

# It is not that easy!

## The cross-meter genres in Flamenco.

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**Abstract:** It is often said in Spain that Sevillana and Fandango de Huelva are music genres in triple time (3/4), but this is, at least, a half truth, such as describing a period of a year as a mere succession of days, without mentioning weeks or months. In 1966, the musicologist Hipólito Rossy put us on the trail of the real metric structure of Sevillana: "The most particular of sevillanas is the rhythmic combination. The singing is clearly in binary meter, while dancing is in ternary" (1998: 265). After Rossy, this combination has also been identified in Fandango de Huelva by Fernández (2004) and Hurtado (2009), as well as relating to Jota by Manzano (2007) and Castro (2014). At the same time, it has been one of the main issues of my musicological research on Flamenco, recently published as a digital audiobook (Jiménez de Cisneros 2015).

In this article (originally presented as a lecture-recital), we will identify through embedded audio clips and graphic examples the binary and ternary elements displayed in Sevillana and Fandango de Huelva, the cross-meter genres of Flamenco, focusing on the guitar accompaniment and the melodic design. Through a pulse-level analysis, we will also look at the metric hierarchy between these elements, leading us to the cross-meter formula, which involves an alternative interpretation of *compound meter*. Finally, some characteristic hand clapping patterns will be included, so as the reader can approach these puzzling genres from the same point of view of the performer.

**Keywords:** Flamenco, cross-meter genres, pulse-level, hypermeter, hand clapping.

## Introduction

The purpose of this paper is to analyse the cross-meter formula, used systematically in two Flamenco genres of folk origin, Sevillana and Fandango de Huelva, and one of the main subjects in the audiobook *Ritmo y compás* (Jiménez de Cisneros: 2015). However, before starting the analysis, I must mention Hipólito Rossy, a pioneer of Flamenco musicology, born in Sevilla in 1897. He was the first to identify the presence of this polymeter in Flamenco:

The most particular of Sevillana is the rhythmic combination. The singing is clearly in binary meter, while dancing is in ternary, as the hand clapping which supports the rhythm; the guitar plays chords in quavers that fit both kinds of meter. [...] A contrast that, in fact, is the grace of Sevillana and becomes the desperation of musicians not used to this kind of music, which becomes for them so hard to play. Rossy, 1998 [1966]: 265 (translated by the author).

We will try to go further in this subject, mainly to confirm, but also to clarify or expand some of his words, and I hope that, by practicing the final hand clapping patterns, you will never have to fall into the "desperation" mentioned by Rossy.

## Metrical analysis<sup>1</sup>

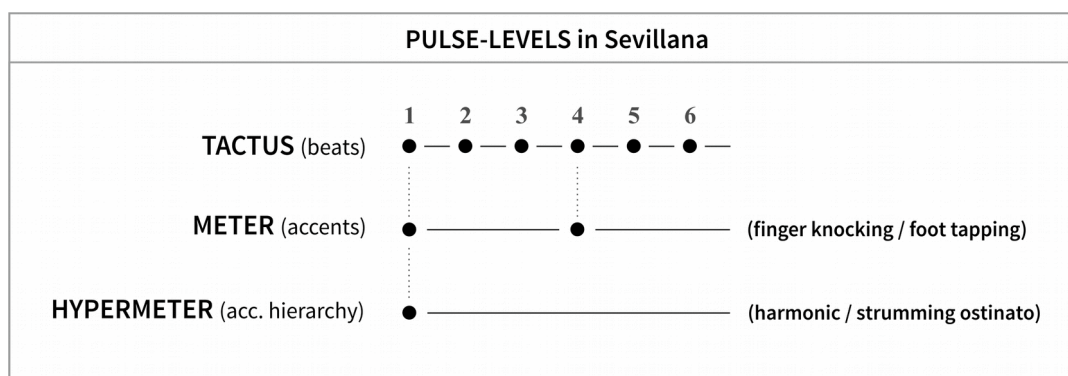
The following fragment is the traditional guitar introduction to Sevillana, ending with a *remate*, a sort of call to action for the singer and the dancers to start [\[audio 1\]](#). In this typical introduction there is a prominent pulse, generally grasped by intuition. In the case of Flamenco, it is also expressed through hand clapping [\[audio 2\]](#). This pulse-level, called *tactus*, is actually the reference level with which we feel the time units (the beat) and, therefore, we calibrate the speed of the music. Indeed, when facing music of oral traditions, it is necessary to support or check our perception as listeners with the information arising from the performers themselves. In this sense, Flamenco dancers have also used a traditional numbering system by which they count the beats of the music. In case of Sevillana (and Fandango de Huelva), they place the beat numbers in this same level.

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<sup>1</sup> This analysis follows the theory on pulse-levels raised by the North-American musicologists Fred Lerdahl and Ray Jackendoff in their book *A Generative Theory of Tonal Music* (1983). The Argentinian musicologist Silvia Malbrán also developed this theory in *El oído de la mente* (2007). It was after this edition that I first met the pulse-level analysis, which I followed in my research (Jiménez de Cisneros: 2015) seeking for a holistic vision of Flamenco metrics.

In this fragment *por sevilla*, a finger tapping every three beats is noticeable. It is an indicator of the level immediately above the *tactus*, known as *meter*, which defines the metrical accentuation, the primary grouping of the beats. In fact, this finger tapping matches the traditional ternary foot tapping of Sevillana. Both *tactus* and *meter* are the pulse levels traditionally identified in Sevillana. Among Flamenco performers, it is usually said that both genres are "styles in triple time". According to this statement, the hand clapping accompaniment would be as follows [audio 3]. But, in fact, this is not the whole truth.

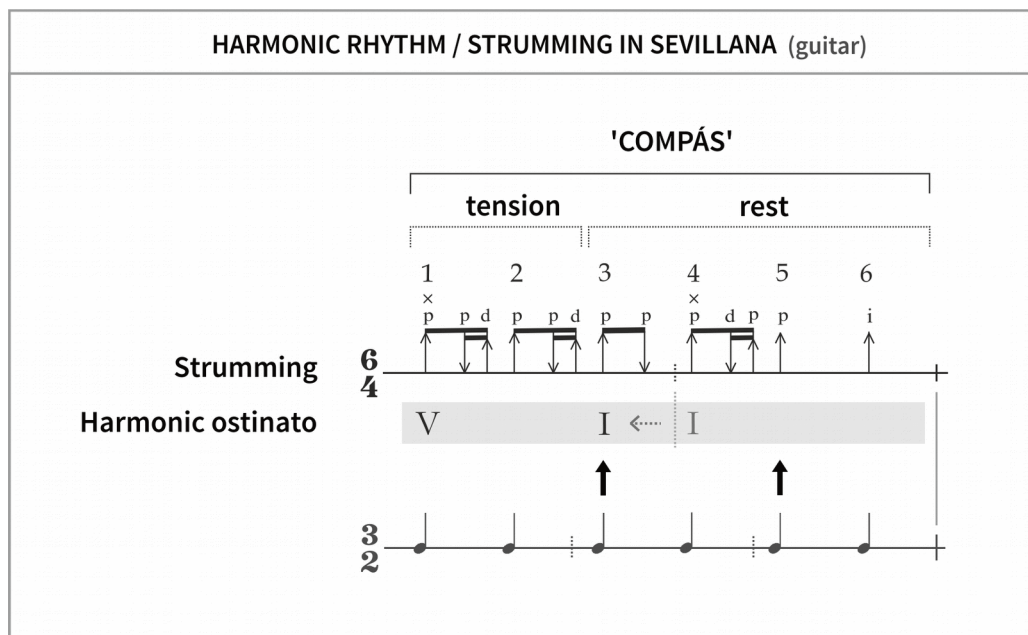
The metrical structure of Sevillana is not limited to these two levels. In this fragment, we can hear a systematic combination of two chords, a harmonic ostinato drawing a period of six beats [audio 4]. Even if we pay attention to the strumming, we may notice that it is not always doing the same rhythm every three beats. In the mentioned *remate* or ending, there is a visible pattern of six beats. So, through this harmonic ostinato and the strumming pattern, a pulse-level above the *meter* is shown: the *hypermeter*. Therefore, the metrical structure is not only based on a ternary beat grouping: it also includes a further level, the grouping of the accents, the meter grouping. In other words, the harmony and the strumming are showing a hierarchy between the metrical accents, a second level in the accentuation. Hence, there is a metrical structure of three pulse-levels, as shown in this picture which uses the graphic solution by Lerdahl and Jackendoff (1983):



**Figure I.** Pulse-levels in Sevillana

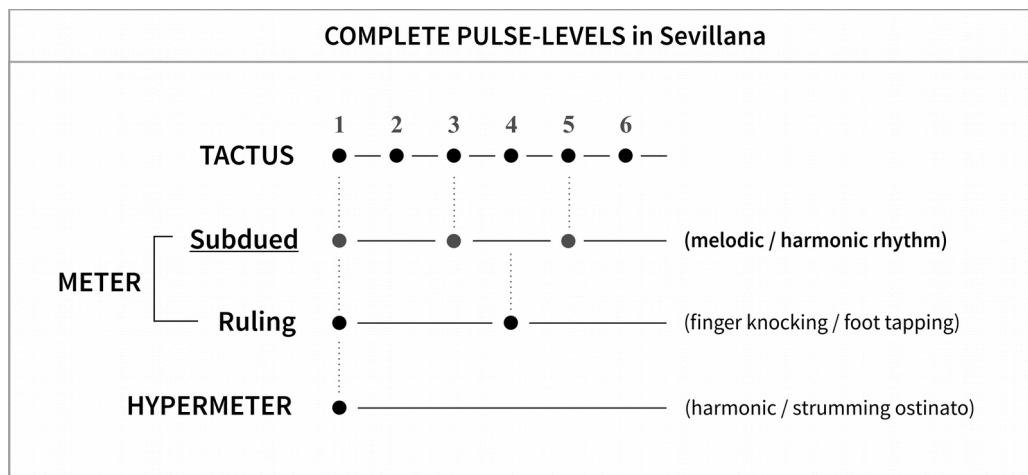
However, if we listen carefully to the harmonic ostinato or the strumming pattern in the *remate*, we may also notice that the chord changes and the rhythmic stress are systematically avoiding one of the ternary accents in the hypermeter, remarking the previous and the following beats (3 and 5). In fact, harmony and strumming are

following a binary step, as shown in this transcription:



**Figure II.** Harmonic rhythm / Strumming in Sevillana (guitar)

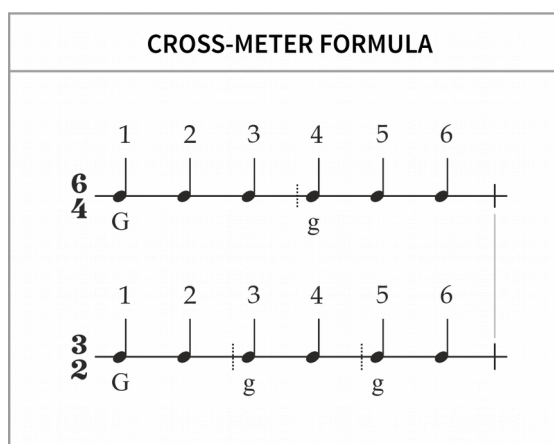
So, the particular threat of Sevillana is that, despite the fact that harmonic rhythm is usually considered the primary metric indicator (the guide to set the time signature), here it is not matching the ternary meter made explicit by Flamenco performers, but rather the opposite, a binary meter [\[audio 5\]](#). In this contradiction lies the "desperation" mentioned by Rossy, because this binary meter is not only hidden behind the finger tapping or the foot tapping, but it is not even mentioned by oral tradition (in fact, most of Flamenco performers are not really conscious of this overlap; they just play it).



**Figure III.** Complete Pulse-levels in Sevillana

Finally, we have a metrical structure of four pulse levels. If we tap this music every two beats, according to the subdued meter, we will actually have a sense of greater control of the music, it seems more clear or comfortable, but at the same time we lose its dynamic effect. In fact, the real feeling of Sevillana depends on the fact that beats 3 and 5 of the hypermeter are not displayed as metrical accents. Keeping a ternary foot tap, as it is traditional, these metric accents of binary origin become emphasis, phenomenal accents that push the dancer forward.

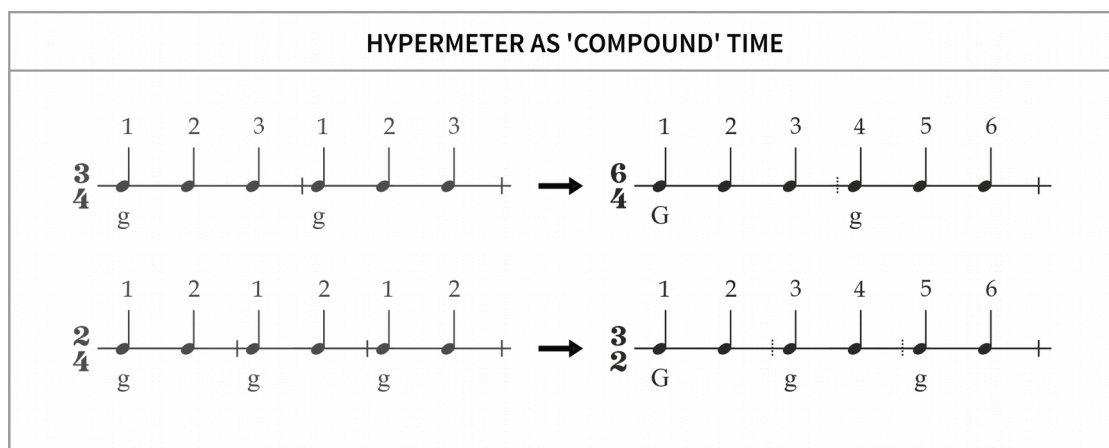
In Sevillana, and also in Fandango de Huelva, this binary-ternary metric overlap forms an indivisible measure of six beats, so we cannot play motifs of less than six beats without breaking that polyrhythmic effect. As we can see in the cross-meter formula, the true measure of these genres is not simply a triple time, but a six beat measure combining two different metric accentuations:<sup>2</sup>



<sup>2</sup> Read more about this formula in Jiménez de Cisneros (2015: 227); regarding the use of the time signatures 6/4 and 3/2 instead of 6/8 and 3/4, read the paragraph II.1 in p. 42.

**Figure IV.** Cross-Meter Formula

This formula is revealing the hidden side of this music, which may certainly produce confusion in musicians not used to it. At the same time, it is suggesting a different conception of *compound meter*, not as subsidiary to any *simple meter*, but as a hypermeter, a measure that is locking several meters in a single unit. In this formula, the 6/4 is not related to the time signature 2/2 (so it is not made up of two beats), but the result of linking two ternary meters (a six beat unit). At the same time, the time signature 3/2 that actually regulates the harmonic rhythm and part of the strumming is not a simple meter of three beats, but the melting of three binary meters, so also a six beat measure. In this sense, both time signatures can be literally considered *compound measures*.<sup>3</sup>

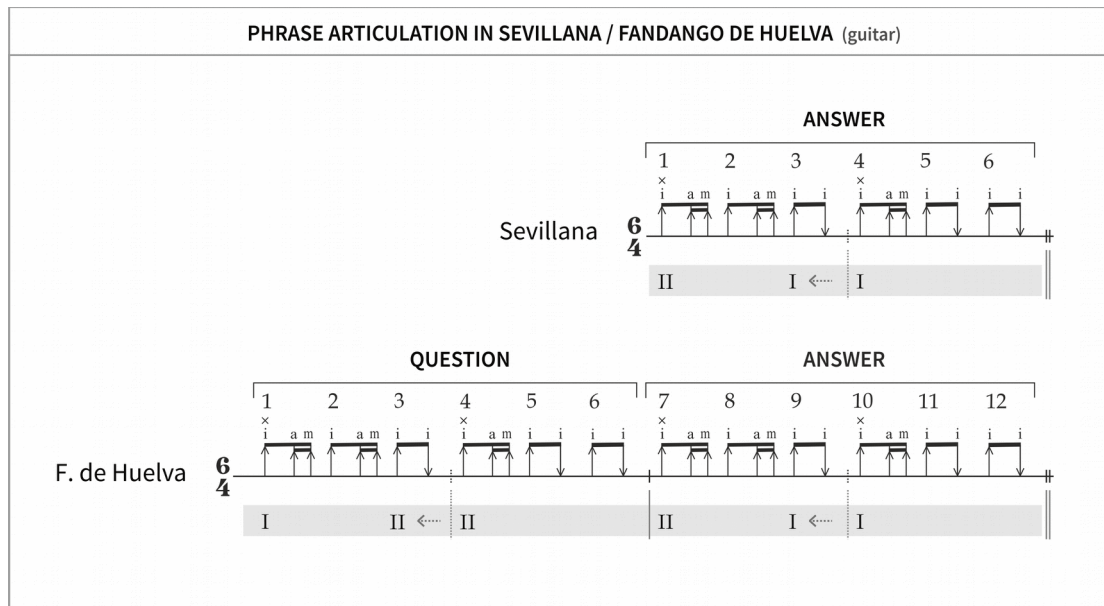


**Figure V.** Hypermeter as “compound” time

Within this pulse-level analysis, which has made visible the cross-meter formula, we have mentioned the harmonic ostinato, especially relevant in Flamenco guitar. In fact, the main difference between Sevillana and Fandango de Huelva lies exactly in this harmonic ostinato. As we have seen, in Sevillana there is a systematic alternation between the dominant chord and the tonic one, showing thereby a stable period of six beats. This dialogue between a tension chord and a resting one gives this period an affirmative sense, the idea of an answer.<sup>4</sup>

<sup>3</sup> This idea is thoroughly developed in Jiménez de Cisneros (2015: 63-68).

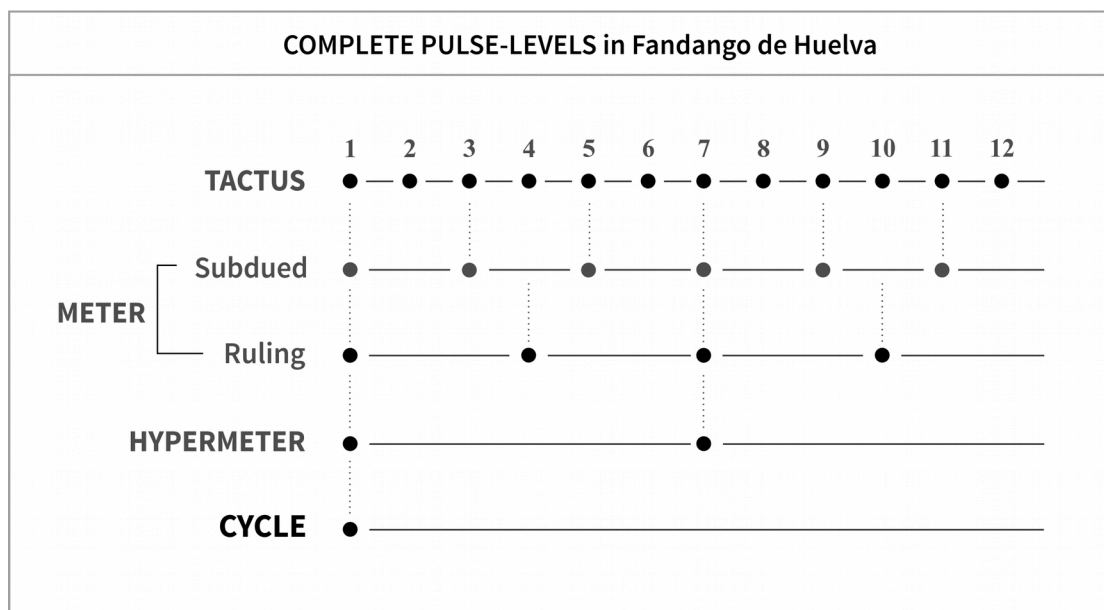
<sup>4</sup> In this sense, the phrasing of Sevillana is uncomplete. This is compensated with longer periods arising from the choreography, but the predominance of dancing in Sevillana (unlike the one in Fandango de Huelva) is certainly undermining the autonomy of guitar playing in this genre.



**Figure VI.** Phrase articulation in Sevillana / Fandango de Huelva

On the other hand, as shown in the picture, Fandango de Huelva is based on twelve-beat periods, instead of six-beat. The guitar creates this long period by systematically including a first hypermeter going from the tonic chord to the dominant, so with the opposite character of Sevillana. This interrogative hypermeter is played in a permanent dialogue with the answering hypermeter. Despite the guitar in Fandango de Huelva may involve other chords, making variations in a wider sense, such harmonic expansion does not change the feeling of a question-answer dialogue [\[audio 6\]](#).

Through the harmonic ostinato of Fandango de Huelva, double length of Sevillana's, we perceive a pulse-level beyond the hypermeter, the cycle, the fifth and final metric level, and the frame for every phrase or variation in Fandango de Huelva:



**Figure VII.** Complete pulse-levels in Fandango de Huelva

Through their numbering system, Flamenco musicians emphasize not only the *tactus*, but also the *cycle*, which is always corresponding to the numbered period (1 to 12 in Fandango de Huelva).<sup>5</sup> In fact, they usually name this *cycle* simply as "compás", in the sense that they consider this period as the only true measure. Finally, I shall mention the melodic design. As noticed by Hipólito Rosy, this polymeter, where the harmonic rhythm and the strumming are not following the same meter as the finger tapping or even the foot tapping, is actually a consequence of the melodic design, in binary meter. The following fragment is a traditional melody of Sevillana. If we listen carefully, we may notice that only one of every two ternary accents (the hand claps in the audio clip) matches the lyrics tonic syllables [\[audio 7\]](#).<sup>6</sup> Instead, if we listen to it according to a binary meter, all accents match tonic syllables [\[audio 8\]](#). In fact, lyrics in Sevillana are following a binary step.<sup>7</sup>

### Hand clapping patterns

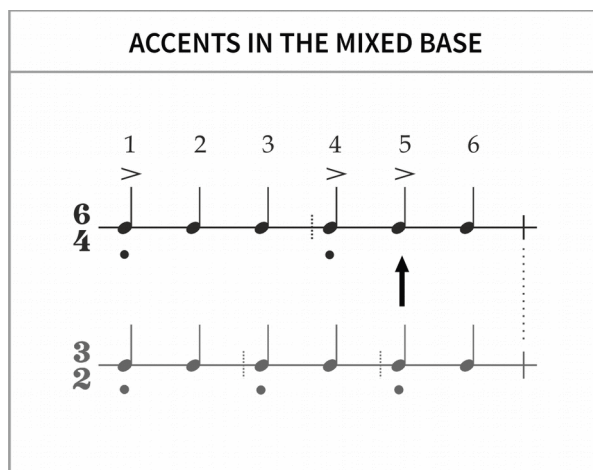
Once we have seen how these two genres work, hand clapping patterns may give us

<sup>5</sup> For further details on Flamenco guitar phrasing, read Jiménez de Cisneros (2015: chapter XI).

<sup>6</sup> La Niña de los Peines (singing) and Melchor de Marchena (guitar), 1946: sevillanas (creación) "Que tu palmito", La Voz de su Amo AA 293.

<sup>7</sup> The same happens with some of the most popular singing styles in Fandango de Huelva (see Jiménez de Cisneros (2015: 229, footnote 4)).

the opportunity to experience the cross-meter formula by ourselves, to feel this polymeter as it is, a sort of tricky game whose rules are hidden behind the popular idea of a mere triple time. The hand clapping technique is the easiest way to get into Flamenco: it is just percussion (no melody, no harmony), with rhythmical synthesis as the main purpose. As mentioned before, to perform the *tactus* and *meter* levels of the music, it would be enough to clap a plain ternary pattern. However, this is not the basic pattern of Sevillana and Fandango de Huelva. Within the purpose of the hand clapping accompaniment, the hallmarks of each genre are also featured, unique elements often related to the pulse-levels beyond the *meter*. In Sevillana and Fandango de Huelva, hand clappers use a main pattern that incorporates an extra accent every six beats, placed on the fifth one (the black points under the notes represent the foot tapping):



**Figure VIII.** Accents in the mixed base

This extra accent does not come from the ternary meter, but from a binary metric accent that becomes a dynamic stress [\[audio 9\]](#). Here, in a very simple way, the pattern is telling the mixture of two different meters by remarking the accents of the ternary, the ruling step, but adding one of the dissenting accents from the binary meter, the subdued step (that's why it is a *mixed* base). So, hand clapping is not deaf to the metrical structure. With this pattern, like the strumming or the harmonic ostinato in the guitar, the hand clapping also reflects the hypermeter (actually, this *base* is featuring three pulse-levels in a single voice). Upon this mixed base, hand clappers build up their duets and trios, a sort of clapping choir. As we can see, the further voices are also influenced by the hidden binary meter, implicit in the rhythmical design.

**HAND CLAPPING 'CHOIRS' (Sevillana / Fandango de Huelva)**

**Figure IX.** Hand-clapping “choirs” (Sevillana / Fandango de Huelva)

If we practice these patterns while foot tapping according to the binary meter, it becomes much easier. But then we lose its recreational or ludic character: the feeling of movement as a result of a systematic stressing on beats 3 and 5. At the same time, the challenging effect of hand clapping is lost. In fact, the difficulty of playing these patterns under a ternary foot step seems to act as a borderline or gateway to relevance, a test to be accepted in live performing.<sup>8</sup>

This article was originally performed as a lecture-recital. At the end of it, I asked for a couple of volunteers to perform some polyrhythmic combinations. After practicing the mixed base, I clapped all patterns upon this base to let the audience realise the stereophonic and dynamic effects of these choirs, as can be heard in the following audio clips: 1-5 [\[audio 10\]](#) and 6-10 [\[audio 11\]](#) (patterns sound on the right, combined with the mixed base center). Through this collective exercise, the volunteers got used to performing the mixed base while keeping a ternary foot tap. Finally, I asked one of them to clap the pattern nr.6 and we tried some three-voice combinations: Base + 6 + 1 (center + right + left): [\[audio 12\]](#); Base + 6 + 3: [\[audio 13\]](#); Base + 6 + 4: [\[audio 14\]](#).<sup>8</sup>

<sup>8</sup> In order to get a similar experience, I would suggest the reader to practice all patterns in graph IX while listening to audio 9.

## Conclusion

Sevillana and Fandango de Huelva, whose metrical structure has been generally described as a plain ternary meter, are often seen as genres with less relevance or musical interest (particularly Sevillana) than those considered "purely" or entirely flamenco, apparently based on more complex (stimulating) metric formulas. This idea has been probably accented by the fact that they are also known as part of the Andalusian folklore, still developed and performed in their original forms and locations. But the analysis of the interaction of their rhythmic and harmonic elements has shown a hidden or ignored side of these genres, an unexpected cross-meter formula, which should give us pause for thought regarding our musical focus and prejudices. In fact, an exhaustive metrical analysis of music of oral tradition such as Flamenco, combining criteria from the modern musicology with the observance of its own resources, may also bear important values both to didactics and performing:

1. From a didactic point of view, metrical analysis acts as a learning enhancer, changing the initial confusion, due to simplistic descriptions, into rhythmic mindfulness. Once aware of the metrical keys of a genre, Flamenco students become capable of reproducing, in a shorter time, rhythmical patterns as any culturally attuned performer, independent to their level of musical education.
2. In this regard, hand clapping, whose main aim is the rhythmical synthesis, becomes the closest expression to the essential metric features of each genre. In fact, with just a few hand clapping languages (the common patterns of Sevillana and Fandango de Huelva being one of them), we can perform the accompaniment of a great number of guitar genres or "palos".<sup>9</sup> Indeed, hand clapping technique is probably the easiest way to understand and put into practice the benefits of a musicological analysis of Flamenco.

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<sup>9</sup> After a systematic pulse-level analysis of the whole Flamenco guitar repertoire, I have identified and described 20 different "toques a compás", divided into 5 metric groups, which may be considered equally autonomous as music genres (Jiménez de Cisneros, 2015: 80-81).

Concert.

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