

# FOLIO OF COMPOSITIONS

COMMENTARY AND 11 COMPOSITIONS

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## **Abstract**

This Folio of Compositions is the result of an intense musical search. A search that I do not believe to be finished yet and which probably never will be, as being a composer is a lifelong journey of exploration.

There has been a clear development in my personal voice during the last 5 years, a development that is documented in the music of these 11 pieces.

The folio includes solo pieces, several chamber works and an orchestral score. Through the composition of these works I have consolidated a style where polyphonic texture, which involves a strong use of polyrhythms and isorhythm, and progressive transformations in pitch and harmony, play an important role.

This commentary is divided into two sections. The first part contains some information about all the compositions, outlining facts such as the date of composition, first performance and main features of the piece. In the second part I present details and examples of compositional techniques, focusing on three specific music elements: harmony and pitches, melody and rhythm.

By composing this corpus of pieces I had the aim of looking further into the essence of music, into the process of communication and the beauty of art.

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## List of compositions

TITLE	INSTRUMENTATION	DATE OF COMPOSITION	DURATION
Three Songs on Regino Mateo poems	Soprano, Clarinet in Bb and Piano	February 2011	12'
Fantasia	Flute and Piano	June 2011	7'
Six Miniatures for Mixed Quartet	Flute, Clarinet in Bb, Violin and Violoncello	February 2012	10'
String Quartet	Two violins, viola and violoncello	June 2012	10'
Blackmoon	Guitar	September 2012	8'
Black & White	Horn	February 2013	6'
Tiempo y Forma	Piano	January 2014	7'
Ten Sounds	Oboe, Clarinet in Bb, Bass Clarinet, Vibraphone, Piano, Violin, Viola, Violoncello	September 2014	9'
Nana para Mariana	Piano	December 2014	4'
La Canción de Mariana	Flute, Viola and Piano	February 2015	7'
Amaranthine Scenes	Orchestra	August 2015	12'

## Contents of the accompanying DVD

The DVD contains full recordings of eight of the pieces presented here, and partial recordings of *Six Miniatures for Mixed Quartet* and *Black & White*. *Amaranthine Scenes* is the only score that I do not have any examples to share.

Some pieces have been revised after these recordings were made, so they may differ at some extent to the recorded versions.

**1. Three Songs on Regino Mateo poems** (Audio track)

Performed by the *Chimera Ensemble*.

Live recording.

Sir Jack Lyons Concert Hall, University of York.

June 2011

**2. Fantasia** (Audio track)

Performed by the *Chroma Dúo*.

Live recording.

Conservatoire of Ponferrada, Spain.

November 2011

**3. Miniatures for Mixed Quartet: Miniature n. 2** (Audio track)

Performed by University of York students.

Workshop recording.

University of York.

October 2011

**4. String Quartet** (Audio track)

Performed by the *Kreutzer Quartet*.

Workshop recording.

University of York.

June 2012

**5. Blackmoon** (Video track)

Performed by Jaime Velasco.

Live recording.

Fundación Botín, Santander, Spain.

December 2015

- 6. Black & White: first part** (Audio track)  
Performed by Juan Carlos San Martín Rubio.  
Studio recording.  
Winter 2014
- 7. Tiempo y Forma** (Video track)  
Performed by Alicia Burgueño.  
Live recording.  
Conservatoire of Santander, Spain.  
March 2014
- 8. Ten Sounds** (Audio track)  
Performed by the Chimera Ensemble, conducted by Mirsini Chatzikonstanti.  
Live recording.  
Sir Jack Lyons Concert Hall, University of York.  
June 2015
- 9. Nana para Mariana** (Video track)  
Performed by Albert Nieto.  
Live recording.  
Ateneo, Santander, Spain.  
March 2015
- 10. La canción de Mariana** (Video track)  
Performed by Ananda Sukarlan, piano; José Manuel Sáiz, viola; Jaime Salas, flute.  
Live recording by RNE (National Spanish Radio).  
Arnüero Church, Cantabria, Spain.  
March 2015

## **Declaration text**

I declare that this thesis is a presentation of original work and I am the sole author. This work has not previously been presented for an award at this, or any other, University. All sources are acknowledged as References.

The composition called *Blackmoon* has been published by the publisher *La mà de Guido*:

Fontecha, Ana R. *Blackmoon*. Sabadell (Barcelona): La mà de Guido, 2015



## 1. Introduction. *The search for horizontality*

I started my PhD at The University of York in the autumn of 2010. By that time I had written just a handful of works. The musical element that concerned me most in those works was the harmony, and therefore the control of the pitches. That obsession has lessened over the last five years as I have become more interested in developing other parameters.

In addition, I tried to use ill-defined rhythms to avoid parallels with the rhythms of the Central European classical tradition, which I have always found insufficiently flexible to communicate my ideas. However, I do not have a specific interest in rhythms of other musical traditions, and I feel more attracted to the “blurring” rhythms of the European avant-garde.

I believe that in my journey through this doctorate I have gone through three stages. The first one represented a constant search, with works where I experimented with different ideas about the organization of the material, mainly focusing on the harmonies. In the second stage my interests extended to other parameters, especially rhythm. In the third stage, these interests flourished in a predominantly contrapuntal writing. In my early works the style of writing is fairly vertical. In fact, as early as the *Fantasia* for flute and piano I received advice from my supervisor to explore the registers in a more contrapuntal manner, breaking the lines into three or four overlapping layers.

I continued following that advice in the *Mixed Quartet*, and more deliberately in the *String Quartet*. In fact, I consider the latter to be a pivotal moment in the development of my production, a turn towards greater contrapuntal flow.

The first stage includes the works *Three Songs*, *Fantasia* and *Mixed Quartet*. After the *String Quartet* I felt the need to simplify the instrumentation in order to concentrate on finding more flexible rhythms. Thus the second stage encompasses the pieces *Blackmoon* and *Black & White. Tiempo y Forma*, for solo piano, would become a turning point. I wrote the piece after a long break due to maternity leave. Although I did not write music for almost a year, I believe that that search for horizontality that I had been pursuing in previous works, was about to produce more mature features. After *Tiempo y Forma* I wrote *Ten Sounds*, which shows a predominantly horizontal texture; *Nana para Mariana*, a small piano piece, that was quite natural to write; the central part (from bar 63) of *La Canción de Mariana* which represents another step in my understanding of horizontal layers that move independently but flow perfectly together and where I felt quite comfortable; and finally *Amaranthine Scenes*, where I could focus more on instrumental color, development of orchestration and the enjoyment of composition, as the reconciliation between the vertical and horizontal ran more freely in me.

## 2. Short description of my compositions

### 2.1. THREE SONGS ON REGINO MATEO POEMS

These three songs were commissioned by a clarinetist friend of mine, to whom the work is dedicated.

The first version of the piece was finished in February 2011 although I made some small corrections afterwards.

Regino Mateo is from my hometown, Santander, in Spain. He has written several books and won some important poetry prizes. These poems are part of his last book. I know Regino personally and he gave me the poems before they were published. He also shared with me the sad story behind them. The poems are dedicated to his partner who died some years ago in a motorbike crash. They are very emotive and express in an elegant but passionate way his grief. That passion and grief is what I tried to reflect in the music and that is one of the reasons this music is fairly expressionist. The first one, *El nacimiento de Hannibal* (Hannibal's birth), relates the moment when the lovers met for the first time. Both the poem and the music reflect a self-controlled passion before the misfortune. The second one, *Aquiles vela el cuerpo de Patroclo* (Achilles holds a wake over Patroclus), narrates the young man's death through the parallelism with the famous scene of the Iliad. Finally, *Leyenda del durmiente* (Sleeper's legend) is an epitaph. The music recreates the sadness of the text but incorporating hope towards the end.

Due to the close connection between the poems, these three songs have been treated as one composition, sharing the main materials and parameters, particularly harmony and melodic profile. The vivid power of the text is supported by descriptive word painting gestures such as *lamento* intervals and the relationship between the directionalities and the meaning of the verses.

Whilst writing these songs, I found it very helpful to read the book "Exploring Twentieth-Century Vocal Music: A Practical Guide to Innovations in Performance and Repertoire" by Sharon Mabry<sup>1</sup>. It opened me to the possibilities of extended techniques for the voice, in order to be freer to choose those effects that better served to my music.

I also studied several lieder, not always from the contemporary repertoire. Among them I should point out the *Siete Canciones Populares Españolas* (Seven Spanish Folksongs) by Falla<sup>2</sup>. The music of these seven songs is based on popular melodies from different parts of Spain. Folk melodies are naturally sung and Falla was able to keep the

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<sup>1</sup> Sharon Mabry, *Exploring Twentieth-Century Vocal Music: A Practical Guide to Innovations in Performance and Repertoire* (New York: Oxford University Press, 2002)

<sup>2</sup> Manuel de Falla. *Siete Canciones Populares Españolas*. Paris: Editions Max Echig, 1922. Accessed 27 Sep 2015. Petrucci Music Library. [http://imslp.org/wiki/7\\_Canciones\\_populares\\_Espa%C3%B1olas\\_\(Falla,\\_Manuel\\_de\)](http://imslp.org/wiki/7_Canciones_populares_Espa%C3%B1olas_(Falla,_Manuel_de))

singing flowing naturally and enrich them with advanced harmonies at the same time. That is what I wanted to achieve in my three songs: lines that were easy to sing, to listen to and to follow, whilst also keeping a contemporary style.

## 2.2. FANTASIA

This piece was commissioned to celebrate the 25<sup>th</sup> anniversary of the Conservatoire of Ponferrada, in Spain.

After listening to the piece in live concert I was not sufficiently satisfied with the middle section as I considered there was a lack of directionality. Therefore I modified it, cutting down the middle section (from bar 52) and rewriting some parts. The recording does not show those modifications. The final correction of the score was completed in January 2014.

The structure is divided into three main parts and an introduction which works as a link between the sections. The profile of the introduction is a contradiction in itself, showing a descending gesture followed by an ascending line. That opposition is a fight whose results will only be known at the end. Meanwhile, the score is full of contrasts in dynamics, attacks and textures shaping up the word *Fantasia* in its very meaning.

At the time of composing this piece I studied several examples of music for flute and piano by composers as dissimilar as Boulez and Debussy. I also relied on my own background as a piano accompanist for flute repertoire.

## 2.3. SIX MINIATURES FOR MIXED QUARTET

At this point in my PhD, my supervisor Dr. Thomas Simaku suggested that my writing style would benefit from writing small forms, working concisely, on small details rather than big gestures, taking as a reference Kurtag's 12 Microludes for String Quartet<sup>3</sup>.

Although I finished the composition in 2012, I revisited the score in the summer of 2015, making some significant changes to the pitches of the third, fourth and fifth miniatures, and adding articulation details, dynamics and tempis.

The miniatures work as variations of a long melody. This melody is treated as a row, i.e. as a previous composition material without rhythm, dynamics, etc. I did not use this approach to management of pitch again as I did not consider it effective.

Another connection with the 2<sup>nd</sup> Viennese School, is that apart from Kurtag's music, I also analysed Webern's small forms, in particular *5 Movements*, op. 5<sup>4</sup>. In the

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<sup>3</sup> "György Kurtág, 12 Microludes for String Quartet (Hommage à Mihály András) Maxwell Quartet", [16 Jun 2012], video clip, accessed 27 Sep 2015, YouTube, <https://www.youtube.com/watch?v=ekTnQdFnXeo>

words of Susan Key “The 1909 Five Movements for String Quartet are an early expression of the way he built interconnected motives into a crystalline texture, in which each facet has a distinctive shape, separate from yet resembling the whole”<sup>5</sup>. That search for crystalline textures has been another challenge for me during the last five years.

In miniatures III and V there is another attempt to move contrapuntal layers independently. That need to increase the flexibility of the texture led me later to layer with different rhythms, techniques that I currently continue developing.

## 2.4. STRING QUARTET

I wrote this composition for a workshop with the Kreutzer String Quartet. I had never written a string quartet before and I considered it as an opportunity for a first approach to one of the greatest traditional formations.

There were many scores that I examined to tackle the composition of this String Quartet. Going back in the historical heritage, I commenced with Beethoven string quartets, then Stravinsky, Bartok and Shostakovich and even Ravel. Afterwards, I progressed to Lutoslawski, Berio, Ligeti, Ferneyhough, Carter, Sciarrino, Rihm and especially Schnittke, whose famous 3<sup>rd</sup> String Quartet<sup>6</sup> includes a quotation of Beethoven’s Gross Fugue in its opening.

I believe this piece was a turning point in my style. In it, I consciously experimented with polyrhythms and sonorities that were only latent in my previous works but were decisive in my later development. Although I feel that the final result is still rather stilted, I consider this work was an important step forward in my compositional approach and technique.

## 2.5. BLACKMOON

I wrote this piece at the suggestion of the famous Spanish guitarist, Miguel Trápaga. The score is published by the publisher *La mà de Guido*.

As a Spanish native, writing for guitar has the pressure of the tradition plus a huge personal background of mixed sounds that come from the flamenco, Spanish guitar repertoire and even family evenings around the instrument. Hence my aim in this piece was to combine the guitar tradition with my own personal language, exploring aspects that specially interest me such as harmony and rhythm, while bearing in mind the idiomatic properties of the instrument.

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<sup>4</sup> Anton Webern, *5 Movements, op. 5* (New York: Universal-Edition, 1922)

<sup>5</sup> Susan Key, “5 Movements op. 5”, program notes, The Los Angeles Philharmonic, accessed 27 Sep 2015, <http://www.laphil.com/philpedia/music/five-movements-op-5-anton-webern>

<sup>6</sup> Alfred Schnittke, *3<sup>rd</sup> String Quartet* (Vienne-London: Universal Edition, 1983)

As explained before, I feel attracted by the powerful sound of perfect fifths and fourths. Therefore, as the guitar is tuned mainly in fourths this was an ideal opportunity to explore this interval in different combinations during the piece.

There are moments of melodic intimacy in *Blackmoon* as well as energetic passages. On the whole, the music has a strong sense of descending lines that, particularly in the middle section, go across the fingerboard over the six strings. In my constant search for flexibility, in that middle section I develop a flowing rhythmic effect, 'moving' the position and pitch of a fourth across dectuplets.

## 2.6. BLACK & WHITE

Black & White was the result of a collaboration with my former colleague Juan Carlos San Martín Rubio, who helped me with numerous technical questions about the possibilities of the horn.

The beginning of this piece resembles the sound of a seashell horn. In the folk music and dance tradition of my home region there is a dance with spears called "La baila de Ibio"<sup>7</sup>, with the only accompaniment being a drum and a seashell horn or conch. The seashell only plays an ascending and descending semitone again and again, as a litany. Since I was a child I have been impressed by the strength of that primitive sound which still haunts me. In this solo horn piece I honour those memories using the semitone as the generative material.

## 2.7. TIEMPO Y FORMA (Tempo and Form)

Tiempo y Forma was a commission for a festival around female composers at the Conservatoire 'Jesús de Monasterio' of Santander, Spain.

The title of this music (*Time and Form*), is a statement that reflects the intention of exploring more consciously the relationship between metre (with different accentuations) and structure. Each section of the piece explores a specific polyrhythmic procedure, with these procedures, therefore, playing a key role in the structure of the work.

The hands move independently in this piece, but not only in terms of the pitches. The challenge for the performer is to play separate lines with distinctive dynamics and different implicit accents at the same time, marking their differences but still flowing as a whole. To sum up, it is a polyphony that implies accents and dynamics as well as pitch and rhythm.

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<sup>7</sup> "La Baila de Ibio Palacio de Festivales (Coros y Danzas de Santander)", [21 Nov 2011], video clip, accessed 27 Sep 2015, YouTube, <https://www.youtube.com/watch?v=-KoHmm2uTL8>

## 2.8. TEN SOUNDS

I decided to write Ten Sounds to explore a larger set of instruments.

The piece is called 'Ten Sounds' because I strictly use only 10 of the 12 notes of the equal-tempered chromatic scale. The two missed notes are F and B, the traditional tritone, the interval that led to the origin of accidentals. Somehow I render homage to those sounds by omission, in the way that sometimes we can feel the presence of things that are not there. But there is more in Ten Sounds. Hidden in waves of sound are the patterns of the change ringing of English bells (again a connection with ancient sounds...) The instruments are divided into three groups: strings, wood-winds and percussion. Each group develops its own pattern, speed and character. The texture is thus enriched with different combinations although all pointing to the same direction.

## 2.9. NANA PARA MARIANA (Lullaby for Mariana)

This cradlesong was a commission to be premiered in the "Festival Internacional de Primavera: música de los siglos XX y XXI" (International Spring Festival of contemporary music) in Salamanca, Spain.

In this small piece for piano I attempted to reflect the world of infant sleep in three different states: when the child is falling asleep, represented in the initial melody; the quiet of deep sleep in the middle section; and restless agitations of dreams in the end, before the voice of the mother returns again to calm the anxieties of the baby. The sounds are suggestive: simple texture, but enriched by a rhythm that sometimes moves independently between voices, confused, as dreams are.

## 2.10. LA CANCIÓN DE MARIANA (Mariana's song)

This was a commission by the 23<sup>rd</sup> International Chamber Music Competition "Ecoparque de Trasmiera" in Cantabria, Spain. It was broadcasted by RNE (National Spanish Radio).

*La Canción de Mariana* shows the development of a single sound: firstly into a melody, then expanded over the piano and viola in different rhythms, and finally completely broken before returning to the initial calm. In the rhythmic aspect, the isorhythmic layers used in the middle section give the listener the feeling that the instruments are playing at different speeds. This is reinforced by the direction of the lines, making them to flow together at the same time but individually, as separate streams in the same sea.

## 2.11. AMARANTHINE SCENES

I wrote this piece following a suggestion by my supervisor Dr. Thomas Simaku.

Writing for orchestra is something that I enjoy deeply and I consider this piece the culmination of my writing style over the past years. Overall, I believe that I have moved from a mainly vertical style of writing to a richer texture, with multiple layers of music, polyrhythms and developed contrapuntal relationships.

I definitely had the music of Toru Takemitsu in mind whilst writing *Amaranthine Scenes* as I am deeply impressed by his capacity to create communicative music with suggestive, bright sonorities.

Some other scores which I studied were the impressive Lutoslawski's *4th Symphony*<sup>8</sup>, *Sudden Time* by Benjamin<sup>9</sup> and Saariaho's *Orion*<sup>10</sup>. When I started writing my orchestral score, my supervisor recommended listening to and analyzing Lutoslawski's music carefully as he believed that my language is close to his polyphonic textures. As always, he was correct. But I also found interesting contrapuntal ideas along with an overwhelming sense of structure. On the other hand, I fell in love with *Sudden Time* when I did my postgraduate in composition at King's College London. At that time, listening to that score opened my mind and gave me a hint of the huge range of possibilities that an orchestra can offer. But probably one of the most decisive moments in my life was when I discovered the music of Kaija Saariaho at the beginning of the 2000's. Her personal vision of spectral techniques was the trigger that led me to decide to be a composer.

I believe that *Amaranthine Scenes* reflects all those influences and represents the culmination of the third stage of my style.

## 3. Some examples of my compositional techniques and language

### 3.1. HARMONY AND GENERATIVE PITCHES

#### 3.1.1. Rows of chords

It is well known that since the functional tonal system was dissolved in the late nineteenth century, composers have explored new ways to sort out musical sounds. The abandonment of tonality led to the disappearance of a tonal centre, leaving a loss of direction and harmonic-temporal interlocking. This is reflected in a rearrangement of all compositional parameters, not only harmony but also melody, rhythm, texture, structure,

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<sup>8</sup> Witold Lutoslawski, *4th Symphony* (London: Chester music, 1993)

<sup>9</sup> George Benjamin, *Sudden Time* (London: Faber music, 1997)

<sup>10</sup> Kaija Saariaho, *Orion* (London: Chester music, 2002)

etc. Therefore, one of the first things that I am concerned with when I start writing a score is how to combine sounds to give character and unity to the piece. Overall, I feel intensely attracted to small changes, especially in the harmonic and rhythmic aspects as will be seen later. This has led me to develop series of similar chords or scales that only differ from one another in one or two notes. In most of my compositions the system is very similar although I choose different chords and sonorities.

### 3.1.1.1. *Three songs*

I usually try to find a satisfactory network of harmonies in my compositions, building groups of sounds that are closely related but not in an explicit way. As I created the three songs as a whole, I used the same row of chords for all three. Based on a chorale that I had written some time before I started the PhD, I merged chords with all the notes in common except one. As a result I had new chords with one more note than the two previous ones: joining two chords of three notes with two notes in common equals a four note chord. Then I can merge that new chord with another four notes chord with three notes in common and so on. The following example (Figure 1) shows the technique I used to merge chords into bigger ones. It is not an example of the harmonies in *Three Songs...* as in the piece I used five and six note chords:

Fig. 1: *Three Songs*. Merging harmonies technique

The numbers above the chords represent the code that I gave to each chord. When the second chord merges with the eighth chord, they make the chord 2,8 (2+8).

### 3.1.1.2. *Fantasia*

As I have explained before, at this point I had a deep interest in finding a convincing harmonic background for my compositions. In this case I worked with four chords and their transpositions. They are six-note chords, allowing the other six notes to fill the harmonic space freely. I experimented with the idea of gradual transformation, not by the method of adding other sounds to chords but with small changes to the pitches by moving



the internal structure of the intervals, changing two of the six notes. For instance, the first chord changes the order of the intervals, its inner structure, in order to form the second chord moving only two sounds out of six, and so on.

The intervals are perfect, augmented and diminished fourths and fifths. Perfect fifths and fourths are the intervals which interested me most at the time of writing, as will be seen later in other scores. On the other hand, six-note chords always leave another six notes to create contrast to enrich the discourse.

This graph shows how these chords are modified:

The image shows a musical score for Piano with four measures. The key signature has one sharp (F#). The interval structures for each measure are: 1. augm. 4th - perfect 5th; 2. augm. 5th - perfect 4th; 3. perfect 5th - augm. 4th; 4. perfect 4th - augm. 4th. Colored arrows (blue, red, green, purple) indicate the movement of notes between measures, showing how the internal structure of the six-note chords is modified.

Fig. 2: *Fantasia for flute and piano*. Chords transformation

Therefore, again in this piece the pitches are in constant modification. What I attempted with those changes is to control the internal processes of tension but as a unified whole in constant motion.

Due to my interest in these slow transformations in the groups of sounds I became motivated by the paintings of M. C. Escher. Escher was a Dutch graphic artist who “played with architecture, perspective and impossible spaces (...) fascinated by the regular division of the plane”<sup>11</sup> He studied mathematics and felt inspired by ‘plane symmetric groups’ and ‘geometric distortions’. What interests me more about Escher drawings is the idea of something that changes its shape slowly to turn into another object. In writing music, my inspiration does not usually come from external non-musical influences, but Escher’s paintings provoked in me interesting thoughts as they match my own inclination. At the time I wrote this *Fantasia* I had in mind the following Escher picture *Day and Night*. In it we can appreciate a progressive transformation of colours and forms. That is the kind of transformation I intended to create with the harmonic plan of the piece.

<sup>11</sup> Maurits Cornelis Escher, “Biography”, Official website, Accessed on 27 Sep 2015, <http://www.mcescher.com/about/biography/>

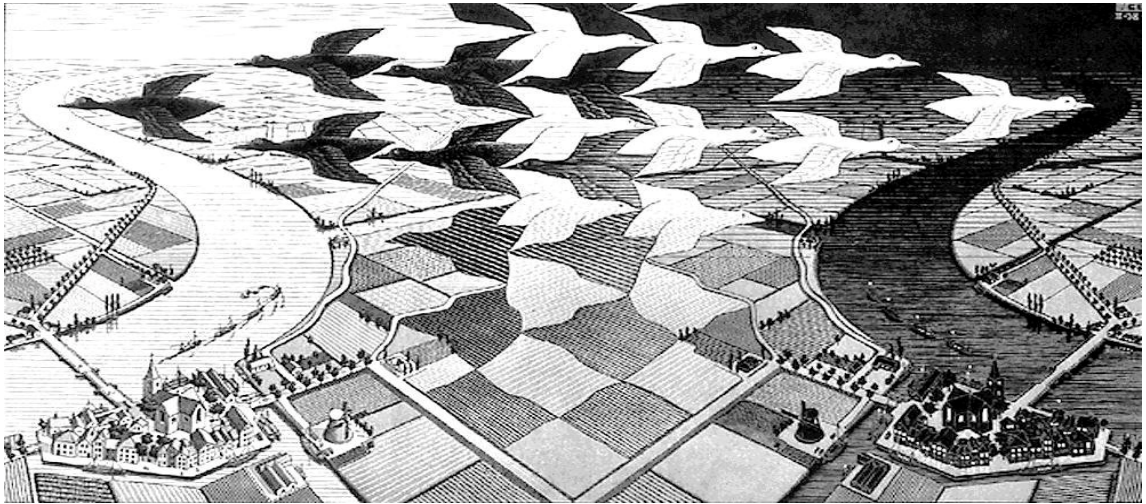


Fig. 3: *Day and Night*. M. C. Escher

### 3.1.1.3. *Tiempo y Forma*

Harmonies and pitches arise from the idea of gradual transformation. The music starts in a harmonic realm which, through minimal changes, turns into a complementary palette of sounds. My inspiration is again the paintings of M. C. Escher.

With regards to the management of pitch, I used a set of four sounds that contains the three possible intervals (a minor third, major second, minor second) within a tritone, the largest possible interval if we do not count complementary inversions. Those pitches are: D, F, F sharp, G sharp:



Fig. 4: *Tiempo y Forma*. Set of intervals within a tritone

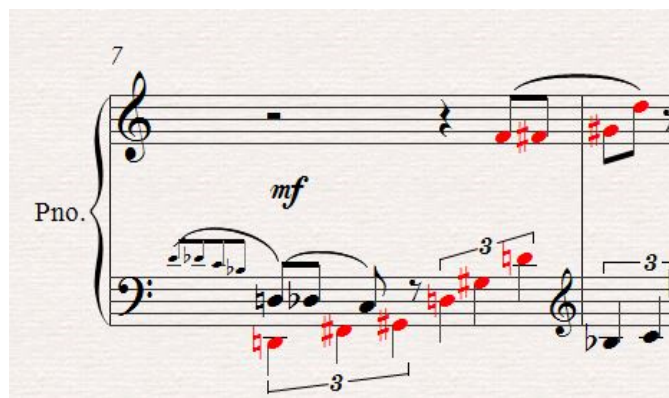


Fig. 5 *Tiempo y Forma*. Bars 7-8

These cells lay over a harmonic background of 20 chords which, once more, differ in only one note from each other.

### 3.1.2. Fifths and fourths

#### String Quartet

The perfect fifth is the interval that interests me most because of its importance as the third partial in the harmonic series, ancient reminiscences and powerful sonority. I am interested in chords in whose genetic codes perfect fourths and fifths are the most representative interval. There are 13 vectors of six notes with four perfect fourths and fifths in their genetic codes and this piece is based on them.

I used Set Theory, an analytical technique used to categorize sets of sounds and describe their intervallic relationships, to discern how many fifths there are in all the possible scales with six notes (Figure 6).

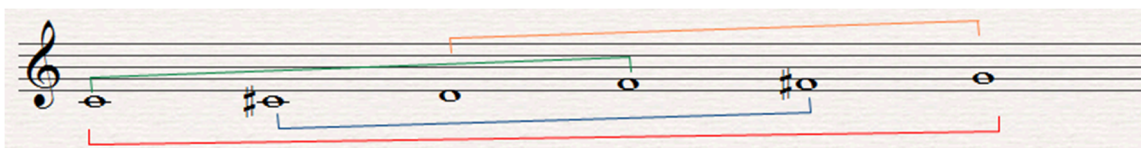


Fig. 6: *String Quartet*. Scale with four fifths

Working again with groups of six notes allowed me to have six more free to develop contrast or counterpoint.

### 3.1.3. Change Ringing

#### Ten Sounds

Across this piece, there are passages where the instruments repeat groups of notes for an extended span of time. To avoid repetition and create a forward motion I moved the sounds according to the changes in English bell ringing patterns. The permutations of the patterns allowed me move the notes easily, as well as beautifully and logically. In *Ten Sounds* I played with 3, 4 and 5 note patterns. Here is an illustration of a 4 note changing pattern:

#### Plain Bob Minimus

First 6 changes

- 1) 1234
- 2) 2143
- 3) 2413
- 4) 4231
- 5) 4321
- 6) 3412

#### Corresponding notes

Piano, bars 59-61

- 1) D, Bb, E, C#
- 2) Bb, D, C#, E
- 3) Bb, C#, D, E
- 4) C#, Bb, E, D
- 5) C#, E, Bb, D
- 6) E, C#, D, Bb



Fig. 7: *Ten Sounds*. Change Ringing. Piano, bars 59-61

Being written in triplets, the accents of the four note pattern are also displaced, coinciding every four triplets. I used these permutations in different parts of the structure, creating connections between the strings' layout and the piano.

### 3.2. MUSICAL GESTURES AND MELODY

#### 3.2.1. Word painting

##### Three songs

This is a work with a clear expressionist flavour, based on poems full of passion and emotion, born from a personal misfortune suffered by the author. For example, there is a close relationship between the voice and the clarinet, as if there was a dialogue between the poet and his soul, which would be symbolised by the clarinet part.

To reinforce the mood and meaning of the words in the poems, I used musical word painting resources to reinforce the meaning of the text:

1. *Se clavaron los dientes asesinos (killer teeth were sunk [in flesh])*. This is specifically an imitation, with slaps in the clarinet and staccato notes.

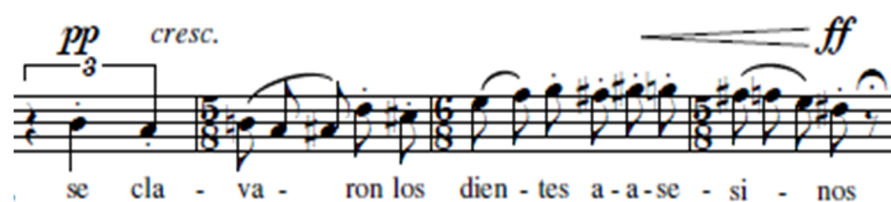


Fig. 8: *Nacimiento de Hannibal*. Bars 37 to 40

2. *Se abrió esa grieta (That crack was opened)* The crack opening is represented by the big descending leap:



Fig. 9: *Nacimiento de Hannibal*. Bars 16 and 17

3. *Domador de caballos (Horse tamer)*. Soft semiquavers as a far roar background:

39 *p* con un fe- roz ru - gi - do en el sen - de - ro *mp*

*p* *mp*

*p* *mp*

Fig. 10: *Aquiles vela el cuerpo de Patroclo*. Bars 39 to 41

4. *Ahora hay solo silencio (Now there is only silence)*. Here I create a dramatic effect by the omission of music to accompany the word *silencio* (silence), i.e., an allegorical reading.

Ad libitum  
recitado

Ahora hay sólo - - - silencio.

*fff* *mf* *pp*

Ad libitum

*fff*

Fig. 11: *Aquiles vela el cuerpo de Patroclo*. Bars 64 and 65

### 3.2.2. Musical gestures

#### *Fantasia*

In this work I focus on exploiting certain musical gestures to give coherence to the discourse.

The work has three differentiated sections. The piece begins with a downward gesture which I call Alpha which operates as a link between sections, not as a rondo or a leitmotif but with a leading role. In fact, the main gestures of the piece belong to Alpha at least to some extent. Alpha's profile is made of two opposing lines, one up and one down. Therefore Alpha represents two sides of the same musical gesture. That opposition gives Alpha an interesting tension.

Fig. 12: *Fantasia for flute and piano*. Alpha descending line. Bar 1

Fig. 13: *Fantasia for flute and piano*. Alpha ascending line. Bar 3

Alpha appears three times in the score, always with a structural function. The first and the third are very similar but the second transforms its character by the dynamic. In the following example we can see how Alpha has changed its sounds, but not its profile:

The image displays two musical staves for piano, labeled 'Pno.'. The top staff is labeled 'Bar 1' and the bottom staff is labeled 'Bar 58'. Both staves show a sequence of notes in the right hand, with brackets above indicating spans of 6 and 7 measures. The notes are mostly black, indicating they are played in the right hand. The piano part is in G major (one sharp) and 3/4 time. The first example (Bar 1) has a dynamic marking of 'p' (piano). The second example (Bar 58) has a dynamic marking of 'f' (forte).

Fig. 14: *Fantasia for flute and piano*. Alpha profile transformation. Bar 1 vs. bar 58

### 3.2.3. Melody

In terms of melody, I have been inspired by the experience of maternity. In that respect, I decided not to be afraid of unfolding a long, simple melody at the beginning of *Nana para Mariana*. It moves slowly and weaves around a B natural, using that note as a gravitational centre. Although I know there could be some similarities with a “tonic” in the tonal system, I do not consider I should avoid creating music around a single sound for that reason. Our musical background is full of tonal and modal influences and that is the tradition we belong to. Therefore I am not keen on “fighting” against certain procedures simply because they have an ancient flavour. On the contrary, using what we know well can lead us to new discoveries.

### 3.3. RHYTHM

In the first stage of my PhD I felt a huge desire to be free of the constraints of tempo and rhythm and let the music run without the restrictions of bars. Thus, I wrote numerous tuples, changes of tempo marks, dotted rhythms, etc. But soon I understood I had to come up with better solutions to increment the flexibility of the rhythm. Hence, I opted for loosening the vertical discourse, i.e., displacing textural and rhythmic layers and making them more independent.

### 3.3.1. Polyrhythm

#### 3.3.1.1. *String Quartet*

Out of the pieces that I studied in order to prepare myself for writing my first string quartet, I found the second movement of Schnittke's 2<sup>nd</sup> String Quartet<sup>12</sup> particularly interesting, where the four instruments play different sets of tuplets (demisemiquavers, septuplet, sextuplet and quintuplet) with accents that do not correspond to the implicit accents of the settled tuplets. That example reinforced in me the idea of polyrhythmic layers of music moving at the same time. On this occasion, this resource was not applied to the whole piece, but I used it at different formal points, with different directional and structural purposes. As an example I have chosen a passage from the central part of the work, where cello and viola replicate two independent but similar short phrases. They vary slightly in their profile to interlock in a more creative way, changing the leading roles in the middle (bar 60):

The image displays a musical score for a string quartet, specifically bars 61 to 68. It consists of four staves: Violin I (Vln. I), Violin II (Vln. II), Viola (Vla.), and Cello (Vcl.). The score is written in a complex, polyrhythmic style. The Violin parts feature intricate patterns of eighth and sixteenth notes, often with accents and dynamic markings like 'p' (piano) and 'f' (forte). The Viola and Cello parts play similar but independent phrases, with the Cello often having a more prominent role in the middle of the passage. The score includes various musical notations such as slurs, accents, and dynamic markings, indicating a highly expressive and technically demanding piece.

Fig. 15: *String Quartet*. Bars 61 to 68

<sup>12</sup> Alfred Schnittke, *2<sup>nd</sup> String Quartet* (Vienne-London: Universal Edition, 1981)



### 3.3.1.2. *Blackmoon*

In this guitar piece I brought up the concept of gradual changes, the game between what is the same but different, in a fresh manner. In the third section I set out a common idiomatic resource: simply moving up and down an arpeggio. However, I enrich the rhythmic effect by moving the position and register of the relevant notes in intervals of major 3rds, and perfect fourths and fifths across the dectuplets (Figure 16). The style of writing was inspired by the 1<sup>st</sup> Etude op. 25 by Chopin<sup>13</sup>.

The figure shows five systems of musical notation for guitar, labeled 'Gtr.' on the left. Each system contains ten-note dectuplets. The first system (bars 54-55) is marked *ppp (ma sonoro)* and *sul tasto*. The second system (bars 56-57) is marked *p*. The third system (bars 58-59) is marked *pp* and *sul pont.*. The fourth system (bars 60-61) is marked *molto rall.*. The fifth system (bar 62) is marked *mf* and includes the instruction *clarinet sound (r.h. on the XII)* and a fermata over an octave sign.

Fig. 16: *Blackmoon*. Bars 54 to 62

### 3.3.1.3. *Tiempo y Forma*

In order to keep looking for other polyrhythmic procedures, in this instance I played with the expressiveness of the melodies. I made use of two procedures that appear in different parts of the structure, having therefore a functional role in the form. The title of the piece refers to that characteristic.

<sup>13</sup> Fryderyk Chopin, *Etudes* (Great Britain: Kevin Mayhew Ltd., 2003)

Firstly, I changed the pulse, placing rests between repetitions and therefore displacing the melody from its natural continuity. Secondly, I developed what I call “implicit polymeter”, i.e., different attacks and slurs in each textural layer, phrasing naturally overlapped melodies with dissimilar lengths. In many parts of the score there are contrapuntal voices with different implicit accents, in a high horizontal sense. In some parts there are even tricks for the listener, as the main line is not the one that plays on the beat as becomes clear later.

There are many examples of these procedures throughout the piece. Sometimes they are spread over a whole section, other times at climactic points. To highlight the first kind of procedure which I explained before, I have chosen the following example, where the phrase in the left hand becomes independent of the one in the right by means of a rest. The result is a constant “off-beat” rhythm (left hand, bar 33) that becomes “on-beat” to the listener because of its displacement and length. Only in the second half of bar 40 do we become aware of the illusion:

The image displays a musical score for piano, consisting of four systems of staves (numbered 29, 33, 36, and 39). Each system is labeled 'Pno.' and contains two staves (treble and bass clef). The score is annotated with various musical notations and dynamics:

- System 29:** Starts with a forte (*ff*) dynamic. The left hand has a rest in the first half of the system, while the right hand plays a melodic line.
- System 33:** Features a piano (*p*) dynamic in the right hand and a forte (*f*) dynamic in the left hand. The left hand has a constant 'off-beat' rhythm. A red circle highlights a specific rhythmic pattern in the left hand.
- System 36:** Shows a piano (*p*) dynamic in the right hand and a piano (*p*) dynamic in the left hand. The left hand has a rest in the first half of the system.
- System 39:** Includes a piano (*p*) dynamic in the right hand and a forte (*f*) dynamic in the left hand. The right hand has a 'leggiero sempre' marking. The left hand has a mezzo-forte (*mf*) dynamic. The system ends with an 'espress.' marking.

Fig. 17: *Tiempo y Forma*. Bars 29 to 42

In this next example, the separate phrasing designs and dynamics of the right and left hands make them fairly independent throughout. I consider this to be important,

because layering the streams with separate dynamics is the antithesis of what I did in the third song *Leyenda del durmiente*, although I had explored it already in the *String Quartet*. The left hand is always piano while the right hand is richer in dynamics. The directionality of the two streams shows a strong opposition, with the left hand taking an upwards movement whereas the right hand has a downwards trend:

Fig. 18: *Tiempo y Forma*. Bars 72 to 87

### 3.3.2. Isorhythm

#### 3.3.2.1. *Three songs*

I consider that *Leyenda del Durmiente* signified a first step in the development of rhythmic multi-layers that is part of my mature personal compositional style. In this song I tackled the problem of increasing the flexibility of rhythm with a simple but effective idea. Throughout the whole song, the piano and the clarinet play an individual phrase that is constantly repeated as a passacaglia. Each phrase differs in its length, so that the moments in which the piano begins its phrase again do not match with those of the clarinet. These textural layers are independent in the temporal parameter but not in other elements, such as the dynamic. To reinforce the form of the piece, all three voices coincide at two structurally strategic points: the beginning of the second section and the climax. The following example is the beginning of the song. To better appreciate the displacement, I coloured each new entry of the piano and the clarinet:

□ 1  $\text{♩} = 42$  III. Leyenda del durmiente 12

S.  $\text{♩} = 42$  *pp*  
Hu - bie-ra si-do fá - cil des - nu - dar

Cl. *ppp* *pp*

Pno. *ppp* *pp*

11 *p* *pp* *mp* *mf*  
el cuer-po blan - co y blan-do - pa - ra - ci-an cons-tru - i - das con ce-ra sus me - ji - llas

Cl. *mp*

Pno. *mp*

20 *mf* *mp*  
ya - ban - do - nar - la - si, so - bréa - qué le - cho, co - mo quien

Cl. *mf* *mp*

Pno. *mf* *mp*

Fig. 19: *Leyenda del durmiente*. Repetitions in piano and clarinet are displaced in tempo

### 3.3.2.2. *La Canción de Mariana*

I consider that in the middle section of this piece I managed to create a successful multilayered passage. It is a long section that expands for 30 bars (63 to 93) and consequently has a relevant structural importance. At the time that I wrote this piece I had to give a speech in Madrid about the *Quatuor pour la fin du temps* by Messiaen<sup>14</sup>, and only recently I have realized that that section reflects an unconscious tribute to the piano accompaniment of the 5<sup>th</sup> and last movements of that piece. The piano plays descending rows of chords whilst the viola creates ascending lines, confronting two layers again as I did in *Tiempo y Forma* (as seen in Figure 18). For the viola, however, each phrase starts

<sup>14</sup> "Olivier Messiaen - Quatuor pour la fin du temps (Quartet for the End of Time) [Matthew Schellhorn]", [30 May 2011], video clip, accessed 27 Sep 2015, YouTube, <https://www.youtube.com/watch?v=UeSVu1zbf94>

in a lower register and in a resultant downwards motion. Both layers of music are isorhythmic, meaning that each one has a special rhythmic pattern that is repeated. My aim was once again to suggest the illusion of different speeds in the instruments.

### 3.3.2.3. *Amaranthine Scenes*

Taking advantage of the possibilities of an orchestral score, *Amaranthine Scenes* has plenty of passages with multi-rhythmic layers. I believe there is a particular scene that will probably draw more attention from the listener. All those efforts in search for horizontality, that I have been commenting on above, resolve here in a new approach. In the scene called *Mystical*, I wrote more than 30 entries of the same melody for most of the instruments of the orchestra, as an enormous canon. But all the instruments are asked to play *pianississimo* during the whole section:

**Mystical**

Fl. <sup>98</sup> <sup>1.</sup> <sub>2.</sub>

*ppp* sempre  
legato cantabile

Fig. 20: *Amaranthine Scenes*. Bar 98

The aim was to raise the dynamic with the addition of textural layers, giving interest to the process via shortening the values of the notes, which gives a false sense of increasing of speed:

Fig. 21: *Amaranthine Scenes*. Bars 137-139

This accumulative texture is supported by cellos and basses, which are the only instruments that play soft *crescendi* and *diminuendi*. These slight variations in the dynamic confer an unstable ground to the texture, something that is in constant movement, never fixed, wavy... Once again, my eternal need of motion in music.

## **Conclusions**

After finishing the composition of these 11 compositions, I consider that I have achieved the goals that I had been pursuing since I started composing for the first time. During this long process I opened some paths that did not lead to further explorations, but I also found some answers to my compositional concerns.

Subsequently, I recognise this PhD has helped me to evolve my personal voice, being now prepared to undertake the challenges of a new period in my professional career.

## Appendix

<p><b>NACIMIENTO DE HANNIBAL</b></p> <p>Fue la primera vez: mordí tus labios con mucha más pasión, se abrió esa grieta que me otorgó tu sangre a borbotones.</p> <p>Me pregunto si fue tan rojo el zumo de la manzana dulce y primitiva que dio la desnudez a nuestros padres (Fue el rito semejante: abrió el deseo con avidez las bocas, se clavaron los dientes asesinos en la carne delicada. Y así los ojos vieron).</p> <p>Me pregunto si entonces yo sabía que comulgar un cuerpo es aprenderlo, desvelar sus secretos más oscuros al redimir su alma: ¿Qué más alto testimonio de amor pude ofrecerte?</p>	<p><b>BIRTH OF HANNIBAL</b></p> <p>It was the first time: I bit your lips with far more passion, that crack was opened it gave your blood to gush.</p> <p>I wonder if the juice was so red of the sweet, primitive apple that gave our fathers nudity (It was such a rite: desire eagerly open the mouths, were fixed killer teeth in the sensitive flesh. And so the eyes saw.)</p> <p>I wonder if I knew then to communion a body is to learn it, reveal its darkest secrets to redeem his soul: What higher testimony of love I could bring you?</p>
<p><b>AQUILES VELA EL CUERPO DE PATROCLO</b></p> <p>Se confunden ahora sus palabras en la memoria rota.</p> <p>No recuerdo si dijo volaré sobre un turbio alazán hasta tus brazos antes de que la noche los enfríe o si dijo seré yo tu victoria, tu brazo poderoso, el puño airado capaz de quebrantar el desafío de los muros de Troya.</p>	<p><b>ACHILLES HOLDS A WAKE OVER PATROCLO'S BODY</b></p> <p>Now his words are confused in the broken memory.</p> <p>I do not remember if he said I'll fly on a misty bird to your arms before the night cools them or if he said I will be your victory your strong arm, the angry fist able to break the challenge of the walls of Troy.</p>

<p>No recuerdo si Héctor, Domador de Caballos, lo arrolló con un feroz rugido en el sendero o si arrasó su lanza este pequeño corazón con la muerte que era mía.</p> <p>Ahora hay sólo silencio. Y esta noche de agosto huele a sangre. Y dicen que está muerto. Y yo no quiero que su cuerpo de tierra sea tierra, que se crispen sus labios y griten con voz ciega "Canta, diosa, la tristeza de Aquiles".</p>	<p>I do not remember if Hector Horse tamer, ran over him with a ferocious roar in the path or if his lance destroys his small heart with the death that was mine.</p> <p>Now there is only silence. And this August night smells of blood. And they say he is dead. And I do not want that his body [made]of earth be earth [again] that his lips get tense and shout with blind voice "Sing, goddess, Achilles sadness. "</p>
<p><b>LEYENDA DEL DURMIENTE</b></p> <p>Hubiera sido fácil desnudar el cuerpo blanco y blando —parecían construidas con cera sus mejillas— y abandonarlo así, sobre aquel lecho, como quien deja un ángel olvidado dormitando entre el polvo de una iglesia.</p> <p>Pues resultan confusas las fronteras entre el sueño y la muerte, y nunca sabes si después de pasar más de cien años aún serán sus labios carne y sangre, si podrá despertar cuando lo roces con la boca agrietada. Si habrá luz en sus ojos cuando te reconozca.</p>	<p><b>LEGEND OF THE SLEEPING</b></p> <p>It would have been easy to strip the soft, white body -his cheeks seemed built with wax- and leave it in that way, on that bed, as who leaves a forgotten angel dozing in the dust of a church.</p> <p>As borders are confusing between sleep and death, and you never know if after more than a hundred years his lips are still flesh and blood, if he can wake up when you brush him with your chapped mouth. If there will be light in his eyes when he recognizes you.</p>



## References

Benjamin, George. *Sudden Time*. London: Faber music, 1997

Chopin, Fryderyk. *Etudes*. Great Britain: Kevin Mayhew Ltd., 2003

Escher, Maurits Cornelis. "Biography". Official website. Accessed on 27 Sep 2015.  
<http://www.mcescher.com/about/biography/>

Falla, Manuel de. *Siete Canciones Populares Españolas*. Paris: Editions Max Echig, 1922.  
 Accessed 27 Sep 2015. Petrucci Music Library.  
[http://imslp.org/wiki/7\\_Canciones\\_populares\\_Espa%C3%B1olas\\_\(Falla,\\_Manuel\\_de\)](http://imslp.org/wiki/7_Canciones_populares_Espa%C3%B1olas_(Falla,_Manuel_de))

"György Kurtág, 12 Microludes for String Quartet (Homage à Mihály András) Maxwell Quartet". [16 Jun 2012]. Video clip. Accessed 27 Sep 2015. YouTube.  
<https://www.youtube.com/watch?v=ekTnQdFnXeo>

Key, Susan. "Five Movements op. 5". Program notes. The Los Angeles Philharmonic.  
 Accessed 27 Sep 2015. <http://www.laphil.com/philpedia/music/five-movements-op-5-anton-webern>

"La Baila de Ibio Palacio de Festivales (Coros y Danzas de Santander)". [21 Nov 2011].  
 Video clip. Accessed 27 Sep 2015. YouTube. <https://www.youtube.com/watch?v=-KoHmm2uTL8>

Lutoslawski, Witold. *4th Symphony*. London: Chester music, 1993

Mabry, Sharon. *Exploring Twentieth-Century Vocal Music: A Practical Guide to Innovations in Performance and Repertoire*. New York: Oxford University Press, 2002

"Olivier Messiaen - Quatuor pour la fin du temps (Quartet for the End of Time) [Matthew Schellhorn]". [30 May 2011]. Video clip. Accessed 27 Sep 2015. YouTube.  
<https://www.youtube.com/watch?v=UeSVu1zbF94>

Saariaho, Kaia. *Orion*. London: Chester music, 2002

Schnittke, Alfred. *2<sup>nd</sup> String Quartet*. Vienne-London: Universal Edition, 1981

Schnittke, Alfred. *3<sup>rd</sup> String Quartet*. Vienne-London: Universal Edition, 1983

Webern, Anton. *5 Movements, op. 5*. New York: Universal-Edition, 1922

