UNIVERSITY OF SOUTHAMPTON

FACULTY OF LAW, ARTS AND SOCIAL SCIENCES

School of Humanities

PORTFOLIO OF COMPOSITIONS WITH COMMENTARY

by

Roger Goula-Sarda

Thesis for the degree of Doctor of Philosophy

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Errata

Correction sheet

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Abstract

This thesis consists of a portfolio of original compositions and a commentary. The portfolio is divided into two major groups: concert music and collaborative music. There are six concert pieces including two solo works, one for guitar and one percussion, one string quartet with electronics, an oboe and percussion piece with real-time electronics, one septet and one orchestral work. Collaborative pieces are represented by the score for a contemporary dance choreography and the music for a theatre play. Other collaborative works not included in the portfolio will be briefly commented upon.

The commentary will mainly concentrate on the aesthetics behind my praxis as a composer through the analysis of the works presented on the portfolio. I will also present a philosophical discussion of what musical composition represents nowadays to me in relation to Postmodernism.

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Abbreviations

cl. *Clarinet*

vlc. *Violoncello*

perc. *Percussion*

c.a. *Cor Anglais*

pno. *Piano*

db. *Double bass*

Chapter 1

Introduction and Philosophy

After studying for a degree in Classical Guitar and composition at the Conservatory of Barcelona (Spain), I decided to continue with my studies in composition. I moved to London to undertake the MA in Contemporary Composition at Goldsmiths College of London under the supervision of Roger Redgate. There I discovered a new world of composition that I had been totally unaware of. My compositions until then had been conditioned by the scholastic education I had received, where the rules of harmony, counterpoint and structure were extremely important.

At Goldsmiths College I started writing music following two different and opposite methods. The first method used numerical structures as a basis to compose serialised pieces. The second method was more empirical, i.e. intuitively determined and based on improvisation.

The first method came from an abstract organisation of compositional materials, whereas the second one came from the non-idiomatic improvisation[1]. Although these two methods have been traditionally opposed I realised that for me they weren't too far one from each other, so I started writing following the two methods at the same time.

When writing serial pieces I realised that my intuition was a key element in deciding what numbers or which direction to choose. The same was happening when

[1] Derek Bailey uses the term 'idiomatic' and 'non-idiomatic' to describe the two main forms of improvisation. 'Idiomatic' improvisation is mainly concerned with the expression of an idiom (e.g., jazz, flamenco) and takes its identity and motivation from that idiom. 'Non-idiomatic' improvisation [...] is most usually found in so-called 'free' improvisation and is not usually tied to representing an idiomatic identity". Bailey, Derek. 1992. *Improvisation: Its nature and practice in Music.* Da Capo Press, Inc., London.

improvising (on the instrument or on paper), were I was unconsciously trying to create structures.

During my PhD I have been developing this idea and trying to reconcile these two compositional notions in my writing.

My first piece as a PhD student at the University of Southampton was *Death of the Siren*[2] for string quartet, written for a workshop held by the university and the Allegri String Quartet. Although this work is not included in the portfolio, it was important in my development as a composer, and therefore I will briefly introduce it here.

The Death of the Siren was an experiment. I wanted to write a work where many different ways of composing could live and interact together in the same piece. I first wrote cells of music of different styles and lengths without thinking about a defined structure or dramatic development. Later, I structured some cuts through a time line, as an editor would do with a tape or a film. The final 'montage', which lacks a dramatic line, has an interesting effect on the listener.

The montage of different music materials and styles is not a new compositional idea. For instance, John Zorn uses the same concept in his *Forbidden Fruit* or *Cat O'nine Tails*[3] string quartets. In these quartets we can hear electronically modified sounds from the quartet, influences of post-romantic music, of Haydn, country music, and a Japanese singer, all in the same composition and never layered one on top of the other vertically, but arranged horizontally as a montage of different musical discourses. The actual structure and timing of these portions of material is critical.

I feel my attempt to compose *The Death of the Siren* in such a way failed due to two main reasons. Firstly, the material in each unit lacks a strong identity because of its similarity to the material in the other units. Secondly, the length of the musical units does not contribute to our understanding of the idea of the montage. Some of the units are long enough for the material to start, develop and end in the same unit so that the cut to the next unit is weakened. In contrast, Zorn's piece works because of the fast, contrasting, radical cuts, which allows our mind to perceive a change of musical structure at each cut.

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[2] See appendix 1 and CD attached.

[3] *The Winter was Hard* (Nonesuch, 7559-79181-2) includes a performance of *Forbidden Fruit* by John Zorn
The String Quartets (Tzadik, Cat. # 7047, 1999) includes a performance of *Cat O'nine Tails* by John Zorn

By structuring the music as a montage instead of a dramatic, continuous line, the piece acquires connotations, which are different from the expected ones. Our minds are used to radical visual cuts (or jump cuts), as we see these everyday on TV or at the cinema. However, it seems difficult to structure music in the same way, or to create the same effect of association but with sound rather than images.

Even if my attempt at such a way of composing failed this time, I am still interested in the idea that motivated the piece in the first place: the decontextualisation of musical material as a way of creating new musical ideas and new contexts.

Plastic artists have used this idea widely. Marcel Duchamp, for example, with *Fountain* represents one of the first and most iconic works behind this concept. The 'collage' technique is also a concrete example of this idea. When we apply the idea of collage to music, since collage does not imply a temporal line as music does, it is more accurate to use the term *montage*, a word borrowed from the field of cinema.

Montage and other techniques of decontextualisation in music are normally associated with the philosophical concept of postmodernism. In some ways I feel my music is close to this idea but in some ways it differs from it. In the following paragraphs I will explain why.

Although it is difficult to define postmodernism and especially postmodernism in music, one of its main characteristics is that all post-modern composers seem to 'simultaneously embrace and repudiate history'.[4] Postmodernism embraces history in the sense that it borrows elements from older periods. Postmodernism repudiates history at the same time because of its reinterpretation and decontextualisation of these historic elements.

It is important not to confuse postmodernism with 'antimodernism'. Both concepts are a reaction against modernism; however the latter claims to be an élitist musical movement that pretends to perpetuate pre-modern musical periods, such as the Romantic one or the Classical one. Postmodernism is certainly a reaction against modernism without the nostalgia for 'Golden Age' periods, and consequently non-elitist.

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[4] *The Nature and Origins of Musical Postmodernism'*, Jonathan D. Kramer in *Postmodern Music/Postmodern Thought.* Edited by Judy Lochhead and Joseph Auner. Routledge, London,2002. Page 14

I feel my music could be considered postmodern in the sense that reference to older works and styles is an essential element of cohesion to my composing. Although this element of reference can be more or less literal, and have deeper or lighter impact on the final work, it is always existent.

We could refer here to the French philosopher Jean-Francois Lyotard who says, "A work can become modern only if it is first postmodern. Postmodernism thus understood is not modernism at its end but in the nascent state, and this state is constant". In other words we could say that all art process has its own postmodern period. During the creation of a piece of music or art in general it is impossible to deny the existence of the previous works and tendencies. Even by trying to avoid or break with the past you are referring to it.

Although depending on the period and/or composer the degree of reference to previous works can vary, we can see this clearly in music history. For example in opera there is always a reference to popular songs of that specific period, or Liszt Transcriptions are a good example of reference and contextualization. On a larger scale, we could consider Stravinsky's classical period works postmodern because of the reference of a whole style or period.

We tend to consider postmodern works when reference of other pieces in those is closer to literal reference. A classic example would be the third movement of Berio's *Sinfonia* where the reference of Mahler Second Symphony's Scherzo is almost literal. Or in that sense we could consider that when a DJ is mixing two records in a club he is doing the ultimate postmodern activity because he is referring literally to two different pieces of music to create a third new one.

It seems to me that what Lyotard says about all art process having a postmodern period is true. I believe that this does not mean that the final piece has to become necessarily a postmodern or a modern work. What it changes is the degree of self-consciousness of the reference and the intention of the composer by introducing such elements.

In my work, as mentioned above, there is always a great amount of reference, deeper or more superficial, more or less literal, on a larger or smaller scale. This does not mean that my work has to be necessarily postmodern or modern. Some of the works I present in this Thesis can be considered postmodern because they idiom of reference, like the string quartet *Node* or the dance piece *Déjà Waltz*, or other pieces could be considered modern like *Perfect Match* or *Regarding the Pain of Others* because of the self contained dramatic idiom. When writing these different works I do not make a conscious decision about the connotations of such references.

I do not feel my music has to be a reaction to any previous artistic praxis or tradition as conscious postmodern artist might do. This is the point at which I deviate away from postmodernism theory. I like any artistic expression if it is completely genuine and has its own reasons to exist. Furthermore, I am fascinated by the pluralism of our time and the social and artistic potential of this pluralism. This means that it can be expressed by many different ways such as using a specific style (that can be considered as a literal reference) or a reference to a specific piece of work, less or more literally. I do not have the need to develop a new musical language because history and tradition provide us with a rich source of styles. It is through the use, reinterpretation and decontextualisation of these sources that I want to say something new.

My music is experimental in nature. This does not mean either that it has to be classified as *modern* music. Even when I use a more conventional language in my work I cannot avoid having an experimentalist approach. I believe writing music is a continuous discovery and that *style* is just a contextual tool that facilitates this discovery.

My own point of view concurs with Jonathan D. Kramer, and as he says in his article *The Nature and Origins of Musical Portmodernism*[5], "a more subtle and nuanced understanding of postmodernism emerges once we consider it not as a historical period but as an attitude." Nowadays, we are extremely aware of History, more than in any other society before. This artistic historical self-awareness affects our actions as artists. We are constantly reinterpreting the same ideas in a more contemporary context, with a very complex degree of reference and self-reference. Each style brings new ideas, emotions and degrees of seriousness to music. I believe each historical style brings a richness of nuances

[5] *The Nature and Origins of Musical Postmodernism'*, Jonathan D. Kramer in *Postmodern Music/Postmodern Thought.* Edited by Judy Lochhead and Joseph Auner. Routledge, London.2002

to my music. This is why I think my music it is part of a postmodern attitude because of this historical awareness that our times dictate and that it is not possible to detach from, but at the same time I cannot consider each of my works individually as consciously postmodern by definition.

All my portfolio, concert and collaborational works have been influenced by this idea. It happens to be an eclectic portfolio of works, but the motivation behind it is to create a new musical concept that becomes understandable, not through a particular piece of music, but through a whole musical praxis.

Chapter 2

Analysis of the Portfolio

The portfolio contains works written between September 2002 and December 2006. However, not all the pieces written during this period, both concert works and collaboration works, have been added to the final portfolio. I have chosen the works according to their relevance in terms of style, complexity and also in terms of my own subjective appreciation. Although the works of the portfolio do not configure a unitary piece of research, they have been written within a close period of time where a similar aesthetic or compositional praxis has been applied, consciously or not, to all of them. In this chapter I will talk briefly about all the pieces included in the portfolio.

There are eight pieces in the portfolio. Six concert compositions and two collaborational compositions. The concert compositions include the two solo works *Aleph* (for guitar) and *Perfectmatch* (for percussion); *Grotesque* for percussion, oboe and real-time electronics; *Node* for string quartet and tape; *Coincidentia Oppositorium* for septet (cor anglais, Bb clarinet, two celli, double bass, percussion and piano); and *Regarding the Pain of Others*, a chamber orchestra piece for an ensemble of thirteen players. Collaboration works include the dance choreography *Déjà Waltz*; and the music for the theatre play *Mariana Pineda* by Frederico Lorca. Other collaborational works not included in the potfolio will be briefly introduced.

In this chapter I will introduce each of these pieces in the context of my aesthetics as a composer presented in Chapter I. In **§1** I will consider the concert music pieces and in **§2** I will talk about collaboration works.

2.1 Concert Works

The concert pieces that have been included in this portfolio are mainly commissioned works. Unfortunately not all these commissions have been performed but they are all relevant works in my trajectory as a composer.

2.1.1 Node

Node[1] for string quartet and tape was a commission by SPNM[2] for the event TAKE/ONE. They wanted a piece specifically for string quartet and electronics. It was performed by The Elysian Quartet at The Spitz venue in London on December 7th 2004. A recording of the performance is provided in the attached CD.

For the programme note of *Node* I wrote: 'this piece creates a bridge across a thousand years of Music History. All the acoustic material comes from a responsory[3] by Hildegard von Bingen (1098-1179) whereas the electronic material is noise produced by a violin manipulated with the software Max/MSP'.

The score of *Node* is a mixture of graphical writing and conventional scoring. It is in fact the most graphical score on the portfolio. The first material I developed was the electronic line. I first sampled sounds from a violin like *col legno*, random harmonics *sul ponticello*, sustained notes, *pizzicati* and *tremolandi*. Then I modified them through a Max/MSP patch in the computer. After obtaining the desired sounds I placed them in a sequencer, arranging them in multiple layers and organising the sounds in a time line. Once I finished with the electronics I printed the entire waveform and I placed it over a blank score, creating the graphical part of the score. The electronics are present throughout the entire piece but acquire a different role in different sections.

From the time-line given by the printed waveform I started writing the material for the strings. The entire pitch material for the strings comes from a responsory by Hildegard von Bingen. On the viola, I used the Von Bingen responsory almost in its original form. Then I abstracted the pitch structure relationships and transferred it to a quarter-tone scale.

[1] See *Node* score and CD attached.

[2] SPNM: Society for the Promotion of New Music, 4th Floor, St Margaret's House, 18-20 Southwark St, London SE1 1TJ.

[3] Responsory number 63 [*De Sancta Maria*] *O Quam Pretiosa* by Hildegard von Bingen. See appendix 2.

I created the desired dramatic development effect by changing the rhythmic relations and superimposing different parts of the responsory[4].

The final result is a *collage* of different sonorities. On the one hand we can hear the electronic line, which has a perceptible connection with the sound of the strings. On a second level we hear the strings creating the dramatic tension. In the middle of the piece the melodic line of the responsory appears like a memory of the past, clashing with the micro-atonalism and the accelerated rhythm of the other strings. The combination of sonorities creates a quiet tension which is broken later on by a radical change in the material provided by the drum machine for a few seconds. After this brief drum machine change we return to the quietness of the beginning.

Each system of the score represents 15 seconds in time making 30 seconds per page. The players should use a stopwatch to follow the time-line.

2.1.2 Grotesque

Grotesque[5] was written as a SPNM[6] commission for the event organised by SPNM called 'The Sound Source'. The aim of the Sound Source series was to bring contemporary music to unconventional venues that traditionally had not hosted contemporary music events. The commission was for the opening night of the events series, the piece had to be written for percussion, oboe and electronics, and would be played by New Noise (Joby Burgess, percussion, Janey Miller, oboe, Matt Fairclough, electronics). The concert was on the 30th of June 2005 at the Bartok Bar[7] in Camden Town, London. Unfortunately, due to the complexity of the score and the short rehearsal period that New Noise had at their disposal, the piece was not performed in that concert[8].

The final score is for snare drum, marimba, amplified oboe and live electronics[9]. As distinct from the score for *Node*, the score for *Grotesque* is specific, detailed in pitch, rhythm and technique.

[4] See page 3 of *Node* score.

[5] See *Grotesque* score.

[6] See footnote n.2

[7] Bartok, 78-79 Chalk Farm Road, London, NW1.

[8] note: consequently I have not been able to provide a recording of *Grotesque*.

[9] Live electronics implies: computer running Max/MSP with a patch containing a) a real-time pitch shifter b) a granular real-time sampler and c) a sampler trigger with four pre-recorded samples from the oboe.

Through the first part of the piece the snare drum plays constant variations and permutations of non-complex rhythms at a speed of ♪=60 and *mf*. These non complex rhythms are intercut with the marimba, and become increasingly present. In the meantime, the oboe has an intense monologue by combining two different musical materials. The first material is made of abrupt non-melodic jumps of micro-tonal pitches on irrational rhythms. The second material in the oboe is obtained by the repetition of close micro-tonal sounds combined with the pitch shifter on the electronics.

By the end of the first section of the piece (bar 27), the marimba becomes more prominent than the snare drum. The marimba then replicates the first oboe material. In the second part of *Grotesque* (bar 28), the oboe starts playing melodically while the marimba starts to disappear, allowing more space for the melody of the oboe. This lasts until bar 38, when the vibraphone starts playing with the bow. It is also here where the electronics start, playing a recording of[10] a distorted version of what had been performed until this point. In the meantime, both acoustic instruments are playing long sustained notes. This atmosphere is cut abruptly when the oboe starts playing an over blown multiphonic *ostinato* rhythm, and the snare drum plays an obsessive *quasi ostinato* (bars 39-42).

The inspiration behind *Grotesque* comes from the world of circus. My intention from the beginning was not to reproduce the 'sound' of the circus but to create an atmosphere of magic decadence by abstracting the idea of the circus and exagerating it until it becomes *grotesque.*

2.1.3 Perfectmatch

The first solo piece presented in the portfolio is *Perfectmatch*[11]. It was commissioned by the Spanish percussionist Ignacio Molins and premiered at the National Portrait Gallery in London on November 3rd 2006. Three instruments are used throughout the piece: a thunder sheet, a vibraphone and a set of 6 woodblocks (it is likely that the final version will be for 5 woodblocks after the advice of the performer). The piece was developed by closely following the advice of the performer. We discussed the possibilities of the instruments, the use of the mallets and bows and the notation. It was a very enjoyable and

[10] The granular sampler triggers random sounds or cuts from the sample recorded previously.

[11] See *Perfectmatch* score and CD attached.

inspiring experience that I hope to repeat soon. A recording of the performance at the National Portrait Gallery is included in the portfolio CD.

In the program note for the concert I wrote: '*Perfectmatch* explores the possibility of the union between two completely different worlds. It is, in a way, a mystic experience that reconciles the eternal duality of our world, the physical aspect with the metaphysical one. The consciousness of our existence as a 'perfect match' between our mind and our body, as the beginning of reality'.

The idea behind the piece is therefore identical to *Coincidentia Oppositorium* (see Chapter 3). It is borrowed from the mystics, in particular from Meister Eckhart and his mystical vision of Christianity. In the book *Zen, Mística y Abstracción*[12] by Amador Vega we can find a deep analysis of the mystics in relationship with the Zen doctrine and contemporary art. Vega says:

> *La experiencia mística es sobre todo la experiencia para que el hombre sea libre de intervenir en el mundo. La union mística es una expressión que recuerda la obligación que tiene el hombre de encontrarse con su fondo de realidad, en donde la experiencia del desierto y la nada halla su comprensión afirmativa. Sin esta experiencia no hay encuentro con el mundo.*

The mystic experience is above all the experience that frees men to intervene in the world. The mystic union is an expression that reminds us of the obligation that each human being has to discover the depth of his reality, where the experience of the desert and nothingness finds its afirmative understanding. Without this experience there is no understanding of the world.

The process of abstraction is similar to the mystical experience. Just by being conscious of the duality between our body and mind, we are able to experience emptiness. We cannot pretend to escape from this duality. By understanding it, we are able to go backwards in the process of creation. This is what Meister Eckhart understands as *descreation*. Descreation 'pretends to place the creator (artist) at the same originary level in the process of creation'[13].

---

[12] Vega, Amador. 2002. *Zen. Mística y Abstraccón.* Editorial Trotta, S.A., Madrid. Page 64.

[13] Vega, Amador. 2002. *Zen. Mística y Abstracción.* Editorial Trotta, S.A., Madrid. Page 110.

Through *Perfectmatch* I didn't want to explore this *descreation* but to understand the coexistence between our two realities, mind and body, and to explore the possibilities of their interaction.

The piece starts with an introduction of 12 bars in *ff*. This introduction, apart from having a premonitory function, has a spectral function too. It works as an 'ambient sound' cleaner. Its loudness and rhythmic pattern allows us to be aware of the acoustics of the room where the piece is being performed. At the same time, this introduction prepares our ears to listen for the delicate sounds that will be produced later on by the friction of the bow on the edge of the metal pieces of the vibraphone.

After the double bar line on the third system, where we hear for the first time the vibraphone played with the cello bow, the piece starts properly. In this section -from the double bar to the end of page 2- we find two different materials in constant dialogue: the thin and suspended sounds of the bowed vibraphone versus the fast and sharp percussive note cells. At the beginning of the section the suspended material is more present than at the end, where the second fast material takes over. This leads us to the next section of the piece -from page 3 to the end of second system on page 5- where there is an exclusive use of vibraphone and wood blocks. The section starts being very rhythmical and combining both instruments.

At the end of this section there is a disassociation of this partnership between vibraphone and wood blocks by playing different rhythmic structures in each instrument, creating in this way two disconnected contrapuntal lines. On the third systhem of page 5 we enter into the last section dedicated to the non-pitched percussion instruments, i. e. the wood blocks and the thunder sheet. The musical material of this last section is directly related to the material used in the middle section. The avoidance of the use of a pitched instrument makes the material dryer. The piece finishes abruptly with a *fff* of the thunder sheet.

In each section there is a clear use of two main instruments. Every section has an instrument that relates it to the next one not only because of the use of the specific instrument but also with regards to the material played. In section one I use the thunder sheet and the vibraphone. In section two I use the vibraphone and the wood blocks and in the third one the wood blocks and the thunder sheet.

Since the first performance of *Perfectmatch*, Ignacio Molins has used this piece in his Masterclasses in Valencia, Spain, as an example of collaborative work between player and composer. Some students have performed *Perfectmatch* for their graduation exams.

2.1.4 Aleph

Aleph[14], a piece for solo guitar, was also a commission. Classical guitarist David Sanz was asked by the Joventuts Musicals de Barcelona (Society for Young Musicians of Barcelona) to organise a concert with works for classical guitar written exclusively by contemporary Catalan composers. *Aleph* was commissioned for the occasion. Unfortunately, due to internal problems within the organising bodies, the event was cancelled.

The piece is inspired by the Borges's story *Aleph*[15]. The Aleph "is a point in space that contains all other points. Anyone who gazes into it can see everything in the universe from every angle simultaneously, without distortion, overlapping or confusion"[16].

Although I have a BA in Classical Guitar, and guitar is my first instrument as a player and improviser, it was difficult to write for the guitar. It is not a problem of technical difficulty but on the contrary, having a deep knowledge of the instrument becomes a handicap. Personally, it is a difficult process to detach myself from the instrument when I write for guitar. Writing for guitar, exploring the use of extended techniques and introducing them into my writing is an area I want to develop more in the future.

The works *Coincidentia Oppositorium* and *Regarding the Pain of Others* will be closely analysed in Chapter 4. Now, I will briefly comment on the collaborational works for dance and theatre that I have included in my final potfolio.

[14] See *Aleph* score.

[15] Borges, Jorge Luis. 1999. *El Aleph.* Alianza Editorial, S.A., Madrid.

[16] http://en.wikipedia.org/wiki/The_Alephs

2.2 Collaborative Works

Very early in my career as a composer I started collaborating with other art disciplines. I regard my work as a collaborative composer as important as my concert music. I feel equally comfortable writing music in collaboration or writing music for my own purposes or projects. Furthermore, I believe that learning how to collaborate with creative people from other disciplines is a very important part of the *craft* of being a composer.

Working as a collaborative composer is probably more difficult than working as a concert music composer. It is important to know where you stand in the creative process and what your collaborators -directors, choreographers, actors, dancers or artists- expect from you. As a participant in a 'collaborative' process, the composer has to be open to other people's ideas and input.

I enjoy collaborative work because most of the time we do not know what the final piece is going to be like until the performance. The process is as exciting as the result itself, and yet the result is usually much richer because of the team work. I especially like working with choreographers and dancers because of their enhanced perception of sound, space and time, which allows me to push music in new directions.

During my years of research I have worked on many dance, theatre and film projects. Many of these projects had to be produced in a very short time so the use of technology (i.e. computers, samplers, synthesisers) has been very common. The result is that from many of these collaborations I don't have a music score, because I tend to use my home studio as an instrument itself.

I have included in my portfolio two relevant collaborative pieces. In the portfolio you can find the scores for *Mariana Pineda*[17] and *Déjà Waltz*. Here I will analyse *Mariana Pineda* and other collaborations not included in the final portfolio. *Déjà Waltz* will be closely analyzed in Chapter 3.

[17] See *Mariana Pineda* score.

2.2.1 Mariana Pineda

> *Mariana Pineda Muñoz was the tragic heroine, executed in 1831 for the liberal cause in opposition to the king Ferdinand VII. Her story is a well-known and much celebrated one in the history of Andalusia.*
>
> *In Lorca's play, Mariana becomes a martyr for the cause of love, a woman who loves, hopes and waits in vain. Encouraged by her lover, Pedro de Sotomayor, she sews a flag for the radicals of Granada, thus condemning herself to a terrible fate. Lorca's play revolves around Mariana's wait for revolution and personal salvation.*
>
> *Mariana Pineda has been received with both popular and critical acclaim in Spain, outside of which it has rarely been performed.*

These were the words written by Mark Griffin in the program note for his production of Mariana Pineda performed on the 9th, 10 and 11th of April 2003 at the George Wood Theatre at Goldsmiths College, University of London.

My involvement with the project began quite early in the production process. I started discussing the music with the director at script level. We talked about where I should introduce the music cues, what the function of the music was and what instrumentation I should use.

The music I finally wrote for Mariana Pineda is functional. I had to write music that would not work against the traditional *Spanish* tone of the play. There was no intention in this production to have a contemporary approach to the play. Therefore I had to adapt to the director's requirements, while trying to provide some interesting music with a more contemporary approach than the one given by the *mise-en-scène*.

I finally decided to write for a quartet with English horn, guitar, cajón flamenco and double bass. The use of these instruments simplified the production of the music and brought a Spanish flavour to the music at the same time. I was going to play the guitar and I had a cajon player friend studying musicology at Goldsmiths College. After desperately trying to find a professional double bass player without success I decided to record it with a keyboard synthesizer on a double bass sound.

I wrote six cues of music and I added a piece of classical guitar, *Capricho Arabe* by Francisco Tarrega, performed by myself. Three of the six cues (*Preludio, Cambio de escena I* and *Cambio de escena II*) have an introductory and premonitory function for each of the three acts of the play.

The other three cues have a diagetic function, i.e. music that has no dramatic function and doesn't have a clear source in the story space. The source can be a musician or a singer in the play. The most relevant one is the *Canción del Contrabandista* (The smuggler's song), which is a song mentioned by Lorca in the script of the play[18].

Cancion del Contrabandista was a well-known piece composed by Manuel Garcia, composer, actor and famous singer of the XIXth century. His daughter Maria Malibran also a well-known singer, performed it in Rossini's opera *Il Barbiere di Siviglia*[19]. Lorca uses this song in the play as a historical and revolutionary reference. I wrote an arrangement of the song[20] for the quartet mentioned above. The actress playing Mariana's character sang it on stage.

Although I enjoyed composing the music for *Mariana Pineda* I believe this is a good example of how difficult it is to collaborate sometimes. I tried to argue for a more contemporary approach though without success.

[18] See appendix 3.

[19] Manuel Garcia is hailed as the tenor of Rossini's *Otello* and *Il barbiere di Seviglia.*

[20] From a XIXth century edition found at the British Library.

2.2.2 Other Collaborations

Other collaborations not included in my portfolio, but equally important for my trajectory as a composer, are *Not In My Name, Mena, Gnosis* and *Scratching Inside my Stomach.*

Not in My Name

Not In My Name was a physical theatre play produced by the theatre company Theatralia. Based on a script by the Living Theatre, the play was deeply politically engaged against Bush's death penalty policy. The play was performed for a week at the Garage Theatre (part of Blomsbury Theatre in London) in 2005 and for three weeks the following season at the Camden People's Theatre in London.

The music was a mix of pre-recorded electronics and live performance involving some improvisation. Apart from writing and playing the music live I was also a member of the heterogenic cast.

Mena

Mena[21] is a contemporary dance video based on the myth of *Theseus and the Minotaur.* Directed by the choreographer Frauke Requardt (now artist in residence at The Place, London) and peformed by Janina Rajakangas, the music was written, recorded and mixed in my home studio. The music is a mix of electric guitar sounds and voice sounds performed by Jaime Craggs.

Gnosis

Gnosis[22] was a choreography produced by Ektos Dance Theatre, and performed at the Resolution! Dance Festival 2006 at The Place Theatre in London. The choreography, directed by Lia Prentaki, was inspired by the concept of memory and remembering. The music has a nostalgic character running throughout the whole piece, which features Spanish guitar sounds and electronics.

[21] See DVD attached.
[22] See DVD attached.

Scratching Inside my Stomach

Scratching Inside my Stomach was another dance project performed at The Place during the Resolution! Dance Festival 2006. This time the choreographer was Janina Rajakangas leader of the Rajakangas & Moussaoui Dance Company. I was onstage live-mixing pre-recoreded samples of Janina's movment sounds creating a rhythmic texture in synchronisation with the real movements. On this occasion I also had to do some movements myself, in an integration of musician and dancers.

In Chapter 3 I will closely analyse the dance collaboration *Déjà Waltz* composed for the ABCDance Company from St. Pölten, Austria.

Chapter 3

Déjà Waltz

Déjà Waltz[1] was the first important collaboration I worked on as a composer. It involved a big dance production at the Festspielhaus in St. Pölten, Austria. The spectacle was called *Déjà Waltz* (a mixture of the French term *déjà vue* and the traditional Austrian dance music) and it involved a collection of choreographies somehow related to waltz. The choreographies were created by the same dancers of the company-in-residence, the ABCdance Company. I had to write and play live music for a choreography for three dancers created by Nora Sitges, who was herself a dancer for the ABCdance Company.

The idea behind the choreography was to make a piece that would be a deconstruction of a waltz. The structure of the piece was very clear for the choreographer from the beginning. This was predetermined because the movements of the choreography were already designed before the music was written.

The collaboration was going to be a long-distance one. Nora Sitges would be based in Austria working with the dancers while I would be in London writing the music. One week before the performances I would fly to Austria to work together with the dancers. Because of the difficulties in communication that distance imposes, we had to stick (or we thought we had to at the time) to a precise plan of action.

Apart form the duration and the structure of the piece, which was given to me as a must by the choreographer, I had complete freedom to write the music. We agreed with Nora that we would start from a traditional waltz and evolve through a deconstruction of it until we reached a music that would appear perceptively unrelated to the original waltz.

[1] See *Déjà Waltz* score.

This music would represent the first part of the whole choreography. The second part would be the inversion (or retrograde) of the first part musically and choreographically. We also decided that the music would involve classical guitar and pre-recorded electronics and that I would play live on stage as part of the choreography.

By combining the elements of retrograding, deconstruction of traditional material and by adding new material such as electronics, the choreographer wanted to represent the absurdity of the tradition of the waltz nowadays. Almost as a Dadaist performance the dancers would start perverting the traditional movements of the waltz together with the music. We would end up with a subtly grotesque performance of the waltz where nothing seems to be quite in the right place.

The first choice I had to make was to decide whether I would use an already existing waltz for the guitar or I would write one from scratch. All the waltz guitar music I found during my research was too short for the choreography. Amongst all the music I considered, I particularly liked a short waltz by the Spanish guitarist and composer Francisco Tarrega (1852-1909) called *Las dos Hermanas*[2]. I decided that due to the timing constraints imposed by the choreography, it was better to write a new waltz myself. However, I used Tarrega's waltz as my source of inspiration.

The waltz I wrote starts with an introduction of 7 bars of 4/4. This introduction is harmonically related to the actual waltz (in E major) but disconnected from the well-known 3/4 waltz rhythm. In the choreography, before the music starts, a dancer starts moving while we hear in the background sounds of a crowd in a bar. When I start playing the introduction, it works as a cue for the dancer to prepare herself for the waltz and as a cue for the background sound to fade out.

The music mirrors the choreography in the sense that while only the guitar is playing the waltz, just one dancer is performing on stage. When the electronics come in, two more dancers appear on stage.

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[2] *Tarrega, Obras Completas para Guitarra, Nueva edicion basada en sus manuscritos y ediciones originales Vol. IV,* Ed by Melchor Rodriguez, Soneto. See appendix 4.

The main section of the waltz develops from the anacrusis bar 8 to bar 81. From bar 8 to bar 35 we have the development of the main theme (*section A*). There are three repetitions of the theme. The first three bars plus anacrusis of each repetition are exactly the same. The development of each repetition is different, adopting a character of *question*, *answer* and *question.*

As a big answer to the first theme we have *section B* that goes from bar 27 to bar 53 in repetition. This section is in A major, subdominant of the tonality of the main theme.

Section C goes from the anacrusis of bar 55 to bar 81. The first part of this section is written in the dominant tonality of the main theme, i.e. B major. The second box of the repetition (from bar anacrusis of bar 71 to bar 81) is written in the original tonality of the main theme and has the function of a transition to the recapitulation of *section A*.

Up to *section C*, the melody is predominant on the top line. In the first part of *section C* I placed the melodic line predominantly on the bass.

The main theme starts its recapitulation from the anacrusis of bar 82. There are three repetitions of the melody. From the anacrusis of bar 82 to bar 90 the melody and harmony are exactly the same as the original. The second time we hear the tune (from the anacrusis of bar 91 to bar 99) the harmony and melody starts being *perverted* by strange notes far from the E major tonality. This is also the moment when the electronics start.

From bar 98 I started writing atonally but keeping the rhythm and mood of the waltz until bar 104. In this bar there is a change in the guitar notation, and the electronics become more predominant. From bar 104 until the middle of the piece (at the end of page 2) the guitar plays *loops* or repetitions of music cells. These cells are modified, perverted and decontextualised sections of the original waltz. Some cells contain more rhythmical material than others and some are more melodic in nature.

The entire electronics part can be divided into four sections. At the end of each of these sections we can hear on the electronics a particular fast and rhythmic sound, which is the cue for the following section. These rhythmic sounds become increasingly predominant until the end the last section (section 4) where we find the climax of the piece.

The tape of the piece is *musique concrète.* All the sounds we hear on the tape come from an original source of sound. I used all sorts of metal sounds like kitchen pots and metal bars to generate the samples, which were later modified in the computer. I organised all these sound in 3/4 time signature (or waltz rhythm) in very different and extreme tempos.

From the climax onwards the music is exactly the same but retrograded.

The score included in the portfolio is the final version of the score before I travelled to Austria. Although I sent several demos to Nora before I went to Austria, once I was there we had to properly adapt the music to the choreography. There was a major cut on the length of the electronics section. We also eliminated the guitar section. The choreographer also wanted me to add more intensity and rhythm to the electronics, which I did.

Chapter 4

Regarding the Pain of Others

4.1 Introduction

In this chapter I will closely analyse the piece *Regarding the Pain of Others*[1] written for thirteen players [1111, 1110, 2111].

The inspiration for the piece comes from two different sources. The first, and most relevant one, is 'Desastres de la Guerra' (The Disasters of War), a collection of eighty-two etchings produced by the Spanish artist Francico Goya (1746-1828) between 1810 and 1820. They portray the atrocities undertaken by the French soldiers when they invaded Spain in 1808. The second source of inspiration is the book 'Regarding the pain of others' by Susan Sontag, where she analyses the response of Western society to images of war and horror.

In fact I conceive *Regarding the pain of others* as a loud scream of repulsion at the horror of war, to the impotence I feel in front of the lack of reaction by the Western population to war, and their acceptance of the act itself through a mass media imposition.

Goya's etchings are considered of great historical importance. Goya is the first artist to portray the horror and atrocities of war objectively. His etchings were so strong even for his own time that they were not published until 1863, thirty-five years after Goya's death[2]. What makes Goya's plates so intense and terrifying to look at is the reality of the atrocity.

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[1] See *Regarding the Pain of Others* score.

[2] In the first edition three plates were missing from the eighty-five original etchings designed by Goya.

They show what happened, nothing else. As Sontag says about the etchings: 'war is not a spectacle'[3] in the eyes of Goya, but pure reality. Goya is able, for the first time in art history, to step back and look at war from a distant position. This distance allows him to question the brutality of the act of war. Furthermore, he reflects the meaning of the human condition through the small monochromatic plates[4].

To be able to have an external and objective view to the subject of war as Goya did, I need to use a more contemporary device. I decided to write a piece where the structure would be consistent in itself. By using a structure base on a mathematical sequence, I tried to achieve a more universal and complex view of what war represents to the First World. Some could argue that this is a cold way of looking at war but it is actually a critique of how the First World interprets war. In a sense, I mimic the relationship between the First World and war; a static observational vision from the comfortable security of our homes. Hence, the title of the piece.

Apart from the images, Goya introduces a small phrase that emphasises the brutality of what we see. We find phrases like 'I saw this' (*yo vi esto*), 'this is the truth' (*esto es lo verdadero*) or 'why?' (*porqué?*), 'This is bad' (*esto es malo*). The imposition of the testimony and the confirmation of the veracity of the images provoke a major impact on the viewer. We engage completely with them.

This impact is what I wanted to provoke in the audience when I started to write *Regarding the pain of others*. I wanted to write a very strong piece that would be simple at the same time. A piece engaged politically with our time. A piece that would tell us we have not changed much since Goya's times, and that war is still a horrible and common practice.

Initially *Regarding the pain of others* had to contain three different parts according to three different plates. Each 'movement' of the piece would be directly written from each correspondent picture as a direct source[5]. After having written two different sketches I

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[3] Sontag, Susan. 2003. *Regarding the pain of others*. Penguin Books Ltd., London. Page 40

[4] A part from the *Desastres* collection Goya did three more collections of etchings: *Caprichos*, *Tauromaquia* and *Disparates*. In all of them Goya is able to capture the incomprehensibility of the human race.

[5] Hans Werner Henze in his piece *Caprichos* based on Goya's other collection of etchings with the same name, has a

abandoned this idea. I realised that if the source of my piece was Goya's *Desastres de la Guerra* it would have to be a bigger piece. I decided to do a one-movement piece instead.

Although the piece is in one self-contained movement it is possible to divide the piece into two big sections. The first section starts at the begining of the piece and ends at the end of bar 104. The second section runs from bar 105 to the end. As we will see later on the analysis these two sections are strongly related harmonically and structurally.

The harmony (pitch structure) and the overall structure of the piece are based on the golden section (the proportion 1, 1, 2, 3, 5, 8, 13, 21...) and the so-called Fibonacci series. Both structures are carefully used in the piece and consciously related mathematically.

It is well known that many composers have used the Fibonacci series in many different ways to structure their compositions. We know for example that Bartók used this series for the first movement of his *Music for strings, percussion and celesta,* not only to organise the overall structure of the piece but also to shape the rhythm and the pitch of the melody cells[6].

similar approach to the structure of the piece.

[6] Soler, Josep. 1989. *Fuga. Tecnica e Historia.* Antoni Bosch, Editor, Barcelona.

4.2 The structure

As mentioned above, the whole structure of the piece is based on the golden section. The different events in the piece happen at key places dictated by the mathematical structure. Although this mathematical structure has a philosophical origin, it is also a guide for me to compose. This means that in some key places, due the dramatic needs of the music, I allowed myself not to follow the *a priory* structure given by the numbers but to follow my subjective intuition.

The piece contains 13 cells of 13 bars (13 being a number of the golden section) of 4/4 in each cell, making a total of 169 bars for the whole piece (see *Fig1*).

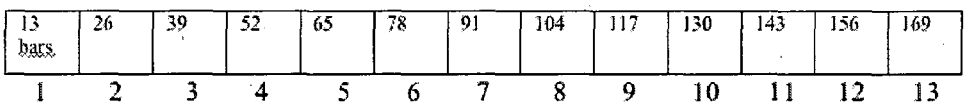

Fig1

The 13 cells that form the piece are structured in groups where the number of cells in each group is given by the golden section. In other words, if we look at the piece from the beginning we find 6 groups of cells. The first three groups are made of 1 cell of 13 bars each. The fourth group contains 2 cells of 13 bars, the fifth 3 cells, and the last one 5 cells (see *Fig2*). Looking at the piece structure from another perspective, we can see that the number of cells (13) of 13 bars each is obtained by placing in a time line the same number of cells we find in the golden section: 1, 2, 3, 5.

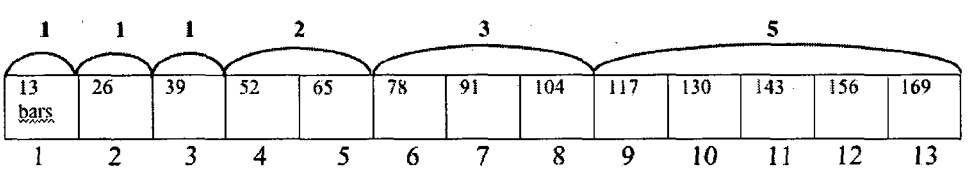

Fig2

If we look closely at each cell of 13 bars, we find similar internal structures using groups of bars related to golden section numbers (e.g. 2 bars, 3 bars, 5 bars, 3 bars or 1 bar, 2 bars, 3 bras, 2 bars, 3 bars, 2 bars). For example from bar 27 to bar 39 (the third cell of 13 bars) we find a structure of 3+5+3+2. (see *Fig3*)

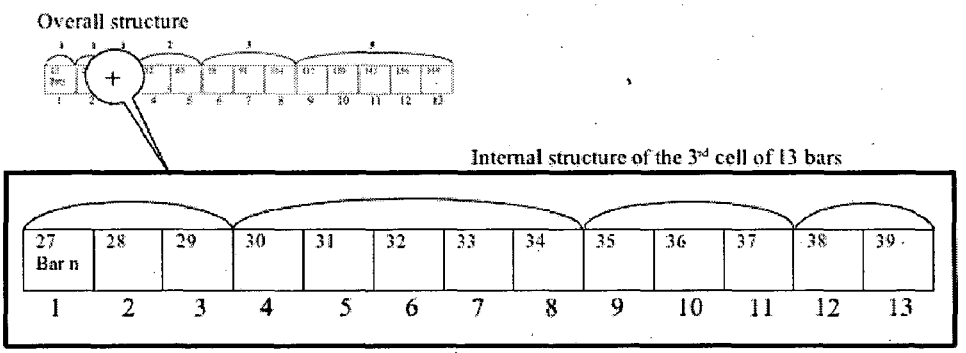

Fig3

By creating this fractal relationship between cells of bars and the overall structure of the piece, I was able to plan a coherent relationship between the different events of the piece and when these would happen.

The most important moment of *Regarding the Pain of Others* is located at the end of bar 104. This inflection point is placed at 3/2 of the piece (8 cells of 13 on the first part and 5 cells of 13 bars on the second part of the piece). *See Fig4*

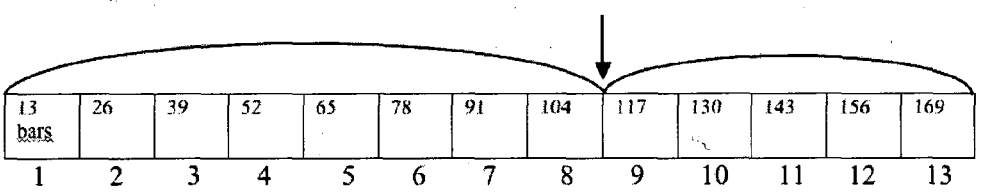

Fig4.

From bar 105 there is a radical change of colour. The piano starts playing for the first time almost *concertanti* together with the rest of the orchestra (the previous piano moments are purely colouristic, i.e., clusters on specific points of the piece). We find as well a change of harmony (explained in the next chapter). The piece is divided into two big parts where the second part acts as a big release after the first part (see *Fig7*). This particular point is also essential for the pitch structure. In fact, the entire structure of the piece has a very strong relationship with the pitch structure.

4.3 Pitch structure

In general terms I can say the pitch structure of *Regarding the Pain of Others* is a big journey to consonance. It starts with a big cluster and ends on a single note.

When we study the pitch structure, the piece can be divided into two major parts, as already mentioned above, following the ratio 3/2. The first part can be regarded as a big cluster (until bar 105) and the second part, because of its consonant nature, can be interpreted as a release of the first part. See *Fig5*.

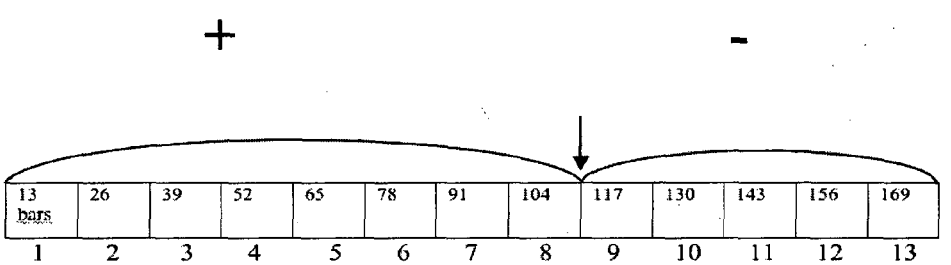

Fig5

The pitch material played by the piano in the second part of the piece is randomly chosen over a 12 note scale. Although it is not intended to be related to the overall pitch structure, we could consider the random pitch on the piano works as an extension of the first cluster chord. This time the cluster chord is spread in time and over a rhythm structure.

Throughout the piece we find quartertone pitches. These are essentially colouristic and are intended to have an effect of *distortion* or of minor modulation from the original note. The way quartertones are placed are entirely intuitive and have always a dramatic context.

I could summarise the idea behind the pitch structure of *Regarding the pain of others* by saying that it is a 'disintegration of a cluster'. The piece starts with a cluster of 13 notes and ends with just one note, F sharp[7].

Although the piece is based on a cluster, we never find consecutive chromatic tone chords in its full disposition. In other words, I always use an 'open' disposition for cluster chords. We can see in figure 6 how I have organised the 12 notes of the initial chromatic cluster (three notes are repeated in the chord: E, F and Bb). The sounds belong predominantly to the high and low registers, avoiding the middle positions. Spreading the cluster chord, as well as carefully choosing the orchestration, I create the very particular desired sound.

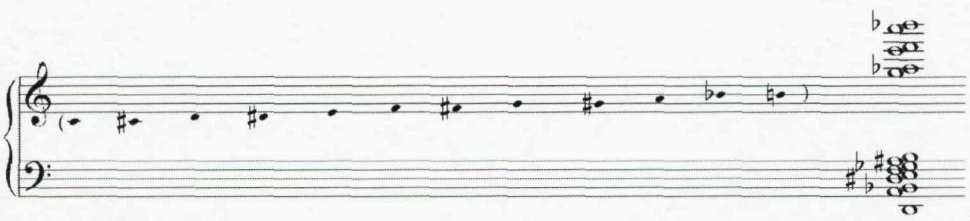

Fig6

[7] The use of clusters in pieces dedicated to war or victims of war is a common practise (because of its powerful sound). Cage in his *In the name of the Holocaust* combines the use of chromatic, diatonic and pentatonic clusters, a technique borrowed from his teacher Cowell. Penderecki's *Threnody to Victims of Hiroshima* has been descried as 'a set of variations upon a cluster'.

Notice the disposition of the first chord on the viola, violoncello and contrabass. Each instrument is playing perfect fifths. These perfect fifths are linked by a semitone in the highest note (ascending between contrabass and violoncello and descending between violoncello and viola) (see *Fig7.*)

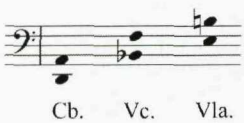

Fig7

Although this chordal disposition by fifths is *contaminated* by other chromatic notes played by the brass and bassoon, it creates a very interesting powerful sound.

Many dispositions of the same fundamental chord appear through the piece. These changes are carefully placed in the piece accentuating the important structural points explained in the previous section.

There are six moments or steps in which the initial chord is *stripped* until we are left with the last note. The number of notes in each step (corresponding to a chord) is again a number from the golden section. The first chord is a cluster of 13 notes, the second has 8 notes, the third contains 5 notes, 3 notes in the third chord, 2 in the penultimate chord and just 1 note in the last 'chord' or step. This is 13, 8, 5, 3, 2, and 1 (see *Fig8*)

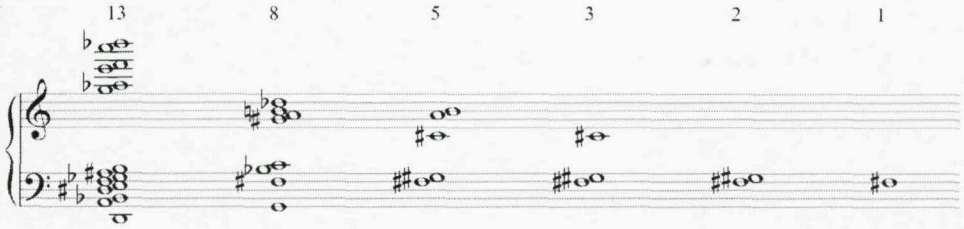

Fig8

Each pitch group is introduced in a particular place of the overall structure. While I used the golden section in an ascending sequence when designing the piece structure (1, 2, 3, 5, 8, 13), I used the numbers from the golden section in a descending sequence for the pitch organisation (13, 8, 5, 3, 2, 1). *See Fig9*

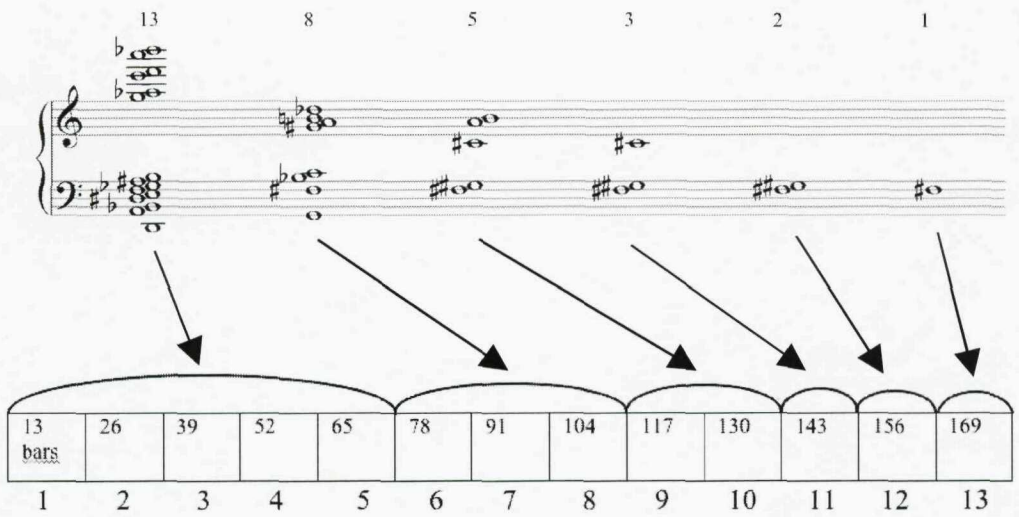

Fig9

Bar 105 is also important in terms of pitch because it is where we find the transition between the cluster of 8 notes and the pitch group of 5. This group of 5 notes is the first one in the entire piece to be recognised by our ear as a *consonant* association of pitches.

If we look closely at this chord of five notes we will see that it is actually a diatonic cluster. The five pitches (F#, G#, A, B, C#) could belong to E major or A major keys (or relative keys). The same notes could be organised by fifths again plus a chromatic note. See *Fig10*

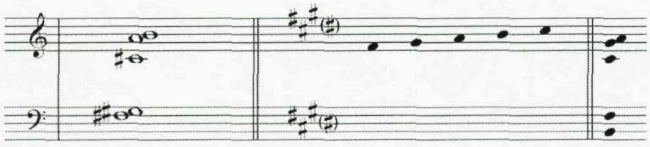

Fig10

4.4 Orchestration and texture

The whole piece is divided into two parts in terms of texture. These two parts are differentiated by the use of the piano. As mentioned above, these two parts have a 3/2 ratio relationship. The use of the piano in the second big half of the piece is very predominant at the beginning and becomes more fragmented by the end of the piece. It is by then that the piano becomes integrated with the orchestra in a more dialectic manner. After a couple of climaxes led by the orchestra we finally arrive at a last big *tutti* on bar 156 where the piano is playing rhythmical clusters.

Not only the pitches and the overall structure of the piece are based on the Fibonacci section, but also the organisation of the orchestration, i.e. the disposition of instruments and textures.

One of the properties of the Fibonacci section is that the relationship between consecutive numbers is always of 3/2. If we take any number of the series, for example 144, and the following one, in this case 233, the relationship between these two numbers is the same as if we took two other random consecutive numbers in the series, for example, 5 and 8.

While writing *Regarding the pain of others,* I always had this mathematical relationship in mind. In contrast with the rational way in which I use this relationship in the structure and pitch of the piece, here this relationship is used *empirically.* Here the term empirical is understood as Feldman used it: empirical writing as intuitive writing.

Within the piece we can differentiate very easily moments of crowded movement (combinations of rhythm cells and use of different techniques in each instrument) from moments of cold stillness (*non vibrato* long notes). The same ratio 2:3 is applied here when organising these two different textures.

We can find an example of this kind of organisation in the section that goes from bar 9 (page 3) until bar 13 (page 5). From bar 9 until bar 11 (3 bars in total) we have non-static rhythmic structures whereas bars 12 and 13 (two bars) are completely static in rhythm. The relationship between both sections again follows the ratio of 2:3.

There is also an important texture change at the beginning of the forth cell of 13 bars (from bar 40). After having 40 bars of dense combination of cluster formations we move into a more metrical sound. It is the first time we hear the woodwinds on their own. This section given by two cells of 13 bars, is a big crescendo until the last five bars, where we go back to the first non-metrical cluster organisation. This time I combined the cluster with an *ostinato* on the brass section.

On the last 13 bars (from bar 161 to the end of the piece) we have a static monophonic F# played by opposite registers of the orchestra. This is interrupted by some other instruments, playing as well F# but in *sfz*. The piece finishes on an F# monody.

4.5 Conclusion

Regarding the pain of others is the most structured piece of my portfolio. I felt this was needed by the idea behind the piece. It is a serious homage to those who have suffered the injustice of war. It did not feel right for me to write a melodic or sentimental piece. In this case the structure and the organised frame helped me to be free in what I needed to say.

Chapter 5

Coincidentia Oppositorium

5.1 Introduction

The Latin term 'coincidentia oppositorium' comes from the philosophical writings of Nicholas of Cusa (1401-1464) and the Leibnitz School. We understand 'coincidentia oppositorium' (CO) in the context of mystic philosophy as the 'obligation of harmonize on the same plane both physic and mental aspects'[1]. The mystics understand this unit not as a fusion, or cancellation, but as a unity where both natures remain intact and want to emphasise that both natures remain intact.

I found this concept very interesting because of its way of understanding different metaphysical approaches. Occidental culture and philosophy had thought of the Being and looked at the Nothingness as a 'horror vacui'. However, oriental culture and specifically Buddhism has always seen the *end* as a new beginning. These two opposite approaches of nihilism created radically different understandings of our existence.

Mystics realised that the only process to understand the world is the one you have to do personally. This subjectivity is achieved through the ecstasy that eliminates the objective condition blinding the true reality. To search for your own ego, from the Being to the Nothingness, is the only way to understand our existence.

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[1] Vega, Amador. 2002. *Zen. Mística y abstracción.* Editorial Trotta, S.A., Madrid. Page 57.

CO[2] is the place where the subject takes his/her own true subjectivity and where everything is shown as it truly is. CO goes beyond consciousness where there is no difference between life and death or ideal/material, subject/object.

I regard this mystic process as very important because of the way I perceive Art. This personal transformation means going to the beginning of everything, returning to the original unity. This concept of creation is what Eckhart described as "descreation". We understand this term as the process of going back to the origin of creation without forgetting what is already created. Art does not consist in the mimesis or representation of perfect concepts – as Platonists believed. "Descreation" brings the creator to the same level as the origin of creation[3]. The creator or artist has to put himself in the same position as that which mystics placed themselves to understand existence through God. It is an absolutely subjective work where our objective position in the world has to be eliminated and we need to trust our trained intuition. 'Descreation' is the process of going back to the origin of creation to being able to go further in the present. This is the place of the CO. All our objective knowledge has to be put aside and our subjectivity allowed to work in conjunction with our intuition.

I took the idea of CO in this composition at different levels. I wanted to be able to write the music in a subjective way, trusting my intuition. I realised that in my previous compositions I didn't do that because I was too concerned about creating a system to develop pitch or rhythmic material. I always believed that a certain pitch structure is necessary in order to develop a consistent piece of music. In my opinion working just with 'random' pitch material exhausts the sources too quickly. I normally leave the other elements of development of the music material (like rhythm, instrumentation, techniques, textures, gestures or even general atmosphere of the piece) and form, as intuitive processes of the work[4]. In this case the structure of the piece has been built as well without a pre-planned system while developing the musical material.

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[2] See CO score.

[3] Vega, Amador. 2002. *Zen. Mística y Abstracción.* Editorial Trotta, S.A., Madrid. Page 110.

[4] See John Cage article *Forerunners of modern music.* March 1949. I agree with Cage's classification of the different elements of composition, where structure and method tend to be consciously controlled and material and form are unconsciously allowed to be. In CO I tried not to be consciously of the structure.

Here was my contradiction. I needed to create a system to generate pitch material fast enough to be able to concentrate on the actual process of the creation of the work. I started working with a 'magic square' to generate the pitch material. Magic squares have been used for over 3,000 years. They are descendants of the oldest known number mystery, the legend of Lo Shu, found in China in the book *Yih King*. The legend says:

In the ancient time of China, there was a huge flood. The people tried to offer some sacrifice to the 'river god of one of the flooding rivers, the 'Lo' river, to calm his anger. However, every time a turtle came from the river and walked around the sacrifice. The river god didn't accept the sacrifice until one time, a child noticed the curious figure on the turtle shell. Hence they realized the correct amount of sacrifice had to add to 15 (The word 'Shu' means books.) (Fig11) [5].

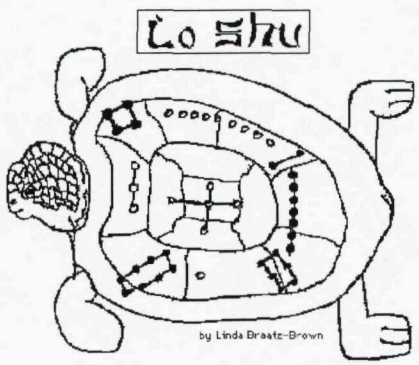


Fig11

If we write the numbers of the turtle Lo Shu in a square (*Fig 12*) we will find that the sum of any combination (forward, backward or diagonal) of any row adds to 15. For example if we take the top row 4, 9 and 2 we can see that the addition of these three numbers is 15. The same happens with all the 16 direct combinations and all the 48 indirect ones.

[5] http://mathforum.org/alejandre/magic.square/loshu.html

4	9	2
3	5	7
8	1	6

Fig12

5.2 Pitch Structure

The way I am using the Lo Shu magic square to generate pitch is quite simple. I am taking each number of a row as an interval in semitones. In other words, if we take for example the first row 492 and the C note as a start point, the first interval from C will be the E note as we add 4 semitones from it. From that E note I will add the second interval that is 9 semitones which is a C#. From that note I will add the last number of the row (2 semitones) obtaining a D# as a result (*Fig 13*).

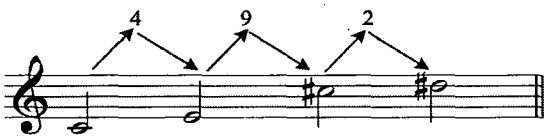


Fig13

When I started working in this way I realised that I was always adding the intervals in the same direction. As a result, and because the addition of any row of the Lo Shu square is always 15 I always had the same note at the end when I started from a certain point, i.e. starting always from the C note I had a D# even though the two internal notes where different. See in figure 14 the chordal formation result of adding the numbers from rows 492, 357, 816 and 276 as an example.

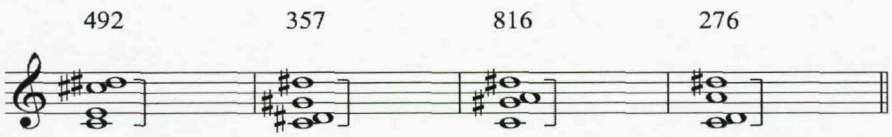


Fig14

I understood that the possibilities of this system would increase and would be richer if I added the parameter of direction. Again I counted the number of possibilities: 2 different directions in 3 different positions with the possibility of repetition, which is a total of 8 possible combinations per row. ($2^3 = 8$).

Summarising, I have considered 3 different parameters involved in the construction of the pitch material from the Lo Shu magic square. The first one is the row combination I choose. Secondly the starting point where I will begin to add the intervals and finally the direction of the interval. If we count the possibilities in a more mathematical way we see that 48 combinations of rows, plus 12 notes as starting points, plus 8 combinations of directions add up to a total of 4608 different row combinations of 4 notes. (If we consider that transposition is not a different combination then we have 384 combinations).

Since I had so many combinations and possibilities and I did not want to spend a considerable amount of time generating data, I decided to build up a computer program that would generate it for me. This idea is closely related to the concept of CO and that is the reason why I decided to name it CO. It is the coincidence between two opposites: the rational and objective process generated by a computer and the subjective process created by a human mind that is the piece of music itself.

In order to create the program that generates the pitch data I have used Max/MSP, a graphical environment for music[6]. The program itself is relatively simple.

It involves the three parameters explained above. Inserting the desired row from the Magic square, the program will generate a certain amount of rows. The computer will decide randomly the initial note for each row. Once this is obtained, it will generate the first interval deciding randomly again its direction. This process will be done two more times from the generated pitch to complete the third interval and the resulting four notes. We can decide how many rows we want to be generated each time. Every time we start the program, all three parameters (starting point, direction and the final 4 notes) remain stored in a list where we will have access at any time to work with it. In figure 15 we can see the principal *patch* of the program.

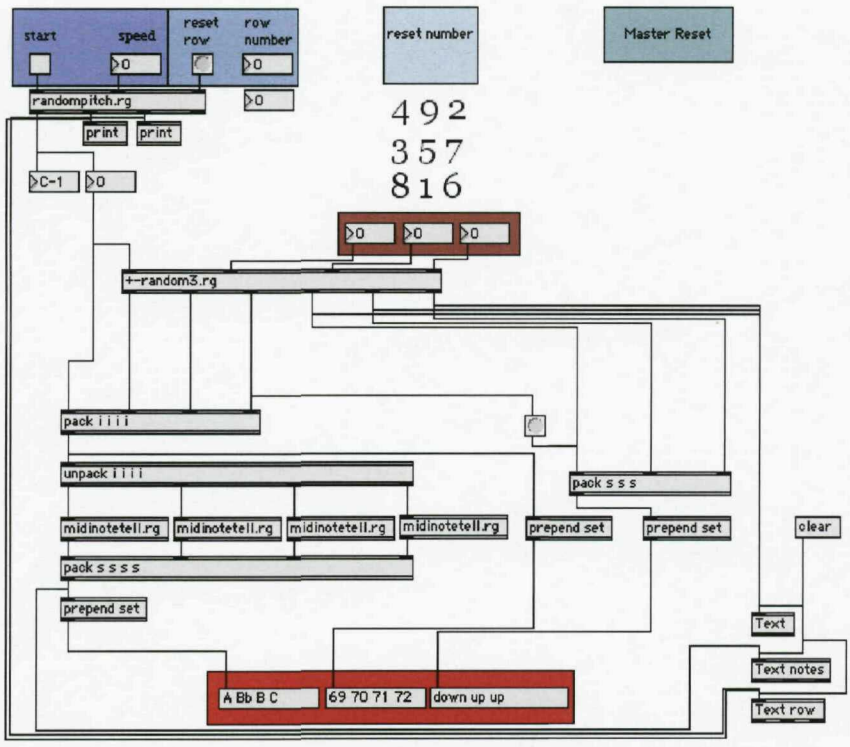


Fig15

[6] http://www.cycling74.com

We can see in the red box at the bottom four notes (A Bb B and C), next to them we have four numbers (the corresponding midi notes) and in the last box we find the three direction words. The first four notes are the actual row created from the C note going down the first interval and going up on the second and last interval[7].

Since this is a program to generate pitch data to be used later for the piece, the program had to produce a table with the results (*Table 1*):

492		
E bang	E C D# C#	down down down
F bang	F C# Bb C	down up up
G bang	G D# F# E	down down down
C bang	C G# F# E	down down down
#G bang	G# C A G	up up down
#C bang	C# A C D	down down up
#D bang	D# G Bb C	up down up
F bang	F C# Bb C	down up up
bB bang	Bb F# A G	down down down
E bang	E G# F G	up up up
G bang	G B D E	up down up
D bang	D F# D# F	up up up
row number 2		
#F bang	F# Bb G F	up up down
#C bang	C# A F# G#	down up up
G bang	G B G# Bb	up up up
#D bang	D# G Bb G#	up down down
#D bang	D# G Bb C	up down up
A bang	A C# E F#	up down up
C bang	C E G F	up down down
G bang	G B D E	up down up
F bang	F A C D	up down up
B bang	B D# C D	up up up
D bang	D F# A G	up down down
bB bang	Bb D F D#	up down down
C bang	C E C# D#	up up up

Table 1

[7] Apart from this principal patch there are two other important sub-patches dedicated to generate the randomness of direction and distribution of rows. See appendix 5 and 6.

It is very interesting to analyze the resulting data. On the first column we have the first notes of every four-note row. We can see that in the second column there are the actual rows of four notes and on the third column we read the directions used for each row. In this case I have used the 4, 9, 2 combination. We can see that when the directions are the same, the rows are transpositions in different levels depending on the first note. Consider for example the first and the third row. The first row had been obtained by adding the intervals of 4, 9 and 2 semitones from an E note in a down direction. The result is the row E C D# and C#. The third row has been obtained by adding the same interval in the same direction, but this time from a G. The resulting row G D# F# E is a transposition three semitones higher than the first row (*Fig16*):

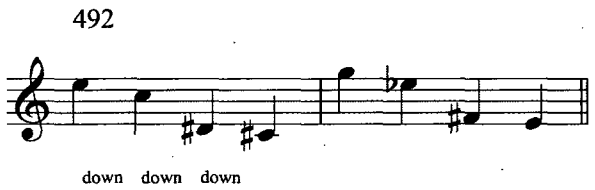


Fig16

Apart from this simple example of the transposition we can see lots of relationships between the rows, for example inversion, retrogradate, repetition of intervals in the middle of the row. It is interesting to note that all these relationships are *randomly* generated by the computer. In a certain way I can still have control of the resulting pitch by introducing the relationship that I want to be established, that is by introducing the first three numbers coming from the Lo Shu square. Every combination of numbers will create a different pitch relationship in each row, producing a richer and varied sonority for the piece. I am not interested in having complete control of the pitch material. It is the global control of the general class of relationship that I found fascinating.

I have explained so far how I generated pitch through a very rational process assisted by computer (except for quarter tones, which were added to achieve colouristic effect). The intuitive side of the *Cointidentia Oppositorium* was given by the choice of rhythm, instrumentation and technique.

The way I worked in order to develop my intuition was to write small cells using the generated pitch material, and then decide whether I wanted to keep them and develop them further. Each cell would be a sketch of some rhythmic idea, a search for some particular instrumentation or a test of a certain instrument technique. The structure of the piece grew out of the development of these small cells into larger units

5.3 Structure and Texture

The way I have structured the textures, and the organisation in time of these textures has a more direct relation with the title of the piece

The opening contains the first of many timbral oppositions (woodwind/piano). However there is also an interesting relationship between homophonic attacks and heterophonic attacks within the duo, as seen, for example, in measure 3.

When cellos enter in measure 9, they initiate the first homophonic duo and because of this (because they can be considered as one unique sound), they form a trio with the woodwind and piano. Thus the piece shows an opening out from c.a. *solo*, to *duo* with piano, to *trio* with the cellos as one unit.

These sorts of instrumental groupings with clear textural changes with homophonic/heterophonic oppositions and coincidences are present throughout the piece.

As soon as the cellos end their duo, the wood blocks enter, like a parametric signal i.e. to reinforce the duality of the homophony/heterophony. This is made when the next duo (c.a./cl) enters, as the wood blocks drop out immediately. This new trio (c.a./cl/db) is a variation of the 'idea of trio' which was initiated by cl/vcl2/perc, which itself 'refers back' to the trio of c.a./vcl/pno (if we count the two cellos as one instrument). However, we have a counting problem as the c.a. and clarinet now play homophonically and could be classed 'as one', in which case, we have a duo. There is here an intentional ambiguity.

What is maintained without question, however, is the appearance of timbral contrast and the rhythmic similarity.

Once this duo (or trio) ceases, the wood blocks re-enter performing the function which they have been assigned. On p.13 for the first time we see some rhythmic interplay between the wood blocks and the c.a.. As on previous occasions one instrument (in this case the db) acts as a 'timbral ground' (significantly, also the most 'neutral' rhythmically) against which the more soloistic parts stand out.

On p.14 when the duo of c.a./clarinet is re-established the piano takes on the 'signal' role of the wood blocks and emphasises the new texture with short clusters. This duo is joined momentarily by the two cellos and for the first and only time in the piece we have two pairs of instruments, each pair playing in homophony with itself but heterophonically with the other pair. This is also the loudest moment of the piece.

The slower tempo heralds a new section in which duos fragment (e.g. the c.a./cl. duo) and new ones are suggested (pf and vibes, although they never 'get it together'; similarly with the c.a. and the vibes). However, on p.20 the process of fragmentation suggested by the c.a./cl. duo is strongly contradicted by an example of extreme coincidence; I am aware of the difficulty of performing this section as it is written. There would be a very high probability that this would not sound homophonic. In any case this is intended to sound like two people *trying* to play together so the dialectic of homophony/heterophony would be manifest in another (interesting) way. This is representative of how C.O. works. In a sense C.O. is trying to say that humans will always be attached to the human condition and that the perfect C.O. will never exist. It is a Platonic concept. The music here follows this idea up to the point that the executers of this piece will have to experience it by themselves.

The 'first duo' of the two cellos returns on p.21 as the c.a./vibes duo fragments. The cellos' homophony turns once more to heterophony on p.24 and from then on no parts 'coincide' vertically. However, one manifestation of the concept of 'coincidence' which has hitherto not been shown is the need to coincide at the boundaries of a gesture, to make one 'super-gesture' or single line; this happens on the last two pages.

Thus, as if vertical alignment has been shown to 'fail' or to be problematic, 'horizontal alignment' is still left as an option. The minimum of overlap between the instruments creates the one section of the piece in which the timbral differences between the instruments are laid bare, and are at their starkest. Individuality 'wins' in one sense (the timbres are ineluctably self-contained) but so does communality in the sense that the instruments have to combine to make one horizontal line. The piece remains dialectical until the very end.

5.4 Conclusion

I regard the idea of Coincidentia Oppositorium not only as an idea for a single composition but as a broad new way of composing that I will develop in further pieces.

Chapter 6

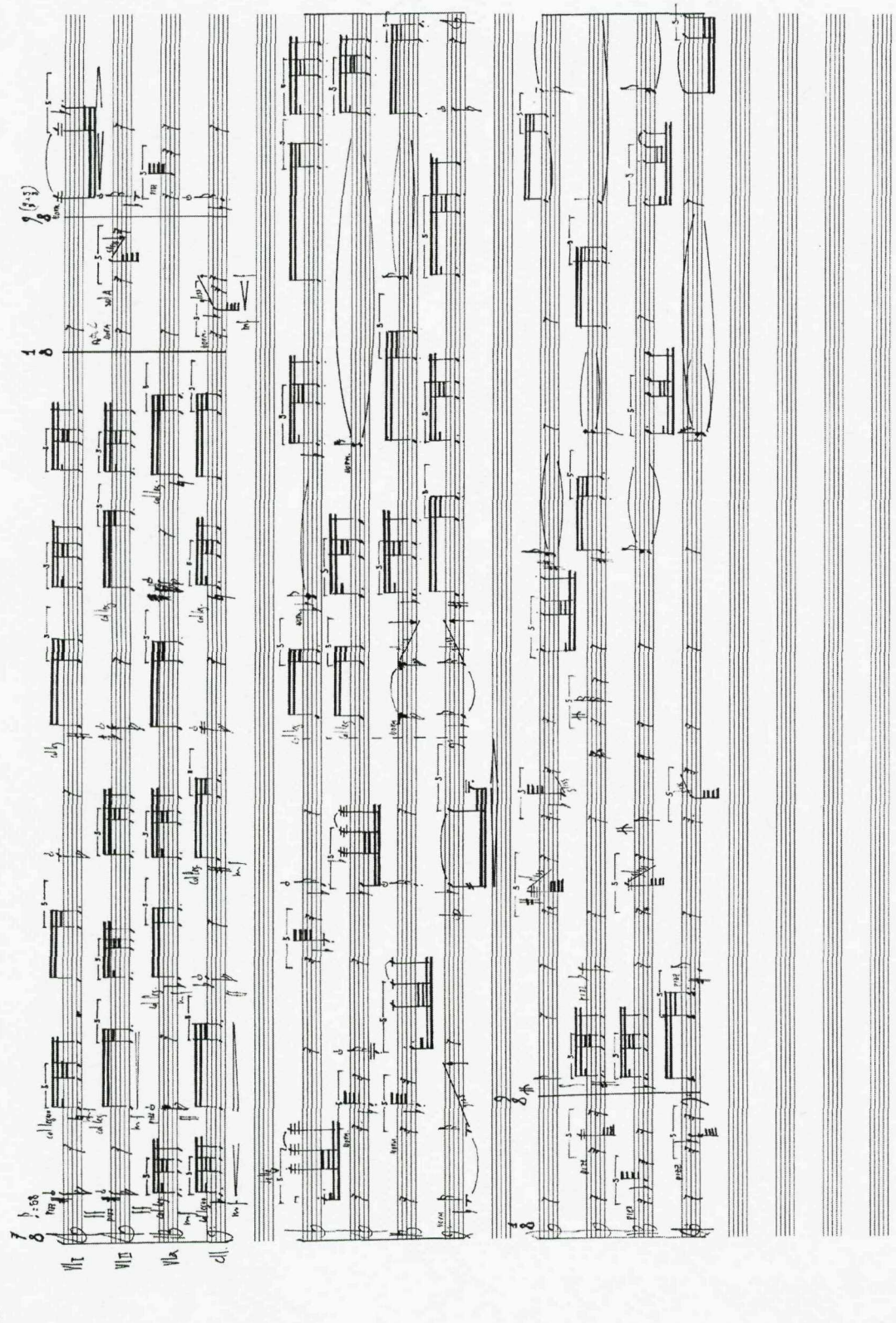
Conclusion

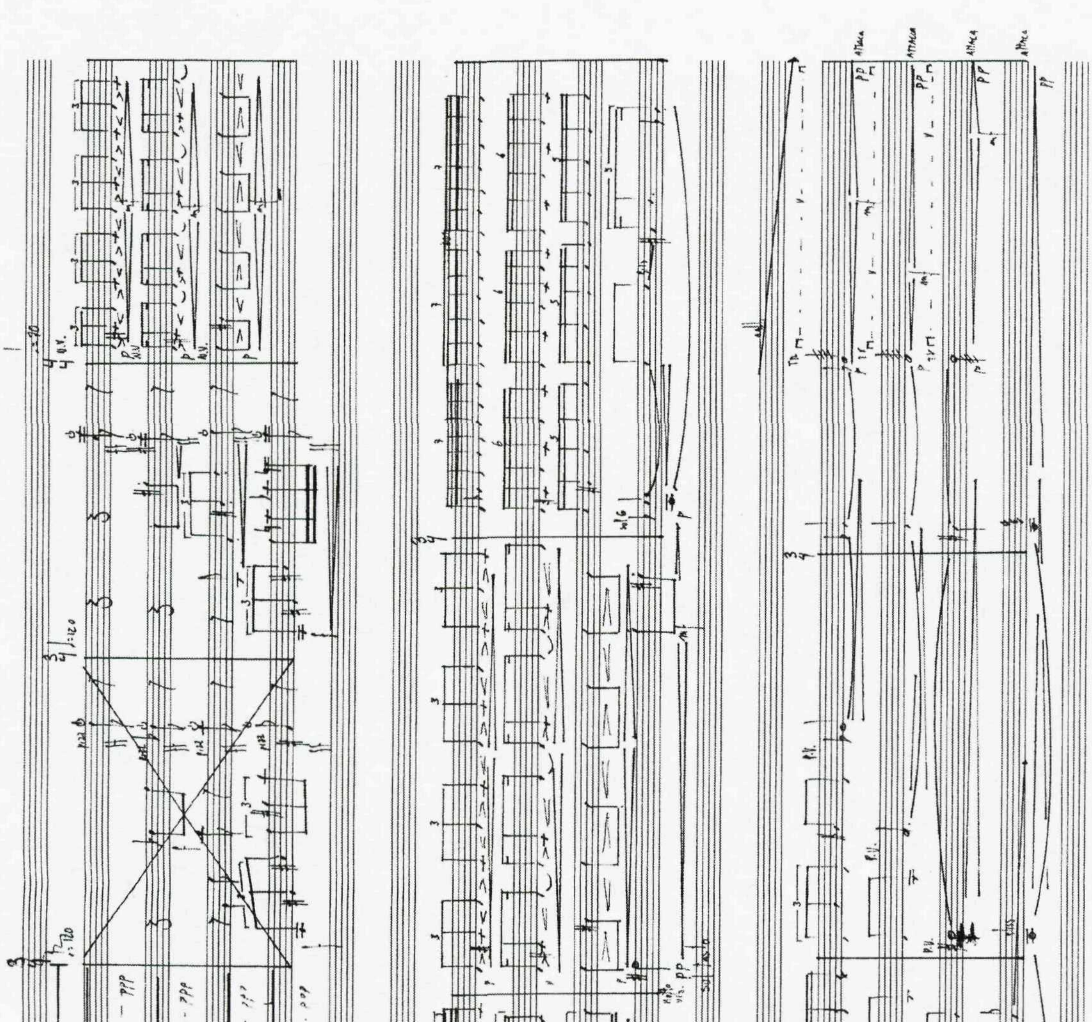
Music, and art in general, mirrors society by exaggerating, contrasting and reacting to its Gods and Demons. Nowadays in Western Europe we live in a society of change and plurality. In music, different styles define different ways of life and different emotional states, each with their own authenticity. As a composer, I want enjoy this plurality and to make use of it. It is by mixing and reinterpreting these styles and emotional states that I feel composition has a place nowadays.

However, I am not particularly interested in the style of my compositions or in the connotation a particular style might bring *per se*. For me, style has become just a tool in order to transmit ideas and emotions and I believe there is meaning in music beyond style. It is this new meaning and re-contextualisation of style that fascinates me. Furthermore, any procedure is valid to obtain any result and it is actually through experimenting, fusioning and decontextualising different compositional praxis that I want to express new ideas.

My portfolio reflects a life project. It is an eclectic portfolio with serious music and less serious pieces. It is through this plurality of different music, methods and styles that I want show who I am as a composer.

APPENDIX 1





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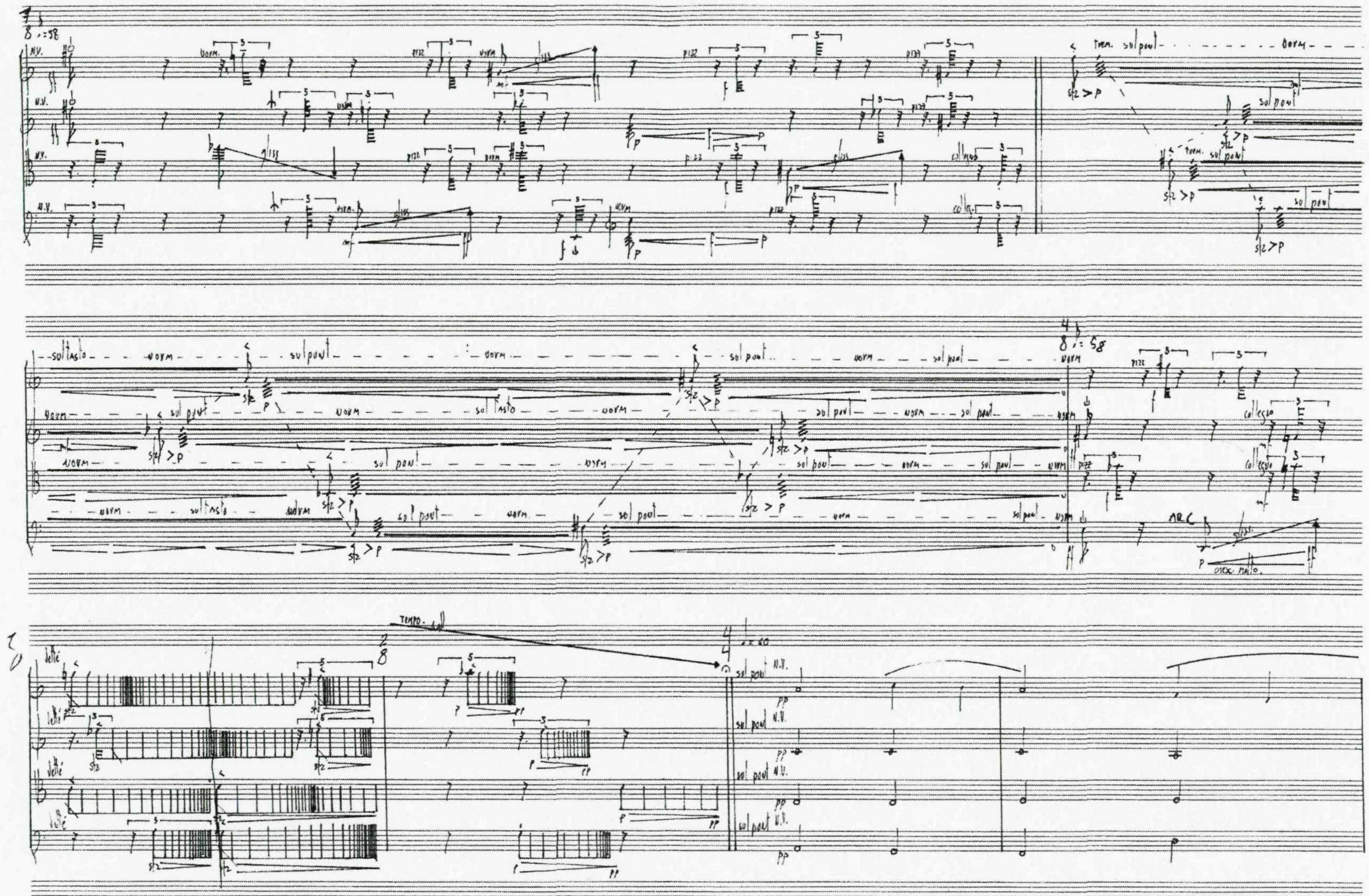
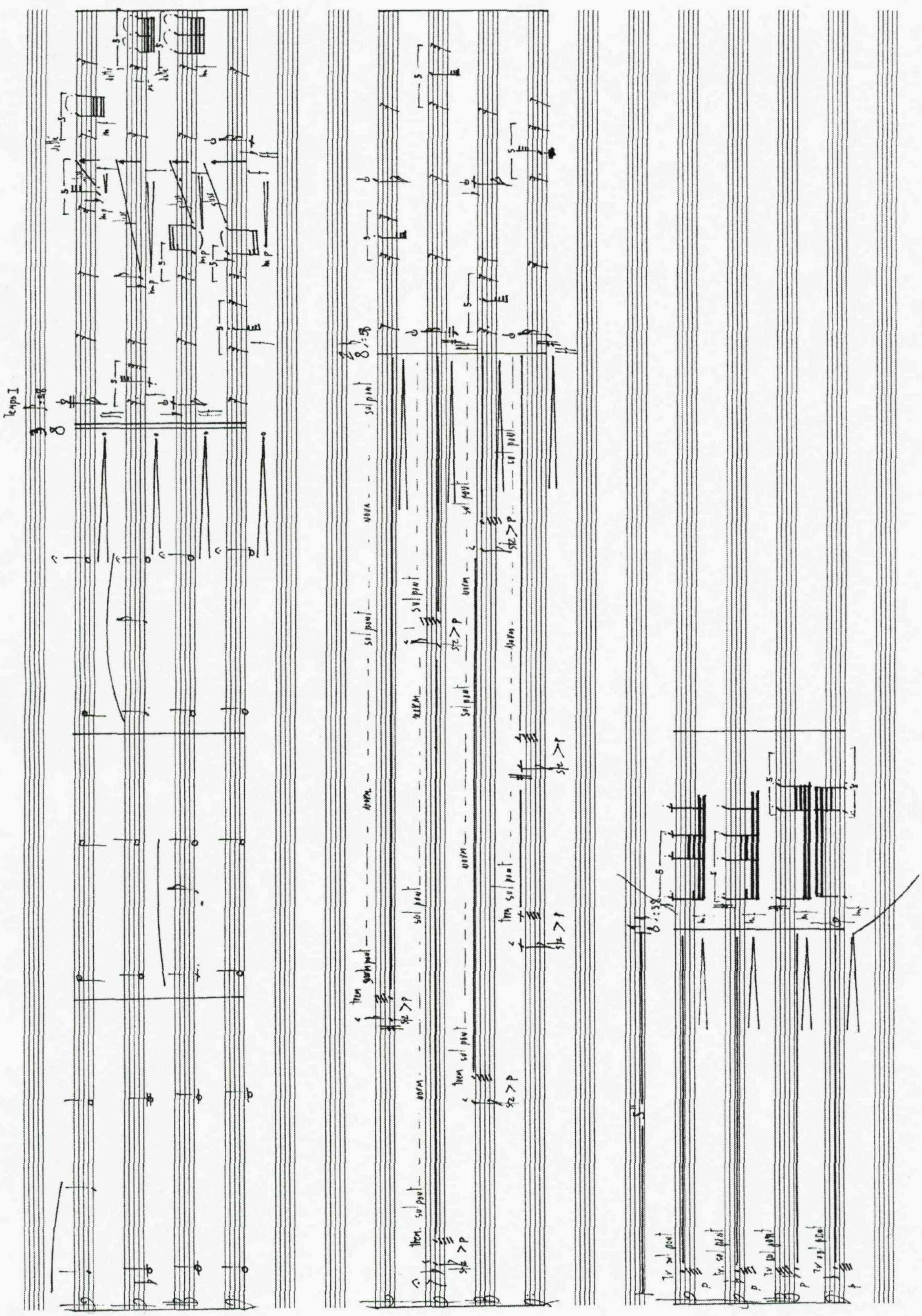


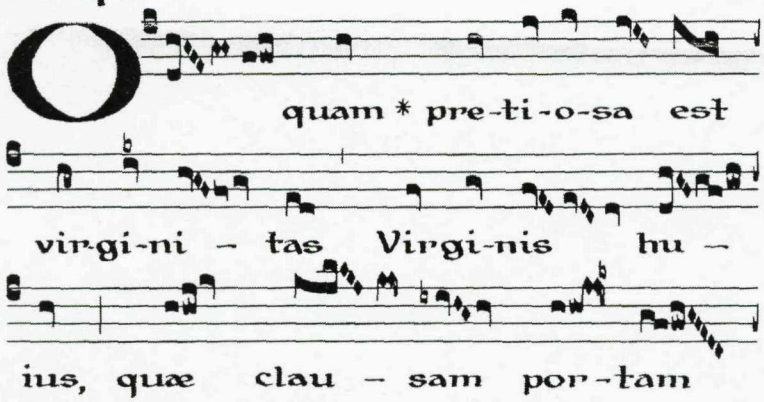
N.V.
norm
pizz
gliss
sul pont
sul tasto
trem.
col legno
ARC
Tempo

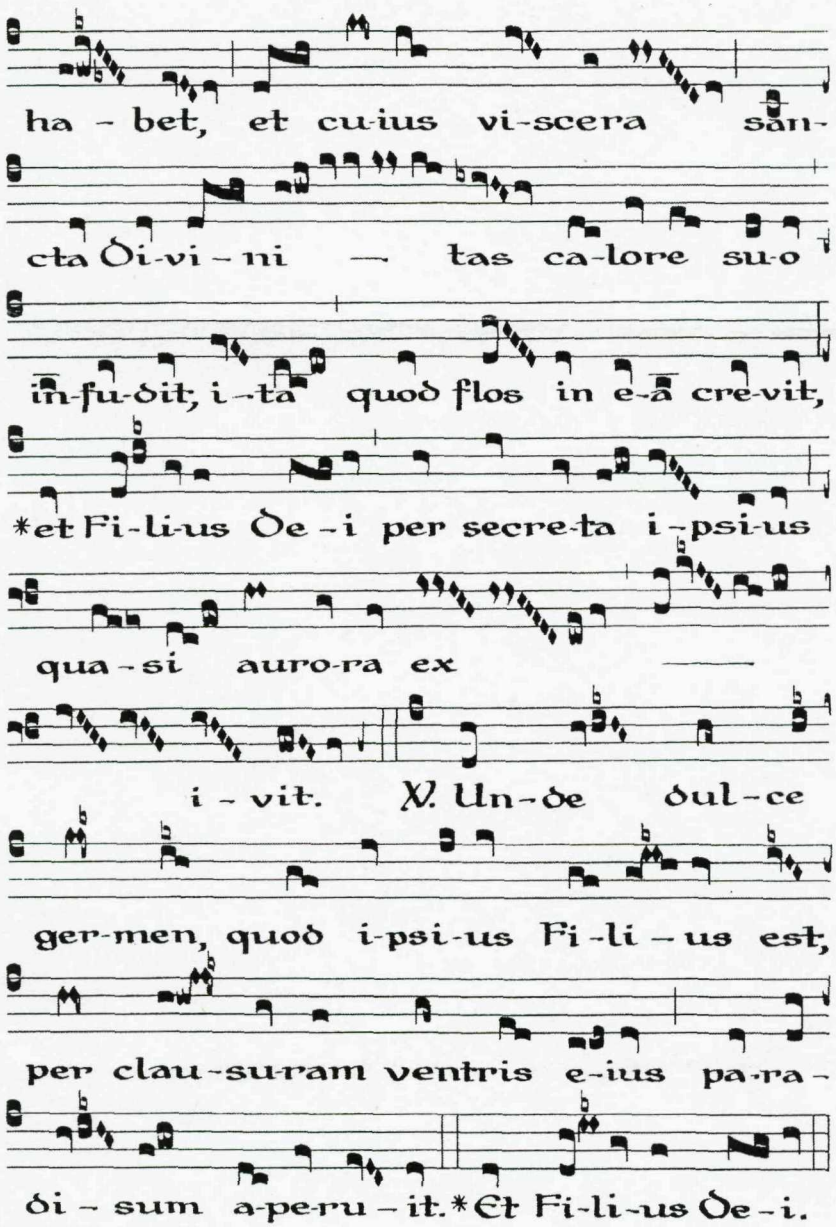


APPENDIX 2

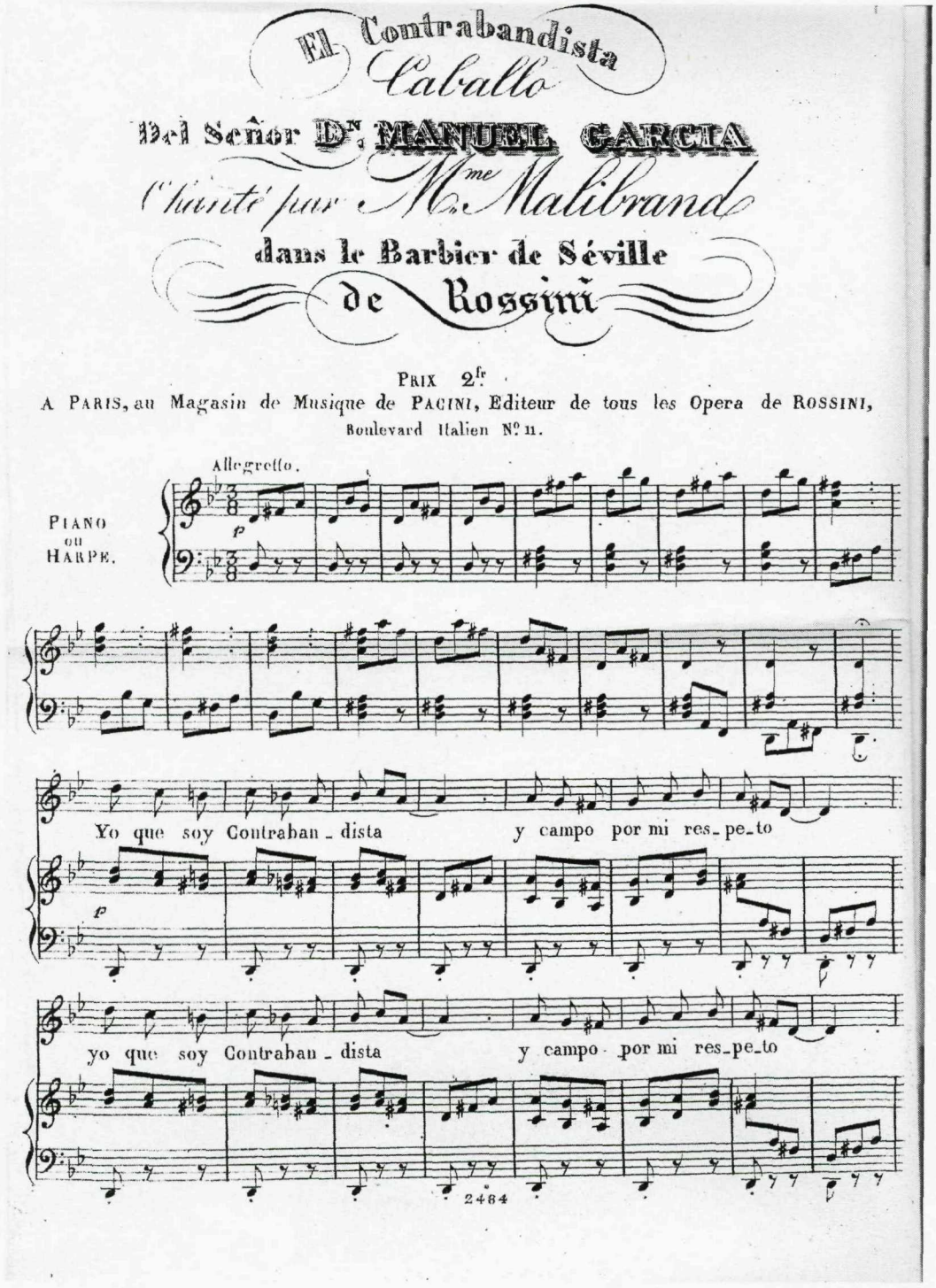
63 De Sancta Maria

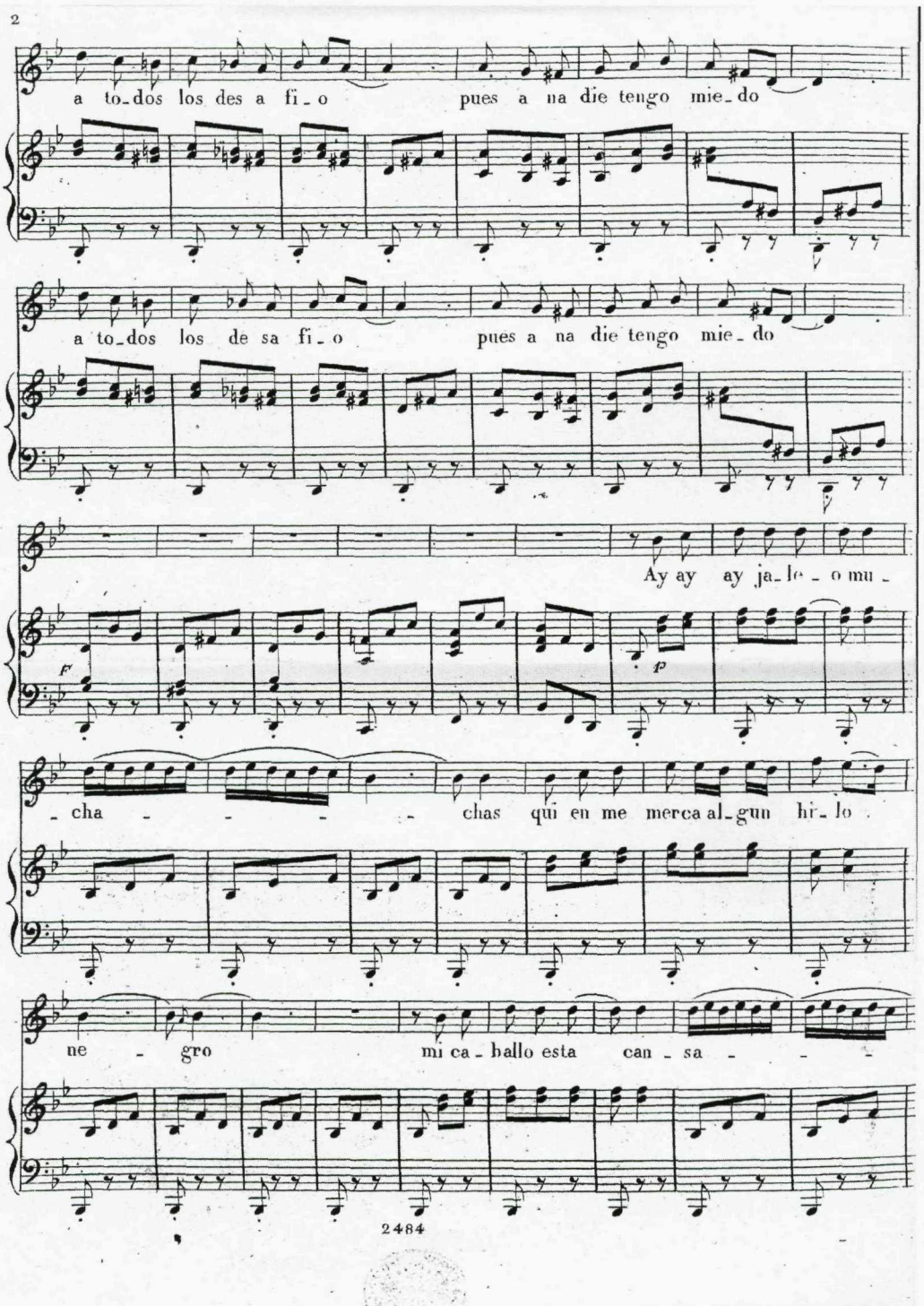
Resp.

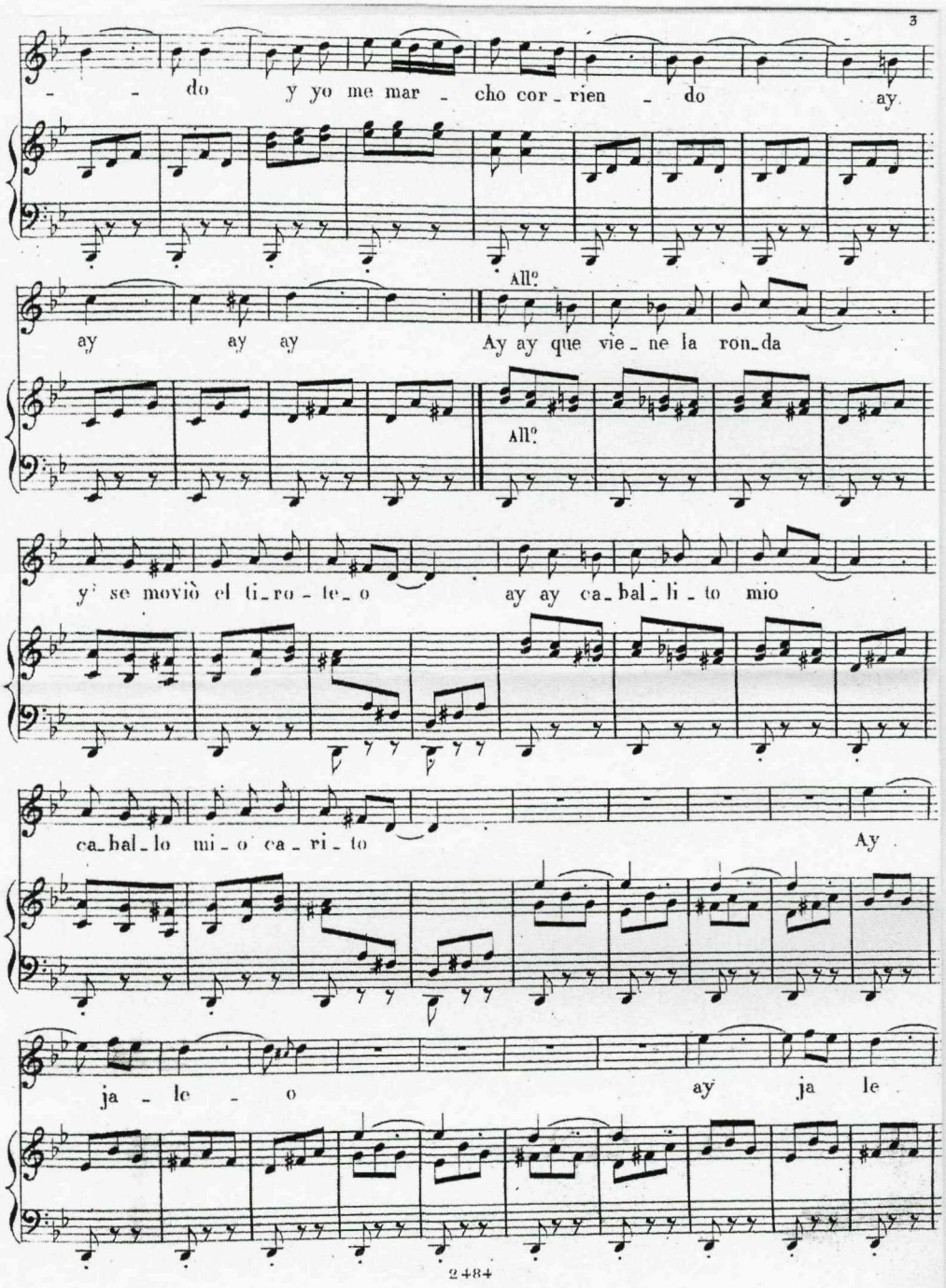


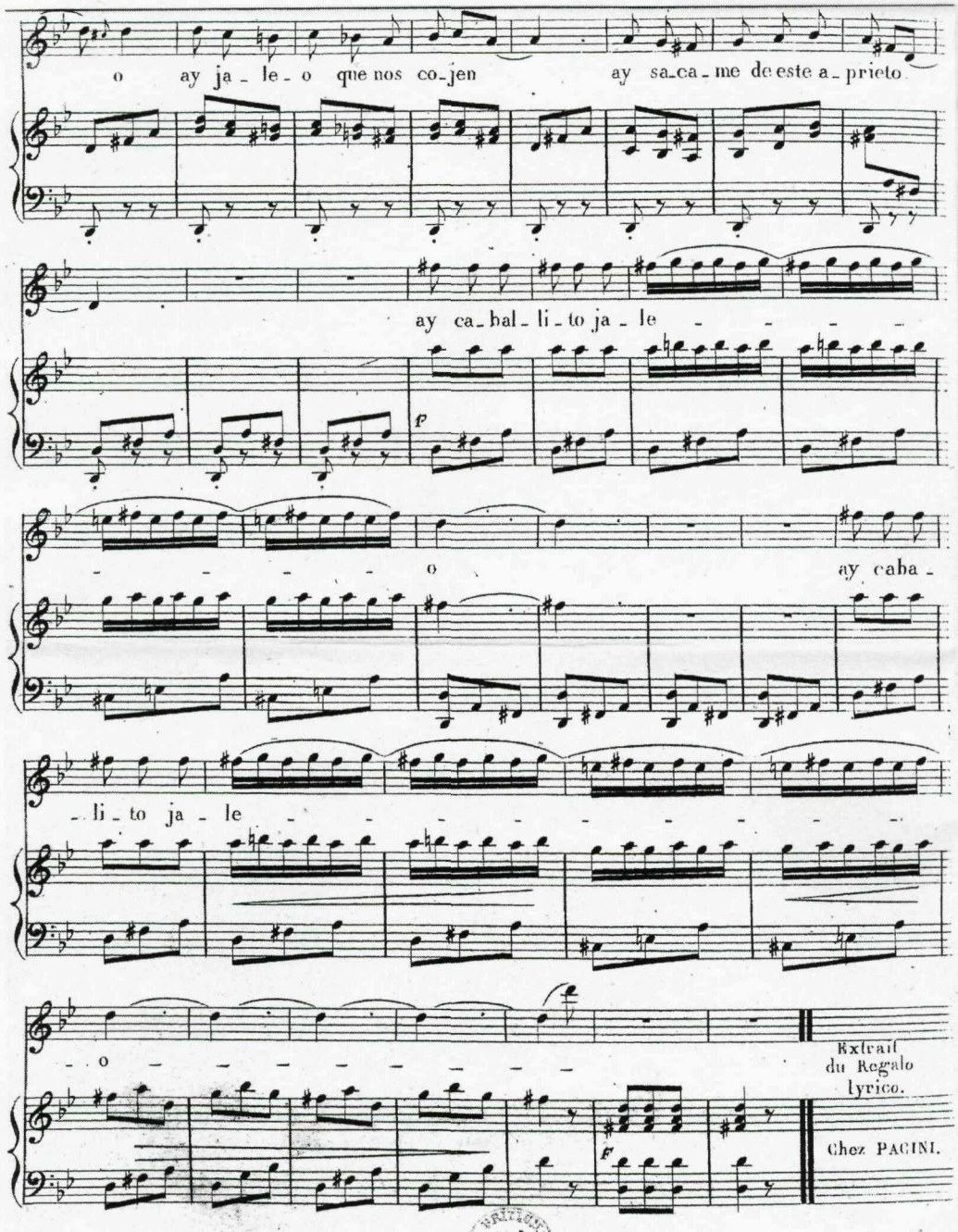

ha - bet, et cu-ius vi-scera san-
cta Di-vi - ni — tas ca-lore su-o
in-fu-dit, i - ta quod flos in e-a cre-vit,
*et Fi-li-us De - i per secre-ta i - psi-us
qua - si auro-ra ex —
i - vit. ℣. Un - de dul - ce
ger-men, quod i-psi-us Fi - li - us est,
per clau - su-ram ventris e-ius pa-ra -
di - sum a-pe-ru - it.* Et Fi-li-us De - i.

APPENDICE 2

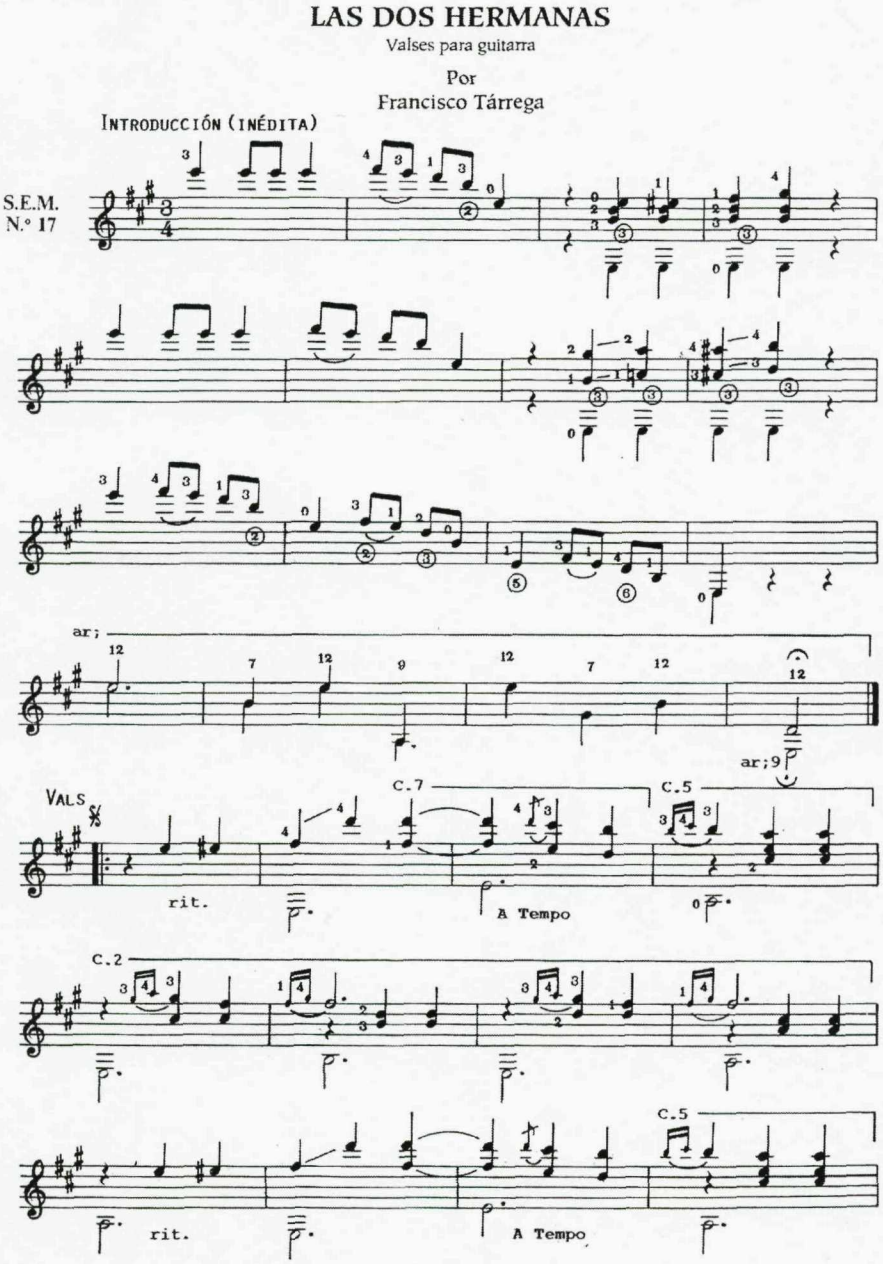

El Contrabandista
Caballo
del Señor Dr. MANUEL GARCIA
Chanté par Mme Malibrand
dans le Barbier de Séville
de Rossini
PRIX 2fr.
A PARIS, au Magasin de Musique de PACINI, Editeur de tous les Opera de ROSSINI,
Boulevard Italien Nº 11.
Allegretto.
PIANO ou HARPE.
p
Yo que soy Contraban_dista y campo por mi res_pe_to
p
yo que soy Contraban_dista y campo por mi res_pe_to
2484

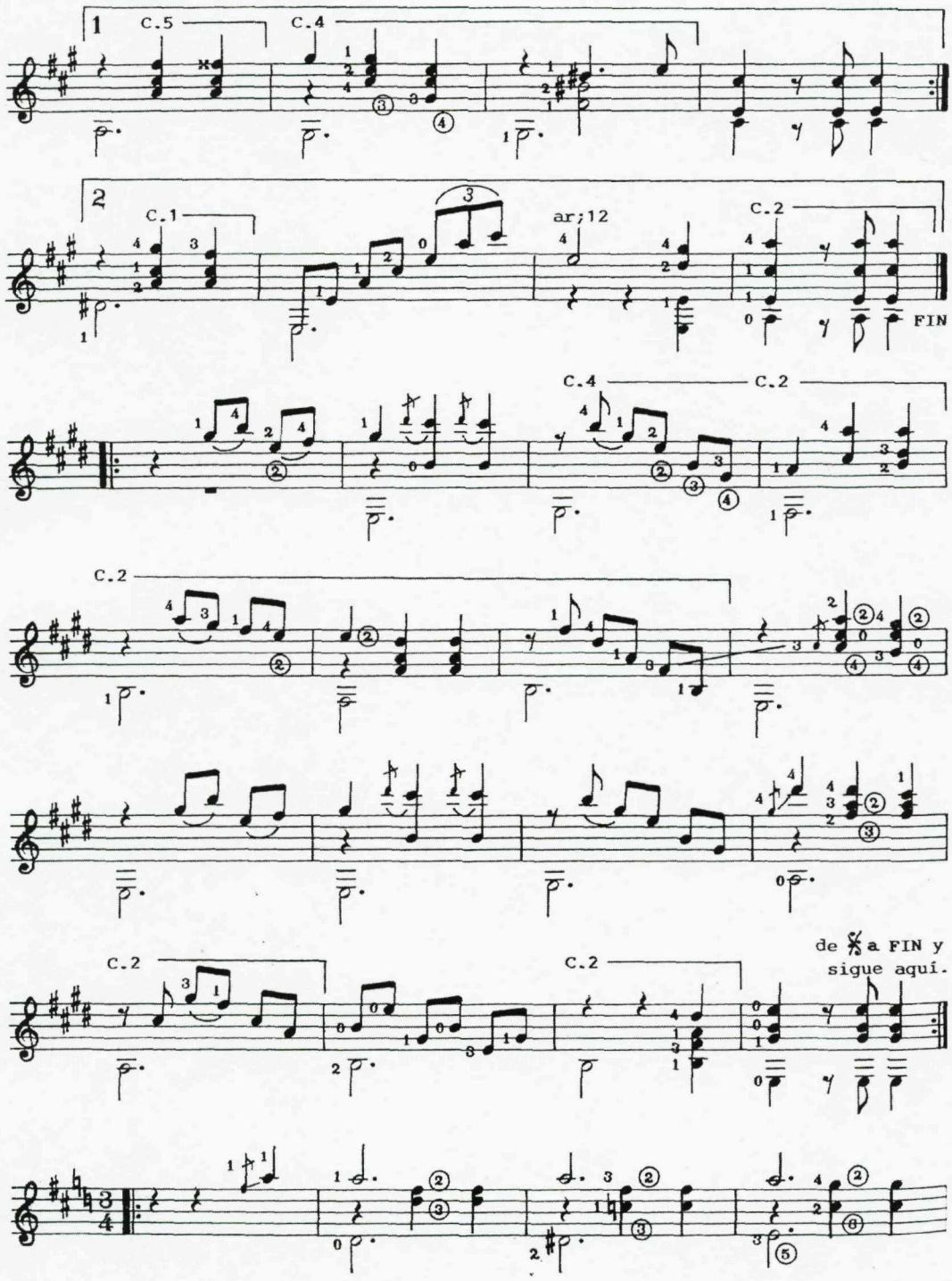

a to_dos los des a fi_o pues a na die tengo mie_do
a to_dos los de sa fi_o pues a na die tengo mie_do
Ay ay ay ja_le_o mu_
f
p
_cha_____chas qui en me merca al_gun hi_lo
ne_gro mi ca_ballo esta can_sa___

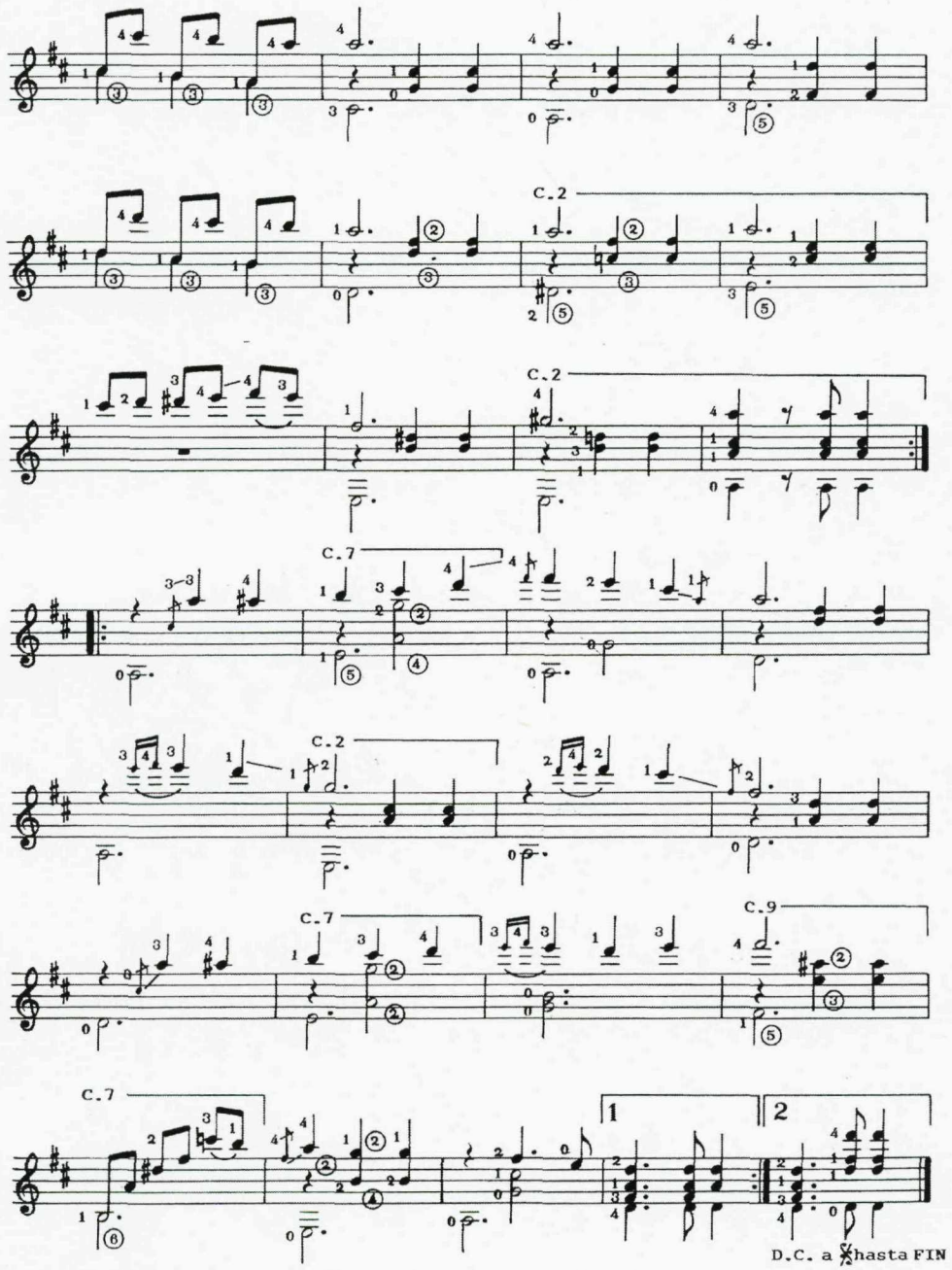

- - do y yo me mar - cho cor - rien - do ay
All°
ay ay ay Ay ay que vie - ne la ron - da
All°
y se moviò el ti - ro - te - o ay ay ca - bal - li - to mio
ca - bal - lo mi - o ca - ri - to Ay
ja - le - o ay ja le


o ay ja - le - o que nos co-jen ay sa-ca - me de este a - prieto
ay ca-bal - li - to ja - le
f
o ay caba -
- li - to ja - le
- o
Extrait du Regalo lyrico.
f
Chez PACINI.

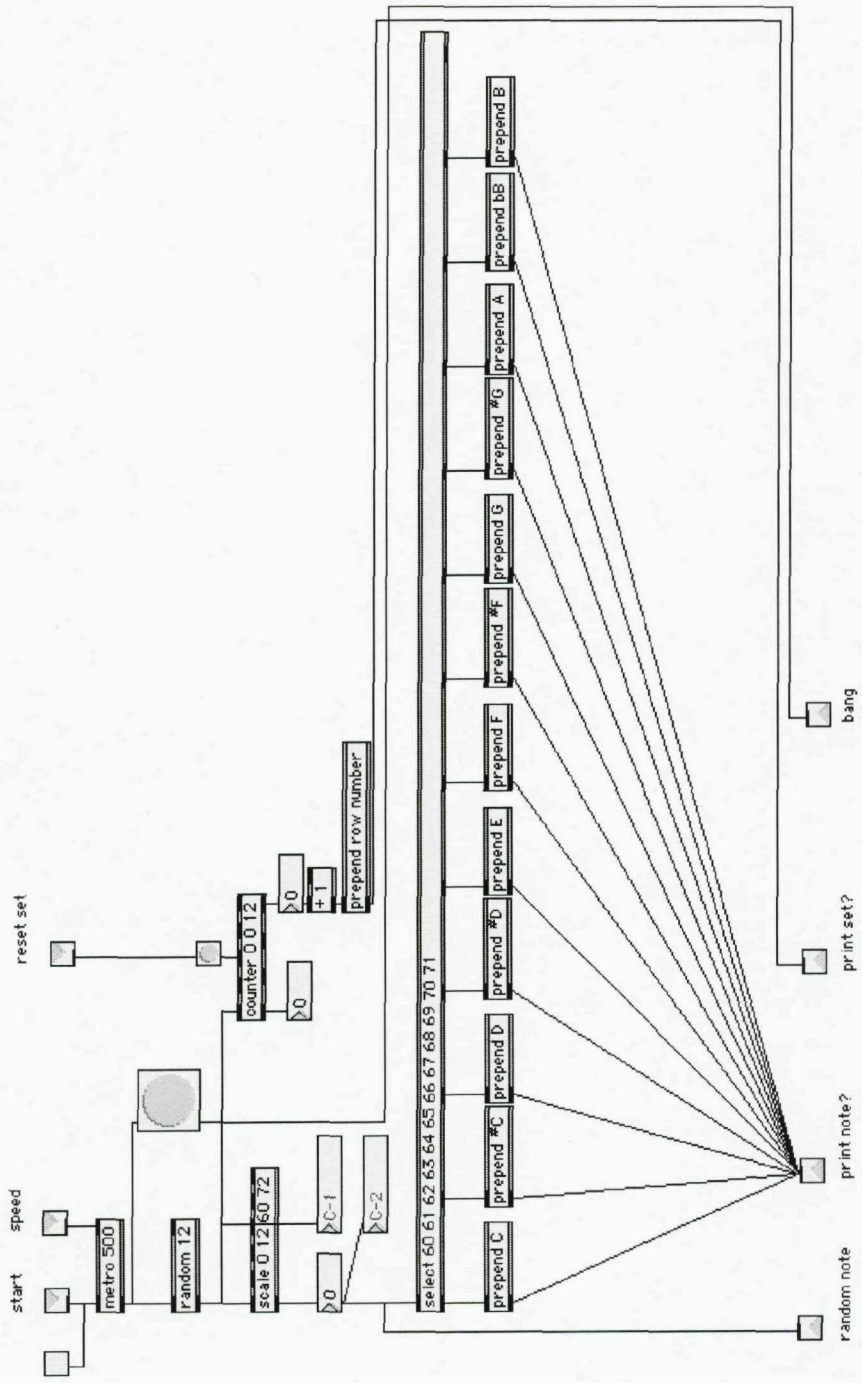
APPENDICE 3


LAS DOS HERMANAS
Valses para guitarra
Por
Francisco Tárrega
INTRODUCCIÓN (INÉDITA)
S.E.M.
N.° 17
ar;
ar;9
VALS
C.7
C.5
rit.
A Tempo
C.2
C.5
rit.
A Tempo

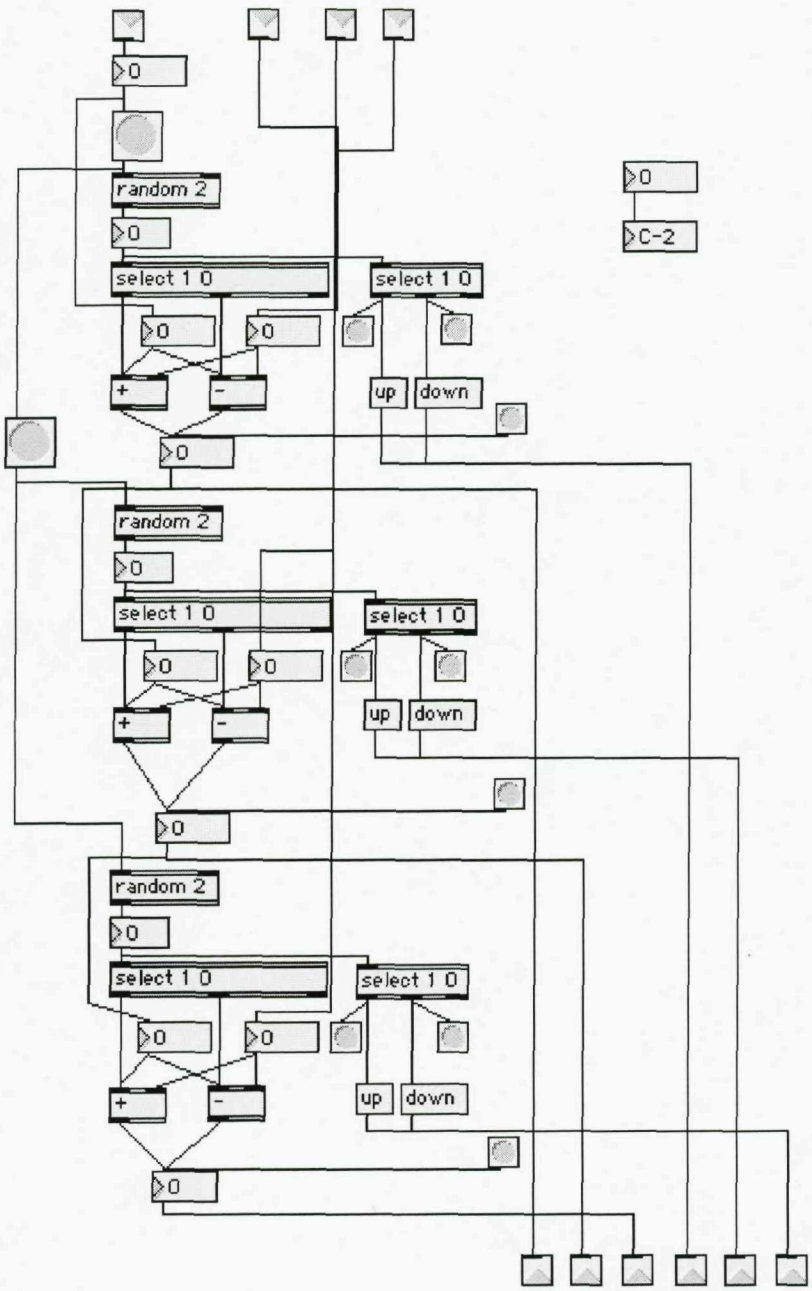

1
C.5
C.4
2
C.1
ar;12
C.2
FIN
C.4
C.2
C.2
C.2
C.2
de 𝄋 a FIN y
sigue aquí.



APPENDIX 5


start
speed
reset set
metro 500
random 12
scale 0 12 60 72
counter 0 0 12
>0
+1
prepend row number
>C-1
>C-2
select 60 61 62 63 64 65 66 67 68 69 70 71
prepend C
prepend #C
prepend D
prepend #D
prepend E
prepend F
prepend #F
prepend G
prepend #G
prepend A
prepend bB
prepend B
bang
print set?
print note?
random note

APPENDIX 6


0
random 2
0
select 1 0
0
0
+
-
0
select 1 0
up
down
0
C-2
random 2
0
select 1 0
0
0
+
-
0
select 1 0
up
down
random 2
0
select 1 0
0
0
+
-
0
select 1 0
up
down

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