

Flamenco *Compas* for *Alegrias*

Analysis of the 12-pulse *palmas* (clapping)

rhythm and its relationship to the standard

African bell pattern

By Jerry Leake

Flamenco embodies a complex musical and cultural tradition that can be traced back to the 1400s. Although considered part of the culture of Spain, flamenco is actually the music of Andalusian gypsies.¹ Flamenco is a multifaceted art involving singing (*cante*), dancing (*baile*), and acoustic guitar (*guitarra*), along with rhythmic punctuations played by hand claps (*palmas*) and a box drum called *cajon*.² The limited scope of this article cannot begin to explore the rich history and evolution of flamenco music; the focus here is on one specific form called *Alegrias*. First, some background information.

COMPAS/PALMAS/FORM

The term *compas* represents the unique meter, measure, or bar within which flamenco music is played and danced. One could also use the term “cycles” to describe the *compas* structure.

Palmas refers to the specific accompanying clapping pattern that is built within the *compas* structure. There are two types of *palmas* techniques: *sordas* and *claras*. Soft claps (*sordas*) are produced when the open palms strike together in a low, muted tone. Louder, higher-pitched claps (*claras*) are produced when the fingers of the strong hand land into the open palm of the weak hand.

The numerous flamenco forms can be characterized by their *compas* structures, their *letras* (song verses), by the key signature, and even chord progression in which the music is performed. Popular forms in 4/4 include Tangos and Rumba; forms in 6/8 and 12/8 include Fandangos, *Bulerias* and *Alegrias*. Each form is played with different *palmas* patterns.

ALEGRIAS PALMAS

An important aspect to understanding the language of *Alegrias* (“happiness”) is the relationship between beat 12 and beat 1. The *Alegrias palmas* pattern actually begins on beat 12. This is not to say that beat 1 is unstressed; many guitar and vocal phrases begin on beat 1. It is the specific treatment of the *palmas* pattern within *Alegrias* that is examined herein. In the most basic *compas* structure there are five accented claps sounded within the 12-beat phrase. Shown below, the five underlined numbers (12, 3, 7, 8, 10) represent accented claps with the remaining seven beats clapped softly.³

To practice, count the numbers (beginning from beat 12) while clapping accented and non-accented strokes. Use both *sordas* and *claras* clapping techniques. With practice over time, this unusual “12 equals 1” phraseology—where 12 is the first beat of the cycle—will become comfortable—and even quite natural.

12 1 2 3 4 5 6 7 8 9 10 11

Once proficient with the voice and clap, one can try stepping to the

phrase in a six-beat fashion whereby each step contains two numbers. Begin with the two feet together and follow the specific parenthetical stepping sequence. When repeating the phrase, the feet switch positions, as shown below.⁴

R = 12, 1 (right foot steps out, weight is placed to this foot)
L = 2, 3 (left foot steps in lightly, no weight to this foot)
L = 4, 5 (left foot step out, weight is placed to this foot)
R = 6, 7 (right foot steps in lightly, no weight to this foot)
R = 8, 9 (right foot steps out, weight is placed to that foot)
L = 10, 11 (left foot steps in lightly, no weight to this foot)
L = 12, 1 (repeat: feet switch positions, left foot steps out)

<u>12</u>	1	2	<u>3</u>	4	5	6	<u>7</u>	8	9	<u>10</u>	11
R		L		L		R		R		L	
L		R		R		L		L		R (repeat)	

FLAMENCO FOCAL POINTS

Next, important focal points of the music can be noted. Beat 10 is a critical cadence point where the dance and music end their phrases together in a dynamic fashion. Beat 11 is dramatic in its musical silence and statuesque pose of the dance. The music and dance resume at beat 12 and continue the cycle of intricate development and potent cadence to beat 10. In my experience, when the guitar initially begins an “instrumental” composition in *Alegrias*, the *palmas* pattern often first enters on beat 7.⁵

Summary of Events:

- Accented claps are 12, 3, 7, 8, 10
- *Palmas* enter on beat 7 (instrumental scenario)
- Music and dance phrases cadence to beat 10

BEAT/“CELL” ANALYSIS

The unique structure of *Alegrias* contains challenging syncopation that supports the music’s growth within the inherent tension and resolution points of the phrase. In this article, each rhythm “cell”—12, 3, 7, 8, 10—begins on the pulse with the accented clap and lasts until the next cell. The duration of the five “cells” contained within the pattern is uneven, and yet, at the same time, is elegant and logical.

The duration of the first cell from beat 7–8 is “one” stroke, the duration of the second cell from beats 8–10 is “two” strokes, from beats 10–12 is “two” strokes, from beats 12–3 is “three” strokes, and from beat 3–7 is “four” strokes. What results is a unique expansion of accented claps within the phrase.

Shown below, the underlined number “1” represents accented cells (from beat 7); all other numbers are rendered softer. Above this

expanding cell series is a top row in small font size that illustrates the beat numbers 1–12.

Count expanding cells as:

1 2 3 4 5 6 7 8 9 10 11 12
1 1 2 1 2 1 2 3 1 2 3 4

The same sequence with the top row of numbers beginning from beat 7

7 8 9 10 11 12 1 2 3 4 5 6
1 1 2 1 2 1 2 3 1 2 3 4

A stacked “tower-like” illustration of the five cells (from beat 7) reveals the expanding duration and stability of the structure.

1
 1 2
 1 2
 1 2 3
 1 2 3 4

RELATIONSHIP BETWEEN ALEGRIAS AND AFRICAN BELL PATTERN

My experience with African music from the Ewe and Dagomba people of Ghana encompasses rhythms in binary pulses of 2/4 and 4/4, and ternary pulses of 6/8 and 12/8. Recently I recorded a contemporary arrangement of a traditional African drum rhythm in 6/8 with the 12-pulse *Alegrias* pattern played on *cajon* and *palmas*. I was struck by how well the two traditions worked together, as if born from the same musical mother. This prompted me to compare the seven strokes of the 12/8 standard African pattern to the five accented claps of *Alegrias*.

A reinterpretation of *Alegrias* in a 12/8 ternary feel requires three pulses per beat, as opposed to two pulses per beat. In this non-traditional form, beat 12 of the *Alegrias* is placed onto beat 1 of the 12/8 phrase.

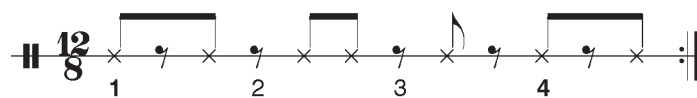
Shown below, the “/” represents the division of beats; the “x” represents accented *Alegrias* claps; the “-” represents non-accented claps. Numbers below the phrase refer to the original *Alegrias* structure. Notice that the first and second claps now land on beats one and two of the 12/8 structure. Instead of stepping in a six feel (as before), step to the 12/8 phrase shown below in a four feel: R, L, L, R. When repeating the phrase, steps retain their same orientation.

Alegrias in 12/8 Pulse (four feel):

R L L R
 x - - / x - - / - x x / - x -
 12 3 7 8 10

A primary element of the 12/8 African bell is how on-beat strokes align with beats 1 and 4, with all other strokes landing off the beat, as shown below. I notated the phrase using eighth notes and eighth rests for maximum beat clarity.

Standard African 12/8 Bell:



In the previous “*Alegrias* in 12/8 pulse,” claps aligned with beats 1 and 2, with the three remaining claps off the beat. By rotating the *Alegrias* phrase back one beat, the pattern shares the same on-beat points as the African bell. The 12 of *Alegrias* now aligns with beat 4 of the 12/8 bell. *Alegrias* numbers are included to show where its phrase originates.

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Alegrias Realignment:

x - - / - x x / - x - / x - -
 3 7 8 10 12

What also becomes clear is how the second and third off-beat strokes of the *Alegrias* realignment coincide with the off-beat strokes of the African bell. Shown below are the primary off-beat and on-beat strokes of both patterns. All five *Alegrias* accents align with the bell. Missing from the *palmas* phrase are the two off-beat strokes of the bell on beats one and four.

bell

beat: 1 2 3 4

palmas

3 7 8 10 12
 original alegrias claps

COGNITIVE PERCEPTION AND DOWNBEAT AMBIGUITY

Whereas the African bell pattern contains seven strokes and five rests, the *Alegrias* pattern contains five accented claps and seven unaccented claps. In this form, the relatively empty and “expanding cell” structure of *Alegrias* results in an intricate level of syncopation that could cause the pattern to flip/rotate in the mind of inexperienced “non-African” listeners and players. Downbeat ambiguity is a common phenomenon with cycling time line/clave-like patterns. The African bell pattern can flip with long (L) and short (S) strokes switching from L-L-S-L-L-L-S (5+7 structure) to L-L-L-S-L-L-S (7+5 structure).⁶ Part of the beauty and complexity of world rhythm cycles is the potential to experience “downbeat culture shock.”

Previous scholarly research, most notably by David Locke and Jeff Pressing, examined the possible rotations (“modes”) of the standard pattern by moving the first stroke to the end of the phrase: L-L-S-L-L-L-S, L-S-L-L-L-S-L, S-L-L-L-S-L-L, L-L-L-S-L-L-S, L-L-S-L-L-S-L, L-S-L-L-S-L-L, and S-L-L-S-L-L-L. Each of these patterns

represents different time line structures for other traditional rhythms.⁷ A similar “modal/rotation” model can be applied to the *Alegrias palmas*. These rotations contain unique tension/resolution points, while also revealing what the ear might perceive as the downbeat to the music.

Aside from the previously examined traditional phrase and the African bell realignment, three other rotations of the *Alegrias* pattern are possible. In a traditional Flamenco context, the four rotations are not incorporated; in a contemporary setting, the performer/composer is free to explore any creative application. *Alegrias* numbers are included to identify the source of the original phrase. While engaging in these rotations, pattern familiarity with the original phrase will probably be diminished. Indeed, the inherent gravitational force of several rotations will sound unrelated to its origin.

Alegrias Rotations (eighth rests could be sounded using softer claps):

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CONCLUDING REMARKS

There is much more to this analysis than interesting observation and cultural coincidence. By constantly challenging the existing paradigms, new resources and ideas can evolve. Pioneering music creations that pay respect to traditional roots, while exploring unusual instrument sound combinations and unique rhythm and melodic systems, result in what could be classified as “new world music.”

ENDNOTES

1. Andulicia is located in southern Spain. There is ongoing debate regarding the degree of influence gypsies had on the development of flamenco. Other influences could be attributed to the Moors, Jews, Christians, and North Africans. World music traditions often evolve as an amalgam of many neighboring regions, with limited historical documentation to resolve the various conclusions.
2. The *cajon* is a folk instrument that originated in Peru and is a recent addition to the flamenco lexicon. In the 1970s guitar virtuoso Paco de Lucía toured Peru and was given a *cajon* as a gift. He brought it back to Spain where it underwent several modifications—the open hole on the side and the addition of tunable snares—to suit the flamenco sound.
3. The basic skeletal structure of *Alegrias* is discussed in this article. More highly syncopated *palmas* patterns are integrated in an actual performance.
4. This clapping, recitation and movement exercise was taught to me by flamenco guitarist Juanito Pascual. I regularly incorporate a similar three-tiered kinesthetic approach to learning African and Indian rhythm.
5. In vocal and dance music, the *Alegrias palmas* pattern usually begins just after beat 1, as a pick up leading into beat 3 (conversations with Juanito Pascual).
6. For more information on 12/8 timeline rotations and their application in other traditional rhythms see: “The Euclidean Algorithm Generate Traditional Musical Rhythms” by Godfried Toussaint, School of Computer Science, Centre for Interdisciplinary Research in Music Media and Technology, the Schulich School of Music, McGill University, Montreal, Québec, Canada.
7. Prior research of the African bell pattern and its transpositions/rotations has been conducted by Kofi Agawu, A.M. Jones, James Keotting, Robert Kauffman, Kobla Ladzekpo, David Locke, Alan Merriam, J.H. Kwabena Nketia, and Jeff Pressing, to name a few. See “Sources” below for the specific publications.

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Jerry Leake is co-founder of the acclaimed world-music ensemble Natraj. He also performs with Club d'Elf, R.A.R.E, Moksha, BodyGrooves, and the Agbekor Drum and Dance Society. He is featured on dozens of CDs and has released several CDs of his own music. On tabla, he has accompanied Ali Akbar Khan, Steve Gorn, Sharafat Ali Khan, Kumkum Sanyal, Chitravena Ravikiran, George Ruckert, Peter Row, Purnima Sen, Nandkishor Muley. He graduated from the Berklee College of Music, where he studied jazz vibraphone with Gary Burton and hand percussion with Pablo Landrum. He has written eight widely used texts on North Indian, West African, Latin American percussion, and rhythm theory (www.Rhombuspublishing.com). Jerry is on the faculty of the New England Conservatory of Music and Tufts University, and is a substitute teacher for Jamey Haddad at Berklee. Jerry is former president of the Massachusetts PAS Chapter. PN

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