

The Contemporary Cello

Artistic Research

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1. INTRODUCTION

I have always been interested on looking for new repertoire for cello, in order to have a large range of pieces of many styles from where I can choose. I love Bach, Haydn and romantic composers. But 7 years ago, I listened to a piece from Lachemann for cello solo (*Pression*). I was very surprised about it, because I heard the cello sounding completely different, in a way that I had never heard before.

That is how my interest in modern music started, and it has been growing until nowadays. I began to discover new repertoire after Romanticism (Britten, Ligeti, Kodaly, Glass, Gubaidulina, Lachemann, etc.) and I discovered very special and new feelings with this kind of music.

In this way I started to research in contemporary cello repertoire, but I had never had the opportunity to play any of these pieces.

I also realized that I didn't know so many musicians around me interested in these styles. In a way, I felt disappointed because nowadays, there are still a lot of musicians that don't have any interest on the music of our time, even from last century.

I love romantic music, and I don't like all contemporary music, but I have discovered pieces that have really moved me. It is almost crazy that we don't know the music of our own time, because we are supposed to be the best generation to perform it!

With this artistic research I saw very clearly the opportunity to start developing my career as a cellist also through contemporary music.

I can explain my goal from two different points of view: as a musician, and as an artist.

As a musician, I would like to extend my repertoire as a cellist through contemporary music. As a result of this, I will obtain a large overview of new technical possibilities and skills that I can find on the cello. With this process, I would like to be able to build-up contemporary music by myself in a professional and informed way.

As an artist I need to understand contemporary music not only in a technical way, but in an aesthetic and philosophical way. I want to be an artist who knows the art of his own time, and by performing contemporary music, also to share it with more people.

To sum up, the goal is to grow up as a musician and artist learning to perform contemporary music in order to be a musician who has the needed tools for building-up a large number of styles (Baroque, Classic, Romantic, Modern and Contemporary).

The way I chose for doing it was through short contemporary pieces for cello solo. I started with a list of 8 pieces, but I had to reduce it to only 5 because I needed to focus more in depth on each piece. I also intended to premiere a piece for cello solo to get to know the experience of working directly with a composer (and to open my professional possibilities in my life as a musician). So the result of my list ended up with two world premieres and three more pieces for cello solo:

- *Four short studies* (Zimmermann, 1970)
- *10 Preludes for cello solo* (Sofia Gubaidulina, 1974)
- *A graveyard of broken statues* (Wingel Pérez Mendoza, 2014)
- *Memòria Infinita* (José del Valle, 2007)
- *Sept Papillons* (Kaija Saariaho, 2000)

My initial research question was this one:

How can I learn which skills do I need to build up and perform a repertoire of short contemporary pieces for cello solo?

But during the process of researching I realized that I needed to change slightly the direction of my research. At the beginning I was focusing only on the new techniques and skills. But at a certain point, I felt that either I had to focus on new techniques and skills more in depth (having as many tools as possible from the new cello technique), or either to focus more on the preparation process of a contemporary piece (including as part of it the techniques I would find there).

I thought that the first option, about making a huge list of new techniques was not realistic, because it is impossible to know all the existing techniques; and indeed, they are still more techniques to be born

with the current composer). Moreover, it was not satisfactory for me (because it wouldn't allow me to perform complete pieces).

I felt more identified with the second option, because my goal was to be capable of performing contemporary music in a professional way. So I chose this direction, because it allowed me to still work on the specific techniques that I would find in the pieces plus a realistic way of performing contemporary music.

During my third intervention cycle, when I was preparing two premieres, I chose a new question:

How can I learn the preparation process of contemporary music, practising and performing a repertoire of short contemporary pieces for cello solo?

I felt more identified with this one, because after doing two intervention cycles giving more importance to the technical skills, I observed that actually I had done much more. Only focusing on the technical skills, I would not be able to perform the pieces in professional way. My third intervention cycle was useful as an observation exercise. In addition I discovered that when you premiere a piece, the contact with the composer has a tremendous role. I also realized that when you need to bring a contemporary piece into the real life, your preparation time is limited and you need to be very efficient in the way you do it.

That is why with my experience through the first, second and third intervention cycles, I decided to measure somehow my preparation process (mainly to do it efficiently and without spending a lot of time). So I designed a schedule with the preparation parameters that I considered necessary to build-up the interpretation of a contemporary piece, which indeed was very useful.

2. REPORT OF THE RESEARCH

The structure of my research was based on four different intervention cycles, following each of the pieces I performed and researched on (the third contains two pieces because both were premiered on the same day). As I mentioned before, it changed slightly because at the beginning I was more focused on the new techniques in order to get a large range of them to approach easily contemporary music. But I noticed that I was also doing research on the whole preparation process of a contemporary piece, because I had never done that before and it was difficult to take the initiative seriously. It was also not satisfactory for me, because what I wanted was to perform, share and understand that music (besides from only practising the technical skills).

I started with a piece that I considered relatively easy, because it had 4 short movements and it was written very clearly.

1ST INTERVENTION CYCLE – *Four Short Studies* (Zimmermann, 1940)

Zero point

I started practising the piece by myself, without any kind of help and information. I tried to record it, but I couldn't, I only was able to play the first movement. Then my starting point was a list of questions because there were things that I needed to research on. My questions were these:

- What means two different ways of bowing or tone-colours?
- How to play the two different voices of the first movement?
- How to ring open harmonics¹ with pizzicato?
- How to play vertical accents?
- How to play chords on 3 strings?
- How to play *sul ponticello*²?
- Can I use vibrato?
- How to make different kind of accents?
- Which is a good tempo?
- How free am I for taking decisions?
- How can I play different kind of accents in the 3rd movement?

Study I

Data Collection

At the beginning it is indicated “*Two different ways of bowing for the different strings, or two different tone-colours with the same bowing*”. I understood that there were two different voices: up stems (II string) and down stems (III strings). But I didn't understand the difference between way of bowing and tone-colour. I solved that thanks to one of the experts of my network, Job ter Haar. Way of bowing refers to stroke bow (*staccato, martelé, détaché*...) and tone-colour to the timbre of the sound (*con legno, sul tasto, ordinario, sul ponticello*...).

About the tempo there is another indication saying “*from slow to as rapidly as possible*”. All my experts (Job ter Haar, Jeroen den Herder and Almudena González Brito) thought that it meant something similar to a gradual and long *accelerando* through the whole study. That was also what I

- 1 It is the resultant pitch when only touching a string with one finger at one of its nodes, and making it vibrate with bow or pizzicato.
- 2 Translated literally from Italian, means “on the bridge”. Applied on the cello, means to play with the bow placed close to the bridge of the instrument, or even at the bridge.

thought, but I was not sure about it.

- Case study about *sul ponticello*

I needed to investigate about it, because it is possible to have different possibilities with that.

[...] the technique can yield a wide variety of timbres ranging from a slight colouration of the pitch to a complete elimination of the fundamental that produces a clangorous, almost non-descript timbre". [...] between a slight pitch and the production of a non-pitched timbre. Variation depends on where the bow is placed in relation to the bridge (even on the bridge) and how the bow is articulated.

(Strange, 2001, p. 3)

It was also possible to listen *sul ponticello* in different places, at the website of Russell Rolén (Rolén, 2014). This gave me an idea about the possibilities when practising.

One of my experts, Jeroen den Herder, suggested me to not play extremely close to the bridge, because there was the danger of losing the pitch and it would be more difficult to change from *ordinario* to *sul ponticello*. Just with a different timbre was enough to listen the difference between the two timbres. What he said that could help is also playing with the pressure of the bow: for *sul ponticello* using more pressure and for *ordinario* less pressure.

Another thing that helped me was to play with less hair (inclining the bow) for the *sul ponticello* (Strange, 2001), and also Jeroen den Herder told me.

Intervention

After trying many possible combinations, I took the decision to play different tone-colours (upper voice with *sul ponticello* and lower voice with *ordinario*) and the same way of bowing (*detaché*). The kind of *sul ponticello* I used was not an extreme one, just one in which you can still recognise the pitch but with a different timbre than *ordinario*.

Study II

Data collection

Here the indication says "*Pizzicato-study employing natural flageolette-like tones in a free tempo, continually-ringing pizzicato*". I understood that it meant always using natural harmonics, never artificial. About *continually-ringing* I understood that they had to be always audible, because some of them didn't sound sometimes and I didn't know why. In order to solve it, I did a case study about ringing open harmonics with pizzicato.

- Case study about ringing open harmonics with pizzicato

I spent a lot of time experimenting on this, because I was not able to ring some of the notes and I couldn't find an explanation.

I found very useful information and vocabulary about the harmonics in one book, where Strange (2001) mentions: "*With a grasp of the basic principles of acoustics, one can easily deduce any and all possible harmonic placements and standard notational practices can be clarified*" (p.113).

So what I did was starting from the basics of acoustics and physics. Related with the Harmonic overtone series³, Strange (2001, p.114) says that the fundamental of the series (C2)⁴ is the 1st harmonic and the second note of the series (C3) is the 1st overtone and the 2nd harmonic. So the 1st overtone is not the 1st harmonic, meaning that harmonic and overtone are not the same.

To see clearly this at the first sound of the Harmonic overtone series:

C2= fundamental / 1st harmonic

C3 = 1st overtone / 2nd harmonic

G3 = 2nd overtone / 3rd harmonic

C4 = 3rd overtone / 4th harmonic

E4 = 4th overtone / 5th harmonic

(etc.)

In a meeting with one of my experts, Job ter Haar, he explained me how to produce in a string all the harmonics. I will give all the examples at the C string of the cello. It is necessary to think in the string as if it would be a segment or a wave (starting at the nut and finishing at the bridge). If we imagine it as a wave, we could call the string the loop and the two cutting points (nut and bridge) are the nodes.

If you pluck with a pizzicato the C open string the result is the fundamental or 1st harmonic (C2). To produce the 1st overtone or 2nd harmonic (C3) you have to divide the string in two equal segments, so you touch the string right at the middle; having then 3 nodes (nut, finger, bridge) and 2 loops. By plucking the string at any of the loops the result is C3, the 2nd harmonic.

By following the same scheme always, we will get the 3rd harmonic (G3) by dividing the string into 3 equal parts, the 4th harmonic (C4) dividing into 4 equal parts, the 5th harmonic (E4) dividing into 5 equal parts, etc. It is possible to touch the string at any of the nodes from the same wave; the result will be the same (see video demonstration in the attached DVD, track 1).

The problem comes from the 3rd harmonic on. If you divide the string into 3 equal parts, you can place the finger of the left hand in two different spots so you can choose (just placing the finger at any of the nodes). There is a danger when you pluck the string; if you pluck in any of the loops, the result will be clear, but if you pluck in one of the nodes of the string you will not get the harmonic, just a dead sound. So the trick is to always pluck the string in one of the loops of the wave, never at the nodes (see video demonstration in the attached DVD, track 2). You can deduce it by knowing which harmonic you have to play, and finding the nodes of it (to avoid them).

Then we did a little experiment: we calculated in a paper (by drawing a segment and measuring with a metro) where you need to divide the segment in order to get the 5 first harmonics of the Harmonic overtone series. And to cover all the notes appearing on the second movement of the piece, I had to do the same process but in all the strings.

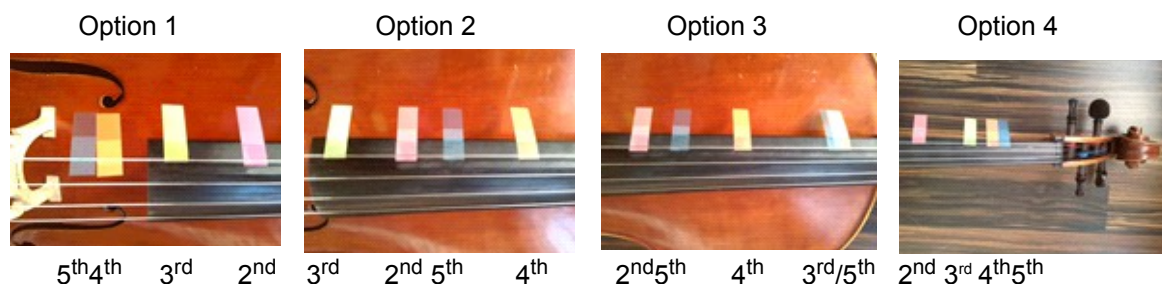
Then I translated that into the cello itself (see appendix for the exact measures in page 41, second table). I made the necessary divisions with a metro, and I wrote with a pencil in the fingerboard the spots belonging to the nodes of the first 5 harmonics (spots where to place the finger). After that I placed coloured stickers at the fingerboard to indicate the middle of the loops of every harmonic (for every harmonic, a different colour). With those stickers I had as a result all the possible places where to pluck the string in order to get a ringing note and not a "dead" note for the first 5 harmonics. This was the result in photos:

3 Physical phenomenon that happens when a strings is in vibration, creating from the fundamental pitch a series of harmonic overtones.

4 For the octave references, I always use the international system, in which C4 is the middle C on a keyboard. In a cello, the lowest note (fourth open string) is C2.



So I discovered that I had four different regions along the fingerboard where I could pluck in order to ring all the first 5 harmonics of every string.



I chose the region in Option 3 because there was a common spot where I could pluck the 3rd and 5th harmonic. So with only 3 spots I could pluck all the harmonics.

Afterwards, I also got some tips for playing harmonic pizzicatos. Jeroen den Herder told me that sometimes helps to play a certain note lower or higher in order to get a cleaner harmonic. For instance when playing F#3 (in second string), it is better to play it lower. Also helps to leave fast the left finger from the string, because then you really let vibrate the string. And the last thing, as critical is a note, more precise should be the pizzicato (we can even use the nail).

I did a very clear, interesting and useful table in order to set up easily all the information I had found about the five first harmonics (see appendix, page 42, second table).

Intervention

I calculated for every note in every string which harmonic was it (1st, 2nd, 3rd, 4th or 5th), I wrote that reference in the score under every note and I tried to memorize it. Then I found the right place where to pluck for every harmonic following the spots of my stickers. I also tried to memorize it (by memorizing the movement of the right hand along the string). As a last help, I marked at the side of my fingerboard with a soft pencil the 3 spots where to pluck (with the number of the harmonic that it belonged to) so I could practice without the stickers. I created a system for my own practice in which I only had to see the number of the harmonic at the score and the number of the harmonic at my fingerboard in order to pluck at the correct place (loop).

About how to pluck for the pizzicatos, I tried with the nail, but I didn't like the sound. I also tried with different fingers, but I found that the most precise I could get was by plucking with my index finger in a vertical way.

After 10 months, I had to play again the piece. And I discovered something else about the pizzicatos. Instead of having 3 different spots where to pluck, I noticed that it was possible to play all of them in only one spot. That is, at the C string, at the belonging place to the B-flat³ (from the nut, centimetre 49. At that spot, in all the strings, it is possible to ring all the 5 first harmonics. It is a comfortable place (not too close to the bridge and not interrupting the fingers of left hand), and it is a spot free of any node. Even if the ideal place to play them it's at the middle of a wave, it is also true that it is not necessary; the only rule is to not play at any node. This discovery and decision made my life much easier with this study (see video demonstration in the attached DVD, track 3).

Study III

Data collection

The indication of the third study was clear: "*very rapidly*".

- Case study about fast vertical accents (in 3 strings)

This study was full of accents and it is indicated *very rapidly*. I found very difficult to gain speed when playing accents in a *fortissimo* dynamic. It makes it even harder when you have to play double or triple strings.

For the chords in 3 strings, Jeroen den Herder advised me to play more *sul tasto*⁵ (better close to the fingerboard and not to the bridge, because the angle and distance between strings is shorter there). But for the rest of the chords it is better to play closer to the bridge, because the sound is more full and you can get more dynamic (*ff*).

In order to play a fast tempo with the bow (with the accents), he advised me to use little bow, sharp, rigid hand, a vertical movement and in the frog⁶. But he also warned me that for this you need to have a really strong right hand, and to take care when practising.

Almudena González Brito, advised me also to play all the time close to the strings, to feel as if the hand and bow would be like a magnet. And for the chords in 3 strings, could help to focus only on the two low strings, because the higher one will resonate naturally.

About notation I also realized that there were in the movement four different articulations for the notes: nothing, a dot (·) and two different accents (^ and >).

Intervention

About the notation I decided to play the notes with no sign in *detaché*, the notes with the dot very short, the notes with the vertical accent (^) accentuated vertically and the notes with the horizontal accent (>) with a longer accent.

In order to difference the quintuplets to the sextuplets, I tried to practice with metronome, but at the end, the most important was to identify the sextuplets (because there are only 6 of them) and play them faster than the rest (which are always quintuplets).

It is necessary to train a good coordination to combine all the parameters: different accents, no accents, rests, left-hand pizzicatos, and difference between quintuplets and sextuplets. To obtain it I played it slower. Afterwards I organized the study in very small groups, quarter note by quarter note. I tried to play, coordinate and memorize group by group but in a fast tempo. Then I did the same, but

5 On the cello, means to play with the bow placed close to the fingerboard.

6 Part of the bow referred to the side where the hand holds it.

with bigger groups (for example every two quarter notes), and again the same process with bigger phrases, and again until I could play the whole study through. It also helped to paint with different colours the articulations, and pizzicatos.

Study IV

Data collection

The last movement was also quite clear: *“High position, as slowly as possible. The duration of each note is determined by the distance between the notes”*. For the last thing, about the duration of each note, what I did was to measure the distance between all of them and to write numbers in between related to the approximated distance in order to follow mentally as if they would be seconds.

About vibrato, which more a stylistic parameter, I asked my experts and I listened to many recordings. I was not sure if it was appropriated to use vibrato in contemporary music. I compared three recordings (see appendix page 42, first table), and I saw that all of them use vibrato. So I understood that it was also common (but not necessary to use vibrato).

There was also a demand of *sostenuto* and slowness for the bow, especially in high notes.

Intervention

First I practised just the notes and the position changes, because they are very big and high. Then I did it following the numbers (seconds) to get the tempo with a good length between every note. Once I automatized it, I didn't need to count anymore by seconds. I also thought that it was not necessary to be so strict with that, because the composer just drew the separation without writing any time reference.

About the vibrato, first I practised without vibrato, to play like something colder. But then I practised with vibrato and I realized that it was much easier to get a nice tone for a slow bow and it was helpful for the shifting, because the hand is more relaxed and that is better for big position changes.

General data collection about stylistic parameters

At the end of this process I still needed to take some decisions about tempo, and style, because it was the first contemporary piece I was playing in my career.

Then I also did a comparison between three recordings by three different performers: Siegfried Palm – to whom was dedicated the piece, Michael Bach – a German cellist, and Ellen Fallowfield – a young cellist also researching in Switzerland about new cello techniques (see recordings in the reference list, page 52).

First of all, it was interesting to compare some of my decisions with those interpretations. Actually I was doing sometimes very different things. I also found very different decisions between this three interpretations, mainly about the timing and tempo decisions.

Intervention of general data

It helped me to understand that somehow, the performer is freer than in other pieces. Because here you really have to take decisions that will make the piece completely different from any other performance. So I decided to be as much as possible close to the indications by the composer, but also adding my own musical understanding to it, because at the end, it is not just about practising new skills, but about making art.

Final recording

It is possible to listen the final recording of this piece in the attached DVD, tracks 4 to 7).

2nd INTERVENTION CYCLE – *Ten Preludes for violoncello solo* (Sofia Gubaidulina, 1974)

From this piece I chose only 3 movements, the ones with the techniques I wanted to work on (because for the rest I didn't need to research that much). This was my selection:

5. *sul ponticello* – *ordinario* – *sul tasto*

6. *flagioletti*⁷

10. *senza arco* – *senza pizzicato*

Zero point

I prepared this 3 movements by myself, without any help or research in order to make the first recording (see attached DVD, tracks 8 to 10). But I didn't understand some things, and that is way my zero point was also a list of questions:

- What should I do with the bow in order to change gradually from *sul ponticello* to *sul tasto*?
- How can I end *tremolos*⁸ with quality?
- What kind of *sul ponticello* may I use?
- How can I improve my *sul tasto*?
- What helps to play *flagioletti*?
- How can I measure the seconds when playing?
- What means the symbols in bar 6 page 8? (see image in page 11)
- How to strike the string with the left hand fingers in order to produce a loud/resonant sound?
- Should I strike the string with only one finger or more?
- Should I stay in the string or leave it with left hand fingers?
- How to play the tremolo in bar 22 page 15, by following the written indication ***)? (See image in page 13)

5th Prelude: *Sul Ponticello – Ordinario – Sul tasto*

Data collection

The first think I did was to ask some questions about the *tremolos*. I asked to my expert Job ter Haar how to improve my *crescendos* and *diminuendos* in tremolos. He recommended me to experiment by playing shorter or longer tremolo, slower or faster and different places for the bow.

About how to end the tremolos with quality, I found it really hard, especially in *forte*. In *piano* it was easier because you can do it fading out (with less pressure and doing every time the bow shorter, until the sound disappears). In *forte*, I experimented by finishing down bow⁹, up bow¹⁰ or random. I visited another expert, Hans Woudenberg, who had worked on this piece together with Sofia Gubaidulina). He advised me to also think what was going on after that tremolo (if it was an ending,

7 Harmonics

8 Succession of a lot of fast notes with the same length; it can be measured or not.

9 Direction of the bow when it moves from the frog to the tip.

10 Direction of the bow when it moves from the tip to the frog.

or the middle of a phrase). That also helps to decide what kind of tremolo you want to play at the end of every note.

- Case study about *sul tasto*

I read some information about *sul tasto*, because it means to play close to the fingerboard or over the fingerboard (at the contrary than *sul ponticello*). It seems, easy, but once you start investigating about it, you can learn that there are many possibilities.

[...] There are a variety of sounds that are available with *sul tasto*, depending on the precise point at which the bow makes contact with the string and how it is drawn across the string. [...] The curve of the bridge and the placement of the nut effectively cut out the even-numbered harmonics when the bow is placed over the fingerboard. This spectrum is characteristic of an electronic square wave, which is often defined as an “extremely hollow sound”. [...] The performer can even get an acceptable *sul ponticello* sound by bowing right next to the left hand finger that is pressing the string. [...] The bow can be placed behind the fingers, where the string do not resonate. [...] The closer one bows to the nut, the easier it is to produce a sound since the nut raises the string above the fingerboard. [...]

(Strange, 2001, p.6)

Again, at the website of Russell Rolén (Rollen, 2014), I could hear the kind of colour that *sul tasto* produces in different places of the fingerboard.

By experimenting, I discovered that when you play *sul tasto* you get kind of a softer colour, and that is because you lose many harmonics. The contrary than when you play *sul ponticello*, where the sound is richer in harmonics.

- Case study about gradual change from *sul tasto* to *sul ponticello* and vice versa

I had to experiment with that, because sometimes you have a very short time to change from one tone-colour to another one. The most difficult was the progression from *sul ponticello* to *sul tasto*. By practising, I discovered that by changing the angle of the bow, it is possible to help your bow moving up and down because it has a natural tendency to ascend or descend depending on it. I realized that if you want to move down (to the bridge), it is better to point with the tip of your bow further for a down bow, and you have to point close to your body with the tip for up bow. The other way round, when you want to move to the fingerboard with down bow you point with the tip close to you, and for up bow you point further.

Then, by adding the tremolo, the rule was the same than if it would be always down bow. So, when going to the bridge pointing further and when going to the fingerboard pointing close.

Hans Woudenberg told me to not play always equally *sul ponticello*, to experiment with all the different colours that you can get from playing *sul ponticello* varying the pressure, place on the string (all the places between *ordinario* and the bridge), speed of the bow... Another advice was to never

force the string, always feel what it needs or demands.

Intervention

I experimented with the tremolo, and I found that for a louder dynamic it was better to play with more pressure, more bow, fast movement and at the middle of the bow. For softer dynamic, was better with less pressure, shorter bow, slow movement and at the tip of the bow. Then I discovered that for doing crescendo I had to speed up the tremolo, going to the middle of the bow, with more pressure and more bow. For diminuendos the other way round, slowing down the tremolo, going to the tip, realising pressure and less bow.

About finishing the tremolos with quality in the *fortes*, I decided to always finish with an up bow and really playing the last “note” of it, because when you play up bow it is natural to play *crescendo*; otherwise, playing it down bow it sounds more like *diminuendo* (which is not the idea, because the *fortes* are always preceded by a *crescendo*. So with up bow it was more convincing.

The advice of Hans Woudenberg helped me to play really convinced the ending of my tremolos, because it was related with the musicality, not only with the technique, and sometimes imagination helps a lot to acquire a specific movement or technique.

What I decided to show in the different tone-colours was not an extreme difference between the possibilities of the instrument, but just different colours by playing a sound richer (*sul ponticello*) or poorer (*sul tasto*) in harmonics and overtones.

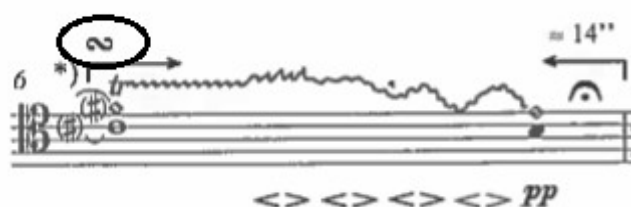
I improved very much the progressions from *sul tasto* to *sul ponticello* and vice-versa, and also how to do it fast. With the combination of the angle position of the bow (pointing with the tip closer to you or further) and your own body movement (with the right arm), it was much easier and I could even play it relaxed.

About the *sul ponticello*, I was experimenting different possibilities with it, and I decided that it was much more interesting to play and to listen different colours of *sul ponticello*. Sometimes I used it more in a natural sound (closer to *ordinario*) and other times I used it in a more distort sound (closer to the bridge, or almost in the bridge, losing the fundamental pitch), getting all kind of random overtones. Even in one single note, mainly when it is indicated to change gradually from one tone colour to another, for instance I change from less *sul ponticello* to more *sul ponticello*, really looking for the transformation of the sound.

6th Prelude: *Flagioletti*

Data collection

In the score there is an indication which says “non-metrical passages”, and it is together with a symbol that I didn’t understand in this music:



I asked Hans Woudenberg and he thinks that it could also mean improvising. He performed it like that for Sofia Gubaidulina, and she didn’t dislike it. Actually this symbol appears again at bar 22 of

the 10th prelude, and there it's written "the performer may improvise".

Another doubt that I had was about the trills in harmonic positions. I deduced that the trills were meant to play keeping always the artificial harmonic position (pressing with the thumb and touching with the third finger), and moving the hand along the string imitating the written shape.

I chose two recordings from Vladimir Tonkha (a Russian cellist who knows very well Sofia Gubaidulina). I thought that it was a good source to check how he plays it. The two recordings are very similar but from two different years (2001 and 2008).

He plays the trills like I deduced but with a slower movements.

Nevertheless, Hans Woudenberg told me that it was possible to play in other way. Doing the same, but also producing a trill with the third finger (alternating touching and not touching the string). He played it in Berlin for her and she didn't say anything about the trills, because she likes listening different interpretations from different performers. I also asked him what means the symbol in bar 6 (page 8), and he told me that it means non-metrical passage (as it is written in the indications in the score) but also could mean improvising.

- Case study about stopped harmonics¹¹

I had always played stopped harmonics of 4th (touching with the 3rd finger a 4th interval from the thumb), having as a result two octaves higher than the note you press with the thumb. At this piece I saw (bar 21 and 43, see attached score) that it was also possible to play artificial harmonics of 5th, having as a result 1 higher octave than the note you would play with the third finger. Strange, (2001, p.120) says that it is possible to play stopped harmonics opening a 5th, a 4th, a 3rd major and 3rd minor. It is exactly the same as the distances with an open string, but the problem here is that you need two fingers of the left hand at the same time, so it depends on how much a singular person can stretch the hand. It also depends on the region of the fingerboard, because in lower register the distances are bigger than in the high register and you need to open more the hand. I did this experiment to know the results of all these possibilities, and these are the resultant sounds:

- Opening a 5th (2nd overtone) = a fifth (one higher octave) from the note in the thumb finger
- Opening a 4th (3rd overtone) = two higher octaves than the note in the thumb
- Opening a 3rd major (4th overtone) = a major third (two higher octaves) from the note in the thumb
- Opening a 3rd minor (5th overtone) = a fifth (two higher octaves) from the note in the thumb

The problem I had with this particular piece is that I had to play stopped harmonics opening a 5th in a low register, which was completely impossible to reach with my hand. Job ter Haar proposed me to find a solution with my own body, for example playing with the chin instead than with the thumb. Hans Woudenberg told me to stretch as much as I could but to not play the real pitch, but just noise.

Intervention

About the trills, I started doing them as Vladimir Tonkha, but I liked the idea that Hans Woudenberg proposed to me, because the result is a mixture of irregular sounds and noises. I didn't do it very improvised (as he also suggested me), I tried to follow the indication in the score with the seconds and the shape of the drawing.

For the stopped harmonics opening a fifth, the decision I took was to play like noise, really soft. For example in bar 21, I started with noise and when moving my hand through the trill, I looked for the real pitch when going to a higher register (when the distance it's shorter and I can approach it). At

¹¹ Also called "artificial harmonic", produced stopping the string with one depressed finger (making it shorter) and touching with another one.

bar 43 I decided to start that glissando also with noise, and from 44 to play with the real pitch (because actually it says that you have to change from opening a 5th to opening a 4th).

10th Prelude: Senza arco – Senza pizzicato

Data collection

- Case study about ringing notes by striking the fingerboard with left hand fingers

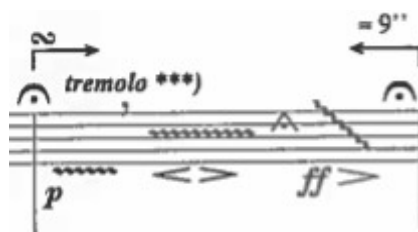
This prelude is meant to play without arco and pizzicato (as the title says). As it is indicated in the score “the sound is produced by striking the string above the fingerboard with a finger”. The main problem for this is to ring them. It is very easy to just hit and get a percussive sound without pitch. In the lower register it was easier (because the string is thicker and it has more resonance). But in the high register (when the string is thinner), faster rhythms and you need to play *piano* it is more difficult. I tried to strike very strongly every note, because it is easier to hear the pitch. But I was not doing dynamics. I also tried to do it with only one finger, but it also didn't help. Then I tried staying at the string after hitting it, or leaving immediately after. I had the feeling that it was clearer when you leave the string.

Hans Woudenberg advised me to not only focus on note by note, but on phrasing. If I hit every note, and leave the string after every note, the feeling is very vertical; it is not possible to listen a connexion between notes, so it is not possible to hear a horizontal line or phrase. That was also important because the phrasing is very well indicated with dynamics, *crescendos* and *diminuendos*. He proposed me to not leave the string after every note, to really stay there in order to make a horizontal line and showing the interesting chromatic intervals. He suggested me to use a trick: when removing fingers from the fingerboard, instead of removing them in a vertical way, it is better to do it horizontally (like doing a very small pizzicato).

An interesting thing that I discovered by listening the recordings of Vladimir Tonkha is that from bar 35 he uses pizzicatos. I didn't understand why he was doing that, because it says without pizzicato. But when I was talking with Hans Woudenberg we realized that we had different editions and the title was different. His edition was the first one, edited by the company Hans Sikorski and the title of the 10th prelude was “*senza arco*” (so it's allowed to use pizzicato). Mine was edited by Vladimir Tonkha and the title of the 10th prelude was “*senza arco, senza pizzicato*” (he specifies that you must not use pizzicato). But the funny thing is that Vladimir Tonkha makes use of pizzicato at his recordings.

- Case study about percussive tremolos

It was difficult for me to understand and reproduce in the correct way the tremolo which appears at this prelude.



***) Das Tremolo wird mit dem Daumen der rechten Hand auf der C-Saite gespielt. Dabei bleibt der Daumen der linken Hand mit dem Nagel auf der Saite. Der so erzeugte Ton soll an das Tremolo der kleinen Trommel erinnern.
Während der Glissando-Töne wird die Saite auf die übliche Weise heruntergedrückt.
The tremolo is played on the C string with the thumb of the right hand. At the same time the left-hand thumbnail remains on the string.
The sound thus produced is supposed to imitate a side drum roll. During glissando notes the string is depressed in the normal way.

I asked help to colleagues, even percussion players, so at the end I understood very clearly how to do it. The movement of the right hand should be very fast and periodic, the thumb has to hit the C string periodically as a drum roll. By trying different things and asking some experts and colleagues, I arrived to the conclusion that it was better to use also another finger besides from the thumb, because it is less tiring and more effective (instead of doing everything with the thumb, I alternate the thumb and the 3rd finger). I played it for some research colleagues and they told me that I was producing an extra noise hitting the fingerboard and not only the string. They also told me that the very last tremolo of the movement instead of 20 seconds it was only around 10 seconds.

It is interesting to say that in the recordings that I heard from Vladimir Tonkha, at the tremolo improvising spots he makes a complete improvisation about it. It is completely modified (specially the last one): longer than it is written, he hits the fingerboard with the right hand, plays glissandos with normal pizzicatos, double strings, more notes etc.

Intervention

The way I decided to strike the string was staying at the string after every note, in order to get a horizontal feeling. I didn't give so much importance anymore to the clearness of every note, but to the line. Indeed it was very helpful to use a small pizzicato when removing finger from the string. But for playing in *forte* I decided that sometimes was interesting to hit every note as I was doing at the beginning.

After discovering that the title was different depending on the editions and that even when the editor specified "senza pizzicato", but he was using it in his recordings, then I decided that I would also use pizzicato sometimes (from bar 35, because it is in a higher register and with faster rhythm).

About the tremolo, since I tried for the first time to play it with thumb and 3rd finger, I have done it always like that (not only with the thumb, because that is very tiring and slow). I tried to do it a bit softer (with a smaller movement) to avoid the extra noise if possible. I also tried to play longer the last tremolo, and for that I decided to improvise a bit more and to do the left hand glissandi very slow. As it says that the performer may improvise in those passages, I decided to be a bit more creative instead of only following the shapes and dynamics of the tremolos. For that I just had to feel a bit freer with the crescendos and decrescendos, and if sometimes I play less seconds that was better than not feeling it. For example, at the very last tremolo sometimes I end up very tired and I cannot play that effect for 20 seconds, so I prefer to finish earlier instead of finishing with a bad drum roll effect. In fact, the duration of the seconds in this movement are not very strict because it is indicated with this symbol \approx instead of this $=$. It is even written sometimes *circa* (which means approximately).

Data Collection about stylistic parameters and composer

Hans Woudenberg told me that Sofia Gubaidulina likes working her pieces together with performers, and that she is really opened to any interesting idea that a performer can approach to her like new possibilities.

She is a good improviser with weird instruments, she likes all kind of interesting and weird sounds. She also loves a very expressive vibrato. This is why Hans proposed me to use it always when I think it is musically appropriated (for example sometimes in the 5th prelude of this piece). It is important to use the vibrato as another tool to play with the sound, so it doesn't mean to always use vibrato. But in Gubaidulina's music the performer is sometimes free to sing lyrically (with sound

quality and vibrato). For example, at the *glissandos* of this 5th prelude it is also interesting to really sing them. She really looks for an expression and lyricism; for example it is also very important at this prelude to always sing, even singing the rests and never lose the horizontal feeling. He encouraged me to use always my imagination, and even when you don't know what to do, it is the best moment to do some relations so you can have a guide in your head. For example, he told me that if he would have to relate this three preludes with something else, he would relate the number 5 with sculpture (because what she does with the intervals is to sculpt a line, like the shapes you can find in an sculpture); number 6 with dance and painting (because of the jumping and funny writing at the fast tempo and the special colours you can find in the free parts of the trill); and with number 10 with theatre (because you can really act with it, imagining the talking and the movements on a stage).

Jeroen den Herder also knows her, and he told me that she is really obsessed looking for a perfect balance between the form of a piece and the freedom of the performer. This explains why she is very generous giving "small guided improvisations" inside her music.

Besides from that, I also listened to some pieces of her like: *The Canticle of the Sun*, *The Seven Last Words*, *String Quartets*, *Trio Silenzio* and *Sonata for violin and cello*.

I listened recordings of the piece, especially the ones by Vladimir Tonkha. I thought they were important because Sofia Gubaidulina always works with him and they know very well each other. In conclusion I could see that he takes very seriously the score, but sometimes, when there is chance to improvise, he really does it. Actually on his interpretation of the 10th Prelude he makes a complete improvisation from it, it is longer and he uses many effects like hitting the fingerboard, glissandos, pizzicatos or even adding more notes.

I also read basic information about her and watched a documentary about her called *Portrait of Sofia Gubaidulina* (BBC Documentary, 1990).

This documentary helped to catch her essence. There is always a real deepness on her, even when she is not talking; she has a very strong personality. She has real passion about music and about composing, even when she was a child she needed to do it, because she explains that she always had on his imagination all kind of melodies and weird sounds. She created a safe, peaceful and religious space on her mind (because she didn't have an easy childhood).

When she speaks about her music, she is always making relations with the nature (for example with the form of a tree and its movements) and with religion.

Intervention

After having this talks, watching this documentary, listening more of her music and listening recordings of the piece, I took the freedom of really making a personal interpretation looking for really special sounds and doing it always with musicality (for example using also a full nice sound with vibrato).

There is always deepness at her music, some kind of mysticism. I decided to perform it almost in a sacred way. I also found a close relation within her music and the behaving of nature. For example, at the fifth prelude, I had the feeling of a pendulum movement, so I found that image in the nature when a wave comes and goes back at the sand of the seashore. That is the meaning I found for the rests of this prelude.

And at the end, it is very important to create a determinate atmosphere, to create a fictitious space where you can bring the audience with you. It is not only about playing notes, but creating spaces and atmosphere, always in a deep way.

Final recording

It is possible to listen to the final recording of these three movements at the attached DVD, tracks 11 to 13.

3rd INTERVENTION CYCLE – Premieres of *A graveyard of broken statues* (Wingel Pérez Mendoza) and *Memòria Infinita* (José del Valle)

In this intervention cycle, I focused in two pieces at the same time, because I had to premiere them and I had only one month and a half of preparation. The structure of this intervention cycle will be a bit different, because I will focus on the preparation process of premiering a piece. I noticed that with the previous pieces I was spending a lot of time to prepare them and that I didn't do it in a efficient way, which made me feel tired about the whole process. That is why I decided to observe in this intervention cycle the preparation process, because I had to prepare in a professional way two new pieces (premieres) in only one month and a half. I didn't want to make a structure, I just wanted to observe in order to make a possible schedule for the future. In this case, the contact with the composer would also have a very important role. At this point of my research was when I started to think about changing the direction of it, because I realized that it was necessary to work on the new skills and techniques, but as part of a whole process of preparation. So I tried to improvise the structure of this intervention cycle, because my time was limited and it would be afterwards an observation-reflection work. The most important was the work with the composers, asking them questions about notation and stylistic parameters, and their feedback.

MEMÒRIA INFINITA – PIECE IN 3 MOVEMENTS FOR CELLO SOLO (JOSÉ DEL VALLE, 2007)

This piece was already composed when I met the composer. I knew him from a few years ago and in September of 2013 we met, so I told him about my research topic. That is why he offered me to premiere a piece he already had composed, but nobody had performed before. I was really happy about it, and he sent me the score in December of 2013. The premiere took place in a concert at Codarts on January 28th.

My starting point for this piece was reading the score. In one way it was not very hard because the writing was quite conventional (in spite of a few spots) and it didn't have so many new effects or techniques. I could read easily the notes, but the rhythm was the aspect that took me most of the time of the preparation.

I had to do a very detailed work to have clear the rhythm. I had to spend a lot of time to understand every single bar of the piece. It was difficult because it has a lot of different and tricky combinations of small figures (eight-notes, sixteenth-notes, thirty-second-notes...). A good example of this is in the second movement, bar number 37 (see appendix). The most difficult was the second movement, because the tempo is slower and there are smaller figures (because there is time for more notes). It is completely necessary to do a previous work of *solfège*; so I took the score and a pencil. For the most difficult bars, I did the following: first I draw a line to the belonging spots of every beat (every quarter-note), and secondly (if necessary, mainly in the second movement) I draw a smaller line at the middle of every beat (every eight-note).

Once I did this work, when every rhythmical combination was clear for me at the score, I started practising it extremely slow, subdividing every quarter note (with a metronome). Little by little, when I was able to do it in an easy way, I accelerated the speed of the metronome. I repeated the same process until I was able to play at the real tempo. The most difficult spots, I decided to memorize them, because otherwise I could not have time to think during the performance.

After this work I realized that another difficulty was actually the coordination between the rhythm and other parameters as notes, fingerings, bowings, effects, articulation, dynamics, slurs... So at the end, I realized that I had also memorized (unconsciously) all the movements synchronized within the rhythm.

At this moment I felt that I was able to play the first movement through, so I recorded it (see attached DVD, track 14).

At this point of preparation I still needed to talk with the composer to take the final decisions related with his original idea of the piece. I made a list of questions for every movement that was growing during my practice time, and I had the chance to meet with him at the beginning of January 2014. In this meeting I interviewed him with some questions about notation and stylistic parameters. Then I played for him the piece and he gave me a feedback. Some of the issues that we discussed lead to make some little modifications from the composer.

For all the bar references, see attached score.

Questions for the composer with answers

1st movement:

- Is it possible to slow down the general indication for the tempo?
Try to be as close as possible to the original tempo, but always in your possibilities. If you can convince me with a slower tempo, I would agree.
- At the 1st movement, should I cut the resonance of the first note in pizzicato or let it ring?
Let it ring during the rests until the second bar.
- When you indicate *percutere sul cassa*¹², in which part of the instrument do you want it?
Choose the place that you like more.
- Do you want me to be very strict with the tempo and rhythm or can I take some freedom in the rests or between phrases?
It is better to keep strictly the tempo, because that makes connection between the notes. But if you want to take some time, breathings, stretching, never do it in the middle of a phrase, but before and after. And in case you take some time, you can compensate by rushing a little bit after (if it helps to give direction).
- What kind of articulation do you want in general, more *legato-detaché* or more *staccato*?
*As long as the rhythm is clear, the one you feel better. I prefer shorter articulation in general, but in some phrases more legato. For example when it is written *cantabile* or *espressivo* it is legato.*
- 1st movement bar 85 (see image below), would be possible to modify the grace notes or remove any of them so it is more comfortable and effective?



It is true that it sounds a bit weak and it is written fortissimo. I prefer then that you avoid the left-hand extension by removing the first note from the grace notes (see annotated score with the correction).

- Can I start the *accelerando* written in 103 two bars later?
*Yes, indeed it makes more sense, because there is not enough time to play bars 103 and 104 faster. So start the *accelerando* in bar 105 instead of 103.*
- The indication of a new tempo in bar 108, is correct or do you want this new tempo in the bar before when you also write a *tempo*? Can I make a little separation (coma) between bar 107 and

¹² From Italian, means “tap on the box”. Applied to the cello, it means to tap on the body of the instrument (it can be at the front, at the back and at the sides).

108?

The new tempo starts where it is written (bar 108). But don't make a separation between the note before and this bar, because my intention was to connect them even if it was not in the same tempo.

2nd movement:

- What is your intention with the passages measured by seconds in which you stop writing the in a conventional way?

I use it for some effects that don't need to be very strict rhythmically, and sometimes with not defined pitch. I think that it is not difficult to follow the seconds, because they just represent the needed time to execute a determinate effect.

- What means the symbol in bar 2 (see image below)?



It is a kind of pizzicato called "Bartok-pizzicato". You should play it pulling the string with two fingers, and then let it go so it strikes in the fingerboard with a percussive noise.

- What means the indication *percutere sul cordi* and how do you want it?

You should hit the strings into the fingerboard by striking with the fingers of the left hand. I imagine it as a percussive but resonant sound.

- What means the indication *dietro ponti*?

It means behind the bridge, so between the bridge and the tailpiece.

- What means the symbol in the second note of bar 27?

It represents a random note (in this case, a very high note, because it is written in the high register).

- What means the line written after the rests in bar 18?

It is a reference for the performer, it represents an approximated length of the rest. It means exactly the same also after a note.

- In bar 47, the pizzicato is written between two notes, does it refer only to the last note or to the last two notes?

It is a mistake, it is for the two last notes.

- What kind of *attacca* do you want at the end of this movement, strict in tempo?

I intended to have a connection between the last note of the 2nd movement and the beginning of the 3rd, but not measured. Try to maintain the attention of the audience.

3rd movement:

- Is it possible to slow down the general indication for the tempo?

The same than with the first movement; try to be as close as possible, because I don't want the piece to be much longer than I thought. But if it is only a little bit and you can convince me, it is fine.

- Does the notation of the three first notes mean also *percutere sul cassa*? Because in the rest of the movements it is indicated, but not here)?

Yes, that is the meaning.

Feedback from the composer

In general, he felt that my tempo choice was not very regular. He explained me that it was important for him to maintain the tempo, to not slow down or rush. Perhaps the introduction in *moderato* (from beginning to bar 17 could be more *recitativo*, but not the rest.

He felt that the effects could be more obvious, because the piece has a very clear writing and language, especially at the second movement (see video in the attached DVD, track 15; where he explains that in Spanish).

There is a video (see attached DVD, track 16; original language is Spanish), where he explained me the structure of the piece and the way he composed it. It was based on the *ABDEC System* created by Javier Darias (who is the leader of *ECCA*, a composers collective emerged from the Composition and Art School of Alcoi, Spain). This system is based on the creation of a few initial motives (A, B, C, D...). Lately you can create transformations of them or more motives (E, F, G...) so you combine them so the piece grows in a pyramidal way. This method allows the composer to relate the material on one piece.

He told me that the structure I was showing was too square, and that maybe I could be more musical being aware of the phrases. That is why he helped me to group the notes and rest into phrases, in order to feel more the speech of the music. That allowed me to find the correct direction of some notes and rests, to not slow down in the middle of a phrase and to give some space between different phrases (by breathing or taking some time). I wrote at my score commas between the phrases (see attached score).

Intervention

After our meeting, I worked on the last step in order to bring the piece in a higher level, in a professional and artistic level. So I paid attention to the remarks he gave me in his feedback.

I wanted to show a good structure. For that I practised with the metronome in order to get a more stable tempo and also making sure that I was playing long phrases instead of (note by note, or bar by bar). When the "skeleton" of the piece was clear I stopped practising with the metronome, in order to get a good speech of the music in balance with the tempo and the phrasing. For example I decided to take some breaths sometimes in between the phrases, but never in the middle of them. I also made sure to maintain the same idea within every phrase (keeping during a singular phrase either articulated or more legato way of playing).

For the effects I had to work a little bit harder, to get them with more obvious results (as the composer suggested me).

One of the effects was "*percutere sul cassa*", and it appears several times at the second and third movement. As the composer gave me the freedom to hit the cello wherever I wanted, I decided to do in different ways. At the second movement in bar 2, I did it with my left-hand thumb at the front of the cello's body (see appendix); in bar 4 also with the thumb at the side; in bar 12 with the thumb at the front; and in bar 33 the same. At the third movement bar 1 I did it with the four other fingers (instead of the thumb) at the front of the cello. The result was different in between these options. When playing with the thumb at the side it was very clear, soft and with little harmonics resonance; with the thumb at the front was very clear, soft but with more resonance, and with the four finger at the front was quite loud and very resonant. I took the decisions depending on the dynamics (for less dynamic less resonance and for more dynamic more resonance).

A curiosity was that I needed to change in tremolo with the bow from *sul tasto* to *sul ponticello* and vice versa (at the beginning of the second movement). I had done that work already in my second intervention cycle (at the fifth prelude), so I took exactly the same steps (see page 10).

Final recording

As a result, I have a second recording of this piece, which was the live performance of the premiere at the concert that I gave in Codarts on January 28th (see attached DVD, tracks 17 and 18).

A GRAVEYARD OF BROKEN STATUES – PIECE FOR CELLO SOLO (WINGEL PÉREZ MENDOZA, 2014)

This piece was written for me by Wingel Pérez Mendoza, another master student in composition at Codarts. I worked already with the composer experimenting some new effects and techniques, so I received the piece in December of 2013. I performed the world premiere of this piece on January 24th at “*Gaudeamus Jonge Componistenbal*” (Utrecht). I also presented it in a concert at Codarts on January 28th.

My starting point with this piece was the reading of the score. It was difficult to understand the notation and to find how to play every note of the piece. In fact, the rhythmical aspect was one of the biggest challenges at the beginning of the preparation of this piece.

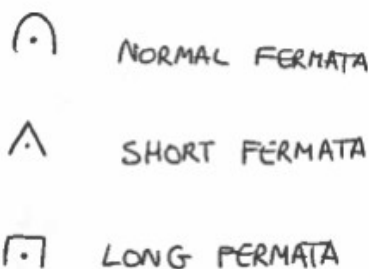
The first thing I did was to read the instructions page, which was totally clear for me. But there were another aspects that I didn't understand, especially about notation. In this case, I needed to meet with the composer quite early, because I was not able to reproduce everything what was written in the score. I made a list of questions to clarify all my doubts (written in the section below). I had the first meeting with the composer in December 2013.

For all the bar references, see attached score.

Questions for the composer with answers about notation

- What means the symbol between the second and third bar (see second of fermata of the following drawing)?

It is a fermata, but a short one. There are different kinds of fermata:



- What mean the numbers indications above some groups of small notes (eight-notes, sixteenth-notes or thirty-second-notes)?

When you see two numbers like this 5:4 (see image below), it means that you have to play 5 notes in the space you would play 4 of those. For example, in bar 3 this means that you have to play 5 thirty-second-notes in the space of 4 thirty-second-notes. In other words, you have to play a thirty-second-notes quintuplet in the space of 4 thirty-second-notes.

If you see a number followed by a line (see image below), you will realize that it is always after a group with the indication I just mentioned before (5:4). In this case, that means that you play those notes as you did in the group before. For example in bar 9 you would play this 3 thirty-second-notes at the same speed that the group before.



- What means when you draw an arrow?

It means that you should change gradually from one tone-colour to another one. If you realize, always after an arrow it is indicated a new tone-colour. For example at bar 2 (see attached score) it would mean that you change gradually with the bow from ordinario to sul ponticello.

- What means when you write two notes at the same time and the one below is between brackets (see following image)?



The upper note means the place where you have to place the finger (rhombus shape), and the under note indicates in which string (C, G, D or A). When you see this, the result is always an open harmonic. For example, the first note in bar 22 you would place the finger at the place of F2 in C string.

Sometimes you have to play double stops with the harmonics (see image below), so read very carefully the shape of the figure. If it is a rhombus it is the note you have to play, if it is not a rhombus and it is between brackets it just indicates the string.



Once when the reading of the score was totally clear for me, I also asked him about more stylistic parameters. And I also suggested him to find another solutions for some effects or particular spots on the piece, because I thought that it was very hard to play and sometimes the result was not as good as you can imagine theoretically. He was very opened to discuss about everything and even to modify some passages, so at the end it was a collaboration work between composer and performer. There is a summary of some aspects in the following lines.

Questions for the composer with answers about stylistic parameters

- Do you like that I use vibrato in the long notes from 58 to 61 (see attached score)?

That was not my original idea, I prefer without vibrato. But what you do also makes sense because in those four bars my idea was to do a progressive crescendo and somehow it helps.

- Do you really want a diminuendo at the end of bar 104 (see attached score)? Naturally the effect is a crescendo. I can try to avoid it, but it sounds very unnatural.

I think you are right, it sounds more natural and convincing with crescendo.

- Do you want every harmonic note¹³ to be audible and clear from bar 23 to 27 (see attached score)? And do you want me to play with slurs or separating the note? Do you mind if I slow down the tempo here?

Yes, my intention was clarity and transparency in this passage. Of course it needs slurs because there are some long notes to be maintained when changing notes in the other voice. About the tempo, it would not make so much sense to slow down in this passage, because there is already

¹³ Note produced touching slightly with one finger a string.

a slow section in the middle of the piece.

- Why do you want the all the eight and quarter-notes to be played up bow from bar 93 (see attached score)?
Because I want that you just touch the string and produce a tiny sound at the tip of the bow.
- From bar 93 (see attached score) do you want the two voices to have the same sonority or the one with bow louder than the pizzicato one?
No, I want both of them to be audible. Both are equally important.
- Why do you want all the notes in bar 100 (see attached score) to be played down bow?
Because I want that it has a contrasting effect from the material before, to show that it is a new section.
- Do you like that I use vibrato in the chords of four strings, especially in the last note of the piece?
I prefer that you don't use, but if it helps you have to decide if you want to use it.

After this meeting I was practising with a more clear idea. But still after a intensive work on the piece, I needed to exchange some thoughts and suggestions with the composer to make the piece more natural. That is why we had a second meeting at the beginning of January 2014. The first thing I did was to perform the piece for him, which means that I made the first recording of the piece (see attached DVD, track 19). After that, we started to talk about the piece, and that lead to make some experiments and modifications together.

Feedback and modifications together with the composer

About the passage from 23 to 26 (see attached score), when playing double stops I wrote the slurs only in the places where the two voices can change at the same time, never when maintaining one of the voices. I practised a lot this passage, because it had a lot of quick fingering changes. I couldn't get a good result, because some notes didn't sound. It is because sometimes when playing harmonics the response is slower, and the resultant sound takes more time than a stopped note¹⁴. It was so fast that there was not enough time to produce every harmonic note. And besides from that, when playing harmonics you have to play also with the pressure, speed and place of your bow. Some harmonics need more pressure and some other less (even for the pressure of the left hand). It was physically almost impossible to play this passage at the indicated tempo. Sometimes even the fingerings where very tricky, and for the harmonics you need to place the fingers in the perfect spot. So I proposed the composer to remove some notes, the most difficult notes, or to make shorter some of the maintained notes. He totally understood my explanation, and saw that the result was not clear. We were trying the new possibilities by removing some notes or making some shorter until the result was transparent enough. It is possible to see a video extract of this conversation in Spanish (see attached DVD, track 20) and the results with the notes that we removed in the attached score.

I also wanted to find a solution from bar 93 when playing all the notes up bow (see example in the image below). I was not very convinced because it was very uncomfortable and the result was not soft enough sometimes (because it was difficult to control that movement with the bow). Besides from that I was also not convinced about the effect of this two voices (see following example, from bar 95):

¹⁴ Note produced depressing with a finger the string; in a normal way.



The way of playing it was one voice with left-hand pizzicato in an open string and the other voice with left-hand stopped note. One of the difficulties was the connection between this chords, because if you have to press every time with a different finger, then you have to play every time the left-hand pizzicato with a different finger. You can try to look for the best combinations giving a fingering to the stopped note and another to the pizzicato. But the problem was that not every finger from the left-hand has the same result when playing pizzicato. Sometimes it sounds too weak (especially with the third and fourth finger); and this combination created a lot of tension in the hand. Moreover, I thought that the result was not effective. What you could hear was a note played with bow and an extremely soft sound produced with the pizzicato. But the composer wanted the two voices at the same level. So I proposed to him to play both voices with pizzicato, and forgetting about the bow. I played it for him and he agreed on it, because the result was more in balance as he actually pretended. That is why I decided to play both in pizzicato, because I suggested it to the composer and he agreed on it.

Another question that I had for him was about section B (see attached score). I asked him if he preferred that section very clear and in a slower tempo, or in the original tempo but more unclear. He said that his intention was to create tension, so it was not very necessary to achieve clarity at this spot (in the original tempo). See attached DVD, track 21 for the extract of this talk (in Spanish).

From his feedback, he proposed me to do the slap with more resonance (see attached DVD, track 22, in Spanish).

He had a recommendation for me about the tempo. Even if there are already a lot of written rubatos, he proposed me to feel more free in that sense through the whole piece without losing the continuity of the music (in spite of section C).

And his last remark was about the dynamics. He proposed me to exaggerate a lot all the dynamics: if there is a *f*, make *ff*; if there is a *ff*, make *fff* (and the same for the *pianos*). He mentioned that Bernstein used always that remark when playing Wagner's music. See attached DVD, track 23 (in Spanish) about this conversation.

It is possible to read more of my suggestions at the appendix page 43.

Intervention

When everything was completely clear for me I had to practised on the main difficulties of the piece to bring it into a professional way. In this piece I had to work on new skills, to develop them and master them. In the following lines I explain in which aspects did I work and how to improve them.

- **Chords of 4 simultaneous strings**

This was one of the effects that we were experimenting together before the piece was written. He asked me if it was possible to play with the bow the 4 strings at the same time. I told him that it was impossible because the angle of the strings makes a curve and the bow is straight. Then he proposed me to find a way of reducing the angle of the strings into a straighter position by pressing the two strings of the middle (D and G). In fact, it was possible to obtain a straighter positions in the strings by pressing these two strings in a very high position and playing with the bow very close to

the fingerboard. So we found an interesting chord experimenting on this. If you play on the third string (G) with the first finger a G4 and on the second string (D) with the second finger a D5, you get a chord of fifths. This is the result in F-clef:



It is necessary to take in mind that you need to approach with the hair of your bow the first (A) and the fourth (C) string, and then the two strings in the middle will also sound.

There is one difficulty, which is the huge different between playing an open string and a string stopped in a very high register. The segment of the string in vibration is really different, for the open string very long and for the stopped string very short. That means that the string behaves in a very different way, and that is why the bow is also behaving differently. For the open strings, especially for the C string (which is the lowest) the bow needs more of pressure, but for the stopped strings you need less pressure in the bow because the segment is too short and you need to play closer to the bridge to have a good tone. It is almost impossible to combine at the same time the different pressures that every string needs. Sometimes, there is even a string that doesn't sound, or a broken sound from one of them. It can help to focus more on the C string because that is the one which needs more pressure, and not force the rest of the strings. So it is important that the result shows very clearly the lowest note of the chord (C2) and the highest (D5), so, if eventually we have to give preferences to the notes, the most important is to play those notes (fourth and second string) and not the A3 at the first string.

It helps if you add some vibrato in the stopped notes, because then those strings are vibrating more freely (you put in movement the rest of the string, not only the segment between the finger and the bridge). This helps a lot especially for the last note of the piece, because it must be played very loud (fffff). Even if it was not the original wish of the composer I decided to use some vibrato in the moment of the performance in case that the sound was not good, because it helped to have a sound with more quality.

- Double stops combining harmonic notes and stopped notes

This was another skill to be developed which appears for example at bar 80:



I had always played double stops in either normal stopped notes or either harmonic notes. But I had never played double stops with one voice stopped and the other one in harmonic. This means that in one string you have to place the finger just touching it, and in other string you have to press with the finger. That is not easy at the beginning but it is possible to train it. Actually the main real difficulty was for the bow, because each note demands a different use of the bow. The stopped note needs more pressure and less speed, and the harmonic note needs less pressure, more speed and closer to the bridge. I practised it first starting with the stopped note and then adding the harmonic note. It

was difficult to start directly with both notes, so I had to experiment with the bow pressure. I tried to play with more pressure the harmonic, but it didn't work very well. I also tried to play with less pressure the stopped note, and even if it was difficult, it could work.

I decided to not use vibrato at the stopped notes, because I realized that it was easier and nicer when the sound of the stopped note was similar to the harmonic one. So at the end, my guide was to make both sounds as similar as possible, and that is why I decided to use less pressure for the stopped note and more for the harmonic note. And if eventually, one of the notes doesn't sound in a live performance, I thought that it would be more important to with the stopped note, because it is easier to produce a clear sound with that one.

After all this work I realized that I only had left a few days, around a week, to work on the piece. So I decided to focus more in the musical aspect of the piece, in order to make a story about it because an audience want to listen a artistic result, and not a exercise of new techniques. I played it for my main teacher Herre Jan Stegenga, and he was very good to give me some new inspiration for the piece (for example the creation of more different colours and textures).

Final recording

I have two good recordings of the piece. One when I did the world premiere at Gaudeamus in Utrecht on January 24th (see attached DVD, track 24) and the second one when I presented it in a concert at Codarts on January 28th (see attached DVD, track 25). It is also possible to listen the second one in YouTube following the link from the reference list (page 52).

I would like to mention too that the composer will reissue the piece applying some of the changes that we agreed on when I premiered the piece. I will also be part to the new edition, adding some indications about bowing, fingerings, articulation and slurs.

And even more, there will be a second part of this piece, maybe with micro-tonal intonation and multiphonics (more in a contemplative style). And again it will be a collaboration of composer and performer, so we can explore the possibilities of the cello.

4th INTERVENTION CYCLE – *Sept Papillons* (Kaija Saariaho, 2000)

After the experience I had when preparing the previous pieces I thought that it would be very useful to create a schedule with steps to follow for preparing a contemporary piece. I had that need because I thought that I was spending a lot of time from the first moment when I started to read the score until the moment I was able to play it through. So in this piece I focused more on the aspect of how to prepare a contemporary piece and I designed a schedule to follow based on my previous experience, analysis and observation. I wanted to design it to check if that would make my building-up process of a piece shorter and in a efficient way.

Zero point

I couldn't make a recording of the piece because it took me a lot of time to understand and reproduce the notes from score with my cello.

Work schedule design

I designed this schedule, taking into account all the necessary parameters that I thought, in order to follow through my preparation process:

- 1st Specific notation of the piece (page of instructions, signs, etc.)
- 2nd Effects – How to develop specific effects, skills or techniques from the piece
- 3rd Notes – How to reproduce every note of the piece
- 4th Fingering – Look for a good fingering
- 5th Rhythm – Put the notes in the correct rhythm
- 6th Tempo – Play in the indicated tempo
- 7th Bowing – Choose a good organization for the movements of the bow
- 8th Dynamics – Play with the correct dynamics
- 9th Phrasing – Look for long phrases so it sounds musically and not as a technical exercise
- 10th Extra information about the composer and other pieces about him/her – That always helps to take the final decisions about the interpretation and to have inspirations from him/her
- 11th Feedback or help from others – Once you can play the piece, it is always important to get feedback from other people or in case you don't understand something you can always ask experts, colleagues or look for it in sources.

I will explain my preparation process following the steps on the schedule that I created.

1st Notation

I read the instructions page and it was everything explained quite clear. The only thing I needed to investigate more was about the overpressure, represented with this symbol:



This technique can be approached in two ways, either with pitch being the prime parameter, or with timbral effects being the prime parameter. If exact pitch, is important the performer can use many degrees of bow pressure and still produce a dominant pitch. Because of the physics of a string, the more bow pressure the performer uses the faster the bow must travel to produce a specific pitch. If no pitch is desired, a slow bow with heavy pressure will produce a texture without pitch. The particular timbral quality will depend on the part of the bow that is used by the player. Of course the easiest place to obtain a non-pitched scratch sound is at the frog, because that is where the bow has the most natural weight. To obtain a scratch at the tip of the bow is quite difficult because the player has to execute the stroke with much more pressure.

(Strange, 2001, p. 17)

I also found more information, videos and tips to practice in two websites.

I found examples of notation for overpressure or distortion. It is possible to see different ways of notating it, including the way Saariaho does it (Rolen, 2014). There is also available a video with a little explanation about it and with examples played by Russell Rolen, where he gives a serial of 8 exercises to develop overpressure (Rolen, 2014).

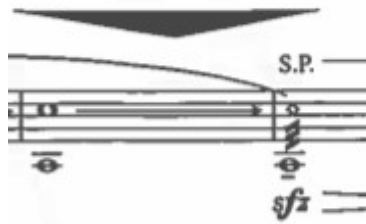
I saw more examples at the website of Ellen Fallowfield, a young cellist girl researching on new techniques for cello (Fallowfield, 2014).

Moreover, I read in a book about Kaija Saariaho that she uses on the cello the effect of overpressure close to the bridge in solo, ensemble and orchestral works having as a result a rough noise (Moisala, 2009, p.81).

2nd Effects

- Overpressure:

After collecting some data (explained in the previous step), I experimented in different contact points (closer to the fingerboard or bridge), with different speeds, different amounts of pressure, different strings, open strings, stopped notes in different positions. I realized that for me the most difficult was to produce it on the low register (C string). I had to practice it because there is at the 4th movement of this piece there is a place where you need to play C open string with overpressure:



(Bar 10 and 11 from 4th movement)

Finally I found out that when getting closer to the bridge it was easier to “break” the sound. There were many possible ways of doing this effect, with a large range of results. I decided to do it closer to the bridge (as I read in the book mentioned at the previous step) and without pitch, just looking for a rough sound.

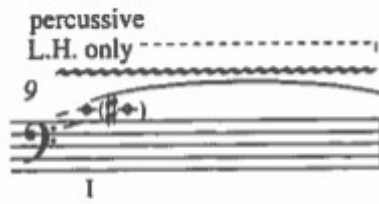
- Increasing and decreasing pressure with the left fingers during the same note (indicate with an arrow that goes from stopped to harmonic note, or vice versa):



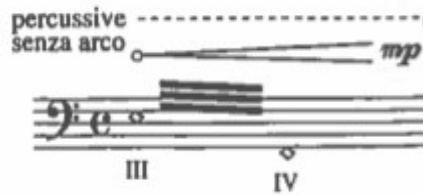
Even that I had never done it before, I just needed to experiment a bit with this. The process is to release or add pressure with the finger in order to change gradually from stopped note to harmonic note or vice versa. I realized that by adding a bit more of pressure with the bow was easier to transform the sound. Actually this effect appears combined together with the previous one (overpressure), so when putting them together it is easier to transform the sound, they complement each other.

- Harmonic trills:

At the sixth movement was indicated to play sometimes a trill without arco, only in a percussive way with the left hand (alternating two fingers quickly, to create a trill effect). Sometimes, instead of a trill, it is indicated tremolo, but it is the same:



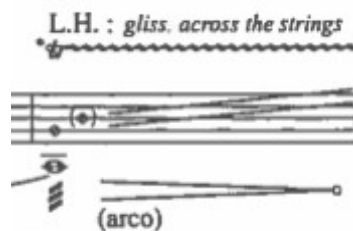
9th bar of movement VI



1st bar of movement VI

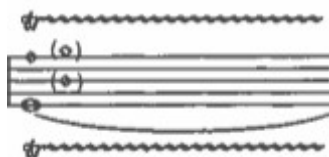
I had already worked on this effect in my 2nd Intervention cycle, at the tenth prelude of the piece by Sofia Gubaidulina (see 2nd Intervention cycle, page 13). The main difference was that in that piece was indicated to play with the right hand and in this piece with the left hand. I tried to apply the same way of playing (like a drum roll, in a percussive manner) and without depressing the strings because the notes are written like harmonics in the score. And the main difference I applied was with the dynamic, because in Gubaidulina's prelude you can play loud, but in this piece of Saariaho you should play this effect from *niente*¹⁵ to only *mezzopiano*, so the effect is softer. Moreover, I saw a video from a workshop organized by Saariaho and Anssi Karttunen (the cello player who edited the piece and worked together with the composer). It is interesting because he gives an example of this effect. He advises to have always loose hand, light and the alternation of the fingers can be irregular.

This effect is the same for playing with bow. The left hand should behave in the same way:



8th bar of movement 6

And in case there is an open string, it is again the same, but it is important that this is also heard:



12th bar of movement 6

- Left-hand pizzicatos from fourth movement

Another little effect that I would like to mention is in the fourth movement, from bar 12 (see image below); where the cross (+) means pizzicato with the left hand:

¹⁵ From Italian, means "nothing". In music means absence of sound.



She uses a combination of open string notes, harmonic notes and sometimes adding a left-hand pizzicato on some open strings. I didn't understand it very well at the beginning, I had this question on my head: should I play with the bow those notes or only with pizzicato? I didn't understand why was it written to play both arco and pizzicato simultaneously. I tried then stopping the bow in every pizzicato note, but it was very difficult and strange. Then I tried playing arco and on top of it also the pizzicatos and I didn't expect such a nice result. The result was a very opened timbre for those open strings, and I even found a reason on why she wrote it. Almost every time this pizzicato appears on an open string, it is after playing a harmonic note in the same string. Sometimes, when playing a harmonic note and releasing the finger but still bowing with the open string, what happens is that the harmonic note continues sounding longer than the moment when you release the finger. But in this case, if you accompany the release of the finger with a pizzicato, you stop immediately the harmonic note and you listen very clearly the open string note. I could see in this moment that the composer knew very well the instrument and that had been working with a cellist, because this kind of trick is known specially by the performers and not composers. When you want to ring a open string, mainly in the low register, you can accompany the beginning of it with a small left-hand pizzicato (sometimes imperceptible) to put already in vibration the string. So I understood this effect more as a technical help to ring every note clearly.

3rd Notes

I had to do a very detailed work to read every note carefully, because there were a lot of different harmonics (natural harmonics and stopped harmonics). The most difficult thing was the combination of different kinds of harmonics and open strings or stopped notes. The most difficult movement in this aspect was the second, in which I had to do a very exhaustive work combined with the fingering in the next step.

There are also a lot of trills which you need to read very carefully. One thing that I didn't realize until I took the score as reading a book was that some of the trills were written above the staff and some under it. At this moment I discovered that when it is under the staff the trill should be played only with the down voice, and if it is above with the upper voice (at the beginning I was playing always in the upper voice). There are even some places in which it is written above and under, meaning that the trill should be reproduced then in both voices simultaneously.

4th Fingering

In general, this was a difficulty throughout the whole piece, because there are a lot of extended positions and you need for that a big hand and flexibility. There are a lot of natural harmonics, and it is difficult sometimes because you need to place your finger at the perfect place, if you are not at the perfect spot you may lose the note or play a different one.

The main difficulty of the piece for me was the second movement, in which there are a lot of tricky combinations for the fingers in left-hand. It was difficult because the hand had to be extremely opened sometimes, and moving the arm in totally different ways in order to approach some of the notes with a determinate fingers. In addition, the combination of open harmonics with stopped harmonics, open strings and stopped notes made it extremely difficult because each finger is

touching the string in a totally different way and each finger has to be at the perfect place. Of course you almost never find this kind of strange positions in the normal cello repertoire. You need a very strong hand and it is very tiring.

- Detailed work in fingerings of second movement

I discovered that the whole second movement could be played with fingerings in blocks, like playing chord or arpeggios in four strings. After practising this a lot I still couldn't play it through, because I needed a lot of time to change from one position to the next one. It was also very important to know which notes should sound at every moment, because it is very easy to play other harmonics which are close to the one you need, so it is important to memorize the sounds. I decided to make an experiment by taking photos of the different positions. It helped me to clean up my mind because I could see it from outside and get a picture of how the hand looks and how the arm should be placed in order to help to the fingers position. It was also important to look for comfort in every positions, to have the most natural possible position to avoid the tiredness of the hand. I only took photos from the more difficult positions through the piece (which are perhaps a 90% of it). These are the results with an explanation of every position (I gave a different letter to the 10 positions that I found). Of course, this positions and descriptions are for my hand, they may help another person, but perhaps not everything will be the same in other's person hand.

A) From bar 1 to 4 (first half)

Leggiero, molto espressivo ♩ = c.58

S.T. → S.P.

0 1 2 3 4

repeat ad lib. *mp*

1 2 3 4

4 0 1 4

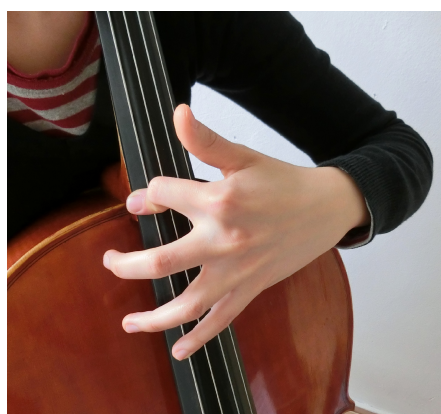


It is possible to start from the beginning already with the position needed on bar 3, otherwise you need time to prepare it. You need to have the elbow very low, because you need to approach the fourth string with the fourth finger. The only finger which is depressing is the first finger in the fourth string. At the same time, the same finger has to touch the third string to produce a harmonic. It is important to find the right position for this finger, because this skill is used in many of the positions. The position of the hand is horizontal because you need to use the fourth finger in the fourth string.

B) Bar 4 (second half)

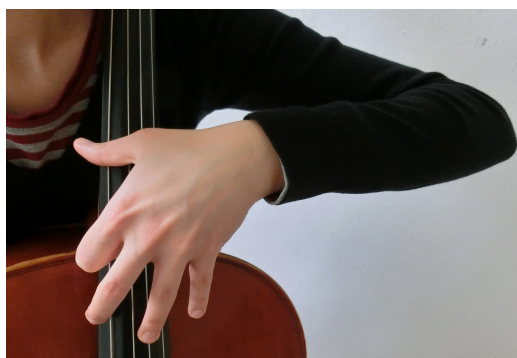


C) Bar 5



These two positions are together because you need to combine them through bar number 5. It is not possible to have a fixed positions, so you need to alternate the third finger in the second string (B) and fourth finger in the fourth string (C). The connection from the previous chord to this one is the release of the thumb finger from the second string plus the alternation just mentioned with between third and fourth finger. For this alternation I think it is good to stay at the same place with the elbow (low position) and moving the wrist from higher position (when playing third finger) to lower position (when playing the fourth). The position of the hand is still horizontal because you still need the fourth finger in the fourth string.

D) From bar 6 to 9

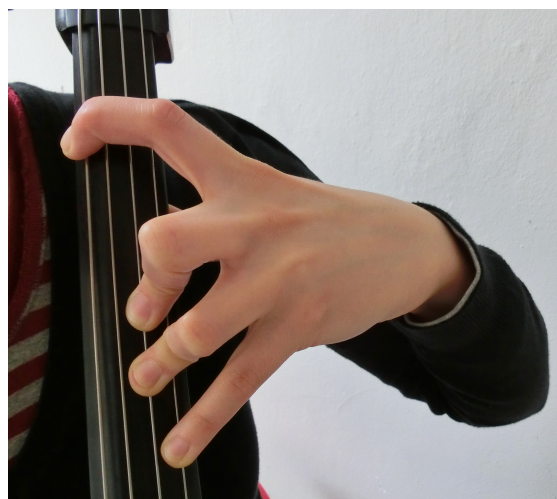


In this position the wrist is high and you only need to depress with the thumb in the fourth string. The hand is in a more vertical position now, because it helps to press enough with the thumb and you don't need to use the fourth finger.

E) Bar 11 (first half)



F) From bar 11 (second half) to bar 14 (first half)



In bar 11 you start with a very comfortable position (first image) but you have to go in the second half of this bar to a very uncomfortable position (second image). You need to open a lot between the first and second finger; actually all the fingers stay at the same place but you add the first finger in the fourth string in extended position. The distance is very big because the bridge is from first finger (in fourth string) to third finger (in second string); besides from having an very big distance, it gets even bigger with one free string in the middle. It helps if the wrist goes higher and upper together with stretching the fingers (from a curved position to a straight position).

G) Bar 16 (first half)



H) Bar 16 (second half)



I) Bar 17



J) From bar 18 to end



From bar 16, the position is the same but adding fingers. It starts in bar 16 with the thumb touching the second string and depressing the third string, plus the third finger creating an stopped harmonic in the third string. In the next position (H) you have to add the first finger depressing the fourth string. The next add (I) is that you touch with the third finger the fourth string (being very careful, because this finger has to touch two string at the same time, so maybe it helps to do it with the tip of the finger in a vertical way). And the last add (J) is the fourth finger touching the first string. The problem for the fourth finger is that it has to be in a lower position than the third, in my case I had to bend it and touch the string with the nail. The position of the hand is in general horizontal and the wrist stays in the middle, but for the last position, the wrist has to be a little bit higher than before, to help the fourth finger.

A very curious thing of the last position is that at the end you are playing in every string exactly the same note (A3).

Some of these positions are also useful for the fifth and seventh movement, because they are the same.

At his point, I want to mention that I already researched on the different stopped harmonics in my second intervention cycle (see page 12). That knowledge helped me to be careful when reading the distances on the harmonics, because Saariaho writes harmonics of fourths and fifths, and just by reading them from the score I knew already which had to be the resultant note.

5th Rhythm

In this piece the rhythm was not an important difficulty because it was very clear, regular, with a lot of long notes, *ritardandos* and *fermatas*. Moreover, the tempos were not fast and sometimes it was indicated flexibility on the tempo.

6th Tempo

In all the places where is a metronome indication, it is preceded by “c.”, so at the end the performer can decide to play around that indication, but not necessarily that exact number. This indication appears at the second, third, fourth (bar 12) and seventh movement.

Other indications are “*libero*”¹⁶ (first and fourth movements), “*calmo*”¹⁷ (third movement), “*tranquillo*”¹⁸ (fourth movement) and “*lento*”¹⁹ (fifth movement). In the sixth movement it even indicates “*senza tempo*”²⁰ plus “each bar should last at least 5 seconds).

I felt at every moment very free in that way during this piece. The only two movements in which I needed to work a bit more consciously was at the second and seventh movement.

7th Bowing

The most difficult things about the bow in this piece was about the effects (overpressure) and the bariolage in the second and seventh movement. In the second movement I practised all these slurs in open strings, without fingerings, just to ensure the string in which the bow has to be placed at every note. I also practised without slurs, just in separate notes because at the beginning it was very difficult to coordinate the left-hand positions together with the bow bariolage. When I could dominate more the notes with the left hand I started practising with the original slurs and always from slower to faster tempo.

16 In Italian means free.

17 In Italian means calm.

18 In Italian means quiet.

19 In Italian means slow.

20 In Italian means without tempo.

The beginning of the third movement was difficult because it is a double stop with a extreme difference of register. The note to be played on the second string is a D3 (open string) and in the first string a B-flat5 (stopped note). The difference is almost of three octaves and one is open string and the other stopped, so it is difficult to find a good balance with the bow to ring properly from the same moment both notes. The difficulty for the bow is that it needs to be in a perfect angle and the notes need different pressure. The stopped note is so high that it needs less pressure and more speed of bow; the open note is in a lower register and needs more pressure but less speed. I practised it in different ways, until I decided to start with a flat bow (hair of the bow in parallel with the string), singing with vibrato the upper voice and not in a extreme soft dynamic. I decided to focus more on the high note, because it belongs to the melody (the other note is a maintained note for 3 bars). I used vibrato for the first note, to make clear that it was the melody but also giving importance to start both voices at the same time.

8th Dynamics

The dynamics were also not a main difficulty, because in general it is indicated soft dynamics, there are even *pianissimos* (*ppp*), or sometimes the composer indicates from *niente* or to *niente*. The only places in which loud dynamics are written are at the fourth and seventh movement. Sometimes there are even written indications related with the dynamics. For example the word "*leggero*"²¹ appears in many places.

9th Phrasing

I understood very well in this piece the intention of the composer in this aspect, because it has a lot of indications which if you follow, you would get a natural phrasing. They are indicated with dynamics, hairpins, fermatas and long slurs in top of smaller ones.

10th Extra information

At this point of the schedule I was able to play the piece through, so I tried to look for more information that could help me to improve the style and to find some inspiration.

I listened to a recording of the piece played by Anssi Karttunen, because this piece was dedicated to him, who gave the first performance in Helsinki on 2000.

I also watched a workshop given by Kaija Saariaho and Anssi Karttunen (both Finnish). It was interesting because sometimes I found useful information for specific skills in this piece (I already wrote about it in the second step of this schedule).

And Anssi Karttunen gives a very interesting advice about the new techniques. He says that when playing extended techniques, we should give to the audience the feeling that they are part of a language and not extended techniques, and for that we need to assimilate them.

In another video I listened to Saariaho speaking about the nature's role in her music. She says that she uses to take elements from the nature to compose. For example she thinks in the symmetry of a flower, or wind, or water... to use them as a metaphoric idea on how to transform and develop the musical material through a piece (Saariaho, 2012).

In this piece I could see the nature element very clearly. The piece is called *Sept Papillons*, it comes from French and it means Seven Butterflies. I could imagine that every movement was a different butterfly, because they are called *Papillon I*, *Papillon II*, etc. I tried to use my imagination in order to have a different idea of every movement, related with butterflies. For example in *Papillon I* I can imagine a sunshine when a butterfly starts to fly quietly, stopping in some branches or rocks. In *Papillon II* I imagine a lot of butterflies flying together coming from far away and at the end leaving

21 In Italian means light.

slowly. In *Papillon III*, I imagine something more sad (because it is indicated “*con tristezza*”²²); so I imagine a butterfly dying, doing the last movements of its life. In *Papillon IV* I can imagine perfectly a butterfly opening the cocoon when it goes out. I find the effect of the overpressure as the moments the butterfly breaks the cocoon. This effect appears three times, so I imagine the third time the moment when it goes out. From bar 12 I imagine as if it would be the first movements of a butterfly, in a mixture of blunder and beauty, and finally flying high for the first time. The *Papillon V* is a mixture from other movements (first, second and fourth); and at the end I can imagine the wing-beat of a butterfly (effect that I will mention in the next step of the schedule). In *Papillon VI* I imagine the wing-beat of a butterfly which feels anxious, like if it would be caught somewhere (and actually it is written “*poco nervoso*”²³). In the last movement, in *Papillon VII* I imagine an angry butterfly, flying very fast and with accelerated movements.

11th Feedback and Help

I had meetings with two experts for this piece, with Jeroen den Herder and Hans Woudenberg. They



helped me by giving me some feedback about what I was playing, and I also asked them some questions about doubts that I still had in mind after doing the rest of the steps.

In the first movement I found very difficult position change from bar 12 (1st image) to 13 (2nd image):

The distance is too big, but the two last notes of bar 12 are the same sound of the next notes in next bar. Hans Woudenberg proposed me to practice playing the last note of bar 12 removing the finger but still maintaining the harmonic note, by using the same bow pressure. By doing that, I would have more time to prepare the next notes.

In the last bar of the first movement you are supposed to play three strings at the same time (during the second beat), which is in fact the same note but in three different octaves. I thought that it was impossible because with the bow it is not possible to play three strings in a maintained note due to the curved angle of the strings. But one of my experts, Jeroen den Herder, told me that if you play more *sul tasto* it is possible (because the angle is less curved closer to the fingerboard, and more curved closer to the bridge). In the score it is written that you end *sul tasto* in the last beat of the bar, but it is necessary to do it earlier (a bit before the second beat). Together with the *sul tasto*, you also have to help with the left hand fingers in order to make a flatter angle which is better for the bow. By only touching the first string (because it is harmonic) and depressing the second string a lot (which makes it lower) and depressing the third string but not so much (so it stays higher than the second). In fact, at the third beat of this bar you should play only the first and third string (avoiding the one in the middle). This is even more difficult, because this means that the first and third string have to be in a higher plane than the second, which is unnatural. How you can get this is going extremely *sul tasto*, playing as *sul tasto* as possible (because there the curve is less accentuated). Indeed, if it is necessary, I realized that it is possible to depress the string in the middle in a higher register to make it even lower than it was. So even if in this note is indicated only *sul tasto* in the score, it is necessary to do extremely *sul tasto*.

22 In Italian means with sadness.

23 In Italian means a bit nervous.

About all the work I did with the second movement, with the fixed positions for the left hand, I had a different approach from Hans Woudenberg. He told me that it was also possible to stay all the time flexible with the hand, instead of having fixed positions in a rigid way, because that creates also tension for the music. I tried to do it, but I didn't feel that advice good for my hand, because my fingers are too flexible and it was difficult to play always the correct notes. So I decided to stay with my own work with positions in blocks. I guess that it depends also on each person's hand.

Another thing that he proposed me, and I liked it, was to be more expressive with the low notes of the arpeggios in the second movement. It is indicated "*molto espressivo*", and he suggested me to look for a melodic line in which I could sing following the low notes.

And his last advice for this movement was to look for an appropriated pressure of the bow, the same kind of pressure that you use for playing harmonics (which means a little more of pressure in the bow, than in stopped notes).

When I played this piece for both Jeroen den Herder and Hans Woudenberg, they suggested me to play louder the pizzicatos on the fourth movement (the effect I mentioned already at the end of the second step). They both told me that it was not only a technical issue, but a musical effect which should be audible. In the recording of Anssi Karttunen this element is audible, but not very loud. So I decided to use it in both ways technical (to help the open string to ring) and musical (to give some brightness to those notes).

In the meeting with Jeroen den Herder we were speaking about the overpressure on the bow, and he told me that it is something that you need to practice with a very constant bow speed, slow and with overweight. He said that it is something that doesn't come alone, but something that you need to develop. In this piece, when it appears, you can combine it with half pressure in the finger of the left-hand finger, which helps a lot to distort the sound. But that is even a trick that I can use for other pieces.

He also made me pay special attention to the last two bars of the fifth movement. There you should play a maintained A open string and playing a trill on top of it which makes gradually a glissando going to the high register; at the same time you should move gradually from *sul ponticello* to *sul tasto*. Somehow the bow jumps by itself. So he proposed me to consider it as an effect for the bow, in which the bow jumps a lot when going to *sul tasto*, imitating the butterfly's wing-beat (see attached DVD, track 30).

Jeroen den Herder told me that Saariaho writes very well all the effects for the cello, and that means that a composer knows very well the instrument.

For the style I got two general remarks from my experts. Jeroen den Herder told me that everything in this piece has to be very light, because you can relate everything with the wing-beats of a butterfly. Hans Woudenberg told me that I was trying to play very clearly everything, and that in this music sometimes you need to go a bit further. In this case, you should feel like an organism, something alive (not something mathematical), so I could be more abstract and not that clear. So I took in mind these two advices in general, when practising the piece.

Final recording

This was the hardest piece for me and I will continue practising on it, until I can have better results for my personal satisfaction. But anyway I had to record it to document properly my work (see attached DVD, tracks 26 to 32).

3. CONCLUSION AND OUTCOME

Besides from the intervention cycles, I also interviewed eight expert cellists in contemporary music in order to compare my work and perspective with experienced musicians. It is possible to find a summary of the questions and the most interesting answers in the appendix (page 46); and information about them in the appendix (page 44). I will also mention together with my reflections, some of their ideas that were very useful for me.

First of all, I found difficult to start working on contemporary music. I had never done that before in the 17 years I have been playing the cello. When I started with *Four short studies* (Zimmermann) in my First intervention cycle, I felt lost. The notation was not very different, but I had some instructions to follow and a new way of writing (for example no bar indication, no tonality, no tempo reference, a lot of harmonics, etc).

I think that it is difficult to start performing contemporary music, because there is no previous knowledge and preparation. It is something still in development and it is very hard to find information in book. For example, I couldn't find any book where to find information about performing contemporary music with the cello. That is why I used a book about performing contemporary music in the violin instead than with the cello. It has a lot of similarities (so it can help a lot), but still the way you play a violin and the way you play a cello changes. Sometimes you find new techniques and skills that you need to research about, and the sources are very limited (a few recordings, perhaps a book, and perhaps a website). Sometimes you even need to ask help to other people (colleagues and composers), or to come out with your own solutions and decisions.

I thought before starting the research, that playing contemporary music and music from other periods (baroque, classical, romantic and modern) was different, and that actually you needed different and new skills to approach it. I still think that it is different, especially with the preparation process and the way you bring it to an audience. About the skills, I also keep thinking that you need different ones, because in every piece you find a new technique, way of notating, indication, effect, colour, timing, rhythm difficulties, "impossible passages", etc. In one of the questions of my interviews I asked people if it was different for them to prepare contemporary music than others. At the beginning of the interviews most of them answered that it was not so different, that for both contemporary and earlier styles you look for the same (quality sound, colours, phrasing, intonation, different use of left-hand and right hand, different use of body language...). But as the interview was going on, I discovered that they recognised extra difficulties that you find in contemporary music and not in others. For example, for almost all of them, the notation is always the first difficulty, because you need to understand the language of a piece. Usually, they also have to deal with rhythmical problems, different ways of tuning and difficult techniques (that sometimes can even be painful). Besides from that, it is needed a different mentality (because you need to take a lot of decisions), and sometimes it is needed more preparation time together with a more detailed work (to understand, develop and master the new techniques).

I also asked them if it is possible to have all the new skills and extended techniques in order to approach contemporary music, or if that is something that you have to discover with every new piece. In general, they think that it is not possible to have all the needed skills. Actually contemporary music has been developed the possibilities of the instrument more than the cello technique through the last 60 years (José Enrique Bouché, 2014, Interview). Some of them also say that it is possible to create a toolbox after years of experience, that makes your work with contemporary music every time easier. I also got an interesting answer about it from John Addison, who thinks that "extended techniques" are an extension of the standard cello technique; only skills as whistling, singing or things apart from the cello technique are extra skills.

After this reflection about the differences between performing contemporary and earlier music, and the difficulty of starting with it, I would like to mention the most difficult experiences that I lived through my research process in this two years.

It was always very difficult for me to start with all of the pieces, because somehow, I didn't know how to start working on them. One of the main setbacks was the moment when I needed to change my question. At the beginning I was more focused on the specific new skills and techniques, but in a certain moment, when working on the premieres, I realized that my real problem was the approach of contemporary music (as I explained in the introduction, page 1). So I felt that I was not in the correct track and that somehow my research would turn useless. I felt a bit demotivated in this period, because only working in the new techniques was not satisfactory for me and it wouldn't allow me to perform well a complete piece. I asked myself constantly: how will help me to become a self-sufficient cellist just working in a few new techniques? After a lot of reflection, talks with colleagues and my coach Job ter Haar, I took a decision: it was impossible to achieve all the existent new techniques in contemporary repertoire. Then I took a new direction: what would make me self-sufficient is the preparation process of contemporary repertoire. The change on my work was not such a difference, because still I would continue with the new skills, but from another perspective, which was the analysis and reflection on the process. At the end of my research, I designed a schedule to prepare more efficiently contemporary music (I will explain it in a few paragraphs).

Another setback, has been the big amount of recordings that I needed, because it took a lot of time, and indeed, my final versions are not my best result. I consider that this recordings are actually a starting point for my career as a contemporary musician, so they will become better after having more practice and experience.

The real dragon of this journey was the time limitation for preparing a contemporary piece, because I always had the feeling that I needed more time to prepare them better. I had this feeling especially when premiering pieces, because I had a deadline (which were for me a goal) and I had to force myself to work in a very efficient way. That is when I realized that the most important is to work and practice efficiently (like with the rest of the music). It is a curious coincidence that John Addison said in his interview that one of the biggest challenges when premiering a piece was that usually there is not enough time to prepare them.

At this point, I would like to take especial attention to the premieres. It depends on the piece, but I learnt that it is completely necessary to get in contact with the composer. Even when everything is clear in the score, we should be as close as possible to the composer's idea. We cannot contact with Beethoven or somebody that met him, but the good thing of contemporary music is that it is possible to do so!

When there are difficulties or problems when reading the score for a premiere, it is crucial to meet with the composer. It is good to try to do your best, but some difficulties are immediately solved when the composer explains his/her intention. But we have to be honest in two senses, by following their wishes and also helping them if we have some recommendations. Sometimes it is necessary to do some modifications or corrections, as it happens with any edition. And sometimes, we can inspire or propose alternatives to a composer. I am sure that a good composer would be always open to listen and exchange information.

I have to say that the fact of premiering a piece, was first a big dragon for me (especially with A graveyard of broken statues); because I had to deal with "impossible passages" and I was frustrated. But when I met with the composers, I understood that it was one of the steps of the preparation process and it turned to be one of the most satisfactory experiences of my research: working together with a composer and premiering a piece.

As I mentioned before, I created a schedule with some steps to follow when preparing contemporary music (see page 25). I did it because I understood that I needed to work in a efficient and quicker way:

- 1st Specific notation of the piece (page of instructions, signs, etc.)
- 2nd Effects – How to develop specific effects, skills or techniques from the piece
- 3rd Notes – How to reproduce every note of the piece
- 4th Fingering – Look for a good fingering
- 5th Rhythm – Put the notes in the correct rhythm
- 6th Tempo – Play in the indicated tempo

7th Bowing – Choose a good organization for the movements of the bow

8th Dynamics – Play with the correct dynamics

9th Phrasing – Look for long phrases so it sounds musically and not as a technical exercise

10th Extra information about the composer and other pieces about him/her – That always helps to take the final decisions about the interpretation and to have inspirations from him/her

11th Feedback or help from others – Once you can play the piece, it is always important to get feedback from other people or in case you don't understand something you can always ask experts, colleagues or look for it in sources.

I used it in my last intervention cycle, and I have to say that it saved me a lot of time because my work was structured in logical steps (always the previous step would help me for the next one).

Anyway, at the end, I also recognised that it was helpful but it could not be something close and extremely strict. Every piece is different and every piece has its own difficulties, so sometimes the order of the steps could change. So I decided that I would always use the parameters mentioned at each step, but probably in a different order. For example, the 10th step (information about the composer) could also help at the beginning; or I could work first in the dynamics and after in the bowing. I had even another idea: to combine some parameters together in a bigger step. For example, a step could be a combination of bowing and phrasing.

What is very useful for me is being able to organize in separate sections the needed work in contemporary music. And something to take in mind when premiering a piece, is that there is one extra step: meeting the composer.

It is interesting to compare my schedule and my need of using it between the answers that I got from my interviews. Some of them organize their work in steps, and some of them not. First I will mention people who use a schedule:

- Job ter Haar: know about the composer – read the score – listen to recordings (sometimes) – prepare the part (so you don't need to turn pages when playing) – play the piece – identify problems – solve problems – from here practice as with any other music.
- Manuel Santapau: notation – work in technical problems – work in effects, textures and colours – work in phrasing – from here, the same than with other pieces.
- Almudena González Brito: notation – practice unknown effects – play through – understand the essence of composer – practice difficult sections – give an interpretation

And there are also cellists who don't use a schedule but they have some preferences or remarks:

- Álvaro Huertas: you will always find a different process for every piece, the piece will show it to you.
- Herre Jan Stegenga: always start from playing.
- Jeroen den Herder: first read the score, don't play because you need to understand the language.
- Hans Woudenberg: when the work with the score grows, you find answers from the score.

This information made me think that at the end, everyone has his/her own method, and the good thing is to discover it. For the moment, my “preparation rules” are very useful for me and I think that I have discovered my own method.

Another parameter to which I paid attention was on how to convince an audience with this kind of music, because sometimes I have seen people reacting in negative ways when they listen this music. I think that there are a few things that can help you as a performer to convince an audience when you play contemporary music. The first thing is to take the work seriously, and I got very interesting recommendations from my experts. Herre Jan Stegenga says that sometimes you need to help with a different body language (even theatrical performance), and especially when you play alone, you need to fill and feel the space of the hall. Job ter Haar thinks that it can help if you give to the audience a little background about the piece, and never show to the audience that you don't like or can't do something, but be aware of create magic. And at the end, as Manuel Santapau says, you have to believe in what you do and bring it to the audience in the same way that you would do with a classical

or romantic piece; you have to show them that for us, it is the same.

I would like to continue mentioning the good things that this research has provided me.

Working in contemporary music has helped me to understand better my instrument, because sometimes lead me to do some experiments. At a certain point I was wondering if practising new techniques and effects would affect in a bad way to my standard technique, because the concept of beauty in the sound changes, and you need to bring the possibilities of your instrument to the extreme. I asked in the interviews about this, and all the people agreed on the fact that contemporary skills affect in a good way. It can even help the cello standard technique. For example, when you have to play with different tuning systems (quarter tones, microtonalism...) Jeroen den Herder says that the standard intonation improves. John Addison also thinks that new bow techniques can help you to understand and make more secure your bow technique. There is even some people who think that some of this non-conventional techniques should be integrated in the standard technique of every student. It can also amplify your vision on the cello playing, like for example Jeroen den Herder mentions that before he only thought in "singing" with the cello, but after years of experience he also thinks in "speaking".

The only danger (said by all my experts) is that you need to purify constantly your technique with basic exercises (scales, standard bow technique, intonation and quality sound); because it exists the danger that you lose your own sound.

I can say that personally, this research has helped me to understand better music, because I think that every style can complement each other for your own technique and perception about music. I find very satisfactory to play music from our time, especially when you can meet the composers. One of the interesting things is that you need to have a network (composers and colleagues) in order to solve some of the problems that you find when you prepare contemporary music. In my network I have 11 people, including the help of my teacher Herre Jan Stegenga and my research coach Job ter Haar (who is also a cellist), together with people who I knew already and that I didn't know. I had contacted also with more experts, but they never answered to me (which is usually a common factor in this kind of situations). But I can be very happy with the amount of people I have in my network, because they all helped me in an active way and I can come back to them in the future.

As a personal assessment to my progress, I feel satisfied with the fact that I have certainly opened a new field in my career; now I know that I can play contemporary music. I have already some results, as the two pieces that I premiered (*A graveyard of broken statues* and *Memòria Infinita*), having received positive critics after it. In the next season, I will also premiere *Spirare, potes spirare*, a piece for flute and cello from the composer Jing Jing Luo.

But anyway, I feel that all this work has been just my first step at this new world for me. I know that even if I can do it, I need years of experience to master this kind of music. As Jeroen den Herder said to me in his interview it is also a question of time, because after a few years it becomes easier and easier to prepare this music (the same happens until the moment you are ready to perform a Brahms sonata).

I designed this research for my own inquisitiveness, but I hope there are also things helpful for other people. For example, all the data collection, experiments and ideas of working can be very helpful. All the information I have collected about harmonics and the rest of the skills, are very useful for the rest of the people, because as I mentioned before, it is very hard to find this kind of information in books or websites.

And know that I have discovered contemporary music, I want to share my enthusiasm with more young people and encourage everyone to do it. I confess that once you start, you learn more and more, and you love it more and more.

4. APPENDICES

1st Intervention cycle - Table of comparison between three different performances (*Four short studies*, Zimmermann).

The three recordings are from Siegfried Palm, to whom was dedicated the piece; Michael Bach; and Ellen Fallowfield.

Performers	Study I	Study II	Study III	Study IV
Siegfried Palm	Tempo: not accelerando 2 voices: Up=ordinario Down=sul tasto	Tempo: free/fast (1 short idea) Harmonics: not really ringing	Tempo: fast Accents: not very different / very vertical	Tempo: slow Sostenuto: No, gaps Vibrato: yes
Michael Bach	Tempo: free/fast 2 voices: Up=ordinario Down=sul tasto	Tempo: free, some notes more relevant Harmonics: ringing	Tempo: very fast Accents: no difference (more spiccato)	Tempo: not very slow Sostenuto: yes Vibrato: yes
Ellen Fallowfield	Tempo: not gradual accelerando 2 voices: Up= sul ponticello Down= sul tasto	Tempo: free Harmonics: plucking with different fingers / close to bridge / not always ringing	Tempo: fast Accents: not very vertical	Tempo: not very slow (gaps) Sostenuto: No, with gaps Vibrato: yes

1st Intervention cycle – All the exact possibilities where you can produce with pizzicato the first five harmonics of the Harmonic Overtone Series

The length of the string from nut to bridge is 69cm. All the measures are taken from the nut.

Harmonic number	Overtone number	Division of the string into	Length from the nut where are the nodes	Reference note (belonged stopped note)	Resultant note (harmonic)
1 st	Fundamental	1 segment		Open string	C2
2 nd	1 st	2 equal segments	34,5cm (at the middle)	C3	C3
3 rd	2 nd	3 equal segments	23cm and 46cm	G2 and G3	G3
4 th	3 rd	4 equal segments	17,25cm and 51,75cm	F2 and C4(*)	C4
5 th	4 th	5 equal segments	11,25cm, 22,5cm, 33,75cm and 45cm	E2, A2, E3 and E4	E4

(*) It is supposed to be another place where to produce the 4th harmonic, at the really middle of the string. But as long as it is a common place together with the 2nd harmonic (C3), the result is C3 and not C4.

3rd Intervention cycle – *A graveyard of broken statues* (Wingel Pérez Mendoza): Suggestions that I proposed to the composer for a reissue

- From bar 18 to bar 30 would be easier for the performer that you write just the notes to be played, and the string you can indicate it with a number (under or above) instead with another note because it looks very confusing.
- You could write different dynamics to show that you want a progressive crescendo by steps from bar 58 to 61.
- You could also indicate the strings in which the glissandos should be played (especially in bar 108 because it looks very confusing for the performer). You could also write on this glissandos that they should be stopped with the thumb finger because that is the easiest (probably the only) way of doing it.
- Remove the *sul tasto* in bar 13, because if you play *sul tasto* it will also sound the second string. It is better to write it directly in bar 15.

Network

Job ter Haar:

Cellist from The Netherlands who studied with René van Ast, Lidewij Scheifes and Anner Bijlsma. He is member of several chamber music ensembles as *Van Swieten Society*, *Ives Ensemble*, *Musica ad Rhenum* and *Floreal String Quartet*. He is also a research coach at *Codarts* (Rotterdam).

Herre Jan Stegenga:

Cellist from The Netherlands, who studied at Paris with Paul Tortelier. Currently he is cello professor at *Codarts* (Rotterdam Conservatory). He has premiered pieces as the *Cello Concerto* of Ton de Kruyff in *Concertgebouw* (Amsterdam). He has recorded the sonatas of Lekeu, Grieg, Pfitzner, Rachmaninov, Shostakovich and the Brahms. Soloist of the *Netherlands Chamber Orchestra*, and ensembles as *Ludwig Trio*, *Schubert Consort* and *Johannes Brahms Quartet*.

Jeroen den Herder:

Cellist from The Netherlands, who studied with Dmitri Ferschtman (Amsterdam) and Christopher Bunting (London). Currently he is teacher at both the conservatories of Amsterdam and Rotterdam, and artistic leader of the “Cello Biennale” in Holland. He has a extensive career in chamber music: he was leader of the Cello Octet *Conjunto Ibérico*, he is member of the *Nieuw Ensemble*, and since 2005 member of the *Ruysdael Quartet*.

Hans Woudenberg:

Cellist from The Netherlands, member of the *Doelen Kwartet* and *Asko-Schönberg Ensemble*. Due to his interest and experience in contemporary music, he has worked with very recognised composers as Sofia Gubaidulina (who he met for the last time in 2011 at her *80 Birthday Anniversary*, where he performed *Silenzio*, a trio for bayan, violin and cello).

Wingel Pérez Mendoza:

Mexican composer, finishing his master degree program in Codarts (Rotterdam). He also takes lesson in Maastricht Conservatory with Robert HP Platz. He has also taken lessons with Victor Rasgado, Vincet Carver, Germán Romero and Robin de Raaff. His music has been played in Queretaro, Guanajuato, Morelia, Puebla, Oaxaca, Mexico City, Czech Republic, The Netherlands and Argentina.

José del Valle:

Spanish composer and viola player. He studied composition with Javier Darías at ECCA (Alcoi), where he is a member nowadays. He was awarded with the prize “Francisco Guerrero Marín” (*Fundation Author-CDMC 2010*). His compositions have been performed by *Archeus Ensemble*, *Ars Poetica*, *Ensemble Espacio Sinkro*, *Duete Eduard Terol* and *Silvia Gómez-Maestro* (clarinet and piano). He has presented his works at the *International Festival Zilele Musicii Noi de Kishinev* (Republic of Moldova), *27 Cicle de Música del segle XX-XXI* (Barcelona, 2012) and *International Festival Meridian* (Bucharest, 2013). His pieces have been also recorded by the *Romanian Radio* and *National Spanish Radio*.

John Addison:

Cellist from Australia. He studied in Tasmania, later he moved to The Netherlands and in 2010 he went back to his country. He has performed with the *Netherlands Chamber Orchestra* and *Belgium based I Fiamminghi*. He decided to concentrate on the performance of 20th and 21st Century music. Since then, he has performed with ensembles as *Nieuw Ensemble*, *Insomnio* and *Volharding*, and he is member of the *Telesto Trio* and *Palmos Ensemble*. He works very closely with composers in order to achieve the best possible interpretation of their works and he is writing a book about new techniques on the cello (for performers and composers).

José Enrique Bouché:

Cellist from Spain, student of Marçal Cervera and R. Ramos. Currently professor at the Conservatorio Superior "Salvador Seguí" of Castellón, where he is also the Erasmus Coordinator. He is also co-director of the Master in Performance and Research at the International University of Valencia (VIU). He has been soloist assistant of the *Chamber Orchestra "Reina Sofía"* and member of *Arké Piano Trio*, *Dubhe Quartet* and *NomosGroup*. He has premiered contemporary pieces of Spanish composers and he has recorded for the labels *Tecnosaga* and *RTVE* (Spanish radio and TV).

Manuel Santapau:

Cellist from Spain, professor at the Conservatorio "Salvador Seguí" of Castellón. He is founder member of the Ensemble Espai Sonor, with whom he has participated in important international festivals. He is also soloist cello at the Symphonic Orchestra of Castellón.

Almudena González Brito:

Cellist from Spain, who studied with Marçal Cervera, Sergi Boadella, Jeroen Reuling and Olsi Leka. Currently she is professor at the Conservatory of Canarias and she plays in the Symphonic Orchestra of Castellón.

Álvaro Huertas:

Spanish cellist, graduated from *Musikhochschule Mannheim*, where he studied with Reimund Korupp. He is founder member of *Cuarteto Leonor* since 2001 and they studied in Stuttgart with *Melos Quartett* and Madrid with Rainer Schimdt (*Hagen Quartett*). They have recorded for *RNE*, *Bayerisches Rundfunks*, *Radio Bremen* and the labels *Animato*, *Verso* and *Autor*. He is also teacher at the Conservatory "Victoria de los Ángeles" of Madrid.

Interviews

I made a selection of the most important answers that I got.

1. Do you think it is different to prepare a contemporary piece or any other (classical, romantic...)? What are the difficulties or differences?

Job ter Haar:

This depends a lot on the piece, but often my preparation is different.

Jeroen den Herder:

I don't think it is different, because I always try to look for feelings and emotions in all music. But it is also a question of time. You need around 10 years to play well the cello, and 5 more years to play Brahms. In contemporary music it works in the same way, as many years you do it, the better you will do it. There is also the composer factor, because good composers write effects very clearly, and just following what it's written you will get it. Actually, I think there is a "hidden fight" between composers and performers.

Hans Woudenberg:

I think that the approach is the same for every style, and at the same time, the approach is different for every piece. But I think that you must feel attracted by the score, you must feel interest on it.

John Addison:

I think the main difference is that a lot of the 'extended' techniques have not been codified into a universal notation system and consequently there can be a lot of information in the explanations about the techniques that must be studied, you cannot assume that a symbol from one composer means the same in a piece by another. Preparation for works that use different intonation systems require some extra time to absorb and refine the differences, for example double stops using sixth tones.

Manuel Santapau:

I don't think it is too different. In both you look for expression, dialogue, textures, colours... The only that changes is the incorporation of new techniques.

José Enrique Bouché:

I think that what makes it difficult is that the cello technique has not been developed as much as the composition techniques in the lately years.

Álvaro Huertas:

Each composer has his own language, and you need to get used to it in a comfortable way; but this happens in music from every period. But the use of non conventional skills sometimes means a difficulty.

Almudena González Brito:

I think it is different. For example I find the multiphonics very difficult.

2. Are needed special skills or techniques to play contemporary music?

Job ter Haar:

I think so; the technique of the cello has been extended in the 20th century. The techniques I developed especially while playing contemporary music include:

- extensive knowledge of harmonics
- pizzicato skills (two, three fingers etc.)
- rhythmical skills
- different sounds and special effects
- the ability to take in music fast, and master different languages quickly

John Addison:

Yes and no. The term that has been used for the technique used in contemporary works has been labelled 'extended' techniques for about the last 50 years. They are only an extension to standard techniques.

So for the yes answer I would say if pieces contain extra techniques such as singing/whistling and playing at the same time, or choreography with your feet and/or hands then these are extra skill sets that need to be acquired. In terms of cello technique, I don't consider the skills and techniques as "special" they are just the requirements of cellists living in the 21st century.

Manuel Santapau:

I think that besides from new techniques, there is a different use of the left hand, and right hand (even a different body language). For example for the left hand there are more possibilities, like mezza pressione, stopatto, etc; and sometimes the vibrato has different indications (poco, ordinario, molto). So yes, I think that contemporary music demands new skills.

3. Do you think it is possible to have a large range of skills so you can approach contemporary music easily? Or do you think that every piece has its own skills to be developed?

Job ter Haar:

I think you develop a "toolbox" over the years. I believe in learning skills when you need them, so I don't think one should try to learn them in advance.

After 30 years being in business, it still happens that I have to learn a new skill, but often it is an extension of an existing one.

Jeroen den Herder:

After many years of experience, you can have a big box of tools for the non-conventional skills.

John Addison:

There are a lot of extended techniques that are used in the same way by many different composers, so after a while, once they become familiar, you do develop an extended skill-set that makes it easier to approach new works. So I wouldn't say that every piece has its own individual skills that need to be developed, though of course this can sometimes be the case if there is an unfamiliar technique being used by the composer.

Álvaro Huertas:

Playing regularly contemporary music helps to know and develop non-conventional techniques. Of course, as much you practice them the most natural they are.

During the second half of the 20th Century a lot of rhythmic, technical and sonorous possibilities have been developed, and I think that some of them have to be part of the classical-music standard technique.

4. Which are the important PARAMETERS to take in mind when preparing a contemporary piece?

Job ter Haar:

Notation. And after that it depends completely on the piece.

Sometimes I find it very hard to get an idea about the music before I start practising. In general, I tend to gather more information about the style before I start practising than with classical music, because then I already know the style.

Rhythmical problems of course are a typical for contemporary repertoire. I spend a lot of time analysing and practising them, and over the years we developed a lot of tools for that

Then I have to deal with unusual problems, passages that are written "against" the instrument, which doesn't happen so often with classical music. This requires a different mentality.

Often, I have to let go of the idea that I should be able to play all the notes. I have to make choices: which ones can I play, or which ones should really be heard? It often comes down to time

management. How much time do I want to spend on which passages? Time is always limited, but difficulty is sometimes unlimited.

When I have to play a very difficult passage, I simply make some changes. Then I practice. The advantage of this is that I start from a position of control instead of chaos, and later the "impossible" notes often turn out to be possible, but even when they are really impossible I play the rest much better

sometimes feel very demotivated when I have to play things I really can't play.

And, last but not least, I prepare my cello with white dots on the fingerboard.

Hans Woudenberg:

I think that there is a very special relation between the score and the performer, it's like both become only one thing. Actually, sometimes when you grow with the study of the score, you find answers.

José Enrique Bouché:

The traditional ones (rhythm, sound, intonation and knowledge about the composer and the aesthetics). And besides from that, the specific elements of each composition.

5. Do you follow a SCHEDULE (steps) to prepare a contemporary piece? If not, how would you make one? Please, mention the steps.

Job ter Haar:

Sometimes I don't practice at all before a first rehearsal, especially when the piece is very difficult, notation is complex and I don't know what the composer had in mind. But, yes, I follow some steps:

- 1) Find out about composer if I don't know him/her
- 2) Read score. When this doesn't work: read preface
- 3) Sometimes but not always: listen to recording
- 4) Prepare part (arranging the score and taking notes). This is crucial!
- 5) Start playing and identify problems
- 6) Solve problems:
 - a) Read preface anyway
 - b) Panic stage: call colleagues
 - c) Anger stage: call composer
 - d) Denial stage: put piece away or skip passage
 - e) Acceptance stage: start making the best of it

After that, I believe it is the same as with any other music, except when you have the opportunity to really work with a composer.

Jeroen den Herder:

Read and read the score, but don't play it. You need to understand the language, and after that you start to practice.

John Addison:

No, not really though if it's a work from the complexity school I will rehearse the piece with a metronome but without the cello. If there is a different tuning system used I will take some time exploring the sound world before attempting to play the notes on the page.

Manuel Santapau:

The first is the specific notation and symbology from every piece. After that, solving the technical problems. Then, the effects, textures and colours that we want to achieve. Practising the phrasing. And from here, the preparation I think it is the same than with any other classical piece. But sometimes the practice process in contemporary music can be slower and more detailed.

José Enrique Bouché:

If it is possible, the first step is always to get in contact with the composer (or people who know him/her). From there, I try to work out from his/her ideas.

Álvaro Huertas:

*I think that every piece leads to a different process, because every piece has its own difficulties. For example if you prepare *Pression* by Lachenmann, you cannot approach in the same way than *Bunraku* by Mayuzumi.*

Almudena González Brito:

First I read and memorize the instructions. I practice the new effects that are unknown for me. I try to play through the whole piece. I try to understand the essence of the piece and composer. I practise the most difficult sections. And then I practise everything giving an interpretation.

Herre Jan Stegenga:

No, but I think it's good to start always from scratching.

6. If you don't know how to do something (for example, a specific skill, note, effect...), what would you do?

Job ter Haar:

Call colleagues, call the composer, try to find it in a book or website (but the last thing hardly ever happens).

Sometimes I have to make up my own solution, based on experience, taste, opinion, or even guesswork. Sometimes even improvisation.

John Addison:

Ask a colleague and Youtube, but make sure that if there is more than one video to watch as many as you can to take a consensus, e-mail the composer.

Álvaro Huertas:

If the composer is alive, I contact with him/her. If not, contact with other musicians that knew him/her. I have one anecdote, that once I got five different versions for one symbol, all given by people who knew very closely the composer.

7. What are the main difficulties of playing cello solo in contemporary music?

Job ter Haar:

Sound quality is the biggest challenge, I think. Also you can't hide, so the problem with impossible passages or notes is bigger than in chamber music. On the other hand, you can be more flexible. Keeping the attention is also a special challenge in solo playing.

John Addison:

Composers don't seem to take into account that you need to turn the page! I've spent hundreds of hours in my career cutting and pasting scores so I'll be able to play the piece and often you end up with scores that are so large you become invisible behind the barricade of the music stand. Sometimes the physical demands of some pieces are extraordinarily high and it can take a lot of training to be able to get through the piece.

8. If you have ever premiered a piece, what do you find interesting about it? And what are the difficulties?

Job ter Haar:

Interesting: the excitement of doing something new, and working with a composer to make the piece work. Difficult: there is no precedent, nothing to fall back on. Also, there is no guarantee that anyone will like it. But, also no guarantee that anyone will DISLIKE it either.

John Addison:

The joy of being the first interpreter of new works, there's nothing like it. The freedom from

preconceived ideas of the audience allows you more space. The main difficulty is that there usually is never enough time to prepare the piece, composers also need to be aware that a piece will grow from its first performance and owing usually to the difficulty of the work, composers need to keep this in mind and be supportive.

Manuel Santapau:

I like seeing the procedure of a piece since it gets born until the moment of the first performance. It is one of the most satisfactory experiences for me related with the contemporary music. I find awesome the easiness and predisposition of the composers to help you to perform their piece.

Álvaro Huertas:

Sometimes the premiere of a piece can affect to the destiny of the piece, it depends and how the audience reacts on it, and for that the performer has a very important role. That is why I think that a performer who premieres a piece should do it in a very honest way, in order to communicate the essence of the piece, and even making some corrections if it is necessary.

Almudena González Brito:

There is one advantage: that the expectation is lower because you are the first who is going to perform it.

9. Do you think that contemporary skills can affect in a good or bad way our standard technique as a cellists?

Job ter Haar:

The skills will probably affect me only in a good way. Of course I can have muscular problems because of some special techniques or long pieces, but I could also get that from playing tennis or moving furniture, or playing too much Bach or Piatti.

What I find problematic is working on impossible passages. It can easily lead to playing badly; sometimes playing badly is even unavoidable. I have to be conscious about that and repair the damage by practising scales and other basic techniques.

Jeroen den Herder:

I think in a good way. For example I think that it helps a lot for the intonation to play quarter tones. Years ago, when I played the cello I only thought in singing. But after having contemporary music experience, I also think in speaking with the cello.

But it has the danger that if you don't keep practising in a healthy way you can loose your sound.

John Addison:

They can only help refine standard technique. When you start exploring scratch bowing for instance, when you have to tip your bow over the edge into a new sound world, you learn so much about your own style of bowing, the connection to the string becomes more secure. Pieces with Microtonal, Just and other forms of intonation should be a requirement for every undergraduate at a conservatorium. The amount of information that is gathered to inform your 'regular' playing and sense of intonation is invaluable.

Manuel Santapau:

I think it helps. But, we should not forget about purifying our own technique (by practising with the classical-technique).

10. What is helpful to convince an audience if you play contemporary music?

Job ter Haar:

Often, it helps to give the audience some background knowledge, or prepare them for what they are going to hear. You can do that by writing program notes, or giving a short introduction on stage. Then, you have to believe in the piece, or at least pretend you do if you really can't. Really go for it and enjoy it.

Sometimes you really have to know how to fake things... or at least don't show it when you can't really do something.

It is important that the audience knows that the events in the music are not random (unless they are!).

People feel insulted if they think you don't care, or the composer doesn't care.

Your body language has to be in accord with what happens in the music, but I guess that is the case with all music. Sometimes, pieces will even require a theatrical approach.

Find beauty in the sounds, even in the ugly ones, sometimes ugliness can be very beautiful.

Allow for unexpected things to happen. Improvise your way out of problems.

Take your time, allow enough space (beginning/end/pauses).

Create "magic", concentration.

Manuel Santapau:

You have to believe in what you do, and it's our responsibility to bring this music to an audience in the same way that we would do with classical or romantic music.

Herre Jan Stegenga:

It is important to have a theatrical performance, the body language helps. And always, fill and feel the space of the hall.

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6. LIST OF ATTACHMENTS

➔ DVD (tracks-list):

1. Demonstration of playing the same note in different nodes from the same wave
2. Demonstration of loops and nodes in a string
3. Demonstration of the spot where I can play the 5 first harmonics (free of nodes)
4. Four short studies (Zimmermann) - Study I
5. Four short studies (Zimmermann) - Study II
6. Four short studies (Zimmermann) - Study III
7. Four short studies (Zimmermann) - Study IV
8. Ten preludes for cello solo (Gubaidulina) - 5. sul ponticello-ordinario-sul tasto (1st recording, September 2013)
9. Ten preludes for cello solo (Gubaidulina) - 6. flagioletti (1st recording, september 2013)
10. Ten preludes for cello solo (Gubaidulina) - 10. senza arco, senza pizzicato (1st recording, September 2013)
11. Ten preludes for cello solo (Gubaidulina) - 5. sul ponticello-ordinario-sul tasto
12. Ten preludes for cello solo (Gubaidulina) - 6.flagioletti
13. Ten preludes for cello solo (Gubaidulina) - 10. senza arco,senza pizzicato
14. Memòria Infinita (José del Valle) - 1st movement (1st recording, december 2013)
15. Meeting with José del Valle - Talking about effects
16. Meeting with José del Valle - Talking about ABDEC Composition System
17. Memòria Infinita (José del Valle) - 1st movement (Premiere, January 2014)
18. Memòria Infinita (José del Valle) - 2nd and 3rd movement (Premiere, January 2014)
19. A graveyard of broken statues (Wingel Pérez Mendoza) - 1st performance (for the composer) January 2014
20. A graveyard of broken statues (Wingel Pérez Mendoza) - 1st performance (for the composer) January 2014
21. A graveyard of broken statues (Wingel Pérez Mendoza) - 1st performance (for the composer) January 2014
22. Meeting with Wingel Pérez Mendoza - Talking about the slap effect
23. Meeting with Wingel Pérez Mendoza - Talking about the slap effect
24. A graveyard of broken statues (Wingel Pérez Mendoza) - World premiere (Gaudeamus Jonge componistenbal, Utrecht - January 2014)
25. A graveyard of broken statues (Wingel Pérez Mendoza) - Second presentation of the piece (Rotterdam, January 2014)
26. Sept papillons (Saariaho) – Papillon I
27. Sept papillons (Saariaho) – Papillon II
28. Sept papillons (Saariaho) – Papillon III
29. Sept papillons (Saariaho) – Papillon IV
30. Sept papillons (Saariaho) – Papillon V
31. Sept papillons (Saariaho) – Papillon VI
32. Sept papillons (Saariaho) – Papillon VII

➔ Annotated scores of new compositions:

- *Memòria Infinita* (José del Valle, 2007) – Piece for cello solo in 3 movements
- *A graveyard of broken statues* (Wingel Pérez Mendoza, 2014) – Piece for cello solo