state, the musician can finally play with a balanced body.

Music comes from human emotions, and this unique technique will hopefully overcome the obstacles and difficulties caused by the often uncoordinated ways that have become habit-forming in our bodies. This so that nothing will interfere with the full expression of these emotions.

Using the described technique, we can consciously adapt our breathing to the feelings expressed in the music, towards the better service of classical music. This as the technique becomes one of the principle tools of artistic creativity, more effectively reflecting the intentions of the composer. Making breathing an essential element in the technique of viola and similar string instruments offers new opportunities to anyone interested in research and new creation of music.