The Harp: No Tango Tourist

Creating an Authentic Tango Harp Voice

Julie Rokseth - tango harp

World Music / Crossover Domain

Artistic Research Coach: Santiago Cimadevilla Main subject teachers: Wim Warman (tango piano) Saskia Kingma (harp)

17 April 2017

Table of Contents

ine s	tory of my researcn	<u> </u>
The	story of my research	1
	nat did I want to learn?	1
	Journey to the Artistic Research Question	1
Wi	nat answers did I find?	2
١٨/١	Big Discoveries	2 3
	nat did I develop?	
	umentation and description of the Artistic Result	5
IVV	nat are my results? A Toolbox for The Tango Harpist	5 5
	Arrangement for harp and bandoneon of "Los Mareados"	7
Ho	w does my research relate to my final results?	8
Refl	ection on the Artistic Result	9
Re	sult	9
	Expectations	9
Pro	ocess	10
	The start of the Process	10 10
	About the Intervention Cycles What I learned from doing research	10
The Ir	ntervention Cycles	12
	Intervention Cycle	12
	The piano	12
	The guitar	18
	The double bass	19
	Artistic Discoveries Reference Recording	22 23
Sec	and Intervention Cycle	26
	Guitar melody in tango style - Focused exploration with Tim Panman	27
	Plectrums	30
	Case study of "Con el Cielo en las Manos", A. Piazzolla Artistic Discoveries	31 37
	Reference recording after 2nd intervention	37
Thire	d Intervention Cycle	38
	Gustavo Beytelmann 2nd Interview	38
	Diving deeper into folk harp traditions	39
	Diving deeper into contemporary music harp techniques Experimenting with harp contribution in the tango	41 42
	Reference recordings and intervention	49
Fou	th Intervention Cycle	50
	Reference recording	50
	Feedback "Lea Marcades" by Juan Carles Cabián	50 51
	"Los Mareados" by Juan Carlos Cobián Final result	61
Appe	ndices	62
Netv		62
	erence List	65
	Books	65
	Articles	65
	Scores Recordings	65 65
	. receirantige	

Websites	66
A Toolbox for the Tango Harpist	67
Tango Rhythm Section	67
Strumming	67
Síncopas	69
Yumba techniques	72
Percussive effects	73
Other techniques for accompaniment	74
Tango Melody Techniques	75
Different sound qualities	75
Ornaments	76
Harp X-Factor	77
Arrastre on the harp	77
Hitting the strings	78
Atmospheric effects	79
Expressing variations in sound colour and attack	80
Phrasing of the melody	81
The lyric of "Los Mareados"	82
"Los Mareados" for harp and bandoneon	83
Experiment Walking bass	96
Solo harp arrangement of "Con el Cielo en las Manos"	112
Starting point "Desde el Alma" arrangement	114
My own arrangement of "Desde el Alma"	116
My own arrangement of "La Trampera"	128

The story of my research A. The story of my research

My Boldest Artistic Decision was to break convention and play the classical harp down the Tango line at Codarts. It was the nurturing at Codarts that let me to focus my Artistic Research on injecting the harp into Tango and discovering whether, and how the harp could sing with an authentic tango voice while also being able to give some of its own uniqueness upon the tradition. To make sure that the harp can become a real and organic tango instrument rather than being a "tango tourist"— a borrowed classical instrument that sometimes sits like a lovely guest but doesn't actually belong. This Artistic Research project has allowed me to show that the harp can sing with a voice that DOES belong in tango. The Harp: no tango tourist.

What did I want to learn?

Journey to the Artistic Research Question.

During my almost 20 years of classical harp schooling, I have at many times felt constrained and unable to fully express myself - there was, for me, too much focus on finding the "correct" or "perfect" way of playing rather than exploring one's own creativity and possibilities in unique artistic expression. Looking to my brother who plays tango bandoneon, I saw a much more comfortable relationship between him, his instrument, his expression, and his genre. This drew me to the Argentinian tango and I felt a strong urge to try and express and free myself through the harp in this genre. We play as a duo and discovered that our instruments while very rarely paired, sounded great together. However, it was difficult to find a point where we could communicate musically - both of us coming from so different traditions. In order for us to have that point of musical connection, I started considering actually playing tango on the harp.

What I found as I started to dive into the genre was that the very few harpists that are trying a bit of tango, just like I was, they come across as tango tourists from the classical world. The reason I feel this way is that they are using harp techniques, sounds and ways of phrasing melodies that clearly comes from the classical style.

I was informed by the head of the tango department, Leo Vervelde, that the harp was an instrument that was present in the first days of the tango. This was also referred to by Sierra in "History of the Orquesta Típica" (1984), but there was no extended tradition or traceable link to that past of the harp in early tango. Certainly, there was no tango harp tradition or techniques passed down or recorded. The harp was there but appears that it was not strong enough to continue its development like the other instruments in parallel with how tango was developing. What this meant was that there was no path for me to uncover and follow - I would have to forge a new one. This gave me a feeling of working on something more meaningful than just something from my own desires and it inspired me. I could now attempt to re-inject the harp to a genre where it had been effectively absent for nearly a hundred years!

Now I knew I wanted to immerse the harp into the tango, to find its own unique and authentic tango voice and create the special tango techniques and sounds that I could somehow coax out of the harp. Find a true tango voice that it could hold, but also a voice that could also give something extra to the rich tradition of Argentinian tango.

My personal goals for this research were to broaden my ways of expressing myself through the harp, and in that way opening up for more creativity in myself and have more freedom in my artistic development and career opportunities. The way I wanted to do this was to set the practical goal of creating a Toolbox of techniques and sounds so that the harp would be able to resonate with authentic tango. The idea of this toolbox was also that it would give me a pallet with many more colours to choose from when composing, arranging and playing in other different genres as well - not just the tango. So, these ideas helped inform me of what should be included in the toolbox. The Toolbox for the Tango Harpist - is split into three sections of Rhythm, Melody, and Harp X-factor (techniques

based on the uniqueness and magic of the harp with a clear direction of how to use them in the tango).

Next to the toolbox I wanted to create an arrangement of the piece "Los Mareados" by Juan Carlos Cobán arranged for harp and bandoneon. I chose this piece because it has three parts with different character and feel, which could give me the possibility to show off many new techniques of the tango voice of the harp. Also, the piece really suits the most recognisable tango instrument, the bandoneon, and therefore the harp must prove itself worthy of being there and must be capable of holding its new responsibilities without getting swallowed by the bandoneon - by both being accompaniment and melody maker.

All these factors have lead me to ask the **Artistic Research Question**:

How can I discover and create new techniques and sounds for the harp, with respect to rhythm, melody, and the harp itself, that allows the harp to assume an original yet authentic Tango voice? And how can I show this harp Tango voice using some of these new techniques through my arrangement and performance of "Los Mareados" (Juan Carlos Cobián) for harp and bandoneon?

What answers did I find?

Through the research process I did make some big artistic discoveries. The biggest practical discoveries were related to building up what I called a "Toolbox for the Tango Harpist" – an abstract storehouse to keep the tango sounds and techniques that I created to use on the harp. Beyond the making of the elements that make up the toolbox was *how* and *where* to use these elements for best effect. Further still, and significantly, the very process of creating these new sounds and techniques for the Toolbox opened up a profound development in my overall musicianship with different ways of attack and even new ways of thinking about music, tango and the harp.

Big discoveries

Toolbox for the Tango Harpist: a new Harp Toolbox of tango sounds and techniques This Harp Tango Toolbox was divided into 3 sections related to the intervention cycles that I undertook. I have through my research discovered that the harp can, in fact:

- 1. take on the responsibility of the *rhythm section*;
- 2. hold and express the tango melody; and
- 3. has its own special uniqueness to give to the tango tradition.

It is important to note that the first two intervention cycles, rhythm and melody were cycles looking for and creating new techniques that could mimic, replicate, and assume responsibilities for those aspects within tango. The third cycle flips that idea and is focused on understanding and morphing harp techniques that already exist, as well as figuring out where best to place them for maximum effect.

Harp versatility and its darker side

I would describe the tango as a genre that has a very special combination of grit and roughness to the romantic melody lines, with fire and passion evoked in the sounds, with an atmosphere of nostalgic mystery and intense drama about it. This is in contrast with the standard classical picture of the harp, with its glamour, elegance and romantic majesty. Through my research, I have gotten to know and develop a new side to the harp, a darker, grittier and more dramatic side. Having found out that both the dark and the light live within the harp, this research has allowed me to demonstrate how and why the harp glides into the tango in a truly marvellous way.

This realisation, about the harp's darker side has shown me its great versatility. A versatility that I did not know that it possessed, even after nearly twenty years of classical training, and it is this big artistic discovery that has made me fall in love with my instrument all over again. I have always liked the majesty and elegance of the harp, but now I have found new sounds, atmospheres and possibilities that lie in my instrument that I didn't know were there. This has opened up my creativity and inspiration and given me a great new respect for my instrument, and a new strength in myself as a creative artist.

I want to emphasise that the introduction of the Celtic folk lever harp broadened even further the sonic possibilities for the harp tango voice and became the best instrument for certain sounds and techniques (discussed in the intervention cycles).

Transformed my way of thinking about music, tango, and the harp

My way of thinking changed with regard to things like: the way I use the bass now - more colours and sounds; varying where on the string I pluck the string, can even play melodies there; another thing is thinking about the harp in a more percussive and rhythmical way. However, the best way to explain this abstract concept is through an example: So, I will highlight the case of my transformed thinking regarding the element of resonance. I now have a different way of understanding and using the resonance. I worked against the resonance of the harp, because tango has many short notes. I believed I had to find a way to control and stop it from ringing. Now, however, I work with the resonance, which is a very different way of approaching it. I believe there were many small experiences that pushed forwards this change. One was Gustavo Beytelmann's feedback after my first cycle. Through interviewing Lies Joosten about the harp in Latin American music, I found many ways of playing where the harpists use the damping of the strings to create effects and rhythmical patterns. Also, the work with my classical harp teacher Saskia Kingma at Codarts, pushed me in the direction of changing my mindset as she has always encouraged me to work with the harp, but still dare to walk on unknown paths. After this transformation in my way of thinking I have started making many more effects that I can create with my damping, I can make contrasts between very short notes and passages where I let the resonance ring fully, and I have created tango techniques built on the idea of the resonance that lies in the harp. I now use the whole spectrum of the sound, instead of a small part. I believe this is something I can experiment with and develop further in the future.

Understanding of the two-way contribution between genre and instrument development. This whole research process has lead me to realising both how the tango has enriched, and will continue to enrich, my already existing harp technique, and how the harp in return can enrich the tango, by adding its very special uniqueness. My inspiration and hope for the use of the harp in the tango in the future became much bigger after an interview with Gustavo Beytelmann. We were talking about the bandoneon and the instrument's tango techniques. He said that he does not believe that the most *bandoneonistic* techniques developed as a part of the instrument tradition, but that they came about from the influence that the tango had on the instrument. I understand this as a two-way beneficial contribution. This gave me hope about injecting the harp into the tango. If my artistic research plants the seed of playing tango on the harp, the overall development of the tango and its flow of influence will hopefully bring about its own tango harp techniques and the Tango voice of the harp can grow and take its own place in the genre.

What did I develop?

These two years where I have been diving into the tango through my research, as well as being and breathing in a tango environment daily, playing in the tango orchestra at school and in smaller ensembles, learning by great tango teachers, I have gotten a deeper and clearer understanding of what tango is. Both in a music theoretical way, and a more instinctive way. I still have so much to learn, but comparing my knowledge of the tango now to what I knew two years ago, the difference is immense and it has had a great effect on me being able to find an authentic tango voice for the harp. Here are some of the ways my awareness around performing tango on the harp, and my understanding of the tango, has grown from my reference recording (https://goo.gl/IFHoCd "Bandoneon, Guitarra y Bajo" by Astor Piazzolla, arr. Julie and Andreas Rokseth) and earliest attempts:

New understanding of how to use the full spectrum of the resonance of the harp

- My focus is now in my left hand when I'm playing, instead of my right hand as it was earlier. I play the bass stronger dynamically and give it a much stronger responsibility of driving the music.
- The contrast between accentuated notes and not accentuated notes: I now have an
 understanding of different ways to pluck the strings of accentuated notes, and how to pluck the
 strings of unaccented notes, and the "feel" for this important characteristic of the tango.
- Realising how many different colours I can produce depending on where I pluck the string. From
 my classical training I have used the normal position, which is a bit lower than the middle, and the
 technique "Pres De La Table" where you pluck the string very close to the soundboard. I now use
 much more subtle variations of this.
- Through this process I have had to work much more with the pedals and levers of the harp than I have done earlier; in a more musically melodic way using pedal slides and creating chromatic patterns and slurring into bass notes. In the start this was one of the things I was most afraid of in the tango, because it is such a complicated aspect of playing the harp. Slowly my understanding of the pedals changed from being a disadvantage of the harp to being an interesting part of the instrument, a positive attribute that now feels much more in the flow of the rest of the harp and my expression.
- Developed a stronger rhythmical stability and calm when holding the responsibility of the rhythm section.
- I have developed a better ear for creating sounds and arrangements for the harp with the bandoneon, and found ways that these two instrument can complement each other.
- When performing I have now a stronger intention with my music, both the techniques and smaller motives and the pieces as a whole.
- I have developed the ability to create tango arrangements with thought through artistic choices. Looking back at my first reference recording I was only transcribing, trying to copy exactly what I heard, while the arrangement of "Los Mareados", the research result, was created from scratch and every musical idea and artistic choice are my own coming from my now strong repertoire of tango techniques and my understanding of the genre.

In my first reference recording it can sound like I have a fair knowledge about tango on the first listen. However, in reality didn't have any idea of why I was playing the way I was playing. The harp voice was transcribed from guitar and bass and I tried to let everything sound like in the original recording, without really knowing why. I can also hear clearly that I played with my attention to the right hand, not the left hand, and therefore let the right hand lead the way. As of now, I always let the bass and the left hand be where my focus is because this makes the left hand drive the piece and the right hand can lean more on the left, lean on the foundation and be more free. My awareness around how to use the resonance of the harp in the tango was almost non-existent in the reference recording. I let everything I played in the right hand ring out without trying to work with the length of the resonance or the damping as a rhythmical effect. In the C-part however I can hear that I have started to experiment with damping the bass strings, which makes a very nice effect. The C-part is definitely the part that is closest to how I now understand and express the tango through the harp.

B. Documentation and description of the artistic result

What are my results?

There are two significant results to my Artistic Research project that are both creative.

Firstly, I have created a Toolbox for the Tango Harpist. This toolbox has all the techniques that I have found, developed and created during my research. It is useful for myself, as I can go back to this collection of the tango harp techniques while arranging and composing in the genre. It is also created with the idea that it can be useful for other harpists that want to start playing the tango on the harp, and for composers and arrangers. As these techniques where refined with the idea of a duo with harp and bandoneon always in the front, all of these techniques are created to work in a small ensemble or duo, not necessarily a tango orchestra. That being mentioned some are absolutely transferrable if things such as volume and space are put into consideration.

Secondly, I have used selected techniques from the Toolbox to make an arrangement for harp and bandoneon of the piece "Los Mareados" by Juan Carlos Cobián, in order to show them off in context and in their practical application.

A Toolbox for the Tango Harpist

I have created and gathered a collection of 40 new and pre-existing techniques and sounds with which to make an authentic, yet original harp tango voice. Divided up into areas of focus: rhythm, melody, harp x-factor. The comprehensive and complete Toolbox for the Tango Harpist sits as Appendix C.

In the following table, all the techniques are listed with links to videos where they are demonstrated. Most of the videos I have made myself, while on the pre-existing techniques I am linking to Gunnhildur Einarsdóttir's webpage about harp notation.

Table 1: Summary of techniques included in the Toolbox for the Tango Harpist.

Toolbox for the tango harpist - Summary and links		
Rhythm s	section	
Strumming		
Basic strumming	https://youtu.be/gxLZpOOwuVk?t=8s	
Strumming with a bass note	https://youtu.be/gxLZpOOwuVk?t=22s	
Strumming with a bass note and the use of enharmonic doubling	https://youtu.be/gxLZpOOwuVk?t=35s	
Percussive strumming version 1	https://youtu.be/gxLZpOOwuVk?t=50s	
Percussive strumming version 2	https://youtu.be/gxLZpOOwuVk?t=1m12s	
Flamenco inspired strumming	https://youtu.be/gxLZpOOwuVk?t=1m28s	

Semiquaver strumming	https://youtu.be/gxLZpOOwuVk?t=1m33s
*Cluster glissando	https://youtu.be/gxLZpOOwuVk?t=1m47s
Síncopas	
*Síncopa with arrastre - Arpeggio	https://youtu.be/gxLZpOOwuVk?t=2m4s
*Síncopa with arrastre - Scale	https://youtu.be/gxLZpOOwuVk?t=2m19s
Síncopa with arrastre - Pedal slide/lever slide	https://youtu.be/gxLZpOOwuVk?t=2m29s
Síncopa with arrastre - Glissando	https://youtu.be/gxLZpOOwuVk?t=2m43s
Salgán Síncopa 1	https://youtu.be/gxLZpOOwuVk?t=3m2s
Salgán Síncopa 2	https://youtu.be/gxLZpOOwuVk?t=3m13s
Yumba Techniques	
Yumba	https://youtu.be/gxLZpOOwuVk?t=3m43s
Yumbita	https://youtu.be/gxLZpOOwuVk?t=3m53s
*Piazzolla Yumba	https://youtu.be/gxLZpOOwuVk?t=4m4s
Percussive effects	
Knocking on the soundboard	https://youtu.be/gxLZpOOwuVk?t=4m19s
Latigo - scraping the string	https://youtu.be/gxLZpOOwuVk?t=4m29s
Other techniques for accompanying	
Repeating chord in two hands, using the damping as rhythmical effect	https://youtu.be/gxLZpOOwuVk?t=4m54s
Tango Melody	Techniques
Different sound qualities	
*Harmonics	https://goo.gl/xVbmiY
Tremolo	https://youtu.be/gxLZpOOwuVk?t=5m14s
Tremolo by use of enharmonic doubling of a note	https://goo.gl/0DcBFn
*Xylophonic sounds	https://goo.gl/oBRIEk
Vibrato	https://youtu.be/gxLZpOOwuVk?t=5m29s
Playing with plectrum	https://youtu.be/gxLZpOOwuVk?t=5m42s
Ornaments	

"Hammer-on" for the harp	https://youtu.be/gxLZpOOwuVk?t=6m17s		
Harp X-Factor			
Arrastre on the harp			
*Pedal/lever buzz arrastre	https://youtu.be/gxLZpOOwuVk?t=6m31s		
*Arpeggio used as arrastre - upwards motion	https://youtu.be/gxLZpOOwuVk?t=6m42s		
*Arpeggio used as arrastre - downwards motion	https://youtu.be/gxLZpOOwuVk?t=6m52s		
Fast arpeggio in higher octaves used as arrastre	https://youtu.be/gxLZpOOwuVk?t=7m4s		
Hitting the strings			
*Hitting the strings in a pattern with a break between	https://youtu.be/gxLZpOOwuVk?t=7m26s		
*Hitting the strings and letting the ring	https://youtu.be/gxLZpOOwuVk?t=7m40s		
Hitting strings - percussive strumming arrastre	https://youtu.be/gxLZpOOwuVk?t=7m56s		
Atmospheric effects			
*Glissando	https://youtu.be/gxLZpOOwuVk?t=8m16s		
*Flutter glissando	https://youtu.be/gxLZpOOwuVk?t=9m5s		
*Pedal buzz	https://goo.gl/tzJ8iH		
Expressing variations in sound colour and atta	ack		
*Using the placing on the strings to change the colour of the sound	https://youtu.be/gxLZpOOwuVk?t=9m16s		
*Direction of the plucking	https://youtu.be/gxLZpOOwuVk?t=10m55		
Phrasing the melody			
*Repetition of the note with enharmonic doubling of the note	https://youtu.be/gxLZpOOwuVk?t=11m8s		

^{*} Techniques that are used in my arrangement of "Los Mareados", Juan Carlos Cobiàn.

Arrangement for harp and bandoneon of "Los Mareados" by Juan Carlos Cobián

My second artistic result is my own arrangement of "Los Mareados" for harp and bandoneon. In this piece, I have selected specific techniques I discovered during my research, so that the harp can express its new tango voice.

"Tonight you will enter in my past, into the past of my life." This is a translation of a line from the lyric of "Los Mareados" (Appendix D). The lyric deals with a romantic couple who are sharing their very last night together, getting drunk in the process. The piece is incredibly melancholic but also involves a sense of celebrating their time together. I wanted to express this feeling through the purely instrumental line-up, and so let the lyric be the guide to my artistic choices and use of tango techniques when arranging this piece.

Since this is a result of my research throughout two years, I have focused on using the harp in soloistic ways as well as finding ways for the bandoneon and harp to sound well and interesting together.

In order to really capture the atmosphere of the lyric I used many of the atmospheric effects like the glissando, flutter glissando etc. I also used the many possibilities I have found of varying the colour of the sound, by for example doing the introduction standing, using only the high parts of the bass strings. I let the bass of the harp have an important role throughout the piece, using different types of *sincopas* to have a strong emotional drive the whole way. In the part where the bandoneon enters, the harp has a glissando in the right hand, while playing a deep *sincopa* pattern in the left. In this part, the glissando symbolises the feeling of getting drunker, the beauty of laughing together, while the bass is the deep solemnity of the situation.

In the C-part I let the technique "hitting the strings" be what drives it and I blend it together with the deep cluster of the bandoneon. This part is where the quoted lyric enters, and I find that this drum-like pattern emphasises the lyric.

For the full score go to Appendix E.

To watch the full video: https://goo.gl/S8a8oe

How does my research relate to my final results?

The key to the journey from the research to my final research was for me to go from the classical rules and style, break free of that box, and move into a new area of possibilities. My wish was to manage this without losing my classical technique, good sound and strength - all that I had from my years in the classical music. I experienced that through the process I sometimes moved too far away from my own sound and technique, while at other times I was too afraid to really find anything outside my own comfort zone. In these situations, it was really my main teachers, Wim Warman (piano) and Saskia Kingma (harp) that nudged me in the right direction. In the end the way to go was to start trusting my own ear. Once I was comfortable doing this, I found I was better at making bolder personal artistic choices, whereas before I would have just reverted back to general classical considerations. Through embracing the tango in my everyday life, I had soaked up so much more that I knew. When I started trusting my own ears and instinct, realising that tango is just another way for us to express ourselves through the art of music, I got some really good results. This realisation came during the end of the second intervention cycle and I believe it was due to some very interesting conversations and interviews with Gustavo Beytelmann. Through trusting my own ears, experimenting with all the knowledge, feedback from experts, and music I had found, I was able to connect my research to my final result, creating the Toolbox for the Tango Harpist and arranging using these techniques in an intuitive way.

C. Reflection on the artistic result

Result

Expectations

Was the result what you expected?

Far beyond what I was expecting! I had believed that the harp would have a tango voice but I didn't know that it would be able to sing so strongly with it. Overall, a much **deeper** and sophisticated result than I had expected.

I was able to find and create far more practical techniques for the Toolbox than I had expected. Also, many were extremely challenging to master and therefore more satisfying in accomplishment. Yes, the research was able to show that the Harp does not have to be a "Tango Tourist" from the classical world but can sing with an authentic tango voice all its own!

To inject the harp into tango will make it novel, especially to start with, however, it is essential that it does not become a "gimmick" or novelty for novelty's sake. I have taken this responsibility very seriously and I hope that it is evident from the diligence with which I did my research.

Personal results

The way I express myself on the harp is now more sincere and the connection between me and my instruments is stronger. I have confidence in my own artistic choices and I have a new love, inspiration and respect for my instrument. This new love and inspiration I am feeling for my instrument will be what drives me onwards in my professional musician life, and might be the most important result from the research.

How will it help you in your further professional life?

I have now a specialty that other harpists and musicians are interested in hearing about and learning about. This is a nice point of difference within a competitive professional harp landscape. I have also a way to express myself stronger as a musician and I am much more secure in myself as an artist. This is in a great way because of having to make difficult artistic decisions throughout the whole research project.

The Toolbox became a very useful resource in respect of having a bigger palette of musical colours to play and compose with, and these were not strictly limited to use within Tango either, which was a welcome surprise.

Significance for others

Next to the significance this research has had for me personally and for the harp in the tango genre, I believe there are at least four separate groups that would benefit from this research, its methods and results.

- Harpists adventurous enough to explore beyond the classical realm into tango, and even other styles. The significance for this research lies in the fact that the idea of a harp tango voice has been found to be true. The area has been opened and now comes the development and refinement of that voice through more artists exploring the idea further and adding their own artistic signatures.
- Tango musicians and enthusiasts will also benefit from having their musical style of choice being challenged and expanded. Knowing that tango is always developing, hopefully this can open up even more possibilities for that to continue in the future.
- Composers/arrangers will find this significant because of the repertoire of new techniques, interesting sounds, and widened palette of musical colours that they will now get to work with. This also makes greater ways to engage the harp within their works and not just in tango.
- Other instrumentalists that want a process of how to find a place for their instrument in a genre
 where it does not have a tradition. This research has shown that being free in your creative
 process and strong in your artistic decision making can allow you to more fully utilize your
 instrument in ways not previously considered or condoned, but that are valid musical
 expressions nonetheless.

Process

The start of the process

Artistic Research Question

I believe my Artistic Research Question was the right one to ask. Even though it has changed slightly through the process, the idea to divide my areas of enquiry to rhythm, melody and harp in that order for my intervention cycles enabled me to gain so much without getting lost in the great big genre that is tango. It made it manageable and effective in the creation of the practical techniques.

Choice of piece to arrange for harp and bandoneon to show off the harp's tango voice "Los Mareados" was an excellent choice, among many, for the arrangement to show off some of the tango voice techniques. This is because this piece has a very strong lyric and atmosphere, which I could let the harp embrace with its magic and new found dark side. As it is such a known piece I could also experiment a lot with being free in my arrangement while having it still recognisable.

About the intervention cycles

What steps in the intervention cycles stood out as good or bad?

Looking back, first part of my first intervention cycle where I studied the tango piano was confusing. This instrument was so different to the harp, which came as a surprise to me. I got the feeling that it would be almost impossible to play the tango on the harp, as so many ways to express tango through the piano worked against the harps nature. Now I can see that I did still learn a lot of things from the piano, especially through my experiment of the walking bass. I also learned a lot about constructing and accomplishing experiments. It was really when I started working with other string instruments, that the process started flowing better.

The focused exploration/interviews I did to go deeper into the double bass and the guitar were methods that worked very well. I was left after these sessions with new techniques, new ideas, new ways of thinking about the tango and a clear vision of my way forward.

The experimentation thought arranging and playing, something I did a lot in my third cycle, was a great way to work with my new techniques and to find places for the already existing harp techniques.

The size of the research

Concerning the size of my research, the concept of creating a definitive and complete harp voice for the tango was well outside the range for this research project. However, in opening the door and starting its creation and development to the extent that I have, this project has achieved a great result that did not become too big. It did carry the potential to become a bit too big, especially in the last couple of cycles where research really started rolling. It was exciting and very interesting but I had to be disciplined and narrow the focus back down to a manageable level while still at a good theoretical depth. This highlighted the fact that the concept in general is large with a host of different areas of interest, and that value would be gained by more research, study and exploration.

What I learned from doing research

How to break the rules.

Through this research, the biggest thing for me was my own personal development when it comes to breaking rules. I had to break 20 years of classical training which said that I couldn't play like that, or shouldn't make those sounds, and that doing it like that was wrong, and worst of all that it wasn't music I was making if I tried it that way. I had to push myself to go out of my box of comfort and explore areas where I had never been before. This took a lot of courage to go through with! I believe a lot of classical musicians would understand my troubles.

It was scary, but I got braver and braver from the first cycle onwards. Learned to break rules, go my own way, and be strong in myself. In the first cycle, I pushed myself to walk outside my own borders, but I can see from where I'm standing now, how carefully I was treading in the beginning. My first cycle bears some witness to this I believe. The results were good and exciting, but still unexplored in a way. As an example; the strumming that I discovered. Later I have discovered so many different ways of playing this technique, without fear of experimenting and playing with the idea of slapping the strings with the back of my hand. In the first cycle, however, I found one way to do it, and that was as far as I could go at that time outside my box. This is also the reason that in the last process of my research the techniques I found early in the process have become so much more developed and I have many variations on my hands now.

After having to go through with that personally confronting process I find myself a more confident and accomplished musician, trusting fully in my own voice, my own taste, and my own artistic decisions.

The value of a good network! And how to use it.

This touches on the confidence development too. Throughout the project, I have found the value of talking to people about what I was doing and the value of listening to other peoples' experience and knowledge from similar or even different areas of expertise. Significantly, it is not difficult to contact people I don't know anymore because I now believe that I am a worthy artist in my own right, that I can make strong artistic decision, and that I genuinely have something of value to offer these discussions.

The Intervention Cycles

First intervention cycle How the harp takes on the responsibility of the Tango Rhythm section

My reference recording for this cycle is a version for harp and bandoneon of the piece "Bandoneon, guitarra y bajo" by Astor Piazzolla. This was an arrangement my brother Andreas Rokseth and I made for our duo "Julie & Andreas" some time before I started my research and it was created by first doing a transcription of this piece and then adjusting the guitar and double bass voice to fit the harp. When doing this I had very little knowledge of tango and used my "classical point of view" to arrange it for harp.

"Bandoneon, guitarra y bajo" by Astor Piazzolla, arr. Julie and Andreas Rokseth. Performed by Julie & Andreas in concert in Rosekyrkja 2014, Stordal, Norway: https://goo.gl/IFHoCd

The feedback I got from teachers and from experts outside Codarts, in this case Carel Kraayenhof, was that the harp already could take on the responsibility of the rhythm section. There was, however, an opinion expressed that the rhythm section should be more solid, so that the melody and other things could build and stay on that, and one suggestion was to use either an amplifier or to play louder. My classical harp teacher also mentioned that to her it sounded like I played in a classical way, she was missing some of the sound that makes it tango.

Another thing that was mentioned was to find more contrasts between the parts, and a stronger melodic role for the harp. Carol Kraayenhof expressed his interest and wish to hear the harp take on a melodic role and the have the function of the solo in the tango as well, and to look into guitar and bandoneon duos to find inspiration and knowledge about this.

From this feedback I decided to split up my rhythm section cycle into three parts; piano, guitar and double bass. To get a deeper understanding of what this responsibility really meant, I wanted to look at how each instrument in the rhythm section expressed this in the tango. This would also let me get a clearer picture of what the "tango sound" really is, and how I could find the harp's own way to hold and express this responsibility.

The piano

I started with the piano. I used Wim Warman's compendium of tango exercises for the tango pianist "Basic rhythm for tango piano students" to get an overview of what basic techniques the tango piano uses. Through trying out some of these techniques on the harp I quickly realised that there is a big difference between the piano and the harp. In the light of the tango genre this becomes quite important, and especially noticeable is the big resonance of the harp. The piano also has a lot of resonance, but as the pianist lets go of the key the resonance will go. On the harp you have to do an active movement to stop the resonance and even then some of it will still ring in the wood of the harp. Also, the strings you do not play will also resonate and will need to be dampened if the wish is to completely stop the sound, especially the bass strings.

In tango, the relationship between staccato and legato is very important, and most of the bass lines should not resonate for long. I decided to make an experiment to solve this problem, and I chose to use the walking bass exercises Warman's compendium (unpublished) as a base for my experiment because those were the ones that were most challenging to play on the harp.

In this experiment, I chose 3 of the 10 examples of tango walking bass that Warman had written out. To create the same legato feeling that the piano creates when playing walking bass I decided that I needed to dampen each string at the same moment that I played the next note. If I was to play this in a classical piece I would not dampen the notes the end of the bar, or when the motive changed chord

- so, it felt unnatural for me to dampen each string. It also meant that I had to find a fingering for each motive that gave room for another finger to dampen the last string that was played.

I decided to play each bass line in two (not in four) with extra energy on the 1st and the 3rd beat, as is used in many of the tango styles. I wanted an active forwards movement, and a clear strong sound. It's important to stress that my desired end result was not exact fingerings for every conceivable tango bass line, but an understanding of what the well-functioning fingerings and dampening methods have in common.

I set up an experiment where I tested each bass line in two different tempos, 80 bpm (the slowest tangos where they use walking bass) and in 140 ppm (the fastest tangos where they use walking bass). I also set up different placing on the string, one normal placing and one close to the soundboard. This technique is called *Près de la Table (p.d.l.t.)*. You play the strings so close to the soundboard that the string resonates less and gives a different sound, more like a guitar. I included this technique in my experiment because I thought it could be a way of solving the problem as the strings would resonate for a shorter time and I was curious to discover if it would change which fingerings that would work well.

Experiment Walking bass

I did three experiments on the walking bass, one for each of the bass lines I chose. I will here explain in detail how I did experiment 1, and then give a conclusion what I learned about playing walking bass on the harp. I will also give a conclusion to the second and third experiments I did on bass line two and three. To see the details behind these two experiments (the bass lines and the tracking of the experiment) please go to Appendix F.

This is the first bass line I chose. It is a scale. The challenges on the harp in this bass line is that it is 5 notes upwards and we only use 4 fingers, so a change of hand position has to happen. The other thing is that we never dampen each note when playing scale.



On bass line 1, I made four different fingerings. To write this as accurate as I could I used a system that harp player Siobhan Armstrong (expert on historical harps and a pioneer in the field of the old Irish harp) has developed. She plays the wire strung Irish harp. These harps were played in the 1600s in Ireland and very little knowledge of how they were played at that time has survived till our days. Siobhan is one the players that has worked on researching how they played this historical instrument. The strings of this harp will resonate for a very long time if not dampened, and so she made a system allowing the notation of which finger plays a given note as well as which finger dampens it. I decided that this system would work very well in my experiment. I write which finger plays the string beneath the note, and under this number I write in brackets which finger dampens the last string played. I write a comma when the hand needs to let go of all strings and change position.

On the following page you will find **bass line 1** with my own fingering and notes.

Following the bass line 1 will come a two page system where I track the progress of the experiment and my own observations.



		BASSLINE ONE	
Ex. num	Test variables	REFLECTION	Date accomplished
	Fingering A		
	Placing: P.d.J.t Tempo: 80 BPM Octave: Low	Quite clear. Better for the hand if I put the harp on the floor and lean over. It leads towards the first beat in the second bar.	08/03 - 16
	Placing: P.d.J.t Tempo: 140 BPM Octave: Low	Difficult to put on the 4th beat without a buzz from the finger - too big vibrations of the string from the 3rd beat. Besides from that - works good.	08/03 - 16
	Placing: Normal Tempo: 80 BPM Octave: Low	Rounder sound - less clear. Fingering workes good besides from a big sound when damping the 3rd beat in bar two.	08/03 - 16
	Placing: Normal Tempo: 140 BPM Octave: Low	A lot of resonance. Same as 1A2: buzz on 4th beat. Lead to the 1st beat in bar two.	08/03 - 16
	Placing: P.d.J.t Tempo: 80 BPM Octave: High	Clear and good sound. Easier to play even than the ones in the octave below. Maybe the hand need to build up more .	08/03 - 16
	Placing: P.d.J.t Tempo: 140 BPM Octave: High	Strong sounds of the damping on the way down. Sounds cool. Could be a good effect.	08/03 - 16
	Placing: Normal Tempo: 80 BPM Octave: High	Clear 1st and 3rd beat. Less control on timing than in 1A5.	08/03 - 16
٠	Placing: Normal Tempo: 140 BPM Octave: High	Sound when dampening the 3rd beat. Besides from that clear.	08/03 - 16
	Fingering B		
	Placing: RdJ.t	Difficult to dampen the with the 4th finger when playing the 3rd	10/03 - 16

	· mgcmig 😅		
1	Placing: P.d.J.t Tempo: 80 BPM Octave: Low	Difficult to dampen the with the 4th finger when playing the 3rd at the same time. The rest felt good dampening. Clear sound with lots of attack.	10/03 - 16
2	Placing: P.d.J.t Tempo: 140 BPM Octave: Low	The same observations as in 1B1	10/03 - 16
3	Placing: Normal Tempo: 80 BPM Octave: Low	Very difficult to dampen the 4th and playing the 3rd at the same time. Feels unatural for the fingers and I have to drag the 3rd finger more out and up instead of letting it fall into my hand.	10/03 - 16
1	Placing: Normal Tempo: 140 BPM Octave: Low	Better with the 3rd and 4th finger because of the speed. Feels like the line is split in two between the bars.	10/03 - 16
5	Placing: RdJ.t Tempo: 80 BPM Octave: High	Little power in the 1st beat and the 3rd.	10/03 - 16
6	Placing: P.d.J.t Tempo: 140 BPM Octave: High	Difficult between 3rd and 4th finger. Difficult to jump down to 4th finger in bar 1 again.	10/03 - 16
,	Placing: Normal Tempo: 80 BPM Octave: High	The damping between 3rd finger and 4th difficult but the rest of the damping works good.	10/03 - 16
•	Placing: Normal Tempo: 140 BPM Octave: High	Same as in 1B7.	10/03 - 16

	Fingering C		
	Placing: P.d.J.t Tempo: 80 BPM Octave: Low	Feels good to play. Clear. Difficult to dampen the 1st beat without a sound. Good direction between the bars.	14/03 - 16
	Placing: P.d.J.t Tempo: 140 BPM Octave: Low	Gets a buzz on the when putting down the finger on the 4th beat in the 1st bar.	14/03 - 16
	Placing: Normal Tempo: 80 BPM Octave: Low	Even more difficult without getting the buzz. Big vibrations on the string. Sound good 2nd bar.	14/03 - 16
	Placing: Normal Tempo: 140 BPM Octave: Low	Less sounds on the dampening than expected. Difficult to dampen with the 4th while playing the 3rd. The rest feels very good for the hand.	14/03 - 16
	Placing: P.d.J.t Tempo: 80 BPM Octave: High	Feels good for the hand.	14/03 - 16
	Placing: P.d.J.t Tempo: 140 BPM Octave: High	A good forward movement, difficult without the buzz after the lift in 1st bar.	14/03 - 16
	Placing: Normal Tempo: 80 BPM Octave: High	Feels good for the hand. Good control of the sound. Less sounds from the damping.	14/03 - 16
•	Placing: Normal Tempo: 140 BPM Octave: High	Gets a buzz after the jump in 1st bar. More dampening sounds. Good forwards movement.	14/03 - 16
	Fingering D		
	Placing: P.d.I.t Tempo: 80 BPM Octave: Low	Difficult to get the hand far enough down. Can't get down. Like the sound. Difficult to be precise with the damping.	14/03 - 16
	Placing: P.d.J.t Tempo: 80 BPM		14/03 - 16 14/03 - 16
	Placing: P.d.i.t Tempo: 80 BPM Octave: Low Placing: P.d.i.t Tempo: 140 BPM	the sound. Difficult to be precise with the damping.	
	Placing: P.d.Lt Tempo: 80 BPM Octave: Low Placing: P.d.Lt Tempo: 140 BPM Octave: Low Placing: Normal Tempo: 80 BPM	the sound. Difficult to be precise with the damping. Much the same as 1D1. Much rounder sound with the etouffeé. Difficult to dampen in a	14/03 - 16
	Placing: P.d.I.t Tempo: 80 BPM Octave: Low Placing: P.d.I.t Tempo: 140 BPM Octave: Low Placing: Normal Tempo: 80 BPM Octave: Low Placing: Normal Tempo: 140 BPM	the sound. Difficult to be precise with the damping. Much the same as 1D1. Much rounder sound with the etouffeé. Difficult to dampen in a good way. Get the slap sound before the next note is played. Easier to dampen at the right time when its quicker. Less natural	14/03 - 16 14/03 - 16
3	Placing: P.d.I.t Tempo: 80 BPM Octave: Low Placing: P.d.I.t Tempo: 140 BPM Octave: Low Placing: Normal Tempo: 80 BPM Octave: Low Placing: Normal Tempo: 140 BPM Octave: Low	Much the same as 1D1. Much rounder sound with the etouffeé. Difficult to dampen in a good way. Get the slap sound before the next note is played. Easier to dampen at the right time when its quicker. Less natural forwards direction with the etouffeé than the other fingerings. Feels bad for the hand if I have it too far down. Playes as far	14/03 - 16 14/03 - 16 14/03 - 16
	Placing: P.d.Lt Tempo: 80 BPM Octave: Low Placing: P.d.Lt Tempo: 140 BPM Octave: Low Placing: Normal Tempo: 80 BPM Octave: Low Placing: Normal Tempo: 140 BPM Octave: Low Placing: P.d.Lt Tempo: 80 BPM Octave: Low	the sound. Difficult to be precise with the damping. Much the same as 1D1. Much rounder sound with the etouffeé. Difficult to dampen in a good way. Get the slap sound before the next note is played. Easier to dampen at the right time when its quicker. Less natural forwards direction with the etouffeé than the other fingerings. Feels bad for the hand if I have it too far down. Playes as far down as feels good. The damping comes early.	14/03 - 16 14/03 - 16 14/03 - 16 14/03 - 16

Table 2: System of tracking progress of bass line experiment and my own observations

Summary experiment 1:

1A

In 1A I discovered that this fingering has an active forward movement because the 2nd and 1st finger connect the first and second bar, and leads to the first beat of bar 2.

It was very difficult to set the 2nd finger down on the 4th beat in bar 1 without a buzz, especially in the lower octaves.

When I played in the high octave there was a lot of resonance in the bass strings.

There was quite a lot of sound from the dampening in bar one when using the first finger to dampen. This sound is very prominent in p.d.l.t in 140 BPM (1A6), to such an extent that it could be used as an effect.

1B

In 1B there was a great forwards movement within the bars, but the jumping of the hand breaks the line between the bars so you don't get the same movement towards the 1st beat in bar 2 as in 1A. It was also very challenging to dampen with the 4th finger while at the same time playing with the 3rd. This led to an unnatural movement in the hand and it was difficult to produce the same quality of the sound when playing the 3rd fingers as the rest of the line. Less sound from the dampening than in 1A.

1C

In 1C I had the same problem of dampening with the 4th finger and playing the 3rd at the same time. It had the very nice movement towards the first beat of the 2nd bar like in **1B.** It also had the problem of the buzz sound when jumping with the second finger in bar 1. It worked best in the upper octave.

1D

The last fingering was 1D. Here I used a technique called *etouffeé*. In this technique, you dampen the strings with your palm while playing the next note with your thumb. It is a technique used in classical music. This technique was difficult to use while playing *p.d.l.t* as the position of the hand prevented me from getting as close to the soundboard as I usually would when playing *p.d.l.t*. I went as far down as I could, and it did create a difference in the sound. As the damping comes a bit before the next note it creates this feeling of triplets. This worked better in the higher octave as I had more control over the damping and could also dampen closer to the playing of the next note. The sound in this technique is much softer and rounder that in 1A, 1B and 1C, and has more of the lighter overtones in the sound.

Conclusion of Experiment Bass Line 1

In this line the high octave worked better than the low one. In the high octave the rest of the strings will make a lot of resonance.

To jump with the second finger to a string just above is difficult to do without a buzz.

I get a better forwards movement when I connect the fingers when playing the 4th beat of the bar and the 1st beat of the next bar.

In most cases the technique *p.d.l.t.* worked better than normal placing on the string when it concerns the sounds from the damping and the buzz sounds because the strings vibrate less. At the same time it was more challenging to play the low octave bass strings so close to the soundboard because they have a very high tension and are heavy to play. This meant that damping with the 4th finger while playing the 3rd was more difficult to play in a clear and even way.

To play close to the soundboard in the lowest octave is not something that I have done before. I got a suggestion from my harp teacher that if I could try to leave the harp on the floor. This works much better for the hand and I can get a more natural way of playing.

Conclusion Experiment 2 and 3

It worked very well to play with the fingering 4 - 2 and then dampen the first one with the 3rd finger while playing with the 2nd. This feels natural for the hand and gives a good flow in the line.

The sound of the dampening is less when using 2nd and 3rd finger. When using the 1st it often gives a slap sound. This can be used as an effect, but is important to be aware of.

In the low octave, it is good to use the 1st finger as support when playing the fingers underneath. This

In the low octave, it is good to use the 1st finger as support when playing the fingers underneath. This gives a more controlled movement and more strength in the movement. To dampen with the 4th finger while playing the 3rd is more difficult the bigger the interval is between them. *Etouffeé* works best in the high octave. There is a clear difference in the sound when switching between *etouffeé* and normal technique. When the interval between the notes are quite big and I need to dampen a string that is higher than the one being played I can also use the side of the thumb to dampen. This creates less sound from the damping. To get the best flow it is best to connect the fingers as much as possible.

Here is a link to video material from all the three experiments: https://goo.gl/M47hHV

The guitar

To research the role of the guitar I have listened to a lot of guitar tango music. This is very interesting as one or up to 5 - 6 guitars were used to accompany the melody instrument. I chose to transcribe Roberto Grela and Leopoldo Federico's version of "Yo Te Bendigo" for bandoneon, two guitars and double bass. (Recorded by their ensemble "Cuarteto San Telmo",1966/2007) I acquired the transcription for the guitar voice from Leo Vervelde (Head of tango department at Codarts) made by Kay Sleking (tango guitar teacher at Codarts) for this version and transcribed the bandoneon voice and the bass voice. I also tried to write down a more detailed version of the guitar voices so that I could test out what might work and what didn't work on the harp. This resulted in my own transcription for harp and bandoneon.

An important thing I noticed was that while Roberto Grela had a lot of melody and countermelodies, the other guitarist was strumming the rhythm. I wanted to see if I could get the same effect of strumming my harp. I looked at YouTube videos of, amongst other folk harpists, Catriona McCay (2011) (https://goo.gl/KCr2EU) and started to develop my own technique. I have earlier seen and heard only folk harpists do this technique. I quickly understood why. The tension of the strings on the concert harp is so high that to me it was difficult to find a full and rhythmical sound with my fingernails. I therefore, tested this technique with finger plectrums on. When I have all the plectrums on my fingers the sounds gets very sharp. I discovered that if I use one finger plectrum on my 4th finger I get the natural sound of the nails on the 2nd and the 3rd finger, but still with the clarity and rhythmical precision of the plectrum.

What I found that Catriona McCay and other folk harpists do when strumming is to use the left hand to dampen the strings they don't want to resonate in the particular chord they are playing. I was looking to create the sound that I heard at 00:58 in "Yo te Bendigo", where there is a bass line with strumming in unison with it. I discovered that I can play a chord note with my 4th finger while keeping 3rd, 2nd and 1st finger on the strings that are not in the chord. Then I strum the strings with my other hand. The result is a clear bass line with the sound of a rhythmical strumming at the same time.

I discovered that the sound was not as full as I wanted it to be when I strummed. I realised that the pedal placement could help with this problem. The concert harp has 7 pedals. Each one has three levels. The pedals change the note of the strings a half note up or down. When the pedal is in the middle the note is without a sharp or a flat. There is one pedal for C, one for D, one for E etc. For further information on how the system work follow this link: https://goo.gl/ylp2Yg (Einarsdóttir)

The first chord in bar 32 is B - minor. I changed the G-pedal to G flat which is the same as F sharp. Now all the G-strings were G flat. I could stop dampening this string and let it resonate in the B - minor chord. I did the same thing with the C-pedal, all the C- strings became C flat, same as B natural. The result was a sound with more body and a more even strumming. I repeated this process in the next chord. This process gave me this result:

Position of the pedals in bar 32 - 34: **D E F# Gb A B Cb** Position of the pedals in bar 35 - 37: **D E F# Gb A# Bb C#**

Video of the bars 32 - 37 as explained above: goo.gl/ZG9pAE

I chose to focus on one more technique that the guitar uses in this piece. In the first bar the guitar plays a motive of 5 notes that lead to the first beat. This is a chromatic motive and it has a role of setting the tempo of the song. This is a chromatic line and looks like this:



The system of the pedals makes it challenging to play chromatic on the harp, especially if the chromatic line is fast. It is also difficult to get an active forward movement which is important in this motive - as it is leading towards the first beat of the next bar - when repeating the same string in a quick tempo. To solve this I decided to use pedal slides on this motive. A pedal slide is made by plucking the string, then without damping the string press the pedal of this string and change the note of the string. The string will still resonate and a new note one half note about or below the first one plucked will now sound. What is important to be aware of when using this technique is that the slide will always be a decrescendo. In this motive, I needed to do a pedal slide on the G-string and on the B- string, which is the last note before the first beat of the second bar. This meant that the first note of the bar would be a slide and a decrescendo. To get a direction towards the first beat and a small crescendo instead I added a base note one octave under which I play at the same time as a do the slide.

It would be a possibility to slide on the A-string instead of the B-string, so that you get the line: F natural - G natural - G sharp - A natural - A sharp - B natural instead. This would be very difficult because both the G-pedal and the A-pedal are on the same side of the harp. The foot would have to move very quickly from one pedal slide to the next. In the first solution, I use one pedal on each side so that the left foot does one pedal slide, and the right foot does the one straight after. The last challenge in this pedal-slide is that the foot has to be extremely rhythmical and "play" musically as a part of the fingers. This was a new way of thinking for me and needed a lot of practice.

Video of bar 1 slowly: goo.gl/MXjoAY

Video of the first bars normal tempo: https://goo.gl/6jorCo

The double bass

My third task in this intervention cycle was to experiment with double bass techniques and see how it could inspire the use of the bass of the harp. I did this through a focused exploration with Alexander Vocking (Graduated master student at the Tango Department, Codarts University of the Arts). We did this lesson as a focused exploration and used the compendium "The Tango - A secret code" by Juan Pablo Navarro as a guide. This compendium was used as a workshop handout to follow his workshop in 2013 on the ISB Convention, International Society of Bassists. https://www.youtube.com/watch? v=hWUmBQv-3nQ. All sheet music examples in this chapter are from this compendium.

In this exploration, my goal was to understand the intention of the techniques and find ways to get the same effects on the harp, not to get to focused on creating exactly the same sound. I recorded the whole session. I have here collected the most important discoveries I found. In tango, and especially on the double bass, the different styles are very important for the interpretation of the piece. The sheet music of a piece of Pugliese and a piece of DiSarli could look almost the same, but the name of the composer will change the whole playing style and technique of the double bass player. I have therefore, been aware of what style we have been working on, but mainly made my final decision about what to transfer to the harp based on what I think worked artistically well for the instrument. I also kept in mind what would be interesting to use in a duo setting, instead of an orchestra setting. Here are my most important discoveries:

Salgán's síncopa



Double bass

This is a motive where the attack is on the first note. Then it quickly draws back and the sound gets rounder and more piano. On the bass they pluck the string high close to the bridge on the first note and move higher on the next two. The first note needs to be a bit sharp with a lot of attack. It also needs to be dampened as soon as possible. Already on the second note we want less attack. https://goo.gl/YhZOme

Harp

We placed the first finger close to the soundboard to create a lot of attack and the rest ones played higher and then even higher on the string. This is a natural thing to do as the soundboard moves down I can have my hand almost in a natural angle and get this effect. I also use my thumb and drag the string out when paying it so that the attack is even higher and you get a rough sound. I play a decrescendo and put the 1st finger back on the first string when playing the 4th finger to dampen it. https://goo.gl/K467IK

Salgáns style in síncopas



These *síncopas* are also in Salgán style. They are usually performed playing arco, but you can also do them pizzicato. There are two versions of them.

Version one

Double bass

The first note has the accent and should have a lot of resonance. The second note should be something between a note and a ghost note. The way the bassists do it is play the first note high on the string so to get a lot of bass, then the next one on the same string lower down while dampening the string at the same time with the other hand. https://goo.gl/Jn9ptn

Harp

To do this on the harp I tried to play the first note high on the string and then just dampen it. This didn't give a strong enough sound on the second note. We found a way of dampening it with more movement and using the side of the little finger, 4th finger and 3rd finger. This gave a strong sound of damping also producing some overtones and body in it. Also, it was good with a big physical movement so that the audience will see an action being made. https://goo.gl/TDPG22

Version two

Double bass

In this version, there is also an accent on the second note. While the first one is round and with a lot of resonance, the second should be short with attack. https://goo.gl/3mECrC

Harp

This was challenging on the harp because I had to put the finger back on the same string and play it. The bass strings vibrate so much that this is difficult to do and keep the timing at the same time. Also, it makes a strong damping sound when I put the finger back that should not be there. We started exploring the method of gliding. On the harp this is a technique that is commonly used to help with the problem of only using 4 fingers on lines of 5 notes. We do not, however, glide in the deep bass. On double bass they use more fingers the thicker sound they want. I solved this by gliding with two fingers on the first beat, then playing a short note with the 2nd finger closer to the soundboard. https://goo.gl//vxmBrn

Basic síncopas

Anticipated syncopation - síncopa + arrastre1



Double bass

The double bass uses the bow and played a short *arrastre* with the accent on the end. https://goo.gl/LwUwdN

Harp

On the harp, I play an *arrastre* with a line towards the first beat. Then I repeat the note on the same string with the same finger (1st finger) and stop it quickly with the same finger, before I jump up an octave to play the last note.

https://goo.gl/sERTmq

Pugliese Yumba



Double bass

In *yumba* the 1st and the 3rd beat are early and short, and the 2nd and 4th beat are laid back and will sound until - and lead towards - the next beat. The timing and tempo are very important in this style. https://goo.gl/gV3dBo

Harp

On the harp, I play a bass note with the 1st finger of my left hand, and a chord with my right hand, then quickly reposition the same fingers to stop the sound. The third finger of my left hand makes a short and quick glissando from the bottom strings on the 2nd and the 4th beat and let them sound until playing the next beat. Then muffling them in the same movement as playing the string. https://youtu.be/8LrNCLIXFGc?t=1m22s

I later showed this technique to my main subject teacher Wim Warman and we developed this technique further for situations where more sound and attack is needed. You will find this technique in my reference recording.

¹ Arrastre is an effect in tango music, where one slurs the chord to an accentuated part of the bar (Vervelde, Warman, 2001).

Piazzolla Yumba



Double bass

This is done with a bow *arrastre* on the 1st and 3rd beat and a hit on the bass body on the 2nd and 4th. The hit is done on the backside of the bass and they want a dark sound. A variation is to hit it on the top for a lighter sound but still strong and clear. The other way to make the Piazzolla *Yumba* is to do a strappato on the 1st and the 3rd beat and then hit the bass. The strappato is done by hitting the strings with the bow and then letting the bow jump on the strings. Then they dampen it with the other hand very quickly.

https://youtu.be/8LrNCLIXFGc?t=57s

Harp

I decided to test out the last technique. To make the sound of strappato on the harp I played a sharp and rough glissando from the lowest string with so much attack that the strings would hit against each other and created this very sharp sound. Then I dampened it with the right hand. I used my left hand to hit the harp on the back of the soundboard.

https://youtu.be/8LrNCLIXFGc?t=1m3s

Artistic discoveries

Through the first intervention cycle I made some big artistic discoveries.

The first one was that the double bass and the guitar are closer to the harp than the piano. The direct connection the finger has with the strings on the harp, makes the playing technique between the harp and the piano very different. Even though the system of the piano and the harp are more similar to each other - both use the G-clef and the F-clef and both have the bass in the left hand and the melody in the right - the different ways of producing sound makes them far apart. Things like attack, dampening, vibration, resonance are topics that are closer related between the bass, harp and guitar. And these issues are especially important in tango.

To create the real atmosphere of the tango it's important to work with the sound, not only the notes. In tango a bass line played by the double bass in for example Pugliese style, the bass will sound dry, rough and almost without a tone, but in the setting of the típica orchestra this helps to create that special sound and feeling that makes it tango. I have to be much more aware of the different shades and colours in the sound I am creating on the harp when I am working with tango, not only looking for the "prettiest" sounds.

I realised that one big difference between the tango and the classical music I have been playing is that tango is one step closer to improvisation. Tango is about the feeling that you want to express, not necessary all the notes. Through using *fraseo*² it leaves more room for the musician to have his/her own expression and sound. Also, the tradition of making own arrangements opens up for more creativity and lets the musician shape and personalise the music to a bigger degree than in classical music.

The versatility of the harp is larger than I knew before starting this cycle. I have discovered so many new ways to play the harp, much more than I thought I would. I have also trained my ear in a way that

² Fraseo/fraseado [phrasing/phrased]: use of accelerandos and rallentandos and, in general, of techniques that alter the structure of the melody rhythmically, mainly in order to avoid aligning with the beat. It can also involve ornaments and modification of timbres and pitch. In this way, the performer – while playing a solo passage – transfers his subjective conception of the piece to the written structure (Pega, B. A.).

I now can hear all the different shades of sound I can create. In the bass strings for example I knew being a classical harpist that the sound would get clearer and more nasal the closer to the soundboard you get, but I didn't apply this knowledge like I do now.

I have also discovered that my fingers in my left hand are not strong enough to do the things I now want to do. As a classical harpist, we rarely work so much down in the two lowest octaves, at least not with so strong dynamic as I do now.

Reference recording

My new reference recording is a recording of the piece "Yo Te Bendigo" arranged for harp and bandoneon, based on the version by Federico/Grela. In this piece, I use the harp as a tango instrument with tango techniques and sound, moving away from my classical point of view. I chose to use this as my reference video for two reasons. This song has a quite high tempo and it is also played in a traditional way. And just like my first reference video the version I transcribed from was arranged for

bandoneon, guitar (two) and bass. Again, I am here taking on the role of both the bass and the guitar on the harp.

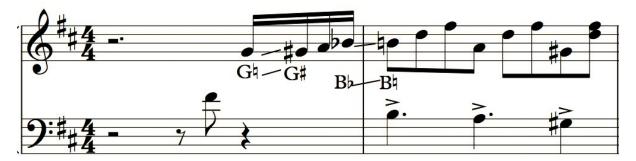
For me it is very interesting to see the different choices I have made this time. I believe that the biggest difference when working with this song compared to "Bandoneon, Guitarra y Bajo" is that I was much more focused on the bass this time. Both in what the bass was doing and how I could "translate" this to the harp. I was also much more aware of the bass in the interpretation of the piece. Earlier the sense of "balance" between the bass and the right hand clearly came from the classical point of view, while now my sense of balance needs a lot of direction in the bass, and weight.

Guitar techniques in "Yo Te Bendigo"

In Yo Te Bendigo, I am trying to play the guitar part as closely to the original as I can. I have made some choices to change it - in every instance because of limitations of the harp and that I have found better solutions. I then strive to finding the same effect as produced on the recording. I have chosen to use the strumming technique only in bar 32 - 38 even though one of the guitars are strumming almost all the time. This is because the strumming takes up two hands, so nothing else can be played at that time. I can also get the same effect as strumming when I do quick arpeggios (like I do in bar 14) and without changing the sound too much. In bar 32 there is a change of atmosphere and that is why I find that a good moment to change to the strumming technique.



I will use the pedal slides in both the first bar of the piece and in the harp solo from 39 - 43 as some of the melodic lines have a lot of chromatics in them.



In the harp solo, the pedal slides will not come on the beat so the forward energy will not be negatively affected.



Bass techniques in "Yo Te Bendigo"

I have also incorporated some of the bass techniques I have found in this intervention cycle; In bar 27 - 29 I have decided to use the Salgán *síncopa*. In the recording, they are playing an accented 8- note before the first beat of bar 28. This is where I thought it would be fitting to put in the Salgán *síncopa*. I also wanted to play the entire motif of this *síncopa*, so I do that instead of lying on one note as the bass does in the recording. I repeat it in a different chord in bar 28/29.



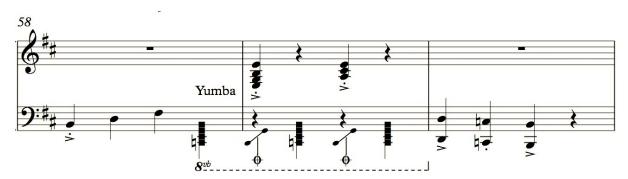
https://youtu.be/CdaUJAdaLss?t=20s

In bar 56 - 58 the guitars are playing a long *arrastre* on the 4th beat into the 1st beat. I wanted to make a long *arrastre* using the new knowledge I have. I decided to make the 4th beat with lots of sound but with little attack. So, I start the 4th beat placing my fingers on the middle of the string. I tried to turn my hand so the next notes in the *arrastre* go closer and closer to the soundboard. The last note that lands on the beat is really short but with lots of attack so I play it very close to the soundboard, using 2nd finger instead of 1st as the second finger can "drag" the string out to the side more than the 1st and make an even stronger attack sound. I dampen the string quickly and play the rest of the bar in two. On the 4th beat comes a new *arrastre* leading to the next bar.



https://youtu.be/CdaUJAdaLss?t=30s

In bar 59 there is *yumba* timing. Here I use the techniques I have developed with Alex Vocking and Wim Warman. In the end of bar 58 they slow down a little and start the *yumba* on the last beat of bar 58. In bar 59 I keep the *yumba* but gradually go back to playing with straight beat.



https://youtu.be/CdaUJAdaLss?t=42s

Piano techniques in "Yo Te Bendigo"

From bar 17 till bar 23 I have used walking bass in the same style as in my experiment; legato with extra energy on the 1st and 3rd beat. I have used the conclusion of my experiment to decide the fingering/damping of this walking bass (see the reference recording).



You will find the full score of the arrangement I have made of "Yo Te Bendigo" for harp and bandoneon in the Appendix G.

Full video of "Yo Te Bendigo" for harp and bandoneon, with Julie & Andreas performing: $\underline{\text{goo.gl/}}$ $\underline{\text{cJEZZL}}$

Second intervention cycle How the harp can hold the tango melody

In my second intervention cycle I wanted to look at how to use the harp as a tango melody instrument. I will use the video "Yo te Bendigo" from the end of my first intervention cycle as my reference recording. The feedback on this that I have received from my teachers is that the tempo is a bit low. In the parts where I play the melody the feedback I have received has been about using some *fraseo* and more elements typical for the harp. My own feedback for the parts where I play the melody is to have a stronger character and more variation in the sound. I want to have a broader spectrum of sound qualities.

This feedback, and as well the feedback from Carel Kraayenhof from my first reference recording, made me decide to have a closer look at the melody tradition that guitar and bandoneon have, to see if I can find ideas on how to hold the melody inspired from their tradition around it. As I have already established a close relation between the harp and the guitar, it will give me a broader repertoire of sounds and ideas on how to use my own (string) instrument. The bandoneon is close to the harp in the way that it is also a two handed chord instrument. I am especially interested to see how the bandoneon uses its ability to play chords to emphasise the melody, as it does in so many solo bandoneon arrangements.

In the start of this cycle I made a big decision concerning my research. I decided to include my wire strung, lever folk harp into the research. There are many types of harps in this world. When I started this research my plan was to focus only on the pedal harp. One of the reasons for this was that my focus is to bring the harp from the classical tradition and into the tango tradition. It was also because based on my former knowledge of the tango and the folk harp, I believed that it would be almost impossible to use the folk harp in this style, because the lack of the pedal system makes it more limited when it comes to harmonies and chromatics. It is also important to mention that at the time I started the research the only folk harp I had was a small diatonic one. As I worked on my first intervention cycle I discovered things that I could make work on the pedal harp, but I wasn't completely satisfied with the results. At the same time my research brought me towards many interesting folk harp traditions around the world.

One year earlier I had already ordered a Scottish folk harp that was being crafted during my first year at the masters here. This harp has a lever system to change the note of the string. When I picked up the harp this summer I had already reached the point that I was curious to see if I could also use this harp for tango.

During the summer months after my first year of the master I spent a lot of time getting familiar with the new system so that I could be able to use this harp on a high musical level this year. I am now discovering that including this folk harp into my research opens up for many more possibilities and colours of sounds as many of my newly found techniques that work poorly on the pedal harp work well on the folk harp. As we today have the technology to amplify the folk harp, the biggest challenge and perhaps one of the reasons for it disappearing from the tango tradition, is no longer a problem. This has led to my decision to bring this harp into my research. I will name it the *lever harp* in this research, and the classical harp I will call the *pedal harp*.

The most important differences of the two harps:

- The tension of the strings. The lever harp has lower tension on the strings than the pedal harp. The lower tension makes it easier to do ornaments, quick melodic lines, strumming, use of plectrum etc.
- Levers instead of pedals. The levers work in the same way as pedals, but the harpist
 has to use a hand to switch them instead of a foot. The levers have two positions, while the pedal
 harp has three. This means there are some keys the folk harp can't play.
- Less strings. The folk harp is smaller and has a smaller range of strings.
- Different sound. The sound of the lever harp is more clear and has more punch in the sound. It lacks the roundness of the pedal harp.

Guitar melody in tango style - Focused exploration with Tim Panman

I started this cycle with going deeper into what are important techniques for the guitar when playing the melody in tango, and if any of these can be used on or transferred to the harp. I did an interview, again with focused exploration, with tango guitarist Tim Panman.

To see and hear how the different techniques worked, please visit this link: https://goo.gl/5PzLgy

Plectrum

How the technique works on the guitar

The use of plectrum in the tango comes from the tradition of Roberto Grela. In this tradition, they play with the plectrum strumming downwards always, except from when playing fast melodies. The effect that this technique gives is a stronger and a more accurate attack on the string. In guitar ensembles, it creates a big contrast to the softer sound of the accompaniment. The way the plectrum is used will greatly vary on the result each musician wants. For example, a grip of the plectrum where a big piece of it is sticking out from the fingers gives the musician more freedom in movement as there is a bigger chance that the plectrum will hit the string, while a grip where a shorter piece is sticking out gives the musician a more accurate attack. Also, it's important that the plectrum hits the string a bit from the side, not completely straight, and it should be gliding smoothly on the string.

How we solved it on the harp

We began by testing this on the lever harp. A grip with a shorter piece sticking out works best on harp, as the strings have a lot of tension and you need a lot of control on your grip. Both ways of strumming work and can be used, but strumming towards the body give the best control of the movement. We made the observation that on the guitar gravity will always work with the strumming, while on the harp it is a more horizontal movement so you don't get that as strongly. Playing with the plectrum was absolutely something to follow up on, but it was clear that it needs practice. The most difficult part of it was to use small enough movements that I could play in a high tempo while at the same time having a good and controlled punch to the string.

I also tested using the plectrum on the pedal harp, but because of the higher tension on the strings of the pedal harp, it is easier to make this technique work well on the lever harp. With practice and testing of different types of plectrums it can also be an interesting technique for the pedal harp. In the context of a harp and bandoneon duo playing with a plectrum, which gives a more percussive sound than with the fingers, would create a contrast to the rounder long notes of the bandoneon.

Dampened plectrum sound

This is a technique used both when accompanying and when playing the melody.

How the technique works on the guitar

To create this effect the guitarist dampens and plays the string at the same time, in a way that leaves the strings some room to vibrate and create sound. After playing the string the guitarist will increase the pressure on the string with the right hand, dampening it completely. The sound will sound a bit like sitar.

How we solved it on the harp

Due to the previous findings with the plectrum, we only worked with the lever harp for this. The way I found I could do it was to pluck the string with a plectrum while keeping the lower palm of the hand on the string. On the harp, it was challenging to find the exact pressure to dampen and the perfect moment to dampen to create this special sound. It worked well when the timing of the dampening was correct.

Hammer-on and Pull-off

How the technique works on the guitar

These are techniques where the guitarist creates a new tone using the fingers of his/her left hand instead of playing the string with the right. "Hammer on" means that they press the finger hard on the string and can create quick ornaments. The note will not be very strong as it is not plucked, only pressed. The "pull off" is similar, but instead of hammering the string, the left hand plucks the string. It creates a more "lazy" sound than when it's plucked with the right hand. The application of this technique makes it easier to play fast melodic lines. When used as ornaments, both of these techniques are applied half a note or one note over the note to which it's creating the ornament.

How we solved it on the harp

On the harp the "hammer on" is close to the use of pedal slides, or lever slides on the lever harp. Often this technique is used creating an ornament that goes from for example c - c# - c, where the c# is the hammer on, before it goes back to c again. On both harps, it would be natural to pluck the string once, and then let the last two notes be made by the lever or pedal moving up and down. Here you could say that the pedal or the lever works as the guitarists left hand and "hammers" the string. The pull off is not relevant the for obvious reasons.

Ponticello

How the technique works on the guitar

This is a technique which gives the guitarist a sharp sound, though less percussive than when he uses plectrum. Ponticello means to play close to the bridge and it's the opposite of the technique called "Tasto" - playing close to the fingerboard - which creates a rounder sound. Ponticello is used a lot in flamenco and can give the guitar the punch it needs to go through a bigger ensemble or to create a contrast with a softer accompaniment.

How we solved it on the harp

On the harp this technique is very similar to the harp technique called "*Prés de la table*" where we play very low on the string. This has the same effect of a sharper sound with more punch in it.

Chromatics

When the guitar plays the melody in the tango it always includes a lot of chromatics when forming the melody line.

How the technique works on the guitar

Playing chromatics on the guitar is a very natural thing to do as in order to play a chromatic line you will simply glide your fingers of the left hand in a line. One example of where the guitarist would put the chromatics is when the melody has a big interval upwards. It would then be natural to add 2 - 4 chromatic notes in an upwards motion before reaching the melody note. If the guitar plays the same melody line twice in a piece it's also common that the second time around the guitarist will use more chromatics to create a stronger variation from the first time.

How we solved it on the harp

Chromatics on the harp is not a natural thing for the instrument. As the harp is set in one key, it will be necessary to use pedals/levers to create chromatic lines. As chromatics lines often move quite quickly in tango, there might not be time to pluck the string again for each note. Instead of plucking, we can then use a pedal/lever slide, where the attack of the lever/pedal creates the new note, just like I mentioned in the part about the "hammer on". This creates a decrescendo, which Tim did not experience as a problem for the style.

Licks

Licks are small fixed melodic phrases that come in handy during improvisation. The ones Tim showed me are used when finishing a melody line and especially when handing the melody over to someone else. In that way, it often has a concluding feeling which also invites to something new. There is often chromatic lines to be found in these licks.

Here are some examples of licks.

Lick 1

A lick in 3/4 on the tonic, here written in the key B minor.



How we solved it on the harp

To play this lick I play the first three notes as normal, and then use a pedal/lever slide from the F so that the F# is a slide. I do the same from Bb to B. On the pedal harp, I could also do it another way. I could arrange the pedals like this from the start: B C# D E F Gb A# B which means I could use the G string to play the F# and the A-string to play the Bb.

Lick 2

A lick in 3/4 on the dominant, here written in the key B minor.



How we solved it on the harp

To play this lick I first have to make sure I preset an A#. On the lever harp it is not possible to make A# on the A-string, therefore I have to use Bb instead. From F# to F I use a pedal/ lever slide and finish by playing the E as normal.

Lick 3

A lick in 3/4 on the dominant, here written in the key B minor. This lick normally finishes on the A#, but Tim added three notes to lead it back to the tonic.



How we solved it on the harp

To play this lick I first have to make sure I have an A# from before. On the lever harp I will again play Bb on the B-sting instead of A#, which means I have to make a lever slide from B to Bb. On the pedal harp this lick can be played without any slides.

Lick 4

A lick in 4/4 on the tonic, here written in A minor.



How we solved it on the harp

This one is played by plucking the first string as normal, then making a pedal/lever slide from D to D#, and continue with normal plucking after that.

Harmonics

Tango guitarists often use harmonics in their melodies, either as a colour, or even for a whole melody line. They can also add chords played entirely with harmonics, further adding colour to the melody. In modern tango pieces there is also use of harmonics with corresponding non-harmonic bass notes.

How we solved it on the harp

Harmonics is used a lot on the harp. When playing a melody using harmonics with the right hand, the left hand can add chords with harmonics, or bass notes and chords with normal plucked sound.

More effects and techniques

The guitarists will always play *fraseo* when playing a tango melody. They will also use repetition of one note a lot, mostly with a crescendo. This is something that Roberto Grela did a lot and that has become a characteristic of the guitar melody tradition. A guitarist will also colour the melody by adding chords while playing it. All of these three can be applied on the harp.

Some of these guitar techniques are already techniques the harpist can use on the harp and as such they can be easily incorporated into the way I play a tango melody on the harp. These techniques are: harmonics, the licks, *ponticello - Prés de la Table* on the harp, adding chords to the melody and repeating a note. (The repetition of a note will be something I will go deeper into in the next part of this intervention cycle; the case study.)

Plectrums

One of the techniques Tim Panman showed me from the guitar melody tradition was the use of plectrum. This is a big part of the tango way to express the melody, developed by Roberto Grela who's work I had already transcribed "Yo te Bendigo" in my first intervention cycle. I realised that to try to transfer this interesting technique to the harp I had to go a bit deeper into this material. He helped me with what plectrum could work on the harp, what hand position to use and which different sounds this could produce.

I began with a literature study to find out if a tradition for using plectrum on the harp already existed somewhere. This initial research led to very little findings. I found the use of nails, and artificial nails in some cultures, for example in Spain, Latin America and Ireland, but no mention of plectrums. Then I found an article by Rowan (2013) called "Three Ancient Harp Techniques for Today's Harpers". This article describes the use of plectrum as something harpists can try out, and refers to the use of plectrum on the lyre of Israel and today's krar. The author also refers to Asian guzheng musicians using one plectrum on each finger. To try out plectrum on the harp Rowan advices to start with the soft oud plectrum.

In the next part of this process I emailed historical harpist Siobhán Armstrong, a contact and teacher of mine from a Summer course in Ireland in Early Irish Harp. I knew Siobhán had a great network and a deep knowledge about historical harps and various folk harp cultures around the world. I asked her if she knew of any harp tradition that uses plectrum, and if so, what type of plectrum they use. She answered me that she does not know of any culture that uses plectrum on harp, beside from other string instruments like the guzheng.

I acquired different types of plectrums from different cultures with string instruments. Earlier master student at Codarts, Giannis Koutis had introduced me to the instrument qanon some months before this and I decided to try the plectrum from this tradition. This plectrum is used with a metal ring around the finger, and plucks the strings almost in the same fashion as a harpist would use the finger tips or nails. I used a video where a qanon player named Bassem Alkhouri demonstrates how to play this instrument and how to hold and use this plectrum, https://goo.gl/xPRJU9 (Atlasensemble1, 2010). To find out different ways to hold the oud plectrum I found a video where this is demonstrated https://goo.gl/bXAoyx. (Majnuun Music & Dance, 2015).

The plectrums that I think work best are the oud plectrum and the ganon.

Case study of "Con el Cielo en las Manos", A. Piazzolla arrangement for solo bandoneon

<u>Triangulation method: Analysing - Interview - Analysis</u>

I have used the solo bandoneon arrangement "El Cielo en las Manos" by Astor Piazzolla as a case study in the next part of this intervention cycle. The bandoneon is a two handed chord instrument like the harp. Since the bandoneon is such an important instrument in the tango - many even call it "the soul of the tango" - it's interesting to go deeper into how the bandoneon expresses the tango. In this case, I will look at how the bandoneon expresses the melody.

At a quick look at a solo arrangement for the bandoneon it can look quite similar to how a solo arrangement for harp would look. It has the left hand in the F-clef, and the right hand in the G-clef. The right hand often plays chords that are open, spreading over a wide range. Often the left hand moves in slow arpeggios and broken chords. The right hand usually has the melody with some chords and movement around it. This is similar to how the harp would be arranged. In this case study, I will analyse the A part of this piece, with focus on how the melody is expressed and on finding ways to express the same ideas on the harp. I will then interview Gustavo Beytelmann, tango pianist, composer, arranger and artistic leader of the tango department on Codarts University of the Arts about this piece, and in the end I will make my own arrangement of the first two pages for solo harp.

To look at the score of the A-part of the original arrangement (Piazzolla, 1950) for solo bandoneon, please go to Appendix H.

Analysis of "Con el Cielo en las Manos" by Astor Piazzolla

While analysing this piece I also listened to Juan Josè Mosalini's recording of this piece on the album "Buenas Noches Che Bandoneon" (2011).

This piece is arranged in B-minor and has two parts, an A-part and a B-part. I will focus my analysis on the A-part, starting from the mark 1 in the sheet music.

In the first two bars the left hand plays broken chords on 8-notes, and holds the chords for two beats. The bass moves in a downwards movement B natural, A natural G sharp. In the second part of the second bar the left hand has a pause, giving space for the ornament in the right hand. On the last beat of the second bar the right hand has a big chromatic ornament that moves from C natural - C sharp - D natural - C sharp - C natural - C sharp and lands on E natural in the next bar. One beat before this ornament, we find the first use of *the octave* in the A-part: the bandoneon plays the c one octave higher than where the trill begins, as an upbeat to the first C natural in the ornament.



In the 3rd bar the bass continues the movement from G natural to F sharp and in the next bar it lands on the B natural in Bm7. This is the first place that the melody has added notes from the chord in sixths that move parallel down to the B-minor chord in the 4th bar.

In the next bars the melody line is staying on the B natural, and in this arrangement we see how Piazzolla made variations even though he is just repeating the B natural. Examples of this is how he incorporates small jumps up to the octave above and small chromatic lines. Just before the last B natural in this part, before the melody goes into the ending of the A-part, he intensifies the octave jumping with three jumps in a quintuplet movement. In these bars with variations over the B natural, the left hand moves from Bm7 to B7, to B diminished and C#m7b5/B, with the B natural as a pedal the three bars. The chords are played over a wide range, and go even wider into the next bar on G7 and F#7 where the range is one octave plus a seventh.



From bar 9 the A-part repeats again. In the second part of the second bar the same chromatic ornament from the first A-part comes, with some added notes. Again, the next bar has some added chord notes in sixths in the left hand and lands on a Bm7.



For the next part there is again an upbeat from the octave above leading into the 5th bar of the second A-part where the 7 and the 9 from the C9 is included in the right hand and repeats on every melody note. Also, in the left hand the chord is repeated in the same orchestration, ranging over 2 octaves plus a third. It ends in a dense G#mb5/B on the first beat of bar 6.



In the last two bars of this part which finishes the A-part we see again that the left hand has some breaks leaving space for the right hand to ornament and phrase. In the 7th bar the melody line stays on the C natural, which gets repeated 6 times before it moves up to G natural, and then concludes the melody line back home to B natural and the Bm chord.



The things I find most interesting with this arrangement is the use of:

- octaves
- chromatic phrasing and ornamentation
- open chords in the left hand, elegantly leaving so much space for the right hand
- added chord notes in the right hand at the most dramatic parts of the piece and on the beats where the melody "lands"

On the next pages comes the full score of the first A-part of "Con el Cielo en las Manos", the bandoneon arrangement by Astor Piazzolla.

Interview with Gustavo Beytelmann

I will here write down what I found most important for me and my case study from this interview.

Julie: "Let's talk about the solo arrangement of "Con el Cielo en las Manos" by Astor Piazzolla. You knew Piazzolla well and his music, and you have the perspective of a composer and arranger as well

as a musician. For me this sounds like a very bandoneonistic arrangement. What is the strongest bandoneon techniques and bandoneonistic musical elements in this solo arrangement, and would you also use and play these on the piano and other instruments?"

Gustavo Beytelmann answered that there are many techniques that are especially bandoneonistic, and that there are at least two important ones that we can hear in this bandoneon solo arrangement. The first one is how the bandoneon expresses the chords, with a very wide range. Playing this on the piano would be close to impossible as the distance is so big.

The second bandoneon technique Beytelmann talked about was *the repeated notes* and its variation: *the octaves*, which is another type of repetition. This is something the piano also can do, but a pianist would not do it all the time. The repetition of a note is easier and a more natural thing to do on the bandoneon because the bandoneon does not offer any resistance. The piano has resistance on every key which means the pianist have to use more energy pressing it down. It is the same with the octave. This repetition of the note is not a regular motion. The expression of it can vary in many ways, for example with an accelerando towards a ritardando, or the contrary. Together with the octave this produces a musical effect which can almost be seen as the conversation in music, very close to a verbal way of expressing something. You can hear how the musicians put, or try to put the music and the notes closer. Beytelmann mentions that both Piazzolla and Troilo did this very well. You can almost hear the words be spoken as they play, and he believes that they had in their mind something that goes between the music and the language, almost like a bridge. This is what the octave does with the expression of the music. In a more technical way the octave also can be used as an upbeat to a more important note, almost like a punch to the second note so that this note gets a little plus, a little more importance.

These bandoneonistic techniques, Beytelmann believes, originate not from the development of the instrument, but that they developed because the tango itself influenced the instrument. He also points to an interesting question about why the bandoneon was preferred over the accordion in the tango, as the accordion also was in Argentina at the time. Beytelmann believes that the bandoneon was closer to the human voice than the accordion, so that they already had a model to go after. This is also connected to the bridge between the musical expression and the vocal expression that Beytelmann mentioned earlier.

The solo harp arrangement

These are things that I wanted to use in my transcription/arrangement for solo harp.

I start the arrangement in the same way as the bandoneon does, with the only difference being that I have octaves in my bass in the first two bars to create a rounder and more full bass sound.



Chromatic ornament using one pedal slide and one double pedal slide.

I have the same chromatic ornament on the last beat of bar two, as is in the solo bandoneon arrangement. The way I have solved this is by playing the c one octave above, then the first c in the ornament, a pedal slide up to c#, then I pluck the d and the c# and use a double pedal slide to c and c#.

Repeating notes and using/developing octaves on the harp

In the three coming bars I have tried to use the repetition of the B - and the use of octaves - in a way that suits the harp.



To repeat a note on the harp is possible, but it takes some extra movement to pluck the same string, and it can create a buzz sound when you put the finger back to the string just after it is plucked. To play octaves works much better and to translate it even more to the harp I changed the c-string into Cb so that it is enharmonic³ with the b-string. Then I have the possibility to repeat the b note using two strings, and I can easily jump from octave to octave to create a feeling of bisbigliando (It's important to be aware, however, that this cannot be done on D natural, G natural and A natural).

In bar 4 - 6 of the A-part in the solo bandoneon arrangement, the bandoneon has a chord in the left hand lasting two beats, leaving space for the right hand to play with the octaves and the B in the second part of the bar. Instead of having a chord, I use long arpeggios starting on the B natural in the same chords as used in the bandoneon arrangement. The arpeggios have the same duration as the chords in the bandoneon arrangement and also leave space for what is happening in the right hand. I have also expanded the sixth bar to last two bars in my arrangement.

Bandoneon arrangement:



Harp arrangement:



³ Definition of enharmonic. Adjective. Music. Of, relating to, or involving tones that are identical in pitch but are written differently according to the key in which they occur, as C sharp and D flat, for example. ("Definition of enharmonic", 2016. https://goo.gl/mDgrF1)



Change of sound the second A-part

The second time the A-part comes I wanted to create a variation to the round and warm sound I am going for the first time. I therefore play *etoufée* and closer to the soundboard to find a sharper sound with more punch, inspired from the guitar technique *ponticello*.

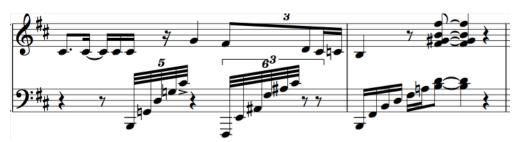
Including more chord notes in bar 15 - 16

From bar 14 I am back to the rounder sound again and use, like the bandoneon arrangement, more chord notes in my right hand to make the sound thicker and louder. To emphasise this I also jump down with my left hand to play a low C natural in the bass that resonates through the whole bar.



Ending of second A-part

The next two bars I have arranged very close to the bandoneon arrangement, using both a pedal slide to create the nice line from the A natural - A sharp - B natural in the melody, using a downwards movement that is a bit shorter towards the C natural in bar 17. In bar 17 I repeat the C natural almost as written in the bandoneon arrangement, only with an incorporated arpeggio in the left hand that does not destroy the rhythmical pattern of the C natural.



To see full score of the harp solo arrangement of the A-part of "Con el Cielo en las Manos" go to Appendix I.

Artistic Discoveries

During this intervention cycle I have already made some great artistic discoveries.

The first one I made was how much of the guitar technique, playing the melody, I can also use on the harp. That includes techniques that already exist for the harp, like the "ponticello", and "harmonics", as well as techniques that I believe will work well on the harp with some testing and experimenting. This really made me excited, as it showed me that I can really develop different colours in the sound when playing the tango melody on the harp.

The bandoneon solo arrangements are not so far from the harp as I believed, and can be a great starting point for transcribing, arranging and learning. Even though the systems of the instruments are so different, there is many similarities between them as well. The repetition of the note and the octave can be a very interesting technique for the harp when the harpist has the possibility to create enharmonic notes. This is a technique that is almost non-existent on the folk harp so it is better for the pedal harp. Also, many of the big chords in the bandoneon can be created on the harp, as the range of the hand on the harp is bigger than on the piano. The harpist can use an even bigger range when playing arpeggios.

Gustavo Beytelmann told me something that made me very inspired to continue this research. He said that he does not believe that the most *bandoneonistic* techniques developed as a part of the instrument tradition, but they developed from the influence that the tango had on the instrument. This made me very excited and happy as it gave me a lot of hope about re-injecting the harp into the tango. It made me think that there is a way to use the harp, even though it has its limitations. If my artistic research plants the seed of playing tango on the harp, the overall development of Tango and its flow of influence will hopefully bring about its own tango harp techniques.

Bringing the lever harp into my research has showed me a whole new world of the harp, and so many new possibilities. Learning the new system of the levers, finding their limitations but also possibilities has taught me that this harp can play both chromatic lines and complicated harmony lines, at least at such a level that I can use it in the tango.

Reference recording after 2nd intervention cycle

The reference recording in the end of this cycle is "Con el Cielo en las Manos", Astor Piazzolla, arr. Julie Rokseth, for solo harp,

Follow this link for video of this piece: https://goo.gl/53PhPl

Through this cycle, I have become much more confident in holding the tango melody. I have already been able to broaden my possibilities of creating different colours of sound when playing the melody, and many of the guitar techniques I have very naturally started using as they work so well for the harp. I have also grown an understanding that in the tango each instrument has its own tradition around the treatment of the melody. I have now a stronger understanding of how the bandoneon and the guitar treat the melody, but still there are many more instruments I could have looked into. In my reference recording, I feel my new understanding comes well out and shows a big difference from the way I played the melody of in the start of this cycle.

Third intervention cycle What the harp contributes to the tango: The Harp X-factor

My reference recording on the start of this cycle was "Con el Cielo en las Manos" by Astor Piazzolla, solo arrangement for harp.

The feedback from expert from this reference recording, in relation to this cycle, was that it already has a strong harp contribution. The use of the octave and the variation with the enharmonic was a good way to let the harp give some of its specialty to a tango stylistic element. There are however some important harp techniques missing in the reference recording, for example the glissando. Also, this reference recording is on the pedal harp, and there is still lacking a knowledge of what the folk harp can contribute to the tango. In this cycle I develop further the ideas and techniques from earlier cycles, but look at them from the perspective of the harp instead - and find new ones. Also, I considered more abstractly what the harp can give to the genre.

Other feedback I got on the reference recording was more in the question of the performance. Beytelmann pointed out that when I play a line, I need to have clear in my head where I'm going to arrive. He expressed that it had nothing to do with the tempo, but that it needed to be in my thoughts where I was going.

In my third cycle, I wanted to look at what the harp can give to the tango. Not only give, but also how the harp can enrich the tango. I wanted to turn the process from the earlier cycles upside down, so that where my focus earlier has been to look to the tango tradition the other tango instruments hold and let this inspire me to find tango harp techniques, I will now look at the specialties of the harp and how and where they can be of best benefit when playing the tango.

First I wanted to go deeper into what already exists in the harp world. The classical style I know well, but what was lacking for me was the many traditions for playing different kinds of folk harps, and more contemporary music techniques for the harp. I started this though with an interview with Gustavo Beytelmann about the idea to bring the harp into the tango.

Gustavo Beytelmann 2nd Interview

In this interview, I talked with Gustavo Beytelmann about the idea of bringing the harp into the tango, and how he with his background in Buenos Aires, but also with his role today of a modern composer, believe this can be done.

Gustavo started with telling me about how the harp was there in the early start of the tango. He believes one of the most likely reasons the harp disappeared from the tango was the need of bigger volume. As the tango became more popular and went into bigger concert scenes for a bigger audience, also the need of higher volume increased. The lineups went from trios and quartets into sextets and later orchestras. The harp disappeared in this development and both the piano and the bandoneons came into the genre.

Beytelmann calls the harp both an old and a new instrument to the tango. Its old in the way that is was a pre - history instrument. He says that one way to understand history is that it started when people were able to write. In this way, the harp was a pre - history instrument in the tango as there was no writings or recordings from this early time. But the harp is also new. Since the instrument could not follow the development of the tango and are not considered a part of the tango family, the harp is today a new instrument to the tango.

Beytelmann compares the tango to a human growing up from child to adult. When we are finished with our natural growing we still need to develop and change. This is when we start looking for knowledge, study at universities, expand our minds. He says the tango can't grow naturally anymore, so, now it's time for the tango to open its minds, build bridges and expand. He therefore finds that this moment is a very good one to start to introduce the harp

into tango. "It's a good moment for people to do an effort to introduce an instrument to a body that didn't reject this instrument," he says, referring to the fact that the harp was there in the start, and already has a space there waiting for someone to occupy it.

Beytelmann believes that what the harp needs is a good approach. A way to come with its own history and incorporate the elements that distinguish tango from other styles of music. He tells me that the harp has been frequently used in the tango history, by orchestras like Fresedos. But they used the harp in a modest and classical way, without the articulation of the tango, more in a model from Debussy and Ravel. He believes it's a field of experimentation and that I need to develop things that most of my colleagues do not need to use. For instance, to open up for more different productions of sound, so that I can take the harp out of this softly and charming role and into one that is more rough. He mentions two composers that already has pushed the harp into that direction in his opinion: Carlos Salzedo (harpist and composer) and Luciano Berio with his "Sequenza II" for harp in 1963.

One idea Gustavo gives me is to look at the orchestras in the 50s and 60s and how the pianist often will play with doubling the octaves, using two hands. This is something I could do when I'm playing in my duo, and it will free one of my hands from its traditional way of playing. It will also increase the sound.

The last thing he focuses on is how great it is to have a possibility to enlarge and enrich my way of playing and the repertoire I'm playing. He says that when I was working in the classical style I was using one way of expressing myself through the harp. Now I can and do expand this way of playing, by adding new tango techniques to my own already existing classical technique.

For a video of this interview go to: https://goo.gl/15S4YE

Diving deeper into folk harp traditions

Interview with Lies Joosten

Lies Joosten is a Dutch harpist that plays folk harp in a Latin - American style. While she lived in Mexico for a few years she learned to play in this style through playing with musicians there and developing her own techniques. Lies does not play the Venezuelan harp or the Paraguayan harp, but a lever harp like me. This was one of the reasons I chose to do my interview with her - to see how she played Latin - American music on a similar harp as me. I do believe it would be of great interest for my research to look into the tradition of Venezuelan harp and Paraguayan harp as well, but for this research this was too big a project. For this interview, my focus was to broaden my knowledge about ways to use the lever harp in different cultures, and to see if there were some techniques that would work well in the tango that Lies uses in her music.

Lies told me about a man called Dr Alfredo Rolando Ortiz that has made books about how to play Latin music on harp, both on the lever and the pedal harp. She mentioned especially his first book where he really opened the doors of Latin harp techniques to the rest of the world, also explaining about the different style in the different countries. This was a book that she had gotten a lot of inspiration and knowledge from.

She also mentioned a Dutch harpist that is an expert in Venezuelan harp, Ineke Herstel, and suggested I could contact her if I wanted to dive more into the style.

Play Latin - American music on the harp

The biggest challenges Lies met during her years in Mexico was that much of the music was to be played very fast. This can be difficult on the harp. There is also a technique to manage to play things very fast that is that the harpist turn her hand upwards - using less movements and playing similar

intervals in an upwards or downwards movement very fast. This technique had been challenging to learn as there can easily build up a lot of tension on her arm.

In the Mexican music it was often the harp that had the role of the bass. This means that the way to treat the bass of the harp is highly developed, being used through improvisations, melody etc. Lies explained that the bass has a life of its own.

Techniques

Many of the techniques Lies showed me were techniques where the sound that comes from damping was important for the rhythm. These are the ones I believe I can find of good use the tango:

Playing octaves in the bass, damping with the 4th creating a buzz effect.

Etouffeé in two hands

In one hand is something I have already found of good use in the tango. Here is an interesting technique where they play the same way in the right hand - with their thumbs - and overlapping each other creating very quick bass lines. This was completely new to me. 05:34

Strumming techniques

- Flamenco strumming: separating the fingers of the right hand as they strum, starting with the little finger, then the ring finger etc. Creating a sound similar to the technique flamenco guitarists use. Strumming with the left hand already damping the strings (very percussive effect).
- Strumming very high on the harp creates a very different sound and works very well.

Tip Lies gave me while she showed me her techniques of strumming was to let my little finger nail grow out so that it would be closer to having a plectrum there.

Two handed rhythmical pattern created with damping the last played chord quickly with the other hand, thus creating a buzz that is what makes the pattern clear.

Drumming on soundboard

There are lots of possibilities. Lies recommend taking a lesson in cajon to understand the way to create a good sound better. One of the techniques she uses is using the palm of the hand and then the fingers, changing between them.

Slides

Slide with thumb and plays thirds under. Can also do it with 5th and 6th.

Beside from these techniques she recommended for me to look more into the kora music, as I could find a lot of inspiration there.

Listening to Kora music

To follow up on one of the tips from Lies Joosten, I listened to three different albums with kora music.

Cissoko, A., & Goetze, V. (2008) Sira

Touré, A. F., & Diabate, T. (2010). Ali Farka Touré & Toumani Diabaté; and

Touré, A. F., & Diabate, T. (2005). In the Heart of the Moon

Realising quickly this would be a very big study in itself I decided to listen for a few times and then write down my immediate impression and inspiration: using the scale a lot both with quick 16th and triplets. Small arpeggios, and repetitions of octaves and other intervals in upwards or downwards moving directions. Big contrast between open lines with few notes and big ornaments played very quickly and with many notes.

Literature study

"Latin American Harps History, Music and Techniques for Pedal and Non-Pedal harpists" by Dr Alfredo Rolando Ortiz This book gave me an overview of the history of the harp in Latin America and it gave me some interesting new techniques. I did not find any mentioning of the harp being used in tango.

I will only here mention three techniques that I found specially interesting to use in the tango:

"Trino" Paraguayan tremolo: Tremolo played with two fingers with a third between. Open hand and straight fingers.

Muffled glissando: Using two index and middle finger in same position as the Paraguayan tremolo, playing the glissando with the index finger and muffling with the middle finger.

Arpeggio from top note and down.

Diving deeper into contemporary music harp techniques <u>Literature study</u>

The website "Harp Notation" created by Gunndhildur Einarsdóttir (https://goo.gl/Rs7nCK),

In my third cycle, I wanted to go a bit deeper into the classical world and the techniques that exist in contemporary music.

Through my harp contacts in Scandinavia, I found a website created by an harpist that has specialised in the performance of contemporary music on the harp. She created this website after experiencing the need of a synchronised system of notation for contemporary harp music. With this site, she gives explanations and the way of notating harp techniques.

While starting to explore this website two things hit me. The first thing was that I finally found a clear way of notation techniques and sounds that I have been wondering for a long time how to write down. The second thing was the inspiration I got from it. There were ways of creating glissandos, ways of knocking on the harp etc. that I had never discovered. I will here mention two of the techniques that I believe will be a great colour in the tango.

Flutter glissando - https://goo.gl/Ypr3ag

This is Gunndhildur Einarsdóttir's definition of the flutter glissando:

Production

A flutter glissando is a light glissando produced with the fingertips of one or more fingers. The fingers are held vertically to the strings and the hands slide alternately over the strings in a back and forth motion. A flutter glissando can be played stationary; the fingers slide repeatedly over the same strings, or moving; the fingers slide over the same interval but move simultaneously upwards or downwards in the harp's range.

Sound

A flutter glissando has a round and light sound. It can be produced very quickly and softly.

My use of this in tango:

This will be one of the techniques where the harp can give a very special colour and sound. It is a sound that goes very well with the atmosphere of the tango, and it has a mysterious feel to it.

Xylophnonics with one hand - https://goo.gl/u30J6a

Production

The 4th or 3rd finger mutes the string finger at its base (close to the soundboard). Thereafter the thumb plucks the string. Since the stretch of the hand is limited the thumb plucks the string somewhat below its middle, especially in the case of the longer strings.

Sound

Since the string is plucked a little below its midpoint (see production) the sound is slightly more nasal than normal xylophonic sound.

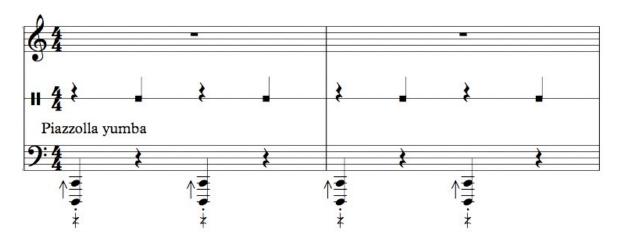
My use of this in tango:

This adds to the colour of the sound. It is great when it comes to creating a counter voice, or giving atmosphere to a piece.

Another thing this site did for me was to help me explain and note down techniques where I have already made a combination of more than one harp technique to create a tango technique. One of these is the Piazzolla *yumba*.

This technique is explained in my first intervention cycle under my focused exploration with Alexander Vocking. This website helped me find a way to both notate it and explain the technique in words to a harpist. This technique consists of a glissando and knocking the soundboard. I found from this site that the technique of making a hard glissando from the lowest bass strings so that the strings slam together and make a buzz sound has a word: thunder glissando. It also has a way of being noted. Also, when it comes to noting down knocking and hitting of the soundboard, Gunndhildur Einarsdóttir recommends to always write it on a line between the two staves. She also writes that verbal specification is needed for which striking technique that is wanted. In the Piazzolla *yumba* I will be hitting the soundboard with the palm of my hand, and have chosen to use the square, as this will also be what I use when notation hitting the strings with the palm of my hand.

This is how I will now write the Piazzolla yumba on the harp:



Experimenting with harp contribution in the tango

 through arranging "Desde el Alma" by Rosita Melo and "La Trampera" by for lever harp and bandoneon

In this part of my cycle I wanted to start using all my discoveries from earlier in the research, and start to vary and experiment with the techniques to develop variation and integrate more typical harp techniques. My main focus though was to use some of the most defining techniques of the harp and work with how they could step over to the tango genre. The techniques I was focusing on were:

- glissando
- harp resonance
- arpeggio
- · the possibilities in the levers/pedals

"Desde el Alma", by Rosita Melo

Before I started working on "Desde el Alma" I asked my teacher Wim Warman about what he found most important when arranging a tango valse. He answered that the most important thing when accompanying in tango valse is to vary between playing all the three beats, and playing only two of them or only one. He also explained that in tango valse a very interesting thing to include is the switch to 6/8 (in two) and back again, and even playing 3 over two.

The note I started working from can be found in Appendix J. (Blaya, R. G. http://www.todotango.com/).

I will now present some of the most interesting ways I found that the harp can use its new tango voice in this piece.

Use of lever slides and chromatic lines

When working on the lever slides I tried to use them not only as a technical way to create chromatic lines, but also in a way that worked musically, where the different sound created different colours in a musically way.

The first place I used it was in the opening of the piece. I use it here in the end of the opening line, and although it has a decrescendo it worked very well. The percussive effect that comes with it, especially on the folk harp, creates a different type of accent on the first beat.



I also use this in a little melodic line I play between the A1-part and A2-part.



Arpeggio

In the accompaniment, I have integrated a downwards arpeggio which I play like a downwards moving *arrastre*. I think this is a great way to use arpeggio as *arrastre* and I use it again in the C-part.

From the first A1 part:



From the first C-part part:



All through the piece I use arpeggio as a way to vary the accompaniment, both with stating the arpeggio on the beat, and by ending the arpeggio on the beat. I also vary the speed of the arpeggio. See recording of the piece to hear this.

Resonance

I use the resonance by creating short notes in my right hand, and damping always the last bass to have the bass clear. I have also experimented with the contrast of letting the harp ring, and damping. Here are two examples where I feel this works very well.

In the first B-part I let the resonance ring much stronger in my right hand than in the A-part in the first 5 bars. Then in the 6th bar I dampen all the resonance just after the 2nd beat, together with the bandoneon playing an accounted staccato note. The contrast is very cool.





The second place I want to mention is in the bandoneon variation in the end. In the middle of the first A-part of the variation I let the harp ring as a blanket just when the bandoneon has a break in the variation. After this comes a part where I dampen a lot in the right hand again.

Glissando

The uses I have found for the glissando in this piece are; first, as a variation in the accompaniment in the second A-part. Here I start the glissando on the first beat and end it on the 3rd beat. What I found very nice is that the glissando also transports my right hand one octave up and lets me vary the accompaniment in the next bars by playing in that higher octave.



Secondly, I also use it leading into the harp solo in the last bar before the second C-part.

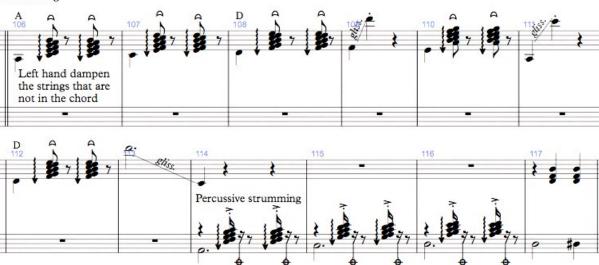




Strumming

While working on this piece of music I have found many new ways of strumming. I use the second B-part as the part where I play around with this technique.

Strumming



In the first three bars, I use the technique I found in my first cycle where I play the bass with my 4th finger, and use the next three to dampen the string that aren't in the chord. In the 4th bar I use a strumming - glissando, where I still hold down the left fingers dampening some of the strings. The glissando starts slowly, and goes faster and faster towards the end. The glissando does not have an end note, just the percussive feel of the quick motion. This repeats in the 6th bar. In bar 8, I play many glissandos downwards, still in the same style as the strumming - quick rhythmical glissandos, ending in a lower octave. From bar 9, I play something I have called the percussive strumming, where I strum with a very fast movement and dampen the strings immediately after so that the notes don't really sound, you only get the percussive effect. When working on this part I did a lot of testing while my brother played the bandoneon voice. In my own opinion, I managed to create a way of using strumming that shows the x-factor of the harp, and still fits the tango with being rhythmical and varied.

Melody

In the second C-part the harp has the melody. My main idea for this part was to double the melody in octaves, using both hands like Gustavo Beytelmann mentioned was a technique from the 50s in the tango. This worked great. I integrated the idea of adding more chord notes at important places in the melody. I do this in the 6th bar of this part. To add from the harp, I play this as an arpeggio. I shape the arpeggio so that it is slower in the start and quicker towards the end.



I have integrated a chromatic line up to the first beat of the 9th bar in the C-part. Here the use of lever slide comes out in a beautiful way.



In the bars 11 - 16, I have used the repetition of the note. As this piece is arranged on the folk harp I could not create enharmonic doubling of two notes. (this only works on a couple of notes on the folk harp). I looked for different ways of using the repetition of the string on the harp. I included a technique that I found a few years ago when trying to create a tremolo on harp. The technique is to use both the finger tip and the back of the finger - the nail, and quickly shake the finger back and forth. This works excellent on the folk harp as the tension is so low. I arrange this part so that by repeating the note quicker and quicker it goes into this tremolo. I added overtones in my left hand in unison with the tremolo. I am very happy finding that tango guitarists use a lot of overtones, as I love overtones so much myself.



The bass line

Through the whole piece my focus has been to create a bass line that is clear, has some chromatics and that I let drive the piece. The bass line is not very advanced, and that is the same with the chords. Most of it is very close to how it was arranged in the score that I used as reference. As this is a lovely piece from early in the tango I didn't want to make it too modern with to advanced harmonies. In the last A-part I have arranged in a bandoneon variation inspired by Pugliese's arrangement of this piece. To have a bandoneon variation in the end of the piece is a very typical tango tool. The feedback I got from Gustavo Beytelmann during my work on this was that when accompanying the bandoneon variation in the last part, I could not play the accompaniment as I had earlier. He said the variation needed pushing. And the pushing needed to be gritty and strong. In these bars, I therefore now play only the bass, but with two hands. I combine two types of sounds. The right hand plucks the strings very high on the strings (*Haut dans les Cordes*), to get a sound with more punch in it, and the bass plucks in the middle of the string to give a full bass sound. If this was arranged on the pedal harp I would have used the low bass to get a stronger bass feel. I also keep this idea of *pushing* in my mind when performing it.



For full score of this arrangement go to Appendix K.

"La Trampera" by Aníbal Troilo

This is a milonga⁴. In arranging this piece for harp and bandoneon I got the possibility to experiment more with the harp contribution in tango, as well as working on a new type of rhythm that I have not yet worked with in my research. Touching the milonga rhythm is a great thing as this style is an important part of the tango tradition.

I will now present some of the most interesting ways I found that the harp can use its new tango voice in this piece.

The Milonga Rhythm

The milonga rhythm works very naturally well on the harp. I have used this motive as the basic idea for the milonga rhythm in the piece.



This motive has four notes, and the harpist uses four fingers. It means the harpist can keep the hand in one position that is also in a very natural way. On top of this I experimented and found many variations to use the right hand. One is to dampen really quickly, so that there is a lot of space for the milonga rhythm. Another variation is to use the downwards arpeggio I learned in my folk harp study. I play it quickly and vary it if it is the end note that lands on the beat, or the top note.

In the end of the piece I use a completely new way of playing the milonga rhythm, where I use both hands to work together on the motive, instead of using the hands for separate roles. This is a way of thinking on accompanying that I learned on the workshop I attended on the Dutch Harp Festival. I play the first note in octaves with my left hand, then I use my right hand to do a short cluster glissando (like strumming) with my nails, use my left hand to dampen it so quickly that it become more of a percussive effect and while my hand is in the motion of damping my thumb pluck the second note of the motive. This way I have included percussive elements into the motive. Then the right hand played the last two notes of the motive.



This technique is a great way to use the harp. The bass resonates through the whole movement, mixed with the sharp damping of the percussive effect. Broadening this milonga motive over to two octaves instead of one is also something the harp can do in an elegant way which gives a great variation to the original motive.

Arpeggio

In La Trampera I use arpeggio in different ways. In the start, I vary between downwards quick arpeggios, and normal ones. In the start of the B-part I use arpeggio as a heavy arrester, specially the second time we start on the B-part. I also use the arpeggio as *arrastre* in the first melody line in the A-part, just before I go into a sudden pianissimo.

⁴ The milonga campera is written in 4/4 time and has a typical, rhythmic subdivision: 3-3-2. That is, a subdivision of quavers (8ths) into 3 groups. One of three quavers, another of 3 and one of 2. Another milonga style is milonga cuidadana and is written in 4/8 or 2/4, based on this rhythm in 2/4: one punctuated quaver, a semiquaver and to quavers. (Warman & Vervelde, 2001)



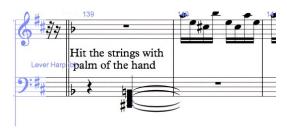
Resonance

In this piece, I wanted to create big contrasts between letting the harp resonate and creating very short notes. This would also make the character playful which I wanted this piece to have as the melodic motive is a bit naive.

One of the places where I found it worked well with very short and accentuated notes was in bar 38 - 41.



One example of how I found ways of using the resonance is where I hit the strings in bar 139, and let the resonance lay there for the next bars without damping. I also arranged it so that the bandoneon plays a deep cluster at the same time as I hit the strings. This blends in a great way, and when the bandoneon's move ends the cluster notes the resonance of the harp still lingers in the soundscape.



Solo

For the harp solo I used the ideas from the kora music I have been listening to. I used triplets and 16th, used the octave and created pattern where the repetition of the note was the base idea. Here is a short expert from the sheet music:



For full score of this arrangement go to Appendix L.

Reference recordings and Intervention

I have two reference recordings in the end of this cycle.

"Desde el Alma" by Rosita Melo, arr. Julie Rokseth, for harp and bandoneon performed by Julie & Andreas. https://goo.gl/40UhIE

"La Trampera" by Aníbal Troilo, arr. Julie Rokseth, for harp and bandoneon performed by Julie & Andreas. https://goo.gl/tZ9Jft

Through this last cycle I really felt like the loose threads came together - the understanding about the tango I had already acquired together with the possibilities on the harp discovered in this cycle, my own freedom in expressing myself through the harp are opening up for unlimited possibilities. The small dive into the harp world that started this cycle was very eye opening. To discover so many things about the harp that I hadn't known about makes me excited about continuing the process, finding more knowledge in the future. I believe that doing this literature study at this point, after already freeing myself from the classical norms and my box of comfort was an excellent timing. Now I was open enough to take in new ways to play the harp as well as new techniques, and immediately they sparked my ideas of how to further develop and use them in a tango setting.

In the second part of this cycle I experimented with my techniques in a setting of arranging "Desde el Alma" and "La Trampera". This process led to a stronger understanding of how I can use the tango harp techniques in different ways and really feel that what the arrangements and playing are expressing the tango voice of the harp.

The feedback on the reference recording have been very good. Both Wim Warman, Saskia Kingma, Gustavo Beytelmann and Leo Vervelde gave me the feedback that now the harp is really used in a creative way, full of variations, sounding like a tango harp.

Fourth intervention cycle Arrangement of "Los Mareados" (Juan Carlos Cobían)

This cycle is the finale for the Toolbox for Tango Harpists that I have compiled over the first three intervention cycles. It is an arrangement of "Los Mareados" (Juan Carlos Cobían) for bandoneon and pedal harp, that uses selected techniques from the Toolbox with which to demonstrate the authentic, yet unique tango harp voice that I have been developing throughout my research. I have chosen to create this arrangement for the pedal harp, as this was the harp I started out this research on, and I believe the atmosphere of this piece fits the pedal harp very well.

Reference recording

I have chosen to have "Desde el Alma" by Rosia Melo, (arr. Julie Rokseth, for harp and bandoneon performed by Julie & Andreas. https://goo.gl/40UhlE) as my reference recording for this cycle. This because I felt that by this arrangement in my third cycle I really stepped up and brought the tango voice to the harp. Through experimenting I found ways to use my new techniques to my own arrangement.

Feedback

The feedback I got on "Desde el Alma" was very good. Both my main teacher Wim Warman and Saskia Kingma really liked it, the fast way I have managed to adapt to the lever system and dare to use it to create interesting harmonics, and above all the great feel of tango. Gustavo Beytelmann also like the arrangement, and wanted me to look for even more variations in character between the parts, for example, by playing one part in a lower tempo.

My own feedback was that it sounded more confident and that I have found great ways of using the lever harp in the tango. Now I was excited to move into making the final result, the arrangement of "Los Mareados". As I had decided to use the pedal harp on this arrangement, because of the atmosphere of this piece fitted more to the pedal harp, I found that I had still many technique that worked better for the pedal harp that was not yet really used in a full tango arrangement.

Special Television Appearance

Selected by Codarts to appear, Julie & Andreas performed with Gustavo Beytelmann for TV - Show "Vrije Geluiden" on VPRO and played "Milonga Triste" by Sebastián Piana. https://goo.gl/R5udcZ

While this is not a reference recording, it serves as a significant milestone for how far we have managed to come in the journey of bringing the harp into the tango. And you can clearly hear a strong tango harp voice emerging. The greatest thing that this opportunity for performance gave me was the fact that these ideas I am researching are being supported by those experts who know tango. And that they are willing to support it being declared and shown to the public, and that it is worth pursuing beyond music academia and research at the university. This was a huge boost in my confidence in myself and my confidence in the harp that made me want to set the bar just that little bit higher for my final arrangement and performance. This was helped by feedback on this from Matthew Suen, my Musician Enhancement Psychologist, who really let me understand the nature of this approval and how to really use this confidence boost to supercharge my efforts.

"Los Mareados" by Juan Carlos Cobián

arranged for harp and bandoneon

Starting the process

When I started the process of arranging this piece there were two things that was important to me:

The first thing was that I wanted to make the harp carry this piece. By this I mean to give the harp solo parts and to always have the harp voice be important. When working with the two instruments together I wanted to focus on beautiful ways to blend these two instruments, really using the unique sound they can create together.

The second important part for me was to use the lyric of the song as a background for my artistic choices. By this I mean to try and express the essence, emotion, and atmosphere of the lyric through my instrumental arrangement.

For the full lyric with a translation go to Appendix D.

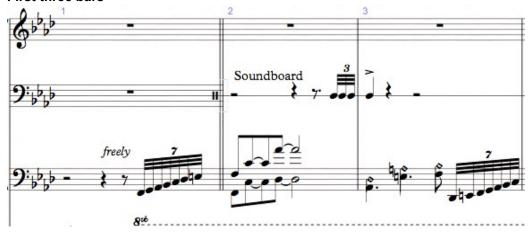
Introduction

I decided to create a solo harp introduction to this piece. To make a statement of the harp holding the tango voice I wanted the idea behind this introduction to be the what is the strongest characteristic of the harp: the resonance. To find the biggest resonance in the harp I needed to turn to the bass strings. So, I wrote the introduction over 14 bars in the bass of the pedal harp, focusing on the atmosphere of the lyric and the resonance of the harp. During my process of creating this introduction I had a lesson and conversation with Gustavo Beytelmann. He gave me some valuable input to this idea.

After presenting my ideas to Gustavo Beytelmann, he played for me his own arrangement of "Casita de mis viejos" by Juan Carlos Cobián. Here you can see a small excerpt from this arrangement: https://goo.gl/rJ7nlg (Architekt of Sound, 2014) Gustavo told me that his idea for this piece was: How can I stretch this melody without losing the sense, using the idea of resonance? With his idea being so similar to my own, and with the same composer of the pieces, this was a great opportunity for me to learn from.

Gustavo advised me to think about how the notes are related to each other, and to take a lot of time. He also advised me to follow to trust my ears, and to think about this as an improvisation, using for example, the different feel of resonance in the different rooms I am in to shape the introduction in a different way. Hence, it will always be performed in a different way.

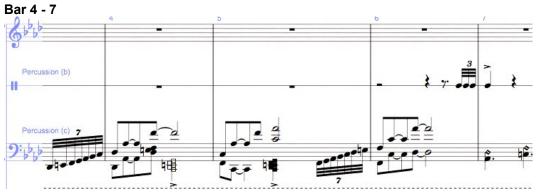
First three bars



I have written my arrangement in F-minor. In the first bar, I start with an anticipated *síncopa* with *arrastre* up to the first beat of my first motive. I have decided to use a full scale *arrastre*, using both of my hands to play it instead of playing it as a glissando as it gets more pronounced. I dampen all the strings quickly, except from the first note and the last, letting the octave ring through the harp.

My first motive is a F natural to C natural to A natural. The melody of the piece starts with a F natural to C natural, repeating this fourth before going one step down and repeating the fourth in a downwards motion. This goes on. In my introduction, I have turned the first interval so instead of going down to C from F, I go up to C, getting a fifth instead of a fourth. This motive is developing through my introduction. The first motive I do not dampen. I use knocking on the soundboard in a triplet rhythmical motive taking us into the 3rd bar.

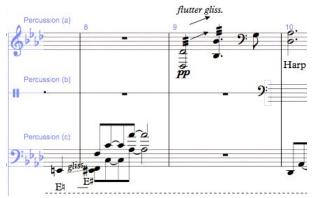
I wanted to use some harmonics in the introduction. Even though it is more difficult to produce good harmonics in the low registers, there is also more possibilities to create different types of harmonics. After testing different ones I decided to use double octave harmonics, as these are bright and will contrast to the low notes around them, but still have that unclear mystical feeling to them that the bass strings create. The idea is that they rise out of the sea of resonance that are ringing from before.



In bar 4 and five I am developing the first motive, and include the first to notes of the melody of this piece in the left hand in bar 5.

One of the things I wanted to appear in this introduction was a small presentation on the sounds that would reappear in the arrangement, so that the sounds would not be a complete stranger to the ear later. This is why I included the technique hitting the strings in the lowest register here - creating a soft cluster sound with a lot of resonance. In bar 6 and 7 I repeat the motive of the first two bars again, with the only difference that I play other notes on my double octave harmonics.

Bar 8 and 9



I use a *sincopa* with a pedal buzz *arrastre* into bar 8. The idea is to take a lot of time when performing this, lingering on the *arrastre* (in this case the slurring of the pedal). I perform the pedal *arrastre* on the lowest E - string, letting the note slur into E#, doubling the first beat by playing F on the F strings, just as the technique is explained in the **Toolbox for the Tango Harpist**. In bar 9 I use a flutter glissando, while letting the bass ring without damping. This is to enrich the mysterious atmosphere I have already created, and to introduce this sound that will reappear in the C-part of the piece.

Bar 10 - 14



In these bars, I go back to a less freely rhythmical feel while including the fourth between the C natural and the F natural in my bass motive - moving closer to the melody of the piece. I use the hitting of the strings more rhythmical and end this line with a broad glissando going all the way to the lowest strings. In bar 14 the resonance is allowed to ring all through the bar, continuing into bar 15 still without damping.

First A-part

The first A-part I have written as a harp solo. My first idea was to give the arrangement a more rhythmical stable drive here. After my conversation with Gustavo, and especially listening to his ideas about resonance, I decided to continue with the idea of using the resonance and stretching the notes. I also played this part, while it was still in the process, for my harp teacher Saskia Kingma, and she advised me also to take more time. She pushed me to play with the idea of even making the audience a bit uncomfortable, lingering on the resonance until it has almost died out before moving onwards. So, still working with these very interesting elements I wanted to keep quite close to the melody line of the A-part so that the motives I play, even though performed in a free rhythm, could still be recognisable for people who know this piece.

Bar 15 - 19



As this part is so rhythmical free I found it was a great place to play with the repetition of the note and the use of the octave. I use a lot of enharmonic, as I discovered in my second intervention cycle is a great way the harp can contribute to this very characteristic tango treatment of the melody. In bar 15 I position the pedals so that the B string is a B sharp, and the E string is a E sharp, letting both the first notes of the melody have enharmonic doubling. I play an arpeggio, performed as an *arrastre*, using only these notes F and C up to the triplet leading into the next bar. I continue using this idea of enharmonic, both on the first beat of bar 16 and in bar 18 where the whole bar is dedicated to the C note, using B# as enharmonic. In bar 17 I use the arpeggio not as an *arrastre*, but as a way to give more importance to this note by adding extra chord notes. In bar 16 and 17 I use downwards *arrastre* in the bass.

Bar 20 - 23



In bar 20, I present an accompanying motive that comes back in the C - part. This is the first quarter notes on the first beat in bar 20. I have put the melody in the bass in these bars, something I learned from my first cycle of transcribing "Yo the Bendigo." This works very well and gives the feeling that a different voice of instrument has joined the conversation and gives a great variation. This part ends with a feeling of a question mark, on the fifth of the dominant, opening up for the bandoneons entrance, and answer, in the next part.

Second A-part

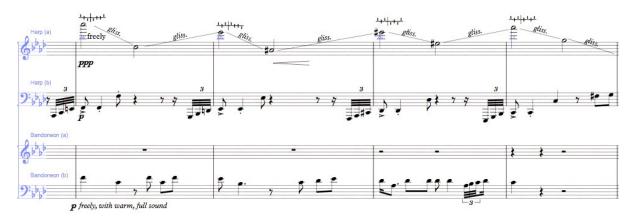
During my third intervention cycle I was experimenting a lot with what the harp could give to the tango, and I played a lot around with the idea of using glissandos in more ways that upbeats and ending to pieces. I started already then playing with the idea of having a part in "Los Mareados" where the harp creates a blanket of resonance through using glissando over a longer period. This idea fit very well for this part. The glissando is the beauty of the lyric, the meeting between the two friends, and the deep *síncopa* bass has that melancholic feeling to it and is warning us about something sad coming.

Listening to the lyric of this part I feel that the person telling the story has such a big sadness in him, while actually just telling us very nice things. It is the start of the verse, beginning with pity, that makes me feel afraid of what will come to this meeting.

Pity
I felt at finding you
because looking at you
I saw your eyes
shine
with an electric fire,
your beautiful eyes
that I so adored.

This part is also where I let the bandoneon enter for the first time. The bandoneon plays in the left hand almost this whole part, performing the melody with a full, deep sound. Gustavo Beytelmann advised my bandoneon player to try to find the sound of a cello when playing this part, singing the melody with a deep voice. The harp now takes the accompanying role and I could really start to play with my new rhythm section techniques.

Bar 25 - 27



In these bars I use a *sincopa* in Salgán style in my left hand. I have arranged it in a low register to create a big contrast to the right hand. In the right hand I am using a glissando, going without stopping through these four bars, while changing the pedals in every new bar to create new chords sounding. The bandoneon is playing in the register that is in the middle of the harps left hand and right hand, with space to create *fraseo* and at the same time a clear rhythmical bass line to lean on.

Bar 28 - 31



From bar 28 the glissando moves over two beats in an upwards movement, and has a pause in the last two beats on the bar. This repeats in bar 29. To create a tension in these bars leading towards the end of this A-part, I have arranged an opposite movement in the left hand, going downwards and also ending on the second beat. In bar 31 this tension is released by landing on the tonic, using the same arpeggio as in the first bar of the first A-part, with enharmonic doubling on the B and C string and on the E and F string.

B-part

The B-part I have arranged very different from the A-part, to create a new atmosphere and a contrast to the A-part. This is because the change in the lyric. This part of the song starts with:

Tonight, my friend, with alcohol we're getting drunk; I don't care if they laugh and call us "the doped ones."

Still sad feeling to it, but a really a last moment for these to people to be in the presence and enjoy each other's company. They are getting drunk and this is the feeling I have gone with in this part. Here I have arranged a stronger part for the bandoneon, and the bandoneon and the harp has a much stronger sense of a conversation between them, switching between who has the melody, playing in unison but stumbling away from each other the next moment.

Bar 32 - 35



In these 4 bars I let the harp have the melody, while the bandoneon is freely under. The idea is that the bandoneon has small motives in rhythm, then small motives more freely and then back again to rhythmical. There is also a lot of response to each other going on in this part.

Bar 36 - 39



The idea continues in these bars. In bar 37 I have included enharmonic doubling of the C natural over a triplet, and in bar 39 I have used a pedal slide just before going into a glissando. All these small things are together with the bandoneon voice, who also has parts of the melody, creating a feeling of lightness and dizziness.

Bar 40 - 43



From bar 41 the harp has a Salgán *síncopa* as the bandoneon holds the melody. In bar 42 I have included the a bisbigliando in the harp, which gives the first sign that we are going to change the atmosphere again. The Salgán *síncopa* continues in bar 43.



The harp joins in with the melody and together the instruments move towards a *fermata* in bar 46 before starting descending towards the next part. Here both the movement of the notes and the energy goes down and we land in a deep F natural before starting on the C-part of the piece.

First C-part

To arrange the C-part I have found much inspiration from Mercedes Sosa's version of "Los Mareados" from her album "Mercedes Sosa en Argentina" (1982). Inspired from this arrangement, I wanted the C-part to start with a feeling of destiny and unchangeable paths. That is why the harp starts by hitting the stings, and the bandoneon joins with the deep cluster. After a lot of testing I found that this blended in a great way, creating a subtle, deep and melancholic sound. It reminds me of a heartbeat going on and on. The lyric in this part is about the singer saying goodbye, letting a person she/he loved go into his or hers past.

Today you're gonna enter in my past, in the past of my life.
Three things bears my wounded soul: Love, Regret, Pain.
Today you're gonna my past, today we'll follow new paths.
How great has been our love and, yet, alas, look what's left!

I tried to get this feeling out through my artistic choices of this part.

Bar 59 - 66

-=61



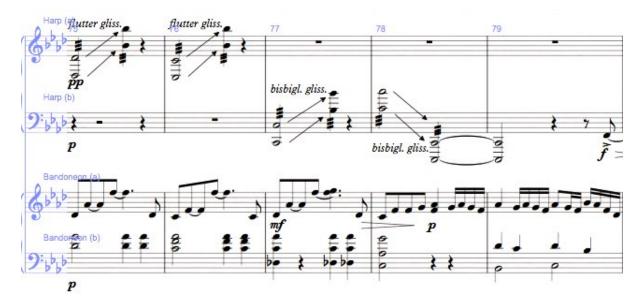
In these bars, I am using the harp tango technique "hitting the strings" in the low register as the rhythmical base, creating a cluster sound with a lot of resonance. I have arranged in a deep chord with dissonances in the bandoneon and found that these two techniques blend in a beautiful way. It creates the effect of a heartbeat as I wanted to create. The harp has the melody and a counter voice to the melody. The melody has small ornaments and is made simpler, cutting some of the melody out. I felt free to do so, because this is a well known melody in the tango communities. I therefore wanted that the first listen to the melody should be like watching it appear from a foggy landscape. This would fit the atmosphere that I wanted. Also for those who do not know the melody, it will come back many times as I repeat the C-part. The countermelody I have arranged using the xylophonic sound technique, giving it a completely different sound than the main melody.

Bar 67 - 74



From bar 67 the harp and the bandoneon play the melody in unison. In the harp I develop further the hit of the strings into a cluster glissando from the lowest strings on the 1st and 3rd beat. The 2nd and 4th beat continue as before. This intensifies the arrangement a lot, and together with the melody in unison it is very clear that the arrangement is going towards something.

Bar 75 - 79



These bars are a small digression away from the main part, and I wrote it in to remind the listener about the start of this piece, and get a feeling of a wholeness, before we go into the last C-part and the ending of the piece. It is also to do something unpredictable, break the building up of intensity and sadness and surprise the ears of the listener with more space, calm and relaxing. In these bars, I use variations of the glissando, creating beautiful atmospheres and soundscapes. Bar 75 and 76 has the flutter glissando, of which I introduced in the introduction for the harp, and bar 77 and 78 has a bisbigliando glissando.

In the bandoneon voice I have arranged the return of the motive from my introduction for solo harp.

Bar 80 - 87



From bar 80 the last C-part stars. The harp is accompanying the bandoneon by using the harp version of the Salgán *síncopa*, with some small motive of counter voices in the right hand. The bandoneon has the melody. In the end of these bars the idea is again that it is intensifying, and really starting to build from bar 88 - 92.

Bar 88 - 92



From bar 88 the harp changes its accompaniment. I have arranged it so that the harp play arpeggio arrastre up to the first beats, and play an accompany movement of quavers. The bass is arranged very low on the harp and moves chromatically downwards. The right hand works in the lowest register the harpist can reach comfortably. Through these bars the accompaniment motive moves in an upwards movement and reaches a peak in bar 92 where the accompaniment jump over one octave up, led by a broad arpeggio up to the first beat. This is where the lyric goes into its most sad and dramatic part:

How great has been our love and, yet, alas, look what's left!

Bar 93 - 96



From bar 93 the movement in the harp goes downwards again, but without losing energy, and in bar 94 it goes into its most intensive moment of this part where it plays Piazzolla *Yumba*. From 95 to 96 the harp has a counter melody to the melody the bandoneon has just ended. The bandoneon has the end of the melody in these bars, and end it with thick chords and a deep bass. I have written these bars to be dramatic and sad.

Bar 97 to 103



Slowly the sound of the heartbeats die out in a decrescendo with both instruments.

Last part of the process

After my arrangement was done, while working on the performance of it I found that the introduction was difficult to make clear. I remembered the Latin American harpists who often stand to play and use the upper top of the bass strings while playing. I started testing if this was even possible on the pedal harp. This led to a great discovery for me. The whole introduction I now do standing playing, getting a much clearer sound, with more deepness and less overtones. This also led to me to the decision to play the bass of the second A-part also high on the strings.

Here is a video of me playing the introduction and A-part low on the strings before I was completely done with the arrangement. https://goo.gl/hSwL7h

Final result of my arrangement of "Los Mareados" (Juan Carlos Cobián)

For the full score go to Appendix E.

To watch the full video: https://goo.gl/S8a8oe

Appendices Network

Over the course of this research I have learned the value and practical use of a good functional network. This most definitely touches on my confidence development too. Throughout the project, I have found the value of talking to people about what I was doing and the value of listening to other peoples' experience and knowledge from similar or even different areas of expertise. Significantly, it is not difficult to contact people I don't know anymore because I now believe that I am a worthy artist in my own right, that I can make strong artistic decision, and that I genuinely have something of value to offer these discussions.

Creating contacts for my research was something I struggled with in the start. I found it difficult to see who could help, as there were no tango harpists to turn to. I did however after a while realised that to find help, advice and information I could find a very good use for in my research I did not need tango harpists, but only people that could understand one part of what I was doing and in that way contribute and help me build up my knowledge and help pave the way onwards. Therefore, I am proud to present these short profiles of the people that supported me and aided me, not only in my Master research, but my overall advancement as an artist:

Gustavo Beytelmann, tango pianist and composer

Artistic director of the tango department at Codarts. Throughout this process, Gustavo Beytelmann has been an inspiration and great source for my further development. Through conversations, lessons and informal interviews he has given me the belief that the harp has a place in the tango and that this work I have been doing has been important and worthwhile. Gustavo Beytelmann has urged me to keep the magic of the harp, as it is, while still finding its tango voice, and my own artistic voice. For example, through this whole process he has been advising me to *use* the resonance of the harp instead of stopping it, which led to a completely new way of expressing myself on the harp. He has been a lighthouse in a stormy night, nudging me in the right direction if I got lost in the dark.

Wim Warman, tango pianist

One of my two main subject teachers at Codarts. Wim has taught me what tango is, first the basics, then diving deeper into this rich genre. His knowledge about the tango has been a big help when I have been creating and developing new techniques. His feedback has pushed me and inspired me to go further to push the border of what I believed the harp could achieve as a tango instrument. His feedback on my reference recordings during this process has also shaped my choices of directions onwards in my research.

Leo Vervelde, bandoneonist

Bandoneonist and head of the tango department at Codarts. Leo Vervelde was the person that in the very start of my studies here inspired me to go deeper and find the harp's own tango voice. He started by telling me the inspiring story of the harp being there in the dawn of the tango history. After this point he has been a great resource, getting me in touch with many people, among others Carel Kraayenhof. His feedback on my work, the reference recordings as well as my experimentation with the arrangements in the last cycle, has been of great value to my research.

Saskia Kingma, classical harpist

One of my main subject teachers at Codarts. As well as being an amazing harpist in the classical genre, my teacher Saskia has a great ear for other genres and for chamber music. Her enthusiasm for this subject, bringing the harp into a "new" genre has been inspirational for me and has been of big importance in my own personal process of breaking with the classical style. Her feedback and ideas when bringing tango harp techniques under development brought me further and opened up many doors for my creativity. She has also helped me keep the quality of sound intact and pushed me to trust my own artistic decisions. She arranged the workshop I attended with Lavinia Meijer, as well as got me in touch with Rosetty De Ruiter-Verwoerdt, (jazz harpist).

Santiago Cimadevilla, bandoneonist

Tango musician and my coach in Artistic Research at Codarts. I find myself very lucky to have had the opportunity to have a tango musician as a coach through this research. To have Santiago's feedback

on every level from the start has been so good, especially for a newbie to the tango as myself. As well as useful feedback that has helped me find the way onwards, Santiago has been a great help to broaden my network and find ways of structuring my work.

Michalis Cholevas, multi-instrumentalist

Currently doing a PhD, musician, teacher, and coach in Artistic Research, at Codarts. Gave me clear and useful guidance around how I could use the method experimentation when doing artistic research in the start of my process. This inspired me to use this method as a part of my first intervention cycle, as well as later in the process. Michalis has throughout these two years been a person I could turn to for very helpful advice around both structure and what next steps to take in my process.

Carel Kraayenhof, bandoneonist and composer

Tango musician living in the Netherlands. From the very first meeting with Carel in the start of this process, he has been a great support and source of tango knowledge. His belief in the harp as a tango instrument gave me inspiration. Through his collaboration with the harpist Lavinia Meijer, he also has knowledge about the harp and how it works. This made him a very valuable person to me as this is one of the few persons that had a foot in both of the worlds I was trying to connect. Carel gave me feedback on my first reference recording that helped me shape both the first and the second intervention cycle. He has been someone I could turn to through the whole process for guidance.

Lavinia Meijer, harpist

Classical harpist who has also worked with many different genres, amongst other with tango in a duo with Carel Kraayenhof. The first meeting with Lavinia was at one of hers and Carel Kraayenhof's concerts. Hearing their music sparked so many ideas for my own research. The next meeting with her was at a workshop she held for the harpists and composers at Codarts. I learned many useful things at this workshop, above all I was inspired by her way of enhancing the harp tradition with her own playing style, new compositions and arrangements.

Lies Joosten, folk harpist

Harpist working in different styles, but most known for her own style in Latin American music. Lies was one of the contacts I got from attending a harp workshop in the Dutch Harp Festival in Utrecht 2016. In my interview with her I got many new ideas for folk harp techniques that could work in the tango. She also game me many tips on new contacts and literature on the Latin American harp music, for example Dr Alfredo Rolando Ortiz's books on the subject.

Rosetty De Ruiter-Verwoerdt, jazz harpist

Jazz harpist teaching the classical harp class at Codarts in jazz harp. I got in contact with Rosetty from my harp teacher Saskia Kingma. I attended one of the classes Rosetty gave to the classical harp class at Codarts, and had a conversation with her afterwards. From her I got the idea to look more into jazz harp techniques and playing style.

Alexander Vocking, double bass

Tango musician and earlier Codarts master student. With Alexander I did a focused exploration of the double bass tango techniques and together we tested and tried out how to create the same musical effects on the harp. Alexanders deep understanding of the tango, the double bass and the role of this instrument in the tango gave me a much bigger idea of what the responsibility of the rhythm section is in the tango and how I can hold this on the harp. He also introduced me to the compendium "The Tango - A secret code" by Juan Pablo Navarro.

Tim Panman, guitarist

Tango musician and earlier Codarts master student. From Tim, I have gotten super advice and knowledge about the tango tradition of the guitar, as well as techniques, tips and advice. With his positive attitude to my research, the talks and interview with him were truly inspiring.

Barbara Varassi Pega, pianist

Tango musician, PhD in tango and coach in artistic research at Codarts. Barbara has been present at both my AR exam after the first year, and the feedback session a few months ago. She has given such clear and good feedback that it has really helped me in my process. Her question has always inspired me to think through my choices again, pushing me to be strong in my own decisions. She has also helped me with contacts in Argentina.

Giannis Koutis, oud

APPENDIX A - Network

Earlier master student at Codarts. Gianni's introduced me to both the instruments oud and qanon which inspired my experiment around using plectrum on the harp.

Siobhán Armstrong, historical harpist

Performer of historical harps, founder of "The Historical Harp Society of Ireland" and is the director of "Scoil na gCláirseach—Summer School of Early Irish Harp". I got to know Siobhán through attending her very interesting Summer School a couple of years before I started my master at Codarts. Through the research I have turned to Siobhán for questions about the harp traditions using plectrum and I have also been inspired by the system she has developed to notate fingering and damping. I am very proud to have a woman with her unique knowledge in my network.

Andreas Rokseth, bandoneonist

My brother and master student at Codarts in tango. Andreas has been a great source of information about the bandoneon, both about how the bandoneon treats the melody and advice when it came to arranging for the bandoneon. My duo with Andreas was also what sparked the very first idea about diving deeper into the tango which I am forever grateful to him for.

Matthew John Suen, Musician Enhancement Psychologist

Australian performance enhancement coach for musicians and sport athletes. Matthew has been my coach in performance enhancement for the last four years. His guidance in structuring an artistic creative lifestyle, his advice about academic research as well as his help with the English has been very valuable for me personally and for this research.

Reference list

Books

Definition of enharmonic (2016). *American Heritage® Dictionary of the English Language* (5th Ed.). Houghton Mifflin Harcourt Publishing Company

Definition of strumming (2016). American Heritage® Dictionary of the English Language (5th Ed.). Houghton Mifflin Harcourt Publishing Company

Navarro, Juan Pablo (2013). *The Tango - A secret code*. Handout compendium for workshop in ISB Convention 2013.

Dr. Ortiz, Alfredo Rolando (2002). *Latin American Harps History, Music and Techniques for Pedal and Non-Pedal Harpists*. Corona: AROY Music. (Original work published in 1979)

Sierra, Adolfo Luis (1984). *History of the Orquesta Típica*. Buenos Aires: A. Peña Lillo (Original work published in 1966)

Pega, B. V. Creating and recreating tangos. Artistic processes in music by Pugliese, Salgán, Piazzolla and Beytelmann (unpublished)

Warman, Wim. (unpublished) Tango exercices (sic)

Warman, W., & Vervelde, L. (2001). *Transcription course*. Rotterdam: Made for internal use in Codarts, University of the Arts.

Articles

Rowan, Diana (2013). "Three Ancient Harp Techniques for Today's Harpers". Folk Harp Journal. Retrieved from https://goo.gl/bwodkz

Scores

Filiberto, J. D. (music), Bruno, J. A. (lyric), 'Transcription by Kay Sleking'. Yo Te Bendigo for guitar and bandoneon. Unpublished

Piazzolla, A. (music), Cárpena, H. (lyric) (1950) "Con el Cielo en Las Manos".

Recordings

Cissoko, A., & Goetze, V. (2008) Sira. ObliqSound

Cuarteto San Telmo (2007). *Tangos de Siempre*. Argentina: SONY BMG MUSIC ENTERTAINMENT (Original recording published 1966).

Track 9: "Yo Te Bendigo"

APPENDIX B - Reference list

Mosalini, Juan Josè (2011). *Buenas Noches Che Bandoneon*. Acqua Records. ** Track 8: "Con el Cielo en las Manos"

Sosa, Mercedes (1982). *Mercedes Sosa en Argentina*. Buenos Aires: Philips ** Track 15: "Los Mareados"

Touré, A. F., & Diabate, T. (2010). *Ali Farka Touré & Toumani Diabaté*. England: World Circuit Records (UK), & Nonesuch (US)

Touré, A. F., & Diabate, T. (2005). and In the Heart of the Moon. Mali: World Circuit Records

Websites

[Atlasensemble1] (2010, November 5). "Bassem Alkhouri demonstrates the qanun". [Video File] Retrieved from https://goo.gl/xPRJU9

Blaya, Ricardo García. "Todo Tango". Retrieved from https://goo.gl/aaEPwj

Einarsdóttir, Gunnhildur. "Harp Notation". Retrieved from https://goo.gl/1mzG0T

International Society of Bassists (2013, September 3). "Juan Pablo Navarro -The Tango - A Secret Code". [Video File] Retrieved from https://goo.gl/rsxkD1

[Majnuun Music & Dance] (2015, April 10). "10 Ways To Hold an Oud Risha". [Video File] Retrieved from https://goo.gl/bXAoyx.

McKay, Catriona (2011, October 3). "Isflak". [Video File] Retrieved from https://goo.gl/KCr2EU

A Toolbox for The Tango Harpist

For almost every technique in this toolbox there is a demonstration video made. These videos are compiled into a single one, in the same order as the techniques are presented here. Links to each video are found in the description of each technique, full video of all techniques is found here:

https://youtu.be/gxLZpOOwuVk

Tango Rhythm Section

The techniques gathered in this part of the toolbox are created so that the harp can take on the role of being an accompanying instrument in a small ensemble setting in the tango.

Strumming

To strum is to play (a stringed musical instrument) by stroking or brushing the strings.⁵ Strumming is used in the tango tradition by guitars and guitarróns playing accompaniment. Strumming on a harp works well both on the folk harp and on the pedal harp. Here are some different types of strumming techniques for the harp.

Basic strumming

For demonstration of this technique go to: https://youtu.be/gxLZpOOwuVk?t=8s

Production

4 fingers of the left hand are placed on the strings that should not be ringing with resonance, the strings that are not in the chord. The right hand is used to strum, either with back side of the fingers - the nail, or with the front of the fingers. It is best done in a rhythmical movement back and forth, brushing the strings only when a rhythmical sound is wanted.

Sound

Similar to the sound of a guitar being strummed. Percussive with a clear harmony feeling.



Strumming with a bass note

For demonstration of this technique go to: https://youtu.be/gxLZpOOwuVk?t=22s

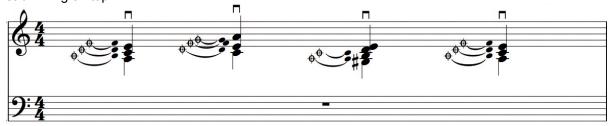
Production

4th finger of the left hand is playing the wanted bass note, while 3 fingers are damping the strings that should not me ringing with resonance, the strings that are not in the chord. The right hand is used to strum, either with back side of the fingers - the nail, or with the front of the fingers. It is best done in a rhythmical movement back and forth, brushing the strings only when a rhythmical sound is wanted.

Sound

⁵ "Definition of strumming" (2016) https://goo.gl/bQJ8Uu

Similar to the sound of a guitar being strummed. Percussive with a clear harmony feeling. With the bass note it reminds of a bass together with a guitar, or two guitars - one playing a bass line and one strumming on top.



Strumming with a bass note and the use of enharmonic⁶ doubling (Only for pedal harp)

For demonstration of this technique go to: https://youtu.be/gxLZpOOwuVk?t=35s

Production

The pedals are placed in a position where they create as many enharmonic notes in the chord as is possible. Then the production is made as described in "Strumming with a bass note", except from that the need of damping the strings will be much less as more of the strings can ring in a note from the chord.

Sound

For the pedal harp this is the strumming technique that creates the fullest sound as many strings are resonating.

Percussive strumming version 1

For demonstration of this technique go to: https://youtu.be/gxLZpOOwuVk?t=50s

Production

Right hand uses back of hand (nails) to strum with a quick, firm motion. Left hand dampen the strings straight after they have been strummed, so quickly that the notes do not have time to sing, but there will be only a percussive sound. This technique is easily combined with a bass line played with the 4th finger of the left hand just before strumming.

Sound

Sharp and crisp sound well suited for percussive effects.

Percussive strumming version 2

For demonstration of this technique go to: https://youtu.be/gxLZpOOwuVk?t=1m12s

Production

Left hand keep the palm and fingers pressed lightly on the strings that are going to sound, while right hand uses back of hand (nails) to strum with a quick, firm motion.

Sound

Sharp and muffled sound well suited for percussive effects.

Additional remarks

⁶ Definition of enharmonic. Adjective. Music. Of, relating to, or involving tones that are identical in pitch but are written differently according to the key in which they occur, as C sharp and D flat, for example. ("Definition of enharmonic", 2016. https://goo.gl/mDgrF1)

This technique can add a very interesting colour to the bandoneon *arrastre*⁷ when done in unison.

Flamenco inspired strumming

For demonstration of this technique go to: https://youtu.be/gxLZpOOwuVk?t=1m28s

Production

The left hand dampens the strings that should not be resonating with the chord. The right hand strum the strings by letting one finger after the other move over the strings in a flowing motion, starting with the little finger, using the back of the fingers.

Sound

Creates a round, percussive sound with a clear feeling of the harmony. The inspiration from flamenco can be easily noticed.

Semiguaver strumming

For demonstration of this technique go to: https://youtu.be/gxLZpOOwuVk?t=1m33s

Using this technique the harpist can create fast semiquaver rhythm in a strumming pattern.

Production

The left hand dampens the strings that should not be resonating with the chord. The right hand uses the index finger, middle finger and ring finger to strum. The fingers need to be straight from the palm, with a bend in the joint between the fingers and the palm. Keep the wrist relaxed and move the fingers in a fast motion back and forwards. It is the tip of the fingers that is connecting with the strings.

Sound

Round and percussive.

Additional marks

As this technique is done with the tip of the fingers, it will always have a guite low volume.

Cluster glissando

For demonstration of this technique go to: https://youtu.be/gxLZpOOwuVk?t=1m47s

The cluster glissando can be used as a variation of strumming in the tango. For definition on the cluster glissando go to: https://goo.gl/O6MmCe

Production

In this technique, the harpist uses one finger to create the effect, instead of sliding all the fingers over the strings as in the earlier strumming techniques. The movement is quicker than a normal glissando, and the tempo can vary within the cluster glissando for example by going faster and faster.

Sound

The sound is closer to a glissando than the strumming, buy still the movement is so quick that the sound will be felt more as a percussive effect than a melodic one.

Síncopas

These techniques should be used to create tango bass accompaniment. Most of them are developed to be performed only with the left hand, either alone or with melody/chords in the right hand, and it will be indicated if two hands are needed.

⁷ Arrastre is an effect in tango music, where one slurs the chord to an accentuated part of the bar (Vervelde, Warman, 2001).

Síncopa with arrastre - Arpeggio

For demonstration of this technique go to: https://youtu.be/gxLZpOOwuVk?t=2m4s

Production

The ring, middle and index finger plays an arpeggio to create the *arrastre*, and land on an accentuated beat with the thumb. As the thumb is plucking the string, the other fingers fall back on the strings they just place to dampen them. The thumb repeats the same note on the second quaver and moves the hand up to finish the motive.



Síncopa with arrastre - Scale

For demonstration of this technique go to: https://youtu.be/gxLZpOOwuVk?t=2m19s

Production

Produced in the same way as the "Síncopa with arrastre - Arpeggio", only that the fingers are placed in a scale instead, leading to the accentuated note.



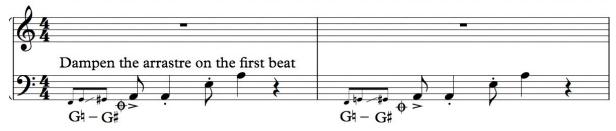
Síncopa with arrastre - Pedal slide/lever slide

For demonstration of this technique go to: https://youtu.be/gxLZpOOwuVk?t=2m29s

Production

Produced in the same way as the "Sincopa with arrastre - Arpeggio", only that the fingers are placed in a scale instead, leading to the accentuated note. On the sheet music example under, the arrastre is executed with three notes before the accentuated note, which means played with only two fingers as the third note is a pedal slide/ lever slide. The harpist can also choose to do a four note arrastre using three fingers.

The pedal slide/lever slide have to be done very accurate and with a firm movement. If the harpist is using a lever harp this is a **two handed variation** of the *Síncopa* with *arrastre*. In this case, the motive should be played with the right hand, while the left hand change the lever in the *arrastre*.



Síncopa with arrastre - Glissando (Two handed)

For demonstration of this technique go to: https://youtu.be/gxLZpOOwuVk?t=2m43s

Production

In this example, the technique is executed with a glissando up to the 1st beat with the left hand. The index finger of the right hand pluck the accentuated note while the left hand quickly dampens the glissando. This means it can only be played in the range of the right hand. (To broaden the range of the right hand leave the harp standing on the floor.)

Another way of producing the glissando *arrastre* is by playing the octave with four fingers from each hand. This means it's no longer a glissando but a long scale and each note will sound more divided form the rest and clear. The notes can be dampened by putting the fingers back on the strings after playing them, or with the palm of the left hand.



For demonstration of this technique go to: https://youtu.be/gxLZpOOwuVk?t=3m2s

An anticipated Síncopa with the accent on the last quaver before the first beat of the bar.

Production

Place the thumb on the first string, very close to the soundboard. The first note should be played with much attack to create a dry, sharp note. Keep the hand in a horizontal position, tipping it slightly away from the body. Place the index finger and the ring finger on the strings. Play the thumb by dragging the strings outwards to create a strong attack. Then doing a decrescendo when playing the next notes and damping the first string with the thumb as the last one is being plucked.



Salgán Síncopa 2

For demonstration of this technique go to: https://youtu.be/gxLZpOOwuVk?t=3m13s

Production

Place 4th finger, 2nd and 1st on the strings. Play forth finger (the *Sincopa*) with an ascent and (while getting support from the fingers still resting on the strings) dampen the vibrating strings with the sides of the little finger, 4th and 3rd finger in a way that produces a buzz sound. This buzz sound is the "ghost" note of the 1st beat.



Yumba techniques

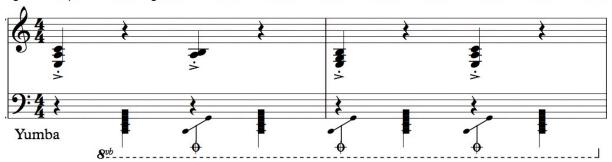
Definition of *yumba* (Warman & Vervelde, 2001): "*Yumba*, figure of speech, introduced by Osvaldo Pugliese. Pugliese was searching for a way to accompany soloists on piano. One of his compositions is also called "La Yumba". The name Yumba (pronounced: shoom—baaa) imitates the sound produced by piano and double bass. On the 1st and 3rd round the piano plays the lowest part of the chord. On the 2nd and 4th counts the piano plays a single note or cluster in the lowest register of the piano. This is the "baaa"."

Yumba

For demonstration of this technique go to: https://youtu.be/gxLZpOOwuVk?t=3m43s

Production

The *yumba* is created by an accentuated chord or note played by the right hand on the 1st and 3rd beat. On the 2nd and 4th beat the harpist hit the lowest string with the palm of the left hand. Let the bass strings resonate until the next beat and dampen them with the left hand at the exact time the right hand pluck the strings of the chord.



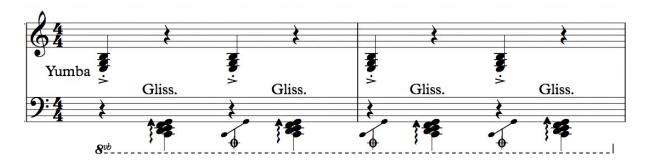
Yumbita

For demonstration of this technique go to: https://youtu.be/gxLZpOOwuVk?t=3m53s

This is a variation of the *yumba*. I have chosen to call it *yumbita* because it has a rounder sound and lower volume that the *yumba*.

Production

This technique is created by an accentuated chord or note played by the right hand on the 1st and 3rd beat, and a short and firm glissando played in **piano** to **mezzoforte** from the lowest strings on the harp on the 2nd and 4th beat. Let the bass strings resonate until the next beat and dampen them with the left hand at the exact time the right hand pluck the strings of the chord.

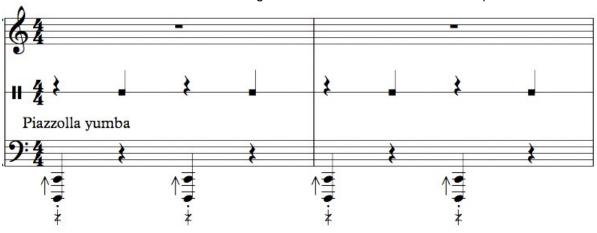


The Piazzolla Yumba

For demonstration of this technique go to: https://youtu.be/gxLZpOOwuVk?t=4m4s

Production

On the first beat the left hand play a thunder glissando from the lowest strings of the harp, really going for creating as much "thunder" as possible. As quick as possible the left hand dampens the strings that resonate and on the second beat the right hand hits the soundboard with the palm of the hand.



Percussive effects

Knocking on the soundboard

For demonstration of this technique go to: https://youtu.be/gxLZpOOwuVk?t=4m19s

Many of the traditional instruments in the tango uses knocking on the instruments. It is mostly used as a rhythmical effect and percussive variation. On the harp there are many possibilities in making different knocking sounds, by varying the place the harpist knocks or the use of the hand.

Latigo - scraping the string

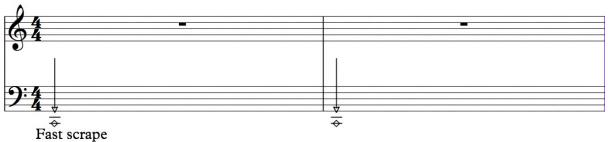
For demonstration of this technique go to: https://youtu.be/gxLZpOOwuVk?t=4m29s

This technique is similar to the effect latigo the tango violinists use. Latigo means whip.

Production

Use the left hand and place the tip of the thumb, or the nail of the thumb, on one of the bass strings. Using a firm downwards motion scrape the sting in a vertical way, starting slow and go quicker and quicker. The tempo used will decide the character of the effect. This technique can also be done in an upwards motion, something that works well when playing in a standing position. The tempo of the

latigo can vary after the effect the harpist wants. Often the latigo starts slow and will speed up the further into the movement it comes.



Other techniques for accompaniment

Repeating chord in two hands using the damping as rhythmical effect

For demonstration of this technique go to: https://youtu.be/gxLZpOOwuVk?t=4m54s

This technique can be used in both milonga⁸, tango and valse rhythms.

Production

A chord is played in quavers, repeated on the same strings, changing between which hand is plucking the strings. The harpist accentuates the quavers that imply the rhythmical pattern that is wanted. The accentuated notes are quickly dampened by the other hand that is placing the fingers to play the chord again.



⁸The milonga campera is written in 4/4 time and has a typical, rhythmic subdivision: 3-3-2. That is, a subdivision of quavers (8ths) into 3 groups. One of three quavers, another of 3 and one of 2. Another milonga style is milonga cuidadana and is written in 4/8 or 2/4, based on this rhythm in 2/4: one punctuated quaver, a semiquaver and to quavers. (Warman & Vervelde, 2001)

Tango Melody techniques

The techniques in this part of the toolbox focuses on ways to hold and colour the tango melody on the harp.

Different sound qualities

Harmonics

This is a technique that is much used in the harp tradition, in both the classical tradition and the folk music tradition. It is most relevant to use in the tango as this is a technique already used a lot by the tango guitarist when holding the tango melody.

For details on how exactly to produce and notate this technique go to https://goo.gl/xVbmiY

The harp can really develop further the use of this technique in the tango. Examples of this is that the harp can hold the melody using only harmonics, it can play chords with only harmonics (the left hand can play up to three harmonics at the same time), and the harp can create clear double octave harmonics.

Tremolo

For demonstration of this technique go to: https://youtu.be/gxLZpOOwuVk?t=5m14s

This technique works best for the lever harp, as the tension of the strings are lower. It can also be done on the pedal harp, but the sound will not be as full as on the lever harp. As well as being a great effect when creating a special atmosphere, this technique can also be used to hold a note for a longer time, especially for the strings on the higher registers where the resonance will quickly go down to a very low volume after being plucked.

Production

Use the index finger to create the motion. Move the finger quickly back and forward, letting both the front of the fingertip and the back of the finger (the nail) pluck the string and create the sound. Let the hand be firm but the index finger loose without tension.

<u>Tremolo by use of enharmonic doubling of a note (two handed)</u>

This technique works best for the pedal harp as the pedals can create more enharmonic doubling. Create an enharmonic doubling of a note and repeatedly play the two strings using two hands. For details on how to produce and notate this technique go to https://goo.gl/0DcBFn

Xylophonic sounds

This technique is a great tool for creating different voices and variations of the sound. It can also be used as a more percussive effect in the tango. It is a muted sound, very different to the normal plucking of the strings.

For more information of how to produce this sound and how to notate it, go to: https://goo.gl/oBRIEk

Vibrato (two handed)

For demonstration of this technique go to: https://youtu.be/gxLZpOOwuVk?t=5m29s

Vibrato is used a lot in the tango by both violins and guitar. On the harp,, it can be a great variation to the sound in a solo when the harp has long notes.

For more information on how to produce and notate this technique go to https://goo.gl/hAVg3T

Playing with plectrum

For demonstration of this technique go to: https://youtu.be/gxLZpOOwuVk?t=5m42s

Using plectrum when playing the melodies creates a sound with more punch that will easily go through a thick accompaniment. The harpist will use some time to pick up and find the right position of the plectrum in the hand, so this needs to be taken into consideration when arranging the piece.

Oud plectrum

The oud plectrum is a soft plectrum. It is long which means it is easier to hold it in a comfortable and secure way. The sound is quite soft, but has a clear punch. It is also sharp with many overtones.

Qanon plectrum

This plectrum is thicker and harder than the old plectrum. It gives a sound that has more punch and is loader, but with less roundness and overtones. This plectrum can be a bit hard on the thinnest strings, so, the harpist is advised to test it our carefully.

This plectrum can be used both without and with the qanon plectrum ring. Wearing the ring gives a movement when plucking that is similar to when using only the finger. It also gives the harpist the possibility to use other fingers at the same time. The downside is that it takes a lot of time to put both the ring and the plectrum to its place. For quick changes it can therefore be better to use the plectrum without the ring.

Ornaments

Hammer-on for the harp

For demonstration of this technique go to: https://youtu.be/gxLZpOOwuVk?t=6m17s

This technique, which is used a lot by tango guitarists, is created by hammering a string that is already vibrating and thus making a new note above or under the already sounding note. It is most used as an ornament. This way of making this ornament also allows the harpist to play an ornament in a half step above or below the note, even though the pedals are set in a different way.

Production

Pluck the string with the first note of the ornament/melodic line, switch the pedal or lever connected to the string in a firm movement to the desired new note, making the tuning discs hammer the string creating a new note. Quickly change the pedal/lever back to its starting place and the string will again return to the first note. The movement of the pedal should not go into the full position of the pedal, but quickly up or down and back again.

Sound

The second and third note will be of a very different sound quality than the first. This makes this ornament stand out more than if the harpist plays it in a normal way - plucking each string.

Additional remarks

On the harp, the hammer-on can only be used one half step up or down as it is the levers and pedals doing the hammering.

Harp X-Factor

The techniques in this part of the toolbox are the ones where the harps magic, mystery and uniqueness can contribute to the tango.

Arrastre on the harp

There are many ways to slur into an accentuated beat on the harp. The three most natural ways to do it is by doing an arpeggio, a glissando, a scale or a scale with a pedal slide up to the accentuated note. To look at examples of how these can be played go to "Síncopa with arrastre".

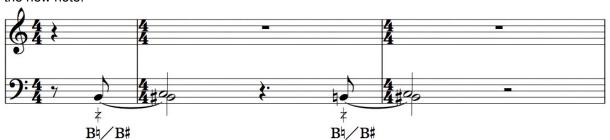
Pedal/lever buzz arrastre

For demonstration of this technique go to: https://youtu.be/gxLZpOOwuVk?t=6m31s

This technique can only be played on two strings that have the possibility to be set as enharmonic doubling. It works best in the bass register of the harp.

Production

To create this effect the harpist positions the pedals so that the lowest string is set to a note that is one half step under the accentuated note. The lowest string is plucked, then left to resonate as long as the harpist chooses to. Before the vibration has gone away the harpist pushes the pedal so that it is lingering between the pedal positions. Then with a firm movement pushes the pedal into the next position while plucking the highest string at the same time. This way both the strings will resonate in the new note.



Arpeggio used as arrastre - upwards motion (Two handed)

For demonstration of this technique go to: https://youtu.be/gxLZpOOwuVk?t=6m42s

An example of the arpeggio used as *arrastre* is to be found in "Síncopa with arrastre". Here is a way to use a longer and more present arrastre, using both hands to create it.

Production

Use 7 notes in the *arrastre*, with the 8th note being the accentuated note. Be clear with the intention and direction of the *arrastre* while paying it.



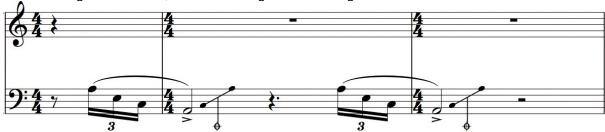
Arpeggio used as arrastre - downwards motion

For demonstration of this technique go to: https://youtu.be/gxLZpOOwuVk?t=6m52s

The *arrastre* can also be played in a downwards movement ending on the accentuated note. This can be done both by scale, scale with pedal slide, glissando and arpeggio. Here is one example of an arpeggio in a downwards movement.

Production

Place the fingers in a chord, with the 4th finger on the string that has the accentuated note.



Fast arpeggio in higher octaves as arrastre. (Two handed)

For demonstration of this technique go to: https://youtu.be/gxLZpOOwuVk?t=7m4s

This quick arpeggio sounds like a very short *arrastre*. It can remind the listener of the short bandoneon *arrastre* or a guitar strumming. It is a great tool to use when accompanying in the tango. This technique also blends very well together with the bandoneon *arrastre*.

Production

Place the fingers in a close arpeggio in the higher octaves of the harp. Include the 7th or similar extensions of the chord, so the strings used are close together. Start very short before the beat and do a very fast arpeggio.

Hitting the strings

These techniques that involve hitting the strings give a very different effect on the pedal harp than on the lever harp. Due to the lower register on the pedal harp, and thicker bass strings, they will resonate fuller than the lever harp. On the lever harp the resonance in the lowest register has a clearer more ringing sound, but will have a lower volume.

Hitting the strings

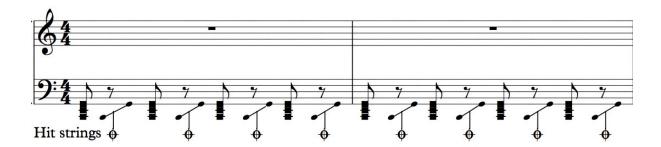
Hitting the strings in a pattern with a break between

For demonstration of this technique go to: https://youtu.be/gxLZpOOwuVk?t=7m26s

This technique is similar to the deep cluster of the bandoneon. It is a percussive effect that works well both alone and in unison with the bandoneon doing the cluster.

Production

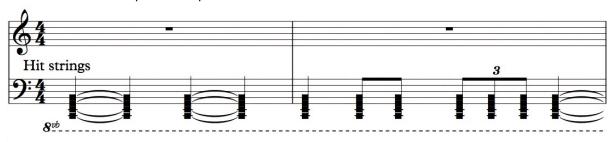
Hit the strings with firm motion, removing the hand quickly so that they will ring fuller. Dampen with side of the hand opening hand slightly to avoid buzz sound of damping. Spreading the fingers while hitting will give a slightly fuller sound.



Hitting the strings and letting them ring

For demonstration of this technique go to: https://youtu.be/gxLZpOOwuVk?t=7m40s

This technique is similar to the one mentioned above, but the similarity to the bandoneon cluster goes away when letting them ring. It is a percussive effect with a rich attack, giving a blanket of resonance in its wake. Can be repeated in guick succession.



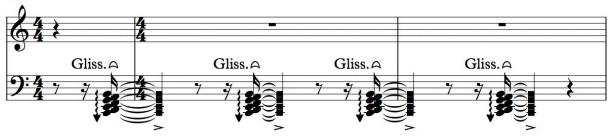
Hitting strings + percussive strumming arrastre

For demonstration of this technique go to: https://youtu.be/gxLZpOOwuVk?t=7m56s

A technique that is developed with inspiration from the bandoneon *arrastre*. It works both good along, and in unison with the bandoneon *arrastre*. It has a very different character depending on if it is played in the bass or in the higher registers. When played in the bass of the pedal harp it might be necessary to leave the harp the floor to reach with the right hand.

Production

The right hand play a percussive strumming. Instead of damping the strings quickly with the left hand, the left hand hits the strings instead. The strumming is played slightly before the beat, creating an *arrastre* up to the beat which is the hit of the strings. The strings can be left to resonate for a while, or dampened quickly.



Atmospheric effects

Glissando

For demonstration of this technique go to: https://youtu.be/gxLZpOOwuVk?t=8m16s

The glissando is already an established tool in the tango. The harp can enhance this tool with its many possibilities of forming and shaping the glissando and by the use of pedal positions to create a specific chord or scale all over the harp.

There are endless possibilities of doing a glissando on the harp in a way that fits into the tango. The examples that are showed in this video is fast bisbigliando glissando, slow bisbigliando glissando, a glissando as a continues motion from a broken chord, deep glissando going all the way to the lower bass strings and glissando made with the back of the fingers (nails).

Flutter glissando

For demonstration of this technique go to: https://youtu.be/gxLZpOOwuVk?t=9m5s

This is a muffled sounding glissando that can create a soft, mysterious soundscape.

For more details on how to produce and notate this technique, please go to: https://goo.gl/8Ab2kz

Pedal buzz

This technique has a big range of volume and sound of attack. It can be used as a sharp percussive effect, and a soft mysterious colour in the sound in the deep bass strings.

For more details on how to produce and notate this technique, please go to: https://goo.gl/tzJ8iH

Expressing variations in sound colour and attack <u>Using the placing on the string to change the colour of the sound</u>

For demonstration of this technique go to: https://youtu.be/gxLZpOOwuVk?t=9m16s

Playing close to the soundboard, which is called *Pres de la Table*, low on the string (*Bas dans les Cordes*) and high on the strings (*Haut dans les Cordes*) are different variations of where the string can be plucked. This is important in the tango because the gives the harpist the possibility to find a sound in the bass or the melody that is more clear and punchy, and can more easily be heard through a thick accompaniment or ensemble.

For the bass strings

This section will have a stronger impact on the pedal harp than the lever harp, but basically the same things apply for both.

Plucking the string on the normal position gives a round, full sound. This is where the strings will vibrate the most.

Playing *Bas dans les Cordes* in the bass will create a sound that is more clear, but that still has a round sound with a lot of overtones in it. In tango this can be a good option because the notes have a clearer attack, but still with the resonance and overtones of the harp in the sound.

Playing *Haut dans les Cordes* in the bass can be challenging for the arm, as it has to be held in an unnaturally high position. The sound is very interesting for use in the tango as it has the most punch in the attack, and a deeper voice as there is less overtones. This technique is great for shorter parts so the harpist can rest the arm. A great way of using this technique is by standing and playing. (Only for the pedal harp). The right hand rests over the neck of the harp, and the harpist stands slightly to the left side of the harp. Now the harpist can reach the very highest areas of the deepest bass strings. This technique is great for when the harpist has a bass without many pedal changes, or a melody in the bass without many pedal changes. Playing in higher octaves while standing in this position is very difficult.

Playing *Pres de la Table* in the bass is challenging for the body, but can work very well if the harpist leaves the harp standing on the floor. The strings are heavy to pluck as the tension is so high, but can

APPENDIX C - A Toolbox for The Tango Harpist

give a good effect. In my experience from this research, the sound from when strings are plucked closest to the soundboard, which gives a nasal sound, does not have a strong place in the tango, if not for more percussive effects.

For the rest of the harp:

The rest of the harps works in the same way as the bass, only that the differences are less. The sound is dryer, with more punch and sharpness the further away from the middle of the string the player plucks. This means that if the harpist has a melody or counter melody that is playing over an accompaniment that has a big instrumentation, or thick chords, or high in volume, the harpist can go further down on the strings to create the right attack and sound needed to go through the accompaniment. Also, when the harpist is playing more voices at once, going further down or up with one of the voices will give the impression that there are more instruments and create depth and variation to the arrangement.

Direction of the plucking

For demonstration of this technique go to: https://youtu.be/gxLZpOOwuVk?t=10m55

The direction that the strings moves/are plucked has influence on the sound of the attack. The harpist can use this technique to give a sharper attack than what is natural for the harp, which is useful in the genre of the tango.

Production

Place the index finger on the string. Twist the hand so that the finger is parallel to the floor. This gives a more natural movement for the plucking. Pluck the string so that the string moves out towards the room, instead of towards the other strings.

Phrasing of the melody

Repetitions of the note with enharmonic doubling of a note

For demonstration of this technique go to: https://youtu.be/gxLZpOOwuVk?t=11m8s

This a way of expressing and treating a tango melody inspired from the bandoneon's treatment of the melody. The repetition of the note, and the octave as well, in the melody is tool for phrasing the tango melody. On the harp, by creating enharmonic doubling of the note, the performer can enhance the possibilities of repeating a note.

The lyric of "Los Mareados" by Enrique Cadícamo

Music by Juan Carlos Cobián

Original lyric9

Rara..
como encendida
te hallé bebiendo
linda y fatal...
Bebías
y en el fragor del champán,
loca, reías por no llorar...
Pena
Me dio encontrarte
pues al mirarte
yo vi brillar
tus ojos
con un eléctrico ardor,
tus bellos ojos que tanto adoré...

Esta noche, amiga mía, el alcohol nos ha embriagado... ¡Qué importa que se rían y nos llamen los mareados! Cada cual tiene sus penas y nosotros las tenemos... Esta noche beberemos porque ya no volveremos a vernos más...

Hoy vas a entrar en mi pasado, en el pasado de mi vida...
Tres cosas lleva mi alma herida: amor... pesar... dolor...
Hoy vas a entrar en mi pasado y hoy nuevas sendas tomaremos... ¡Qué grande ha sido nuestro amor!...
Y, sin embargo, ¡ay!, mirá lo que quedó...

Translated lyric¹⁰

Rare, as if on fire, I found you drinking, cute and fatal; You drank, and in the din of champagne crazy you laughed rather than cry... Pity I felt at finding you because looking at you I saw your eyes shine with an electric fire, your beautiful eyes that I so adored.

Tonight, my friend, with alcohol we're getting drunk; I don't care if they laugh and call us "the doped ones." Everyone has their sorrows and we have ours. Tonight we will drink because we won't ever see each other again...

Today you will enter in my past, into the past of my life. 11
Three things bears my wounded soul: Love, Regret, Pain.
Today you will enter in my past,

today we'll follow new paths. How great has been our love and, yet, alas, look what's left!

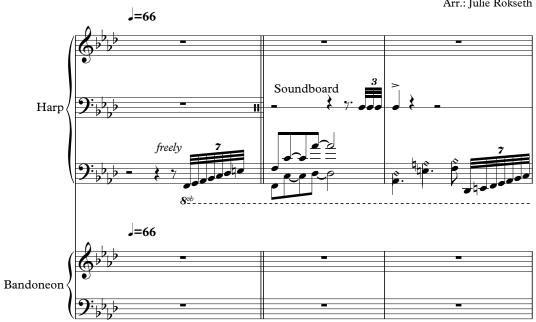
⁹ From www.todotango.com (Blaya, Ricardo García, no copyright)

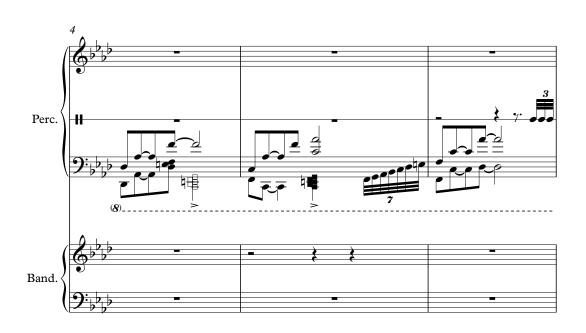
¹⁰ From https://goo.gl/hK6Tgy. (Planet Tango, 1998/2012)

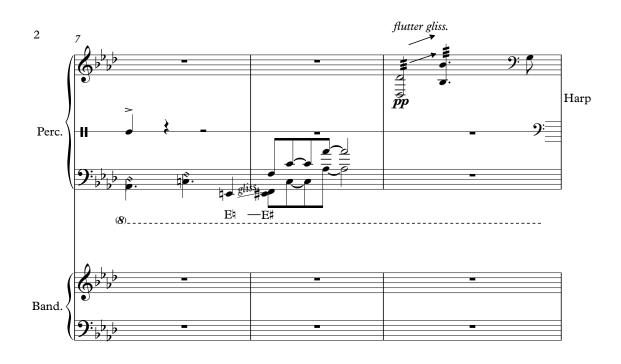
¹¹ Own change to translation from "Today you're gonna enter in my paste, in the past of my life" to "Today you will enter in my past, into the past of my life"

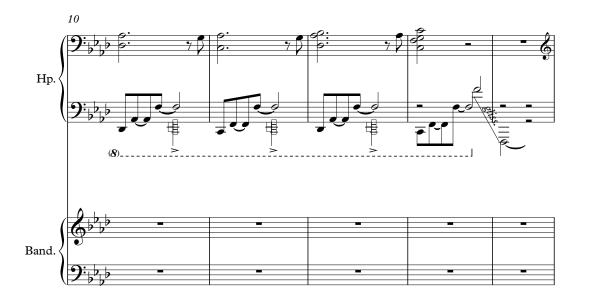
Los Mareados for harp and bandoneon

Juan Carlos Cobián Arr.: Julie Rokseth

























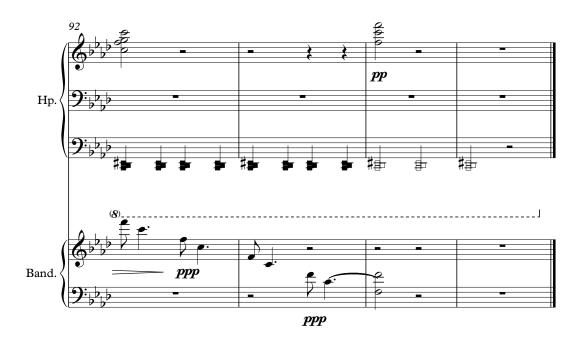




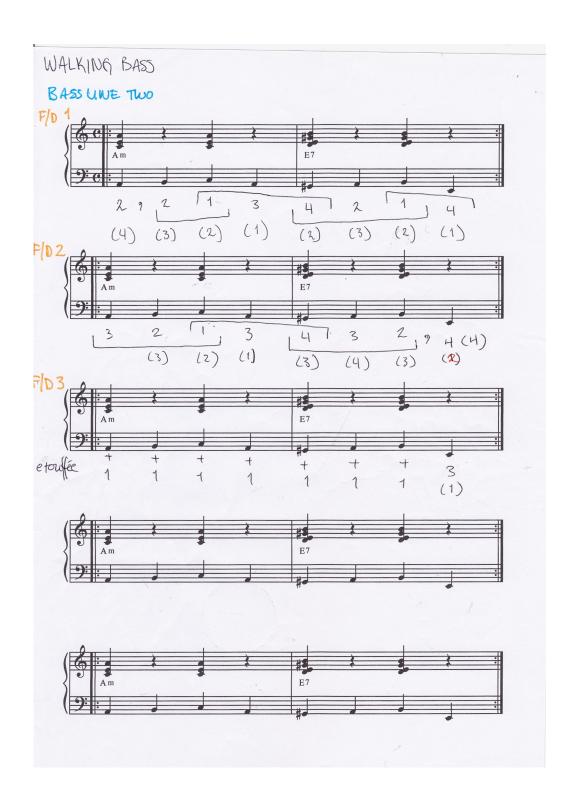








Experiment Walking bass Bass line two and bass line three



		,
Ex. num Test variables	BASSLINE TWO REFLECTION	Date accomplished
Fingering 4	Ween dear and good there for weather out of	or different
Placing: P.d.I.t Tempo: 80 BPM Octave: Low	Very clear and good than to watth out of some in playing with elbow relax!	by our time, or
Placing: P.d.l.t Tempo: 140 BPM Octave: Low	Same - Tringer state for 2. Pinger shorten ned and Identi Tole of the	so havelt og spille
3 Placing: Normal Tempo: 80 BPM Octave: Low	God, naturlig. Det eur herpet sible for vant Veldig frammer - D god chiv.	utz. God klay Mol
4 Placing: Normal Tempo: 140 BPM Octave: Low	Samuet Fruita nestre beste fat Minere em forvata. God komball på dynamille	durpe ly da
5 Placing: P.d.l.t Tempo: 80 BPM Octave: High	Velouis bra. God finger serving og velolig for Letter à spill stell dynamith på den	enver. salte pga. 7. physe
6 Placing: P.d.l.t Tempo: 140 BPM Octave: High	+ Same. Klat of bydely. god finge	-setricing
7 Placing; Normal Tempo: 80 BPM Octave: High 8 Placing: Normal Tempo: 140 BPM Octave: High	Both super good. Not as clear as p.	d.l.t. Hungle.
Placing: P.d.l.t Tempo: 80 BPM Octave: Low	Iblu Wochez Lift root men nur neutritig en Feoled godt 3 opir god leethold a alltig ha Further fints from t Deuping our 4. Proger-	andre stæter. I finger som stæbte. Weethay i hende.
Placing: Normal Tempo: 80 BPM Octave: Low 4 Placing: Normal Tempo: 140 BPM		
Octave: Low 5 Placing: P.d.l.t Tempo: 80 BPM Octave: High	Thu supert. Vandheli's å finn en milk lenholl på 1. slaget mens demge 4. slage	à spi ha full
6 Placing: P.d.l.t Tempo: 140 BPM Octave: High	t Ende nier vaurlug.	
7 Placing: Normal Tempo: 80 BPM Octave: High	Greit. Helix store problem - fint og blut. dybde	lit lite
8 Placing: Normal Tempo: 140 BPM Octave: High	Verniz stole dungel byd new a dunge -	3. slept med
	1	

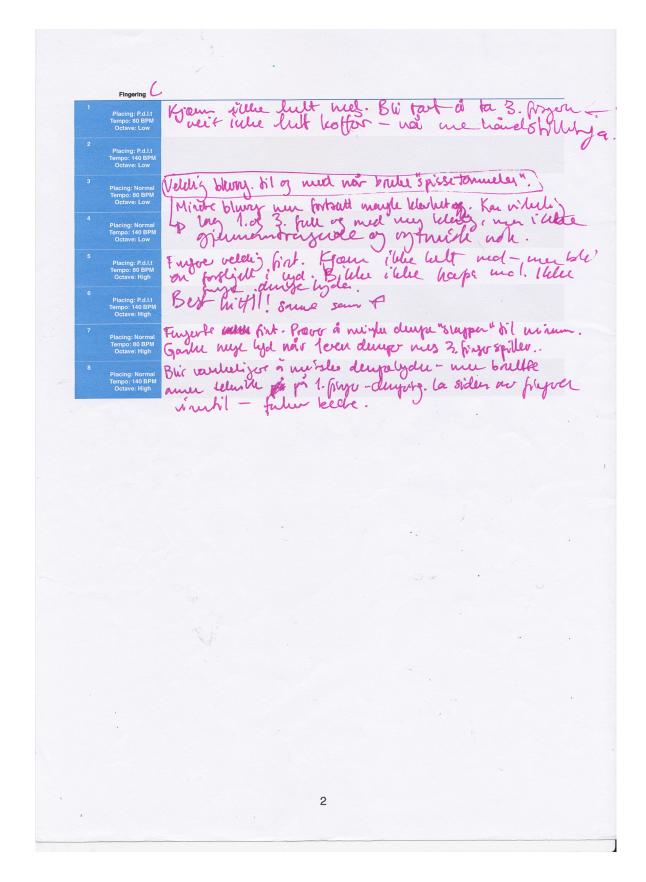
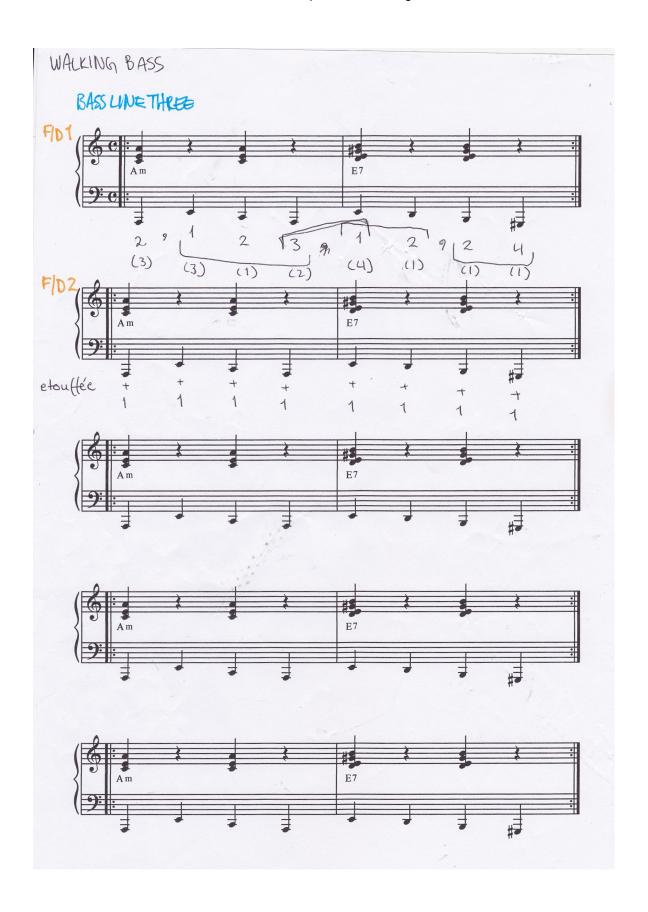


Table 4: System of Tracking progress of Bass Line experiment and my own observations



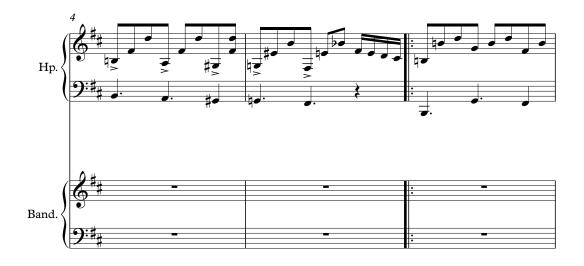
			110/5
	Ex. num	Test variables	REFLECTION Date accomplished 23.03 - Us
	1	Placing: P.d.I.t Tempo: 80 BPM Octave: Low	Veldigha. Golt for house. Klart a tydelig. Lible hendriffa mellam talden ex alderdar.
	2	Placing: P.d.l.t Tempo: 140 BPM Octave: Low	The state of the s
	3	Placing: Normal Tempo: 80 BPM Octave: Low	Veldig good for hunde. The for blurg, Jernt. Iklee nows store bilyd problemer
		Placing: Normal Tempo: 140 BPM Octave: Low	
	5	Placing: P.d.l.t Tempo: 80 BPM Octave: High	Fat. Kleid-går igjenne.
	6.	Placing: P.d.l.t Tempo: 140 BPM Octave: High	
	7	Placing: Normal Tempo: 80 BPM Octave: High	Fint. Like a hoppe i midter - for forbeett 4. skyet som beder til energe.
1	8	Placing: Normal Tempo: 140 BPM Octave: High	Junio i la liliza?
		Fingering 8	
	1	Placing: P.d.l.t Tempo: 80 BPM Octave: Low	tomel - strayen stranger - meles. Deuping beck
	2 .	Placing: P.d.l.t Tempo: 140 BPM Octave: Low	Same her- fryce beste em 80 theregt.
	3	Placing: Normal Tempo: 80 BPM Octave: Low	works oh but alot of Shipsands. Trying to make as little as possible.
		Placing: Normal Tempo: 140 BPM Octave: Low	Works better because of the speed and the "cleaners" of etauffee makes it sound good
		Placing: P.d.l.t Tempo: 80 BPM Octave: High	bible un salte.
		Placing: P.d.l.t Tempo: 140 BPM Octave: High	
		Placing: Normal Tempo: 80 BPM Octave: High	Hert greit. litt litte attock i lyder på 1. og 3. slegt.
	8	Placing: Normal Tempo: 140 BPM Octave: High	Veldig lætt hite staphyda - reint og klort tyderj.
			1

Table 3: System of Tracking progress of Bass Line experiment and my own observations

Yo te bendigo

Juan de Dios Filiberto Transcription: Julie Rokseth

























Solo harp arrangement of "Con el Cielo en las Manos"











Starting point for my own arrangement on "Desde el Alma", by Rosita Melo

Desde el alma



APPENDIX J - Starting point for my own arrangement on "Desde el Alma", by Rosita Melo



My own arrangement of "Desde el Alma" by Rosita Melo













APPENDIX K - My own arrangement of "Desde el Alma" by Rosita Melo













My own arrangement of "La Trampera" by Aníbal Troilo

La Trampera



















APPENDIX L - My own arrangement of "La Trampera" by Aníbal Troilo



APPENDIX L - My own arrangement of "La Trampera" by Aníbal Troilo

