



Berklee College of Music

Harp & Friends

A Thesis Submitted in Partial Fulfillment of the Degree of
Master of Music in Contemporary Performance

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Abstract

This CE addresses the use of the harp in new music styles, showing that this ancient instrument can be also played in any modern and contemporary music ensemble. For this, I interviewed and collaborated with diverse musicians from different backgrounds, countries, traditions and music styles, taking the unique sounds of their tradition and translating them stylistically to the pedal harp. The journey was challenging and exiting, and invited me to open new perspectives and discover new ways of playing the harp. Among the music explored, the following is included: traditional music from northern India, Iran, Spain, and Peru. I also developed knowledge in extended techniques and jazz voicing techniques. As a result of this exploration, I developed new techniques in the harp and wrote notations for them. This knowledge is useful for any harpist and composer, regardless of their style or musical backgrounds.

Keywords: Harp, notation system, techniques, world music, collaboration.

1. Introduction

Both of my parents are from Iran, they moved to Peru in 1980. I was born in a small village near the capital, Lima, where the western culture was very present, especially Spanish colonization; it had influenced the culture in many things, music, architecture and various traditions. Even though my parents were not from Peru, they taught me to love, respect and appreciate the culture and place where we grew up, always reminding my sister and I that “the earth is a single country and humanity its citizens”. In my childhood, I studied in a school that promoted classical music and traditional Peruvian folk music, so from a very young age I was learning Academic European Music but at the same time learning about Peruvian folkloric music. This put me in the path to appreciate modern music and academic music, and also put music as a focus in my life. At my schools we used to sing and play the flute every morning so this practice made me see music as important center in my daily life. On the other hand, at home, my parents were not musicians, but they loved to listen Persian songs. Mostly I grew up listening to traditional folk songs, Persian music, instrumental music, and Middle Eastern Traditional songs and musicians, which is mostly microtones and old tunes interpreted on traditional instruments. This brought a new color palette and textures to my ears, the various different perspectives and perceptions of music, from one hand the Middle Eastern traditions, which I only heard but I didn't play, and on the other hand the traditional South American music that I hear in the streets and radios. But my main focus was to study the European academic music, which was helpful to train me in the basics of music understanding.

At the same time that I started playing the harp, I started, as a hobby, to dance flamenco. Even though was not the center of my professional career, it was a passion that I mysteriously had in my blood.

For many years I was dancing flamenco and playing classical music on the harp, but I never knew how to combine these two passions in my life. This was also applicable for other music styles that I was exposed to, even though I enjoyed and listened to modern music and other traditions, it never came to my mind that I could do all those types of music in this precious instrument, the harp.

Finally, after finishing my formal education in music at the National Conservatory of Peru, I decided to travel for my Masters to a country that I could meet a rich culture and be able to do my own music while learning from different musicians from all over the world. This is how Spain and Contemporary Music studies came to my path. I ended up living in Spain, experiencing flamenco culture face to face and learning from musicians at Berklee that come from diverse cultures and backgrounds. Being in Berklee has exposed me to diverse musicians. Since I grew up in a family culture in which unity in diversity and the beauty of love and respect towards other traditions is so present, it was inevitable for me to collaborate with as many musicians with different backgrounds as possible, and, subsequently learn and want to apply their sounds to my instrument.

2. Proposed Culminating Experience (Abstract)

The main purpose of this CE project is to research, learn, collaborate, compose and place the pedal harp in unusual music situations. Being in Spain gives me the opportunity to be more involved with the traditional music and the different elements that form part of the tradition, such as the guitar techniques, the dance movements with claps and steps, the voice singing and the styles in the tradition. While in Spain I have also been able to collaborate with musicians that admire and execute Mediterranean music, which I also include in my research. The research's in this CE is mostly done by encounters with the musicians and learning through oral

tradition, through teaching lessons, interviews and recordings where I incorporate the understanding of the harmony, melody, scales, rhythms and traditions of the general styles. I have been lucky to meet various musicians from in and out of Berklee, who come from countries like the US, India, and Iran, among others. I want to show that the harp can be used as a good fit that can form part of any music ensemble, just like the other instruments. This task is challenging since both audience and musicians look for the same sounds and formatting in bands. I had to take the first steps in adding harp into modern music and introduce this instrument into as many collaborations as I could, always trying to find new ways of playing that are not remitting the memory of people to the same *cliché* harp that their ears are expecting.

The harp tried to imitate, as close as possible, the outstanding sounds that are representative of each style, for example flamenco guitar techniques like strumming, bendings in the strings to simulate the sitar, or hits in the harp board like the show steps in flamenco. They are not an exact copy but a new interpretation provided by the harp's natural sounds. This innovation provides new performance possibilities, and composition ideas that can be used in any type of music.

3. Objective & Sub-Objectives

My objective is to consolidate my artistic identity by taking the harp out of its comfort zone and to be able to articulate it into any musical context in contemporary and world music

Through this objective I should be able to join any ensemble with the harp as a main and background instrument. I explored different traditions, rhythms, techniques, periods and music forms, and will translate them in to the harp in a stylistic way. This project will include a

meaningful amount of research and analysis of the diverse traditions, rhythms and styles. I will need to understand the principal techniques that are applied to certain style tradition and find a way to relate them properly in the pedal harp. Many of the explorations I will be providing by researching and analyzing the diverse techniques such as being the first pedal harpist to apply guitar techniques into flamenco music. Of course, the harp will display new textures in any situation that collaborates, but that's also part of the unifying nature that I want to bring my instrument. I'll be providing new sounds to the history of the classical harp. Finally, I will compose small pieces for harp and ensemble of voice, guitar, bass, choir, percussion and dancer, among others to show the versatility of the instrument and play with the colors and textures of it.

Sub-objectives

1-Research and analysis

2-Applied Techniques

3-Composition

4-Collaborations

4.1- Performance

4.2 Ensemble

5-Dissemination

At parallel this project will invite to an intercultural dialogue through the instruments and exploring improvisation with harp in diverse settings, this leads to one of the tangents of the project which is record collaborations and make small compositions for different instruments and artist.

4. Methodology

The methodology has mixed elements from performative research and collaborative work. Collaborative work is a key element, since one of the main transmission channels and methodological approaches is based on the oral tradition.

In order to have all my goals ready in one year, (1) research and learn general traditions, rhythms and styles in harp and (2) translate the most important techniques on my instrument, I will use all this information to apply it creatively on the harp by composing pieces inspired in different traditional world rhythms, like Iranian music, Indian music, flamenco rhythms and “Palos”, among others. For this I will have to research a lot on my own, but at the same time, take private classes with the specialist and musicians in Valencia and Berklee, analyze their music and harmony and put them together properly in original compositions.

· This project proposes an artistic research project since it constitutes an artistic proposal and brings along new knowledge. The common tools used in artistic research in general and, specifically in this project are:

- Data collection (interviews, bibliography, online resources)
- Harp Techniques
- Notation systems exploration
- Creative Process
- Composing and performance

4.1. Processes and tools

In order to achieve the main goal of the project, I will follow a systematic plan of action based on research and practice. The actions will involve analyzing data collections, organization of information, composing, arranging, performing, recording, in that order. As most of this style of music are oral traditions, conversations with musicians will be important to be videotaped and sound recorded. Through a list of questions, I will be able to compare

the different kind of opinions and create a general idea and have more clear conclusions. The relationship between taking all the information and put it in a in a song will be essential to display the characteristics of the music. The performance will be to play the compositions and showing each method is in the tradition and then how it sounds in the harp. Recording will be a tool to process data.

A very essential part of the CE is to display the harp in various music ensembles, for this I have accepted as many diverse collaborations that I could so I can test the harp in new music situations that I haven't been before, for this I had to make each song unique using new techniques and extended techniques, to make each one different from the other.

1. Techniques

1.1. Research:

- 1.1.1. Extended techniques
- 1.1.2. Persian and Indian Music bending's and micro tones
- 1.1.3. Persian scales.
- 1.1.4. Jazz chord changes (mapping the pedal harp)
- 1.1.5. Charango strumming
- 1.1.6. Flamenco musicians: guitar, dancer, percussion.
- 1.1.7. Armenian Duduk
- 1.1.8. Electronics applied to the harp

1.2. Apply

1.2.1 Slides: fast slide for trino or vibrato in Persian music and citar imitation to follow singer

1.2.2 Extended techniques:

- 1.2.2.1. Water drops created with harp tuner.
- 1.2.2.2. Slide micro buzzing low strings.

- 1.2.2.3. Enharmonic only one bending for color and texture.
- 1.2.2.4. Bow technique for ambient sounds.
- 1.2.2.5. Fast muffle each string.
- 1.2.3. Three pedals at the same time for fast jazz chords changes
- 1.2.4. Charango strumming 5 fingers.
- 1.2.5. Flamenco Techniques:
 - 1.2.5.1. Chord changes and scales
 - 1.2.5.2. Arzapua technique
 - 1.2.5.3. Strumming's
 - 1.2.5.4. Flamenco dancer, step following
 - 1.2.5.5. Near soundboard guitar texture
 - 1.2.5.6. Soundboard hits

5. Justification

From a very young age, I have developed a big passion for world music, my main reason to do this project is to finally unify the worlds that I grew up and materialize in music the concept that from a very young age have been thought: unity in diversity. This project will contribute and benefit the profession of many harpist all around the world, because brings the new idea of adding harp into new music horizons by composing various pieces for pedal harp with ensembles, it presents the harp in a diverse technical level. This idea will add knowledge to the discipline of being a harpist, and open new paths for unexplored areas of study in the pedal harp. As an artistic project the compositions are contributions as artist proposal.

6. Execution

For this I had to take the learning of the traditions to practice in my instruments, some of the

microtones that I learned are very important in middle Iranian music are not possible to play the harp, like for example “Shur” and “Nava” scales that use “coron” (microtone), some sitar bending techniques are possible depending on the scales I am using, this is limited because of the harp pedals, that can bend in between some notes only. Also, when applying flamenco guitar techniques such as “arzapua” and “Abanico” I have to do it still very slow to develop the skill.

1- Research and analysis.

1.1. Because of the physical similarity of articulating the strings, one of the sources of information have been Spanish flamenco guitar, I focused on some of the techniques, such as pulgar, golpe, arzapua, arpeggiato, board hits, strummings, harmonic rhythm, “palos” which are the diveres rhythms and styles inside flamenco and “cierres” which are endings.

1.2. Because of the harmonic technical similarities piano technique was particularly contemporary voicing techniques, this mostly learned in Ear training and harmony class in Berklee.

1.3. Voice techniques: I used two singing traditions, one from North India and other from Iran, for both I had to learn the scales and see which one of the scales are possible to play in harp and how to imitate and follow the voice properly, in the case of Indian music, we used a mixolydian b9 scale in which I bend the notes very quickly using hand and pedals to pretend being a Sitar.

In case of the Persian singer I learned the basic Persian scales, which are:

Nava, Chargah, Hodayun and Shur, this has many micro tones, some of them are possible, but have to listen to the singer and find by using the tuner, which microtone is she singing and then tune the harp in that microtone, as well as accompanying her with more classical style of harp playing but with the harp in a new tuning.

1.4. Extended Techniques: some of the unusual techniques in the harp are notated by contemporary composers that are looking more into bringing new sounds to the harp and make the harpist play the instrument in new ways creating new textures and movements, this usually is very challenging for classical musicians because of what we are looking and expecting from the instrument, I took some of the existing extended techniques, explore them with detail, observe them in diverse contexts, and finally added them into experimental, noise avant garde compositions and improvisations with other musicians in this area of music, more of the knowledge of this technique and how to apply them, comes after experimenting playing with them and putting them in context.

2.1 Applied technique:

Persian Scales - I did research in the basic Persian scales, which are:

- Shur, is minor scale with second degree Coron (quarter down) or Sori (quarter up)
- Homyun, is like Shur scale with the third-degree half up.
- Chahgah, is C Major with flat in the sixth degree and begins from that degree, does not have microtones (Coron and Sori)
- Nava, which is like Shur scales but with alteration in second and fourth degree.

Some of these scales are major and most of them minor, but what makes them distinct one from the other are the phrases that usually accompany these scales, it is important to learn and understand the quarter notes that are respective to each of the scales, these are called Coron and Sori; Coron are the ones that travel a microtone lower than the real note and Sori are the notes that sound a microtone higher.

I practiced playing the major scales with a Persian typical rhythm and phrase with a Tar player that accompanied me in the explorative encounter. Later on, to discover the exact sound

of the quarter notes, I needed the help of a Persian singer. By meeting her and rehearsing together, I saw the necessity of tuning each of the notes that were quarter notes and which ones they are. The process that I experimented to achieve these notes was by asking the singer to sing only the quarter note (she also helped herself to find the note by plating her Cetar (Persian instrument like a tar but with 3 strings) and I place the tuning machine near her voice so it could capture the exact frequency that she was pitching the note, so I could imitate the same with the harp tuning machine, just as a usual harp tuning routine.

2.2 Extended techniques used notation:

1- Bzzing Technique: this technique is an extended sound texture and harmonic development exploration of an existing extended technique for pedal harp. Through this notation, I try to explain the way of applying this musical element: the note travels thought all the possible microtones from one note to its next half, and this is made by the pedal creating two sounds, a mechanical - machine bzzing, and a series of harmonics that change pitch depending how delicately, cleanly and slowly you move the pedal thought the positions. The technique can be done in any metal string on the harp that has a pedal change.

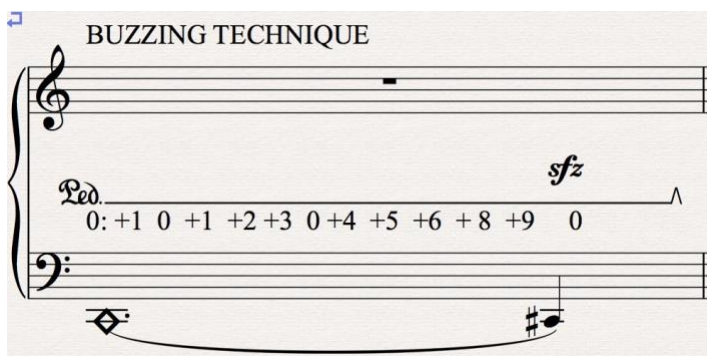


Figure 1. Bzzing technique

2- The dying string: this technique was created by breaking a string (about to break, because of the nature of the instrument) at the end of a piece, with the string breaking without

you noticing. It is a five-minute-long piece which I play around in the harp without touching the string until the end, as we see in the notation, I start de-tuning and tuning the string, taking it to the highest note possible and breaking it loudly. Developing this technique was difficult to notate, as I had to use diverse notations which already exist and combine them together to give form to this new technique with a new understating of an old notation. This idea of taking an existing notation and giving it a new meaning comes from academic - classic and contemporary notation, in which contemporary composers take this notation and explain its meaning at the beginning or end of the composition.

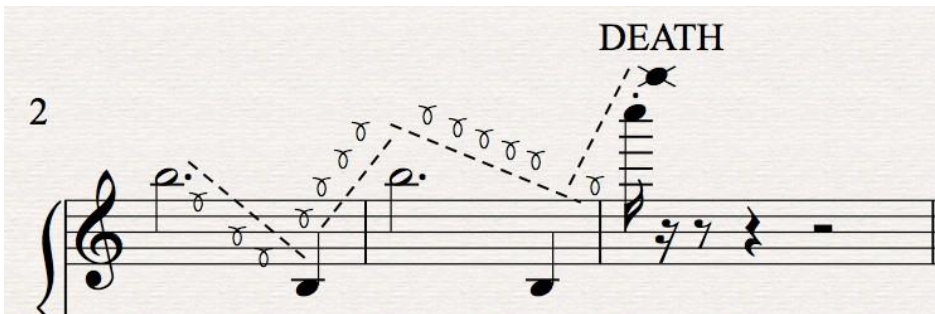


Figure 2. The dying string

3- Gliss in one string: this technique creates a creepy horror movie sound in the harp, it is close to a high scream but in pianissimo. The way of playing it depends on how fast or slow you gliss the strings, and it can be only done in the metal strings of a harp.

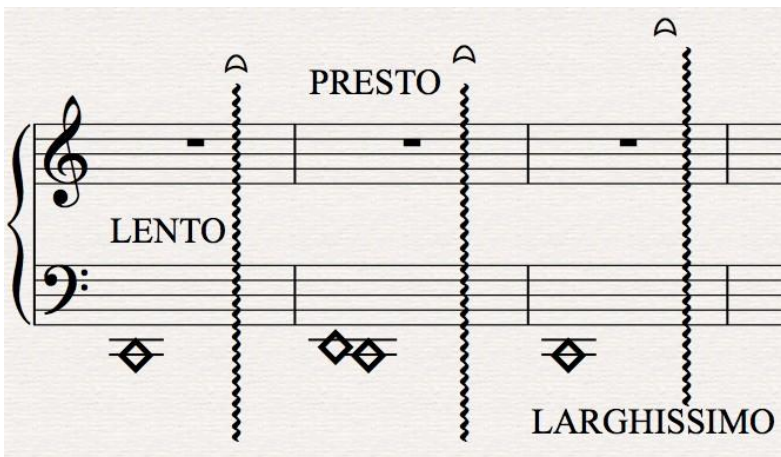


Figure 3. Gliss in one string

4- Muffled notes, similar to Bass: this technique was made so the harp could play the same melodies in various sound textures. In this technique, the right hand plays the melodies and the left hand muffles the same notes near the soundboard.



Figure 4. Muffle notes

5- High note bending technique: this technique was created to imitate the North Indian melodic tradition, in which the Sitar and the singer play ornaments to enrich the notes. The harp will display a type of vibrato and microtones, that accompany and complement a singer.

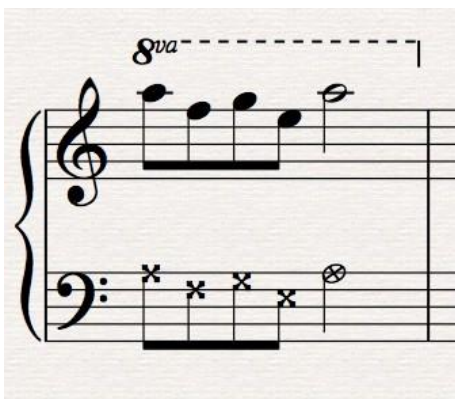


Figure 5. High note bending technique

6- Double Bending Technique: this technique is very similar to the high note technique. However, in this situation, I choose two notes that are possible (pedal) to sound harmonically, for example, D sharp and E flat, and only bend one of them to

create the desired texture. I have used it for middle eastern music in general.



Figure 6. Double Bending

7- Flamenco chord strumming: this technique is a used harp technique in which the left hand muffles the notes around the chords that we do not want heard, and the right hand strums the chords. To imitate the the flamenco sound, I use some nail work and follow a harmonic rhythm depending on the “palo”, as this technique applies to any palo. Also, this technique can be played in open strumming, so I put the key and all the chord notes with enharmonic in the pedal diagram, and strum the rhythm with both hands.



Figure 7. Flamenco chord strumming

8- Open Strumming technique: this technique is very similar to the chord strumming techniques; the difference is that I write a pedal harp diagram or include pedal changes that create the harmony that I want to use. If it is flamenco, this means usually Phrygian. After this, I place the pedals in the notes I want to sound, and I start

strumming the flamenco rhythm that I want.

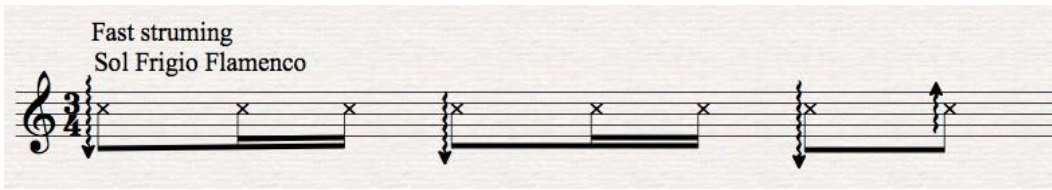


Figure 8. Open Strumming technique

Other flamenco guitar techniques:

Pulgar-índice (thumb - index finger)

Usually the thumb plays a melody meanwhile with the index finger it repeats one note continuously, like a pedal mode. In the harp: This technique does not require much practice as the others, if a pedal harpist manage to make counterpoint and independent melodies with both hands, than this technique is basically play the melody P.D.T. (near the harp soundboard) with the left hand and using the right hand as background filling with fast notes like arpeggios or any chromatic or whole tone note creating the guitar effect very lightly.

Golpe - (hit)

One of the flamenco representatives' sounds is hitting the guitar harmonic wood with the fingers that are not playing strings, the index and middle finger at the same time.

Harp: for the harpist this technique is a bit more tricky, we can do it easier with both hands, in which one hand does the "cierre" or plays the notes and the other hit the harp sound board at the same time that the right hand is playing, but if we want to do this only with one hand than the melody or chord needs to be PDT (pres de la table, near the sound board) so the finger that is not playing can hit the soundboard)

Arpeggios (Arpeggio)

An arpeggio is a sequence of notes made by different fingers of the right hand. They can be ascendant, descendent or both combined.

This can be done perfectly in the harp because of the nature of the instrument. There are many types and ways to play the arpeggios, variations also come with the voicings and harmonic changes. Most of the arpeggios are explained in Granados book of flamenco guitar technique, and almost all of them are possible to play in the pedal harp.

Rasgueo (strumming)

It is the action of rubbing or passing the tip of the fingers of the right hand along the strings with ascending and / or descending movements. In flamenco, a wide variety of strings are made, using and combining different fingers.

This technique requires more practice and skill in the pedal harp to get it faster, since the harp strings are harder to plug than the guitar, we need more effort to strum and take sound out of the technique, also the way we play the chord is by muffling the strings that we do not want to sound and strumming the ones that we want to hear.

For the extended techniques, when improvisation and jamming with avant garde musicians and contemporary instrumentalist, I developed some sounds in the harp that I have the notation for, such as low strings pedal banding to create harmonics and metallic buzzing sounds, the breaking strings technique, muffle each note for fast melodies and bending vibrato in high strings in the upper octave of the harp.

Collaborations:

An important part of this CE is to develop the techniques and music skills by participating in as much diverse music as possible and collaborating with different artist from Berklee and Valencian artist. I have collaborated with diverse musicians such as, electronic experimental

(where I am more free to apply the extended techniques) flamenco dancers, contemporary dancers, Saxophone improvisers, Indian musicians, Persian musicians, Flamenco guitarists, pop musicians, and jazz musicians, among others.

During this academic year, I participated in more than 100 recordings for different musicians from different programs in Berklee, the genres were new and challenging for the harp and for my contemporary music skills. I strived to always play something very different in each collaboration, and tried to play the least classical possible.

Most of the development of my techniques come from collaborating with new musicians and having to learn and understand their language and add the harp in a stylistic way.

Compositions:

Exploring these techniques has changed my way of composing. This year I composed 4 pieces for my personal project, in which I concentrate and unify the diverse cultures that I learned about this year. These pieces compile sounds and instruments from Middle East and flamenco, bringing naturally new techniques that I created to accompany the pieces properly. The pieces are diverse in nature, the music flies around global traditions, jazz, and inevitable classic influences that come from my background.

The first piece was called 'Andes por donde Andes'. It is written for harp violin and saxophone, the style is from Peruvian Andes with a mixture of modern elements, ambient sounds and classic music.

The second piece is called 'Palabras Ocultas', which was created in 3 different languages based on the Bahai book originally in Arab and Farsi. The music in this piece displays Arab, Persian and flamenco traditions, using percussion, Arab and Farsi singing, and Alegrias y Soleà a Spanish rhythm.

The third piece is called 'Generosity', made for percussion (cajon, djembe, Indian tabla)

saxophone, harp, bass and choir band with a duration of 9 minutes, starts with ambient music with choir and develops a traditional sound from Iran and India with classical tradition, also adding extended techniques in the harp cadenza.

The fourth piece is called 'Frames', this is a jazz ensemble of saxophone, bass drums and harp, the pieces were inspired by a travel theme and the feel is swing fusion with classical. This piece displays the harmonic development in the harp.

All of these pieces responded to the articulation of most of the learnings from the musicians in Berklee fusion with my previous knowledge, which is classical technique. At the same time, I composed and improvised pieces with dancers (harp solo in music) and created a band with a specific sound and type of composition, which will be explained in coming chapters.

Dissemination Creative Projects (performances, ensembles)

1- Featured Harp

1.1- Dragon Fruits

1.1.1. Concept: indie, pop, world music, female band with a vintage sounds and old textures that reflect in the visual art and songs.

1.1.2. Photo session: we developed a photo session representing your upcoming album, which features us 3 members of the band equally and pictures the sound in the vintage style pictures

1.1.3. Live session videos: we developed 2 live session videos in the AKSS with 2 different songs, the art direction in the video follows the artistic format of the band and shows the Dragon Fruit which is representative of the band.

1.1.4. Album: between the 3 of us we composed and collaborated in creating an album with 8 songs, each one with a new color but maintaining the band essence, for this piece I use most of the learned techniques this year, such as Spanish guitar techniques, Indian bending techniques and jazz composition.

1.1.5. Media: We developed 4 main social platforms to show Dragon Fruit to the world, we have a Instagram, FB fan page, SoundCloud and Youtube Channel, the website will be managed by us 3, as well as the Gmail.

1.2. Ensemble Olya

1.2.1. Art music: I drew most of the music for this project based on the musicians that I met this year, the sound combines world music, global traditions, jazz, and classical music. I asked a Peruvian artist to develop an art drawing that represents my music, the artist Javier Bravo de Rueda have developed now 2 flyers with his drawing that perfectly display my music in art.

1.2.2. Recordings: all the 4 songs were recorded in the AKSS, to these 4 ensemble pieces I add the 4 small improvisation pieces with Joseph Galiano Valencian Saxophone player.

1.2.3. Live sessions: I have 2 live sessions recorded with this music.

1.3. Harp Tale

This project was about creating a children's tale in which they can travel around the world reading and listening to the diverse sound of each different country, I choose Peruvian song from the Andes for Peru, a collaboration with a singer from India, a jazz influenced tune and a Spanish influences piece., I will place these music pieces in the different parts of a talk that speaks about these countries and places that are so far one from the other, but also showing unity and harmony by presenting the harp as a connecting sound among the short music samples.

1.4. Audiobook

This is a project in which harp is displayed as a background instrument, the style applied here is electronic. I recorded the audio book in Spanish, and then overdubbed the harp solo, then in post-production I transferred the harp to Ableton and developed some

environmental sounds and effects to the harp to create a background music for the audio book.

7. Professional Plan

I am planning to still study more world music and global traditions from different perspective to expand my knowledge on these styles. This year, my project involves only a small area of learning, but I will keep analyzing and adding knowledge to the pedal harp, this will come through studying deeply the traditional oral history, dance, instruments and harmony. Also, further than the traditional music styles, I want to add modern functional harmony that I learned from jazz, as well as extended techniques and improvisation, as some avant-garde musician have done, but now applied to the harp.

8. Final Conclusions & Reflections

Developing this CE helped me reflect about my musical journey. I have discovered new artistic skills that I had in my nature but was not aware of. Among my harp skills, I developed a passion for world music, traditional sounds from diverse countries and learned to use the harp in way different and new from those that I knew before coming to Berklee. As a result of this project, I changed my music perspective from being a classical harpist to becoming a modern and contemporary performer, and developing new skills around the arts as choreographer, composer and producer. My main take aways as an artist and person are to show diversity through music, to be versatile and to show that the harp can also be a versatile instrument that can be a part of any musical ensemble, much as any other instrument. I recognize now that the ideas I had before arriving have been developed better than I anticipated: I achieved musical ideas, projects completions, and combined this with networking, overcoming the expectations I had.

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