Paco de Lucía and Jazz: Melodic-Harmonic Improvisation as a Central Element in "Zyryab" (1990)

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INTRODUCTION

Jazz is one of the musical genres that has arguably had a significant impact on flamenco in recent decades, acting as one of the sources that the southern Andalusian art has turned to repeatedly in search of ideas (Gamboa 1992, 35). This point is generally accepted in related academic research but, despite the magnetism generated by this contact among both musicians and researchers, continues to be a sparsely studied phenomenon (Calvo and Gamboa 1994, 137). Fortunately, in the past few years, researchers from different countries have examined this connection from various points of view. Pamies (2016), Manuel (2016) and Jiménez (2017) argue for the existence of a jazz substyle, while offering different departure points: Manuel points out that from 1990 the hybrid genre of "flamenco jazz" emerged as an original and dynamic entity, while Pamies considers Paco de Lucía's collaboration on Pedro Iturralde's *Jazz Flamenco* series (1967–1968) to have helped define jazz flamenco. Jiménez stresses the importance of 1995 album *10 de Paco*, by pianist Chano Domínguez and flutist/saxophonist Jorge Pardo, adding that, after that album, new bands with the title of jazz/flamenco or flamenco/jazz began to emerge.

[2] Paco de Lucía is considered one of the pioneers of contemporary flamenco. This idea has been generally confirmed by his constant flirtations with jazz, from his participation on Pedro Iturralde's *Jazz Flamenco* albums in 1967 and 1968,¹ to his subsequent concert performances alongside great jazz musicians such as John McLaughlin, Larry Coryell, Al Di Meola and Chick Corea. For Herrero, de Lucía was "the first to understand the necessity of integrating new concepts into flamenco, mixing it [...] with other musical genres to enrich it and open new doors" (1991, 100), as well as attracting other jazz

^{1.} The Spanish record label Hispavox originally published two LPs, *Jazz Flamenco* (HH (S) 11 – 128, 1967) and *Jazz Flamenco vol.* 2 (HHS 11 – 151, 1968); on the former, Paco de Algeciras (De Lucía) and Paco de Antequera alternate in the role of flamenco guitarist. A third album, originally published in 1968 by the German label Saba, called *Flamenco Jazz Pedro Iturralde Quintet – Paco de Lucía* (SB 15 143 ST, 1968), features De Lucía as the only guitarist on the recording. For further information, see "Contactos tempranos entre jazz y flamenco en España. Una perspectiva analítica de la serie Jazz-Flamenco de Pedro Iturralde y Paco de Lucía (1967-1968)" (Zagalaz 2018).

musicians to flamenco after his appearance on the international concert scene (Herrero 1991, 105). De Lucía's discovery of the melodic-harmonic implications regarding his solo improvisations, led him to learn about harmonies that could be integrated in flamenco guitar music,² in addition to other aesthetic elements such as the introduction of sections designed for melodic-harmonic soloing, which would have a profound impact on the compositional concepts of several of his albums. Paco de Lucía talked many times about his musical skills, the impact of playing with Coryell (later replaced by Di Meola) and McLaughlin, and the way he learned how to improvise the way the jazzmen do:

Tú sabes que nosotros los flamencos, sobre todo los de nuestra generación, ninguno sabemos música. Yo desde pequeño siempre tuve las ganas de aprender música porque yo sabía que me iba a hacer falta. Y se necesita saber música, porque el tiempo que yo tardo en encontrar una cadencia de acordes, uno que sepa música te la hace en dos minutos, y yo puedo tardar quince días. Entonces, yo me planteé muchas veces aprender música, pero no tengo la disciplina y nunca tuve la disciplina de aprender algo, porque, entre otras cosas, estuve en la escuela dos o tres años, y me acostumbré a estar en la calle, a aprender. Lo que aprendí lo aprendí en la calle, pues en una fiesta, en una juerga, o en un escenario, u oyendo un disco. Entonces, de pronto, se me ocurrió que si tocaba con gente del jazz, porque la gente del jazz maneja muy bien la armonía, ahí había un campo para aprender que no me iba a cambiar mis esquemas. [...] y ese fue el motivo. Yo me metí ahí porque tenía ganas de aprender otras maneras de tocar. Por ejemplo, la improvisación. La improvisación que se usa en el jazz, que se está utilizando ya en el flamenco, ya se incorporó al flamenco. Me parece muy importante. Yo pienso que cualquier músico de cualquier identidad, de cualquier estilo debería aprender a improvisar. La improvisación es algo que, hasta que no lo descubres, realmente no aprecias lo que tiene, lo que vale. Porque eso de meterte en un escenario a tocar sin saber lo que vas a tocar es muy excitante y muy atractivo [...] porque si hay improvisación en cada concierto, hay aventura.³

^{2.} Félix Grande's words taken from an interview included in the documentary: Hernández, Daniel, Diego, Jesús de. 2002. *Francisco Sánchez: Paco de Lucía*. ALEA TV, ARTE, TVE.

^{3. &}quot;You know that we, flamencos, specially from our generation, we do not know music. Since I was a child, I wanted to learn music because I knew I was going to need it. And you need to know music formally, because the time I spend figuring out a chord progression, someone who knows music gets it in two minutes, while I can spend fifteen days. So, I thought many times I should learn music, but I don't have the discipline and I didn't have the discipline to learn something, because, among other things, I went to school

[3] Norberto Torres introduces the concept of *grupo flamenco* as "a new flamenco performance form with the tune *Entre dos aguas*" (2002, 113), in which the presence of percussion, rhythmic guitar and electric bass frees up the guitar from its responsibilities so that it can become a melodic instrument, more suitable for improvisation (Torres 2002, 114).⁴ This rhumba tune, recorded at the last minute as a filler, was featured on the album *Fuente y Caudal* (1973), and unexpectedly catapulted de Lucía onto stages all over the world thanks to a success which was unprecedented in the history of flamenco (Pérez Custodio 2005, 88), even if he was accused from the more traditional quarters of flamenco of "playing too many notes." In any case, de Lucía's approach was eventually embraced by most of the flamenco world, much more deeply and sooner than other relevant flamenco performers and singers. *Camarón de la Isla*, for example, took more time to be accepted as a flamenco reference.

[4] The release of the album *Paco de Lucía interpreta Manuel de Falla* (1978) was another move towards jazz by de Lucía, with the introduction of jazz-like elements in a flamenco context (Zagalaz 2012, 44). The presence of the flutist and saxophonist Jorge Pardo on some of the tracks brought about unequivocally jazzy phrases, although the definitive dive into jazz happened on the 1981 album *Sólo quiero caminar* (Torres 2002, 114), which represented "the first recorded translation of the new musical channel that Paco had been cultivating for years" (Téllez 2003, 347). The introduction of wind instruments, such as the saxophone, which are typically considered to be more closely associated with jazz and were indeed rare in the flamenco tradition, contributed to the new idea of the flamenco group. The inclusion of these new instruments also affected the approach to composition: the adaptation of musical elements built on chord progressions to facilitate the development of improvised melodic-harmonic solos, during which the musicians in the

for just two or three years, and I got used to be on the streets. What I learnt, I learnt it on the streets, at parties or on the stage, or listening to records. Then, suddenly, the idea came to me that I should play with jazz people, because they're very good with harmony, there I had a field to learn which wouldn't alter my ways [...] and that was the reason. I got into it because I wanted to learn different ways of playing. For example, improvisation. Jazz improvisation, which is already in use in flamenco, it was incorporated to flamenco. I think it's very important. I think any musician from any identity, from any style should learn how to improvise. Improvisation is something that, until you don't discover it, you don't really appreciate what it entails, what it's worth. Because getting on the stage to play without knowing what are you going to play is exciting and attractive [...] because if there is improvisation in each concert, there is adventure." (Interview with Paco de Lucía, unknown date. Accessed April 7, 2022. https://www.youtube.com/watch?v=c-JqjbnnN4c&cab_channel=RubenDiazFlamencoGuitar)

^{4.} Torres refers to melodic-harmonic jazz improvisation, not to the improvisation concept in traditional flamenco.

band could express themselves and feel free.⁵ This fascination with and search for improvisation as an expressive element within his overall musical concept led de Lucía to embrace and rationalize it, to recognize its harmonic implications and to internalize it. This development has been documented in specialized literature on numerous occasions (Zagalaz 2012, 2019). In addition, de Lucía's words on improvisation show how important this concept was for him, and clarifies his position and intentions on that matter:

A la hora de improvisar, tienes que saber siempre qué armonía, dónde estás, musicalmente dónde estás, armónicamente. Y el sentido del riesgo, el no saber qué vas a hacer dentro de 15 segundos, tirarte a no sé... es difícil de explicar, es una abstracción. Pero la sensación es una maravilla. Y yo ya ahora no puedo prescindir de la improvisación.⁶

[5] An optimal example of de Lucia's innovative engagement with improvisation can be located in the album "Zyryab" (1990) in which de Lucía "takes the flamenco group to its most extreme point" (Pérez Custodio 2005, 141). "Zyryab," which means "dark nightingale" in Persian, was the nickname of a musician named Abu al-Hasan, also known as 'Ali bin Nafi', who travelled from Baghdad to Córdoba, Spain, in 822 AD, facilitated by Umayyad emir Abd-el-Rahman II (Shannon, 2015). According to Martín Moreno (1985), he brought with him new teaching methods and instruments, such as a lute with an extra string, commonly linked to predecessors of Spanish guitar. De Lucía selected this name for both the whole album and its main track. The album features notable collaborations by renowned musicians such as Manolo Sanlúcar and Joan Albert Amargós, in addition to veteran players in his sextet such as Jorge Pardo and Carles Benavent. However, the most decisive contribution, at least in terms of jazz improvisation, was provided by Chick Corea, with whom de Lucía had already worked in 1982 on the Corea's album Touchstone, which also featured Catalonian bassist Carles Benavent (Zagalaz 2012). The title track, "Zyryab," paradigmatic in terms of both structure and harmonic complexity (Zagalaz 2019) features a structure that could well be

^{5.} Interview with Paco de Lucía in the documentary: Michael Meert. 1995. *Paco de Lucía, Light and Shade. A Portrait.* WDR, Euroarts, TVE.

^{6. &}quot;When it comes to improvising, you always have to know the harmony, where you are, where you are musically, harmonically. And the feeling of risk, of not knowing what you are going to do in 15 seconds, jump into wherever, I don't know... it is difficult to explain, it is an abstraction. But it feels wonderful. I cannot play without improvisation any more." (Interview with Paco de Lucía in the documentary: Michael Meert. 1995. *Paco de Lucía, Light and Shade. A Portrait.* WDR, Euroarts, TVE.)

that of a jazz tune: introduction, head, solos (which alternate with the head) and outro, which, in terms of structure, constitutes an exception on the album (Manuel 2016).⁷ De Lucía and Corea play their solos over a chord progression devised specifically for that purpose, while Carles Benavent does the same over a modified progression after the third occurrence of the head, although with a mandola instead of the electric bass, his regular instrument. The result is the slow evolution of de Lucía's compositional concept that would shape the concept of the flamenco group by incorporating structural elements from jazz and improvisation into its approach.

[6] There are few academic studies focused on how de Lucía incorporated non-Flamenco concepts to his playing and composing, including the concept of the solo as melodic-harmonic improvisation. From an academic perspective, it is interesting clearing up which specific elements did de Lucía take from jazz besides the concept of the flamenco group and how he implemented the improvisational techniques; also, considering the clear differences between flamenco and jazz, identify the skills he acquired to shape his improvisational vocabulary would shed light to this specific contact. The nature of this form of improvisation, the essence of which resides in the contrasts between melodic-harmonic tension and release, generated by the melodic overlap of harmonies floating over the proposed chord base, generally in cyclical fashion, and which normally contains relatively complex harmonies and modulations. This structure poses certain challenges for the improviser, since playing through those kinds of changes is not very common in jazz music.

[7] Seeking to offer a technical perspective on this approach, which is already accepted by the academic flamenco world, the objective of this article is to analyze Paco de Lucía's recorded performance on the solo section of the tune "Zyryab." The aim is to uncover and illuminate the melodic-harmonic soloing vocabulary used by de Lucía and the possible aesthetic transferences from jazz to flamenco through a methodology based on transcription and comparative analysis.

TRADITIONAL FLAMENCO, IMPROVISATION AND TRANSCRIPTION

[8] Historically, flamenco has posed difficulties with regard to transcription and analysis due to its musical characteristics. However, these difficulties are not unique to the genre,

^{7.} This kind of instrumental melodic soloing over chord progression is not present in traditional flamenco.

but rather a common characteristic, to different degrees of intensity, of all musical styles (Hoces 2012, 48). One of the factors that contributed to those difficulties is the historical lack of rigor and studies, as noted by many authors (Valderrama Zapata 2008, Steingress 1993, Alvarez Caballero 1994). It is important to stress that flamenco is a hybrid music in which Western and Eastern music systems connect, developed through the centuries, but consolidated in the 19th century. The arrival of the gypsy people from the Middle East to the Iberian Peninsula in the 15th century has been well documented (Álvarez Caballero 1988), and, in subsequent years, they settled in southern Spain, where Muslim culture was still very strong after seven centuries of domination. Muslims and Jews who managed to stay after several expulsions lived together in specific spots, along with the locals, mostly Catholics, but also gypsies and other minorities, many times underground, hiding their traditions and beliefs. This was the starting point for flamenco, which developed in the fringes of society until king Carlos III enacted a law in 1783 which reduced the social pressure on gypsy people (Mairena y Molina, 1963; Larrea Palacín, 1974). From that moment on, historical traces of flamenco increase, until we find references to the word "flamenco" with regard to music in the press, starting in the first half of the 19th century. In the second half of that century, flamenco experienced a great development and expansion; Silverio Franconetti, a flamenco singer who, after a long stay in South America, came back to Spain from Uruguay in 1864, and became what specialists consider the first flamenco singer, or *cantaor* (Castro Buendía 2010). He also founded the first Café Cantante, the Café de Silverio, where flamenco performances (among other kinds of shows) took place. This resulted in the generation of a brand-new scenic space for flamenco, that eventually spread all over the country. His contribution to flamenco and the configuration of the earlier styles of *cantes* and their later development was also determinant; he was called at that time Rey de los cantaores8 (Castro Buendía 2010). In recent times, researchers such as K. Meira Goldberg (2022) and Eloy Martín Corrales (2000) have analyzed the impact of African slaves on early flamenco, which would add yet another ingredient to this already complex mix.

[8] Flamenco generally includes singing, playing, and dancing. The singing (*cante*), developed by the *cantaor* or *cantaora*, is monophonic and includes micro tonalism, and in some palos may be unaccompanied (*a palo seco*), or with some rhythm patterns defined by

^{8.} Rey de los cantaores translates as "King of Singers."

clapping.⁹ The playing (*toque*) was originally intended only to accompany the singing and dancing. With the addition of the guitar, well-tempered and built according to Western tradition, the encounter between two worlds is paradigmatic, considering the similitudes with the Arabic maqam approach including microtonalities and the purely melodic approach to improvisation. So, besides confronting two theoretical worlds (Eastern melodic/modal world and Western harmonic/chordal world), flamenco music moves in two different tonal scenarios: on one hand, some *palos* are in major/minor tonality, as *Garrotín* (major) or *Peteneras* (minor), and others include what is generally called Andalusian Phrygian or flamenco tonality. As noted by Manuel, "Andalusian Phrygian tonality is epitomized in the common chord progression Am - G - F - E (The "Andalusian cadence"), in which the E functions as the tonic, rather than the dominant of A." (2006, p. 97).

[9] Over this chord progression, the melody lines use a Phrygian approach, but with variable tones, especially the third (which sometimes is minor and other times major) but also the sixth, the seventh, and even the fifth.¹⁰ Sometimes, the nature of some of these tones is not clear, due to the use of the microtonal approach inherited from the different cultures contributing to flamenco aesthetic. These blurry features become more evident when the western system of notation is applied to the flamenco melodic lines sung by the *cantaor* or *cantaora* than to the guitar or any other instrument.¹¹ There are some rhythm-

Andalusian Cadence

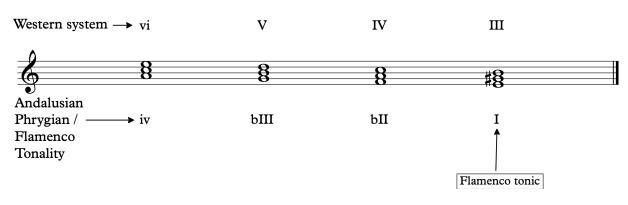


Figure 1. Andalusian cadence and flamenco tonic.

^{9.} In some palos, the rhythm is defined by a hammer on an anvil (*carceleras, martinetes*), and other palos have free rhythm. Other palos, as *soleás* or *bulerías*, present an amalgama rhythm, combining binary and ternary approaches.

^{10.} For more information, see Castro Buendía (2010) and Zagalaz (2017).

^{11.} Cantaor (male) and cantaora (female) are the names provided to singers in flamenco.

free palos, such as the *saeta*, which also impedes not only pitch recognition but also rhythm definition, and again poses challenges to researchers attempting any analytical study of flamenco. All of these features compound a problem related to the appreciation of flamenco music from a more technical viewpoint, a problem concerning the "scarcity of musicological studies" (Steingress 1998, 95), most of them in Spanish language, although this situation is changing little-by-little with the passage of years and the gradual appearance of technical studies on this topic.

[10] The concept of improvisation is different in jazz and flamenco. The kind of improvisation we find in traditional flamenco is related, firstly, to the structure: it lies in the vocal lines, since the *cantaor* or *cantaora*'s performance may change the melodies, the lyrics, and even determine the chord progression, departing from pre-composed chord sequences and melodic fragments called *falsetas*, known as *centenozation*. Here, the two music systems, Western and Eastern, work together, combining the Eastern standards of improvisation (*maqams, ajnas* etc.) with Western-based harmony, sometimes diatonic (major or minor) and sometimes on a specific flamenco tonality, as noted previously. The guitar, as an instrument, is built over the twelve-tone well-tempered system, which means that, in terms of melodic and harmonic content, it should not necessarily cause more transcription challenges than any other instrument.¹² However, any research must be based on a methodology suitable for the subject being analyzed as well as to the goals of the research itself. In this case, in order to analyze an improvisation over a chord progression similar to the ones generally used in jazz music, it is appropriate to tackle this study from the analytical and methodological point of view of a jazz solo.¹³ A melodic

^{12.} Transcription of music, the act of transferring a human activity to a medium of a schematic nature, such as sheet music, which basically consists of height and length, entails an exercise in simplification. The transcription process becomes a matter of regulating what is played according to the characteristics of the medium on which the transcription is to be registered. As regards spoken or sung words, there are inflections and other vocal devices that must be contributed by the reader in the case of a transcription of a speech, for example. Nevertheless, in order to make a linguistic, syntactic, lexical or morphological analysis, it suffices with a simple transcription in which the words that have formed the passage are present. This is also true in the case of musical transcription, which, although it does not include all of the information that is subsequently to be emitted in a performance, is absolutely valid and complete on an analytical level.

^{13.} It is necessary to clarify the term 'improvisation', or at least adjust it to the specific characteristics of De Lucía and to the time in which this recording was made. Gunther Schuller includes an interesting reflection on improvisation during the first years of jazz in his work *The Swing Era: The Development of Jazz, 1930–1945* (New York, Oxford University Press, 1989). The term *to improvise* is nuanced, as many of the most well-known solos recorded during this time period probably didn't contain, as per Schuller, any kind of improvisation. However, this doesn't mean that they weren't improvised at some point, but that the artists felt obliged to repeat the same solo that had been captured for commercial purposes. In Paco de Lucía's case, in analyzing

transcription related to the proposed chord sequence will be analyzed, in order to observe the way in which the performer develops the melodic discourse, and also to observe how the improvisation creates and resolves tensions over the progression.

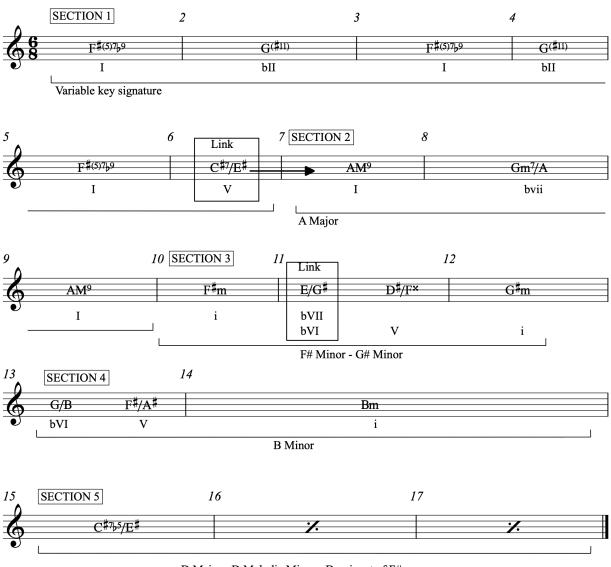
[11] This approach came into existence with the most advanced improvisers of the Swing Era towards the end of the 30s, it was consolidated in the 40s during the Bebop period, and nowadays it exists as an essential aspect of the vocabulary of modern jazz improvisation. Therefore, a transcription without interpretative aims must be governed by objective criteria relevant to observation, as in this analysis of Paco de Lucía's improvisatory vocabulary and the possible elements he adopted from jazz.

[12] The methodological approach to the transcription of De Lucía's solo in "Zyryab" seeks the objective analysis, focusing on the pitch, the relation between melody and chord progression, and the rhythmic parameters. The harmonic base is extracted from the guitar accompaniment. The chords are therefore very detailed, with various extensions. Even so, these types of harmonic add-ons do not determine the transcription or analysis, but rather the relationship between the melodic line and the harmonic essence of each chord.

[13] Also, in this specific study, I have opted not to include a key signature, given the lack of tonal stability of the piece from a traditional Western musical perspective, in order to facilitate the perception and the analysis in an unstable harmonic environment. I have also decided on a 6/8 meter to simplify the analysis and focus the attention on the melodic-harmonic relationships. Finally, I have tried to ensure maximum rhythmic accuracy in the transcription. Even so, the highly virtuosic playing has led me to make slight simplifications and adjustments at certain passages.

[14] For a better harmonic understanding and contextualization, the underlying harmonic structure of the piece will be detailed below, and the analysis of the piece will follow.

live performances of the tune Zyryab, he isn't too faithful to the song as recorded on the 1990 album. On stage, De Lucía tackles the solos freely, showing his skill and acceptance of musical risks. Having said that, it's possible that De Lucía constructed the solo and took advantage of modern-day recording technology such as track by track recording and analog or digital edition). All these elements, even after having considered them, do not change nor condition the goal of this research study, since the resources used come from the interpretative concept of the guitarist, regardless of whether they belong to one or several takes.



D Major - D Melodic Minor - Dominant of F#

Figure 2. Chord structure of the solo section in "Zyryab."

STRUCTURAL ANALYSIS

[15] The section intended for improvisation in the tune "Zyryab" features a sequence of seventeen chords in which different harmonic situations and modulations occur (see Figure 2). Many of the chords are defined by the construction and tuning of the guitar, an element that has determined the development of flamenco harmony over the course of its history. For example, the *Taranta*chord (Figure 3),¹⁴ which in this piece works also as the

^{14.} Even though this harmony was not originally designed with as an over structure, from an analytical point of view it can be interpreted as a F#5 chord (no third), with an E minor triad on top. The *Taranta* is a *palo* considered part of the group of *cantes de las minas* (chants of the mines) or *cantes de Levante* (chants from the East).

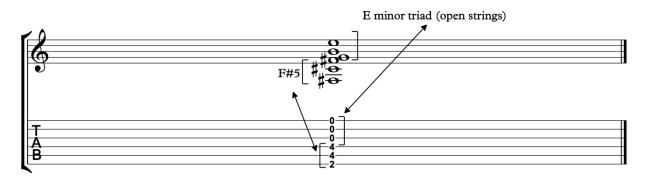


Figure 3. The Taranta chord.

flamenco tonal center, is constructed basically with a 1 - 5 - 1 structure in the second fret (F # - C # - F #), leaving the three upper strings unfretted (G - B - E).

[16] The final result is a sequence made up of an odd number of elements, with little tonal continuity and an intricate and compelling harmonic framework. This chord progression establishes itself as a challenging harmonic basis, which distances itself from the simplicity of jazz standards based on American popular songs.

[17] The F# chord, as seen before generally associated with the *Taranta*,¹⁵ seems to take the role of the root tone, although the instability persists in these first five measures. In the sixth measure, we hear the V chord of the previously observed F# dominant chord, C#, but in the form of a first inversion, with the note E# in the bass voice. But in the sixth measure, instead of returning to the aforementioned F#, a modulation is produced via a deceptive cadence towards the key of A major. Despite the lack of a relationship between both chords, the modulation is produced coherently and does not seem to be artificial. This may be owing to the continuity provided by the C#, which is present in all three chords, as well as the presence of the note B in the last two chords (Figure 4): The continuity makes way for a section with a certain tonal stability. The A major, which includes a significant major ninth, is followed by a G minor seventh



Figure 4. Transition in measure 5 of the sequence.

^{15.} The tuning of the guitar and the central role thereof in the development of flamenco has made this voicing very characteristic and recognizable.

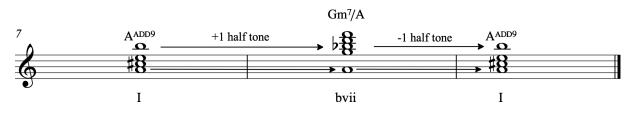


Figure 5. Second section, focused on the A major key.

chord, with the bass on A, which gives the sequence a flamenco sound, since it recalls the classic III (flamenco tonic) – IV (in this case III – ii with a pedal note on the bass and the second chord working as a IV substitution) flamenco Phrygian-related progression. This chord includes the note B_{\flat} , and the transition from the major ninth of the A chord, B_{\flat} , and this B_{\flat} , enriches the small modulation, which ends in the next measure, returning to the initial A chord (Figure 5).

[18] Below, we look at a modulating section which is linked to the previous section through the F# minor chord (minor relative to A). Although it features tonal continuity, a double chord change in a single bar is produced in measure 11 of the sequence. These are the E major and D# major chords, both in the first inversion, which subsequently lead into the G# minor chord and key. This modulation, in a rising tone, occurs at the beginning of measure 11 with the E major chord, although the presence of this structure in both keys offers the improviser the option of adjusting directly on the E or, in the second half of the eleventh bar, on the D# (Figure 6):

[19] In the next two measures, the structure of the preceding two measures is repeated verbatim, but a minor third higher, beginning with G major and F# and then settling in B minor, both as chord and key. The appearance of this chord is significant in terms of its role as the tonic of F# dominant, a central structure in both this sequence and other

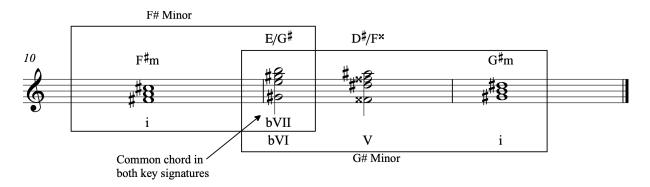


Figure 6. Modulating section with common chord.

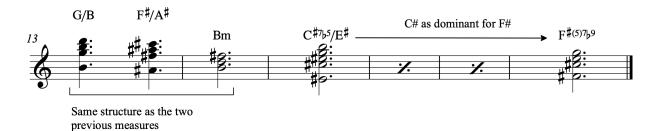


Figure 7. Last two sections of the sequence.

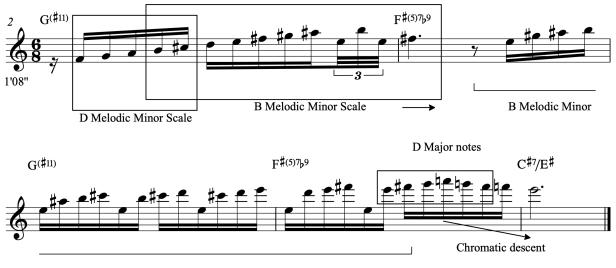
sections of the song "Zyryab." After this phase, the last section is developed over three measures in which the C# seventh flat five first inversion chord is repeated. Despite being a chord with a diminished fifth, it fulfills the role of the initial dominant F#, which, although it is also a dominant chord, has a tonic character from a flamenco viewpoint (Figure 7).

[20] In short, this sequence of seventeen chords represents a complex and demanding harmonic network for any improviser, and it is conditioned by the flamenco sound bestowed upon it through the succession of chords rich in guitar elements. As Manuel aptly observes, De Lucía's harmonies in this song "lie more in the realm of modern flamenco than jazz" (Manuel 2016, 32).

ANALYSIS

[21] De Lucía develops his improvisatory interpretation on the chord progression over the course of three cycles. In these, there is a multitude of stylistic and melodic-harmonic features which show the complex development of the De Lucía's discourse as a soloist. De Lucía not only developed his own compositional concept, but also incorporated the knowledge acquired from numerous experiences with musicians associated with the jazz tradition(Manuel 2016; Pamies 2016; Zagalaz 2012, 2019).

[22] In minute 1'08" (the starting point of the solo), De Lucía begins with an ascending phrase in which he shifts from D Melodic Minor to B Melodic Minor in the middle of the measure. This melodic line, which begins on F# and ends on the same note but one octave higher, moves between the D minor melodic and E minor melodic scales, both constantly present throughout the rest of the performance. Thus, in the following measures, we find an alternating pattern between the modulating F# seventh flat ninth chord, without the third, and G Lydian, in the chord progression. However, De Lucía traces a melody that pivots on the first open string chord and that rigidly responds to the B minor melodic



B Melodic Minor

Figure 8. Use of different scales in the initial modulating section.

scale to connect with the following section, also modulating, through a step in which the G and A notes go back to natural, finishing with a small chromatic descent (Figure 8).

[23] The note E, at the end of the phrase is significant, as it represents the minor third of the destination chord, C# seventh: this can be interpreted as an anticipation of the following modulation, towards A major, where the E\\$ is a structural tone. This type of anticipation is consistent over the course of the entire performance, as observed in the next measure. Starting with the C\\$ seventh first inversion chord (C\\$7/E\\$, it moves to a major A triad which includes the major ninth, B. However, in a kind of ascending arpeggio over the second half of this measure, De Lucía introduces the notes B\> and F\\$. In the next bar, the harmonic base shifts to G minor seventh, which de Lucía seems to turn into G Dorian character, that is, as a second mode of the F major scale, with the appearance of the notes B\> and F\\$, in contrast to the B\\$ and F\\$ of the A major key, to return to this key one measure later (Figure 9).

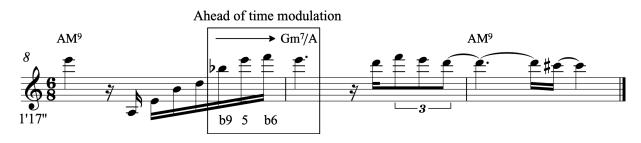


Figure 9. Anticipation of the modulation.

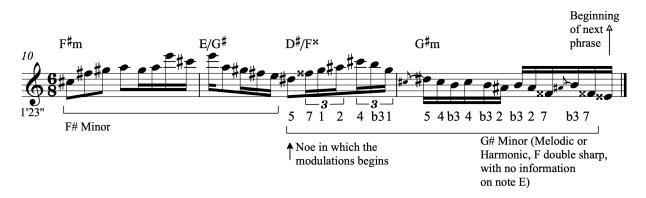


Figure 10. Modulation on the second beat of measure 10.

[24] As shown above, the harmonic sequence enters a modulating phase in which the inverted chords play a central role. After the last A major, the modulation doesn't occur immediately, as the next measure is built on F#, relative to A. In the eleventh measure, there are two chords in first inversion moving symmetrically in a descending and chromatic way, and whose target chord is G# minor. De Lucía, however, does not modulate in the measure change, but rather performs a clear modulation on the second beat of the measure, delaying the modulation itself, which is a common practice in traditional flamenco singing (Figure 10).

[25] It is worth noting how, from the moment the modulation is in effect, de Lucía does not specifically choose G# minor. The presence of the double F# indicates the use of either the minor melodic variation or the harmonic minor. Although both De Lucía's logic, as well as his stylistic tendency, makes the harmonic option the most viable, the fact that there is no E note in the phrase, which would affect one element or another, makes it impossible to determine which one is in use. The only E which appears, double sharped, forms part of the phrase that fits mostly into the following measure, in which de Lucia clearly manages a more substantial application: This use is of the seven note Phrygian tetrachord scale, as called by Haba (1984, 145), composed of two symmetrical tetrachords, with a distribution of half tone, 1.5 tones, half tone, both separated by one tone (Figure 11).

[26] As can be observed, the structure corresponding to the first tetrachord—of the type that we can call a *major Phrygian* (Fernández 2004, 68)—is repeated twice. In addition to the major Phrygian, which, from a modal perspective, is the scale constructed on the fifth degree of the harmonic minor, this scale contains features akin to musical genres coming from the Arab and Turkish traditions. This is the case of the *Hijâz* scale, which has been

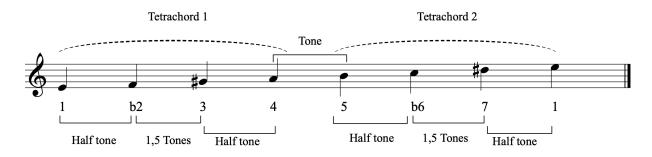


Figure 11. Seven note Phrygian tetrachord scale.

linked to flamenco by specialists such as Peter Manuel (2006, 96), and whose first tetrachord coincides with the previously observed tetrachords. Furthermore, de Lucía clearly introduces this scale, ascending the scale continuously; however, the way the notes are displayed does not recall traditional flamenco lines, but a more scale-based approach (Figure 12):

[27] It is important to highlight the fact that this scale, built on F#, supports the dominant role even though it does not create a chord of such characteristics, as it contains the major seventh. Nevertheless, it is possible that the double tension produced by both augmented second intervals, which is not uncommon in traditional flamenco, increases the attraction, without specifically containing a tritone in its formation. The phrase ends on B minor, again after a very "guitaristic" chromatic descent, becoming the fifth degree of the destination chord.

[28] In the last section of this first chorus, with three measures over the C#7b5 chord with E# in the bass, a singular occurrence arises. In the third measure of the series, which serves as resolution and link to the beginning of the second loop, de Lucía introduces some distinct elements. At the beginning of the measure, he sketches a G seventh ascending arpeggio, arriving at the third above the first octave. Immediately after that, de Lucía plays a phrase exclusively comprising D melodic minor scale notes, but centered in

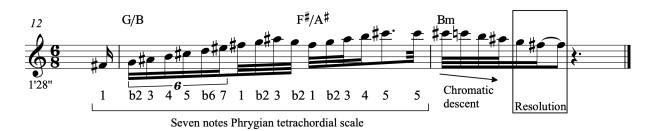


Figure 12. Explicit use of the seven note Phrygian tetrachord scale.

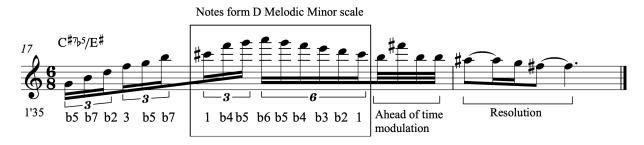


Figure 13. De Lucía's application of the seventh degree of D Melodic Minor scale.

its seventh degree, C[#]. In the last eighth note of the bar, de Lucía anticipates the resolution, which occurs over the first chord of the second improvised chorus (Figure 13).

[29] The use of the seventh degree of the Melodic Minor Scale, known as *superlocrian* in both jazz academic and music fields is common to jazz improvisers as played over a dominant chord. This sonority, based on the almost complete dissonance between the scale and the dominant chord, is integral to a jazz aesthetic, since resolution of the tension caused by the situation in a proper way is one of the main characteristics of jazz improvisation, even though it is not common over a diminished fifth chord, as it is the case here. Despite the \flat 5 nature of the chord, it has a clear dominant character, so the effect is very similar in harmonic terms. This passage confirms that de Lucía took up the practice of improvising over chord progressions from jazz (Manuel 2016), but his approach went further: the structure, the performance and the creativity to craft this composition are strongly influenced by a jazz approach of what is generally known as "playing over changes".

[30] The initial bars of the second chorus by de Lucía begin with a series of phrases with similar rhythmic characteristics, played with a clear syncopated orientation that imbues the section with dynamism. There is a tendency to introduce certain elements that anticipate the subsequent modulation through individual notes at key rhythmic points. There are also anticipations of the modulations previously described, clearer this time, initiating these phrases in the last space of the bars before the modulation. In bars 24 and 25, De Lucía introduces a characteristic element both in flamenco and in his own personal style (Zagalaz 2012): the use of two thirds, major and minor, over a Phrygian-oriented scale. This action generates a tension which De Lucía handles very comfortably, since this approach is strongly linked to the flamenco tradition (Figure 14).

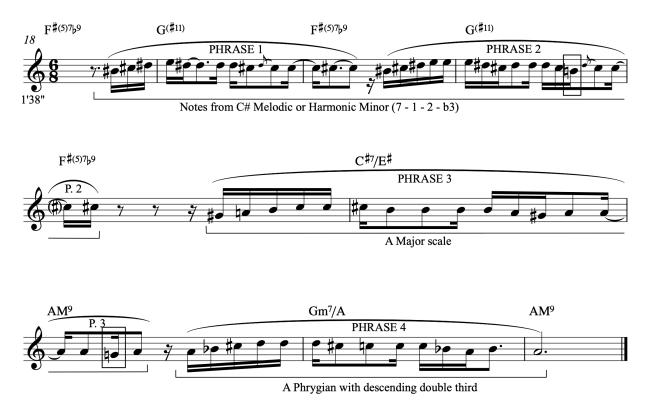


Figure 14. Phrases with a similar rhythmic approach and with the double third Phrygian scale.

[31] In the following bars, de Lucía applies the same kind of elements and in the same positions as in the first chorus, while introducing some innovative elements. Again, in the modulating section F# - E/G# - D#/Fx - G#m, he waits again until the second half of the second bar (E/G# - D#/Fx) to adjust his melody to the modulation. And he anticipates the modulation in the last sixteenth note of that bar in order to get into the melodic or harmonic variation of G# minor. Nevertheless, in the F#m bar, a new application in this performance arises. It is the use of the F minor pentatonic scale in an ascending manner, before applying the F# minor scale.

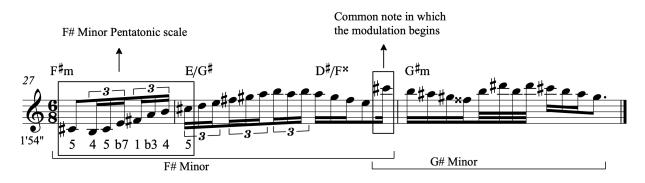


Figure 15. Use of the F# minor pentatonic scale.

[32] In the next group of three bars over C#7b5, De Lucía again uses the same rubric he applied in the first chorus. The application of the seventh mode of the D Melodic Minor scale is clear, arising in the second beat of the second bar in a very explicit way; from C# ascending step by step to the highest octave. He adds an external sound of D Melodic Minor, G#, and varies the way he resolves and connects with the third chorus. This time, De Lucía sketches a series of fast descending arpeggios, going through the E minor, G minor, D minor and A minor triads, chords included in both D major or B minor tonalities. The appearance of notes such as E, B, G, D and A as a catalyst in the whole descent showcases the full range of the instrument, since this virtuosic passage uses the open strings of the guitar (see Figure 16).

[33] The previously mentioned use of the seventh mode of the melodic minor scale over C# gives the section a clear dominant character towards the F# resolution, while the F# is also both tonic itself and B minor dominant, another structural chord of the harmonic progression. However, the E – Am movement, even taking E as a flamenco tonic, keeps certain dominant characteristics over Am, at least from a Western point of view. In this specific situation, despite the lack of any complete descending Andalusian cadences (although they are implicit), F# works as a tonic itself and as the dominant for B minor, generating an ambiguous double tonality situation in which the aforementioned F# is the balance point.

[34] In the third and last chorus played by de Lucía, there are previously observed elements, such as anticipated modulations, tonal ambiguity over the initial bars ($F\#(5)7\flat9$ and G(#11), and the use of ascending arpeggios; for example, the C#7 at bar 40 (despite

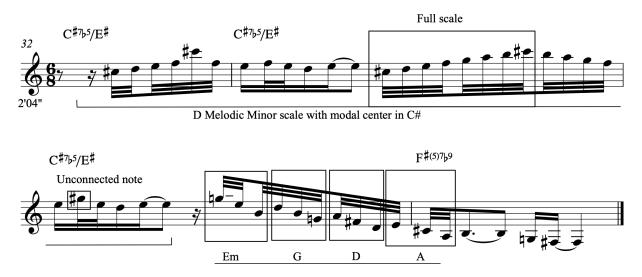


Figure 16. Seventh mode of D Melodic Minor and descending basic triads.

the accidental appearance of a natural E, which is most likely an isolated and slight imprecision). In addition to these previously observed features, there are also new approaches or variations on the previously applied elements. Specifically, over bars 42 and 43, De Lucía uses an element already observed in Figure 10, but in a different moment of the progression, and over two different harmonic contexts. It is the utilization of the seven-note tetrachordal Phrygian scale, but this time over a Gm7/E chord. This begins at bar 42, and stays until the first beat of bar 43, where the progression moves to A major, but de Lucía transposes this scale to its C# version, which represents the dominant of the next bar's subsequent chord, F# minor (Figure 17).

[35] In addition, as observed in Figure 15, the phrasing extends from bar 43 to the first four sixteenth notes of bar 44, when De Lucía returns to F# minor tonality. The degree of intellectualization in this passage is remarkable, where, again, he explores the different harmonic possibilities and leads the phrasing beyond the inspiration/intuition generally attributed to flamenco performers, since, as noted before, these kinds of resources are not present in traditional flamenco. This intellectualization continues in the next moments of the performance. Again, reproducing the previous improvisational approach, de Lucía delays the resolution until the second half of bar 45, beginning in the root note of the D# chord, and developing an ascending D#7 chord, and resolving in the subsequent G# minor.

[36] De Lucía continues to follow this approach on the lead-in to the B minor chord, near the end of this third chorus, but this time over a different harmonic context. In bar 47, as

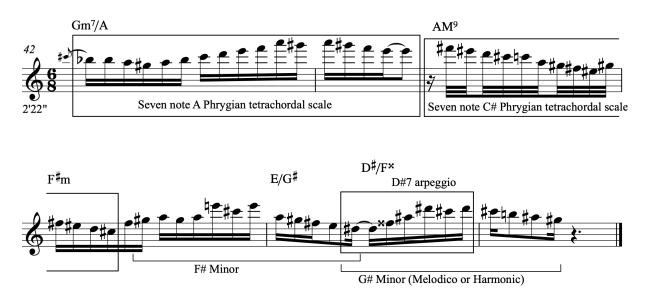


Figure 17. Use of double Phrygian tetrachordal scale.

De Lucía did in bar 32 (figure 11), he begins a fast series of descending triads related to D major/B minor tonality. There are, essentially, two variations: the first, and more significant, is the harmonic place in which he applies this "guitaristic" element; whereas De Lucía previously applied this triad approach over a C#7b5/E# chord, this time it occurs over a B minor tonality, fitting into the current tonal environment. The second variation, less profound but harmonically significant, is the addition of a D# and F# over the Em triad, which could mean, basically, two things: the deliberate enrichment of the Em triad (becoming a EmMaj7add9 chord), or, perhaps, a small inaccuracyduring a tremendously difficult and fast technical section (Figure 18).¹⁶

[37] The virtuosity in the soloing takes a central, progressive role in this third and last chorus over the chord progression. During the last bars, speed becomes the main characteristic of de Lucía's soloing, without losing contact with a clear and understandable phrasing. In this final passage, the elements applied to the last four bars are the same as those already observed in the previous choruses, but with added virtuosity leading into a spectacular ending, as de Lucía manages the intensity until the culmination in which he employs a vertiginous ascending scale. During bars 49 and 50, de Lucía introduces the seventh mode of the D melodic minor scale, this time taking as a pedal note the open first string, E. This succession moves into bar 51, resting on Ft on the first beat. The choice of sonority at this specific point is determinant considering how de

¹⁶ Due to the open string approach and the speed of this passage, it may be a little mistake pressing the 11^{th} fret of the first string (D\$) instead of the 12^{th} fret (E) right after the open string (E).

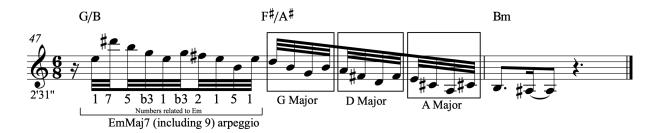


Figure 18. Different approach of descending arpeggios.

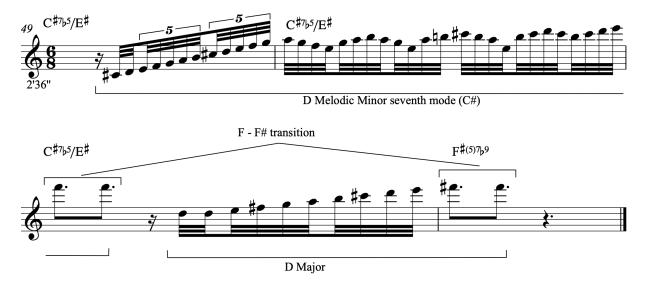


Figure 19. Use of D melodic minor and D Major in the last bars of Paco de Lucía's solo.

Lucía arrives there, the harmonic signification in this moment, and the subsequent direction of both the progression and the work itself. F4, understood as E#, is the major 3rd of the first beat chord of bar 51, which is presented in its first inversion voicing (C#7b5/E#). Also, this E# is a half-step down from the root note of the next chord (and last of the progression), F#, thereby creating a great dominant/tonic tension. De Lucía, in the last beat of bar 51, after a small pause, plays an extremely fast D major ascending scale, reaching the tonal center note F# in the first beat of bar 52, the last of the solo (Figure 19).

[38] The scale used in bars 49 and 50 is unmistakably the seventh mode of D melodic minor, and the one used in bar 51 is D major. The only difference between both scales is precisely the target and final note of the solo (F^{\u03e4} in D melodic minor, F^{\u03e4} in D major). The decision to resolve on that note is revealing. Beyond the classic debate over the extent of actual improvisation in the melodic-harmonic soloing, this represents a complex harmonic approach, and a clear intellectualization of de Lucía's concept, and it offers a clearly intentional tension/resolution effect, perhaps not in the classic way jazz performers do, but by using the same principles of scale/chord confrontation (not observed in this way on classic flamenco), and based on modern flamenco harmonies, while in certain respects following the jazz performer's methodology of soloing.

[39] The creativity and originality of Paco de Lucía is clear, after observing in detail both the composition as well as the solo performance, showing a premeditated transfer from jazz to his own modern flamenco concept. He developed this over the years and with a great impact from playing with McLaughlin and Di Meola, and yet not disconnecting himself from his own flamenco aesthetics and culture: he uses the resources (scales vs. chords) but not the "licks" or jazz music phrases. Some chords and partial progressions come directly from the flamenco tradition (for example, F#(5)7b9, the *Taranta* chord), but the concept of chord progression, soloing, and the melodic-harmonic approach that creates moments of tension and resolution, all come undoubtedly from jazz. However, his way of phrasing does not replicate the jazz aesthetic; De Lucía maintains the electric and rhythmic flamenco phrasing, and he adapts his *falsetas* to the constant harmonic changes over the chord progression.¹⁷ His approach, always imbued with virtuosity, is defined by a scale/ chord concept, sometimes in an extremely clear way, playing complete scales up and down, and sometimes playing from their very roots. What is also clear is an intellectualization on the part of de Lucía when applying arpeggios, as well as a seeking out of moments of tension and resolution, both rhythmically and harmonically.

CONCLUSIONS

[40] The subject of the relationship between flamenco and jazz, both past and present, is beginning to permeate the academic field through various publications, as is the subject of Paco de Lucía's possible jazz influences. Nevertheless, the number of analytical treatments of both subjects remains exiguous. To address this, it is important to apply transcription and analytical techniques, seeking objective and interpretable data and facts that indicate the specific ways in which a cultural or musical transfer may have occurred from one genre to another. Paco de Lucía's masterpiece "Zyryab," released at a moment of artistic and technical maturity in the composer's career, is extremely suitable for this purpose, since the piece shows clearly elements coming from jazz culture, and improvised solos with a melodic-harmonic approach.

^{17.} *Falsetas* are precomposed melodic-rhythmic motives, similar to the concept of the "lick" used in blues or jazz music.

[41] From an analytical point of view, the main characteristic of de Lucía's performance is the intellectual approach applied to the solo, which shows a structure and the use of specific musical resources with different degrees of harmonic complexity. Thus, the uncommon use of mostly diatonic arpeggios¹⁸, the moderate inclusion of jazz-inspired chromatic phrases and the occasional but clear application of the melodic minor scale, are proof of the intellectualization on a lower level of complexity. De Lucía also exhibits a melodic tendency to anticipate the modulation about to happen, which gives continuity to the music over a changing harmonic context. The flamenco sonority is clear throughout the whole solo performance due to the Major Phrygian (5th mode of the Harmonic Minor scale), although there are also certain Arab-influenced sounds produced by the explicit and reiterative use of the seven-note tetrachordal Phrygian scale, in different shapes. Also evident is the use of the seventh degree of the Melodic Minor scale over a dominant chord (even with the flatted 5th), which is generally known as an "altered scale," an element that de Lucía borrowed from advanced jazz improvisation.

[42] Keeping in mind Paco de Lucía's culture of origin and music training, the impact of jazz culture on his compositional and interpretative approach is clear. De Lucía applies melodic-harmonic resources which go beyond the traditional harmonic implications and aesthetic of Flamenco guitar; however, concerning the aesthetics of his phrasing, he is not merely using licks borrowed from the jazz tradition, but rather he incorporates the horizontal harmonic concept in his soloing in order to enrich his overall approach, which aesthetically remains essentially flamenco.

[43] It is important to continue advancing the academic demythologizing of flamenco in order to normalize it in terms of research; furthermore, there is a need for more research on the frontier between jazz and flamenco, since the connection has been constant and profound at least since the late 1950's. The emergence of studies focused on these two categories from an analytical and musical perspective is progressively filling that space, although there is still a long way to go to illuminate all the remaining aspects of this mutual enrichment between flamenco and jazz.

^{18.} Arpeggios themselves are not uncommon in traditional flamenco, but the way de Lucia uses them in a melodic soloing context suggest an external inspiration.

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APPENDIX

Zyryab



