ADAPTING TRADITIONAL FLAMENCO MUSIC FOR THE MODERN MARIMBA ARTIST

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ABSTRACT

Adapting Traditional Flamenco Music for The Modern Marimba Artist

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This document is a compilation of information and exercises for the percussionist to learn how to play Traditional Flamenco on marimba. The document contains a brief history of flamenco and the explanation of the elements of four different *palos flamencos* (subgenres) to introduce the marimbist to the basic musical elements and structure of each palos flamencos. It also includes musical exercises written specifically for marimba. These exercises are traditional components of authentic Flamenco music and can be used in performances as a soloist or as part of a Flamenco ensamble.

Flamenco music has three main elements: *El cante*, *el toque*, and *el baile*. This document is focusing on the instrumental element el toque and also developing some techniques for the marimba player.

Flamenco subgenres called *palos flamencos* present features like time signature, harmonic progression, tempo, and tonality. The palos can share some of the features with other palos, just like a deck of cards. In this document four of the most popular palos are being studied for the marimba player: *Solea, Bulerias, Tangos Flamencos*, and *Rumba Flamenca*.

Solea is considered the first flamenco subgenre derived from the Spanish. It is one of the

Bulerias is the second palo in this document. The rhythmic structure is very similar to solea, with light variations on the accents and the tempo and it is also considered one of the most important subgenres.

Tangos Flamencos are derived from Afro-Cuban rhythms and the Argentinean Tango due the immigration from the Americas to Spain. Tangos Flamencos are considered an important subgenre among flamenco artist, reason why it is included in this document.

Rumba is also an Afro-Cuban rhythm spread along Central and South America and it was also "exported" from the Americas to Spain and even though Rumba Flamenca is considered a minor palo it is what worldwide is known as Flamenco music.

"Adapting Traditional Flamenco Music for the Modern Marimba Artist" also includes transcriptions and ideas for how to solve the unique guitar effects in flamenco music to be played on marimba. The exercises and excerpts are written for 4-mallet marimba techniques but some of them including the appendix can be played with two mallets.

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For musicians, our instrument teachers and professors become home away from home. UNLV Percussion professor made me feel welcome since day one I started to study in Las Vegas. Thank you, Dr. Timothy Jones, Dr. Dean Gronemeier, Professor Gary Cook, and Dr. Alex Stopa for sharing your percussion knowledge with me but most important thing, for being my unconditional compass in this journey.

Thank you, Professor Thomas Leslie, for making me rise the bar as a professional orchestra musician, and for your help when I need it the most.

Thank you to the members of my committee Dr. Richard Miller and Professor Brakley Fraye for your time, help, and patience.

My fascination and passion for Flamenco Music started during my first years in college. The Flamenco professor was recruiting a percussionist to play cajon for Flamenco Ensemble. Years later this professor became my external consultant professor for this dissertation. Thank you, Professor Jesus Xavier Venegas Aragones, for saying yes to this project and for the priceless time you put on our consultant sessions and rehearsals.

Thank you to my parents, Pedro and Lourdes, for all your endless love and support, and to my siblings Pedro and Lourdes, for being here for me when I needed it.

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Thank you to my friends who never let me quit and always have words of wisdom.

PREFACE

In the last fifteen years every aspect of our lives, including music, has been globalized at an accelerated rate greatly due to the Internet. Around the year 2007, at least 50% of the population in North America, Europe and Central Asia had access to Internet and Latin America, East Asia and Pacific Islands reached this same rate in 2012. This means that cultures are interconnected and the access to world music is not only for a small group of people anymore but for anyone who is interested on exploring new music. For this reason, it is very important for a musician to have the knowledge and the skills to play music of the world.

Afro-Cuban music genres such as salsa, son, mambo, and Afro-Brazilian samba and bossa nova are now very popular in English speaking countries. Musicians know the basic characteristics of these genres because they know it is important to deliver a good interpretation. For example, percussionists know they must play the *cascara* pattern on cowbell or on the drum shell for a salsa tune, play the *martillo* on bongos, or the bolero rhythms on congas. This is not the case of flamenco music.

I discovered flamenco music in 2003 when I was studying at the Chihuahua State

University in Mexico. I was invited by the flamenco professor Dr. Xavier Venegas Aragones to
play cajon and palmas (clapping palms). As a young percussionist I was very excited, but I had
no idea about what flamenco music really was. Dr. Venegas Aragones who studied flamenco in
Sevilla Spain at the Fundación Carolina school (one of the biggest flamenco academies in
Spain), explained flamenco history and the basic patterns. I was so engaged with flamenco music
that I took the course every semester until I graduated in 2009 and then flew to Spain to learn
more about this art from.

Once in Spain, I went to the region of Andalucia, specifically the city of Sevilla. Andalucia is considered the birthplace of Flamenco art. In Sevilla I could experiment both live flamenco music and Flamenco lessons. Live Flamenco music is performed in places called *Tablaos*, which is a Spanish word for wooden floor, referring to the piece of wood the dancers perform on. I also learned that Flamenco music and Flamenco dance are connected. Dancers also make music with the tapping, and they are really part of the music not only the dancing. Flamenco dance and music are so connected that most of the flamenco studios have a live ensemble playing for the dance students.

This whole Flamenco journey inspired me to develop a new branch using the marimba as the main instrument in the Flamenco ensemble.

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CHAPTER ONE:

INTRODUCTION

Traditional flamenco has its roots in Spain, more specifically in the southern region of Andalusia. The unique sound of the Spanish guitar accompanied by clapping palms and the singer using Spanish poems as lyrics, are the main characteristics for the listener to recognize this type of music. But is flamenco a single and uniform genre? Does it have specific elements that make it authentic? If so, what are these elements? Why is it important for a musician to understand this information when playing flamenco? Is it possible to play Flamenco on instruments that are not traditional to the genre? If so, what are the rules the musician should follow? Which other percussion instruments besides cajon are applicable to Flamenco?

Marimba is an instrument with a wide range of musical possibilities and genres such as Tango, Classical, and even Rock are played on marimba nowadays with much success. Pieces like Piazzola's *Historia de un Tango* and the famous *Bolero* by Eutasio Rosales arranged for marimba orchestra by the Hurtado Brothers and Claire Omar Musser have become very important in the percussion repertoire. However, Traditional Flamenco is not very well known in the marimba literature. Some guitar arrangements of Classical Spanish pieces can be found, as well as pieces with some Flamenco elements in them such as Isaac Albeniz's *Asturias* is a Classical guitar piece arranged by Leigh Howard Stevens which, although it works perfectly as a marimba piece, it does not have all the elements to be considered Traditional Flamenco. Another example is the piece for solo marimba "Marimba Flamenca" by Alice Gomez that includes some harmony and rhythms that resemble flamenco, but they are isolated elements and do not follow the authentic characteristics of flamenco subgenres.

As percussionists, we are constantly learning new types of music and how to play new percussion instruments. In my undergrad, I was fortunate to have access to Traditional Flamenco classes playing cajon and traveling to Spain to learn more about the culture surrounding this unique type of music. Also, I discovered that Flamenco dance has more to do with percussion than with actual dance. The shoe tapping, called *taconeo*, is a clear percussion accompaniment and sometimes even a rhythm solo, so I got involved in it as well. For these reasons, I decided to combine two main topics in my musical education: Marimba and Traditional Flamenco.

There are very few pedagogical methods available for Flamenco, so the most common way to learn is what flamenco musicians call the traditional oral system, which is to watch, listen, and learn from the masters. I have been gathering information to create a methodology to play Flamenco on marimba for many years now. This document gives a brief introduction of the history of flamenco and each subgenre, some exercises that help the percussionist to develop key skills to play flamenco, and also, examples for the extended technique flamenco guitar on marimba. In this document, I will use the western universal music notation and theory to explain the elements of the different subgenres and exercises.

CHAPTER TWO:

PALOS FLAMENCOS

Flamenco has around fifty different subgenres called *palos flamencos* (often referred as palos), meaning that there is not only one type of flamenco but many subgenres that are considered flamenco. Each of the palos flamencos present features that make them uniquely recognizable as a specific palo. These features are lyrics, time signature, harmonic progression, tempo, and tonality. The palos can share some of the features with other palos, just like a deck of cards.

The first subgenres in history of flamenco and, usually the most performed ones by flamenco musicians in Spain, are called *palos mayores* (major subgenres). The *palos menores* (minor subgenres) are derived of palos mayores, or the ones called *de ida y vuelta* (back and forth), which means it was "imported" from another country and integrated into flamenco culture.

Elements of Palos Flamencos

Flamenco music has three main elements: *El cante* (singing),), *el toque* (instrumental accompaniment), most of the time this is guitar and *palmas*, or clapping, and also *el baile* (dance). Palmas, or clapping, are played usually by the singers or dancers, and it establishes the tempo and the compas (rhythmic patterns) Guitar is the main musical instrument that stablish the tonality and the cadence.

Cante (Singing)

The first flamenco element is historically the *cante*, which is the Spanish word for "sing" and it refers to the singing parts and lyrics in the music. The *cantes* is the name of the lyrics and *cantaor* is how the singer is referred to in flamenco terminology. There are various types of cantes and depending on their features they belong to a specific palo. These features can be found later in this document.

Toque (Playing)

The instrumental element of flamenco is constituted by four components: compas, harmony, tonality, and structure.

Compas or rhythmic patterns are the one of the main components of flamenco music. While in Spanish music theory the term "compas" means time measure, in flamenco this is the word that refers to rhythmic pattern, traditionally played on the palmas or clapping. Compas is one of the elements that help to determine the kind of palo that is being performed. There are three different types of compas in flamenco: compas binario, compas ternario, and compas de amalgama.

Compas binario or binary compas is a time measure in 2 or 4. Some of the palos in compas binario are: Tangos, Rumba Flamenca, Tanguillos, Farruca, and Colombianas.

Compas ternario, or ternary compas is a time measure in 3. This is the least common type of compas in flamenco since just a small amount of palos use a ternary time measure. Among these few palos are Fandangos, Malaguenas, and Sevillanas.

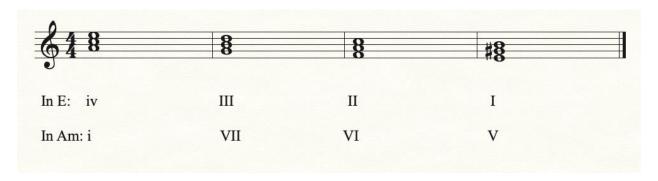
Compas de amalgama, or compound compas, is the most common time measure in flamenco. Compas de amalgama is a combination of ternary and binary time measures which

results in a longer rhythmic pattern. The accents within the rhythmic pattern determine the palo compas. Some examples of the compas de amalgama are Solea, Buleria, Cantinas, Alegrias, among others.

Harmony is another important component of Traditional Flamenco, and *Andalusian* cadence is the most common cadence in Flamenco music. This cadence can be explained as a iv-III-II-I progression in a Phrygian mode, or i-VII-VI-V in a minor mode. Typically, Phrygian is used by Flamenco players and minor for academic purposes.

The main characteristic of this cadence is the descending half step between the last two chords raising the third of the I chord to make it a major chord.

Figure 2.1. Andalusian cadence.



Tonality in flamenco is a particularly important component because not only are tonal major and minor scales used, but also modal, and bi-modal scales (tonal scales + modal scales).¹

Also, tonality is an element that helps define which palo is being played.

Traditional Flamenco uses two main harmonic schemes depending on the tonality of the piece. The first one is in E Phrygian, and it is called *Por arriba*, which means "on top" referring to the position of the hand on guitar and it is commonly found in *soleas*. The second harmonic

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¹ Flamenco Theory, Lola Fernandez. 58

scheme is A Phrygian, and it is called *Por medio*, meaning "in the middle" and it is commonly used in *bulerias*.

Figure 2.2. E Phrygian scale "Por arriba."



Figure 2.3. Majorized E Phrygian scale.



Figure 2.4. A Phrygian scale "Por medio."



Figure. 2.5. Majorized A Phrygian scale.



The structure component is a unique flamenco element. Every palo in flamenco is composed of multiple musical fragments, each of them having a specific purpose. These musical fragments are: *Compas de espera, Cierre, Llamada, Flaseta, Cante accompaniment, and Escobilla*.

The palos in this document to be transposed to marimba are *bulerias*, *solea*, *tangos* flamencos, and rumba flamenca. Each of them has a different historic background with elements such as lyrics, harmonic keys and rhythmic patterns that make them unique.

. The purpose of the discussion at this point is to be able to translate authentic traditional flamenco on marimba either as the accompaniment or as the melody as part in an ensemble or as a soloist.

Baile

The third element of Traditional Flamenco is the baile which is the dancing part. In Flamenco, the baile is not only part of the performance but also it is part of the music ensemble, and it has its own element in the music structure. The taconeo or tapping is considered part of the music as a percussion element just like palmas and cajon. *Bailaores*² tap on the wooden floor

² Spanish word in Flamenco vocabulary to refer to a bailador or bailadora which the direct translation is "dancer."

using shoes with metal heels similar to what Tap dancers wear. The baile also includes cierres and remates that matches musically with what the instruments and palmas are doing.

The *escobilla* is the element of a Flamenco piece that is considered the dance solo but at the same time is part of the music. The escobilla is accompanied by the musicians and it can be alternated with the other Flamenco music elements such as falsetas and compas de espera.

CHAPTER THREE:

SOLEA OR SOLEARES

Solea is the slang word for *soledad* which means loneliness in Spanish. Solea is considered the first flamenco subgenre derived from the Spanish classical music styles like *jota*, *fandangos*, and *seguiryas*. It is one of the most performed subgenres by flamenco artists and considered as a major genre. Soleares is plural for Solea. The fundamental music elements of a Solea are:

- The lyrics about feeling alone and abandoned. These lyrics can be a traditional folk song, poems, or popular verses, and it must be in octosyllabics.³ Traditionally, Soleas have three or four verses.
- The slow tempo usually around quarter note equals 70bpm.
- Solea has a twelve-beat rhythmic pattern. Flamenco musicians count the twelve-beat pattern starting on 12, as a pick ups with an accent. This happens not only in Soleas but also in other palos such as Bulerias, *alegrias* and *cantinas*.
- It uses the Andalusian cadence, in the key "por arriba" (E Phrygian)

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³ Phrases with eight syllabics each.

Compas

The basic tweleve-beat Solea compas is counted from 1 to 12.

Figure. 3.1. Basic Solea twelve beat pattern.



Traditional Flamenco musicians replace the words for eleven and twelve to one two, basically saying: ten, one, two, one, two, three, etc. The compas keeps all twelve beats but the counting is replaced by two groups of 1,2 to help the musicans and dancers with phrasing and endings⁴

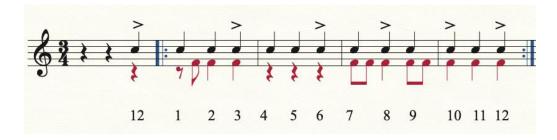
Figure 3.2. Traditional counting of the Solea compas.



The palmas pattern uses two lines: the foundation and the drawing. The base plays on every beat accentuating beats 3, 6, 8, 10, and 12. The drawing is a complementary rhythmic pattern with the purpose to bring out the accents and mark a difference between them.

⁴ Phrasing and the endings will be explained later in this document.

Figure. 3.3. Solea palma pattern.



Compas de Espera, Remate and Cierre.

The literal translation of "compas de espera" is "waiting bar." The compas de espera t is a musical phrase played along the twelve beats with the purpose is to wait for the cantaor⁵ to start singing and it can last as long as needed. The compas de espera can be compared to the blues guitar riff that stablishes the rhythm, the tempo, and the tone, and it is characteristic of the music genre.

The last three beats of the compas de espera is called *remate* which is a short closure for the phrase. The "cierre" which translates as closure is a musical "cliché" with variations to indicate the ending of the twelve-beat phrase.

Figure 3.4. Solea compas de espera.



⁵ "Cantaor" is a word used in Flamenco vocabulary to refer to the singer or cantador.

Figure 3.5. Basic remate for Solea.

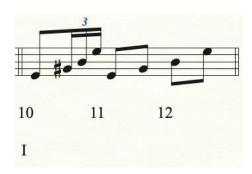


Figure 3.6. Variations of remate.



Figure 3.7 Variations of cierres.



Falseta

Falseta is an instrumental solo composed and performed by, in this case, the marimba player. Multiple falsetas can exist in a Solea alternating with the cante (lyrics) and the dancer. Falsetas are part of the flamenco player repertoire, and just like a collection of tools, they can be

used whenever the performer chooses. Falsetas must follow the twelve beat pattern and they can include a cierre at the end of the phrase on beats 10, 11, and 12.

Figure 3.8. Example of Falseta 1.



Figure 3.9. Example of Falseta 2.



Cante Accompaniment

One of the fundamental roles of the instruments in flamenco is to function as an accompaniment for the singer. The cantaor sings the octosyllabic *coplas* (verse), while the player is accompanying with the traditional flamenco harmony and rhythm.

An example of a traditional octosyllabic coplas is:

- (1) Si al infierno que te vayas

 Que yo me voy contigo
- (2) Yo me voy, ay! Contigo

 Que yo me voy contigo
- (3) Por que yendo en tu compania Llevo la gloria conmigo⁶

Figure 3.10. Chart of the syllable splitting of the Solea verses. Each sentence has eight syllables.

1	2	3	4	5	6	7	8
Si-al	in	fier	no	que	te	va	yas
Que	yo	me	voy	со	on	ti	go
Yo	me	vo	у	Ay	con	ti	go
Que	yo	me	voy	со	on	ti	go
Porque	yendo	en	tu	com	pa	ni	a
Lle	vo	la	glo	ria	con	ti	go

The marimba accompanies the octosyllabic verses using traditional Solea rhythms and harmonic sequences. Notice how the chord changes are on specific beats. The sequence begins on I (E) then moves on to IV (Am), followed by the Andalusian Cadence 1V-III-II, rests on II and resolves to I until beat 7 of the second octosyllable. Then comes the accompaniment for the cierre, which is I, I II, I. Always remember that the I chord is a major chord in the Andalusian Cadence.

⁶ Verses from the folk song "Solea de Alcala".

Figure. 3.11. Cante accompaniment for the first verse.



The harmonic structure of the first verse starts on I chord of the Andalusian Cadence, in this example E major going to iv chord on beat 10 of the twelve-beat pattern. The next phrase starts with the Andalusian cadence chord progression iv-III- II. The II chord holds on beats 4,5, and 6, and then plays the cierre I-I -II -I with the remate cliché on 10,11, 12. The second verse is performed with the same rhythmic pattern and harmonic changes. The marimba player can improvise some cierres during the second verse.

The third verse has a variation on harmony. It is a mini modulation to the V chord of the major key, which in this case is G major.⁷ This chord change happens on beat 3 of the twelve-

⁷ V chord of C major, root of E phrygian.

beat pattern. The V chord leads to I chord of the new major key on beat 10 of the twelve-beat pattern. The last phrase goes back to the phrygian mode and begins with the Andalusian cadence just like in the first two verses.

Figure 3.12. Cante accompaniment for the third verse.



CHAPTER FOUR:

BULERIAS

Bulerias developed from the soleas around late 1800s and early 1900s. The rhythmic structure is very similar to solea, with light variations on the accents. Buleria is Spanish slang for "burleria" which means derision. Therefore, unlike Soleares, Bulerias are more joyful and should be played at a faster tempo. Before becoming an independent palo, Bulerias were part of Solea speeding up the tempo toward the end of the piece as a closure. This kind of ending is called Solea por bulerias. Today, it is considered a palo mayor.

Bulerias use the twelve-beat pattern starting from 12 accentuating beats 3, 7, 8, 10 and 12. The tempos are traditionally between quarter note equals 160-225bmp. The base pattern is filling all the beats and accentuating while the *dibujo* (drawing) usually plays either on the accents or on the upbeats.

The structure of the Buleria is the same as Solea: Compas de espera with cierres on the last three beats, a falseta, followed by cante accompaniment, alternating these two, escobilla, back to the cante.

Bulerias are traditionally played "por medio" which is A phrygian, however, it is not rare to find bulerias "por arriba" because it is a palo that was developed based on Solea. This document includes both "por arriba" and "por medio" examples to help the player to learn and memorize patterns on marimba that simulate the two main finger positions on guitar.

Compas

Bulerias compas is traditionally counted in a different way. Instead of counting 7, 8, 9, 10, 11, 12, the flamenco players count this beat pattern replacing the words for 11 and 12 to 1 and 2. A peculiarity of the Buleria compas is that it always starts on beat 12 and the endings of the remates, cierres, falsetas, and verses are on beat 10. The complete counting looks like this:

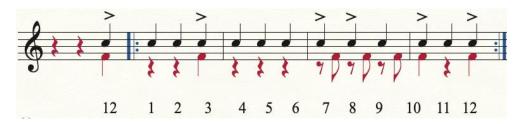
Figure 4.1. Buleria twelve-beat patter traditional counting.



Figure 4.2. Bulerias pattern for two sets of palmas (Variation 1)



Figure 4.3. Example 2 of Bulerias pattern for two sets of palmas (Variation 2)



Compas de espera.

The Buleria waiting bar for marimba is a combination of the guitar rasgueo and the cajon pattern. The purpose is to keep the upbeat pattern of the guitar and make it match with the palmas just like the cajon pattern does. Just as in Soleas, this is a musical phrase played to wait for the cantaor to start singing. These are two options for compas de espera:

Figure 4.4. Compas de espera por arriba.(Variation 1)



Figure 4.5. Compas de espera por medio (Variation 1)

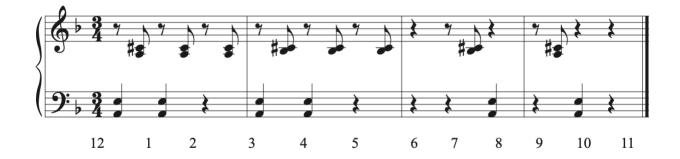


Figure 4.6. Compas de espera por arriba (Variation 2)



Figure 4.7. Compas de espera por medio (Variation 2)



Remate and Cierre

Remates and cierres on Bulerias follow the same rules as on Solea. The remate functions as a closure for the twelve-beat pattern, starting on beat 7 and ending on beat 10.

Figure 4.8. Buleria remate on marimba. Example 1

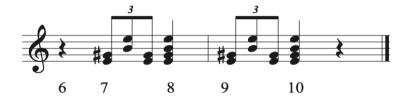


Figure 4.9. Buleria remate on marimba. Example 2.



The Buleria cierres start on beat 12 and ends on beat 10 with a remate. The cierres add some variety to the compas de espera, to make it more interesting and challenging for the marimbist when it is played multiple times before the singer starts singing.

Figure 4.10. Example of Buleria cierre por arriba.



Figure. 4.11. Example of Buleria cierre por medio.



Falseta

Buleria falsetas are very similar to the Solea falseta, with short solos that can be used as an intro, an interlude, or an alternating melody between the cante and the baile. The falsetas must follow the cante harmony. Bulerias can be tonal or modal so the falsetas must follow the tonality and only have light variations.

Falsetas can be a harmonic solo, using two or even three voices. With guitar this is very common, and it translates very naturally to marimba.

Figure 4.12. Harmonic falseta por arriba.



Figure 4.13. Harmonic falseta "por medio."



Falsetas can also be only a melodic line. This type of falseta allows the player to show virtuosity on the instrument because of the speed of the Bulerias.

Figure 4.14. Melodic falseta for Bulerias por arriba.



Figure 4.15. Melodic falseta por medio.



CHAPTER FIVE:

TANGOS FLAMENCOS

The origin of the tangos flamencos is still a mystery. Historians such as Ricardo Molina and Antonio Mairena in their book *Mundo y Formas del Cante Flamenco* state the theory that tangos appeared in Cadiz and Triana Island around 1814 and are not related to the Argentinean tango. Some other theories explain how tangos are related to the Afro-Cuban rhythms thanks to the immigration from the Americas to Spain in the eighteenth century. Although their origin is uncertain, tangos flamencos are considered a palo mayor.

Tangos are modal or tonal. Modal tangos use the Phrygian mode "por medio" (A phrygian) and just as Solea and Buleria, the I chord is majorized to complete the Andalusian Cadence. Unlike Solea and Buleria, tangos do not have a specific harmonic rhythm except in the remate and cierre.

Compas

Tango rhythm patterns consists of one phrase of two four-beat bars. first beat is a rest for palmas. Only the singer, the tap on guitar or the low sound of cajon play on beat 1. Tango flamencos tempo is commonly between quarter note equals 130-160bpm. This palo has multiple palma variations.

Figure 5.1. Tango flamenco palma pattern (Variation 1)



Figure 5.2. Tango flamenco palma pattern (Variation 2)



Compas de espera.

Compas de espera in Tangos functions the same way as in Solea and Bulerias. It is basically a rhythmic and harmonic pattern to, as we said before, stablish the tempo and the tonaliy, and wait for the cantaor to start singing.

Figure. 5.3 Compas de espera for Tangos Flamencos.



Remate and cierre.

The remates in Tangos Flamencos are one or two bars long and the closure is always on beat 3 of the second measure or on beat 7 if it is counted as one phrase. Remates are usually played at the end of a falseta or the escobilla (dance feature).

Figure 5.4. Remate in Tangos Flamencos.



Cierres are played to finish a compas de espera or the cante accompaniment. Cierres in tangos can be two bars or four bars long.

Figure. 5.5 Two bar cierre for Tangos Flamencos.



Figure 5.6. Four-bar cierre for Tangos Flamencos.



Falseta

Falsetas in Tangos Flamencos, just like in Soleas and Bulerias, are short solos that alternate between the lyrics and the dance feature. In Tangos the falsetas can be as short as twelve bars or longer than sixty bars. The length always depends on the preference of the player. Falsetas also can function as an intro and an interlude.

Also, falsetas in Tangos have a wide variety of styles harmony and rhythmic wise. In the following figures we will find examples of two different falsetas. The first one is a two bar stablished melodic phrase with a slight variation, and the second one includes diverse elements like remates, chromatic phrases, triplets, and sixteen-note scales.

Figure. 5.7 Short Falseta for Tangos Flamencos.



Figure 5.8. Falseta for Tangos Flamencos with multiple musical elements.



Cante Accompaniment

Tangos Flamencos accompaniment is similar to a pop song. The harmony changes happen mostly on the first beat of each bar and changes until the next measure. The coplas are four-bar phrases and just as in a pop song, there are both verse and chorus. Most of the times, the chorus features the Andalusian cadence with one chord per measure. Here is an example of a traditional Tango Flamenco verse:

Rosa Maria, Rosa Maria Si tu me quisieras Que feliz seria

Rhythmically, there are many variations for the cante accompaniment, and it is up to the players to choose the combination of eight notes, triplets, and sixteenth notes as long as they follow the tangos rhythmic rules. Notice how in the following example the last measure is a I chord and being played as a remate.

Figure 5.9. Cante accompaniment for Tangos Flamencos example 1.



Figure 5.10. Cante accompaniment for Tangos Flamencos example 2. The Andalusian cadences is played one chord per bar.



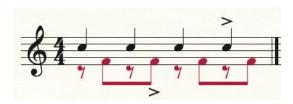
CHAPTER SIX:

RUMBA FLAMENCA

Rumba is an Afro-Cuban rhythm spread along central and South America. This rhythm was also "exported" from the Americas to Spain around the last decade oc the nineteenth century and was adopted by flamenco artists as one of the palos de ida y vuelta, just as the *guajira*, *vidita*, *milongas* and *colombianas*. Even though Rumba Flamenca is considered a minor palo in the flamenco culture, it is by now one of the most popular palos because of its closeness to pop, rock, and folk music.

The main difference between the two types of rumbas is the canto and the palma patterns included in the flamenco version of it. The palma pattern follows the same rules as the palos mayores and it is played by two *palmeros* (clappers.)

Figure 6.1. Rumba flamenco palma pattern.



Rumba Flamenca kept the 4/4 measure of the original Cuban Rhumba and features the tumbao⁸ in the bass line which hits down beat of 1, & of beat 2, and beat 4.

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⁸ Repetitive syncopated rhythm used in Latin music.

Figure 6.2. Afro Cuban Tumbao pattern on bass.



Rumba Flamenca is in 4/4 time measure so in this case the tumbao pattern repeats twice within the same bar. The tumbao pattern can present some variations. The bass line in a four-bar phrase looks like this:

Figure. 6.3. Bass line for Rumba Flamenca.



This palo flamenco has a similar structure as popular music. The general structure consists in an intro, theme A, theme B, improvisation over theme A or B, and a coda or fine.

Figure 6.4. Example of intro for the Rumba Flamenca ⁹



Figure 6.5. Example of theme A.



⁹ "Rumba Flamenca for Flamenco ensemble "La Escencia del Azahar" by Xavier Venegas Aragones. Arranged for marimba by Gabriela Ordonez Villalobos.

Figure 6.6. Example of theme B.



Rumba Flamenca is a tonal palo that occasionally presents the Andalusian cadence at the end of phrases specifically the last two featuring the progression II-I. This palo also can contain a solo improvisation over the chord progression, like in jazz music.

Figure. 6.7. Example of improvisation over a chord progression.



A full version of the Rumba Flamenca "La Esencia del Azahar" arranged for Marimba Band can be found in the Appendix of this document.

CHAPTER SEVEN:

GUITAR EFFECTS ON MARIMBA

Adapting traditional flamenco music to marimba came with some challenges, not only because of the nature of writing for a different instrument but because of the unique guitar effects that flamenco music incorporates. The guitar effects presented in this document are *rasgueo*, *alzapua*, tremolo, muted strings, and capo.

Rasgueo

The rasgueo is the guitar technique of stumming on a chord or chord sequences. ¹⁰ In flamenco music the rasgueo is also an element that can help to differentiate which palo is being played. The rasgueo is tipically used in the compas de espera, cierres, and cante accompaniment, but it also can be found in some falsetas.

On marimba, the strumming is adapted breaking the chord apart and playing two notes on each hand and using triplets, sixteenth notes, or a roll when multiple rasgueos and arpeggiating the chord when a single rasgueo is played.

Figure 7.1. Solea rasgueo on marimba using sixteenth notes.



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 $^{^{\}rm 10}$ Lola Fernandez, "Flamenco al Piano 1".

Figure 7.2. Solea rasgueo using rolls on marimba using rolls.



Figure 7.3. Solea rasgueo on marimba using arpeggio.



Tremolo

The tremolo technique on traditional flamenco guitar comes from the classic guitar playing technique. Transcribing this effect to marimba resulted easy compared to a guitar transcription for piano, for example. The repetition of one single note like playing sixteen notes or sextuplets is common on marimba because of the nature of the roll playing alternating hands.

Figure 7.4. Tremolo on marimba.

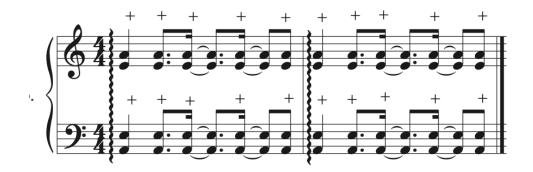


Muted strings

This guitar technique consists in muting the strings with the left hand while strumming them with the right hand to create a rhythmic sound with no specific pitch. Muted strings technique on guitar is a percussive tool generally used at the beginning of the piece to set the tempo and the rhythm.

On marimba, this technique can be played using dead stroke on the first chord of the piece trying to get as little pitch as possible out of the bars.

Figure 7.5. Transcription of muted strings playing Rumba Flamenca on marimba.



Golpe de Caja

Golpe de caja or guitar stroke is the effect of striking the front soundboard of the guitar with the thumb while playing the strings. In Flamenco music this is a very resorted technique in all the palos flamencos, and it helps to mark the compas, downbeats, and accents.

Playing golpe de caja technique on marimba has different options:

1. If playing close to the lower or higher ends of the keyboard, the frame can be used to play golpes de caja with one of the outside mallets.

- Set up a woodblock or a mini cajon on the lower or higher range of the marimba that is not being used, or an independent stand for the woodblock and play with the available mallet.
- 3. The third option is to wear hard sole shoes and tap on the floor.

These three options work very well depending on the piece and the set up. The importance of the golpe de caja is to give more rhythm and emphasis to the accents, so any of the three options fulfill the purpose.

Cejilla o Capo

One of the biggest challenges of this project was the use of the *cejilla*¹¹ or guitar capo and the transposition it implies. In Traditional Flamenco music, as it was explained before, there are two main tonalities based on the predetermined position of the hand on the guitar *al aire* or lose strings, which are por arriba (E Phrygian) and por medio (A Phrygian). In order to change tonalities to adjust to the cantaor's vocal range, Flamenco guitar players exclusively use the capo. Guitar players place the capo on the next fret to transpose half step up and keep the predetermined position of por arriba or por medio. When a guitar player is accompanying a singer, the singer asks to play "por arriba al aire" which means E phrygian. For example, if the singer asks for "por arriba al 3" this means the capo will be placed on fret 3 and the position of E Phrygian, which results in the key of G Phrygian (three half steps up).

The evident way to solve the use of the capo on marimba is to just transpose every compas de espera, cierre, falseta, etc. to a new key. This solution can take very long to do, so in this

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¹¹ Spanish word for capo.

document I explore the way to make it easier step by step. In this example, Solea (E Phrygian) and Solea por Bulerias (A Phrygian) compas is being used.

1. The first step is to learn a four bar phrase with the I chord and the "cliché" cierre and remate in both E and A Phrygian. Memorizing these patterns will help to get familiarized with all the tonalities.

Figure 7.6. I chord and cliché in E Phrygian.



Figure 7.7. I chord and cliché in A Phrygian.



2. The first step is to learn a twelve-bar compas de espera-cierre-cante accompaniment sequence in both E and A Phrygian. In this exercise, the Andalusian Cadences is included. Repeating these patterns will help also with muscle memory to move on to the next keys.

Figure 7.8. Compas de espera-cierre-cante accompaniment sequence in E Phrigyan.



Figure 7.9. Compas de espera-cierre-cante accompaniment sequence in A Phrigyan.



3. The next step is to reduce the gap between E Phrygian and A Phrygian. The tonality that is in the middle of these two is G Phrygian, which uses the key of C minor. The reason why I chose to do this, is to be able to play in a close key for the cantaores. Usually, singers can adjust a half step or a whole step up or down in the tonality they so this way

the marimbist can accompany a cantaor without having to transpose, but more by learning patterns in a closer key.

Figure 7.10. I chord and cliché in G Phrygian.



Figure 7.11. Compas de espera-cierre-cante accompaniment sequence in G Phrigyan.



4. Reducing the gap between A Phrygian and E Phrygian is the next step. In this case, the dinctance between these two tonalities is wider so the marimbist will learn two new patterns, B Phrigian and D Phrygian.

Figure 7.12. I chord and cliché in B Phrygian



Figure 7.13. Compas de espera-cierre-cante accompaniment sequence in B Phrigyan



Figure 7.14. Compas de espera-cierre-cante accompaniment sequence in D Phrigyan



Figure 7.15. Compas de espera-cierre-cante accompaniment sequence in D Phrigyan



CHAPTER EIGHT:

CONCLUSION

Playing a new music genre is exciting and challenging at the same time, especially in the beginning. Sometimes folk music is still inherited from generation to generation via aural and oral tradition and there is not a stablished pedagogy or methodology to learn it outside of the region of origin. Learning a new genre becomes even more challenging if the instrument we play is not in the traditional instrumentation, as in the case of marimba in traditional Flamenco.

Traditional Flamenco music has been played for centuries, but the first flamenco guitar methods were published no earlier than the 1980's. Methods for nontraditional flamenco instruments such as piano and cajon are even newer and some of them were even published in the last decade as first ones in the field.

I did extended research of previews marimba flamenco players just to find out that there are not many of them. And in some cases, none of them. So, I realized that this is a project that I can start almost from the foundation. I started this project learning how to play flamenco on marimba the same way most people in Spain learn the art of flamenco: listening, watching, and copying, which is the same way I learned to play flamenco cajon and palmas. Then the next step was to write it on paper and give it form to create a methodology for the modern marimba artist, which is a guide to learning flamenco history, vocabulary, and of course, music.

This is an ongoing project that I will be developing for many more years along with other flamenco players who got as excited as I did about the project. Flamenco music is a genre that is so extense, that this document is just the tip of the iceberg for the new Flamenco Marimba artform.

APPENDIX

Score

La Esencia del Azahar

For Marimba Band

Xavier Venegas Aragones Arr. by Gabriela Ordonez Villalobos









La Esencia del Azahar

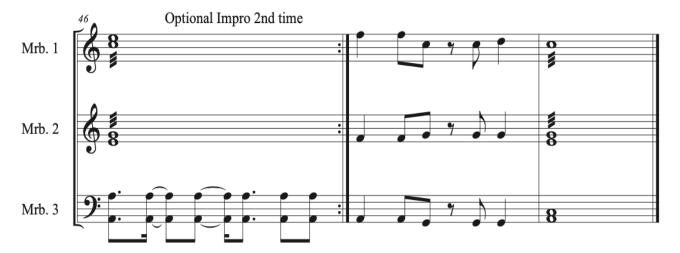












BIBLIOGRAPHY

- Albeniz, Isaac. *Asturias*, transcription by Leigh Howard Stevens. Elberon, NJ: Keyboard Percussion Publications, 1989.
- Batista, Andres. Metodo de Guitarra Flamenca. Milwawkee, WI: Music Sales America, 2004.
- Benítez, Caty León. "El Flamenco y Las Artes." Litoral 1, No. 238, 2004.
- Bonald, José Manuel Caballero. "Incertidumbres Del Flamenco." Litoral 1, No. 238, 2004.
- Calahorro Arjona, Manuel Angel. "Implicacion de la extemporizacion y la improvisacion en el repertorio de la guitarra Flamenca," *Revista de Musicologia*, Vol 42, No 2 July-December 2019.
- Chalfa Ruyter, Nancy Lee. "Flamenco History Conference." Dance Chronicle 20, No. 1, 1997.
- Cutmore, Jason. "Andaluza: From inspiration to interpretation." *American Music Teacher* Vol.56, No.6, June- July 2007.
- De Lucia, Paco. *Cositas Buenas*. Recorded 2003. Madrid, Spain: Decca Universal Recordings, 2004, CD.
- Donnier, Philippe. "Flamenco: Structures Temporelles." *Cahiers de Musiques Traditionnelles* 10, 1997.
- Esteban, Jose Maria. *Breve Enciclopedia del Flamenco*. Mostoles, Spain: Editorial Libsa Sa, 2007.
- Fernandez, Lola. Flamenco al Piano 1: Solea. Acordes Concert. Madrid, Spain: 2008.
- Fernandez, Lola. Flamenco al Piano 2: Tangos. Acordes Concert. Madrid, Spain: 2009
- Fernandez, Lola. Flamenco al Piano 3: Bulerias. Acordes Concert. Madrid, Spain: 2010.
- Fernandez, Lola. Flamenco Music Theory. Acordes Concert. Madrid, Spain: 2004.
- Granados, Manuel. *Teoria Musical de la Guitarra Flamenca: Fundamentos de Armonia y Principios de Composicion, Vol. 1.* Casa Bethoveen. Barcelona, Spain: 1998.
- Ghosn, Luciano. "Solea Tradicional de Paco Pena." Filmed July 2022. Luciano Ghosn, 2:34. https://www.youtube.com/watch?v=NfNcZn7ymUY.

- Graf-Martinez, Gerhard. Flamenco Guitar Method Vol.2. Mainz, Germany: Schott Musik International, 2003.
- Leake., Jerry "Flamenco *Compas* for *Alegrias*: Analysis of the 12-pulse palmas (clapping) rhythm and its relationship to the standard African bell pattern." *Percussive Notes* 46, No. 2, April 2008.
- Linares, Carmen. *Antologia de Carmen Linares*. Recorded in 1995. Madrid, Spain: Estudios Musigrama, 1996, CD.
- Mairena, Antonio, and Ricardo Molina. *Mundo y Formas del Cante Flamenco*. Madrid: Revista de Occidente, 1963.
- Manuel, Peter. "Composition, Authorship, and Ownership in Flamenco, Past and Present." *Ethnomusicology* 54, No. 1, 2010.
- Manuel, Peter. "From Scarlatti to 'Guantanamera': Dual Tonicity in Spanish and Latin American Music." *Journal of the American Musicological Society* 55, No.2, 2002.
- Moya Maleno, J. Lorenzo. "De la Guitarra al Piano Flamenco. Estudio Metodologico de Adaptacion y Repertorio Idoneo." *Sinfonia Virtual*, No. 36, 2019.
- Ordonez Flores, Eva, and Marc Jeannin. "Metrical Rhythmic Interpretations on Cante Flamenco." *The World of Music*, Vol 50, No.1, 2008.
- Phillips, Miriam. "Becoming the Floor / Breaking the Floor: Experiencing the Kathak-Flamenco." *Ethnomusicology* 57, No. 3, 2013.
- Thomas, Katherine. "Flamenco and Spanish Dance." Dance Research Journal 34, No.1, 2002.
- Vega, Jose Blas. Magna Antologia del Cante Flamenco. Hispavox S.A. Madrid, 1982.
- Vega-Toscano, Ana. "Los Cantes de Ida y Vuelta en el Flamenco: La Guajira." *Revista de Musicología* 20, No. 2, 1997.
- Washabaugh, William. *Flamenco: passion, politics, and popular culture*. Oxford, England: Berg Publishers, 1996.
- Zagalas, Juan. "El trazado melodico en las bulerias grabadas por Camaron de la Isla junto a Paco de Lucia." *Revista de Musicologia*. Vol. 40, No.2, July 2017.

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