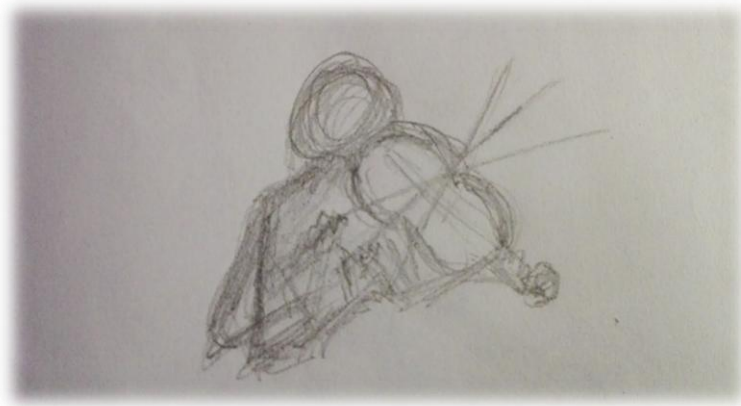


Artistic Research Report

Body movement awareness as a path to expression in violin playing



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Main subject – Violin performance

Research Domain – Performance practice

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CONTENTS

THE STORY OF MY RESEARCH	3
DOCUMENTATION OF THE ARTISTIC RESULT	6
MY REFLECTION ON THE PROCESS AND THE ARTISTIC RESULT	9
THE INTERVENTION CYCLES	11
1 ST INTERVENTION CYCLE	11
1.1 RECORDING	11
1.2 FEEDBACK	11
1.3 DATA COLLECTION	13
1.4 INTERVENTION	14
1.5 REFLECTION	22
2 ND INTERVENTION CYCLE	24
2.1 RECORDINGS	24
2.2 FEEDBACK	24
2.3 DATA COLLECTION	25
3.1 INTERVENTION	29
4.1 REFLECTION	34
5.1 QUASI-EXPERIMENT	35
5.2 FINAL RECORDINGS	37
APPENDICES	39
NETWORK	39
REFERENCE LIST	39
MEMORY STICK CONTENT LIST	40
APPENDIX 1: Interviews	41
APPENDIX 2: Annotated score. Analysis	43
APPENDIX 3: Annotated score. Effort element	44
APPENDIX 4: IMS examples	47
APPENDIX 5: Questionnaire Quasi-experiment	49

THE STORY OF MY RESEARCH

“...the body can provide a direct route to the emotions...”

Constantine Stanislavski¹

When playing the violin my goal has always been to communicate and emotionally move my audience. I saw this as an important role as a musician in general, but it was also important for me as a human being. From the first moment I began thinking about my Masters research, I was aware that I would spend hours of practise on the violin and likely read many books. I really wanted to work on something that I was passionate about. I have always been interested in body movement. I love violinists who move easily on stage and I have always been curious about how they connect so well between their body and the instrument. I wished to have the same freedom in my own movement when playing. Violinists such as Janine Jansen and Pinchas Zuckermann were always a great inspiration for me. They were so full of power and emotion in both their musical and physical expression while playing. I felt that this kind of physical expression wasn't my strongest point as a violinist when I started my research process. Sometimes I felt stiffness in my muscles while playing. On other occasions I had the feeling of not being able to transmit the emotions of the piece to the audience in its totality because I was having blocked or stiff movements. I also felt that my sound was affected by this stiffness. For these reasons I wished to examine the effect that body movement has on my playing. I also wished to explore how I could help my violin sound and musical phrasing through awareness of my motion.

I wanted to connect more with my audience as a musician and as a person and I wished to do it through movement, but how could I connect these two subjects? Further, how could movement and physical awareness affect my violin playing?

I started asking others such as teachers and musical peers about methods and ways to expand my range of movement and how to connect it with expressivity. It was a complicated topic and difficult to define what I needed. My research coach, Nicole Jordan suggested that I contact some experts in movement analysis such Annemieke Wijers from the dance and health department of Codarts. I needed a place to begin research into movement and expression. During the talk with Annemieke I was told about Laban Movement Analysis and it became the starting point of my research.

Laban Movement Analysis: History and description

Laban Movement Analysis (LMA) was originated by Rudolf Laban (1879-1958). Laban was a dance artist and theorist who created a notation system to evaluate and analyze human being movements. He was interested in the relationship between human movements and the space which surrounds them. One of his greatest contributions was the publication of his *Kinetographie Laban* (1928), a dance notation system. He created signs that could represent body parts moving in space and time dynamically. Some of these signs are detailed in pg.29 of this report. Laban's theories about movement were later applied to other fields such acting performance and music².

From the book *Making connections* by Peggy Hackney (1998)³, LMA is a method that provides a rich overview of the scope of movement possibilities. The basic elements of the LMA system are Body, Effort, Shape and Space. These basic elements will be described in the next section of this report, but briefly, these concepts can be used to generate movement or to analyse it. They provide an inroad to understanding movement and for developing movement efficiency and expressivity. LMA uses a multidisciplinary approach, incorporating contributions from anatomy, kinesiology and psychology.

¹ Stanislavsky, Constantin - *Creating a Role*. Trans. Elizabeth R. Hapgood. Theatre Arts Books, NY, 1961 pg.228

² http://www.uio.no/studier/emner/hf/imv/MUS2006/v12/litteratur/Gambetta_2005.pdf

³ Hackney, Peggy. *Making connections: Total body integration through Bartenieff Fundamentals*. Routledge, NY, 1998

“In every physical action, unless it is purely mechanical, there is concealed some inner action, some feeling.”⁴

Constantine Stanislavski

Early on, LMA seemed to be a way to describe physical feelings that could be translated into musical expression when playing my violin. With this idea in mind I formulated my research question:

- How can I embody the expressive intentions of the musical score in my solo violin-playing by applying elements of Laban Movement Analysis in *Grave* from Bach Sonata N°2 and *Something wild* by Nenad First?

Why LMA?

It was time for me to start making connections between elements of different artistic disciplines and movement was my focus. I wasn't sure where it would take me but I thought it could be interesting to connect a practice used by dancers to my own practise about body awareness and movement in violin playing. Also because the system uses what is called Kinetography Laban, a system of annotation to describe movement and phrasing. This is important because it was the first time that use of movements could be understood through symbols by the performers.

I wasn't sure what I was going to discover and the field seemed very large, but I hoped that learning about how I move and using LMA as a frame could help me explore the connections between my playing and expression through my body movement.

What are the elements of LMA and how they can be useful in my research?

My aim was to work with the different elements of the technique and apply them into my violin practise through experimentation.

Effort: The Effort element is considered the qualitative use of energy in the action. This category is used to describe and experience WHAT we want to express and HOW.

Practicing the dynamic quality of the movement we can connect common elements between movement and violin playing by focusing our attention, for example when bowing, on the strength of the movement, the control of the movement, and the timing of the movement. Each of these is very different depending of the situation, i.e., the type of music being played.

Effort is the principal reason why I chose to learn about LMA because this topic is not only related with technique but also as main way to reach a better expression. For example, dancers use effort to generate expression through clear intentions in the generation of the movement. As a violinist, I found it interesting to research the root of this way of element of movement as it relates to expression to translate it into my playing music.

Body: This category is responsible for describing which parts of the body are connected and which parts are influenced by others. My aim was to find more connection between the involved parts of the body while playing violin.

Shape: Shape is linked to body element. It describes the way the body is changing in the environment. I wished to understand if movement and sound are in accordance with the corresponding character of different pieces I perform.

Space: Space is the way of organizing movement harmoniously in relation of the use of body and shape. Awareness in space is one subject I was never taught in my musical education and I believed it was important because acknowledging space a better sense of movement could be achieved.

⁴ Stanislavsky, Constantin. *Creating a Role*. Trans. Elizabeth R. Hapgood. Theatre Arts Books, NY 1961 pg.228

I aimed to accomplish my goals by applying these key principals of LMA to describe and better understand the relationship between elements of musical expression and my movements during performance.

Musical Content of the Research

I started working in *Grave* from Bach sonata N°2 during the first part of my research. The piece has a general nature of majesty and the melody recalls an improvisatory character. The structural ambiguity of the piece also provides to the performer with a variety of interpretative possibilities. My aim was to help express the graceful musical line with fluent physical movements by applying concepts of LMA.

In the second part of my research I started working on a contemporary piece. I was looking for a piece that contrasted with the character of the physical movement in the Bach *Grave* and I found *Something wild* written by Nenad First. Rhythm, strength and even aggression are the main characteristics of this piece. I wanted to challenge myself by playing a piece that demands that the performer to communicate an extreme character. My aim was to do this by understanding how to relate a musical idea with a physical sensation.

In order to achieve my goal of connecting movement with expression I experimented with exercises based on Bartenieff fundamentals which themselves are exercises based on LMA developed for Irmgard Bartenieff, Laban's pupil. Briefly, these exercises are for better connecting action with the environment through movement sequences (see *1st Intervention cycle*, pg.14-16 for full description). These were combined with and other exercises that could help me to first work on perceiving and becoming more aware of my body and movements. I then connected these exercises with the violin so I could link my body awareness with my technique and body movement. Overall, I found that a better understanding of body movement, breath, intention, dynamics and effort provided me with good insight into musical expression. I will provide more detail about this below. The outcome of all of this information I developed through the production of an annotated score I called Intention-Movement Score described in the *2nd intervention cycle* of this report (see pg.29-34). This score provides a direct connection between elements of LMA and musical expression.

DOCUMENTATION OF THE ARTISTIC RESULT

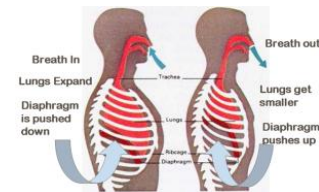
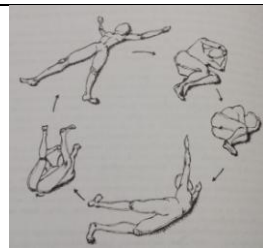

The outcome of my research is first step in the development of my understanding of physical movement and its emotional connection to violin playing. My work started as a tool to improve my own physical sensations while playing violin and it developed into a method that other violinists can apply to their own practice in order to develop range of movement and expressivity by applying elements of LMA. I created this method through experimentation, interviews and workshops, and desk research.

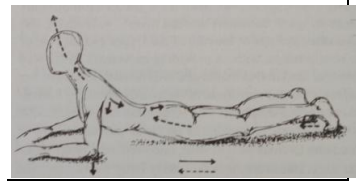

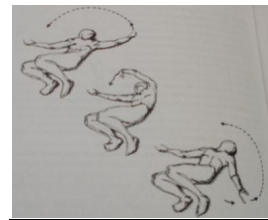
This method comprises three different sections: body exercises based on Irmgard Bartenieff Fundamentals, physical exercises with violin based on specific technique, and the Intention-Movement Score. Each of these sections is described below. As part of this research I was able to share this method with some colleagues in a pilot study in order to obtain feedback. The entire work and process can be found in section *Intervention cycles* in this report.

The Method

Body exercises

The following body exercises are based on patterns of total body connectivity developed by Irmgard Bartenieff. They are based in principles of LMA. The aim of the selected exercises is to improve connection between different parts of body more efficiently. A detailed description of the exercises can be found in the 1st *Intervention cycle* (pg.14-16).

Patterns of total body connectivity examples	Description	Picture
Breath	<p>When breathing in, bring the air to the lower belly and widen the rib cage. The diaphragm contracts and descends hereby increasing the internal volume and automatically pulling air into the lungs. There is a feeling of opening.</p> <p>When breathing out, the diaphragm releases and ascends upward. The air is expelled from the lungs. There is a sensation of relaxation and release.</p>	
Core-Distal Connectivity	<p>Opening-closing exercise. The exercise consists in lying on the floor on one side. While exhaling, move your limbs towards you. When you inhale, expand your arms and legs away from the centre. After that, repeat the exercise on the other side.</p>	
Head-Tail Connectivity	<p>In this exercise, the legs, arms and head are resting on the floor. Be aware of your spine. Move your hips slightly up while noticing the connection between your head and tail bone.</p>	

Upper-Lower Connectivity	Push and pull exercise: While laying in prone position rest your forearms on the ground and keep your upper body raised. Push with the arms towards the floor and feel the core of your body grounded allowing head and neck rise while arms and shoulders stay on the floor.	
Body-Half Connectivity	While facing up, one side of the body remains still. Then the opposite's side's elbow and knee move towards each other.	
Cross-Lateral Connectivity	While lying on the side, move one arm in a circle around the body while looking at the hand. The torso can move slightly to accommodate the arm movement without interruptions. Do the same exercise in the opposite direction. Repeat the exercise with the other arm.	

Physical Exercises with violin

While practicing body exercises I did a parallel work connecting movement into my violin playing. I took several exercises from violinists and teachers such Yehudi Menuhin⁵ and Paul Rolland⁶. I practised them as a means of motion development. Their examples also helped me to review my body posture with the instrument. They gave me a clearer understanding of movement efficiency and sound production. Here you can see descriptions of the exercises and recordings of the same that I developed based on some practical examples of the violinists mentioned above. The process can be found in more detail in the *1st intervention cycle* (pg.20-22):

- **Horizontal movement of the bow.** This exercise increases awareness of the horizontal motion by using the whole length of the bow. The wrist and fingers have to be relaxed by anticipating the movement before the bow change. <https://youtu.be/eIgtjMGrCPg>
- **Shifting.** This exercise involves coordination between the hands. The left hand changes its position through *glissando* from the first position to a higher position. The movement must begin slightly ahead of time in order to be connected to the bow speed smoothly. <https://youtu.be/kZdQJq95fYc>
- **Strings crossing.** When crossing from one string to another there should be a continuous curved motion instead of an abrupt change of direction. The whole arm has to be involved when changing from the G string to the E string. <https://youtu.be/-iXsqWGHYoY>
- **Full length bow movement appreciation.** Semicircles should be drawn with the bow while travelling from the frog to the tip. The left elbow movement is also involved in the shifting. <https://youtu.be/1NxnjZJI5xI>

⁵ Menuhin, Y – *Life class. Thoughts, exercises, reflections of an itinerant violinist*. Heinemann. London, 1986

⁶ Rolland, P. *The teaching of action in string playing*. USA, 1974

- **Counter-movement.** This exercise is based in the application of opposite directions between violin and body. Start by moving the violin away from the bow when reaching the tip. Then bring the violin near the bow when reaching the bow frog. Because the movement originates from the back it helps to maintain continuity of motion and sound.
<https://youtu.be/j2Csh9WLDuY>
- **Chords.** The bow is moved in a circular motion to help augment the strings resonance length. When increasing speed the amplitude of movement must be reduced.
<https://youtu.be/U3cWzGw-MPk>

Intention - Movement Score (IMS)

The IMS is part of the artistic result I developed from applying LMA elements into the piece *Something wild* composed by Nenad First. The concept is still under development but it is presented as a score of symbols based on Laban Kynetographie. I used the symbols that describe the effort factors of weight, time, flow and space⁷. These factors describe movement qualities. Any movement involves a certain amount of tension which takes a certain amount of time and it occupies a certain amount of space. Working in those qualities I could find relationships between phrasing, musical expression, and motion. The symbols used in the IMS are taken from my analysis of Kynetographie Laban. I took elements of dance notation to describe phrasing and intention and I added it into the musical score. I made some adjustments to make the score more understandable for a musician. The result was an alternative score that works alongside the regular musical notation. The IMS offers the musician an idea of the physical sensation associated with the music to help him/her to visualize and embody expression in the musical phrase.

While this approach is still in its infancy, I found it a very exciting and applicable start to combining Laban symbols with music. What I learned from this process is that movements can be more efficient by a clarification of the intention of the action or musical phrase⁸. If the performer has a solid idea of what he or she wishes to express, it can be achievable by the practise of body flow and intention through movement. In music, movement is also part of the action. By applying IMS into my pieces what I discovered subsequently was that movement is inherent to music because there is movement in the music itself (based on tempo changes, rhythm and intention). For this reason I believe that musicians can enrich their performances by becoming more aware of their own bodies and more fluent with their body movements.

The development of the IMS can be found in the section 2nd *Intervention cycle* pg.29-34.

⁷ Van der Mast, Joan . *Laban Movement Analysis* – Reader from Codarts. Bachelor of dance. 2015 pg.30-42

⁸ See pg.27-28 of this report

MY REFLECTION ON THE PROCESS AND THE ARTISTIC RESULT

I started the process of my research with a clear idea of what I wanted to achieve in my performances. What I didn't know was how I could reach it. I read about Laban Movement Analysis and I practised the principles in sessions with movement experts. Thanks to applying LMA elements I started feeling differently when playing violin. The conception I had of my body movements also changed. It was also interesting to compare how other violinists and teachers experimented with motion to help their performances. I took their examples and I reinforced them with my own discoveries and exercises.

I can appreciate the difference between the first recording I did in the beginning of the process and the last recordings. I am happy that I can see two different musicians comparing the recordings. In the beginning I was tense and restricted in my playing, but in the end I could see a violinist who was not suffering with body movements and technique while playing. Sound production was directly connected to my physical execution. When I started liberating the tension, I got feedback from my teacher that my sound became richer. I also felt and observed that my movements became freer: my shoulders were relaxed, my neck and upper body tension was relieved and my posture was improved. I developed a more powerful interpretation of my pieces through the practise of movement awareness.

The result is not only an inner feeling of physical and indeed mental comfort, but also a better understanding of the whole body participating in the performance. Being conscience of posture, breath, space, and overall use of the body has allowed me to have a new point of view about my playing.

The process also helped me to go deeper into pieces of violin solo repertoire. I had to ask myself what I wanted to express through the music and how could I do it. Indeed, every piece demands of the performer a different approach in technical and musical terms. I found really useful the process of self-analysis that brought me more knowledge about my own way of practicing and thinking. I also appreciated the support that every person of my network gave me during the process. In particular my violin teacher Benzion Shamir for his unconditional support and my research coach Nicole Jordan, for her patience and effort. Their feedback helped me to have new points of view to keep climbing step by step until I reached this point in my development.

My main goal was to be more expressive. My body and violin exercises helped me a lot to know better how my body works. But the most interesting part was to find a way to translate physical sensations into musical intentions. For this reason I created the Intention-Movement Score that helped me to clarify my musical interpretation of the piece *Something wild*. Applying elements of dance notation into a musical score have been for me a fascinating process of discovery. I think it can be useful as a tool in order to enrich expressivity in musicians' performances. I will continue to use the IMS as part of the learning process of my pieces. All the acquired knowledge is enhanced in the performance thanks to a careful practise of physical sensations during normal musical practise. Once I gain more self-confidence through this new level of awareness of the score, I feel able to just "go for it" on stage.

Applying elements of LMA to the music brought me a different conception about performing expressively. Process of self-analysis brought me to realize that movements could be affected differently by the musical ideas of the performers. At the same time the application of Effort elements to the musical score helped me to understand musical phrasing by being aware of physical intentions. I started observing movement inseparable of violin technique and musical expression. One needs the urge of the other to become. Unfortunately, I didn't have more time to develop those ideas but the process opened a possible path in my future research as a violinist.

As musicians I believe that one of our principal goals is to communicate to the audience. I cannot say that I found a magical solution that everybody can use to help expressiveness, but after two years of hard work in analysis and self-experimentation, I can say that I have more tools to keep developing my own career satisfactorily as a musician. Now I better understand the weaker points of my playing and how to deal with them. The research process has enriched my creativity as well. I explored with exercises of esteemed violin teachers and skilled movement experts, I created my own exercises, and I found a way to annotate physical sensations in a musical score. The process of creating the IMS was really inspiring to me. It inspired me to think about musical phrasing and expression in a different way. It required visualization of

the movement and connecting breathing with musical phrasing before starting the action of playing⁹. This process helped me to have more control over my movements. However, the highlight of the process was for me to think more concretely about musical expression in the pieces of my violin solo repertoire. I did this by applying symbols that describe Effort elements into the piece¹⁰. While there is no fixed way to interpret a score, what I found was that I could most effectively clarify my artistic intentions from the perspective of “Effort”. I did this by working from the smallest detail to the largest and then I understood the piece as a whole. You can see the complete process in the 2nd *Intervention cycle*.

Besides that I had the opportunity to present my work on the Research Festival that took place at Codarts on 8-3-2017. It was for me a good chance to share my work to the others and talk about the process. Different people were caught by the topic and I also received some interesting feedback that refreshed and helped me to clarify my ideas. I am also thankful to the violinists who participated in my experiment for the last part of the research. You can find the entire experiment and results in the 2nd *Intervention cycle* (pg.35-36). Through sharing my exercises and ideas with them they all expressed their interest and excitement about applying movement awareness in their own playing. It was also interesting to listen to their opinions about the purpose of the IMS, take their feedback and consider its usefulness for future implementation. Their enthusiasm inspired me to keep working on it. I think that my method could be applied more broadly in musical repertoire and used by other musicians, not only violinists, who are interested in movement awareness and developing their expressive potential through physical awareness.

⁹ See pg.28 of this report

¹⁰ See 2nd *Intervention cycle* pg.29-30

THE INTERVENTION CYCLES

I have organized my research work into two intervention cycles. The first describes the process of improving my body awareness through specific exercises. The second intervention describes the application of elements of LMA into a musical score and the creation of the IMS. Although this report is written in distinct sections even while I began focusing my attention in development of expressivity I continued to work on body awareness throughout.

Each cycle is described in detail below and is organized in the following sections:

- Recordings
- Feedback
- Data collection
- Intervention
- Reflection on the process

1st INTERVENTION CYCLE

1.1 RECORDING

I recorded *Grave* from J.S. Bach's Sonata No.2 as a starting point in my research. This musical movement is characterized by the elements of a Largo piece, slow tempo and solemn character. The composer makes an extensive use of double-stops to provide harmonic support to the melodic line. The melody should flow like if it was improvised and it does not rest until the end. Both chords and melodic elements follow each other without interruptions in a majestic atmosphere. I focused my attention in this piece because was a good example to potentiate the continuity of my movements.

Recordings are made with a Zoom Q4n camera recorder and a Huawei P8 lite smartphone.

First recording

Date: 28-11-2015

YouTube link: <https://tinyurl.com/kz5gvxl>

Memory-stick: Track 1

1.2 FEEDBACK

For the feedback of my first recording I got in touch with Annemieke Wijers, dance teacher at Codarts and movement analyst. I also spoke with my main-subject teacher Benzion Shamir and pianist and teacher Ester Balasch. I have highlighted the aspects of the feedback that were relevant for me and that I believed I could incorporate into my research.

Annemieke Wijers

*Looking at the video I would say that working with **more breath**, (and the third dimensionality of it) can give more volume to your movements.*

*I see **tension in your right shoulder**. I would like to work with you on that by finding, again, the **third dimensionality** of that joint so the whole **upper body** can move more freely with the flow of the music.*

Benzion Shamir

*The conduction of the melody is good. (...) **Don't push the sound with your bow** and feel free to change the velocity of the bow to reach every melodic phrase going on. Feel the colour of every sentence like an improvisation, stay clear rhythmically but free. (...) Be careful with the **use of right arm** to reach the chords. The intonation is good.*

Ester Balasch

This is a very enjoyable performance and the phrasing is especially beautiful. You also take very good care of the tone, where it ranges from intense to eerie making it very interesting to listen to.

*When the melody gets to a climax point, especially on higher pitch notes, **you help the intensity by tensing some parts of your body**. From the video I can see your **right shoulder** a bit higher. That has an impact on the tone making a bit pushed occasionally.*

When playing the chords it would be great to have a bit more presence on the lower notes, so then you can use the chord to affect the melody to a greater extent.

Self-reflection

As it is shown in the video, sometimes the core awareness of my body is lost during the interpretation. I suspend my body in the air while putting the weight of my body in one leg. This is affecting the precision of my bow because my core is not stable enough. Consequently, the sound cannot flow freely in all passages. Changing body weight in a soft sway movement from one leg to the other is recommended in order to maintain stability¹¹.

My right shoulder is often stiff and it does not allow the rest of the arm to move freely. Due to this stiffness, my elbow is reacting by moving slightly toward the back and the wrist becomes a bit rigid and pointing upward. If my shoulder is not strong enough and it is working incorrectly, then the other parts of the arm have to accommodate the change resulting in unnecessary tension. See some examples at minutes 2:02' and 3:09' of the video recording. Notice how the bow technique is related to the shoulder movement. If the shoulder is blocked I move my arm in the up bows by turning my whole arm slightly backwards. By relaxing the shoulders the movement of the bow can be more fluid and the left hand fingers become more relaxed.

The chords need more bass notes presence. It could be useful to reach the lower strings by helping the bow use a more connected movement from the back to the arm (scapula – shoulder – arm – elbow – hand).

Focal points formulated for further research. Questions:

- Are my movements efficient enough during my performance?
- Can I feel stiffness in some parts of my body while I am playing?
- Are any specific movements affecting my tone? If so, how do I improve these movements?

In order to have a clearer picture of the elements that needed improvement in *Grave* I made an annotated score. I highlighted the more relevant aspects in different colours (presented in a key). I also used the feedback from the experts as well as my own reflection to decide which elements to take into consideration. While examining the recording, I took into account the relationship between my body violin technique and my movements to find any unnecessary tension that would affect the tone.

You can see the annotated score *Movements, tension and tone* in Appendix 2 pg.43.

¹¹ Rolland, P. *The teaching of action in string playing*. USA 1974 pg.33

1.3 DATA COLLECTION

For my data collection I conducted interviews and consulted the literature.

Interviews

I interviewed professional dance teacher and movement analyst Annemieke Wijers and 2016 Codarts cello graduate Susanne Rosmolen. Rosmolen's final research was about the relationship between body and tension while playing the instrument.

Annemieke Wijers clarified to me how to work in Laban Movement Analysis through body awareness and exercises. She recommended some interesting books to me in order to get a deeper understanding of the subject and to have a first contact with the method. Susanne Rosmolen gave me some ideas about how to erase unnecessary tension and how she applied breath into her own cello playing.

You can find the entire interviews in the section *Interviews* in *Appendices* (pg.41-42).

Lessons and literature

"We acknowledge parts of the body as separate but interconnected (if one part changes, the others have to listen and find their relationship). We must begin to interrelate the parts. Doing it we experience how the parts co-create the whole"¹²

Hackney Peggy (1998)

I started individual sessions with Annemieke Wijers. She introduced me to Laban Movement Analysis method. In order to achieve movement efficiency we worked on body exercises and applied LMA principles. She suggested finding a small group of musicians interested in practicing body movement through LMA. I asked some colleagues and students from Codarts to participate. They decided to join us in the experience in a few sessions.

Excerpts of our sessions can be seen in the memory stick, tracks 6-7 and in the following links:

<https://youtu.be/foexQGFUzuQ>

https://www.youtube.com/watch?v=v_WVTXi1RTk

In order to have more understanding of LMA, Annemieke recommended two books that were really useful during my research: *Making connections* by Peggy Hackney (1998) and *Laban Movement Analysis* (2005), a Codarts reader for bachelor dance students written by Joan van der Mast and based on Peggy Hackney texts.

Both books explain in detail how to apply elements of movement analysis through Bartenieff Fundamentals (Total Body Integration exercises). I explain these exercises in the following section.

¹² Hackney, Peggy. *Making connections: Total body integration through Bartenieff Fundamentals*. Routledge, NY 1998 pg.40

1.4 INTERVENTION

1.4.1 Imrgard Bartenieff exercises

Imrgard Bartenieff (1900-1981) studied with Rudolf Laban in 1925 and following this became a physical therapist. She developed a set of exercises based on concepts and principles of kinesiological functioning that can be applied to all kinds of movement. Kinesiology is the study of body movement, addressing the anatomical, biomechanical and psychological mechanisms.

Annemieke mentioned in her feedback that there was a lack of connection between my core and limbs when playing the violin. I focused my attention on the connection between each part of my body and their relation with the whole body. She also emphasized to bring the attention to the third dimensionality of the shoulder joint in order to let the upper body move freely. In a lesson, she explained that third dimensionality in motion means the position changes of the body with respect to its surrounding. **Space**, expansion of the body in the environment, and **Shape**, the relationship that body has with space, are qualities of movement in third dimensionality. These elements are chained to the body action and can be trained through the practice of Patterns of Total body Connectivity I explain below.

Patterns of Total Body Connectivity¹³ were based in the principles of human movement by Imrgard Bartenieff. They are set up to provide coordination while dealing with demands of gravity. Bartenieff investigated in the field of movement control through developing a system of body connections.

We make connections within our own bodies through patterns which our neuromuscular system develops for executing movement sequences. Every human being is physiologically mandated to fulfil certain developmental tasks bodily in order to be fully functional and expressive¹⁴.

Peggy Hackney (1998)

Here I have explained some exercises of Total Body Connectivity based on Bartenieff fundamentals. The experimentation with the exercises is part of a large process. The goal is to better connect parts within the body, not to perform the sequence of movements. Its daily practise helps to incorporate physical awareness and movement perception. Patterns of Total Body Connectivity are:

Breath is the basic pattern of body connectivity and a generator of fluency. Breath can be practised through awareness of the inner space while directing the air to different directions: forwards - backwards, upwards – downwards, diagonals and in all directions.

Core-Distal Connectivity coordinates the relationship between each limb and the core muscles. This pattern helps strengthening the core.

Head-Tail Connectivity, flexibility of the spine can be achieved by incrementing awareness through this pattern.

Upper-Lower Connectivity builds strength by increasing the awareness between the lowest part of the pelvis and the ground.

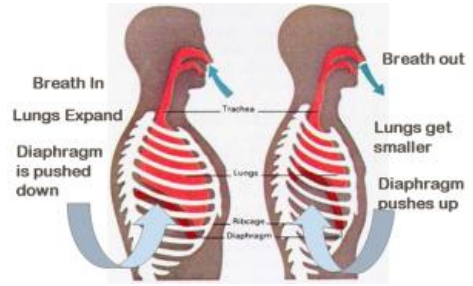
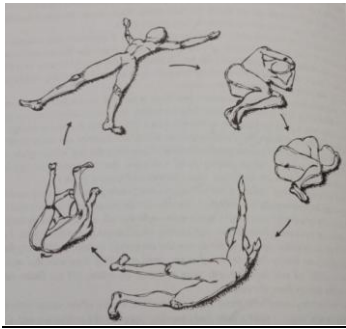
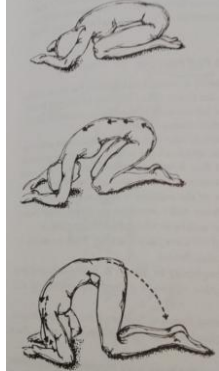
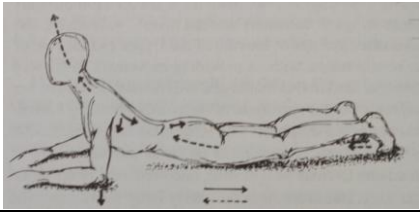
Body-Half Connectivity potentiates movement in one half of the body while the other half is static.



Cross-lateral Connectivity. These exercise use diagonal movements from one side to the other as well as up and down and forward and back.

¹³Hackney, Peggy. *Making connections: Total body integration through Bartenieff Fundamentals*. Routledge, NY, 1998. pg.218

¹⁴ Ib., pg.42

Exercises

Patterns of Total Body Connectivity examples	Description	Picture
Breath	<p>When breathing in, bring the air to the lower belly and widen the rib cage. The diaphragm contracts and descends hereby increasing the internal volume and automatically pulling air into the lungs. There is a feeling of opening.</p> <p>When breathing out, the diaphragm releases and descends upward. The air is expelled from the lungs. There is a sensation of relaxation and release.</p>	
Core-Distal Connectivity	<p>Opening-closing exercise. The exercise consists in lying on the floor on one side. While exhaling, move your limbs towards you. When you inhale, expand your arms and legs away from the centre. After that, repeat the exercise on the other side.</p>	
Head-Tail Connectivity	<p>In this exercise, the legs, arms and head are resting on the floor. Be aware of your spine. Move your hips slightly up while noticing the connection between your head and tail bone.</p>	
Upper-Lower Connectivity	<p>Push and pull exercise: While laying in prone position rest your forearms on the ground and keep your upper body raised. Push with the arms towards the floor and feel the core of your body grounded allowing head and neck rise while arms and shoulders stay on the floor.</p>	

Body-Half Connectivity	While facing up, one side of the body remains still. Then the opposite's side's elbow and knee move towards each other.	
Cross-Lateral Connectivity	While lying on the side, move one arm in a circle around the body while looking at the hand. The torso can move slightly to accommodate the arm movement without interruptions. Do the same exercise in the opposite direction. Repeat the exercise with the other arm.	

Observations

All the patterns of body connectivity are equally important. However, two of them were especially relevant in my research process. When experimenting with *Core-distal Connectivity* I worked on the relationship between my core and limbs because the feedback and self-reflection revealed that this aspect of my physicality was weak. These exercises really helped me to strengthen my core and it also helped me to be aware of every part of my body, including hands, head and feet. This is very important because all the body parts are involved in the action, also in playing an instrument. In the exercise of *Cross-lateral Connectivity* I focused on the use of my arms without unnecessary tension. In this exercise the arms are suspended in the air with the least effort possible. The back muscles need to change position to support the arm movement at all times. The pelvis acts as a strong pillar. I found this exercise very interesting because initially I could feel a disconnection between my arms and back. I did not realize how much extra effort I had been putting in this action before practicing it. This extra effort resulted in stiffness of the shoulders and a reduced range of motion in my playing.

The recording of these exercises can be found in memory stick tracks 9-10 and in the following youtube links:

- Core-distal Connectivity - https://youtu.be/m4O_fYhw8tE
- Cross-lateral Connectivity - <https://youtu.be/DIJGEWk6Rnc>

1.4.2 Mobilizations and stretching exercises

For violin players, the right upper limb is the extremity that needs the most mobility. This is because most part of the movements are executed with arms, specially right arm. It is also found to be one of the parts of violinists most affected by tension and flaws¹⁵. Proper use of the upper body can provide a more accurate technique by avoiding tensions. The authors suggest that physical exercises can help to improve neuromuscular connections and a proper use of shoulders, arms and wrists in violin playing.

Under the guidance of Annemeike and after referencing the literature, I started using shoulder and arms mobilisations before playing to relax the parts with the most tension. The goal was to become aware of the relation between spine, scapulas and shoulders in order to provide me with improved control of my

¹⁵ Turner-Stokes L., Reid K. *Three-dimensional motion analysis of upper limb movement in the bowing arm of string-playing musicians*. Clin Biomech. Bristol, 1999

movements when playing. I have selected some of the basic warm-ups and stretch exercises I took from the literature and video recordings.^{16 17}

Mobilisations

- Neck mobilisation: Move the neck in half circles from one side to the other. Movement should be executed slowly.
- Arm movement: Move the arms up from the side until they are above your head while inhaling. Change the direction in a soft movement and lower them from the side again until they rest next to the body.
- Shoulder rotations:
 1. Feel tension and release by shrugging your shoulders up as high as possible and holding your breath. Exhale with an audible sigh as you drop the shoulders. Relax and repeat.
 2. When you inhale, lift your shoulders towards your ears. When you exhale, rotate the shoulders towards the back and down thus opening up the chest area. Reverse directions.
- Wrist mobilisations. Cross hands with interlaced fingers. Upper arms and elbows are resting next to the body without movement. Wrists are free and allow movement of the hands in small circles. Repeat the circular movement several times to both directions.
- Hand and finger warm-up. Move your arms straight in front of your body. In that position open and close hands repeatedly. Move your arms up until they are parallel to each other and hold for 5 seconds. Hands keep executing the previous action of opening and closing during arms movement. Move your arms to the sides and hold them in the line of the shoulders while hands open and close. Hold for 5 seconds. Reaching the first position of the exercises, move your arms from the side to the front while opening and closing hands. Repeat the whole cycle and relax.

Upper body stretching and strengthening

- Interlace your fingers behind your back. Stretch your arms and lower your chin down. Maintain position for 5 seconds and relax.
- With the arms behind your back, one hand holds the wrist of the other. Tilt your head to the side and stretch for 5 seconds and relax.
- Strengthening the back. Open your hands. Raise your arms in a V shape. For 5 seconds move your arms up and down a short distance of 10 cm while doing short breaths. Relax and breathe normally for 5 seconds with your arms up. Lower your elbows to the shoulders' level and repeat the short breaths and 10 cm movement for 5 seconds. Relax and breathe normally. Raise the arms above the head and repeat short breaths and movement for 5 seconds. Relax.

Shoulder stretch

- Move your left elbow up until the hand rests on the left shoulder. Move the elbow close to the chest in a comfortable way. In this position, the right arm embraces the upper part of the opposite arm. Turn the body to the right side while holding this position. Feel the stretch in the back. Relax and repeat the exercise in the opposite side of the body.

Examples of mobilisation (arm movement and shoulder rotation) exercises can be found in the memory stick in track 11 and in the following YouTube link:

https://youtu.be/fuYIu_ZyyCo

¹⁶ Olson, Mia. *Musicians Yoga: A Guide to Practice Performance and Inspiration*. USA, 2009

¹⁷ Potter, Kate. *Yoga for Musicians*. Audio-visual content 2015

1.4.3 Self-experiment – back to basics

Date: 23-4-2015

In order to have a better understanding of the importance of the core while playing violin I decided to do an experiment. I realised that I tensed some muscles and experimenting with weight and balance could help me attain better awareness while playing. For this reason I recorded the first phrases of *Grave* in three different ways so I could feel how my body reacts and how it is affecting my tone and movements:

Step 1 – Bending my knees and feeling the weight of my body going down. Then I recorded it again standing up normally.

<https://youtu.be/44nO5ZaAxic>

Step 2 – Standing in my tiptoes and trying to look for balance in this awkward position. Then I recorded it again with my feet flat on the floor.

<https://youtu.be/cEvIq0m9XBg>

Step 3 – Annemieke Wijers observed that fixed positions do not help the movement to flow. I recorded the excerpt again but this time walking around the room. The goal was to keep playing as if I just was standing still but with more awareness of the entire body instead of focusing only on hands and instrument.

<https://youtu.be/72TKdlMBeUE>

Result

As I experimented, new sensations came to me. When I was bending my knees (Step 1) I could feel my body more relaxed and my core more connected to my back and limbs. I think the major discovery was that when I noticed my shortness of breath or unnecessary tension I started concentrating on the weight of my body. That helped me understand that in a situation of stress or muscle stiffness I need to move my body. That will allow me to go back to the sensation of a strong core and to feel closer to the floor.

When I was staying in my tiptoes (Step 2), I was shifting the weight of my body constantly trying to find balance. Not leaning on the feet makes me lose my technique control. This reminded me that when I was in a stressful situation I use to hold my arms up and hold the breath at the same time. This had a big impact on the outcome.

Walking while I was playing (Step 3) was a nice experience. Not only I was focused on my playing but also had to be alert so I would not stop walking. My breath and the rhythm of my steps were in unison and I started to move my right arm with less effort. My right shoulder was relaxed and the sound projection was not affected by walking.

I noticed that bending my knees a little helped me feel the connection between my body and the floor. At the same time it helped release the upper body. I started using this new sensation to help me during my interpretations. With the “walking experience” I started feeling the freedom of my hips while playing (that is unavoidable when walking) and its repercussion to the upper body movement of back, shoulders, arms and hands.

These experiments seemed quite simple but they were having a direct impact onto my playing. By practicing them I became more aware of the use individual parts of my body and the body as a whole.

The recording of the final part of the self-experiment can be found in memory stick track 2 and in the following link:

<https://www.youtube.com/watch?v=7f26PgFOpM>

Observations of outcome

- The right shoulder is more relaxed.
- There is less general stiffness in the body. The arm allows the wrist to move freely. It helps me avoid the habit of moving the bow arm backwards by using the bow in a straight line.
- Sometimes the tone is still affected by tension in the chords.

1.4.4 Breath

*“Breath is the key to life, movement, and rhythm. We breathe automatically, but breath can be influenced by and is reflective of changes in consciousness, feelings, and thoughts. (...) Flow is the key to mobility. Breath creates flow in your body.”*¹⁸

Peggy Hackney (1998)

Practicing exercises before playing helped me to be more aware of my body movements and tension. However, some of my habits came back very quickly. The first thing I realized was that I was holding the breath several times during my performances, especially in the difficult passages.

The first principle to move the body with fluidity is breathing. Holding the breath while playing results in muscle stiffness, less oxygen running to the brain, a feeling of stress and blocked movements. This is also discussed in the work of Susanne Rosmolen (2016). With the understanding that breath is the generator of movement I decided to practice it consciously.

While I was reading and experimenting with Total Body Connectivity exercises I felt and realized that every movement and action emerges from breath. Breath supports every movement we do and it is the key to phrasing and to any expressive content. I realised that this was also an aspect of other practices such as yoga which I have also practiced over the years. Now I was becoming conscious of how it affected my violin playing.

Breath also changes the shape of our body and the relation we get in the space. The awareness of the inner space helped me widen my breathing capacity range. That was achieved by directing the air to all range of possibilities (forward - backward, upward – downward, diagonally and in the whole space) as well as imagining the cavity as though it were a balloon. It also helped me relax body and mind before playing. I discuss this in more detail in the following section.

How to incorporate breathing into my playing?

First of all I connected breaths with bowings in slow scales and easy musical passages. I practiced the following exercises to break my old habits. I focused my attention to any breath holding patterns. The exercises are based in Rosmolen’s research.¹⁹

Sequencing change of bow and breathing:

- down bow - exhalation, up bow – inhalation
- down bow – inhalation, down bow – exhalation

Sequencing change of breathing in the middle of the bow:

- down bow (exhalation in the middle of the stick) – bow change – up bow (inhalation in the middle)
- down bow (inhalation in the middle) – bow change – up bow (exhalation in the middle)

In order to get a more fluent movement while playing Bach’s *Grave*, I marked where I should inhale and exhale in the score. That way I could be aware of the moments that I should control it during my performance. When I tried this exercise I realised quickly that my breath would have different tempos depending on my physical and mental state of that day. I found that when performing the piece on stage I went into “stress mode” and my breathing would become shorter and faster than usual.

I decided to erase most of the annotated breathings of the score because they weren’t helping. Instead I used the breathing exercises as a practise tool through the application of an idea that I developed called “Home Spots”. Home Spots are specific points in the score where an inhalation or an exhalation of breath could help me conduct the musical phrase more easily. I have included an annotated score with Home

¹⁸ Hackney, Peggy. *Making connections: Total body integration through Bartenieff Fundamentals*. Routledge, NY, 1998. pg.51

¹⁹ Rosmolen, Susanne. *Just relax...? Artistic Research Report*, 2016

Spots markings. The blue is inhalation and the red is exhalation. At these points I use breath connected to movement and rhythm.

In example a) I found it useful to inhale before the first chord, while doing a preparation movement with the arm. Preparation movement is executed before tone production is generated. Exhalation would occur just before the bow touches the string.

In example b) I connected the breath cycle of inhalation and exhalation with the end of the musical phrase.

In example c) I applied the breathing in and out exercise in the middle of the bow in order to achieve a long musical line.

Using this approach was a personal exploration of how awareness of the breath could help me to connect more to the musical phrasing. I found that it greatly reduced the amount of energy I expended while playing, and I became more aware of the overall musical continuity.

Examples of Home Spots in Bach's *Grave*:



Figure 1²⁰

1.4.5 Physical exercises with the violin

*"The principles of technique are the economic use of energy, the smooth turnings between directions, continuity, anticipation, elasticity, strength, speed and stable rhythm. To achieve this we work in three interlocking principles. The first one is to look upon the violin playing in its three-dimensional context and bring it down into the motions in each dimension. There is the vertical against gravity which is up and down. There is the directional as when we walk or use the bow across the strings; and there is the side-ways motion. There is no single motion that occurs in one dimension alone. We put them together into circles and ellipses to assure the smoothness of the technique. Finally we have to build a sympathetic coordinating structure of motion in our whole body which will support even the smallest of these specific required motions."*²¹

Yehudi Menuhin (1972)

As Yehudi Menuhin stated in *Six lessons* (1972), violinists need to be aware of motion in space. No movement happens in isolation. Every action we do has a reaction. If we move a part of the body it would affect the balance of another. The balance allows humans to make postural adjustments in order to

²⁰ Figure 1. Annotated score: Home Spots. *Grave* from Bach Sonata N°2.

²¹ Menuhin, Yehudi. *Six lessons*. 1972 Audio-visual content

stabilize the body posture after any action. Violinists have to deal with constant balancing during the performance. Performers who have a good balanced posture between the body, the violin and the bow can play by applying minimum effort²². On the other hand, if the performer immobilizes any part of the body that will have an effect on the rest of the parts. The end result is a limited range of motion and a lack of coordination. When all the parts of the body are flexible and able to move freely, the player has a better control over the instrument.

For a correct balance while standing, violinists should distribute their weight on both feet but not in a static manner. Paul Rolland encourages performers to shift the weight from one foot to the other in order to relieve tension and allow the bow movements to be free.²³

The balance of the body is in a close relationship with the weight shift, the speed and direction of the bow stroke. This can be achieved with unilateral²⁴ and bilateral²⁵ movements. During bilateral movements, the body movement is opposite to the direction of the bow stroke. That allows for better balance in medium and fast strokes. The friction created between the bow and strings allows the performer to produce the sound easily. In unilateral movements, both body and bow move in the same direction. Unilateral movements are less effective but can be used in slow bow strokes if the bow change is anticipated correctly.

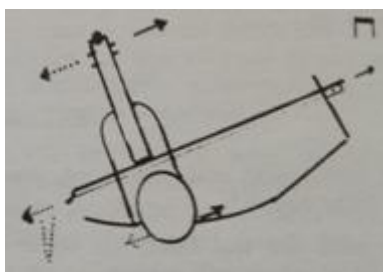


Figure 2

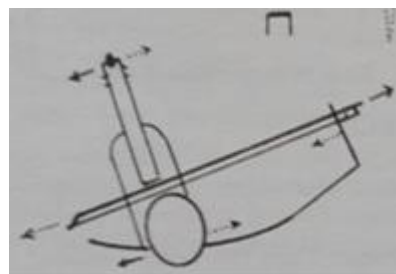


Figure 3

Working with violinist and Codarts teacher Goran Gribajcevic helped me to incorporate the ideas of bilateral movement (or counter-movement) principle into my playing. We worked on the idea of using movement as a tool to enrich tone. I have described it below in three basic steps:

- Step 1. Sit down and hit the floor with the right foot to the floor. At the same time, the torso moves and the chest expands. The hips do not change position but allow for some movement. At the same time, the right arm goes straight allowing the bow to have a straight angle with the strings and reaching the tip in the opposite direction of the violin. In the second phase, the left foot kicks the floor and move the violin inwards. Reach the frog of the bow without effort and the bow parallel to the bridge. Do the opposite movement but this time the violin and the bow come closer to each other.
- Step 2. Do the same sequence of movements without the foot kick. Stand up, bend the knees and use the side of a grand piano as a support for the back.
- Step 3. Do the same movements while standing up normally. Observe how your trunk moves and allows movement to the shoulder-blades, back, chest and abdomen. The shoulders are relaxed. As an example, play a D major scale starting from 3rd position on the A string (2 octaves).

Goran also informed me that violinists from other decades or even centuries developed efficiency in violin playing by making certain moves that improved violin technique and tone. If we analyse video recordings of some of the greatest violinists of the history we can see that they are never static. They are in constant motion although sometimes it is not visible to the naked eye.

²² Roos, J. W. *Violin playing: teaching freedom of movement*. Univ. of Pretoria. Pretoria, 2001 pg.16

²³ Rolland, P. *The teaching of action in string playing*. USA 1974 pg.33

²⁴ Figure 2. Bilateral movement

²⁵ Figure 3. Unilateral movement

I took inspiration from the above sources to create a set of technical exercises that would help me develop movement in violin playing. Every exercise has a concrete purpose. I am applying concepts of constant movement, circular motion and counter-movement by involving the entire body in the movement. Different aspects of violin technique are treated such as left hand shifting, bow arm movement and coordination of both hands.

You can find a short recording of each exercise in the memory stick from tracks 15-21 and in YouTube links.

- **Horizontal movement of the bow.**

This exercise increases awareness of the horizontal motion by using the whole length of the bow. The wrist and fingers have to be relaxed by anticipating the movement before the bow change. <https://youtu.be/eIgtjMGrCPg>

- **Shifting**

This exercise involves coordination between the hands. The left hand changes its position through *glissando* from the first position to a higher position. The movement must begin slightly ahead of time in order to be connected to the bow speed smoothly. <https://youtu.be/kZdQJq95fYc>

- **Strings crossing**

When crossing from one string to another there should be a continuous curved motion instead of an abrupt change of direction. The whole arm has to be involved when changing from the G string to the E string. <https://youtu.be/-iXsqWGhYoY>

- **Full length bow movement appreciation**

Semicircles should be drawn with the bow while travelling from the frog to the tip. The left elbow movement is also involved in the shifting. <https://youtu.be/1NxniZJ15xI>

- **Counter-movement**

This exercise is based in the application of opposite directions between violin and body. Start by moving the violin away from the bow when reaching the tip. Then bring the violin near the bow when reaching the bow frog. Because the movement originates from the back it helps to maintain continuity of motion and sound.

Front - <https://youtu.be/j2Csh9WLDuY>

Back- <https://youtu.be/UtJoFwawnBI>

- **Chords**

The bow is moved in a circular motion to help augment the strings resonance length. When increasing speed the amplitude of movement must be reduced.

<https://youtu.be/U3cWzGw-MPk>

Observations

The above physical exercises with the violin provided me with a better understanding of movement efficiency. By applying concepts of balance and coordination in violin technique I could control my movements better. This idea of continuity was also a starting point in combating rigid playing and a general feeling of discomfort.

1.5 REFLECTION

Applying Bartenieff fundamentals, mobilisations, stretching and breathing exercises into my playing was a multi-layered approach and a both physically and mentally challenging process; however it has helped me to prepare my body and mind for performance in many ways. For example in the control of my back, shoulders and core, the relation of myself in the space with my instrument and the connection between body parts involved in the action. Every single movement we do has a direct repercussion to other parts and constant adjustments of the body are executed during an action in order to get a right balance. Right balance of the body helps movement to be fluent and continuous and the same principle is applied when playing violin.

Through practicing body exercises, breathing, and connecting movement to violin technique I observed an increased fluidity and freedom of my movements while playing violin. This included more involvement of upper part of the body and constant motion during the performance. Results were also audible. My tone was changed in the last recording of the self-experiment.

1.5.1 Second Reference Recording

J.S. Bach, *Grave* - second recording, result of self-experiment

Date: 23-4-2016

Youtube link: <https://tinyurl.com/kbw85jg>

Memory stick: Track 2

1.5.2 Feedback

Annemieke Wijers

*You start breathing with the music and it affects to the **internal movement** of your body parts. Rib cage and chest are opening and closing (LBA terms) depending of the technical issues of the piece **breaking static motion**. All your body is **moving more in the flow** of the music*

Laban Movement Analysis elements:

Use of the body

- ***There is more upper-lower connection** (referring to my first recording reference and Annemieke Wijers' observations from individual sessions). **It gives more stability to you. However, you should continue working in the movement of your hips. They are still helmeted not allowing free flow. You use to lose a little the centre of your body positioning your hips forwards. This position change the sensitivity of your spine and back and arms could be affected.***
- *I see more shifting of weight between feet **finding balance***
- *You have more connection between your heels and your seat-bone*
- *You started **involving chest** movement*
- *The **shoulders are more relaxed** although need more relation with the back in order to focus the energy in an effective way (from the back to your hands)*

Shape qualities

- ***Work on the six directions** projecting your sound through your body: opening, closing, forward, backward, rising and going down.*
- *I saw you bending your knees more in some specific moments. I saw you also doing it properly but you need to have always in mind to not do isolated movements (referring to experiment 1 that I also showed her through video recordings). Isolation only gives you less connectivity between parts of your body and your instrument.*

1.5.3 Conclusion

Working on the body I did not only gain better mobility. It had also an impact on my tone by improving balance. Bow arm is more relaxed therefore less exertion of pressure with the bow to the string and more quality of tone is achieved. A better connection in legato stroke during bow changes is also improved. Body allows more movement possibilities during the performance and motion becomes easier.

2ND INTERVENTION CYCLE

Based on the feedback from the second reference recording of my first intervention cycle, I wished to continue working on body awareness and movement freedom in the second cycle.

In November of 2016 I contacted movement analyst and dance therapist Katharina Conradi. We had private sessions in *Studio7* in Amsterdam. With her I continued working intensively on the process of applying the LMA principles that I started with Annemieke Wijers. In the meantime, I focused on the application of some specific LMA elements in the musical score. I wanted to discover how to connect my movement with musical expression.

You can see excerpts of my sessions with Katharina in track 8 of the memory-stick and in the following youtube link: <https://youtu.be/qwWFsVbokB0>

During the process I analysed and performed a contemporary piece called *Something wild* written by Nenad First (1993). This piece was very different from the Bach. I wanted to explore a piece with a contrasting musical intention to the Bach to observe the different body movements involved and expand my own possibilities. Bach's *Grave* fluid and improvised character really contrasted with the strong and aggressive nature of Nenad's First piece and I was curious to see how this would affect my body. This cycle also discusses my IMS in which I use Kynetographie Laban symbols along with the regular music score. As part of my data collection I also conducted a small pilot study with my violin colleagues. This was very helpful in providing me with feedback about my exercises and my IMS.

2.1 RECORDINGS

Nenad First, *Something wild* - first recording

Date: 5-10-2016

Youtube link: https://youtu.be/YCfJ_c0cAs0

Memory stick: Track 3

2.2 FEEDBACK

In this intervention I asked Benzion Shamir to give me feedback of the piece *Something wild* during our lessons. I also provided my own self-reflection. As before, I have highlighted the relevant feedback which I address in my research.

Benzion Shamir

*“Exaggerate all the effects by **using more bow** in the sforzandi. Relax your right shoulder to play all the passages where the bow has to jump, especially for the **movement you need in strings crossing**. You are having a more solid sound in the section “a battuta, molto ritmico” because your violin is raised up it allows you to move your right arm freely. Use more bow, move your arm to reach the intention of the passages with strong character. Practice ricochet **allowing the shoulder to permit movement**. The elbow and the whole arm should draw a semi-circle (because there is a string crossing in the last note every time).”*

Self-reflection

I focused on the effect of the breath in my body and the general connection between body parts. The exercises helped me to develop a deeper sense of physicality while playing. The movement of my shoulders improved and the body was better balanced during the performance. I started letting previously tense parts of my body such as shoulders and neck participate in the action. It also had an effect on my

tone. The sound became richer because I was not pressing excessively with the bow against the string. This lighter touch also allowed a better flow in my movements.

2.3 DATA COLLECTION

In this cycle I use literature, analysis and experimentation.

In the first intervention I worked on Body, Shape and Space elements in order to increase awareness and therefore gain more freedom in my movements. In my investigations the element of LMA I began to see the Effort element as most relevant to my violin playing. The Effort elements describe the qualities of the four Effort factors, Weight, Time, Space and Flow. Each motion factor has two polar qualities:²⁶

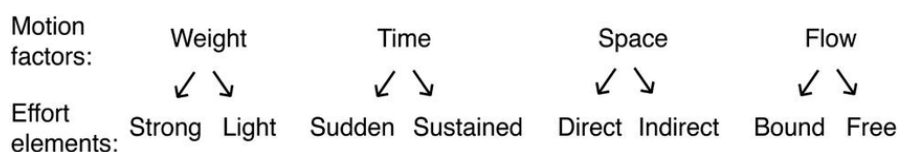


Figure 4²⁷

These elements reveal different expressive qualities in human movement. They are perceived in combination and in sequence. They also express the dominant characteristics of the mover (in this case a musician).

I found the Flow element particularly interesting. It is described by ongoingness and progression. It is the way movements follow each other. If movement is continuous, flow is on. If the movement is discontinuous, with stops and starts, flow is interrupted.

I found it most useful to connect these Effort elements with musical expression because effort, according to Laban, describes the mover's attitude toward investing energy. It is recognizable in patterns of tension, release and phrasing. A change in effort is generally associated with a change in mood or emotion. I saw the effort as a way to explore my own movement and therefore expressivity in my music playing.²⁸

Some issues I aimed to address in this section include:

How can I find connections between flow and music? I can apply flow in music by:

- Having a better understanding of the relationship between my body and the violin through posture and exercises²⁹
- Having a feeling of effortlessness. The aim is to reach the musical goal with an accurate technique that is free of unnecessary tensions.
- Developing the tone and connecting physical sensations to timbre.

2.3.1 Musical analysis of the piece *Something wild*

Before applying Effort elements into the piece I wanted to understand its structure. For this reason I analysed different aspects, especially the varies of the technical demands and the phrasing of each section. The analysis was part of a process to get closer to the essence of the piece and the expressive ideas of the composer.


²⁶ <http://www.movementhasmeaning.com/wp-content/uploads/2010/09/LMA-Workshop-Sheet.pdf>

²⁷ Figure 4. <http://tinyurl.com/mfoy4qj>

²⁸ Van der Mast, Joan. Codarts reader. Bachelor of dance. Laban Movement Analysis. (2015) pg.28

²⁹ See chapter *Physical exercises with violin* in the first intervention cycle pg.20

Liberamente

The first section of the piece is characterized by a lack of measures. It also has two contrasting sonorities. The large number of *sff* (sforzandi) and double-stops alternate with *p* signs very quickly forming a sequence. The intention of the phrase changes by the use of *crescendi* and *diminuendi* presented in different order. The use of *fermatas* () helps maintain the attention of the listener who does not know what to expect next.

The first part of this section is followed by the insistent use of *pizzicato* (left hand). That gives the passage a different sonority until it reaches a climatic point in the *ff* D sharp (with *arco*). The melody disappears and appears again with a powerful character in double-stops.

The last part of the section has a feeling of rush by the use of repeated eighth-notes (where the number of repetitions is not determined by the composer) in *sautillé* (bow stroke). The performer decides how to create the effect by increasing the speed in the *accelerando*.

A battuta, molto ritmico

The annotated tempo is eighth-note = 180-240. This section is characterized by a tune written in the G string. Every five bars the melody is alternated with material from the last part of the *liberamente*. The entire section has to sound powerful and even aggressive (*sempre ff*). The composer writes many time signature changes (7/8, 9/8, 8/8, 6/8, 4/8, 7/8, 6/8, 5/8, etc). This rhythmical section is finished by a succession of double-stops in *ricochet* bow stroke.

Liberamente

This section starts with musical material used in the first *Liberamente*. The following notes are written in *ponticello* (a sound effect using the bow near the bridge) that give the section a mysterious mood. The section *Liberamente* is always characterized by the lack of bar measures and tempo markings. That allows the performer to choose their own timing and tempo.

A battuta

The composer writes a specific tempo measure again. He uses eighth-note=180-240. This section is developed through mysterious phrases in *tremolo* (a sound effect using a fast and short bow stroke in the tip of the bow) distributed in changing measure bars (4/8, 3/8, 8/8, 6/8, etc). The use of unexpected *sforzandi* makes this passage unusual. This part is followed by three bars of *pizzicato* in *crescendo* that turn the piece fierce and powerful. The use of *spicatto* is constantly changed by slurred eighth-notes with the annotation *f sempre*. The section reaches the climax point in the final part. A succession of sixteenth-notes is written with the indication *sautillé* as a bow stroke. The piece reaches the last melodic line. After three bars it becomes interrupted by the material of the next section.

Liberamente

This time, the *Liberamente* is presented with only a few notes. This short section develops into the *A battuta* section.

A battuta

This section is presented again in the original tempo (eighth-note=180-240). This time the composer is using musical material from the first *A battuta*. The slurred eighth-notes are followed by similar rhythms in *spicatto*. Some insistent *sff* in dissonant double-stops make the piece return to the first theme from the first *A battuta, molto ritmico*. This time the tempo is *più mosso*. The tension is still increasing. The theme is slightly varied for a few bars and it develops into the final section. It is characterized by the use of *ricochet* bow stroke.

Feroce, energico

Seven bars of accentuated *ricochet* in *fff* (*sempre al Fine*) lead us onto the final bars. The piece finishes with a big *crescendo* on an interval of fifth that makes a big impact on the listener. The piece finishes *sfff* with a *pizzicato* chord in open strings.

- **After analyzing the score I concluded** that to perform the piece I need to embody all the changes that music suggests. It means that the musical idea, technique and movement have to be connected and work together. In order to keep the attention of the listener I had to work on the musical transitions and the tempo shifts. This is especially necessary during the big pauses (*caesura*) and also in sections where the melody keeps on increasing intensity. The composer suggests fast different articulations and unexpected changes of mood. They can be achieved by a quick response of the

movements. A clear example would be playing a really soft *pianissimo* long note that has to increase the tension quickly after a strong and accentuated fast note.



Figure 5³⁰

Having completed the score analysis I wished to look closer at how I could connect my body to the expressivity in the music. The most obvious connection, as I mentioned above was phrasing, this is because Laban's own Effort element include a description of phrasing. I wanted to explore the possibilities of applying Kynetographie Laban to a music score.

2.3.2 Phrasing

*"Intend is the preparation stage of phrasing and it is at this crucial point that the brain is formulating the motor plan which will eventually be realized in action"*³¹.

Peggy Hackney (1998)

As I already mentioned, Laban created a system of notation for contemporary dance. This notation is presented in a score that describes how to originate the movements and the inner intention of the movement in the phrase. Notation and terminology are too extensive to go into detail in this report. If you are interested, please see Valentine Preston-Dunlop book *Readers in Kinetography Laban* (1967)³². Some specific elements such as intention or phrasing will be explained further in this section.

Laban used music elements to organize the symbols in a structured way and make the metric of the phrase understandable. An example of this notation can be seen in the figure 6 presented below. The sequence of movements is described in symbols. These symbols are normally written in agreement with the musical rhythms and they are organized in bar lines.

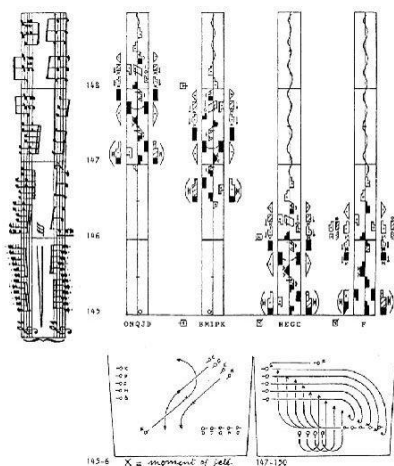


Figure 6³³

³⁰ Figure 5. First, Nenad. *Something wild*. Musical score

³¹ Hackney Peggy. Making connections. Total Body Integration through Bartenieff Fundamentals. 1998,USA pg.237

³² Preston-Dunlop, Valentine. *Readers in Kinetography Laban*. UK, 1967

³³ Figure 6. Kynetography Laban example. <https://tinyurl.com/6dbhmj>

Musicians and dancers have a common point when it comes to expression terms. **Phrasing** is the way the elements in a sequence are connected to express an emotion. They can be the musical elements of a piece or the movements of a choreography. The combination of different parts creates a unit with sense. In this way the performer is able to translate an idea into a meaningful message. In order to get a meaningful phrase he/she needs to have a clear **intention**, with intention being the purpose of the action. For this reason, *intent* is a fundamental part of phrasing. Clarity of intention leads to body efficiency because it prepares the neuromuscular system for the action or movement.

These are the following steps to build a phrase in dancing. They can also be applied in playing music³⁴, an example of how is outlined in the following section.

Phrase phases³⁵

1. Preparation – 2. Initiation – 3. Main action – 4. Follow-through/Recuperation

1 - Before a movement, the performer prepares with a clear intent. The preparation can be led by having a previous image of the movement in the mind. It can also be led via dynamic intent like using a strong and direct power.

2 - The origin of the action comes from the initiation. This part of the process is significant because it dictates how the main action is going to be. The Initiation requires movement and breathing. The main action is the sound result of the intended preparation.

3 - It is the primary action

4 - The quality of the movement changes and the performer can recuperate from the main action to finish the phrase or to create a transition into the next phrase.

³⁴ Rolland, Paul - *The teaching of action in string playing*. USA, 1974 pg.38

³⁵ Hackney Peggy. *Making connections. Total Body Integration through Bartenieff Fundamentals*. 1998,USA pg.240

3.1 INTERVENTION

3.1.1 Intention-Movement Score (IMS)

One of the main tasks of the performer is to interpret and translate what is written in a musical score into sound. In order to do that, musicians need to know how to read notation, dynamics, articulations and a lot of other kind of specific annotations. Despite my attempts, I could not find information about notation that tells you how to feel and embody musical phrasing. For this reason I decided to apply my own method. I researched Rudolf Laban's ideas about annotating movements and phrasing with symbols and I took the elements I considered more useful from the point of view of a musician. I got a secondary score to help myself to read and visualize phrasing.



The selected symbols are shown and described below. I also took into account the previous formal and musical analysis while applying Effort factors of LMA.



The elements I described through symbols are weight, time and flow:

- **Weight** is the intensity of the energy used in the action.
- **Time** is the duration of the movement.
- **Flow** is the way movements follow each other.



Kynetographie Laban Symbols. Effort factors


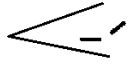
WEIGHT EFFORT: Active attitudes toward the use of the weight

Weight Effort	Symbol	Quality
Strong		Powerful, forceful, impactful
Light		Light, delicate

	Increasing strength
	Increasing lightness

TIME EFFORT: Sense of timing when committing the action

Time Effort	Symbol	Qualities
Sudden		Urgent, quick, staccato
Sustained		Gradual, prolonged

	Increasing speed
	Slowing down, more sustained

FLOW EFFORT: Related to feelings

Flow Effort	Symbol	Quality
Free		Fluid, released
Bound		Controlled, careful, contained

	Restrained
	Increased fluidity

Others symbols:

Strong accent Light accent

By combining some of the elements shown previously, I presented my idea of describing physical sensations related to musical expression. The symbols helped me visualize certain intentions before executing every action needed when playing. The goal was to accomplish a more expressive way of playing by being aware of the intention of every element in the musical phrase.

In the following two examples I have explained which Kynetographic symbols I applied in the first two sections of the piece





Liberamente



Normal score	IMS


As you can see in the score there are no annotated bar lines. The name of the section suggests that it has to be performed freely. The composer uses many pauses and breaths as a way to mark the timing of the phrases.


Description of the Effort elements: The general flow of the phrase is **bound** () because different elements are interrupting the continuous phrase. That creates expectation. The repeated extreme changes from *sff* to *p* demand the performer to execute fast changes of motion. The performer has to be in complete control of the physical movements that affect the bow technique in order to accomplish the desired sound effects.

For example, the piece starts with a fast and aggressive double-stop. It is important to embody the beginning character with prior sensations:

The use of **weight** should be strong () and the timing should be **sudden** (). At the same time, I used the symbol () that means a strong accent. In musical terms we already have the proper notation to express that, we use an accent (). However, the combination of all these elements and the musical symbols gave me a broader overview of the sound projection, a general meaning of the combined elements and informed me on how to execute the action. The second element that appears in the piece is also a double-stop. This time the dynamic indication that appears in the score is *p*. No specific rhythm is


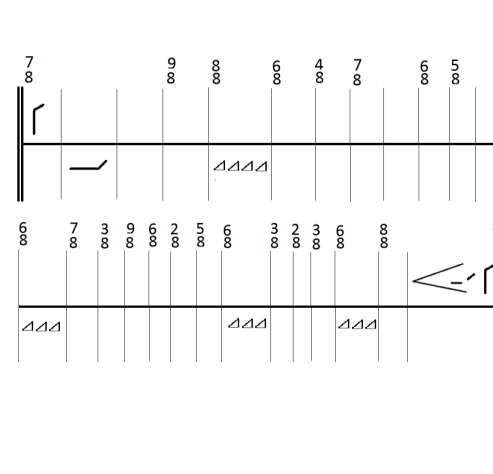
marked by the composer and two parallel lines suggests a long, light () and sustained () sound that continues with a light *pizzicato* to conclude with the first sub-phrase.


After a *fermata* () we find the more alternating *sff* to *p*. The same material is presented again but this time it is built up in the opposite way. The 4th time we play *sff* the intention increases and the weight is getting heavier. The musical phrase develops onto a succession of *pizzicati* and *archi* notes to reach a climatic point and the tension is released again. The next elements have a strong character held by the last breaths. The score becomes more aggressive in the last double-stops octave. The phrase finishes in a restrained (time) and *fff* stroke. After a second *fermata* the mood of the piece changes radically. The last part of the section has a contrasting playful character. However, the same motive has to be repeated while


increasing speed () and dynamic to reach to the next section *a battuta, molto ritmico*.

In connecting Effort elements to a contemporary piece I found it interesting that they could help me have another visualization of myself playing the piece. Some musical indications such as dynamics or articulations started to have more meaning than only an indication of volume or length.

A battuta molto ritmico

Normal score	IMS
	

In contrast to the first section, the *A battuta, molto ritmico* has a clear structure guided by constant time signature changes. The general **flow** is free () but the melody turns to a firmer character by using

strong **weight** (). This fact influences the way that movements follow each other and the way the musical phrase is perceived. I did not use many different symbols to describe this section because it section requires a general constant mood.

The same examples of the Intention-Movement Score can be found in *Appendix 4* (pg.47-48) in a bigger size for detail.

Observations

- Applying symbols helped me clarify the musical intentions of the piece.
- Every movement I was doing in my performance had a musical purpose. The intentions were guided by physical sensations. The movements were not a goal but a result of the musical expression. I evaluated the movements as part of the musical interpretation.
- The score was a result of musical intentions. It was not a score of choreographed movements.

I tried to play both scores at the same time but it did not work because there were too many written indications and it became confusing. I found it more useful to practise the piece in excerpts by applying the elements of the IMS and then perform the piece without them. I concluded that the use of symbols was useful as part of personal practise, not necessarily something to have on a score on stage. Once I had learned the normal score I could incorporate the symbols as a tool to deepen the relation between musical phrasing and body movement.

Development

I presented my Research in the *Research Festival* that took place at Codarts on the 8th of March of 2017. After my presentation I received inspiring feedback from the audience. Composer and instrumentalist Oscar van Dillen came to speak to me after my talk. He was interested in my work and in the idea of applying IMS in a broader way. He recommended defining the general character of each musical section of the piece as opposed to focusing on each individual element. Our conversation made me reconsider the work I was doing with the symbols.

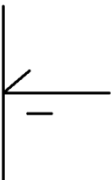
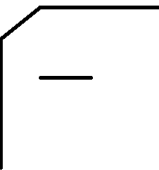
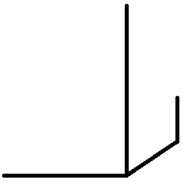
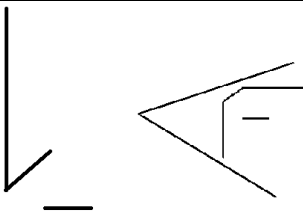
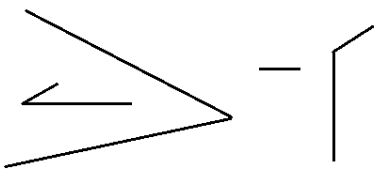
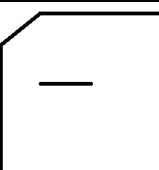
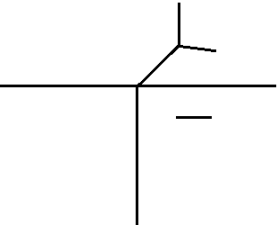
As musicians, we spend a great deal of time refining our technique and organizing the musical ideas in our minds. I was convinced that a detailed work was necessary to reach a better understanding of a piece. But at the same time I was missing the general overview. I was so focused on the way I wanted to execute each element that I forgot to contemplate the piece as a whole.

In order to clarify my ideas and reorganize my work, I contacted Katharina Conradi and continued working on LMA. This time I asked her to check my IMS so we could both work on it together. I also realised that I would need feedback from playing musicians, but first I wanted to clarify my ideas with an expert in the symbols.

After an intense session with Katharina Conradi of analysis and playing, I realised a different perspective of my interpretation. We worked on every section of the piece and we translated musical ideas into pictures of symbols by mixing Effort symbols. We also did the opposite, we first visualised the intention of the section and then we would perform it. Katharina helped me improve the symbol notation. She explained to me how to recognize the Effort factors and how to translate them into symbols when they were combined. Different elements of Effort can be found at the same time. An example is the use of strong weight, sustained time and bound flow. This conjunction describes a concrete intention or state of a musical section. We discussed the character of different parts of the piece from our two different perspectives. In the final part of the session the two points of view became one.

Here I present the symbols that I found better matched the musical intention. They are organised accordingly to the seven sections of the piece *Something wild*. Each section has a symbol representation. These symbols are based in Effort elements of Kinetography Laban and they describe the character and the intention of the piece. The symbols presented are not the result of my research; they are a part of a process. They have been a great tool to expand my expression as a musician. Without any previous knowledge about LMA and specific exercises to develop physical connections and musical analysis, these symbols would not have made any sense. Other musicians can read IMS by firstly, being introduced to LMA. They need a context and experience of Laban technique in order to understand the full meaning.

Intention- Movement Score with new symbols

<i>Section</i>	<i>Picture of state/mood</i>	Description / characteristics
<i>Liberamente</i>		This section is characterized by the use of bound flow and sudden time. The elements of the phrase demand a quick response of the body movements to achieve instantaneous dynamic effects.
<i>A battuta, molto ritmico</i>		Use of three Effort factors: strong weight, direct intention in space and sudden time. The general mood is presented with strong tension and a changing time signature. The section describes vigorousness and power.
<i>Liberamente</i>		The main characteristics of this short section are light weight and free flow. One of the elements of the first <i>Liberamente</i> section is presented. It develops into a light melody.
<i>A battuta</i>		Light weight and sudden time are the principal characteristics of the first part of this section. They are followed by phrases of increasing tension that are direct , strong and sudden . The strength level seems to be endless.
<i>Liberamente</i>		This short section is based in the elements of the first <i>Liberamente</i> . This time the bound flow is reduced and the sustained time dictates the succession of movements.
<i>Più mosso</i>		It has the same character as the first <i>A battuta, molto ritmico</i> . The tempo indication makes the section more energetic and it culminates in the last section.
Feroce, energico		The final part of the piece reaches its climatic point by using four Effort elements: sudden time, strong weight, direct space and bound flow.

SOMETHING WILD

for violin solo

Nenad Firšt

(1988)

Redakcija :

Rok Klopčič

The image displays a musical score for a violin solo titled "SOMETHING WILD" by Nenad Firšt (1988), edited by Rok Klopčič. The score is written for a violin and includes various musical notations such as dynamics (e.g., *sf*, *pp*, *f*, *mp*, *fff*), articulation (e.g., *pizz.*, *arco*, *punta d'arco*), and tempo markings (e.g., *Liberamente*, *a battuta, molto ritmico*, *poco rit.*). The score is divided into several systems, each with a corresponding IMS symbol in a red box to its left. The symbols are: a horizontal line with a vertical tick, a horizontal line with a vertical tick and a small square, a horizontal line with a vertical tick and a small square, and a horizontal line with a vertical tick and a small square. The score also includes fingerings (e.g., 1, 2, 3, 4, 5, 6, 7, 8, 9) and other performance instructions like *rep. e accel.* and *molto*.

Figure 7³⁶

4.1 REFLECTION

The application of the IMS really helped me clarify the musical ideas I interpreted in a score by relating them to physical sensations. By isolating different sensations, I was able to remember and apply them much more easily. By the time I was at the final part of the research I could just read the normal score but with added layers of information and feelings attached.

The way that the performer conducts phrasing affects movement development. At the same time movement influences performer's way of executing tone as I explained in the first intervention. Motion and musical intention work together in musicians' expressivity development. We can analyze concrete aspects of each of them separately but we have to take in account close links that exist between them in order to get a complete overview of expressivity.

As a musician my main goal is to move the audience, as I said in the introduction of this report. This process helped me to enrich expression by expanding my movement awareness and communication skills. The result of the process can be seen in the chapters *Final recordings* and *Comparison of recordings* of this report (pg.37-38).

³⁶ Figure 7. IMS. Symbols development

5.1 QUASI-EXPERIMENT

On the 16th and 17th of March of 2017, at the final part of my research, I had the pleasure to conduct an experiment with violinists. I wanted to share the knowledge I accumulated from my research and receive feedback on my ideas. Further to this, I wanted to test if my ideas could work for other violinists. I asked Codarts Bachelor and Master students to participate in a pilot study. I had four participants in total and conducted two individual sessions and one session with two participants. I recorded them with a Zoom Q4n camera recorder. Sessions can be seen in the tracks 22-24 of the memory stick.

Youtube links:

Álvaro: <https://youtu.be/66A8g8zH0i4>

Stamatis: <https://youtu.be/39iT8VkeXpw>

Alba and Maria: <https://youtu.be/hISrPoodoeE>

These are the steps I carried out in the experiment:

1. Participants answered the first three questions of the questionnaire before starting the experiment. They were asked they had excessive tension when playing the violin. If the answer was “yes” they then described in which ways they believed it affected their tone. They were also asked their point of view on the role of movements in a musical performance. The participants then played an excerpt of a piece they were already familiar with. They had been asked to play a piece of their choice based on the idea of freeing movements by using body awareness and breath.
2. Participants were then taught a few body exercises learned during my research process related to movement awareness (exercises to connect core of the body and limbs). Together myself and participants practiced them connecting breath with movement.
3. They then played the same musical excerpt. This time I chose a few phrases from the musical excerpt in order to apply ideas about physical awareness and breathing into music.
4. Participants were then shown the symbols of my Intention-Movement Score. They were taught the principles of Effort (Flow, Weight, Time and Space) and how to apply them into music.
5. They were then instructed on how to apply the concepts of Effort elements into a simple scale trying to identify changes in the use of every factor.
6. The participants played the musical excerpt again applying the previously mentioned elements of Effort.
7. A final recording was made at the end of the session.
8. The participants answered the final questions of the questionnaire and gave feedback on the information and process.

Results

Number of participants: 4

Average age: 24

Gender: 2 female, 2 male

Education: 3 Bachelor students, 1 Master student

The participants of the experiment were really receptive and open minded. I explained the exercises I used in my method and they were attentive to my indications about their playing. The violinists involved in the experiment were fellow students from the conservatory. For this reason I wanted to share information rather than just teach principles. I was very motivated and I found from my experience throughout the research that I could hear and see the changes on their playing after applying the exercises and the elements of Effort.

Questionnaire and participants feedback

I asked to the participants to fill in a questionnaire before and after the experiment. The first questions were about body tension and movement: Do you feel any excess tension when you play? Where? Does this affect your playing and/or tone? How does it affect it? What do you think is the role of movement in your performances?

Most of the participants related physical tension (generally in the back and shoulders) to a clear change in the tone projection. Some of them described it as a “lighter sound”, “without resonance” or with the difficulty to reach a “deeper sound”. My conclusion was that the lack of control of the bow is one of the most common sensations violinists used to have.

I was highly curious about the participants’ answers in regards to the role of the movement in their performances. Most of them connected movement to personal expression and freedom. Only one participant made the observation that sometimes movement disturbed him because “*it was difficult to coordinate with some musical ideas*”. Sometimes musicians make movement that does not help improve their playing. When musicians move freely they have a better connection with their instrument and the movements become part of the action of tone production. This is one of the conclusions I took from my process.

Questions about the experiment:

Q. Did you experience something relevant during the experiment?

All the participants had a feeling of comfort. Some of them remarked the different sensation they had after doing the exercises. Others talked about the effect that the physical work had in their tone and that they achieved a closer relationship with their instrument.

Q. When did you feel your own playing more expressive in the several times you played the excerpt? Why?

Three quarters of the violinists answered that the last time they played was the most expressive. “*I changed my mind about some different kind of movements and moods in the excerpt*”.

Q. Do you think that IMS can be a useful tool for musicians to embody musical intentions?

In general they thought that physical work should be a part of musical education. All of them agreed on the urge of learning music while being aware of the use of body. Physical sensations are crucial for the performer in order to communicate the piece effectively. The participants were interested in applying concepts I used for my IMS. I received interesting ideas about the use of symbols in musical scores:

“It can be useful if we get some specific guide of using the movement (when and why)”

“I think it can be useful for difficult contemporary pieces and some specific classical music excerpts (with unconventional musical lines and dynamics)”

One example of the completed questionnaire can be seen in *Appendix 5* pg.51-52

Reflection

My first idea for the experiment was to have the participants work on the IMS symbols and apply them onto different musical excerpts. However, I had to change the idea because in a 30 minute session we only had time to play, experience a few body exercises and work on a musical excerpt. When I showed the use of Effort principles to the violinists they all responded very quickly. Its effect was visible and

audible in their playing. The exercises and breaths let them connect better with their own playing. Their musical phrasing also improved after applying ideas of **weight, time, flow** and **space**.

At the same time, it was important for me to notice that the symbols were only a guideline to experiment with movement in a larger process. I used them myself as part of learning process of the piece *Something wild*, so I did not expect them to be the most relevant part of the experiment. Symbols are what they are, they are just symbols. However, the inner feeling of the performer appeared to change when connecting ideas to music. Performers can enrich quality of expression through symbols but they need to be translated onto body responses in order to have an impact on phrasing.

5.2 FINAL RECORDINGS

Date: 29-3-2017

J.S Bach - *Grave* from Sonata N°2

Youtube link: <https://youtu.be/yZNADEZ8nxE>

Memory-stick: Track 4

Nenad First - *Something wild*

Youtube link: <https://youtu.be/L9jEIue5P54>

Memory-stick: Track 5

Comparison of recordings

I compared first recording reference and final recording of Bach *Grave* and First *Something wild* pieces. I used LMA terminology in order to determine the general tendency of my movements. The result is presented in a table. Elements of the analysis can be found in the recordings by some of the examples in minutes I describe in the table.

Terminology³⁷

Body – examples of weight transfer

Shape – attitude and shape qualities: rising/sinking, advancing/retreating, widening, narrowing

Space – pin (linear), wall (flat), ball (round), screw (spiral), pyramid (tetrahedral)

Effort – it describes the use of flow: free/even/bound

<i>Grave</i>	Body	Shape	Space	Effort	Observations
First recording	Weight transf.: generally staying in the left foot (1:03). Body tends to go upwards	narrowing (2:04) advancing (2:38) sinking (0:34)	Pin	Bound/ even	Body tends to go up/ violin down
Final recording	Weight transf.: balanced (left-right)	Rising (1:00) Widening (0:43) Narrowing (2:19) Advancing (1:30)	Ball	Free/even	More horizontal movement appears. Violin in straight position

³⁷ **Chagnon, M., Campbell L., Wanderley M.** *On the use of Laban-Bartenieff techniques to describe ancillary gestures of clarinetists*. Research Report. Music Technology Area, Faculty of Music. McGill University. Canada, 2005

Observations

There are some visible and audible changes from the first recording to the final recording. For example, in the second recording balance in the general posture of the body is reached more easily. Also movement of the upper part of the body is accomplished in a horizontal plain and better technique is achieved. In comparison, movements are expanded and flow is continuous. Flow of movements has impacted in the tone by a good approach of musical intention and phrase.

<i>Something wild</i>	Body	Shape	Space	Flow	Observations
First recording	Balanced	Rising (2:26)	Wall	Bound / even	Stiffness in right shoulder in hard passages
Final recording	Weight shifts from left to right foot equally	Rising (2:22) Widening (0:37)	Wall	Free / even	Not excessive muscle tension

Observations

In general body is well balanced in both recordings. Otherwise muscle tension is affecting a bit the mobility of the right arm in the first recording. Sections with a strong character are performed with excessive tension and a good tone is not audible. The space is reached in a similar way in both recordings. One of the principle differences is the use of flow. In the final recording a continuous movement is reached by liberating the upper part of the body and technique is also better acquired. Musical sections are more contrasted. In the second recording more level of expressivity is reached by a good use of body, more accurate movements and clear phrasing.

APPENDICES

NETWORK

- Nicole Jordan - my research coach

Violinists:

- Benzion Shamir
- Goran Gribajcevic

Other musicians:

- Ester Balasch
- Frans Huijts

Movement analyze experts:

- Katharina Conradi
- Annemieke Wijers

Experiment participants. Codarts students:

- Álvaro García Carmona
- Alba Conejo Mangas
- Stamatis Sachas
- Maria Dorri

LMA sessions for musicians. Annemieke Wijers, teacher:

- Mayuko Takeda
- Virginia del Cura Miranda
- Violeta González Tomàs

REFERENCE LIST

Literature

Books

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Audio-visual content

- Shoulder Anatomy - <https://www.youtube.com/watch?v=D3GVKjeY1FM>
- The movements of the scapula - <https://www.youtube.com/watch?v=LF7oST34r4s>
- Bartenieff fundamentals. Andrea Macial - <https://www.youtube.com/watch?v=DaGt49rRtRU>
- Yehudi Menuhin: *Six lessons* (1972) - <https://www.youtube.com/watch?v=O7BZV1btIK4>
- Kate Potter's Yoga for Musicians - <https://www.youtube.com/watch?v=gKQ88E6hr0M>

Websites

- <http://www.flowskills.com/method.html>
- <http://www.movementhasmeaning.com/wp-content/uploads/2010/09/LMA-Workshop-Sheet.pdf>

MEMORY STICK CONTENT LIST

- Track 1: *Grave*, first recording <https://tinyurl.com/kz5gvxl>
- Track 2: *Grave*, second recording <https://tinyurl.com/kbw85jg>
- Track 3: *Something wild*, first recording https://youtu.be/YCfJ_c0cAs0
- Track 4: *Grave*, final recording <https://youtu.be/yZNADEZ8nxE>
- Track 5: *Something wild*, final recording <https://youtu.be/L9jEIue5P54>
- Track 6: LMA individual session. Annemieke Wijers – excerpts <https://youtu.be/foexQGFUzuQ>
- Track 7: LMA grupal session. Annemieke Wijers – excerpt https://www.youtube.com/watch?v=v_WVTXi1RTk
- Track 8: LMA sessions. Katharina Conradi – excerpts <https://youtu.be/qwWfVbokB0>
- Track 9: Bartenieff Fund. – Core-distal Connectivity exercise https://youtu.be/m4O_fYhw8tE
- Track 10: Bartenieff Fund. – Cross-lateral Connectivity exercise <https://youtu.be/DIJGEWk6Rnc>
- Track 11: Body exercises. Arm-shoulder mobilizations https://youtu.be/fuYIu_ZyyCo
- Track 12: Self-experiment. Step 1: bending <https://youtu.be/44nO5ZaAxic>
- Track 13: Self-experiment. Step 2: tiptoes <https://youtu.be/cEvIq0m9XBg>
- Track 14: Self-experiment. Step 3: walking <https://youtu.be/72TKdlMBeUE>
- Track 15: Physical exercises with violin. Horizontal bow <https://youtu.be/eIgtjMGrCPg>
- Track 16: Physical exercises with violin. Shifting <https://youtu.be/kZdQJq95fYc>
- Track 17: Physical exercises with violin. Strings crossing <https://youtu.be/-iXsqWGhYoY>
- Track 18: Physical exercises with violin. Bow length <https://youtu.be/1NxnjZJI5xI>
- Track 19: Physical exercises with violin. Counter-movement front <https://youtu.be/j2Csh9WLDuY>
- Track 20: Physical exercises with violin. Counter-movement back <https://youtu.be/UtJoFwawnBI>
- Track 21: Physical exercises with violin. Chords <https://youtu.be/U3cWzGw-MPk>
- Track 22: Quasi-experiment – Álvaro <https://youtu.be/66A8g8zH0i4>
- Track 23: Quasi experiment: - Stamatis <https://youtu.be/39iT8VkeXpw>
- Track 24: Quasi experiment – Alba and Maria <https://youtu.be/hISrPoodoeE>

APPENDIX 1: Interviews

Annemieke Wijers

- **What is Laban Movement Analysis?**

LMA is a method used to generate movement or to analyse it through the basic elements. These elements are Body, Effort, Shape and Space. Through this method we are able to understand the natural way to someone moves and then potentiate the “dynamic qualities” that are missed (or potentially in development). The basic elements provide the necessary knowledge to continue developing movement efficiency and expressiveness.

Any movement doesn't happen in isolation. We observe the body as a whole thing.

- **Which exercises do you teach in order to better understand the body element?**

I apply Bartenieff fundamentals in my classes with dance students. I do it always with music to potentiate the flow of the movement. Bartenieff's Fundamentals are series of movement sequences that experiment with the widest range of movement qualities as possible.

In our movement classes you are experimenting some of these exercises but If you are interested in practising deeper these fundamentals I really recommend you reading Making connections: total body integration through Bartenieff Fundamentals written by Peggy Hackney. There you can find information about these fundamentals (fundamentals means the basis of body movement and body connections) in one hand as theory and in the other hand as practice. In the next individual sessions we will work in these fundamentals and after exercising we will analyse your movement playing violin. In your case I think all the exercises related to breath, arms movement and chest will be useful to better understand the role of your upper part of the body connected to the core.

Working on Bartenieff fundamentals can provide you new sensorial knowledge about your body connections and more range of possibilities in your own movement. These fundamentals you will be dealing with analyzing movement through experience and observation.

- **What effort means?**

In German is used the word Antrieb to talk about propulsion. In other words, it is the active attitude through dynamic movement, when the movements are getting started. Through effort we achieve desired quality, intensity and dynamics of our movement.

About the Four basic elements:

Thinking in your role as a musician the first step I would recommend you is to analyze movement when you are playing and continue working with your body. Otherwise, Effort is an important element for you to work also. Practicing effort you can better understand the way you project your sound through your movement. You can reach a variety range of colours and intentions working in this element.

To work in these elements I recommend you starting by working on your body, followed of paying attention of the shape and finally understanding the role of effort (and the effect of space in your performance).

- **What can in order to apply the knowledge that LMA can provide me if I have tension in my body during my performances?**

The first thing you need is keep breathing. Practise breath without instrument to increase the range of air in your lungs before playing and then try to continue with this feeling during your performance. Try to not hold the breath to maintain the body in motion in the flow of your music.

Susanne Rosmolen

- **Have you ever experienced pain in your body while playing cello? Did your movements were affected by it?**
- **What did you do to change it?**

Yes in my lower back. Cellists spend a lot of hours sitting and practising. Then our spine is affected for these repeated movements. The first thing I paid attention was my posture. Changing the position of my feet I could reach less tension in my legs and it affected my playing too. I was trying to change the way of sitting also. I advised the most natural posture of the legs sitting is having your knees below the line of your hips.

What I advised is I couldn't sit for a long time without pain. Then I started practising more focused in timing resting every 20 minutes, standing, mobilising my body and practising again. As I could see, my practise was more efficient and well structured.

I started Alexander technique lessons and I continued working with my cello teacher, Jeroen den Herder.

- **Are you doing exercises before playing?**

Yes, I really try to spend some time analyzing my body. First of all I do a scan of all my body parts being aware of tensions and then I warm up my body doing some exercises I have acquired in my daily practise before playing.

- **How do you apply breath in your playing? Are you relating it with the phrasing of the piece?**

I was doing various exercises. For example, connecting my breath with the bow (up/down) or being aware of the respiration while shifting with the left hand (going up to the string pitch breathing out, helped me a lot). Otherwise when I was playing my repertoire I couldn't breathe in relation to the rhythm of the bow because in fast passages was impossible to have the same tempo. Even so it provided me more awareness during my performances to not hold the respiration and keep moving my body.

- **How did you show your results during your research?**

I kept a diary of my experiences and I have done some recordings to analyze in which parts of my body I had tension.

APPENDIX 2: Annotated score. Analysis





Movements, tension and tone

19

SONATA II.

Grave.

B. W. SIVIG (1)

- | | |
|---|--|
|  | More presence of the lower notes needed / all the arm structure needs to help the movement to the G string |
|  | Tension by rising the shoulder |
|  | Movement of the shoulder and bow backwards |
|  | Pressing with the bow |

APPENDIX 3: Annotated score. Effort element

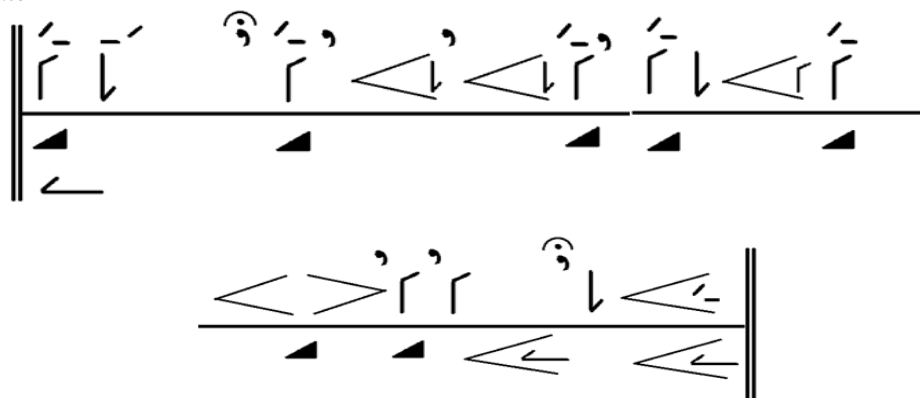
[illegible]

Handwritten musical score for guitar, featuring ten staves of music. The score includes various musical notations such as notes, rests, and dynamic markings. It is heavily annotated with handwritten numbers (1-7) and colors (pink, green, blue) for fingering and phrasing. Performance instructions like *sfz*, *f*, *mp*, *p*, *arco*, *pizz*, *liberamente*, and *a battuta* are present. The piece concludes with a double bar line and a final *sfz* marking.

B6.DSS 1342

APPENDIX 4: IMS examples

liberamente



liberamente

The image displays a complex musical score for a string instrument, consisting of two staves. The top staff includes various dynamics such as *sfz*, *p*, *ppp*, *pp*, *sfz*, *sfz*, *p*, *sfz*, and *f*. It also features articulations like *pizz.* (pizzicato) and *arco* (arco). The bottom staff includes dynamics like *mp*, *ff*, *f*, *p*, *f*, *fff*, and *p*. It also includes performance instructions such as *rep. e accel.* (repeat and accelerate) and *molto*. The score is marked with various symbols, including slurs, accents, and a 4-measure rest.

A battuta, molto ritmico

7 8				9 8	8 8	6 8	4 8	7 8		6 8	5 8		
6 8	7 8	3 8	9 8	6 8	2 8	5 8	6 8	3 8	2 8	3 8	6 8	8 8	

a battuta, molto ritmico

7 pizz. arco
sul G al Θ
arco
sempre ff
6 4 7 sul G al Θ
6 5 6 7 sul G al Θ
9 6 2 5 Θ 6 3
2 3 6 8
poco rit. - - - - -
ricochet

APPENDIX 5: Questionnaire Quasi-experiment

Pre-session Questionnaire

Name:

Age:

Gender:

Education:

- Do you feel any excess tension when you play? Where?
- Does this affect your playing and or sound? If so, how?
- What do you think is the role of body movement in your performances?

After session Questionnaire

- Did you experience something relevant during the experiment?
- Which time did you feel playing more expressive in the several times you played the excerpt during the exp.? Why?
- Do you think that IMS (Intention-Movement Score) can be a useful tool for musicians to embody musical intentions?
- Observations / suggestions:

Questionnaire

Name: ALVARO GARCIA

Age: 20

Gender: MALE

Education: 2nd BACHELOR

- Do you feel any excess tension when you play? Where?

Just sometimes in my back.

- Does this affect your playing and or sound? If so, how?

It does. When I feel tense, I can't put all the weight of my arm connected to the bow. Then I can't reach a deep sound.

- What do you think is the role of body movement in your performances?

It helps me with the phrasing and makes me feel less nervous. But sometimes it also disturbs because it's difficult to coordinate with some musical ideas.

- Did you experience something relevant during the experiment?

Every time I played using Sara's indications I felt more comfortable.

- Which time did you feel playing more expressive in the several times you played the excerpt during the exp.? Why?

I think the last time. I felt so relaxed after all the exercises. I changed my mind about some different kinds of movements and moods in the excerpt.

- Do you think that IMS (Intention-Movement Score) can be a useful tool for musicians to embody musical intentions?

I think it can be useful for difficult contemporary pieces and some specific classical music excerpts (with unconventional lines and dynamics).

- Observations / suggestions:

The relaxation exercises were very useful. I think that preparation for the study is also very important. It's something you can connect with the "method".

Thank you very much!