DECONSTRUCTING THE STRUCTURE

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Doctor of Philosophy

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Statement of originality

I declare that the research presented here is my own original work and has not been submitted to any other institution for the award of a degree.

Signed: .................................................................

Date: 08-09-2014

.................................................................
Abstract

The idea of having something from the outside – extra-musical events, artifacts or notions that suggest reason, rules and structure with which to compose – is for me both fascinating and essential in respect to my nature as a composer. These various sources of inspiration are mostly external to the music itself. They can relate to ancient history (as in Shabtis), a scientific-visual element (as in Swirling Yellow), a historical story with an immediate family connection (as in my opera *An Italian in Ethiopia*), a poem (as in *Mutabor Semper*) and a musical work (as in the *Uninterrupted Oneric Fantasy*, where J.S. Bach’s monumental *Goldberg* variations allowed me to realize the potential of inner balance and musical results that such rational constructions can render). In this thesis, I will demonstrate how extra-musical events or dreams have triggered my imagination and allowed me to find my own musical expression.

All these works use evocative sounds as pathways or guiding lines to that “external” idea. These pathways carry striking sounds such as those produced by the Balinese Gamelan Instruments used in *Shabtis*; or the Singing Bowls and the Japanese Rin; or the Harmonic Device Pedal (HDP); or the Electronic Sounds. These sounds function as an important complementary counterpoint to the main structures of the works.

The method I have used in developing my musical language is that of building a solid structure and then deconstructing it. This approach is similar to that used by sculptors, namely, taking away the extraneous material, subtracting the residua to better shape the delicate final object of musical art.
Acknowledgments

My first and sincere appreciation goes to Dr Michael Smetanin for being not only my supervisor but also my mentor. Thank you for your perceptive comments as the chapters of this thesis trickled to you for revision. I am indebted for your patience and understanding in the midst of my struggles and frustration in attempting a PhD in a new country and in a second language. My gratitude also goes to your wife for being such a caring and hospitable person and for your friendship throughout these years. You have opened your house to me in my hour of need.

I am also most grateful to my co-supervisor, Dr Ivan Zavada for his insights, feedback and overall support during these four years. Thank you for standing up for me and providing practical suggestions.

A sincere thanks also goes to the Australian Government for granting me a full International Postgraduate Research Scholarship (IPRS); for the International Postgraduate Allowance; and to the Conservatorium of Sydney for giving me the Henderson Research Scholarships and the New & Contemporary Classical Music Performance Grant. These four years have been the most fertile in my career as a composer because of the financial support I have received from all of you. It has been a pleasure to study at the Conservatorium of Sydney and to interact with the various departments. The performance of my compositions would not have been possible without their participation and support.

A sincere thanks to all my colleagues who were involved in performing my compositions, and particularly to Prof. Dunbar Hall for introducing me to the intricacies of the Gamelan Orchestra, and to three of the most skilled players I have ever met: Eva Frey, Laura Altman, and Mirey Akiyama. A special thanks also to the Conductors of my compositions: Dr Anthony Clarke for conducting Shabtis, and Natalia Raspopova and the MME Orchestra for interpreting Swirling Yellow. My appreciation goes to the Opera Department, particularly Rowena Cowley and Maree Ryan, and all the Opera singers: Daniel Tambasco, Andrew Woddley, Jared Lillehagen Rebecca Moret, Sylvie Humphries, Nyssa Milligan. And thanks to my
colleagues, and students involved in the *Six Artist* project, not to mention the amazing cellist Julia Ryder and the virtuoso pianist Viet Anh Nguyen. Thank you for your enthusiasm, feedback and your incredible talent and professionalism.

A big thanks to Dr Ian Shanahan for lending the Rin instruments and encouraging my research with your precision; to Brinely and Anun for lending the singing bowls during various occasions; and to Corinne Urquhart for her expert support as a dancer, choreographer and film maker in all my projects, and her lovely family who participated in the Opera: thanks Little Girl! Credit also goes to all those who have been involved in making CDs and DVDs. I now have a tangible memory of the work of four years thanks to you.

To the CEO of the Australian Music Centre, John Davis. What would I have done without your survival tips for composers? To all the staff of the Conservatorium of Sydney than you for your kindness and practical assistance. My appreciation also goes to the Italian Graffiti School for their interest and for advertising my projects.

An array of people deserve and have my appreciation for their genuine friendship, support, practical help and encouragement. No one writes a thesis alone, particularly in a second language. Thank you for the hours of editing, and other technical skills and practical help you have so generously provided. To my “Australian” family: Rebecca Cernec, Anisha Thomas, Daniel Riley, Aidan Rosa, Gianna Marasco, Mariangela & Gaetano Amorosi, Andrea Piccione, Bridget Elliot, Ivana Ficco, John and Paul Piccione, Marisa Cavalieri, Alessandra Patti and many more precious friends. A special thanks to Simone Gherardeschi for his technical expertise.

And last but not least, I would like to thank my family without whom I would not be where I am today. To them I have dedicated the Opera: *An Italian in Ethiopia*. This thesis is dedicated to my grandmother, Adele Senni, who passed away in 2011 whilst I was studying in Sydney. You more than any other have role-modelled the joy of living no matter the circumstances, and have nurtured the “inner child” in me. Thank you for your legacy.
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Introduction

My approach to composition is often inspired by external factors. I have often reflected upon the mental processes that provide musical expression to the inspiration. In what way will this external influence be rendered in my musical idea? Do I need a structure to compose? And if so, how do I use it? Am I bound to pedantically follow my own game rules? Or can I escape from them at some point, to feel the adrenalin of artistic freedom?

In my early twenties, I was torn between studying acoustics in the UK or following my passion for music. I opted to remain in Italy to finish my piano diploma and then study composition. At the same time I was also enrolled in classical and contemporary ballet, and often would play piano and compose for the dancers at the academy.

The theatrical world taught me many things, including determination and workload management. The discipline of this background was invaluable in my artistic development. I now use a parallel approach in composing. When I try to move notes/pitches in the score, I feel the same freedom of movement a choreographer feels with the dancers. This total theatre experience goes beyond the musical dimension, and it has been a powerful tool when composing.

Before I start to compose, I undertake significant preparatory work to avoid losing track of my inspiration during the compositional journey. I need to design a rationally balanced structure, where the number sequences and their characteristics, the movements and the shape that my music will have, becomes clear in my mind. Then, and only then, I can set myself free to put a pen to a white page. As I create, I feel the same surge of adrenalin athletes experience in their final moments of a race. I find myself writing faster and faster to set these shifting sounds free. My need to balance both rational and instinctive choices has been my constant quest when composing. When this is achieved, all the external stimuli begin to slowly converge into my musical language. During this academic journey I have been able to test and develop different approaches to composition and mature this process, which I have identified as “Deconstructing the Structure.”
Chapter 1

Shabtis

1.1 INTRODUCTION TO SHABTIS

The inspiration to compose *Shabtis* was triggered primarily by my interest in ancient Egyptian history, particularly the discovery of King Tutankhamon’s tomb.\(^1\) In King Tutankhamon’s tomb a number of artifacts were found including musical instruments and a board game called Senet which really fascinated me. The other major inspiration was, of course, my obsession for numbers and the mathematics behind things.

As I started researching these areas of interest, the amount of new ideas and information increased exponentially, leading me to explore all the possible interactions between them. The difficulty in following this process lies in the fact that, by trying to control all of the different levels of possibilities present at the beginning of the composition, the system becomes very complex and quickly saturated. By the time I reached the \(\frac{3}{4}\) point of the piece’s length, the structure reached a breaking point. This was a signal that it was time to move towards simplification, keeping only a few of the strongest and repeated elements of the structure and carrying these to the end of the composition.

1.2 BRIEF HISTORICAL BACKGROUND

I became fascinated with Egyptian history from a very young age. When I was 9 years old, the story of King Tutankhamon grabbed my imagination because he was only 10 years old when he became Pharaoh. In those days I often dreamed of being an archeologist participating in the discovery of his tomb back in 1922. To complete my obsession, for my 9\(^{th}\) birthday, my father gave me an official “Tut” photo book which I still treasure, and fastidiously protect from the
The original title I had in mind for this project was *Tut’s Symphony*. However, it soon became *Shabtis* after these curious objects found in King Tutankhamon’s tomb.\(^2\)

Ancient Egyptians believed that the afterlife was very much like the Egypt they lived in. Pharaohs were attended to by ministers, priests and servants. Someone had to be responsible for carrying on this work in the Kingdom of Osiris, the Egyptian God of the Underworld. This was the task of the Shabtis. The Shabtis were small statues that would magically come to life when the Pharaoh would call them. In order to summon them to life, the Pharaoh had to read a verse from the Book of the Dead. In his burial chamber, King Tutankhamon had over 400 Shabtis (and overseers to manage the Shabtis) so there would be workers for each day of the year.

Other objects that grabbed my imagination in addition to the Shabtis were the famous Golden Mask, and four sets of Senet Board Games. This incredible mask was the exact portrayal of the Pharaoh’s facial features and it assisted his soul in recognising his mummified body, thus ensuring his resurrection. Egyptians did not believe one could exist without the body.

The Senet was one of the most popular board games in ancient Egypt (possibly the oldest board game dating to approximately 3300 BC).\(^3\) This game consisted of a board of 30 squares or boxes and a set of sticks, called Astragals, that functioned like a dice. The boxes symbolized the deceased’s passage into the underworld. Tutankhamon probably played this game many times during his young life with his wife Ankesenammon, and other ministers of the Court. Some scholars\(^4\) believe that this game was also used like an oracle to predict the future. Accordingly, the Pharaoh would have used it in making personal as well as government decisions. Egyptologists have been able to decipher some rules for the Senet game. These will be discussed later in this chapter.

### 1.3 *SHABTIS – THE STRUCTURE*

My approach to composing this piece was similar to playing a game. Thus *Shabtis* can be described as a ‘musical game’ with Senet rules applied to musical materials such as melodic lines, permutations of pitches and rhythmic patterns.
The word Senet means ‘passage’ as in moving from your present situation to a future one. I built on this concept for my composition. By composing, the author is playing the Senet game, and the orchestra is the composer’s Senet board. During this musical journey the orchestra players are the Shabtis which are called to life by the Gamelan sound. The Gamelan is the overseer of the Shabtis and during the musical journey they also play the Senet game against each other.

This journey would take me inside the pyramid where unknown sounds would resonate individually to produce an unexpected new sound. In order to achieve that, I knew Shabtis needed a powerful new orchestral sound. My dilemma was how to take the orchestra inside this figurative pyramid and produce this new sound. And, what type of sound was I hoping to obtain at the end? Was there to be a final ‘winning’ sound or instrument to represent the conclusion of the Senet game?

Firstly, I needed to understand how the Egyptians played this game. In my research I discovered that there is little information on the actual rules of this game. So I decided to follow some original ideas, and let my instinct make up its own rules. To have a simple and consistent set of rules as a point of reference was instrumental in stabilising the process and the structure of the composition.

I spent a significant amount of time deciding what specific musical materials I wanted and then engraving my music rules inside the 30 Senet squares on the playing board. In my rules I included the use of letters from the full name of **Tutankhamon-Nebkheperura** to refer to most of the squares. I also gave those squares a progressive number from the Fibonacci series (See Senet Musical Figure 1.5). Finally I assigned to each square a special musical element to be transformed into a music making action.
1.4 TRANSFORMING THE SENET BOARD GAME INTO ITS MUSICAL EQUIVALENT

The Senet game is in some ways similar to the game of Backgammon, but using chopstick-like counters instead of the dice. The game is played by two players who take turns to move their pawns along its 30 squares, some of which are marked with hieroglyphics indicating good or evil fortune. The first player to exit the board becomes the winner. Symbolically the winner is also victorious over his enemies in the underworld, thus conquering eternal life.

While analysing the Senet board game, I found the potential to incorporate musical ideas inside the game. This mechanism would generate the main structure for the composition. Accordingly, the structure and the language of the composition are determined by the specific interactions between different parameters. The letters in Tutankhamon’s name give me the first exposition of the original material, while Tutankhamon’s other name, Nebkheperura, which means ‘Lord of the Forms (metamorphosis) of Ra’, provides the variations of the same material.

The material created from the King’s names, is a multilayered composition made of interlocking chords; specific pitches and rhythmic patterns consecutively assigned to different groups of instruments. I used transpositions and variations (my musical metamorphosis) of most layers in my quest to find this unknown sound inside the pyramid. The resulting effect of this newly created matrix is akin to that of a Matryoshka doll set which can be constructed and deconstructed without losing its ultimate ‘form’.

As mentioned earlier, the rules of the Senet game are only partially understood. However, for some of the boxes, scholars have been able to decipher the meaning of the symbols in the square. These are listed at Figure 1.1, whilst the original Egyptian hieroglyphics in the Senet game are shown at Figure 1.2.
Figure 1.1 - List of Senet Squares and Corresponding Symbol/ Meaning

<table>
<thead>
<tr>
<th>Box No.</th>
<th>Meaning</th>
<th>Rule</th>
</tr>
</thead>
<tbody>
<tr>
<td>15 &amp; 26</td>
<td>You are safe</td>
<td></td>
</tr>
<tr>
<td>27</td>
<td>Danger</td>
<td>If this box is busy, the player needs to go back to box 15.</td>
</tr>
<tr>
<td>28</td>
<td>Safe</td>
<td>‘Piume di Maat’: the pawn cannot be attacked but in order to exit it needs to score 3 points.</td>
</tr>
<tr>
<td>29</td>
<td>Looked after good</td>
<td>Needs to score 2 more points to exit.</td>
</tr>
<tr>
<td>30</td>
<td>Win</td>
<td>The player in this box can exit the game and have a safe passage in the after life.</td>
</tr>
</tbody>
</table>

Figure 1.2 - Original Senet Board Game

Before working on the actual musical material I started to consider the hieroglyphic symbols of Tutankhamon’s name, and their meaning. I had the idea of using a gematria system in my musical game by assigning numbers to the letters in Tutankhamon Nebkheperura’s name (including its hieroglyphic equivalent): putting a letter in most of the 30 boxes of the Senet
Game. (See Appendix 1.1 for Table with Hieroglyphic Symbols and Their Meanings). Then I used that idea as inspiration to couple those boxes not with the same hieroglyphics as in the game, but with actual musical material & musical actions to replicate the general idea of the game.

Below are the steps I took to transform that table game into the music structure for my composition. The board has 3 rows of 10 boxes each. The players move their pawns on the board following the numbers.

Figure 1.3 - Senet Board

<table>
<thead>
<tr>
<th></th>
<th>T</th>
<th>U</th>
<th>T</th>
<th>A</th>
<th>N</th>
<th>K</th>
<th>H</th>
<th>A</th>
<th>N</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
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<td>25</td>
<td>26</td>
<td>27</td>
<td>28</td>
<td>29</td>
<td>30</td>
<td></td>
</tr>
</tbody>
</table>

In each box, I allocated a letter from the Pharaoh’s full name, **TUTANKHAMON-NEBKHEPERURA**, with 11 letters allocated to Tutankhamon, and 12 letters allocated to Nebkheperura. **Tutankhamon** has been strictly coupled with the first 11 Fibonacci numbers (1-2-3-5-8-13-21-34-55-89). Boxes 12-15 and 21-23 were used for the Gamelan and orchestra game (aleatory moment). In the notation, box 1 is identified as **T1**, box 2 **U1**, box 3 **T2**, box 4 **A3**, box 5 **N5**, etc.

Whereas for the second part of the name **Nebkheperura** (boxes 16-30) my rule has been to use the same Fibonacci numbers and material used as for those letters that appear in both names like \((A, N, H, K, U)\) while for the new ones \((E, B, P, R)\) new meaning was added to allow the introduction of new ideas or variations of previous ones. See table at Figure 1.4.

Figure 1.4 - Senet Board with Allocated Letters & Numbers

<table>
<thead>
<tr>
<th></th>
<th>T</th>
<th>U</th>
<th>T</th>
<th>A</th>
<th>N</th>
<th>K</th>
<th>H</th>
<th>A</th>
<th>M</th>
<th>O</th>
</tr>
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<tbody>
<tr>
<td>1</td>
<td>T</td>
<td>U</td>
<td>T</td>
<td>A</td>
<td>N</td>
<td>K</td>
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<td>25</td>
<td>26</td>
<td>27</td>
<td>28</td>
<td>29</td>
<td>30</td>
<td>A</td>
</tr>
</tbody>
</table>
Apart from the first 25 bars (which are the preparation of the beginning of the game) the original hand written A3 score was organised in such a way that an actual page comprised 3 bars.

For example, box 1 of the Senet table helped me compose the 3 bars in page 1 (bars 2-4 of the original hand written score corresponding to page 5, bars 26-28 of the final typed score); box 2, (bars 5-7) was page 2 of the original hand written score corresponding to page 6, bar 29-31 of the final typed score and so on.

I started to manually link the full hand score to the 30 boxes of the Senet board game, so that there would be a 1:1 relationship (1 box = 1 page), in order to control shapes (musical material) and durations in the actual score. This was the method I originally used to better control the structure. It was modified in due course to allow for the musical development of parts that needed more open/free-space. Accordingly, the 1:1 relationship was just my creative starting point and an ideal reference to keep my structure under control. The structure and the rules gave me the freedom to think laterally.

In fact, towards the end of the composition, (in the final ‘Tutti’ rhythmical pattern), the strict structure is finally abandoned, allowing me to retain only the strongest elements in the composition. I will now consider the musical material that was allocated in each box of the final Senet musical board game. (See Table in Figure 1.5 below).

1.5 THE SENET MUSICAL BOARD

The musical Senet game was divided in the following five main sections with musical material in each box. Special moments of the composition were indicated. See Figure 1.5 in the following page.
Figure 1.5 – Senet table linked with part of the musical sequence structure that moved the first musical idea
The pawns are organised until box 15, then the game starts. I used this knowledge to imagine the composition having the initial exposition from box 1 to until box 11; then a bridge until box 15, then from 15 the actual development interrupted by the gamelan game (box 21-23). From box 24 to box 30 the final section.

**Notes: To Figure 1.5**

The First 11 boxes, act like an exposition making a full reading of ‘Tut’ name. Also linked with first 11 Fibonacci numbers inside each box, which are to be also linked with bars: 1 -1-2-3-5-8-13-21-34. This is the material that is found inside the Senet table boxes 1-11.

1. T = Chord Bars 26-28
2. U = Chord 29-31
3. T = Chord 32-34
4. A = _Shabtis Rhythm & Suffara_ 35-37
5. N = Orchestral group; rhythm 38-40
6. K = (D G G# B); (K+ middle letter ) harp 41-43
7. H = Pyramid Q13; dynamics (*Piano to Forte*) 44-46
8. A = Rhythm; 47-49
9. M= Q13; 50-52
10. O = *Oud* tuning (D G A D G); 53-55
11. N = Living Image of God; 56-58
12. T + A = _Tut Chord + Suffara_
13. T + N = _Tut Chord + Rhythm_

### 1.6 GAMELAN: A GUIDE TO THE SENET MUSICAL GAME

The Balinese gamelan plays a very important role in the _Shabtis_ composition. When I was first introduced to the Balinese gamelan I was enchanted and fascinated by its exotic sounds which I immediately associated in my mind to the ancient sounds I imagined inside the pyramid. Choosing instruments from the gamelan, and placing them in a different context, allowed me to evoke sounds reminiscent of ancient times, rather than those of traditional Balinese music. This
required me to design a notation system for instruments that do not normally use western notation or scored material. The Gamelan instruments had that ancient and metallic sound I needed for my composition. It functions as a guide to the orchestra and adds a kind of ritual energy to the Senet musical game. It also acts as a referee to the musical game that was virtually played by me (during the composition process) as well as by the actual players during the performance.

In the second semester of 2009, I was curious to learn more about the gamelan that was so far removed from by cultural background. So I decided to take some classes with Professor Peter Dunbar Hall. From the very first lesson, it was love at first sound! I was amazed by these instruments that worked in pairs, such as the calung and the gangsa/kantilan, the reong and the trompong, and last, but not least, the gongs and the kemply. Each instrument is played with special types of mallets called pankul/pangull (which to me looked like a bird’s beak). The trompong requires bigger mallets with a more traditional shape.

As I mentioned earlier, this was a totally new experience for me, and I was fascinated by the gamelan’s acoustics; the vibrations of the instruments, and the possibilities of making melodic chained rhythms of sounds. As a student, I found it challenging to control the technical side of playing it, particularly to remain in constant rhythm. It was difficult for me to play with one hand and damp the key with the other. I actually liked the long vibrations of these instruments and wondered what it would be like if they were left free to resonate (ie. without having to stop it with the metal key).

The novelty of the Gamelan stimulated my creativity, and led me to further experiment with this instrument. Rather than playing long rhythmic chains, I wanted the chords to be free to vibrate, particularly those linked with the Tutankhamon materials that are inserted in the Senet game board. These free vibrations were initially thought just for the orchestra, but in Shabtis they also become thematic materials in the quest to find my own gamelan voice.

In reality, the typical Gamelan technique of having a long rhythmical chain was never totally abandoned and later in the process becomes a distinguishable characteristic heard in the
important moments of the composition. However, the rhythm I created has nothing to do with the typical gamelan pattern. The most challenging aspect of the composition was realising these concepts and the score in practice. In this endeavor, I had the full support of a gamelan expert, Professor Dunbar Hall, and three other colleagues. They all workshopped and performed my ideas with enthusiasm, helping me to achieve a more refined product.

The gamelan instruments are all handmade, therefore their tuning is always slightly different. This dissonance is evident not only between the pairs of instruments (for example the gangsa and the calung), but even more so between them and the rest of the orchestra. I intentionally wanted to use that margin of difference in order to create a path for a less predictable sound result. However the actual performance was going to be the only real field where that could be verified.

I chose four players, who used the following instruments from the typical Gamelan.

** Player I: **
- gangsa pemade 1
- trompong **

** Player II: **
- gongs 1 and 2 (two higher pitch gongs)
- gangsa pemade 2

** Player III: **
- gongs 3 and 4 (two lower pitch gongs)
- calung 1

** Player IV: **
- calung 2
- kempli (suggested on the score but not used; usually keeps the tempo in normal Balinese use).

The disposition of the players on stage is indicated on the legend of the score.

** This instrument usually has ten kettles. But the order of the kettles of the trompong were re-arranged in the concert to find a more comfortable order in which to play the final chords with all
the four players as only certain sounds from Figure 1.6 (paragraph 1.6.1) were used. Each player played two pitches each as follows: Player I (7/1a); Player II (1/2); Player III (4/7); Player IV (2/4). The players crossed arms to play the chords at the same time (see the video of the concert). This idea came during rehearsal (see from bars 155 forward in section P).

### 1.6.1 Special Tuning of the Instruments

The instruments such as gangsa pemade are traditionally tuned in pairs. The pitches move in the range explained in the chart at Figure 1.6. So the special tuning between the Gamelan instruments was melding with that of a traditional orchestra, producing a certain effect of deliberate instability. I used only certain pitches to be played by the Gamelan, which were strongly related to the material (chords) used in the composition. The pitches I used were 1 - 2 - 4 - 5 - 6 - 7 - 1a (see Figure 1.6 below).

**Figure 1.6 - Gangsa Pemade Paired Notes:**

<table>
<thead>
<tr>
<th></th>
<th>Nome</th>
<th>Pengumbang</th>
<th>Pengisep</th>
<th>Pitches used in <em>Shabtis</em></th>
</tr>
</thead>
<tbody>
<tr>
<td>Alit</td>
<td>1a*</td>
<td>Ding</td>
<td>D + 29</td>
<td>D + 38</td>
</tr>
<tr>
<td>(7)</td>
<td>Daing</td>
<td>C + 4</td>
<td>C +18</td>
<td>V</td>
</tr>
<tr>
<td>6</td>
<td>Dang</td>
<td>B flat + 23</td>
<td>B flat + 40</td>
<td>V</td>
</tr>
<tr>
<td>5</td>
<td>Dung</td>
<td>A +20</td>
<td>A + 35</td>
<td>V</td>
</tr>
<tr>
<td>(4)</td>
<td>Deung</td>
<td>G sharp - 17</td>
<td>G sharp</td>
<td>V</td>
</tr>
<tr>
<td>3</td>
<td>Deng</td>
<td>F -13</td>
<td>F + 7</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Dong</td>
<td>E flat + 29</td>
<td>E flat + 51</td>
<td>V</td>
</tr>
<tr>
<td>1</td>
<td>Ding</td>
<td>D + 31</td>
<td>D + 54</td>
<td>V</td>
</tr>
<tr>
<td>5</td>
<td>Dang</td>
<td>B flat +15</td>
<td>B flat + 41</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Dung</td>
<td>A + 9</td>
<td>A + 40</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Deng</td>
<td>F – 25</td>
<td>F + 12</td>
<td></td>
</tr>
<tr>
<td>Gede</td>
<td>2</td>
<td>Dong</td>
<td>E flat +25</td>
<td>E natural – 34</td>
</tr>
</tbody>
</table>

Legend: 1a* = octave higher
The chords, which are the main ‘Tut Chords’ played by the Gamelan in section C at bars (11-13) are the main material pitches for the gamelan (see Figure 1.9). Here the chords are important not just for the gamelan but also for the whole orchestra and have a function of ‘Byar’: like opening chords that resonate at the beginning and last well on during the composition.

1.6.2 Writing a Score for Gamelan

I had no idea the gamelan had no notational score but was played through oral tradition. Traditional Balinese players only use a numbering system to name the pitches. So my idea was to try and score the gamelan part with a traditional notation system, which would help the players to read music without the need to memorise every musical entrance.

I decided to write a separate score just for the gamelan instruments. I used a fixed pitch to indicate the rhythm and a number underneath each note to indicate the name of the pitch to be played. This method seemed to work and assist the players in following the score in a natural way. The score was revised during rehearsal, during which we made small but important changes in order to facilitate the players’ execution (see gamelan score).

1.6.3 Gamelan Workshop Rehearsal & Final Concert

I had a few rehearsals just with the gamelan players before the final rehearsal with the orchestra to ensure my gamelan score was effective and to help the musicians becoming more confident in their part. Basically the Shabtis main score notates all the entrances for the gamelan and which pitch to play. I wanted all the players to be confident in knowing what to do, and how to follow the main score without difficulties. So during rehearsal we studied the gamelan score making sure everything was clear for the players. We also made a few decisions on the gamelan game (rehearsal mark K) experimenting with different combinations of the material and their ideal length.
We also studied the best way of playing the final section of *Shabtis* (rehearsal marks O) where the four musicians have to move on stage, going one after the other to the trompong instrument to play the final chords (rehearsal marks P). The movement of the gamelan players on stage simulates the game movement on a Senet board (see rehearsal marks O-P).

Especially in section P the players had to perform a rhythmical pattern of unison chords. So in order to be synchronised, they crossed arms connecting at their wrists, to enable them to perform the final chords together (see Concert DVD last page bars 152-154 final seconds).

The overall experience has been incredibly rewarding. The feedback I received has been invaluable for my ongoing understanding and learning of the gamelan. During the final rehearsal with the orchestra, the conductor had to put things together. He used the main score while the gamelan players used their own score. So the gamelan part in the main *Shabtis* score was just to give the conductor an idea on where players were to come in, but little detail about exact pitches or other indications, which would have distracted the conductor. In the final performance all the work came together nicely, and the conductor delivered a clear and elegant performance.

1.7 SISTRA AND OTHER ANCIENT INSTRUMENTS

The music and the instruments were very important to ancient Egyptian society. In fact, the Pharaohs had many instruments in their burial chamber as they believed music would help their soul leave the body to enter the afterlife. I did some research on ancient Egyptian instruments, and tried to incorporate their modern versions where possible.
1.7.1 The *Sistra*

*Sistra* are ancient rattle-like instruments, similar to cymbals with little metal disks that slide along wires and are played by shaking them. The *sistra* simbolised Hathor, the goddess of music, dance and love. In the old Egyptian language, the *sistra* were called “Seshesh”, an onomatopoeic word resembling its sound. It was believed the *sistra*’s sound had the apotropaic power to cast away any negative forces around.

I wanted to include four *sistra* in *Shabtis*: one pair for each of my two percussionists, in order to enrich the sound and add a dramatic visual element. To play the *sistra* the percussionists must move both arms in circular motion creating a big loop over their heads. This gesture adds a dramatic element suggesting the performance of some sacred ritual and it allows the audience to view and appreciate this instrument. (See the DVD of the Concert).

But alas, I could not find any modern equivalent of the *sistra* in the market. So, unable to find them, I decided to make them. Years ago, I saw some quite large *sistra* in the Louvre Museum in Paris. I tried to replicate what I remembered and used the shape of a big tennis racket to do so (actually a double tennis racket) so as to have a three dimensional shape to produce more sound. I used metal wire across the rackets to let the cymbals move freely.
There were also other percussion instruments in Tutankhamon’s time. The Darbuka, for example, was a wooden goblet–shaped vessel with a drumhead made of skin and used for drumming. It is still in use today. In Shabtis the two percussionists used the following sets of instruments:

Figures 1.7 - Percussionist I and II

<table>
<thead>
<tr>
<th>Percussionist I</th>
<th>Percussionist II</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 <em>sistra</em></td>
<td>2 <em>sistra</em></td>
</tr>
<tr>
<td>3 temple blocks</td>
<td>3 wood blocks</td>
</tr>
<tr>
<td>3 tom toms</td>
<td>3 tom toms</td>
</tr>
<tr>
<td>2 suspended cymbals</td>
<td>2 bongos</td>
</tr>
<tr>
<td>1 bass drum</td>
<td>crotales (antique cymbals)</td>
</tr>
</tbody>
</table>

1.7.2 The Trumpet

In Tutankhamon’s tomb, archeologists found a gold and silver trumpets which were used to worship Osiris, God of the Afterlife. Apparently the Egyptian trumpets had a short life and were played only twice in 1939 to be recorded. Since these royal instruments must have been important I added the full brass family in Shabtis including two trumpets, two horns, a trombone, and a tuba.

The Egyptians also had instruments similar to the modern double clarinet (the *arghul*), the flute (*suffara*), which was dedicated to the God Amon and a violin or fiddle known as *rababa*. Obviously I included in the orchestra the modern version of these instruments, even though the intention was to replicate old instruments and their sounds.
1.7.3 The Oud and the Harp

The *oud* was another typical Egyptian instrument that looked like a modern lute and was quite common in Middle-Eastern countries. In box 10 of the Senet game I used the pitches linked to the tuning of the *oud* as the basic music material for that box (see Figure 1.5, box 10, letter O).

The use of the harp in Egypt is quite ancient. There is a reference to this instrument in hieroglyphics dated around 2195-2064 BC from the XI Dynasty, which is called “The Harpist’s Chant/Song”⁹. This bas-relief is now found in the Rijksmuesum voor Oudheden museum in Leiden, Netherlands, and it reads along these lines:

*Follow your heart as long as you live*
*Put Myrrh on your head*
*Wear clothes of Byssus*
*Perfumed with true exotic perfumes*
*Such as those offered to the God*

In *Shabtis* I made used of the piano (with my harmonic device) as well as a harp in an attempt to create a certain atmosphere by mixing all these evoking sounds. Piano and harp have important sonic parts in *Shabtis*, acting as co-protagonists with the gamelan and creating a new flavour. In the concert I amplified the harp and the string where the piano pedal is positioned to match the powerful sounds coming from the gamelan orchestra. (see Chapter 4 concerning the Piano’s HDP Pedal).

1.8 ANALYSING KEY MOMENTS IN SHABTIS

The last question I asked myself before composing was: what was the level of musical awareness in ancient Egypt? What I found out in my research suggests a certain level of sophistication in music. Although Chironomy was a widespread art in the ancient world, it found more visual documentation in Egypt than anywhere else. It is found portrayed on the Mastabas (ie. funeral monuments) and in the burial chambers of many of the ancient Pharaohs. Paintings¹⁰ found in
the Mastaba of Ptah-hotep (2494 to 2345 BC) in Saqqara show an ancient Egyptian Chironomyst conducting music through hand movements, and doing two important gestures at the same time. One hand has the thumb and index finger touching, perhaps indicating the fundamental sound, while the other hand is pictured with straight fingers, as if showing the fifth from the fundamental sound. This image seems to indicate that Egyptians used harmony and understood harmonic intervals and pentatonic scales.

Figure 1.8 - Egyptian Chironomyst

Therefore I felt that the sophistication of ancient Egyptian music could support my use of overlapping multiple devices to create a dense texture rich in colour. *Shabtis’* macro-structure follows the standard traditional first-movement form of classical symphonic works: Introduction, Exposition, Development, Cadenza, (Reprise), and Finale. But it can also be viewed as a triple concerto made of gamelan, piano and harp as these share leading parts in the composition.

I would like to underline that the two percussionists have an important role in the overall duration of the work: they are constantly engaged throughout the performance. When choosing the role of the percussionists and the instruments I wanted them to play, I had in mind *Circles* by Berio. Figure 1.9 below shows how the ‘Tut Chord’ is made. During the composition it has an important function especially at the beginning.
Figure 1.9 - Tut Senet Chords Chart
The table below shows the main Shabti rhythm and its variations.

![Shabti Rhythm Chart]

<table>
<thead>
<tr>
<th>Rhythm</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1 N</td>
<td></td>
</tr>
<tr>
<td>1.2 N</td>
<td></td>
</tr>
<tr>
<td>1.3 N</td>
<td></td>
</tr>
<tr>
<td>1.4 N</td>
<td></td>
</tr>
<tr>
<td>1.5 N</td>
<td></td>
</tr>
<tr>
<td>1.6 N</td>
<td></td>
</tr>
<tr>
<td>1.7 N</td>
<td></td>
</tr>
<tr>
<td>1.8 N</td>
<td></td>
</tr>
<tr>
<td>1.9 N</td>
<td></td>
</tr>
<tr>
<td>1.10 N</td>
<td></td>
</tr>
</tbody>
</table>
1.8.1 Introduction:
The introduction comprises the following parts:

- Section A (bar 1): Introduction- Solo *sistra*, page 1
- Section B (bars 2-7): Introduction - *sistra* and gongs, page 1
- Section C (bars 8-25): Introduction – ‘Tutti’ and Gamelan, pages 2-4

So the introduction as it appears in the final score (rehearsal marks A-B-C), was added after I composed up until box 3 of the Senet musical board. I did this because I needed something that created a better setting for the initial Senet game, and a more solemn presentation of the gamelan as a spiritual guide for the orchestra’s Senet players. The gamelan orchestra is the starting point together with the *sistra* (Section A). The *sistra*, and the gongs, Section B, usher the entrance of the orchestra, soon joined by the gamelan, harp and piano in Section C. Section C establishes two different and contrasting elements: One is the chordal aspect that represents the ‘Tut Chord’ (piano, harp and gamelan), while the rest of the orchestra enters in pianissimo using the *Shabtis* Rhythm Chart (see figure 1.10).

1.8.2 Exposition

The exposition is divided as follows:

- Section D (bars 26-28): Exposition - Tutti and gongs, page 5
- Section E (bars 29-46): Exposition - Tutti, pages 6-10
- Section F (bars 47): Exposition - harp cadenza - Tutti and gongs, page 11
- Section G (bars 48-58): Exposition - Tutti –piano - harp- gamelan (like a triple concerto), pages 12-15
- Section H (bars 59-64): Exposition - Tutti gamelan, pages 16-17

The Senet rules structure starts at section D, bar 26 where I started to compose from the beginning of the board game, box 1. So the Senet Musical game and the boxes 1-11 and their content helped me compose this section from bar 8 to bar 46.
Section D and E, until bar 34 are a tribute to the first three letters of Tutankhamon’s name (TUT-box 1, 2, 3 of the Senet Game – see Figure 1.5). The chords resonate in bar 26 with the full orchestra and in bar 28 through the amplification of the piano and the harp. The gamelan chord sounds and orchestra have quite a different tuning. I chose to exploit this gap when composing and especially during rehearsal.

In Section E, from bar 33, an important musical event occurs. I re-invented something similar to a Taqsīm to create a pattern variation. Fragments of this melody are picked up by other instruments, especially the brass and the winds, but is maintained in the string section. A Taqsīm is an old Middle-Eastern melody of a given mode, linked to a specific rhythmical sequence. I assigned this moment to the first violins while the orchestra is busy in many different counter-voices creating a dense complex musical texture.

Figure 1.11 - “Like a Taqsīm” (bar 33, Violin I)

Section E ends with a sound in the shape of an inverted pyramid, from piano to fortissimo. At this point there is a cross–fade in the dynamics. The full orchestra sounds phase down to niente, while the harp (which is amplified) plays her cadenza (Section F) simulating an action in the Senet board. At this stage we have reached box 12-15 of the Senet game that is half of the journey. Section G sees the piano and the harp once again in the spotlight playing constantly this small rhythmical chain counterpointed by the sistra sound. From bar 51 the orchestra is brought
back, one by one, to a full pyramidal forte. Section H sees the strings, percussions and piano engaged in a strong typical rhythmical pattern (see Figure 1.10 - *Shabtis Rhythm Chart*), stroking the ‘Tut Chords’ many times, and ending the Section with the evoking sounds of the gongs.

### 1.8.3 Development

The development has two main parts:

- Section I (bars 65-73): Development - Tutti, pages 18-19
- Section J (bars 74-89): Development - not full orchestra *Slow Dream Waltz*, pages 20-24

The Development represents box 16-20 of our Senet game. Section I opens the development and sees the orchestra building a wall of sound anticipating the reverberations inside the pyramid. The Section ends returning the fortissimo orchestral sound back to the harp that closes the Section with an Eolic glissando effect. The idea of creating a repetitive wall of crescendo gives a physical dimension to the massive size of the pyramid.

Section J is a *Slow Dream Waltz* to honour King Tut who, despite his position, was still an innocent young child. With this Waltz we enter into his dream. The strings are marking the mood of the Waltz whilst the piano, the clarinet and part of the string section carry the melody. The theme is my vision of ancient Egypt with its warm exotic flavors. The Waltz has a structure of seven bars that are repeated twice. With her sounds, the harp awakens us from this dream and ends at bar 88-89 accompanied by the circular ritual movement of the *sistra*.

### 1.8.4 Cadenza

In the cadenza there are two main games:

- Section K (bar 90 -): cadenza - gamelan game solo, page 25 (see separate gamelan score).
- Section L (bars 91-102): cadenza, Senet game with Tutti, pages 26-27
The cadenza represents boxes 21 to 23 of our Senet game where the gamelan and the orchestra are playing the game. In Section B, the four gamelan players are interacting with each other in the following way: on the gamelan score there is a page from which to choose musical elements (Section K). The gamelan game works as follows: Player 1 makes his musical cadenza choosing from the musical table, while the other three respond with anything except Player 1’s choice. This mechanism is repeated four times. Then the orchestra joins the game and this time the gamelan makes its entrance and the orchestra responds at Section L.

In this Section, the full score is written in such a way that there are seconds indicated for each action, to enable the conductor to follow the game. The game ends with the full orchestra (except the gamelan and the harp) playing an ostinato rhythm (bars 98-100), which is repeated and in crescendo. The rhythm is made through the combination of the gamelan rhythmical variation No. 12-14 (see figure 1.10 - Shabtis Rhythm Chart). The harp and the gamelan play only strong chords to signal the game is coming to its conclusion.

1.8.5 Reprise-Finale

In this final moment we have the following actions:

- Section M (bars 103-108): Reprise-like section B, page 28
- Section N (bars 109-114): Tutti and gamelan, pages 29-30
- Section O (bars 115-154): Tutti and gamelan, pages 30-34 (Senet/ Fibonacci)
- Section P (bars 155-169): Tutti and gamelan, pages 35-36; Finale chopsticks

The striking chords of the gamelan are still echoing in the pyramid when we hear the gongs and the sistra (Section M) bringing us back to the beginning (Section B). As we approach the finale, we have to make certain actions to exit our musical Senet board game (boxes 24-30). In Section N the sounds in the pyramid resonate with ‘Tut Chords’ and melodic elements taking us to a fortissimo sound wall. As they begin to exit the board, they are, one by one, transformed into a Shabtis. Musically two parallel actions occur: During the first action the gamelan (which plays the gamelan rhythm we heard, for example in Section K), is constant through section O and the four Players are one after the other moving to the trompong instrument until all four of them are
positioned in front of it. The last player to move to the trompong will do so almost at the end of the Section in order to provide the continuous sound pattern to the orchestra. During the second parallel action, the orchestra starts Section O, either using the rhythmical chain of rhythm (see Figure 1.10 - Shabtis Rhythm Chart) or freely permutating with given pitches. As the gamelan players did, the orchestra’s players will leave their instruments taking the ‘chopsticks’ instead as unconventional instruments. They are now ready to play the finale, with the chopsticks symbolising the astragals used by the Senet players.

The gongs are signaling that we are now in the after-life. The Orchestra plays with chopsticks the rhythm No.11 from the Shabtis Rhythm Chart, which is the dominant rhythm heard in different forms during the composition. So while all are entering the new world of the after-life we perceive a new sound evoked by the many chopsticks playing together. The ‘Tut Chords’ are echoed once more whilst the sistra perform their rituals for the last time. The Gamelan resonates the last chords as a farewell. The mission is now accomplished and all the Shabtis bow reverently to King Tut (Section P).

1.9 Conclusion

The gamelan is a guide that brings the players to another dimension. The material performed by the gamelan ensemble guides the orchestra through the work’s ‘game-path’ in a ritualistic function. After the Slow Dream Waltz and a Tutti game at the end, ‘Tut’ is finally awoken. A new atmosphere and a previously unknown sound is heard. The Shabtis are awake and ready to serve in the afterlife in a new dimension of time, sound and space. I like to imagine the young ‘Tut Pharaoh’ dwelling in that unknown resonant environment still inspiring us with his young incredible life.
Chapter 2

An Italian in Ethiopia Opera

2.1 INTRODUCTION

My knowledge and love for a certain kind of opera flows from the sounds and effects of *The Nose* by Shostakovich; the atmosphere evoked in the *Macropulos’ Affair* by Janacek; and last, but not least, from the vocal flexibility in *Salomè* by Richard Strauss. Fundamental to this is my Italian background, which makes me vividly sensitive to operatic history and reflects my study of the Italian opera school of Bellini, Donizetti, Verdi and Puccini. All of this, I believe, combines into my approach to opera and its making.

In endeavoring to compose this Opera, I envisioned using classical elements from the past melded with the possibilities of today’s technology. A composition with a hybrid style where music, technology, sound moving in space, singing and some kind of contemporary dancing were fused in a balanced way. The final product of this vision is the Opera I entitled *An Italian in Ethiopia*.

In the early phase of the composition, I listened to many different contemporary operas including some Australian works such as *The Burrow* by Michael Smetanin and *The Bliss* by Brett Dean. I documented my feelings and reactions to this music. Then I worked on the story, the plot; the libretto, the musical structure and the final score-making, while continuing my research into sound reverberation.

I started working on the composition late in 2009 and completed the score towards the end of 2012. The first performance of this Opera was a premiere concert version on 22 February 2013 at the Sydney Conservatorium of Music in collaboration with the Opera Department.
2.2 HISTORICAL BACKGROUND

The Opera *An Italian in Ethiopia* (originally named *The Octagonal Cathedral*) is based on the real story of an Italian war hero only recently re-discovered: The architect Sebastiano Castagna. He was born in 1868 in the small mountain village of Aidone, in Sicily. Castagna left his village at a very young age, to study in Turin and became the equivalent of a modern architect-engineer. An adventurous character by nature, he enrolled in the Italian Army and was sent to Ethiopia. Upon arrival, Castagna knew he had found the place of his dreams.

In 1896 he was taken prisoner by the Ethiopian Army. He was granted a royal pardon and appointed Councilor to the King and Head Engineer of Ethiopia. Castagna was responsible for planning and building of a number of famous constructions including the renowned Octagonal Cathedral – the St George Cathedral in Addis Ababa in honour of the patron Saint of Ethiopia. As it turns out, both St George and Castagna were decapitated thus suggesting a mysterious link between the two.

During this time, Castagna became a very close friend of General Damtew and married Damtew’s aunt, Princess Belinè with whom he had two daughters, Maria and Giuseppina. He received many honours, from both the Italian Government and the Russian Czar for his contribution to the development of Ethiopia.

In 1936, when the Abyssinian war was won by the Italians, Castagna was involved in several diplomatic missions to assist Ethiopian tribes negotiate their surrender conditions with the Italians. Tragically, in 1939 he was brutally decapitated during one of these missions (see Appendix 2.1).
2.3 WRITING THE LIBRETTO

I always wanted to write an opera and be able to control the whole process. Although I had previously written many musical theatre works for young performers (taking care of both the music and the libretto), I still felt intimidated in undertaking such a long and complex project.

The key elements that contributed to the writing of my libretto are:

2.3.1 My personal connection with the story
2.3.2 The decision to use both Italian and English in the text
2.3.3 William Blake’s Poem *My Spectre Is Around Me*
2.3.4 My Poems; and
2.3.5 Cinematographic Technique of Flashbacks

2.3.1 My Personal Connection With The Story

I was around 10 years old and curiously exploring old papers at home when I found an old journal article about Sebastiano Castagna and discovered he was an old relative. Although I probed my parents about my great-great uncle, it was quite a few years before they were willing to share with me what they knew about him. Sebastiano Castagna was my mother’s great-uncle. The story of his life in Ethiopia has been reconstructed by our family over the past 30 years by piecing together information from his personal diaries as well as by the recollection of close relatives, and other historical documents. His story intrigued and fascinated me. The more I researched, the more I realized it had all the elements for an Opera.

2.3.2 The decision to use both Italian and English in the text

I wanted the two languages to co-exist in the libretto to enable the story to be understood from different cultural perspectives. I have used mainly Italian when dealing with emotions and English to move the narrative along. However at times I have repeated the same lyric in both
languages, in order to emphasise the difficulty and frustration people face when attempting to immerse themselves in another culture. Another advantage of using the two languages is to enable the audience to still follow the story, without having to read subtitles. I believe this technique can be a useful tool in modern operas.

2.3.3 William Blake’s Poem *My Spectre Is Around Me*

Blake’s poem *My Spectre Is Around Me* inspired both the creation of the libretto as well as the electro-acoustic musical parts. For the libretto, the image of the Spectre provided the literary device to develop Castagna’s character and to guide him to tell his own story. I wanted something poetically powerful to convey Castagna’s emotions at certain points during the opera (e.g. the building of the Cathedral, his fears during the journey up the mountains etc.). The Spectre acts as a guide; like Virgilio in Dante’s *Divine Comedy*. There are also a number of Spectres/Spirits in the Opera whose function is to bear witness to the significant moments in Castagna’s life. Musically I used the electro-acoustics to represent the presence and activities of the Spectres.

2.3.4 My Poems

In the Libretto I also inserted other poems that I composed during this time. These poems are mainly used for the vocal solos because poetry is better suited to elicit the emotions of the characters (see List of poems in Appendix 2.5).

2.3.5 Cinematographic Technique of Flashbacks

I’ve used the cinematographic technique of flashbacks to move between Castagna’s past and present life events. Within a few music bars, the protagonist (who is ‘virtually’ inside the
Cathedral) is able to move between the past and present events in his life. Visually this is represented on stage simultaneously.

Musically, the instrumental and electro-acoustic sounds serve to underpin the partitioning between “Past” and “Present” and do not pose any interaction problems for the singers. Castagna is the only character that moves between the two timelines except when other singers are occasionally used in a double role. For example, in Part I, the three female roles become supernatural characters Castagna hears in his mind. To mark this change of role from a physical to a spiritual person, I’ve used a fabric hood the female singers put on to signify they are now spirits singing with Castagna in the virtual Cathedral.

When I began to work on this opera, I drew my own stage plan (see Appendix 2.3). I envisaged the stage being physically divided into two fixed parts: the “Present” and the “Past”. The Present is represented by the Cathedral from which Castagna tells his story which is enacted in the Past.

Please note the performance/video submitted with my portfolio is only a concert version of the opera, with only some of the essential staging elements envisioned for the full theatrical production. Therefore, not all the planned flashbacks were visually possible. Furthermore, the singers were somewhat limited in moving between the two sets because they were mostly singing from the script and not by memory.

I started composing almost immediately after the libretto was finished. Making notes of musical ideas whilst working on the script has certainly enhanced the quality of my final product. When I was writing particular scenes, I noted the musical ideas that came to mind. In some instances some words and phrases came with their own music – that is, they were conceived simultaneously. I found this to be an advantage in writing my own libretto.

Nevertheless, a significant responsibility was to find the right balance in order to keep the structure of the story always tight, intense and dramatically correct. I mention this to show how the libretto help me develop the structure of the Opera. The timeline sequence of the events generated the musical sequence of those same events.
2.4 DRAFTING THE PLOT

2.4.1 Structure of the Opera

The making of my Libretto leads to the structure of the Opera. The Opera comprises a small Introduction and Three Parts for a total length of ninety minutes. There are 6 main characters with piano accompaniment. Originally it was planned for more than 6 characters; an ensemble of 8 players on stage (symbolizing the Cathedral) and a chamber orchestra. However, to accommodate the request from the Department to make the production more concise, I amended the opera, reducing the characters to 6 and substituting the ensemble and the orchestra with a simple piano accompaniment.

More than two years ago while working on the Libretto, I wrote a Prologue to the Opera. This Prologue started with a solo composition for an octet ensemble called Dark Flow, followed by the introduction to the main character. Castagna was singing from the Cathedral and talking to himself interacting with the Narrator and the Spectre to open the story.

Even though that Prologue was abandoned, it functioned as a reservoir of ideas and provided the Structure and the temporal sequences that have remained in the final Opera. The sequence was mapped out in great detail with the addition of extra tables where vocal moments, musical events, the narrator and the electro-acoustic appearances were balanced and well mapped out. I also created detailed timelines that acted like a structured plan to ensure all the different parts fitted within a balanced and harmonious structure and all the players had their moment in the Opera. To complete my understanding, I conducted some research inside the Italian Baptistery in Pistoia to visualize the sound reverberation inside its octagonal shape.
2.4.2 The Role of the Cathedral

For centuries massive stone buildings have instilled a sense of awe and inspired creativity in people. Great architecture gives not only national pride and identity, but provides central places of gathering in society. In Castagna’s story, the Octagonal Cathedral is such a place. It is the focal point of the city as well as the opera, and becomes a resonator of voices and sounds; a repository of human events and their secrets.

All the characters in the story are somehow in constant touch with the Cathedral that is the central focus of the stage setting. Around all this unfolds the drama that moves periodically from “present” to “past” events in the narrative. Being an opera rather than a biography, I had to adapt some of the actual events in Castagna’s story and add some fictional drama like the simultaneous appearance of the moon on each of the eight windows of the Cathedral. The number 8 is rich in symbolism. This theme will be discussed later in the chapter. Suffice to say at this point that the number 8 in the Bible represents “Perfect New Beginning” which is what Castagna finds in Addis Ababa.

2.4.3 Descriptions of the Main Characters

A total of six characters are involved. The six characters are all linked together by family connection as follows:

Figure 2.1 - Main characters

<table>
<thead>
<tr>
<th>Characters</th>
<th>Role</th>
<th>Voices</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Sebastiano Castagna</td>
<td>(Prisoner of war &amp; Italian architect)</td>
<td>Tenor</td>
</tr>
<tr>
<td>2. Destà Damtew</td>
<td>(Ethiopian Army General)</td>
<td>High Baritone</td>
</tr>
<tr>
<td>3. Tegnamework</td>
<td>(King’s daughter &amp; Desta’s wife)</td>
<td>Mezzosoprano</td>
</tr>
<tr>
<td>4. Princess Belinè</td>
<td>(Damtew’s aunt &amp; Castagna’s wife)</td>
<td>Soprano</td>
</tr>
<tr>
<td>5. Armarhà</td>
<td>(Castagna's slave girl)</td>
<td>Soprano</td>
</tr>
<tr>
<td>6. King</td>
<td>(King)</td>
<td>Low Baritone</td>
</tr>
</tbody>
</table>
The characters were inspired by people who really existed during an important part of Ethiopian history. For some of the characters, I have maintained their real names: Castagna, Damtew, Belinè. For the others, I have invented their name but retained their historical role:

- The King (two Kings took part in the real story with Castagna);
- Tegna (short form of a name of a real daughter of King Menelik); and
- Armarhà (the slave girl Castagna buys at the market).

I will now briefly describe the characters in the Opera in order of their chronological appearance.

**The King**’s figure is essential to the story and is the main role in Part I. Overcoming earlier doubts about the new prisoner, he will soon make Castagna’s fortune and support his future life and talent in Ethiopia. The King loves his daughter and the people around his entourage. His low baritonal voice gives authority and confidence to his character, underlining his leadership role.

The first character to interact with the King is **Dest’a Damtew**. As mentioned earlier, General Damtew is the King’s son-in-law, married to princess Tegna. He plays a major role in the story, always bringing Castagna back to reality with his common sense and practical solutions. His unfailing love for his princess and his deep friendship with Castagna is underlined by his high baritone-singing role, which is both rich in wittiness and powerful at key moments.

**Tegna** is the King’s daughter and the elegant wife of General Damtew. She is loyal to her husband and to her country. She is very sensitive to her loving husband, as well as his friend Castagna. Tegna is the main female role in Part I and her regal mezzo-soprano voice provides an atmosphere of stability and reassurance to the other characters and to the drama.

**Sebastiano Castagna** is the main protagonist. His story and personality unfolds progressively during the Three Parts of the opera, beginning with his arrival in Addis Ababa as a prisoner, to falling in love with the country, then making his professional contribution as an architect, and living a passionate life full of adventures. At one stage his frustration with the narrow and provincial attitude of his native country (and Sicilian family where he is totally misunderstood)
becomes evident in the opera. In Part III, Belinè asks him to invite his family to the wedding but he declines and promises to just write a letter to inform his mother (see Part III, letter H, bar 249). Castagna is secure of his own artistic abilities yet is also humble and caring for the people around him. He is not intimidated by adversity, nor does he fear the unknown. Castagna’s personality is like a diamond with many facets. At times we see the determined architect who is proud of his art; at other times, the witty and joyful friend of Damtew; then he appears as the passionate lover of Armahà as well as the devoted husband of princess Belinè. Finally we see his heroic side in the loyal and courageous friend who pays the ultimate price in attempting to save Damtew’s life. His tenor voice is best suited to express his many moods and underline the different aspects that coexist in this persona.

Armahà is the slave and “the other woman”. She sings in Parts II and III. Her soprano role is not the longest in the opera, but her function in the drama is very important. She is the passion of one night that will somehow remain always hidden but present in Castagna’s heart and life: she will be mostly silent, yet always by his side.

Last but not least is Princess Belinè. She is of noble origins, linked to the King’s entourage and aunt to Damtew. Deeply devoted to Castagna, she becomes his wife, sharing his dreams and worries. Her main soprano role is mainly in Part III where in addition to her love for Castagna, she shows her love and concern for the Ethiopian people and for the future of the country.

The ghostly character of the Little Girl that follows Castagna’s story provides the connection to his posterity. In particular, there is a poem linked with the silent character of the Little Girl that I will discuss later in this chapter. The poem appears divided into sections during the Opera: it underlines the presence of the Little Girl on stage.
2.5 THE PLOT

2.5.1 Introduction

A delicate piano tune accompanies the silent scene showing a father and his Little Girl looking at some pictures including the portrait of an ancestor. The girl wants to know more. Who is he? Why are all those photos so preciously kept? An incredible story will be unveiled. Suddenly the music ends, and during the silence, the Spectre guides the protagonist Castagna out of his portrait, bringing him back to life. He is taken inside the Cathedral but no-one knows, as there is no visual cathedral on stage: just an empty part of the stage. The electro-acoustic sequence of My Spectrum Is Around Me starts and plays for some time, while Castagna is with the Spectre ready to tell his adventurous story to everyone. From this Cathedral, Castagna’s real life story will be now narrated.

2.5.2 Part I

We are in the King’s court: some prisoners are brought before the King who has to decide their fate. One prisoner gains the King’s attention. The King and General Damtew are discussing the prisoner Castagna. The King is uncomfortable by the proud look of Castagna: “His blue eyes are interrogating me”. The Spirits from the Cathedral attest to Castagna’s drama. The Little Girl appears on stage several times to follow Castagna’s fate.

After making enquiries, the General persuades the King that Castagna is more than an average war prisoner. He is in fact a very experienced architect that could be useful in the Kingdom. The King exercises mercy pardoning Castagna and appointing him as his chief Architect. Castagna’s future is now in Ethiopia: his future role is growing this new flower that is Addis Ababa.

2.5.3 Part II

Part II opens up with Tegna’s solo where she expresses her gut feeling that this mysterious Monsiù Castagna will prove to be a blessing for the kingdom. The solo is followed by a duet between Tegna and Damtew where the theme of their love for each other and for Addis Ababa is
intertwined. Tegna has dark forebodings about the future, but Damtew promptly reassures her. Tegna is glad of Damstew’s friendship with Castagna. Perhaps Damtew should introduce him to his aunt princess Beliné.

To mark the victory over the Italian forces, the King asks Monsiù Castagna to build a Cathedral. Castagna, now the principal architect for the Ethiopian monarchy, accepts the challenge. In his main aria, Castagna sings of his love for Addis Ababa which he sees as a delicate flower growing on a rock. It reminds him of his hometown, Aidone in Sicily.

Castagna builds an octagonal Cathedral and embeds into the architecture a secret sound that underpins the thread of the story in the Opera. In a new scene, Castagna and Damtew are seen as having a crazy night of wild drinking and gambling. Damtew makes jokes about the meaning of Castagna (Italian for chestnut!). The two men have a lot of fun. By the end of the night, they have consumed so much alcohol that they think they are women. Damtew suggests they go to the markets. There are many things one can buy in the market.

While shopping, Castagna’s attention is drawn to a group of slaves for sale, and out of impulse he buys a slave girl, Armarhà. At this point, the spirit of the Little Girl crosses the stage again as she hears a Sicilian song. Castagna and Armarhà spend the night together. Armarhà ends Part II with a solo about her feelings for her Master, Castagna.

2.5.4 Part III
Part III starts with a duet between Castagna and Armarhà where their love appears so real. But once the wild night is over, Castagna wakes up to the realization the woman next to him is not a dream. She is real! Damtew realizes Castagna has a problem and is worried about his commitment to marry his aunt. They discuss what to do with the slave girl and end up deciding to make her a wedding present to Belinè, hoping none of the particulars will ever emerge. So Castagna courts the beautiful Belinè and she eventually accepts his marriage proposal. Castagna’s friendship with Damtew is now more solid than ever. At this point, the secret sound in the Cathedral is heard again, while the invisible Little Girl crosses the stage once more.
While Castagna is resting inside the Cathedral, the moon appears simultaneously on each of the eight windows foreboding an impending siege by the Italians. The vision foretells of the defeat of Ethiopia by the Italian army. At the same time, Belinè also dreams of impending danger at the palace. The Italian invasion is successful. Damtew retreats with his followers into a mountain hideaway. The Italian generals use Castagna to negotiate with the Ethiopian rebels. Castagna sends his children away to safety and accepts to be sent blindfolded on a donkey to Damtew’s hiding place to plead with him to surrender. The wild journey on a donkey’s back ends with Castagna arriving at the secret destination. He brings candles and champagne to convince Damtew to surrender and save his life. But alas, Castagna’s mission fails.

The Cathedral secret sound is heard again; ghosts obsessively move around old Castagna. The “white engineer” is now surrounded by darkness – Death must be near. The following day, Castagna is murdered. His head is found in a sack next to his Cathedral. Belinè from her palace, and Armarihà from the Cathedral sing a final duet expressing their sorrow and despair for their beloved Castagna. At this point, Castagna returns to the portrait as in the beginning. The Cathedral secret sound is heard anew while the Little Girl moves towards him. For a brief moment, Castagna can finally embrace his descendant, the Little Girl. The sound is heard; the Little Girl is the only one who has always believed in Castagna’s story. Now that his story has been told, and witnessed by the Little Girl, he can take his “final bow”. The truth has set him free. Castagna finally rests in peace.

2.6. OPERA ANALYSIS

2.6.1 Introduction

Writing the libretto was a creative endeavor as much as composing its music. Whilst the music is subservient to the text, (meaning that the text determines the form and the structure of the opera), they are linked like the strands of a DNA code. As I was writing the words, these words already had a musical sound in my mind. However, the music had to follow the timeline of the historical events.
2.6.2 The Head Theme

A mysterious spell was cast upon Castagna when he was decapitated. In order to break it and reconnect it with his body, he needed to tell the story to his descendants. Only then will his head be reunited with his body and find lasting peace. Accordingly, the “head theme” plays an important role in this Opera. The “head theme” is common in other important Operas as well. For example, in Salomè, the decapitation of John the Baptist becomes the focal point in the action.

Historically, poetically and philosophically, the “head” has always been an object of constant observation in human thinking. Because in my Opera, the protagonist is beheaded, the head becomes a strong and complex symbol that is used in more than one way to create special events in the story.

Anatomically, the head is the only spherical element of the outer body, and contains the brain, which is the command-centre that rules all parts of the body and controls imagination. It can also represent the spiritual side of man, as different from the material side, of the body. Castagna’s head is the manifestation of his entire being: his power, his intellect, his actions, his emotions. His head then becomes the foundation for the entire being of the musical structure of the opera.

2.6.3 Musical Development of the Head Theme

To reinforce this concept, I developed a main matrix for the musical theme, which I called the “head theme”. This theme is the main generative essence found in the Blake’s Project–electronic part which is heard at the beginning, and in many other forms throughout the opera. The Blake’s Project-electronic, with its main “Head Theme” is made with the following 7 pitches and a repeated C for a total of 8 sounds (see figure below).
The theme is heard often and is melodically divided in the following 3 groups as illustrated in the table below:

<table>
<thead>
<tr>
<th>C</th>
<th>Bb</th>
<th>F#</th>
<th>F</th>
<th>E</th>
<th>(C)</th>
<th>B</th>
<th>C#</th>
</tr>
</thead>
</table>

In Example 2, from Part I, bar 191 the head theme is heard again with its 8 pitches in a slightly different order C, Bb, F#, F, E, C, C#, B# and with just a final addition of a fourth group consisting of G (new pitch-class), F# (repeated sound), and again G. Note that the leaps found in this sequence are an important characteristic, which create a typical element, and are often used to highlight special moments or characters of the opera.

So after the first 2’30” of this electro-acoustic sound, which functions as an Introduction at the beginning of the Opera, the theme in Example 1 from Blake’s Project-electronic sequence is primarily used as a matrix that will generate all the other new musical elements. The notes and intervals that create the actual theme are used fully or in small patterns to underline different characters and characteristic moments during the composition.
An example of this approach is heard early in Part I in the King’s vocal line (Bars 66–72), where the intervals used in the head theme Ex.2 (F#–F♭–E) and (B–G) are used, which diminish in order to depict the King’s character. Such modified intervals, for example, are repeated several times to dramatically emphasize the King’s anxiety.

Figure 2.5  Example 3 - Part I (Bars 66-72 King).

Returning to the full length of Blake’s Project-electronic, its duration is 9’05”, but in the opera only certain selected moments are used from it. (See Appendix 2.5 of the Opera chapter for the full detailed description of Blake’s Project-electronic. Accordingly, in the Opera’s first concert-performance of February 2013, this electro-acoustic music was only partially used (from 0’00” to 3’22”). This portion has been divided into two sections. See Figure 2.6 below.

Figure 2.6. - Concise Description of the Two Sections

<table>
<thead>
<tr>
<th>Durations/Sections</th>
<th>Timeline Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Section 1: 0’00–3’22</strong>: Below are the internal subdivisions.</td>
<td>Section 1: See below description from 0’00–3’22”</td>
</tr>
<tr>
<td>0’00”–0’19”</td>
<td>Introduction</td>
</tr>
<tr>
<td>0’20”–0”40”</td>
<td>This is the main piano fragment heard in the electro-acoustics that will be used in the opera, especially in Part III Letter S as Blake’s electro-acoustic reminiscent theme.</td>
</tr>
</tbody>
</table>
### Part III, bar 464

<table>
<thead>
<tr>
<th>Time</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0’41”–0’57”</td>
<td>Instruments return such as flutes, violins, pedal plus piano.</td>
</tr>
<tr>
<td>0’58”–1’19”</td>
<td>Special effect Ostinato I.</td>
</tr>
<tr>
<td>1’20”–1’46”</td>
<td>Piano theme and development, pedal with instruments.</td>
</tr>
</tbody>
</table>

Double voices effect: English and Italian simultaneously. Both use Blake’s Poem (See the original poem below*).

**Voice II English (Mezzo piano):** I made a variation for the first two stanzas of Blake’s poem.

(The alignment of the two languages below represents the sequence of how they are performed)
<table>
<thead>
<tr>
<th>Il mio spettro e’ ovunque</th>
<th>My spectre around me</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attorno a me</td>
<td>Night and day around me</td>
</tr>
<tr>
<td>Notte e giorno come bestia selvatica Sorveglia la mia via</td>
<td>Like a wild beast guards my way;</td>
</tr>
<tr>
<td><em>Ed io mi sento perso</em></td>
<td>Night and day around me</td>
</tr>
<tr>
<td><em>Soffoco</em></td>
<td>My spectre follows thee behind</td>
</tr>
<tr>
<td><em>Anelo alla liberta</em></td>
<td></td>
</tr>
<tr>
<td><em>Ma liberta’ non e’.</em></td>
<td>My Emanation far within</td>
</tr>
<tr>
<td>Temo me stesso</td>
<td>My spectre around me</td>
</tr>
<tr>
<td>Vago nel mio sogno</td>
<td>My Emanation far within</td>
</tr>
<tr>
<td>In me la mia emanazione da lunghi</td>
<td>Weeps incessantly for my sin.</td>
</tr>
<tr>
<td>In un pianto incessante</td>
<td>Around me night and day</td>
</tr>
<tr>
<td>il mio peccato piange</td>
<td></td>
</tr>
<tr>
<td>Il mio spettro e’!</td>
<td>Like a wild beast guards my way;</td>
</tr>
</tbody>
</table>

**Section 2: from 0’00”–2’30” (as above)**

This section was used in the opera for the building of the Cathedral

| 2’31”–2’34” | Silence |
2’35”–3’22”

This part will be used later in the score as the main rhythmical thematic element linked with Castagna in part II (Letter I bar 142) and in part III (Letter O bar 360 – and bar 469) with his movement to the mountain and his decapitation.

2.6.4 The Symbolism of Number Eight

Without a doubt the real inspiration and the connection with the Opera – is with the eight sides of the St George Cathedral constructed by Castagna. This number is found throughout the composition either as the word “Eight” or as the word “Octagonal”. These words are used often by Castagna and Belinè in the following moments of Parts II and III:

In Part II by Castagna:

- “Eight moons”, bar 193;
- “I can see the eight sides”, bar 198;
- “Octagonal Dome”, bar 203;
- “Octagonal infinity”, bar 210

In Part III by Belinè and Castagna:

- Belinè (double dream duet with Castagna): “I dreamt of the eight moons”, bar 277; and
- Castagna (duet with Damtew): “I dreamt of the eight moons”, bar 409.
In many cultures, the number “eight” has different philosophical-religious meanings. I was attracted by the fact that the number eight is a number that insinuates the infinite, since it is the same glyph positioned in a different way, laid down. (i.e. $8 \rightarrow \infty$).

Here is a list of observations that interested me when approaching/studying this number:

1. The number eight is a Fibonacci number; also internally made of the sum of Fibonacci numbers such as ($8 = 5 + 3$).
2. Eight is also the only Fibonacci number, aside from the number one, that is a perfect cube. ($8 = 2 \times 2 \times 2$).
3. An octagon has eight sides. The area of a regular octagon can be computed as a truncated square.
4. Leonardo Da Vinci suggested the octagon represents “a circle attempting to become a square”.
5. Properties: an octagon has five diagonals from each vertex. So eight vertices multiplied by five diagonals yields 40 diagonals. But then one would be counting each diagonal twice. So the actual diagonals are just 20.
6. Figurate numbers representing octagons (including eight) are called octagonal numbers.
7. A polyhedron with eight faces is an octahedron (one of the Platonic solids).
8. Computers use CPU data in multiples of eight bits. The octet in computer language is used to name the sequence of eight bits. (From [http://en.wikipedia.org/wiki/8_(number)]).

The above list highlights some of the factors that attracted me to this number. I found a similar interest in the topic when I studied the painting *The Lecture* by Picasso. I learnt that in this famous painting, inspired by Marie-Thérèse Walter, Picasso divided the space on his canvas into eight sections inside which he developed his famous female figure.
2.6.5 The Use of Rhetoric Figures

I have intentionally used my libretto to influence the music, getting the idea from the old practice of *Poetics of Affects*[^1]. In Caccini’s preface to his *Le Nuove Musiche* [“New Musics”] written in 1601-1602, the musical aim of the singer was to move the “Affects of the Soul” (di muovere l’affetto dell’animo): this means moving the listeners by using certain rhetorical figures, so that the words become a starting point for creativity.

Therefore, in some musical moments of my opera, the link to this *Poetic* is quite evident. For example, in Part I, Letter J to bar 121, the King sings of “special abilities” and the musical material is at that precise moment a difficult melismatic event with challenging leaps underlining “difficulties-abilities”, the vocal aptitude of both the King and Castagna (the subject of the conversation). This is a clear example that shows how the words have simply guided my music in a manner akin to the old *Poetic of Affects*. During my creative process I observed that new music needs to bind with the past to re-interpret some precise traditional knowledge in order to find its stronger, more modern, identity.

2.6.6 The Use of the Voice and Tessitura

I find composing for voices to be a fascinating as well as a rewarding experience rather than a quest to overcome a challenge. The deployment of the voices in my opera have been conceived to accompany the singers in a challenging, yet comfortable musical environment. I helped them pitch their lines fearlessly, through specific reference notes/chords in the piano part. The vocal range has been carefully considered with music composed to fluently accommodate the ideal vocal range. There are only few instances of genuine complexity – without ranging into extreme limits.
2.6.7 Opera Duration

The opera lasts for about ninety minutes. It is of sufficient duration to be able to express fully the events recounted in my story. The Opera is divided into Three Parts, but it can be better thought of as one lengthy act subdivided into three parts, each comprising several subdivisions. This single-act form developed from my idea of having only one substantial stage-setting divided into two halves, both of which are always visible for the entire duration of a complete production (see Original Stage Drawing in Appendix 2.3).

The idea that there would be no need to change scenery during the Opera, but that the characters would move around the stage to different places during the various happenings, is an important element in my creative approach. The Three Parts of the Opera are so tightly connected that each flows into the next seamlessly.

Some actual small cadences of certain (sub)sections can be found inside the scenes themselves. For example, the true ending of Part II is almost at the beginning of Part III, after the final duet of Armarhà and Castagna (bar 82), while the actual beginning of Part III starts with Damtew’s and Belinè’s duet (bar 83). The opera needs to be understood as a whole, without interruptions – as a one-act structure with three internal subdivisions, in what I would call “Forma Sonata Opera”.

I feel quite an affinity with Strauss’s Salomè in regard to the Opera’s duration, at around ninety minutes with the common dramatic event being a decapitation. Such duration is for me the ideal length for a modern opera.

2.6.8 Function of the Little Girl

The character of the “Little Girl” is a key element in this Opera. She crosses the stage unseen and undisturbed six times during the narration of Castagna’s story. None of the protagonists sees the Little Girl, yet she sees everything and everyone, showing a deep, almost anxious interest in the fate of her great-great uncle Castagna. To underline Castagna’s strong connection to the Little Girl, I used a poem I wrote called Little Girl Poem. I wrote it prior to the opera but used it
therein to express certain feelings and understandings between Castagna and the Little Girl. The Little Girl Poem acts as a counterpoint to the dialogue. It is used in the following way: the italicized parts (1 to 5) have been employed to give voice to the Spirits throughout the Opera. The parts in parentheses are not sung but acted. Below is the poem in its full version:

1. *Mi stordisce* – it stuns me
2. *Forse la morte* – Maybe death
3. *Blue eyes, (Silenzio blu’)* – *Blue silence all around me*
4. *Lasciandomi imbambolata* – *It leaves me astonished*
   (Il gesto riparte – it starts again)
   (Liberamente – freely)
   (Incompreso – not understood)
   (Atteso – awaited)
   (Finalmente svelato – Finally revealed)
5. *Eterno abbraccio* – *eternal embrace*

### 2.6.9 Examining the Opera through a description of the six characters

I shall now describe the Three Parts of the Opera, focusing on some highlights paying special attention to the characters. I will portray each character and their music throughout the entire Opera, starting with the King and progressing in order of appearance to the last one: Princess Belinè and Little Girl. The description of the music as integral to the function of the characters, will give a clearer image of the compositional process and relative structure.

**Figure 2.7 Order of Appearance of the Characters in the Opera**

<table>
<thead>
<tr>
<th>Part I</th>
<th>Part II</th>
<th>Part III</th>
</tr>
</thead>
<tbody>
<tr>
<td>King: low baritone</td>
<td>Tegna</td>
<td>Armarhà</td>
</tr>
<tr>
<td>Damtew: high baritone</td>
<td>Damtew</td>
<td>Castagna</td>
</tr>
<tr>
<td>Tegna: mezzo-soprano</td>
<td>King</td>
<td>Damtew</td>
</tr>
<tr>
<td>Castagna: tenor</td>
<td>Castagna</td>
<td>Belinè: soprano</td>
</tr>
<tr>
<td></td>
<td></td>
<td>King</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Tegna (finale)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Little Girl</td>
</tr>
</tbody>
</table>
In every part there is always a new female voice added:

- in Part I, there is Tegna;
- in Part II, Armarhà; and
- in Part III, Belinè.

So four singers sing in Part I, five in Part II, and six in Part III. In each Part, the amount of music sung is mostly divided among a maximum of four or five voices. The three male voices (Castagna, the King and Damtew) appear throughout the Opera. Armarhà has an important role at the end of Part II, and at the beginning of Part III, followed by a duet with Belinè at the end of Part III. Last but not least, Belinè, the main female voice, sings significantly in Part III.

### 2.7 Analysis of the Subsections of the Three Parts:

The general atmosphere of my music insinuates the stylistic colours of the 1930s, a musical panorama depicting my own vision of those years. A big challenge has been trying to keep the attention of the listeners through making use of different mood-changes, inserting distinct rhythms, inside the actual scene or sometimes with many changes across just a few bars (as in Part I, Letter G), which very often coincide with the rehearsal letters; or fast rhythmical changes between contiguous scenes in just a few bars. There are three distinct primary musical elements that are very much recognisable in the opera; they often occur paired together and/or in rapid sequence. These are:

1. **Thematic material in chords form**: the pitches that constitute the chords can also be disposed as melodic intervals (as in the Deportation music, with both chords and arpeggios manifesting themselves on the same pitches, bars 24-26).

2. **Repetitive rhythms and rhythmical patterns**: see especially Part II mark J, from bar 27 and Part III mark N, from bar 330.

3. **Melodic events**: described in detail below in discussing the characters.
I sought to shape my musical language in a way that conveys both complexity and simplicity in order to better serve the singers. The Three Parts in which the Opera is divided can be also subdivided as follows:

- **Part I**: 3 subsections
- **Part II**: 5 subsections
- **Part III**: 8 subsections

N.B. *At Appendix 2.6, there is a full list labelled “Musical Catalogue” showing the main musical elements of Parts I, II and III. I will quote them as: eg. (Appendix Music Catalogue part I, MT1). Most of the musical examples are found in that list or are cited with their bar-numbers.*

### 2.7.1 Part I

The three subsections in Part I contain important musical solo events and the appearance of characters such as the King, Damtew, Tegna and Castagna. Part I has a duration of 14’50” and does not have a clear ending but continues directly into the beginning of Part II with the mezzo soprano Tegna who sings her solo *Quest’uomo venuto da lontano* (“This man arriving from afar”). Within the three subsections that comprise Part I, there are further internal subdivisions.

**Subsection one** last from bar 1 until the entrance of the King at letter E. The Opera starts with a sequence of 6 instrumental musical solos, which act as an Introduction.

1. Introduction, from bar 1.
2. Blake’s Project Electroacoustic sounds, bar 21 (2’30”).
3. Deportation Music solo, from bar 22, letter A.
4. Brief musical solo, bars 35–45, letter B.
5. Spirit’s entrance, bars 46–4, letter C.
6. Deportation Music (brief refrain), bars 55–59, letter D.
Descriptions of the six events:

1. The Introduction (Appendix Music Catalogue Part I, MT1) is a solo, spanning the first 20 bars. A frozen scene occurs: a family stands in front of a picture. The father and a little girl (LG1: first of a progressive number of her appearances) are looking at Castagna’s painting and photographs. This introduction was a substitute for the old Prologue discussed earlier. Castagna’s main melody in the original Prologue was kept as the main opening melody in the new Introduction, and at the end of the Opera we hear the same melancholic melody this time sung by Castagna. Important cues in bars 1–20 occur according to the Fibonacci series – at bars 1, 2, 3, 5, 8, and 13. Bar 21 acts as a bridging moment to the entrance of the first electro-acoustic sound-event.

2. During the two minutes or so of the electro-acoustic Blake’s Project-electronic, starting from bar 21, the Spectre arrives from the dark and draws Castagna out of the painting, bringing him back to life. (Blake’s Project-electronic Paragraph 3 - see also Appendix 2.5, which contains a comprehensive table of details.)

3. During the Deportation Music, a brief, complex piano-solo, the Spectre takes Castagna with him and then brings him to the King. This subsection possesses an ABCB form (bars 22–29, bars 29–34, bars 35–54, and bars 55-60 the last of which, apart from the starting point, is exactly the same as bars 29–34). The material here comes from my earlier Dark Flow ensemble composition’s material, part of the old Prologue, which was based on the pitches I assigned to the words “Dark Flows, see figure below

Figure 2.8 - Dark Flow

<table>
<thead>
<tr>
<th></th>
<th>D</th>
<th>A</th>
<th>R</th>
<th>K</th>
<th>F</th>
<th>L</th>
<th>O</th>
<th>W</th>
<th>S</th>
</tr>
</thead>
<tbody>
<tr>
<td>G</td>
<td>C</td>
<td>C#</td>
<td>D</td>
<td>G#</td>
<td>F</td>
<td>B</td>
<td>Bb</td>
<td>E/Eb</td>
<td></td>
</tr>
</tbody>
</table>
The opening here is based on two chords, each comprising 5 pitches, referring somehow to the *Dark Flow* pitches, organized thus:

\[
G\flat \ C\flat \ C\# \ D\flat \ G\# \text{ and } Eb \ Bb \ B\flat \ E\flat \ F\flat.
\]

(Appendix Music Catalogue part I, MT2 bar 27).

This musical material is a kind of alter ego to the previously mentioned “head theme”. I believe that to some extent this introduction was influenced by my piano composition *Uninterrupted Oneiric Fantasy*, which is based on a thematic rhythmical chord heard constantly throughout that composition. As I finished the piano work earlier in 2012, while the Opera was still in progress, I felt that this technique could have been effective in the Opera’s Deportation music, and so I applied it. It is interesting to note how similar initial approaches can lead to quite different results.

The Deportation piano-solo contains the following patterns as detailed in the table below. The structure is indicated as number of bars per subsection, and changes of time signature.

**Figure 2.9 - Deportation Music**

<table>
<thead>
<tr>
<th>No. of bars in sequence</th>
<th>1</th>
<th>3</th>
<th>7</th>
<th>2</th>
<th>10</th>
<th>1</th>
<th>9</th>
<th>7</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Form-plan</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>Spirits</td>
<td>B</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bar numbers within the score</td>
<td>22</td>
<td>23–25</td>
<td>26–32</td>
<td>33–34</td>
<td>35–44</td>
<td>45</td>
<td>46–54</td>
<td>55–59</td>
<td>60</td>
</tr>
</tbody>
</table>
4. At bar 35, letter B, a special theme is heard for the first time. This melodic idea is simple and will be heard many times throughout the opera (for example, in part I when Damtew sings “I heard he was with the Italians troops”, from bar 106). In this brief fragment, there is a refrain, bars 42–44. This seldom used subsection was originally developed to follow the narrator – I left both the refrain and the words in the score, for future productions – but also to give a kind of temporal suspension and repetitive melodic pattern that resonates with future events in the opera.

5. During this subsection, at letter C, the Little Girl appears for the second time (LG2) and sits down to watch the singers. From bar 46, where the three spirits (the three female voices) sing, we can also discern the “Little Girl” poem theme” previously mentioned: “Mi stordisce – it stuns me.” This theme consists of a descending major second approached by the voices and filled in with semitones: see for example, the melodic line of both the piano and voices on these pitches: Eb-D-D-Db. This becomes the leitmotif of the Little Girl Poem. (Appendix Music Catalogue part I, MT3 bar 46–47).

6. This subsection I ends with the Letter D, which is the refrain from the Deportation solo (bats 30-34).

**Subsection two** (from letter E) begins with the King’s first entrance, then is followed by Damtew, until Tegna’s first appearance at bar 141.

The King figure is very important in the story, as he provides one of the links to Castagna. The King’s voice is very solemn and anxious right from the beginning of Part I, Section E–F (bars 45–52, 68–75). His main musical presence is mostly in part I, where he is the protagonist for the setting of the story with the section L solo being the climax.

In letter E, the musical material is similar to that at letter C where the Spirits are singing. The piano part insinuates, with its descending semitones, the vocal line for the King with all descending semitones; and even when there is an ascending leap it always returns to descending semitones: so there is a strong relationship between the vocal and instrumental parts. The manifestation of such leaps in the King’s vocal line are also meant to instill a kind of anxiety that
represents his worry about not being able to understand who is before him – the unknown prisoner, Castagna, whose “scaring Blue eyes are staring at him”.

It is interesting to observe that within this ¾ metre, the rhythm of the vocal part in each bar stems from two crotchets and a triplet of quavers, arrayed in all types of permutations such as 131-311-113 [See bars 70, “they Seek to deeply or bar 72, he’s cursing you] etc. (Appendix Music Catalogue part I, MT4).

At bar 75, the Spirits will echo for the first time the King in Forse la Morte (letter C, bars 75–76). This kind of “responsorial singing” will occur again in Part I three times in all (at bars 83, 93 and 98). I had this idea as I imagined the Spirits inside the actual cathedral, with all of the reverberation in their voices. Also, something similar took place at letter C over just a few bars where the female voices alternate the text of the “Little Girl Poem”: “Mi stordisce – it stuns me”. This responsorial approach will be utilized again in Part II, (Appendix Music Catalogue part II, MT17).

Damtew enters, re-assuring the King. Damtew’s vocal line is like that of the King, being comprised of small descending intervals, mostly semitones. (Appendix Music Catalogue part I, MT5). He is really present in all the Three Parts, being involved in the full drama from beginning to end since the story is moulded around his historical figure. (See Appendix 2.1 for historical notes on Castagna and photo).

There are a few observations to be made concerning Damtew’s musical material. It is very dense and articulated, and quite complex as his personality (see, for instance, part I, letter G, or the final duet of part II). Damtew is a very determined man. For example in Part III he is determined to introduce Castagna to his aunt Belinè, or seeks to resolve problematic situations (“Matter solved”) – in the end refuses to surrender in order to save his life.

For the already mentioned “Poetic of Affects” – for example, in Part I (Appendix Music Catalogue part I, MT7) – Damtew is talking about the war, and the piano accompaniment is notated so that both visually and through the sound’s shape we are immediately taken into the war field: it is just a mechanical rhythmical pattern symbolizing the sound of war. Also, when Damtew soon after
sings “Organizzare”, the music, with its descending semitones, sounds “organised”. All of Damtew’s vocal lines are challenging – from the first duet with the King to that with Tegna in Part I, to the duet with Belinè in Part III, to the comic duets with Castagna in Parts II and III, and the dramatic final duet with Castagna in Part III.

Damtew’s role in this first Part is to calm the King and provide him with some ideas about who Castagna really is. At bar 87, there is a dramatic, rapid change in the rhythm: the triplet quavers that kept shifting around within the ¼ bars are now frozen and repeated always on the second beat, creating further instability and anxiety for the King (“Blue eyes … All around me” – the King feels threatened). The piano-instrumental part leads to letter G, where in a highly complex event of just 17 bars, there are four or so changes of rhythm and mood. (Appendix Music Catalogue part I, MT6). Here, Damtew is saying that Castagna was with the Italian troops, but regarding his features “he does not look like one of them”.

From bar 106 there is the rhythm and solemnity of the war, with the use of chords. Then Damtew comments on the fact that Castagna does not look Italian; in fact, he is really an elegant Nordic figure (with blue eyes and red hair) so that the chords at this stage can be exchanged with faster, irregular groups (of quintuplets) until we reach a slow, suspended trill – emphasising the intimidating approach of the King before that epic figure.

Under a mechanical pattern (Appendix Music Catalogue part I, MT7), Damtew sings, “In the war he was maggiore furiere – Bravi a crear organizzare” (“Good in creating organisation”). So, as I already explained for the “abilities” in the King’s part, which appears soon after, undoubtedly the words furnished me with many ideas for the music: the “Poetic of Affects” being a strong basic structure for creativity and homage. Damtew replies to the King that he will ask for some information on Castagna – a “Cantabile-melody”, almost like a lullaby, made again of semitones and leaps that anticipates the King’s aria at letter L.

This aria too (Appendix Music Catalogue part I, MT9) has the sound of a lullaby; it is like a repetitive childish cantilena where he extols the greatness of his Addis Ababa (the meaning of which is simply “flower” in the native language). The musical texture, with obstinate repetitive notes, is
hypnotic for the king; he believes and seeks to encourage himself in the great future for his city and country, thinking that Ethiopia will win this battle and those to come! It is a kind of negative premonition. The melody ascends as the King is searching for the perfect architect to create his new Addis Ababa. Tegna enters for the first time, suggesting that there is no need to kill the prisoners. (Appendix Music Catalogue part I, MT10).

There are three main aspects regarding Princess Tegna: she is the King’s daughter; she is in love with her husband Damtew; and she wishes to protect Castagna. We feel the solemn presence of her strong character throughout the Opera. She is the main female role in Part I and at the beginning of Part II, after which she is absent until the finale of Part III. I chose the mezzo-soprano colour for Tegna to engender stability in the plot as well as to blend with the low voices of the King and Damtew while counterpoising the three high voices of Castagna, Armahà and Belinè. Tegna sings with an elegant yet solemn lower voice, balancing the three male voices in Part I. She sings an elaborate duet with Damtew in Part II, including a premonition “Sento freddo” (I feel cold).

Subsection three, the final subsection, spans from letter M (where Castagna sings “Il Nuovo fiore”) to the end of the Part I. Here the King is enquiring as to why Castagna keeps staring at him: the music still moves chromatically, stopping at bar 149 with the double trill G–G# (Appendix Music Catalogue part I, MT10b). These two pitches are part of the deportation chords, and constitute ideally the basis for my secret sound coming from the Cathedral. I originally planned to make a 15-second sound-track, a recording of singing bowls, somewhat electro-acoustically enhanced, all tuned microtonally around those pitches. I labelled this the Secret Enchanting sound (notated as “SES” in the score). Although I did not implement it in the final concert, being engaged as a performer hence unable to take charge of additional devices, this semitone (G–G#) has been retained and is often heard throughout the Opera as an important element underpinning special moments (see, for example, Part II, bar 114).

The King and Damtew do not comprehend Castagna, who sings twice, in Italian “il nuovo fiore ha bisogno di piu’ acqua” (Appendix Music Catalogue part I, MT11). The first time, his melody (after a leap of a perfect 4th) flows down melismatically, always in semitones. But the second leap, “the
need of water” expands to a major 6th. This is a metaphor for the real need for water-development in Addis Ababa, just like a flower needs water. Because Castagna is not understood, guards are called by the King, but Damtew interrupts to explain that Castagna is actually an architect. This is achieved musically through a lieder piano accompaniment melody form (Appendix Music Catalogue part I, MT12). The same accompaniment pattern will be used in Part II with Tegna, and in Part III with Belinè.

It is problematic to understand a different language so a translator is requested, and the music struggles around the same material of the lieder pattern – especially B–Bb. This again exemplifies the power of words’ meaning reinforced by some musical equivalent. But Castagna is a witty man and surprises them all by speaking in their own language; he sings again: “the new flower needs more water.” And now Castagna’s strong character begins to be revealed, and the head theme appears for the first time as a confirmation at bar 191 (Appendix Music Catalogue part I, M13). That theme was heard earlier during the electro-acoustic fragment in the introduction of bar 21.

Almost at the end of Part I the King is suddenly thrilled at hearing his own language and changes his mind telling Damtew that Castagna could be his helper. In the “Tutti Choral Finale”, letter S, there is a mutual approval where Castagna declares that his future is in Ethiopia. Damtew concludes the event singing “The One”, musically closing within inside a diminished 5th that shrinks into a more diminished 4th using the three pitches (F#–C–Bb) – part of the eight-note head theme, therefore linked to the main protagonist. Everyone is getting closer to Sebastiano Castagna now: his future is in Ethiopia. (Appendix Music Catalogue part I, M14). Castagna from this point on will be singing throughout the Opera. Here, in Part I, his role is incipient, and we will hear more from him after Damtew and Tegna sing at the beginning of Part II.
2.7.2 Part II

Part II has duration of about 35 minutes and can be divided into five subsections. Those events are very intense and constantly flowing one after the other. The main story moves through the emotionally intense duets of Tegna and Damtew, to the arias and solos, which are sung by our protagonist Castagna allowing us to know him better. Then there are the fun nights-out duets between Castagna and Damtew ending with the Sicilian song, which takes us to the end of Part II, where Castagna buys a slave at the market leading us to meet the interesting secret new character of the slave “Armarhà”.

Subsection One: Letters A-G

In this first Subsection, Tegna opens the scene singing alone, then soon after in duo with her husband Damtew. These main protagonists are interacting with each other on different levels talking about different topics and exploring new feelings. Damtew will be engaged during all of Part II while Tegna will conclude her musical appearance soon (in bar 141). She will be have a small moment as Spirit in bar 356 (Appendix Music Catalogue part II, MT17) during the Little Girl Poem. We will encounter her one last time only at the end of Part III in the “Tutti” finale (Appendix Music Catalogue part III, MT 42-44). In subsection one, I have identified all the significant moments in the structure.

Part II starts with Tegna’s solo. She is the daughter of the King; her tone is majestic/regal and she sounds very wise. The musical elements that characterise this section are made of A and B elements. A is the rhythm of bars 1-3 and B is the small arpeggio of bar 4, (Appendix Music Catalogue part II, MT). The small triplets will be a leitmotif in different moments during the Opera: they are linked by the friendship theme as Tegna is talking about the friendship between Castagna and Damtew “something precious” and the musical accompaniment is rich with small movements and precious details. (Music Catalogue part II, MT11).

Damtew starts to sing and he is worried his beloved is in love with Castagna as well. But Tegna has eyes just for him (Rehearsal mark B): she confirms her love for Damtew with a
sweeter/romantic short melody with triplets. Later when Damtew sings the butterfly aria referring to Armarihà (Appendix Music Catalogue part II, MT24) these triplets will be heard again. She confirms the importance of friendship (bar 27) singing with the same musical material as in bar 3 ("Quest’uomo venuto da Lontano") as she refers always to Castagna.

The atmosphere changes suddenly (Appendix Music Catalogue part II, MT2). A rhythmical new pattern appears to underline that there is a kind of negative premonition of happenings for the future. Tegna sings “Sento freddo”- I feel the cold, and again “Futuro incerto”- uncertainty of the future and the two pitches that make the semitones alternate underlining the uncertainty: again referring to the Poetic of Affects. The material of this passage is the same as the opening chords of the deportation music in part I. A new theme starts in 6/8 like a traditional minuet (Appendix Music Catalogue part II, MT3).

The music is very enjoyable but the words are not: this is a deliberate contrast. It ends with the vocal imitation and duet between Damtew and Tegna. Then a lied form breaks through (Appendix Music Catalogue part II, MT4). Damtew is singing “Tuo padre crede nella nostra forza” there is a positive suggestion/approach and again at the same time a negative premonition: the two lovers sing in unison, “Il nuovo fiore non morira’ mai” (the new flower will never die). Section one ends with a mood change opened by a musical intermezzo, from bar 75 in 9/8 (Appendix Music Catalogue part II, MT5).

Damtew wants to introduce Belinè to Castagna then the duet ends singing the love of his love for Tegna. The duet idyll is interrupted by the trill of G-G# (important semitone from the head theme), which indicates again a negative premonition.

Subsection Two: Letters H - K

This Subsection is the moment where the King and Castagna have their agreements: the King asks Castagna to build the City’s Cathedral. Castagna accepts and sings again the theme that was referred to him, which is the same material that Tegna sings at the beginning of Part II which is characterized by a minor 6th (E - C). Also during Letter H, bar 117, while the King
sings, “Sebastiano Castagna I proclaim you my architect”, the Spectre dances freely around the stage. At bar 124 there is a brief musical solo, which I planned longer but I left it there so to give time to the singers. After this there is an echo like the end of Part I with “Tutti” thanking Castagna for his acceptance.

A small musical introduction from the main electronic theme is Letter I from bar 142. It has a dramatic function, as this articulated theme will always be linked with Castagna’s climax moments.

King asks to build the cathedral and Castagna says yes “l’Ingegnere bianco accetta”. This part is highly demanding vocally for the King as it has a very complex rhythm. Also, it is hard to quickly enter from the previous musical solo. The Letter K, musical refrain, is used to move all the singers in the lower back part of the stage where the Cathedral will be build (see DVD of the opera concert attached).

**Subsection Three: Letters L-S**

This section is completely dedicated to the protagonist, “Monsiù Sebastiano Castagna”. It is here that Castagna sings mostly about himself, his home country and his new Ethiopian friends, guiding us through different emotions. The St. George Cathedral is built in this frame of events.

The subsection opens with new musical material (*Appendix Music Catalogue part II, MT9*) and with Castagna singing “I had a dream a number that contains all numbers”. He envisions the eight moons and his art: the Octagonal Dome he is about to build. Here the number eight is mentioned in different forms. As previously explained, it has been very important in the process as multifunctional symbolic number. All the lyrics in these subsections use the poems I wrote (See Appendix 2.2).

At bar 207 *Blake’s Project-electronic* is heard again, the Spectre helps Castagna and all the other singers building the Cathedral. Here all the singers and the Little Girl (LG3) have a double role, becoming Spirits that help Castagna in his important creative/theatrical moment. Also, the secret
sounds (singing bowls) are hidden inside the walls of the Cathedral. (See the DVD for this visual description).

In bar 208 (Appendix Music Catalogue part II, MT10), Castagna is singing an important highlight where the music underlines the octagonal infinity concept using a “virtually infinite chain of chords” (again the idea from the Poetic of Affects). It ends with “Rhythm of silence I perceive you”. We hear a musical solo, which is the refrain with the same melodic triplets that we heard sung by Tegna at the beginning of Part II bar 4 and bar 12.

In Letter O, (Appendix Music Catalogue part II, MT12) is an important Recitativo in Italian. The text is again from my own poem table and can be so translated: “I feel the silences marking time in my heart at a slowing down rhythm, suspended without time. My exuberant loud thoughts find peace; they perceive the external from the internal.” This is the major idea of being out of time in “limbo” between timelines: Castagna was in this condition of uncertainty because his violent death. This moment refers to that concept.

In Letter P, (Appendix Music Catalogue part II, MT13) is the main Aria where Castagna is content and describes his memories making analogies between Addis Ababa and Aidone both located up in the mountains; Addis Ababa is 2000 metres above sea level while Aidone is 900 metres. The atmosphere has the flavour of a traditional tonal system, which is kept deliberately opened and not stabilized for long. Sebastiano sings in Italian, “Non piu’ prigioniero” (“No more prisoner, I can create in this country”). During the Aria the protagonist confirms his love for the Ethiopians and recalls his happy times in Aidone as a child. The aria ends with an English phrase to be understood by all: “I want to be where my heart meets my cozy nest”. Castagna wanted always to go to Addis Ababa so he finally reached his dream.

What follows is a Coda-Recitativo to the previous Aria: “Aidone, miraggio gemello” (“Aidone, twin mirage”) for the territorial analogies of the two cities. (Appendix Music Catalogue part II, MT14) A small but significant melody arises after this recitativo. In Ethiopia Castagna feels citizen of the world.
He feels free to fly as an eagle. The music seems to match this idea of “flying” acting as detonator to the concept: Castagna is a free man able to go where “the brain secretly desires to go”. All this leads to final musical event of this section, (Appendix Music Catalogue part II, MT16-MT17). Castagna has been singing for almost half an hour and in these few bars he summarises everything:

- the building of the cathedral for the love of the new flower (Addis Ababa);
- the hiding of the secret sound in its walls; and
- the need to tell his story.

At this point the Spirits appear again and we hear the Little Girl Poem: “It leaves me astonished”.

**Subsection Four: Letters T-W**

This Subsection marks a big change in mood, (Appendix Music Catalogue part II, MT18). During these new musical events we will be spectators of some of the happy moments between Damtew and Castagna. The fast active music takes us suddenly to the nights and markets of Addis Ababa where the two used to spend their crazy time. They are already drunk when the Valzer of the “Siamo ubriachi” is heard, (Appendix Music Catalogue part II, MT19). The note on the piano part “Barcollante” is a fun reference to the real mood of the two men almost unable to walk because of the alcohol. The two men are mostly in a constant duet in this section.

Damtew invites Castagna to do their usual tour, (Appendix Music Catalogue part II, MT20). Yes, gambling can be dangerous but there are other dangers to appear! A big rhythmical pattern,
musically described as “giocoso” takes us to the new vocal of Damtew’s new idea: “going to the market you get many things”.

**MT 22. Damtew: “Going to the market”. From bar 423.**

![Musical notation](image)

But Damtew is very good in charming and showing Castagna around, tempting him with many “Items here abound” especially a “Butterfly”. The text is a clear homage to the famous Puccini’s Butterfly (See bar 449).

Damtew is moving to a complex musical solo, which starts with no preparation so it is challenging for the singer, (Appendix Music Catalogue part II, MT24). The music uses the broad triplets to accompany a melody, which represent also the drama to come. The text says that “she - lady butterfly” is very young. It is a metaphor comparing the butterfly that only lives for one day to a slave for one night. Suddenly the “Ubriachi valzer” breaks again, taking us to the last duet where the two men are so drunk they do not know if they are male or female. But Armarhá is certainly a girl and Castagna is aware of that, and sings for her the Sicilian song before buying her as a very special “item”. This Sicilian song is a completely invented theme except for the musical bars (531-532) - which are from a traditional Sicilian song “Si marita’ u Rosa” (Rosa got married). So I virtually created a musical marriage between the two themes. The text is that of a typical over the top “Sicilian situation” where the doctor is needed for the dangerous disease called “Love!” I believe the colorful Sicilian cultural life (where daily events and every feeling is amplified) inspired both music and text, bringing out some kind of useful healthy irony that gently leads to the drama to come! During “the Sicilian Song” the Little Girl (LG4) appears and dances around with the Spectre who has, on this occasion, a more human approach.
Subsection Five: Letters X-Z

Subsection five comprises simply of Armarhà’s solos. She is the “slave” Castagna bought at the market after his wild night with Damtew. She sings that she is a one-night-stand but she wishes to be a lady, someone’s love: “Io vorrei essere, una signora”. Her vocals are mainly here, at the end of Part II, and then in the third section of Part III. She is also a Spirit, like Tegna and Belinè, in both Part I and II. Even though her role is not too long in duration her character is central to the development of the drama.

Basically Armarhà sings four different concepts, which are underpinned musically with four different musical events (Appendix Music Catalogue part II, MT27-30).

1. “Io vorrei essere una signora” (She would like to be treated as a lady). It is a melancholic valzer reflecting the sadness of the character for being a women of one night.

2. “Io maldestramente osservo la mia anima” (I sadly observe my soul). It changes into a tango musical idea. Armarhà is expressing the happiness of being with Castagna even for a brief moment.

3. “Felice-d’essere qui, tra le braccia di uno sconosciuto, che neanche sa di essere qui con me” (Happy to be here in the arms of an unknown man who does not even know he is here with me).

4. “Ma il mio vivere e’ tutto qui” (My life is just this). Part II ends here: the music is dramatic and is characterised by groups of dotted triplets, giving a sense of instability. The Armarhà woman for now, even if undesired, will remain by his side for the night, grasping the smallest moment of happiness.

Part II does not have a real ending but is linked directly to Part III as one big continuation opening to the main duet of Armarhà with Castagna, probably stylistically and musically the most complex. (Appendix Music Catalogue Part III, MT1-MT4-from page 56 till page 59 of the score).
2.7.3 Part III: Analysis

Part III lasts for about 45 minutes, and has eight subsections (not a numerical coincidence!) in which various events including the most dramatic ones are taking place. It opens with the technically challenging duet of Castagna and Armarihà followed by the “Slave Matter duet” between Damtew and Castagna. General Damtew introducing his aunt Belinè to Sebastiano who will make a passionate proposal to the princess. At this stage, the story achieves dramatic tension.

Belinè and Castagna’s double dream is a sad premonition of the final journey up to the mountains for the encounter with Damtew to try to save his life. The Opera ends in tragedy but also with a note of hope for future generations. During Part Three there are a lot of my own poems which I have inserted in the actual libretto.

Subsection One: Letters A-C

Part III opens with a trill and the atmosphere of the deportation music. It is the moment of the love duet between Armarihà and Castagna, (Appendix Music Catalogue Part III, MT1). They have spent the night together and Castagna is still in a dream state. The duet is complex both rhythmically and musically. The 2/4 generates small movements of triplets, which challenges the entrances of the voices. The voices are also responding to each other like a two-part invention mainly meeting in bar 12, “Reazione Automatica” where they have the same rhythm imitating an automatic reaction. There is also a play on words as they talk about “fast and calm” and the music helps this transition.

The two protagonists are kissing (bar 25). The phrase “Bacio rubato” is a climax: stolen kiss that hides in the dark then, returns to normal. At this point, they are singing with the same pitches.
Then, sleeping safely in the warm nest, sung by Armarhà, (Appendix Music Catalogue Part III, MT3) ends suddenly with a twist. The piano accompaniment mimics the surprise with an ascending movement: E Gb Ab B. Armarhà wonders if that moment will ever return. The most obscure meaning of the text can be identified here: “Nourished inner tensions inspiring vital un-expected energy and all comes from the unknown.” Maybe an allusion to love and death as powerful moments of human life. (Appendix Music Catalogue Part III, MT4).

In Letter C, Castagna is starting to wake up but is still half asleep when he realises he cannot let himself be in the arms of Armarhà. The music swirls around the same pitches which are coupled as semitones A–Ab; B–Bb; D–Db; E–Eb. Castagna sings Italian words that mean: “I curl myself in a foetal position trying to hug myself”. He feels the need to protect himself, and unconsciously is seeking comfort from the tragic events to come. The section ends with a few musical bars 80-82 and refrains from the electronics.

**Subsection Two: Letters D-E**

The dramatic ending of subsection one is here completely inverted, turned into a comic ironic event. Damtew’s concern is for Castagna’s wild night with Armarhà and what to do now to
make the Slave disappear from his friend’s life. Castagna is promised to Belinè, so the matter must be resolved!

A compound time signature of 12/8 gives time to express this entire complex situation (Appendix Music Catalogue part III, MT6). The music sounds elegant as Damtew reminds Castagna “this is not a dream, is reality and we have a matter to solve!” The ‘brave Damtew’ organised the meeting with his Aunt Belinè and things need to go right for that to really happen.

But unfortunately (or perhaps fortunately!) Castagna does not remember much of the previous night. Damtew teases Castagna about his poor memory quoting from a famous Puccini aria “O mio babbino caro” How could he forget such things! (Bar 103).

A sudden change follows at Letter E where the system goes elegantly and naturally into G minor. Things need to be stabilised somehow and return to normal so a solution must be found, (Appendix Music Catalogue part III, MT7). What shall we do? Both men comment. Yes! Castagna wants to meet and marry Belinè; and this is just “a little mistake”!!
Damtew suggests three options, to which his dear friend Castagna replies:

1. To kill her? No! Too much blood!
2. To hide her? No! Too dangerous!
3. To sell her back to the market? No! Too much stress poor girl!
So what should the solution be? Musically this is the typical operatic response with a classical “Ritenuto and a final accelerando”, (Bar 129), where Damtew comes out with the winning idea: “we will give her as nuptial present to my aunty Belinè!!”

As in the typical real male world things need to be solved fast and easy!! The two exhausted poor men have now “The” solution and the story can continue its development.

**Subsection Three: Letter F**

We finally meet with the main female role of the opera: Belinè, who will become Castagna’s wife. ([Appendix Music Catalogue part III, MT8](#)). Her main role sings and develops only in Part III. My vocal tessitura is always used comfortably within the ideal range. Only in a few moments does it stretch the range of her vocality. The music linked to Belinè has delicate melodies that portray her kind personality as well as her strength of character. Damtew reminds her that Castagna can be as dangerous as he is handsome. Despite the warning, Belinè wants to meet him - she wants to see his eyes (Bar 159). Suddenly, when she hears his voice, (“Sento la sua voce” at Bars 167-169) she knows she is about to meet her destiny.

**Subsection Four: Letters G-J**

In letter G, the Little Girl ([LG5](#)) enters and watches the first duet between Castagna and Belinè: their tender moment is witnessed through the eyes of an innocent young girl. Castagna’s vocal range is never too extreme during the Opera but the complexity of the role is there, and has to do with his lengthy parts.

Castagna tries to impress Belinè with his artistic abilities and reveals to her the secret sound he imbedded in the Cathedral. This occurs in just a few bars of a simple tune, which vaguely reminds of the one at the beginning of the Opera. ([Appendix Music Catalogue part III, MT9](#)).
At Bar 177 there is a sudden change in mood as Castagna enquires about Belinè’s feelings and worries, (Appendix Music Catalogue part III, MT10). The music has a simple rhythmical pattern made of chords to accompany the voices, setting them free to express their real concerns. Castagna asks what is burdening her, and the princess replies that she is worried for her people. She fears that Ethiopia might be in danger. Castagna tries to comfort her, (Appendix Music Catalogue part III, MT11) and proposes marriage: be my wife! Mia sposa. Belinè accepts without reservations.

This new musical event, (Appendix Music Catalogue part III, MT12) is a typical Operatic Aria in ¾, and serves to balance out Castagna’s Aria in Part II. The lyrics underline the concept of mutual understanding “We have/share the same emotions”. At this point Castagna offers his nuptial gift for the bride: “Armarhà the helper”. Belinè feels honoured and does not suspect anything.

There is a rhythm which underlines the wedding excitement but this is soon interrupted in Bar 233/234 when Belinè asks for Castagna’s family to be at their feast. Castagna’s repressed issues now emerge: his Italian family resents his decision to live so far away. (Appendix Music Catalogue part III, MT13).

This simple “Melodia accompagnata” is Castagna’s tender reply and provides further insight into his character (Appendix Music Catalogue part III, MT14). The words are direct “The way I feel, why am here, in love with the new flower”. He is saying that he has fallen in love with the Princess and her city. This music part ends with Castagna’s promise to write a letter to his mother. As a side note, this did happen to the real Castagna and is described in his diary in my family’s possession.

Belinè soon lightens up to express her happiness and the love she has for both: Monsiu’ Sebastiano and her country which is now “their” land. (Appendix Music Catalogue part III, MT15/MT16). I deliberately left the music very simple here, letting just a melody to resonate. The accompaniment is made of a flowing alternating pattern of inversions of intervals of fifths and thirds and sixths and fourths. (Appendix Music Catalogue part III, MT17). This leads to a powerful duet between Castagna and Belinè ready to accept what may come together. The same pattern of
accompaniment will be used soon after in letter J by the King creating a circular effect of musical continuity, (Appendix Music Catalogue part III, MT18).

Belinè has her solo just after the King’s small vocal, with the same lieder accompaniment we heard in letter O Part I, where Damtew sings. Here Belinè shares her dark forebodings “I dreamt of the eight moons” and also “Feels the tears”. (Appendix Music Catalogue part III, MT19)

The King’s voice is heard once more in duet with Belinè where his tone becomes more paternal giving her re-assurance: “There is no time for sadness” and “All will be fine”. He blesses her and wishes much happiness with her new husband Castagna. There is a touch of melancholy in the King’s simple melody. The king’s part in the Opera ends here and he will join everyone only in the actual finale (Letter Z). (Appendix Music Catalogue part III, MT20).

**Subsection Five: Letters K-L and M-N**

**Letters K-L:**

I wish to address the fact that I did not intentionally refer to traditional Ethiopian music, as I was not interested in appropriating or alluding to it. I wanted the two cultures – Italian and Ethiopian – to be represented by my own musical sound with little reference to traditional folk tunes of the period. I wanted any such connotations to be merely subliminal to create a general atmosphere. Only in two scenes (Letter K-L), which have not been included here, did I make explicit folk-music references. Letter K was a vocal wedding sextet while Letter L was the Eight Moons sexted, a parallel amplification to the double-dream duet of Castagna and Belinè here in Part III.

**Letters M-N**

During the double-dream duet of Castagna and Belinè (letters M-N), the Spectre arrives showing his presence. During the music solo (Letter O) the Spectre takes Castagna up to the mountain to meet Damtew. The journey is very arduous and scary. At home Belinè has a nightmare dream
about Sebastiano, whilst her beloved is experiencing this nightmare going up the mountain. The choice of 6/4 allowed me to have time to describe the mood of the characters. I felt with this time signature the words have the right space to be recalled. (Appendix Music Catalogue part III, MT21)

The scene develops as a dialogue even though the protagonists are physically at different locations. Castagna feels someone is following him up the mountain (“In this scary night”), whilst Belinè back at the Palace is dreaming her beloved is in danger (“Death I feel you” – “Wild Sprits around you”). Then the triplets of 6/4 are kept somehow alive but transformed in the compound time signature of 12/8. This is Belinè’s solo prayer: “Blue notte senza stelle” and “Morte ti sento vicino non circondare il mio amor.” This prayer is like simple church hymn. The vocal reaches high G♭ and elegantly returns down to D almost always (chromatically). (Appendix Music Catalogue part III, MT22).

Castagna: “Mi fanno viaggiar come cieco - I am blinded - per non scoprire dove e’ nascosto Damtew.” (They have blinded me for the journey so I will not discover Damtew’s hideaway). In Bar 447, Damtew repeats the same explanation.

Suddenly the rhythmical pattern changes as per Bar 230. Belinè senses the spirit of death is upon Castagna. The deportation music chords heard at the beginning (F-C-F♯ and G-D-G♯) are now resonating once again. (Appendix Music Catalogue part III, MT23). Belinè prays to have Castagna back (“riportatelo da me”) (Appendix Music Catalogue part III, MT24). The scene ends with Castagna’s fears. He feels hounded and knows he will not see Belinè and Armârha again. Musically this moment is like a typical recitativo. (Appendix Music Catalogue part III, MT25).

**Subsection Six: Letters O-R**

In letters O to R we have Castagna’s solo as he journeys up the mountain. The dramatic theme is rendered electronically as per Part II in bar 142. (Appendix Music Catalogue part III, MT27).

Letter P has the final duet between Damtew and Castagna. They toast to their happy past. The music is in 3/4 to be light in contrast to the serious consequences of their meeting. At this point
Damtew sings “My troops still resist the Italians - those Italians are different from Castagna." and the music flows smoothly even though the pattern is a typical ostinato movement. (Appendix Music Catalogue part III, MT28-29)

The music is diametrically opposed. As the situation becomes more grave, the music in Letter Q becomes even more peaceful with the constant rhythm made of triplets (piano left hand) counterpointing the main 4/4 melody (right hand and singer). Castagna recalls his dream of the eight moons and expresses his fears of not being able to succeed in persuading Damtew to surrender. (Appendix Music Catalogue part III, MT30). Castagna's plea is now personal ("I am not here for duty but for those who love you") and he makes his final appeal. But Damtew does not trust the enemy and prefers to take his chances. Better to die fighting than slaughtered after surrendering. Suddenly there is a silent pause after which the decision is made (Bar 425). (Appendix Music Catalogue part III, MT31-34).

In Letter R, we hear the same scary rhythm Tegna heard in Part I ("Sento Freddo"). Damtew sings a reassuring melody saying he won't betray his man. This surreal calm is suddenly interrupted by a thrill that brings them back to reality and ushers the Spectres to the scene. After the failed negotiations, Castagna sadly leaves his nephew. It will be the last time the two men will see each other.

Subsection Seven: Letters S-V (Decapitation)

During the music solo in Letter S, the Spectre leads Castagna down from the mountain to the place where he will be beheaded. Musically this Letter S is similar to Letter O in its main musical rhythmical structure. The Head Theme at Bar 464 represents Castagna's beheading. The Spectre appears wrapped in red ribbon suggesting bloodshed, and puts a red hood on Castagna's head indicating the manner of his death. (Appendix Music Catalogue part III, MT35)

Armarhà hears the Spirits around and senses Castagna is dead ("è notte per Castagna" it is night for Castagna) - Letter T-U. Appendix Music Catalogue Part III, MT36-37. The Little Girl (LG6) goes on
stage for the last time to listen to the final duet between Belinè and Armarhà reminiscing Castagna.

In Letter V there is a final duet between the two women. Belinè sings from the palace, while Armarhà is in the Cathedral: they are expressing the same emotions ("Sentiamo il dolore, lui non c'è più"). Musically the two vocal lines are conducted in intervals of 3rds and 4ths. Castagna is dead yet will live in their memories. His daughters lament his death, and the secret sound in the Cathedral echoes through future generations. Appendix Music Catalogue Part III, MT38-40).

**Subsection Eight: Letters W-X**

The two women farewell Castagna. Soon after we find the Little Girl sitting in front of Castagna's portrait. In the Opera this portrait is a framed glass behind which Castagna stands. At this point he is back in his glass portrait still with a red hood on. The Little Girl touches the painting, and Castagna comes to life for the last time. He removes the hood – the symbol of death from his head. He is now free at last to embrace his unknown descendant: the Little Girl. The poem “Eterno Abbraccio – Eternal Embrace” refers to this moment (Letter W).

In Letter X The Opera ends with the same melancholic melody that was heard at the beginning, thus closing the circle and bringing Castagna’s story to a successful conclusion. Appendix Music Catalogue part III, MT41. Castagna bows thanking the listener and the Little Girl. He is now finally able to rest in peace. The Spectre carries the Singing Bowls to the front of the stage for the finale. Castagna’s secret sound that was once embedded in the Cathedral, now asserts itself with approval. (See DVD of Concert)

Everyone goes around the two singing bowls humming and chanting: "My Spectre around me is gone". (Appendix Music Catalogue part III, MT42-44). Castagna’s posterity is now aware of his story. Undoubtedly, Castagna’s works can testify of his existence, but this is a cold memory, like the marble in the Cathedral. He has finally found a place in the affections of his descendants
2.8 Conclusion

The structure of my Opera is simply the timeline I created while writing the libretto: the text became the matrix for the progressive creation of musical ideas. Usually, when one thinks of Opera, singers and famous arias come to mind. In my Opera, I wanted the vocal parts to be both singable yet elaborate, but never complex for their own sake. I realised that for me, complexity does not necessarily mean modernity. I wanted the audience to have the visual and musical experience they would normally expect from this genre.

Although I am infatuated with the new and the unknown, for this project I did not mind being anchored in the past. I wanted to deliver something that was contemporary yet at the same time inclusive of traditional elements. The aria and the recitativo that Castagna sings in Part II, and Belinè in Part III, illustrate this approach. The same observation can be made in relation to the comic moment in the “Slave matter” and in the Sicilian Song in Part II, both of which are part of that enchanting operatic tradition.

I deliberately alternated modern sonorities with lyrical events. I also used musical devices to make rapid changes between various narrated events. Interacting with the singers provided an invaluable learning experience, as they explained the intricacies of their instrument (the voice) and what they require in order to feel comfortable and deliver the best results. If my instrumental music is generally more complex (e.g. Shabtis and Swirling Yellow), with the Opera I felt as if I was wearing a more comfortable dress which I think is reflected in a more confident approach. Embracing the narrative structure was like wearing a nice cape around my shoulders. It gave me space to compose more freely and to reflect a world where complexity and simplicity coexist. This, more than any other work in my Portfolio, brings out my Italian musical background and my melodic nature.

As mentioned at the beginning of this chapter, the idea for the subject matter of this Opera came from my personal connection with the story. However, my relationship with the protagonist is not the only reason for writing this work. Whilst I was researching the story, I realised there is not a great deal of publically available information as few in Italy are comfortable or even
encouraged to open this can of worms. Castagna died in 1938, 75 years ago. Not many people know his story, because this period is one of the darkest chapters of modern Italian history. The reality of the Italian troops’ behaviour in Ethiopia during those years is still not well known to many today. This history is still being actively suppressed. Many atrocities were perpetrated during the Fascist colonial occupation of Ethiopia between 1936 and 1941, and no doubt some Italian witnesses and perpetrators are still alive. Despite the several requests from the Ethiopian government, no Italian has ever been punished for the war crimes they were responsible for during that period.

The story of Castagna stands out among the spiritual squalor of the Italian Fascist period all infatuated with social Darwinist ideology and grandiose empire-building ambitions. As his story illustrates, not all Italians abdicated their values. Castagna's morality was practically displayed in his upholding of human dignity, and in working towards establishing peace and justice especially in uncertain times. Diversity need not be feared. Castagna had Anglo-Saxon blood (from the Norman conquest of Sicily). His magnetic blue eyes and red hair made him stand out among the Ethiopian Bedouins. Yet, this diversity was no obstacle to mutual respect and acceptance.

The story of Sebastiano Castagna is so rich in noble humanity and drama that I felt compelled to turn it into an opera. I also felt the moral obligation that comes with this knowledge. I hope this Opera may honour not only the memory of my great-great uncle, but also the memory of all the innocent Ethiopian victims who are still seeking justice. *An Italian in Ethiopia* is my legacy to future generations. Lest we forget!
Chapter 3

Swirling Yellow - A journey inside science

3.1 INTRODUCTION

I am quite interested in the new field of String Theory and the study of velocity vectors. I have followed with interest the recent scientific experiments conducted at the CERN (European Organisation for Nuclear Research) where the Higgs Boson\(^1\) was recently discovered. The existence of this subatomic particle was predicted by the scientist Peter Higgs, after which it was named. Later it became popularly known as the “God particle” to the dismay of many scientists. The particle’s existence helps confirm the theory that objects gain their size and shape when particles interact in an energy field with a key particle: the Higgs Boson. The more they attract the bigger their mass will be.

These experiments that were conducted in the Large Hadron Collider (LHC) in Geneva have attracted many professions, including musicians who are trying to compute into sounds the algorithms from the experiments (see paragraph 3.2).

Although I am not a scientist, the idea of the study of velocity together with the reconstruction of the primordial boson particle spurred my imagination and desire to compose. The visual images of these particles colliding were crying out in my mind to find musical expression. This, in a nutshell, is the genesis for the journey into Swirling Yellow. This work is my homage to this scientific endeavour. This composition is certainly the most complex in my portfolio for a number of reasons. If I were asked to describe Swirling Yellow, I would simply say “Circular Momentum” the meaning of which I will try to explain as the chapter progresses.

The circular shape of the collider was my starting point. From the outset it was clear to me the orchestra was going to be arranged in that way. Within this circular space, sound would be bouncing from one point to another.
I experimented with velocity and moving sound spatially without the use of electronics and speakers.

Eventually I decided the sound of the 7 singing bowl/rin were best suited to convey the continuous ‘energy’ inside my musical collider. The circular shape of the singing bowl not only resembles the actual collider tunnel, but its metallic sound keeps the circle tuned and energetically alive. To better understand their sonic quality and the length of their long reverberation, I recorded them in the anechoic chamber of the University of Sydney. The singing bowls became the main protagonists playing live during the composition.

3.2 NOTES ON THE LARGE HADRON COLLIDER (LHC)

The LHC experiment in Geneva investigates the first trace for the “supersymmetry” conjecture. This theory states that each particle has an associated superpartner. This superpartner particle is the heavy replica of a normal particle. All the particles can be described as fermions or bosons. A particle that is one of the two (fermion-boson) will have a superpartner in the other thus making things in nature more symmetrical.

Figure 3.1 - “Particle Zoo”

The Large Hadron Collider is housed inside a circular tunnel that is 27 km long and is located 100 metres underground. The Collider is a machine where ‘counter-circulating beams collide’.
In this circuit, four magnets diametrically positioned are used to keep the particles in circular acceleration. Without these magnetic forces the beams would not bend and subsequently collide. In this circular accelerator, once the particles reach sufficient acceleration (energy) they collide, and keep on colliding as they are in constant movement. In reality the Collider Tunnel is not a perfect circle. It is made of eight arcs, eight insertions and within these, eight octant sections (see image below from the CERN website see details in the bibliography).

Figure 3.2 - Diagram of Collider Tunnel

Again, the number eight plays an important role in shaping the structure of this composition as it did in the Opera. During the experiment the two beams of particles (one of protons, and the other of antiprotons) move in opposite directions until they reach a specific acceleration (known as 7TeV) and only then the collisions begin. When the two beams collide the energy generated is added up as follows:

\[ 7\text{TeV (from the right beam)} + 7\text{TeV (from the left beam)} = 14\text{TeV} \]

This idea of adding up energy generated within the circle is the driving idea behind the structure of *Swirling Yellow*. 
3.3 MUSICAL INTERPRETATION OF THE COLLIDER

I knew my 16 players had to be positioned in a circle to replicate the function of the Collider. However, I needed to experiment how I would represent this energy concept musically. I made drawings testing all possible combinations to test where the sounds would originate and how they would move from one point to another within the circle.

Then, there was the idea of energy, that I associated with velocity. But what would be the best vehicle to express this velocity in musical terms? I decided to combine velocity with strings of rhythm. In doing so, I imagined the sound moving from one point of the circle, usually from the conductor, and moving symmetrically to the left and the right side until reaching the opposite end (ie. Completing a 180 degrees semi-circle). In doing so, these sounds would separate (bounce between players) and reconnect like beams of particles do. In some cases the circle would spin a full turn completing 360 degrees.

After documenting all the possibilities, I imagined the steps of the protocol required to implement this experiment, that is: from the moment the Collider is switched on, to tuning the Circle, to various stages that would lead to the activation of the particle beams, their aborted attempts to collide, to finally arrive at the desired ‘Big Bang’.

At the same time as I was engaged in this process, scientists in Geneva were experiencing a series of setbacks. At one stage the Collider was actually shut down. I could sympathise with their frustration and decided to include this experience in the structure of my composition. Accordingly, in the score there are a number of ‘unsuccessful collision attempts’ in the lead up to the final Big-Bang.
Below are the steps of my protocol that became the structure of *Swirling Yellow*:

**Section I:** Starting Point and First Tuning of the Circle  
**Section II:** Countdown to the Experiment (tests to collide) and Cadenza  
**Section III:** Dance of the Particles (failed attempts to collide)  
**Section IV:** Beginning of Circular Acceleration  
**Section V:** Beams Starting to Collide  
**Section VI:** Final Big Bang Collision Leading to the Unexpected.

Once the structure was in place, it was quite clear how to control the entrance of each instrument to determine the kind of journey or turn they would have on the circle. Originally 3-4 bars (one hand written A3 page), was devoted to each journey or complete action within the circle. Looking back, some images were perfectly matching the result I had in mind; some others were weaker, but overall, there was always a strong connection between image/notation, shape and sound.

### 3.4 WHY SWIRLING YELLOW?

During the 1980’s, when I was completing High School, fractal geometry was not mentioned in the syllabus, no doubt because of its complexity, but also because new developments were occurring at that time (Mandelbrot Sets)\(^4\). These new experiments in fractal geometry suggest our paradigms must be revised. It is only a matter of time until we will be able to see the invisible; to visualise a hidden dimension to nature we were not aware of before these experiments were conducted.

Visualising is an important step in the creative process. A creation must take shape in the mind before it finds its expression in reality. The first thing I visualised was the orchestral circle with the symmetrical position of the instruments.
Figure 3.3 - Circle Drawing

At night when I would close my eyes and try to visualise what it would be like inside the Collider, this yellow swirling spire of light and energy would come to mind. Wanting to capture this image, I started drawing it, and devoted some time to create a painting of it. In doing so, I discovered there are 47 shades of the colour yellow in nature. This fact illustrated quite well the different levels of energy in circulation inside the Circle at any one time.

I also practiced a visual development of the Big Bang through some drawings. (See Appendix 3.1 - Swirling Yellow Original Sketches and Painting).
When I would become weary and frustrated with the work, this image would keep my inspiration alive. *Swirling Yellow* passed through the filter of scientific research, to further conceptual refining in drawings, to a painting, before finding its ultimate musical expression. Musically, the yellow colour is expressed with the G# pitch, which for me is the sound that best represents the idea of primordial life. The G#/A frequency which oscillates between 415-442 Hz has been associated with an orange/yellow colour.

### 3.5 ANALYSIS- INTRODUCTION

#### 3.5.1 Circular Disposition of the Orchestra

Compositionally, my main focus was working on the spatial arrangement of the sound-movement within the circle.

The first step was to divide the circle in half, then to allocate eight players on each side of the circle. The two groups were evenly spaced and symmetrically opposed. Where possible, the same family instruments were positioned mirroring each other. (See also circular chart in the score legend).

![Swirling Yellow Drawings](image-url)
The Conductor stands between the flute and the oboe controlling the starting point of the sound. Ideally, to experience the circular sound-movement of the composition, a sample of the audience should have been sitting in the middle of our musical collider. For logistic reasons this was not possible during the actual performance. In order to direct the sound in a certain direction, a composer is bound to take into account the players’ position within the circle.

To achieve a circular acceleration in the Hadron Collider, scientists have inserted magnets to pull the beams into a curve. Musically, I had to find a way of doing the same. After some testing, I was persuaded the best instrument to take the role of the magnet was the G# sound produced by the main singing bowl that was assigned to the percussionist I who plays the full set. In *Swirling Yellow* the composition begins and ends in G#. This sound remains constant throughout the composition, and is either played by the singing bowl, or by the ensemble, or both. Towards the end of the composition, as the ‘Higgs Boson’ is discovered, all the players’ tunes converge into a
Because of their strategic position within the circle, violin I and violin II play a guiding role at key times, as in section 4 letter P. At other times they support percussionist I.

3.5.2. Role of the Singing Bowls

The singing bowls are hand made instruments that, depending how they are played, produce multiple harmonic frequencies creating an incredibly subtle yet audible effect. These instruments are played using a mallet around the edge. However, I experimented and found several other ways of playing them. In *Swirling Yellow* the singing bowls are played conventionally using a mallet around the external edge, as well as by hitting the side; or as an acciaccatura which can be performed inside or outside the bowl. (See singing bowl Legend in the score).

This unique, almost primordial sound, represents the eternal energy that keeps everything alive and energised. For this reason, in *Swirling Yellow* the singing bowl is usually left free to resonate (ie. its vibrations are not damp unless the score indicates so). For this composition I used the following pitches:

Figure 3.6 - Table of Pitches Used

<table>
<thead>
<tr>
<th>SB 1- Rin 2</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Rin 3- Rin 4</td>
<td></td>
</tr>
<tr>
<td>Rin5- Rin 6</td>
<td></td>
</tr>
</tbody>
</table>
Each singing bowl has its own unique pitch. To be more precise, only the bowl marked 1 in the picture below is a true singing bowl. The others are known as Japanese Rin.

Figure 3.7a - Photo of Singing Bowl/Rin Set

As for the gamelan, I had to create a special notation in the score just for the singing bowls to assist the percussionist and other players to follow the score with these instruments. See below.

Figure 3.7b - Singing Bowl Notation

The instruments can be played in the following way:

Circular Motion

Hit

Note: Quite often, while playing in circular motion on a bowl with the same mallet, the player will hit the border of the other instruments (see score).

Acciaccatura

Acciaccatura can be performed by
As mentioned above, the singing bowl/rin have the function of triggering the musical “matter” inside the circle and to keep it going symbolizing the flow of beams. For this reason the pitches of the 7 bowls are constantly used throughout the composition. The percussionist playing the 7 bowls was responsible to find its own way to keep their sound going at all times. These seven sounds were organised in an actual melodic theme clearly heard for the first time in the solo cadenza of the two percussionists after section 2. However, the G# is the leading sound right from the beginning. Towards the end (Section 6) the whole orchestra converges to G# to signify the successful collision that gives life to the Higgs Boson.

3.5.3 Musical Elements

I worked putting together different parameters. I selected musical pitches and organised them in a sequence of consecutive sound like a scale then transformed them into chords and worked on making rhythmical chains.

The Musical Material consists of the five pitches of the singing bowl/rin plus four extra sounds. The final sequence I obtained is made of 9 sounds: Bb - G# - G♮ - F# - D (from bowls pitches) and A - F♯ - C♯ - C# (extra sound).

Figure 3.8 - Main Musical Material

![Musical Material](image)

Figure 3.9 - Table of Sound in Order Sequence

<table>
<thead>
<tr>
<th>C</th>
<th>C#</th>
<th>D</th>
<th>F</th>
<th>F#</th>
<th>G</th>
<th>G#</th>
<th>A</th>
<th>Bb</th>
</tr>
</thead>
</table>
This musical material creates all the melodic and rhythmical elements of the composition. It also produces this melody made with quintuplets. Below are two examples of this melody.

Figure 3.10 - First Melody Draft

![First Melody Draft](image)

Figures 3.11 - Melody Bars 21-22: The melody is divided between piano and bassoon.

<table>
<thead>
<tr>
<th>Piano: bar 21</th>
<th>Bassoon: bar 22</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Piano: bar 21" /></td>
<td><img src="image" alt="Bassoon: bar 22" /></td>
</tr>
</tbody>
</table>

The rhythmical element of this melodic theme will be used in most sections of the compositions. The material indicated in Figure 3.8 can be also rearranged in chords.

Figure 3.12 - Melody Arranged in Chords

![Melody Arranged in Chords](image)

The quintuplet rhythmical elements of the melody will be used to represent the Boson particle. This special rhythmical pattern is shown below.
So to create my rhythm I simply used the Fibonacci Sequence (1-1-2-3-5-8-13). I allocated the value of 1 to represent one quaver. Creating the following pattern so subdivided.

The progression of the rhythmical variations used in the composition is shown in the following figures below: 3.15-3.16-3.17. Clear evidence of how I use all this rhythm is found in the score Section II Letter E.
3.6 THE VISUAL STRUCTURE (SKETCHES)

The experiment and the shape of the collider gave me the tools to visualise the circle and that helped me to create a visual structure of the 6 sections of Swirling Yellow. See examples of my early sketches in the next page.
3.7 ANALYSIS OF THE SIX SECTIONS OF THE COMPOSITION

Even though the composition is divided in Six notional sections, in performance, there are no interruptions between the sections: the piece has a continuous flow (Circular Momentum). I will now describe the main events in Swirling Yellow.

3.7.1 Section I: Starting point and First Tuning of the Circle

Section I spans letter A to D. From letter A to C the circle is producing its first vibrations moving the dynamics from pianissimo to fortissimo. Letter D represents the first circular acceleration test. In letter A, six of the 16 players have a singing bowl assigned, whilst Percussionist I plays the complete set of 7 singing bowls/\textit{rin} (see Figure 3.5 for disposition of instruments, and Appendix 3.2 for disposition chart). Because this section represents the tuning
of the circle, all of the instruments make their appearance with special sounds-emissions. For example the 7 pitches of main bowls, the strings and piano play harmonics (using G, G#, A), while the wind instruments have minim or longer notes always pitched as the singing bowls. The whole orchestra plays pianissimo and Immobile-Lento. All this setting is required to give the image of the tuning of the circle. The tuning is interrupted by a musical theme (bars 21-22) whose first part is played by the piano and the 2nd by the bassoon (letter B). See above Figure 3.11.

Letter C comprises 7 bars during which three different events take place involving the following consecutive actions:

1. Wide vibrato of the strings and trills of the winds and brasses instruments.

2. The players of the singing bowls are resonating them with a circular motion of mallets. They strike the bowl on last time before taking up their primary instruments.

3. The Cadenza played by percussionist I, who will soon improvise on his seven metallic instruments to simulate energy accumulation, allowing the other players sufficient time to resume their main instruments.

In Section D, we have the first turn of the circle, bars 31 to 38. Mostly, each instrument enters the circle with a minim note followed by a rhythm melody. This “model” (minim and rhythm, or its retrograde) will soon become what I call the Boson Particle Rhythmical Chain. The entrance of every instrument occurs in the space of a minim beginning in bar 31 with the flute, the clarinet, and the first horn. It progresses in bar 32 with the Trumpet, the second violin, and it reaches half of the circle in bar 33 with cello, piano, and percussion I. At this point, from bar 34 to bar 37, the sound progresses from percussion II back to the oboe (positioned next to the conductor), thus completing a full circle. This is a test of the sound-movement within the circle.

Whilst the 16 players are completing the full circle spin starting from left to right, there is another circular spin starting from percussionists I and II which are diametrically opposed to the conductor. The rhythm goes in the opposite direction ending with the flute and the oboe.
completing half a circle then echoing back to the percussionists I and II (bar 37).

3.7.2 Section II: Countdown to the experiment (tests to collide), and Cadenza

Section II spans letters E to L. In this section, the Collider is tuned to start testing the collisions. The energy in the circle increases as the sound begins to spin around it, making half loops. This idea is achieved using the main rhythm described in section 3.5.3. This rhythmical chain, which is sustained by the piano and the marimba, becomes a pattern that remains constant throughout this section indicating the acceleration of the particles. See below.

Figure 3.19 – Section II piano-marimba

The ensemble is responsible for the sound-movement that spins inside the circle. Nevertheless, when the sound reaches the position of the piano and the marimba, they join in the circle before continuing to sustain the rhythm. In a sense they have a double role and their parts are quite involved. The piano and the marimba have a sustaining function throughout the composition.

The circular movement becomes evident in letter G where it occurs twice (note the flute and oboe entrances at bar 38 and 63). From letter H (bar 70) to letter E, the collider speeds up and we have the first appearance of the Boson Particle rhythm in bar 75 (see also Figure 3.15). Usually it takes several bars to complete half a Circle (eg. bars 70 -74) because not all attempts are successful in reaching the optimum speed. However, there are instances where the speed is achieved in only few bars; for example, just before letter K where in two bars (83-84) we have half a spin.
Section II ends with a fast speed of the Collider. The beginning of Section I opens with the main melody (bars 21-22). In Section II (letter K), the same melodic material is spun around by most of the instruments, especially the brass and the winds. The melody heard in letter K now asserts itself to become the dominant sound that is the Boson rhythm. In letter L, the musical Collider is fast and fortissimo. The sound that starts from position 1 (flute and oboe), reaching collision point at position 8 where the percussionists located. Although the collisions failed to produce our particle, the amount of energy in the circle is now greater and a hint of the Boson melody can be heard. This is rendered in the percussionists’ cadenza, where they echo Section II (see Appendix 3.4). Percussionist I plays the main melody with the singing bowl/rin instruments, whereas percussionist II, the marimba player, improvises on the rhythmical chain. The short musical cadenza for the marimba is written to assist the player to visualise the multiple collisions he needs to interpret in his improvisations.

3.7.3 Section III: Dance of the Particles (failed attempts to collide)

In Section III (letter N-O), we abandon the obsession of the circle to give space to a more lyrical moment. By changing perspective, we can observe the particles from a more poetical angle. The cadenza is the preparation to this dance. The purpose of this musical section is to experience the collision projected in three dimensions. The ensemble’s amplification is responsible for this vision in 3D. Here, every instrument expresses their reaction to the particle’s collision.

The main focus is not on the circle, but on the actual particles. The rhythm and the musical material we heard so far are now combined in a more plastic way. This new vision is obtained through the breaking of rhythmical and melodic elements between the instruments. In other words the full perception of the melody and its rhythm is achieved through the collective effort of the ensemble. Fragments of the main melody, and of the main rhythmical chain are shared among the same instrumental family. Since they are mirroring each other, the perception is that of a stereophonic sound. At the end of this dance the circle starts tuning again (bar 102-107) helped by the singing bowl, which breaks through with the melody.
This time around, the sound in the circle does not follow a progressive pattern (ie. from 1 to 8). Instead, the sound starts with the horns (at position 3), then moves to the trumpet and trombone in position 4, to violins I and II (at position 5) and viola and cello at position 6. The circle is broken and the sound returns to position 1 (flute and oboe), to position 2 (clarinet and bassoon) then to position 7 (piano and double bass) and ends in position 8. Two mini-revolutions of the sound inside the circle itself. The section ends with a fortissimo tutti chord bar 108. See below.

Figure 3.20 –Circle Movement

3.7.4 Section IV: Beginning of Circular Acceleration

At this point the Collider has the possibility of starting a successful sequence. The violin I and II are progressing with a melody which incorporates both the rhythmical chain and the Boson particle. They are in fact the “magnet” inside the circle, keeping it tight. See figure below. Their melody starts in letter P from bar 108-111.
Figure 3.21 – Violin I and II “Magnet”

Then the melody is carried by piano and marimba till the end of the section.

Figure 3.22 – Piano – Marimba Melody “Magnet”

The spinning of the circle can be visually observed even in actual the notation of the score. Here we have multiple attempts to spin the Collider. Some are only half, whilst others are full loops. The first two spins are made with a particle of the rhythm played by the violins (a double triplet of semiquavers). The second one starts at bar 112 when the “magnet” players (violin I and II) hand the theme to the pianist. This spin is in pianissimo and its direction goes from player 1 to player 8. The starting point is in position 1 and the musical material, a long sostenuto sound, arrives at position 8. At bar 116, a marimba thrill is used to increase the energy until the Boson articulation in bar 118 resonates through the singing bowl. This Section ends at its maximum energy because we are heading towards the Big Bang.
3.7.5 Section V: Beams starting to collide

In Section V, we find the Collider already in action, ready for the final collision (Section VI). The particles enter the circle in an apparent disorganized way. This impression is deliberately created to replicate the actual constant collisions occurring in the Collider. However, in letter Q we are changing focus: zooming on the vectorial path, the particle follows a brief moment before the actual collision. See below and Appendix 3.3 Score draft on letter Q.

Figure 3.23 - Letter Q

In Bar 124, the singing bowl Part represents the intersecting point of those vectors suggesting the idea of the virtual Bing Bang. From Bar 127, the Collider Orchestra plays an “ostinato rhythm” followed by several circular spins which use the now familiar Boson Particle Rhythm. Our Collider has now reached the ideal Energy (acceleration) to accomplish the task.
3.7.6 Section VI: Final Big Bang Collision Leading to the Unexpected

In July 2012, when I was about to complete this composition, the news was broadcasted that the CERN Lab experiment had been successful. The existence of the Higgs Boson was finally substantiated. However, something unexpected occurred. Scientists found that what was left after the re-creation of this primordial Big Bang was of greater interest to them than the original experiment. The Higgs Boson lasted only a brief moment, but it left a ‘coda’ of new clues to follow.

This news impacted the last section of my composition. I too wanted to conclude leaving a melodic coda of intriguing new possibilities. Accordingly, in section VI (letter R) the orchestral circle in the final performance starts looping 5 times. In my original score I made a note to test during rehearsal the possibility of looping that section, to achieve maximum acceleration that would lead to the evidence of the Boson’s existence. In the scientific experiment, this acceleration generates multiple silent collisions until the successful ones result in the Boson. The sound of my Circle at this point, is the vision of that final acceleration. As the subatomic collisions are silent, so too in my interpretation of that moment. This is why in Swirling Yellow we do not hear a “Big Bang” but only subtle hints of it happening inside the Collider.

Suddenly, there is a pianissimo where subtle sounds seem to float in the air, suggesting the brief moment of decay (letter S). Originally, this and the orchestra polarising into a G# pitch were intended to have been the end of the composition. Instead, after one last spin of the circle (letter T), the circular structure is abandoned altogether, leaving a simple melody (letter U). A mysterious melody, hinted at in the cadenza and made by the 7 bowls, now asserts itself. This “Coda Melody” involves the whole orchestra, some playing the melody, others counterpointing it, with yet playing the same melody but at different speeds. The “Coda Melody” slowly disintegrates, to finally close the circle back to where it started: G#. The G# is returned to the percussionist who resonates it for the last time, giving the 16 players, including the conductor, time to put down their instruments and to pick up their hidden singing bowls for the final return to the primordial energy of life.
3.8 CODA

*Swirling Yellow* begins and ends with “Circular Momentum”. We are now surrounded by this virtual ring of sound, and ready for the final action when the fast acceleration process will be heard.

The final melody is like a scientific experiment where things can go in an unexpected and asymmetrical way. What is left becomes more interesting than what we originally were searching for. This composition has a constant strong circular structure, which is abandoned at the end.

There is a strong adrenalin rush in abandoning the original structure - to be surprised by uncertainty – to be receptive and open to the unknown. When I thought of ending with a melody I knew I was going in a completely new and unexplored direction from where I started, but I felt I wanted to follow that new path. I kept with me the pitches of my singing bowls and constructed a melody on those specific sounds so the common thread, with the rest of the composition was maintained.
Chapter 4

The Harmonic Device Pedal (HDP)

4.1 WHY THE HDP

On a trip to Australia in 2007, I was struck by the Australian aboriginal instrument, the *didjeridu*, the sound of which is formed by a fundamental drone-note and its harmonic spectrum above it. I heard it being played both by street musicians and by refined professionals, the instrument vibrating with its evocative sound that seemed to come from a far-away place recalling an ancient story. Immediately, it seemed to me to be an instrument versatile enough to speak to the soul – one that in the right performer’s hands has the sonic capability of bewitching and enchanting its listeners.

The timbre of the *didjeridu* made me think of parallels between the sound that emerges from this long natural tube and the sound that comes out of a piano. It evoked a concept that I had already developed in Italy before coming to Australia, the HDP. The *didjeridu* inspired me to utilise my concept-pedal again.

My conception was based on the *chamber* of my piano being capable of generating alternative sounds as well the traditional ones. This complicated idea was not achieved in the end, but led the way into conceiving something else. Being so fascinated, I started thinking about a sound already partly known: a normal harmonic, but achieved differently, from the *chamber* of the piano, without the use of a finger on the string, allowing the pianist to remain seated and thus having many more performance and technical possibilities.

My idea stems from wanting to achieve a single characteristic sound that arises from the depths of the piano and resonates as that note and others nearby on the strings of the same piano might. I wanted this sound to join and coexist with other traditional instruments – a sound that could be
elicited as required, that could exist on its own, that could be activated and de-activated in the same way, at the will of the performer. A pianist cannot perform harmonics from the seated playing position, but must stand up to perform them by reaching inside the piano. With the aid of the HDP, both harmonics and normal playing on the keyboard can be achieved together in the same moment. I tested this for the first time in my piece *Sydney Piano Concerto* (2008), which was included in my Masters thesis completed in Italy.

### 4.2 CONCEPTION-CONSTRUCTION

The HDP arose from the idea of enabling the pianist to be completely independent in playing and creating different harmonics, on the lowest bass A string of the piano. From the beginning, the creation of HDP came about from a basic idea of using items and materials found in all hardware stores in order to expedite production and to limit costs. This gave rise to some problems during construction, and to modifications to the basic components in my own workshop.

A first draft of the plans was created using the application AUTOCAD2008 and then in SolidWorks to test its functionality. Empirical tests on the vibration of the materials were useful and led to the use, for example, of Loctite on the screws to reduce as much as possible any secondary resonances due not to the string, but to the HDP itself.

### 4.3 DESCRIPTION

The HDP is essentially composed of two main parts: a moving carriage that is placed inside the piano, and a pedal. It has been built to fit to standard Steinway & Son Grand pianos, but can be mounted on almost all other makes and models of grand pianos. See explanation below of the HDP pictured in these photos.
Figure 4.1 - Photo 1

Figure 4.2 - Photo 2  Figure 4.3 Photo 3

Figure 4.1 - **Photo 1.** The moving carriage is comprised of a base of solid aluminum, 20 x 6 mm (2), to which two adjustable clamps (5) have been applied to allow it to be mounted on the cast iron strut inside the piano. At the top is a sliding track on bearings (3) topped in turn by a solid aluminum piece 16 x 16 mm (1) that acts as a support for the piston mechanism (4). This consists of a sliding mechanism to which has been soldered a spring that is compressed by a steel cable (6) Figure 4.2 - **Photo 2,** causing it to fall onto the string. The whole mechanism can be moved into different positions along the same string, chosen by the pianist using the positioning handle (7).
Figure 4.3 - Photo 3. The pedal used (8) is a modified pedal for a bass drum (Kick-Drum). This was employed to implement traction on the steel cable (7), which slides in a sheath to the piston mechanism (4) to push down onto the string. The ending of the piston mechanism is covered in a rubber glove. Using the pedal, the pianist creates the harmonic.

On the right-hand side of the keyboard, corresponding to the moving carriage is a handle (7) used to position it. This is moved manually by the pianist to produce different types of harmonics. (See also drawings of the device at the end of this chapter, Figure 4.4 - Diagram 1. and Figure 4.5 - Diagram 2.)

4.4 PRACTICAL IMPLEMENTATION OF THE HDP

Essentially, to produce harmonics, the pianist presses the 4th pedal (the HDP pedal), then depresses the lowest A key (the leftmost key of standard grand pianos): this finger-action can be done at the same time or a moment after pressing the HDP pedal. Further, the harmonic note can be produced with or without the engagement of the 3rd pedal (III c), emitting a shorter or longer sound respectively. The second method is preferred because it resonates better and helps balancing the intensity of an orchestra or large ensemble.

4.5 CHANGES IN REAL-TIME

The device responds well, with few problems ever experienced, but care must be taken in changing the disposition of the HDP, particularly when these actions are required to take place very quickly. The changes can indeed be made more securely in a slow manner, just as with instrumental writing where instrument - or mute-changes are required: for example, it is advisable that an appropriate amount of time be made available to effect pedal position-changes. However, if swift changes are required, the pianist must be very diligent in checking that the carriage slides well, so that no obstructions and performance problems occur.
4.6 NOTATION

HDP is notated on a 3\textsuperscript{rd} stave through the use of a standard harmonic symbol (a small circle) directly on the first D pitch-position below the bass clef stave. Please see my portfolio pieces for examples of the notation.

4.7 PERFORMED COMPOSITIONS THAT USED THE HDP

1.  \textit{Shabtis}, for Orchestra 2010
2.  \textit{Swirling Yellow}, for 16 Players 2012
3.  \textit{Uninterrupted Oneiric Fantasy of Saudade Reminiscent}, for solo Piano 2012
4.  \textit{An Italian in Ethiopia Opera}, 2010-2013 (Notated in the Score but not used in the Concert.)

Below Figure 4.4 - \textbf{Diagram 1}, and Figure 4.5 - \textbf{Diagram 2}. 
Figure 4.4 - Diagram 1

Diagram 1.
Figure 4.5 – Diagram 2

Diagram 2.

SCALA 1:2

SCALA 1:5
Chapter 5

Uninterrupted Oneiric Fantasy of Saudade Reminiscent 2012,
For Piano solo and HDP Harmonic Pedal Device

5.1 INTRODUCTION

As a pianist I always felt a great responsibility in being a performer of an instrument that was so emotionally embracing, yet assertive enough to dominate and lead over other instruments. The piano has a rich historical tradition filled with one of the most complex and charming musical repertoires. This is my third piano solo. The first, written in 2002, is a Theme and Variations I called Snake. The second, Gedanken und Fragmente (2007) is an alternation of fragments and thoughts, as suggested in the title.

Before starting my third composition, I was looking for new ideas I had not previously explored. I was strongly aware of the mathematical structure behind Bach’s Goldberg’s Aria, which has been considered as the main generator for this work. The composition in this Portfolio has been written as a tribute to Bach’s masterpiece Goldberg Variations\(^1\). Another influence I want to acknowledge here is the virtuosity of Schumann’s Fantasy op 17\(^2\). My understanding of Schumann’s temporal structure, and the memory of the technical challenge I experienced in playing this work is still stored in the muscle-memory of my hands. This is reflected in the ‘uninterrupted’ tension of this work, as well as by its long title: “Uninterrupted Oneiric Fantasy of Saudade Reminiscent.” The Saudade Reminiscent refers to a nostalgic longing for Schuman’s Fantasy, specifically the first movement. This composition follows a precise puzzled-like structure where musical elements are allowed to flow uninterrupted within its rules. The key to understand this piece lies in the structure. Another aspect of this composition is the use of the HDP pedal which I wanted to test.
5.2 A HINT FROM A PERFECT STRUCTURE: *THE GOLDBERG VARIATIONS*

As young pianist I always felt the temptation to leave the composition and start improvising on my own rather than follow the score. However, when I first studied the Goldberg Variations, I was in awe of its perfect rational beauty and totally humbled by it. I can truly say that the Goldberg variations matured my understanding and gave me a totally new appreciation for using structure in composing.

Bach’s variations represent “Perfection in the Structure”. I always had a clear image of their perfect balance to each other - as if they followed a musical golden ratio that was apparent throughout. Bach had a very rational approach to composing, and that enthused me to try a similar path. The Italian musicologist, Giancarlo Bizzi\(^3\) wrote an interesting dissertation called *Specchi Invisibili dei Suoni*, where he analyses the Goldberg structure/machine and the Mirific Table of Athanasius Kircher. He concludes that Bach’s Opening Aria is a powerful perfect structure in itself, containing the germs for the development and organization of its 30 variations, particularly the Canons. In other words, all possible variations are embryonically hidden inside the Aria. Every musical decision has already being anticipated; all the developing variations are coded in the matrix-structure of the Aria.

5.3 BUILDING THE STRUCTURE

Many composers have been attracted by the structure of Bach’s masterpiece. For example, in the 3\(^{rd}\) Tempo (Theme and Variations) of Beethoven’s *Sonata Op 109*, there seems to be a clear reference to Bach’s *Goldberg Variations*. For my composition I was keen to find my own model of the “Goldberg motor”.

For my structure I devised a simple concept with 2 mathematical elements:

1. The 9 times table (0-9-18-27-36-45|54-63-72-81-90); and

2. The Fibonacci set (1-1-2-3-5-8-13-21-34-55-89).

The example above shows the bars associated with the 9 Times Tables numbers highlighted in green, while the bars associated with the Fibonacci’s numbers are highlighted in red. These two elements act like the two strands of a DNA ribbon creating a hierarchical family structure within the bars where some are leading bars, and others act as bridges between the leading ones.

Therefore, the temporal structure for my composition is simply obtained by alternating the two sets of bars linked to these numbers: the Fibonacci bars and the 9 times-table bars. The last 2 pages of the score (ie. 9 &10) are tabular reference bars of the above two sets (Fibonacci bars-9 times 9 table). These pages are also used in the Cadenza for the pianist’s benefit (see at the end of this Chapter).

5.4 MUSICAL MAIN CHARACTERISTICS

Another characteristic of this composition is a rather unorthodox use of glissando. I visualized the glissando flowing like a winding river through the landscape of the score, linking different musical thoughts much like a connective tissue. Glissando is usually understood as a rather mechanical gesture going up or down on the keyboard. However, I tried to extend its range by including circular movements of the hand as well. I wanted glissando to be the ‘musical brush’ in the hands of a musical painter: free to move from black to white keys, creating different moods and atmospheres.

In fact, the hand written glissando signs on the score almost make it a work of art -at least for me! – see below. Perhaps the reason for viewing the composer as a ‘musical artist’ where multiple forms of art overlap has to do with the fact that this work was written in parallel to the Six Artists project (see chapter 7).
Moreover, in this composition the function of the HDP pedal is like an additional colour on the palette of the musical artist. It is used to add an evocative touch to the music. I am always curious to see how different pianists react to it. This is why I have used it in most of the compositions in this portfolio.

5.5 ANALYSIS

I wrote my composition in A3 pages. There are 8 such pages and each one represents a complete cell in the overall structure. Accordingly, each page will be analysed separately.

5.5.1 Page 0

This page has a curved glissando drawing to help the pianist visualize how to interpret the glissando in the opening of the composition. Starting from the highest pitch of the piano the player has about 20 seconds to perform this gesture that visually resembles a painter drawing on the keyboard before hitting that last note to which the harmonic pedal device is applied.
5.5.2  Page 1 (bars 1-12)

The structure is immediately introduced in page one and it takes the ABA form, where, 
A= bars 1-3  
B = bars 4-9  
A = bars 10-12  

The material in the first three opening bars is strongly linked to the structure. The time 
signature of bar 1 is 11/4; the signature of bars 2/3 is 2/4. 

Figure.5.3 (Time signature bars 2-3)

<table>
<thead>
<tr>
<th>Bars</th>
<th>Time signature</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bar 1</td>
<td>11/4</td>
</tr>
<tr>
<td>Bars 2 &amp; 3</td>
<td>2/4</td>
</tr>
</tbody>
</table>

So this block of bars should be considered as one pattern of 11/4 + 2/4 (= 13/4) + 2/4. This 
pattern is the matrix that keeps resurfacing throughout the composition. So it is not surprising to 
find it repeated 4 times in a row as in page 1 at bar 1-3; bar 4-6; bar 7-9; and bar 10-12.
There are two main elements in Page 1. The first element consists of two chords, which are listed in the table below.

Figure. 5.4 Main Chords for Uninterrupted Fantasy

![Chord Diagram]

The second element is a gesture in homage to Bach where I interpret the same material in the chord but in a melodic way see example below.

Figure 5.5 - Melodic gesture
5.5.3 Page 2 (bars 13-27)

As previously mentioned, all the bars that correspond to any of the numbers from either the Fibonacci sequence or the multiples of 9 are leading bars, meaning that their musical material is a leading theme. For example, in p.2 bar 13 (Fibonacci) there is a new rhythmical element. Again in bar 21 (Fibonacci) the glissando reappears once again. In the closing bar 27 (9 times table) the Pedal introduces a small new element within the rhythmical pattern that opens a door to a new idea that will appear in the following page.

The fun rhythmical element we encounter in bar 13 reappears several times afterwards, and is intended to break the severity of the structure giving the pianist some breathing moments. The matrix bar in the composition is bar 1 and 2. These are repeated throughout the composition with variations in the pitches, but still retaining the same rhythm. The only exception is bar 42 where bar 1 is inverted – ie. here a rest takes the place of chords and chords the place of the rest. (Swapping positions inside the cell does not affect the overall-time division in the bar).

5.5.4 Page 3 (bars 28-41)

Page 3 is one of the most complex in the piece because of the high density of technical gesture. This part acts as a development in the totality of the structure. The Cadenza in Bar 34 (Fibonacci) represents the first climax where opposite dynamics come together. After this, a cantabile melody theme appears. Page 3 (bar 39-41) ends with a reprise of the initial matrix bar: 11/4 + 2/4 + 2/4.

5.5.5 Page 4 (bars 42-54)

This page is technically demanding for both the pianist and the composer. The mathematical mirror symmetry\(^4\) found in the “9 times table” \((0-9-18-27-36-45|54-63-72-81-90)\) has inspired me to recreate a musical equivalent. Thus bars \(45|54\) become one of the main compositional climax of this work compressing all the key musical elements presented so far. This is achieved through a two-fold rotational symmetry\(^5\) where the material is presented in bar 45 from left to right and in bar 54 from right to left, and in both bars the material is also exchanged between the hands.
5.5.6 Page 5 (bars 55-71)

In this page I would like to draw the attention to bars 59-62. Here I experimented with the HDP Pedal, which is played whilst the pianist performs a trilling rhythm. A melody emerges from a brief acciaccatura, whilst the glissando runs through the melody. All the above is played in pianissimo, which makes it even more difficult for the pianist. With this musical scene I wanted to pay tribute to the classical romantic tradition of the piano repertoire.

5.5.7 Page 6 (bars 72-84)

In Page 6 there is a refrain of material already presented. It is a kind of summary of the key elements in the piece and the recognizable patterns start to appear. This also serves to relax the pianist before the build-up of tension required to get to Page 7, one of the most technically challenging pages where all of the important elements are given for the last time.

In bars 89 & 90, the complete musical material expands, but is kept together by the bars of Fibonacci and the 9 times table heard at the beginning. The composition is one big movement that requires constant concentration from both the listener and the performer. In this uninterrupted tension of technical elements and multi-facet sounds that is building up, there is a note of simplicity that consists in resolving the difficulties one at the time. Even the use of the Harmonic Pedal does not represent a real challenge. The hands of the pianist can easily play the singular musical actions, but keeping the structure alive and uninterrupted for 15 minutes seems to be the real challenge for the performer. But I wanted this “uninterrupted” concept to be the central focus.

Approaching the end of the composition suddenly the last two bars before the Cadenza are different and very dense in sound. Bar 89 and 90 have a very important meaning in connection to that concept. They can be considered the final point of my structure while at the same time it is its breaking point.
The Final Cadenza made of 9 Fragments (written bars) and Reminiscent (the one that the pianist will choose from pages 9-10) takes us to a final action where the main material/pitches are finally looped ending in pianissimo.

Figures 5.7 Cadenza
5.6 CONCLUSION

As in Bach’s Goldberg Variations that starts and closes with the same aria (thus obtaining a symmetrical effect), so the glissando and the first three bars constitute the heart of the matrix with which I open and close my composition: they constitute my Goldberg motor.

This composition does not leave much space; it is like one full sound-event. The structure is retained until the end, but in the last two bars (89-90) there is an exit: the structure is finally abandoned. The cadenza ends in bar 90bis by looping main material, which is the same as in bar 90. This final event, so different and unexpected, can guide us where we desire; where things can progress in an unknown new way. After the long uninterrupted flow, the finale takes us back to silence. The ears are not saturated by sound and, as in an anechoic chamber, everything can be perceive finally shaped and clear leaving us with a desire for silence, setting us free to reconnect with the ‘Uninterrupted Dream’.
Chapter 6

Mutabor Semper

6.1 THE MAGIC OF A WORD IN A STORY

When I was a child, I read a story about a prince who would mutate into a stork simply by saying the magic word “MUTABOR”. I was fascinated by this mutation. In my imagination, the prince had the voice of a cello, which for me was the ideal instrument to represent a human voice.

“Mutabor” is a Latin word that suggests change, or more precisely, instant mutation. This gave me the idea of writing a poem which I called Mutabor Semper and it became the structure to the musical composition by the same name.

6.2 AN ACROSTIC POEM MUTABOR SEMPER

The poem refers to transformations happening both in music and in human experience. I wrote the poem as an acrostic, toying with both Italian and English words to choose from. The Table in Figure 6.1 shows 2 columns: column A lists words in Italian, and column A1 lists the same words in English. So the poem starts with the same letters of the word “Mutabor Semper”. I used the difficulty in trying to perfectly match the two sides (two languages) to actually create various interpretations.
The purpose of the poem is to underline the constant transformation and emotions occurring during the composition.

### 6.3 MUSICAL ELEMENTS

The composition depicts the process of constant transformation. The cello is like a mirror to the human transformations. The cello interacts with a voice that reads the poem and plays the singing bowl underpinning the key moments of the mutation. Specifically, I used two singing bowls with the following: pitches G# (used most of the time) and C/C# for the final cadenza (I). The words “Mutabor Semper” (I shall transform myself) has been coupled with the following pitches.

---

**Figure 6.2. – Mutabor Semper Pitches**

<table>
<thead>
<tr>
<th>LATIN</th>
<th>Italian</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td>M</td>
<td>A (Page 0) MOVIMENTI</td>
<td>A1. (Page 1, Bar 12) MOVEMENTS</td>
</tr>
<tr>
<td>U</td>
<td>UNICI</td>
<td>UNIQUE</td>
</tr>
<tr>
<td>T</td>
<td>TRASFORMATI</td>
<td>TRANSFORMED</td>
</tr>
<tr>
<td>B</td>
<td>BITONALI</td>
<td>BI-TONAL</td>
</tr>
<tr>
<td>O</td>
<td>OLTREMONDANI</td>
<td>ORIGINAL</td>
</tr>
<tr>
<td>R</td>
<td>RITMICI</td>
<td>RHYTHMICAL</td>
</tr>
<tr>
<td>S</td>
<td>SUONO</td>
<td>SOUND</td>
</tr>
<tr>
<td>E</td>
<td>ESPRESSIONE</td>
<td>EXPRESSION</td>
</tr>
<tr>
<td>M</td>
<td>MATERIALE</td>
<td>MATERIAL</td>
</tr>
<tr>
<td>P</td>
<td>PERSONA</td>
<td>PERSON</td>
</tr>
<tr>
<td>E</td>
<td>ETERNAMENTE</td>
<td>ETERNALLY</td>
</tr>
<tr>
<td>R</td>
<td>RICREATA</td>
<td>RECREATED</td>
</tr>
</tbody>
</table>

---

<table>
<thead>
<tr>
<th>M</th>
<th>U</th>
<th>T</th>
<th>A</th>
<th>B</th>
<th>O</th>
<th>R</th>
</tr>
</thead>
<tbody>
<tr>
<td>G#</td>
<td>B</td>
<td>C#</td>
<td>A-G#</td>
<td>G</td>
<td>D-C#</td>
<td>C</td>
</tr>
<tr>
<td>S</td>
<td>E</td>
<td>M</td>
<td>P</td>
<td>E</td>
<td>R</td>
<td></td>
</tr>
<tr>
<td>Bb</td>
<td>D</td>
<td>D#</td>
<td>G#</td>
<td>G</td>
<td>(harmonic)</td>
<td>C</td>
</tr>
<tr>
<td>G</td>
<td>(harmonic)</td>
<td>G#</td>
<td>(harmonic)</td>
<td>G</td>
<td>(harmonic)</td>
<td>C</td>
</tr>
</tbody>
</table>
The word “Mutabor” can also be divided as follows: **MU (G♯ B) | TA (C♯ A G♯) | BOR (G D C♯ C)**; whereas, the pitches linked to the word “Semper” give rise to more active actions on the Cello (see Score).

When the cellist plays the pizzicato pitches of *Mutabor*, the cello is positioned in an unorthodox way to indicate its attempt to mutate. So the cello represents a human being in constant need to evolve. This idea of mutation in *Mutabor Semper* has been used in an abridged form called Cadenza II in the *Six Artist* project where the artists are likewise transforming (see chapter 7 for more details on Cadenza II).

### 6.4 ANALYSIS OF THE STRUCTURE

The table below visualizes the structure of the composition and maps out the interactions between the cello, the actress and the singing bowls.

**Figure 6.3 - Sequence-Structure of the Composition**

<table>
<thead>
<tr>
<th>Pages</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bars</td>
<td>Mutabor Semper</td>
<td>1 - 26</td>
<td>27 – 28c</td>
<td>29 - 33</td>
<td>34 - 60</td>
<td>61 - 69</td>
<td></td>
</tr>
<tr>
<td>Poem sequence (Actor)</td>
<td>A Italian</td>
<td>A English B Italian + English</td>
<td>No poem-</td>
<td>C English</td>
<td>D English</td>
<td>A Italian</td>
<td>Mutabor Semper</td>
</tr>
<tr>
<td>Cello actions</td>
<td>Mutabor Semper</td>
<td>Cello plays</td>
<td>game Mutabor Semper</td>
<td>Cello plays</td>
<td>Cello plays</td>
<td>Cello plays</td>
<td>Cello plays</td>
</tr>
<tr>
<td>Structure</td>
<td>Opening material inked with the name Mutabor</td>
<td>Exposition material linked with Mutabor from p. 0</td>
<td>Mutation Game</td>
<td>Mutation I</td>
<td>Mutation II</td>
<td>Cad. I Final position</td>
<td>Cad. II * Explain</td>
</tr>
<tr>
<td>Singing Bowl and its pitch</td>
<td>G♯</td>
<td>G♯</td>
<td>G♯</td>
<td>G♯</td>
<td>Change C♯</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
When the actress, (the voice) and the singing bowls play, the cello responds in the following way:

1- Playing pizzicato pitches as in Page 0;
2- Executing a trill, Bar 49;
3- Playing harmonics, Bar 12; and
4- Ad Libitum elements, Bar 33.

The composition is demanding for the cellist and indicates that to transform oneself in a constructive way requires significant effort. The 5 pages represent the actual sections of the structure.

6.4.1 Section 1 (Page 0)

Mutabor Semper begins with the cellist moving their instrument in a non-standard position playing pizzicato Mutabor pitches accompanied by the actress, Poem A (see the Opening Legend to the score for the full poem). This is done to symbolize the human aspect of it; the player starts playing the cello in pizzicato using just their fingers and performing the Mutabor sounds. Then for Semper, they can choose to use the bow, depending on their interpretation of symbols and techniques.
After the first section, the player puts the instrument back to its normal position ready to perform. During the performance, the cellist smells and touches the instrument as if feeling its humanity (refer to the DVD attached to the back of the Mutabor Score.).

6.4.2 Section 2 (Page 1)

As this section starts, the cellist becomes a human voice pleading to return to its traditional musical voice. In this section, there are several interactions between the actress and the cellist. The cellist moves the instruments in different positions while a new sound (a singing bowl) is heard regularly accompanying the poem. The actress reads Poem A (in English) and poem B which is in both languages.
6.4.3 Section 3 (Page 2)

At this point the cellist has a playful moment where they can choose various mutation options. Please refer to the Mutabor score page 2, where all the paths are well mapped-out to better understand this section. Below are the instructions taken from page 2 (Figure 6.5). First, cello plays bars 27a–28b, which are the Mutabor’s pitches. Then the cellist plays full bar 27b. When repeating 27b for the second time the Mutation-Game really starts. At this point, the cellist follows the black arrow on the score and plays the “Game Material”. Once they are in the game material section there are two options:

(1) The player can follow the red arrow going back to bar 27b to carry on playing the rest of the material and, when possible, exit following the black arrows again and repeat the same actions before going back up through the red arrows. These actions are Ad Libitum. So the cellist is free to go back and forth from black to the red arrows entering bar 27b in and out several times like a snake. When the end of bar 27b is reached, the singing bowl interrupts the Mutation game and the actress ends with the words Mutabor Semper.

or

(2) The player can follow the green arrow* to go to bar 28b and play it to the end of bar 28b (Letter S). At this point, the cellist can choose between two dotted black arrows:

**Arrow 1:** going simply to the end of the bar and wait for the singing bowl and actress to end;

or

**Arrow 2:** following until letters “S” bar 28b and then going back to “S” of bar 27b (following the black dotted arrow). Once in bar 27b, the cellist finishes the bar, until the voice/actress and singing bowl sound.

* From letter M of the “Game Material” to the green arrow the pattern is as follows:

• MU
• UT
• TA
• AB
• BO
• OR
Note: Since the idea is to mutate, the cellist can follow the instructions on the score or is free to reinterpret them.
6.4.4  Section 4 (Page 3)

At this point, the player with all the rhythmical experience gained in Page 2 can fully interpret the complex rhythmic string in this section. The voice reads its Poem D and plays the singing bowl (see the Opening Legend to the score for the full Poem).

6.4.5  Section 5 (Page 4)

The previous material in Page 1 makes its appearance again. Poem D and singing bowl are heard. At this point, the G# bowl is put down and changed to the C/C# bowl, ready to resonate, in Section 6, symbolising the final mutation.

6.4.6  Section 6 (Page 5)

In Section 6 we have a small Cadenza I, which ends with the C/C# singing bowl resonating with the cello as it slides down to its lowest pitch.

Figure 6.6 – Cadenza I

At this point, the cellist lays down the instrument on the floor: the cello is finally mutating. A new ‘silent sound’ like a breath of a new life inflated inside the cello, now emerges. The cello is slowly becoming just a human voice, perhaps begging us for help and answers.
6.5 CONCLUSION

The structure of *Mutabor Semper* is elastic as required for the process of transformation. This elasticity is achieved by elements of continuity and discontinuity. For example in bar 5 there is a fast element that is used again in page 2 as a string rhythm generator. The interaction with elements outside the subject of mutation (cello) suggests that internal resources are insufficient to generate transformation. The use of words in this composition indicate the need to have meaning and understanding for any transformation to begin.

<table>
<thead>
<tr>
<th>Movimenti</th>
<th>Suono</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unici</td>
<td>Espressione</td>
</tr>
<tr>
<td>Trasformati</td>
<td>Materiale</td>
</tr>
<tr>
<td>Aritmetici</td>
<td>Persona</td>
</tr>
<tr>
<td>Bitonali</td>
<td>Eternamente</td>
</tr>
<tr>
<td>Oltremondani</td>
<td>Ricreata</td>
</tr>
<tr>
<td>Ritmici</td>
<td></td>
</tr>
</tbody>
</table>
Chapter 7

“Six Artists Seeking a Composer”

7.1 INTRODUCTION

In July 2011, I was awarded the New Contemporary Music Grant (2011) by the University of Sydney to create the final concert of my project “Six Artists Seeking a Composer” which was performed on 26 October 2012. The following compositions were included in this project: Mutabor Semper for cello solo, Uninterrupted Fantasy for piano, and Study for harp. The reason this project has been included in this thesis is to demonstrate how my structural approach can be applied to a variety of artistic endeavors, in this case, to a theatrical performance. To realise this project I needed the contribution of other artists (for full details of artists involved refer to excerpt of the program in Appendix 7.1.)

7.2 BACKGROUND TO STRUCTURE AND MAIN IDEA

The main idea for this project came from Pirandello’s play Six Characters in Search of an Author, first performed in 1921. In this play, there are six fictional characters who must find a director to bring their unfinished story to life. In the play, an acting company is getting ready to rehearse the play The Rules of the Game, when suddenly the rehearsal is interrupted by the arrival of six strange people. The director of the play is furious at the interruption and demands an explanation. The leader of the characters (the father) explains they are unfinished characters in search of an author to finish their story. Initially the director thinks they are mad and wants to throw them out of the theatre, but as the characters begin to argue amongst themselves and reveal details of their story, the director becomes intrigued and decides to use his actors to stage their story. In my project there are also six characters/artists in search of new music and new composer(s). The artists feel the need for fresh ideas and inspiration and desperately want to find a modern composer to find a new voice; to reinvent themselves.
The six artists are

- A pianist
- A harpist
- A cellist
- A painter
- A dancer; and
- An actor

Three composers approach the six artists and convince them to perform their music. The artists gradually accept the challenge. In this journey, they discover their true identity.

7.3 EXPLANATION OF THE SEQUENCE IN FINAL CONCERT

The concert was held at the Sydney Conservatorium in the Music workshop. In my project, each composer (and I was one of them) brings three compositions, one for each instrument. As in Pirandello’s play, the audience was seated staring at an empty stage. The Program for this concert was handed at the end of the performance to keep the audience focused on the events that would be happening on stage.

The three composers enter the stage and wander around doing different neutral actions such as talking on the telephone, or looking at a score. They appear quite bored and discouraged. Within few minutes of this initial scene, the theatre attendant comes down the stairs saying there are some people who insist to speak with the composers. With nothing better to do, the composers agree to let them in.

The six artists are quite exuberant and run down the stairs with all their equipment and making much noise. After a small dialogue, the artists agree to try the new music the composers had been working on. Everyone gets ready on stage in the following arrangement:
The six artists - pianist, cellist, painter, dance and actor – perform a total of nine compositions from the three composers. Where the dancer, painter and actor felt moved by the pieces, they were left free to interact and improvise with their craft. For this reason, we only partially rehearsed the concert. We wanted these improvisations to be as natural as possible and to arise for the first time during the actual performance.

The compositions followed a certain sequence, always alternating instrumentation, and it lasted for approximately 90 minutes. I engaged two undergraduate students to create some short electro-acoustic intermezzi using my singing bowl recordings to be heard between the nine compositions. This creates a sense of suspended time, and added some drama which in turn allowed the theatrical sequence to be better underlined.

At the end of the concert, we performed a vocal composition I wrote based on John Cage’s interview about music and silence. The composition was organised as follows: all the artists put on a white mask and one after the other started reading the text, creating a big “vocal fugato”. At the end, the artists gradually stopped reading one by one, leaving just a musical silence. At that point, we started walking and exchanged masks: each of us exchanging masks with the artist with whom we felt more in tune. This final action was a tribute to Pirandello’s play where the line between fiction and reality are poetically blurred.
The Mutabor Semper and Uninterrupted Fantasy were performed here in an abridged version but with a lot more visual/theatrical interaction – for example, the drawing glissando becomes a tridimensional action performed not only by the pianist, but also by a painter and a dancer with a ribbon. The Cadenza II is a shorter and more condensed version of Mutabor where I divide the word “Mutabor” in 5 sections using the same connection between letters and pitches. Each section was also divided into six actions. The materials for these musical actions were selected from the original composition and are all listed in the same musical temporal line.

Figure 7.2 - Timeline Structure of the Theatrical Performance Six Artists

<table>
<thead>
<tr>
<th>Composer: Peter</th>
<th>Composer: Alex</th>
<th>Composer: Ursula</th>
<th>Composer: Peter</th>
<th>Composer: Alex</th>
</tr>
</thead>
<tbody>
<tr>
<td>Harpist</td>
<td>Cellist</td>
<td>Pianist</td>
<td>Actor to mime</td>
<td>Dancer</td>
</tr>
<tr>
<td>(Play CD track 2)</td>
<td>(Play CD track 3)</td>
<td>The dancer and painter visualise and materialise the glissandi in their action.</td>
<td>(Play CD track 4)</td>
<td>(Play CD track 5)</td>
</tr>
</tbody>
</table>

Composer: Ursula

<table>
<thead>
<tr>
<th>Composer: Peter</th>
<th>Composer: Alex</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Video)</td>
<td>(Video)</td>
</tr>
<tr>
<td>Dancer</td>
<td>Dancer</td>
</tr>
<tr>
<td>(Play CD track 6)</td>
<td>(Play CD track 7)</td>
</tr>
</tbody>
</table>

Dancer retrieves the second vocalist from within the audience. Vocalist to perform with Ursula at the piano.

Composer: Ursula

<table>
<thead>
<tr>
<th>Composer: Peter</th>
<th>Composer: Alex</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Video)</td>
<td>(Video)</td>
</tr>
<tr>
<td>Actor: mutabor</td>
<td>Actor: recite mutabor poem</td>
</tr>
<tr>
<td>(Play CD track 8)</td>
<td></td>
</tr>
</tbody>
</table>

7.4 CONCLUSION

In Pirandello’s comedy, the split between the “actors” and “fictional Characters” seems at first to represent a division between “Reality” and “Illusion”. However, the real actors are masters of illusion, whilst the fictional characters claim, with some justification, to be more real than the actors. Sometimes reality can be stranger than fiction, and vice-versa. This project explores the relationship between composers, artists and the audience.
CHAPTER 8

General Conclusion

8.1 THE SPECTRE AROUND ME IS GONE

The title of this thesis is *Deconstructing the Structure*. The role that structure plays, not only in my approach to composing, but in the compositions themselves, should be clear by now. Constructing the structure is part of the creative process itself and is the first and most important stage in my compositions. Building a structure represents taking authority over the creative chaos caused by the external stimuli; it is a progression from chaos to order and rules. The final musical outcome is simply an extension of the creative process that begins with building the structure.

Giving rules to the structure requires 'exactitude', a concept I borrowed from the Italian writer Italo Calvino. A structure must be clear, well designed and calculated. This exactitude is then revealed in what Calvino calls "the lightness of thoughtfulness" which can make frivolity seem dull and heavy. Yet exactitude does not mean predictability, which would soon stop engaging our attention. It is the tensions and the unpredictable elements that keep any work exciting and alive. Once we define the structure we start using it, exploring the exceptions and variations, and making decisions to filter some of these to only retain the strong elements.

Once the structure has served its purpose in enabling us to explore the possibilities of a creative idea, I feel free to abandon the structure. I truly feel like the Spectre around me is gone! In order to do so, the structure must have some conditional rules that would allow the composer the freedom to exit the structure mostly towards the end of its journey.

So to briefly answer the questions I asked myself at the beginning of this PhD, “do I need a structure in order to compose?” the answer for me is: absolutely. Do I have the freedom to abandon it at some point? Or am I bound to pedantically follow it? The answer is plain if we
rephrase the question: who has sovereignty, the structure with its rules or its creator? I think the answer is obvious, and in my compositions I have never abdicated this prerogative.

In trying to find my own musical language and style I have looked for a method or tools to serve as a guide. The metallic sounds of instruments such as the Gamelan, the Sistra, the Singing Bowls/rin and the Harmonic Pedal have not only triggered my imagination, but are the common denominator throughout my compositions thus creating that organic feel and style that is recognizable in my work. The unique pitches of these handmade instruments so removed from my background, adds that unpredictable and mysterious element I was looking for, particularly when used in combination with traditional instruments. It is like mixing colours on a pallet.

I find the use of number sets (ie. Fibonacci sequence, times table 9) quite a useful tool in composing. Upon reflection, composing for me is a scientific endeavor as much as it is a creative, emotional and even visual experience. In fact, the visual aspect of mathematical equations is similar in my mind to the visual impact of a musical score. I have realized that the artistic endeavor requires a three-dimensional living. That is, we must be grounded in the individual and collective learnings from the past, whilst we continue working in the present to build a new future. I have often reflected how parallel art is to real life.

My creative and intellectual journey is somehow reflected in the order of the chapters in this thesis. The creative impulse for the first two chapters is historical; anchored in the past. The third and fourth chapters (Swirling Yellow and the Harmonic Pedal) were triggered by scientific experiments (others and my own), which in a way represent the present and its workload. Proving the existence of the Higgs Boson is a crucial step in our understanding of matter. Yet this particle is so elusive that what is observed are the products of its decay. We don't see or hear it, but we are left with evidence that it was there. Perhaps this is the reason why it has become popularly known as the "God Particle"; because like God, we cannot actually see Him, but are surrounded with evidence of its presence in the order and design we see all around us. In fact, science would not be possible in a random universe.

Yet the forces of nature are impersonal. There is no pain in the failed random collisions in the Collider. The pain of transformation is felt in Mutabor Semper. Here the cello represents a
human being, with a will to make choices and with the understanding that freedom lies only in choosing a path to follow and the maturity to accept the logical consequences of these choices (the rules). For this reason the structure in Mutabor Semper is less complex than Swirling Yellow, but deliberately elastic to allow for this process of transformation.

The cello's interaction with elements external to it suggests that internal resources are insufficient to generate transformation by itself. Hence the use of words in this composition. Words imply communication and meaning; they tap into inner longings to trigger the desire for transformation. And just as in the Six Artists Seeking a Composer, I have always marveled at the interaction of situations and new people that have come into my life during happy or difficult times, and how one cannot help but being transformed in that process. For example, by narrating the story of Castagna in the Opera, a number of his relatives previously unknown to me, have got in touch thus fulfilling my wish for Castagna to reconnect with his descendants and not be forgotten.

Looking forward I intend to continue composing by stretching my structure to experiment with the newest technology to produce works suited to different artistic fields. I am keen to make further contributions in research perhaps in a post-doctoral capacity. During the performance of Swirling Yellow and the Opera I became acutely aware of the limitations of the conventional physical space to clearly convey my ideas. The ideal framework for this to happen requires (a) innovative sound spaces and (b) innovative ways to engage and trigger the audience’s interest. For this reason I would like to continue developing the studies I made on sound reverberation in octagonal spaces, and as hinted in Six Artists Seeking a Composer, continue exploring creative ways to engage the public. The Harmonic Pedal Device has been patented and developed to incorporate more harmonics and will be commercialised it in the near future.

Finally, I am grateful to everyone who knowingly or unknowingly has been part of my journey. The fact that there are 8 chapters in this thesis is pleasantly coincidental, but I truly hope it will signal 'new beginnings.' Just as Castagna found full realization in his beloved Ethiopia as an architect, I hope I will be able to do the same in this wonderful country.
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### Appendix 1.1 - Tutankhamon’s Name in Hieroglyphic

<table>
<thead>
<tr>
<th><strong>Tut-Ankh-Amon</strong>=Living image of Amon (God)</th>
<th><strong>Nebkheperura</strong>=Lord of the forms of Ra</th>
<th><strong>HIEROGLYPHIC Symbols</strong></th>
<th><strong>English</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>T</td>
<td></td>
<td>BREAD- Loaf</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>TUT= Image –figure</td>
<td></td>
</tr>
<tr>
<td>U</td>
<td></td>
<td>QUAIL</td>
<td></td>
</tr>
<tr>
<td>T</td>
<td></td>
<td>BREAD-Loaf</td>
<td></td>
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<tr>
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<td>NEB /ANKH= Lord of Life</td>
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<td>K* HEPER</td>
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<td>KHEPER*= Scarab / Metamorphosis</td>
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Appendix 2.1 – Historical Notes

The Opera *An Italian in Ethiopia* (originally named *The Octagonal Cathedral*) is based on the real story of an Italian war hero only recently re-discovered: the architect Sebastiano Castagna. He was born in 1868 in the small mountain village of Aidone, near Piazza Armerina, in Sicily. Castagna left his village at a very young age and went to study in Turin, becoming the equivalent of a modern architect-engineer. An adventurous character by nature, he decided to seek his fortunes in Ethiopia. Enrolling in the Italian Army as an ‘Ufficiale Furiere’ (Quartermaster-coordination duties) provided the perfect excuse to go to Ethiopia. Upon arrival, Castagna knew he had found the place of his dreams.

In 1896 he was required to take part in the battle of Adwua, which the Italians lost. He was taken prisoner by the Ethiopian Army, but his fate changed by a royal pardon when King Menelik and his consort, Princess Taitù, recognized his talents and appointed him Councilor to the King and Head Engineer of Ethiopia. Castagna was responsible for the planning and building of a number of famous constructions including the St George Cathedral in Addis Ababa, the bridge of the Blue Nile, a number of monasteries and aqueducts and many other public buildings in the developing Ethiopia.

In 1913, after the death of King Menelik, Castagna continued to enjoy favour with the new King, Selaissè, who allowed him to continue serving in the same capacity. During this time, Castagna became a very close friend of General Damtew who was the King’s nephew and son-in-law. They did business together and enjoyed many happy times. Castagna mastered the Ethiopian language rather quickly and over time spoke over 70 local dialects. His love for the Ethiopian people was reciprocated by their acceptance of Monsiù Castagna as one of their own. Castagna married Damtew’s aunt, Princess Belinè with whom he had two daughters, Maria and Giuseppina. Things remained well until 1936, when the Abyssinian war was won by the Italians. Castagna was involved in several diplomatic missions to assist Ethiopian tribes to negotiate their surrender conditions with the Italians, but tragically, in 1939
he was brutally decapitated by rebels or unknown assassins during one of these missions.

Historical notes from Anthony Mockler state that Castagna's assassin(s) probably mistook him for an Italian spy or a double agent. Given his blue eyes and unique features, it is unlikely he would have been killed by mistake from either side. Mockler mentions that after his death, the Duke of Aosta offered a substantial financial reward to find his assassin(s). This suggests that by the time he was 70, Castagna had become a person of significant influence and credibility within the Ethiopian Government. His intimate involvement with the 'enemy' must have placed him in an uncomfortable position that undoubtedly raised suspicions within Italian high ranks.

During his life Castagna received many honours, including a Gold Medal of Military Valor from the Italian Government and an official recognition from the Russian Czar for his contribution to the development of Ethiopia, and in particular to its capital, Addis Ababa.

A rather curious aspect of his story is the link to the patron Saint of Ethiopia, St George, in whose honour Castagna built his most famous work, the Octagonal Cathedral. As it turns out, both St George and Castagna were decapitated thus suggesting a mysterious link or common destiny between the two. The article *Un Italiano alla Corte di Menelik (An Italian in Menelik's Court)* by B. Pegolotti, provides further historical information. [For other historical notes see the Appendix to Opera Chapter and the Bibliography.]
The life of Sebastiano Castagna

Historical Notes on Sebastiano Castagna and Ras Destà Damtew are taken from the article “Un Italiano alla corte di Menelik” (An Italian in the Court of Menelik) by Beppe Pegolotti, as well as family memories and notes in a diary that was directly connected to Castagna.

“A 70-year-old Italian managed to travel across the most dangerous regions of Ethiopia with the aim of helping to conduct the surrender of a famous Abyssinian Ras (Damtew), bringing him gifts of candles and a carton of champagne. He travelled for days on a donkey while his eyes were blindfolded. This journey was the most horrendous - with a lot of dangers and difficult terrain to cross – ever undertaken by Castagna.

But he came back without convincing the Ras. This is, however, one of the most incredible stories in the era of Italian imperialism in East Africa, and one of the least known.

The Italian in this story was Sebastiano Castagna and the Abyssinian, Desta Damtew ...

He was born in 1868 in a little village in the south of Italy called Aidone (my mother’s family’s original town in Sicily).

He was the son of Gaetano Castagna and Maria Del Buono, and lived his youth in Torino, Italy. There, he studied engineering and architecture before moving to Ethiopia in 1896, accidentally getting involved in the Battle of Aduwa, as he was not a soldier.

When the war was over he became one of the Ethiopian Emperor’s official architects and a close friend of the famous Abyssinian Ras, Desta Damtew.

The two men were linked by a parental relationship. Castagna had married an aunt of Destà, a noble woman from the Amhara caste who was called Balainé (different spelling to that in the opera). And Ras Destà married Tegname Work, the daughter of the king, Negus Selassie – the so-called Menelik II of Ethiopia. The life of the two men, uncle and nephew, became the stuff of extraordinary stories.
Castagna and Princess Balainè had two daughters: Maria and Giuseppina. The two girls went to study in Rome. Castagna’s daughter Maria had a daughter called Dede’, who is still alive. She recalls that her grandfather was a very clever man and an adventurer who had a prestigious position in the state of Ethiopia, working as an engineer and giving counsel to King Menelik, in effect acting as a prime minister to the monarch. Castagna could speak more than 70 dialects and he was appreciated for this by both the King and the local people, who considered Castagna to be one of them.

As an architect, Castagna designed and built the Cathedral of St. Giorgio in Addis Ababa: the church is famous for its octagonal structure.

The literature on this building in various reviews and in articles by celebrated architects indicates that this church and its structure are considered the best example of “a European interpretation of the Ethiopic style”.

In 1935, the Italian-Abyssinian conflict was no longer avoidable, so Castagna went to the King and asked him to be left free from duty, as he loved both Italy and Ethiopia.

During that war, Ras Desta fought against the troops serving Rodolpho Graziani (governor-general of Italian East Africa). The battle then moved on to Somalia. Although his soldiers were defeated, Damtew moved back to the Great Lakes district and kept on fighting, even after Addis Ababa had been defeated.

These events took place in 1936. Castagna, as underlined in the mission described above in the article*, tried to persuade Damtew (who was, after all, his nephew) to surrender but failed to do so.

Castagna, being someone who knew the country and its people well and who was fluent in the language, was secretly sent to negotiate with Damtew and his fellow “rebels”. The ongoing conflict meant there was no peace in Ethiopia, although the Italian authorities did not want to publicise this fact: Rome did not want to admit that after all the military action undertaken by its forces, there was still a war going on in Italian East Africa. Castagna died in 1938, during one of those “Secret Missions” to negotiate with the rebels. His head was found in a bag and his unmistakable blue eyes revealed his identity: Sebastiano Castagna.
Sebastiano Castagna
The life of Ras Destà Damtew

He was a friend of Sebastiano Castagna’s, they had a business together and Castagna married Damtew’s aunt, Princess Beleinè.

Born in the village of Maskan in 1896 (in the contemporary Gurage Zone), Desta Damtew was the second son of Fitawrari Damtew Ketena. In 1896, Damtew Ketena was killed at the Battle of Adwa.

In 1924, Desta Damtew married the Emperor’s oldest daughter, Princess (Leult) Tenagnework Haile Selassie. They had four daughters and two sons.

In 1930, Emperor Haile Selassie appointed Ras Desta Governor (Shum) of Sidamo Province. He succeeded Birru Wolde Gabriel.

In 1935, Ras Desta commanded troops along the southern border of Ethiopia during the Second Italo-Abyssinian War. In January 1936, he was defeated by the Italian General Rodolfo Graziani at the Battle of Ganale Dorya. Desta retreated back to his administrative centre at Irgalem, where with the help of Dejazmach Gabremariam, he reorganized his survivors to resist the Italian advance. Desta continued to resist the Italians after Emperor Haile Selassie left the country.

After the end of the rainy season in 1936, Italian General Geloso advanced from the north to dislodge Ras Desta and Dejazmach Gabremariam. But, by the end of October, Geloso had not advanced very far or effectively. It was not until a month later, when a second Italian column advanced from the south through the Wadara Forest, that Ras Desta at last left Irgalem, which was occupied on 1 December. With Dejazmach Gabremariam, Dejazmach Beine Merid (Governor of Bale Province), and a dwindling number of soldiers, Ras Desta eluded the Italians until they were trapped near Lake Shala in the Battle of Gogetti, and annihilated. Wounded, Ras Desta managed to escape, only to be caught and executed near his birthplace in February 1937.
Ras Destà Damtew
CASTAGNA Sebastiano

Gold Medal of Military Valor

Civilian

Place of birth: Aidone (Enna province, Sicily)

Date awarded: 1938

In memory

Reason: Veteran of the first military campaigns in Africa, pioneer in difficult times on Ethiopian territory, supporter of Italian noble character in uncivilized nations, valued collaborator of our government authorities, gave of all his abilities to the duty of his homeland, becoming the worthy creator of the endeavor that lead to the conquering of the empire. For the ultimate conciliation of the conquered territories, with unequalled boldness, he volunteered to go to enemy or rebel leaders, without any reliable guarantees or protection. Having fallen into the dastardly trap set by a traitor rebel leader who invited him to attend a meeting via a flattering letter, then took him hostage, the 70 year old managed to evade surveillance and regain his freedom by escaping. Hunted down and captured in the woods, his hero’s head did not yield and he fell under enemy fire rather than accept surrender offered by a barbarian.

Cusae, 5 October 1938

The decree date is currently being verified.
List of Honours bestowed upon Sebastiano Castagna

Gold Medal for Military Valour

Commemorative Medal for the campaigns in Africa

Seniority Cross for Military Service

Knight of the Star of Ethiopia

Knight Official of the Order of Solomon

Knight Official of the Order of Menelik

Commander of the Star of Ethiopia

Grand Officer of the Star of Ethiopia

Knight of the Crown of Italy

Knight of the Order of Saint Simeon

Award bestowed by the Czar of Russia for the rare skills with which Castagna assisted the Emperor Menelik II in the development of construction in the new capital of Addis-Abeba.

Commemorative Medal for the Coronation of the Empress Zauditu’

Commemorative Medal for the Coronation of the Emperor Haile’ Selassie’

Authorised holder of the badge for the campaign for the occupation of the Ethiopian Empire

Authorised holder of the badge for the entry of the troops into Addis-Abeba
Angelo Del Boca, Italian historian and writer

“La Guerra d’Etiopia. L’ultima impresa del colonialismo” (The Ethiopian War. The last feat of colonialism) Longanesi publishing house, Milan 2010

Translated summary extracts:

Between 22 December 1935 and 29 January 1936, by order of Marshall Pietro Badoglio, 31 bombings with 420 type C.500.T. bombs were carried out. Each bomb contained 212 kg of highly toxic mustard gas, striking not only the military but also civilians (page 139).

In 1937 General Rodolfo Graziano (Viceroy), following the attack on 19 February 1937 by two young Eritreans, ordered the killing of over 2,000 people including priests, deacons and pilgrims in the monastery city of Debra’ Libanos (page 246).

In the same period Italian troops killed fortunetellers, sorcerers and storytellers also in Debra’ Libanos (page 247).

Mussolini, Badoglio and Graziani did not stand trial as war criminals for the crimes committed during the Ethiopian war (page 254).

Angelo Del Boca, in his latest work (Neri Pozza publisher), raises doubts that the Italians were actually ever nice people under fascism, wherever they went. Some recent news adds strength to Del Boca’s doubt – the diary of a soldier who died two weeks after returning from Ethiopia (Elvio Cardarelli of Vignarello, Viterbo) - a diary banned by the fascist regime because it told of an inconvenient truth in a time of unanimous consent: Italy used gas in Ethiopia. To be precise, mustard gas, a potent blister-causing poison used in chemical warfare. The Germans used it in the First World War at Ypres in Belgium. It was also used in the Second World War. In the Adriatic Sea “hundreds of tons of mustard gas in cylinders are buried, sunk after 1945 by the Allied Command to hide from public knowledge its use during the war”. From time to time, they end up in fishing nets.

Riccardo Cardellicchio
Appendix 2.2 – List of my own poems. These selected poems were written between 2007 and 2011. They were created while making the libretto and some of them were directed linked with the story, so I decided to use them. In this final appendix this is a full list of them in order of appearance in the actual libretto.

The “Little Girl poem” I wrote earlier and I used in the opera to express feelings and understanding, from different prospective, of both Castagna and the little girl. The poem is like a counter point to the dialogues. They are given to sing to the spirits. Here below poem in full version.

<table>
<thead>
<tr>
<th>Poem</th>
<th>Description</th>
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<tbody>
<tr>
<td>1. Mi stordisce - it stuns me</td>
<td></td>
</tr>
<tr>
<td>2. Forse la morte</td>
<td></td>
</tr>
<tr>
<td>3. Blue eyes, (Silenzio blu')-Blue silence all around me</td>
<td></td>
</tr>
<tr>
<td>4. Lasciandomi imbambolata- It leaves me astonished</td>
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(II gesto riparte- it starts again)  
(Liberamente – freely)  
(Incompreso- not understood)  
(Atteso- awaited)  
(Finalmente svelato-Finally revealed)  
Eterno abbraccio- eternal embrace

This poem was used in the following way:
For the parts written in Italic they have been used, see below. For the others with brackets it refers to the general meaning/concepts found in the story in Part II and part III. Some of Castagna’s main concepts in Part II were constructed with those lines too.

**Part I:**
(3 female voices B+A+T)  
1. It stuns me - Mi stordisce [Mark C bars 46-54]  
2. Forse la Morte [Mark C bars 75-76]  
3. King (B+A+T): Blue eyes, blue silence all around me. [Mark C bars 95-100]

**Part II:**
(3 female voices B+A+T)  
4. It leaves me astonished -Lasciandomi imbambolata, [Mark S bar 357]

**Part III:**
Castagna’s final hug with the Little girl. [Page 88, Mark W bar 563] refers to:  
5. Eterno abbraccio- Eternal embrace.

**Part II: From libretto** [See Score Pages 29-30 Mark L, from bar 187]  
Castagna: I had a dream, a number that contains all numbers. Eight moons were bowing at me. I can see clearly the Eight-sides. Come e' bella my cathedral! A perfect enclosure sacred Octagonal Dome. Here in this Cathedral time and space become Octagonal infinity. Rhythm of silence I perceive you.

Poem: L26 (Title)  
Aleph  
The number that contains all numbers
**Part II**: [See Score Pages 31-32 Mark O, from bar 222]

**Castagna**: Sento i silenzi scandirsi nel mio cuore ad un ritmo rallentato, senza tempo, sospeso senza tempo. I miei pensieri rumorosi ed esuberanti trovano pace; Percepisco l’esterno dall’interno.

Poem: L16.
Essere interni al proprio spazio,
Sentire i silenzi scandirsi ad un ritmo cardiaco rallentato, percepire dall'interno dall'esterno.

**Part II**: [See Score Page 34, Mark P, from bar 306]

**Castagna**: I want to be where my heart meets my cozy nest. Here I feel safe.

Poem: L15.
I am inside my nest feel cuddling cozy there

**Part II**: [See Score Pages 35-36, Mark Q, from bar 317]

**Castagna**: Aidone miraggio gemello di una terra lontana, come il cuore d'Africa ed il sogno fu realtà! Con te mi sento cittadino del mondo, ho imparato a volare come, come aquila libera va dove la mente segretamente desidera..

Poem: L14.
Mi libero in cielo come Aquila con gesto sicuro e rievoco l’eco nascosto

**End of Part II**:

**Armarhà**: [See Score from Mark X Pages 52-55]

Io vorrei essere una signora (una signora);
Io vorrei fermarmi in questo momento unico
essere una signora andar... dove nessun va..
[She is looking at him ...while Castagna is sleeping next to her].

[See Score Pages 54-55, Mark Y-Z, from bars 601 to 640]

Io maldestramente osservo la mia anima, felice d’essere qui fra le braccia e gli sguardi di uno sconosciuto che neanche sa forse d’esser qui con me...(Con me)
Ma il mio vivere e’ tutto qui
Nessuno che mi prenda per mano
Mi aspetti
Mi sogni,
Mi respiri
Che ami se stesso e così la mia vita
Indesideratamente desiderata desisto
... che sia!

Poem: L1.
Io maldestramente osservo la mia anima felice di essere qui,
Triste di non avere nessuno che le tiene compagnia
Che Aspetta,
Che Sogna,
Che Respira,
Che Ama se Stesso e la Vita
Indesideratamente
Desiderata
Desisto
End Part II

Part III: (See score page 55, Mark A bar 3)
/[Castagna wakes up and still believing it is just a dream sings a duet].
Castagna & Armarih Duet
Armarih: Ti vedo
Castagna: Ti vedo
Together C+A: vedo
Castagna: Nella tua bellezza
Armarih: Ti sento
Castagna: Nella tua energia
Armarih: Ti sento
Castagna: Reazione automatica
Armarih: Segreta paura
Castagna: Sento un rilascio veloce e poi tutto calmo
Armarih: Mi sento inebriata
Castagna: Irreale
Armarih: Lucido-Irreale
Castagna: Lucido
(Castagna kisses Armarih)
Castagna+ Armarih unison: (See score page 56, Mark A, from bar 26)
“Bacio”
Rubato
che si
nasconde
nel buio
Poi ritorna se stesso…

Poem: L11.
Sento un calore che dentro mi attraversa e mi inebria
Sento un segnale fine, segreta paura,
Sento un’azione astuta, reazione automatica,
Sento un rilascio veloce e poi tutto calmo
Inerte
Irreale
Accaldato
Lucido

Poem: L3.
Bacio
Rubato
che si
nasconde
nel buio
Poi
Part III: (See score page 56, Mark B, from bar 35)
**Armarhà:** Sleeping safe in a warm nest and cuddling cozy cuddles  
The inner heart jumps... Suddenly a surprise that’s all  
And no one knows if it is going to ever return. In nights flowery instants!

Poem: L5. Jumping heart  
Sleeping safe in a warm nest an cuddling cozy cuddles  
Constantly curse to one’s eye and then the upper hear... The inner heart jumps...  
The lungs seem yellow ribbons... greetings at me... sudden a surprise that eats me all  
And no one knows if it’ is going to ever return

Part III: (See score page 57, Mark B, from bar 49)
**Castagna & Armarhà**  
IN NIGHTS, in nights inner tensions  
INSPIRING VITAL unexpected ENERGY”… from the unknown.  
INSPIRING Energy and all comes unknown.

Poem: L22.INFINITIVE  
“IN NIGHTS FLOWERY INSTANTS NOURISHED INNER TENSIONS  
INSPIRING VITAL ENERGY”.

Part III: (See score page 57, Mark C, from bar 63)
**Castagna:** Mi raccolgo come un feto attorcigliandomi nell’intimo per abbracciarmi  
Non posso permettermi di perdermi di piu’  
Non posso lasciare il mio cuore ad Armarhà

Poem: L6.Irriducibile  
La mia anima cerca se stessa  
Ed ogni giorno quando arriva sera sembra essersi riconciliata col mondo..  
ma poi la notte porta via tutte le sicurezze  
Con il nuovo giorno tutto e’ di nuovo come prima  
tutto e’da riscoprire  
tutto puo’ non essere come ci si aspettava  
tutto puo’ non essere tutto  
mi raccolgo come un feto attorcigliandomi nell’intimo per abbracciarmi  
Non posso permettermi di perdermi di piu’  
Non posso permettervi di scoprire il mio irriducibile segreto

Part III: (See score page 67, Mark H, from bar 198)
**Belinè:** I tuoi occhi si specchiano nei miei  
**Castagna:** I miei sentono  
**Belinè & Castagna:** abbiamo le stesse emozioni...  
**Castagna:** il calore delle tue gemme  
**Belinè & Castagna:** abbiamo le stesse emozioni...
Poem: L21.
I tuoi occhi si specchiamo nei miei I miei sentono il calore delle tue gemme

**Part III:** (See score page 80, Mark Q, from bar 407)

**Castagna:** I dreamed eight moons appeared and bowed to me. I succeeded seven times... you are the eighth. This could be my last mission.

**Damtew:** Be careful of danger... you have

Used general concept:
Poem: L10.
Luna che mi sta di fronte come sentinella del cielo
e tace ogni nostro segreto

Poem: L20.
Castagna e’il sole e le otto lune si inchinano a lui! Ma la madre luna si oppone!
Last night the stars were touching the hills sleeping under the mother moon.

**PART III:** (See score page 90, Mark X, from bar 573)

**Castagna:** Now that my story everybody knows
My heart and brain are again reuniting.
My heart is now free
I now give my elegant final bow (Castagna hugs the little girl).
I feel free to rest in peace.
I feel free no more spectre around me
Just you princess my little girl
My future generation to come here with me now forever free now!
*Tutti:* Free...The Spectre around you is gone!

Poem: L8. Final Bow
When will my heart rest?
Where will my heart rest?
How will it be rested?
Who will take care of it for its final journey?
Knowing many times gentle voices predicted the extreme sacrifice threaten my spirit
with false promises
My spectre is my heart, now I feel it
I am reconciliated
And I give them my elegant final bow!

**End Opera**
Appendix 2.4
An Italian in Ethiopia - Opera Libretto
Ursula Caporali 2010-2012.

Prologue:
Modern side:
A father and his little girl are looking at some pictures; the little girl asks questions and she soon
finds out about the incredible story of that man. Castagna

Part I:
Past Side - Deportation Music
(Belinê+Armarhà+Tegna): Mi stordisce - It stuns me.
King: He is not a soldier! Look at his eyes, mi scrutano. They seek too deeply interrogate me. He is
cursing me! Forse la morte!
(Like echo-B+A+T: Forse la morte!).
Damtew: No my king, you are giving them life. You could have killed them ...wisely you did not!
(B+A+T: Did not).
King: I am sure! He is looking at me like nobody else before.
(Belinê+Armarhà+Tegna): Blue eyes, blue silence all around me.
Damtew: I heard he was with the Italian troops but he does not look like one of them.
King: Look at his scary blue eyes.
Damtew: In the war he was “Maggiore Furiere” bravi a crear organizzare
King: He surely has some kind of special abilities! [He is cursing me]
Damtew: No he is not! But I will ask to our generals [Damtew goes out].
The king is in front of the prisoners.
King: Addis Ababa is my dearest New Flower.
Important, modern recognized by all the countries! So we have won the battle and we always will! I
will find the best architects to create the new Addis Ababa!
Tegna: No need to kill them.
King: The prisoners will work for me,
King: He suddenly stops and turns towards Castagna].
Spoken: but those Eyes are still looking at me [King is going slowly towards Castagna while
speaking].
Who are you? Why are you staring at me? But surely you don’t understand my language!
[Speaking/singing to himself].
Castagna: Il Nuovo fiore ha bisogno di acqua!
King: [The king gets aggressively closer to him, believing he has been insulted].
How can you dare?
Castagna: Il Nuovo fiore ha bisogno di piu’ acqua!
King: Guards! Guards Come in and take him away!!!
Damtew: [Enters running]. Dear king you have no idea. He ‘s not cursing you. He is very good
architect, like an engineer, we will need him!
King: But those eyes make me doubt, but what does he say? We need a translator!
Damtew: [Almost turns to go and find one but the king calls him back. The King and Damtew are
both steady and astonished].
Castagna: The New flower needs more water!
King: I want to officially make him my helper, what do you think Damtew?
Damtew: He will be.. I think…. the one
King +Tegna: He will be Castagna
Castagna: Questa terra mi ha stregato il mio futuro e’ qua.
Part II:

Tegna: Quest’uomo venuto da lontano ha un cuore grande e fara’ grandi cose.
Mio padre ascolta i tuoi consigli. L’amicizia con Monsiu’ sara’ per te cosa preziosa.

Damtew: Anche tu rapita dai suoi occhi?

Tegna: No No.. ho solo occhi per te Damtew, mio adorato
Sono felice che hai un amico sicuro…ha un cuore grande.

Damtew: oh mia musa

Tegna: si?

Damtew: I tuoi saggi consigli.. adorata!

Tegna: sento freddo..d’improvviso… sento freddo ..il mio cuore turbato, futuro incerto, sento freddo futuro incerto .
Il mio cuore turbato mio padre ci vede vincitori ma non sara’ per sempre- {Damtew: Vincitori vincitori ma non sara’}

Damtew: tuo padre crede nella nostra forza..

il nuovo fiore piu’ forte di sempre, non morira’ mai…

Tegna: Il fiore devo avere fiducia ..[Damtew hugs Tegna],

Tegna + Damtew: non morira’ mai

Damtew: Pensavo che forse dovrei presentar a Monsiu’mia zia, la principessa Beline’

Tegna: La sua bellezza lo rapira’

Damtew + Tegna: Rapira’..come noi, amore , nessuna forzatura .. spontaneamente,

Nessuna forzatura ci separera’!

King: Sebastiano Castagna will you be by my side? I proclaim you my architect

Castagna: Sono onorato sono qua per servirla devoto Monsiu’!

Belinè + Armarhà: per onorare te.. (Looking with devotion at Castagna)

King + Tegna: The new flower is thanking you

Damtew: The new flower is..

Castagna: Per onorare il nuovo fiore, the new flower! Grazie!

King: To celebrate our victory I want to have a great Cathedral a symbol for Addis Ababa.
Will you do it for me my white engineer?

Castagna: L’ingegnere bianco accetta: you shall not be disappointed.

Castagna: I had a dream, a number that contains all numbers. Eight moons were bowing at me. I can see clearly the eight-sides come e’ bella my cathedral a perfect enclosure sacred octagonal Dome. Here in this cathedral time and space become octagonal infinity. Rhythm of silence I perceive you.

Sento i silenzi scandirsi nel mio cuore ad un ritmo rallentato, senza tempo, sospeso senza tempo. I mie pensieri rumorosi ed esuberanti trovano pace;

Percepisco l’esterno dall’interno.

Castagna: Non piu’ prigioniero, posso creare in questa terra. Il fiore rinasca ogni giorno piu’ splendente! Onorato della fiducia della gente d’Ethiopia. Sogno da sempre i profumi di questo paese. Quando ero bambino correvo nei campi del mio piccolo sorridente paese d’Aidone arroccato sul monte come arroccato e’ questo Fiore’d’africa che emana il suo profumo ad eterne distanze. I want to be where my heart meets my cozy nest. Here I feel safe.

Castagna: Aidone miraggio gemello di una terra lontana, come il cuore d'Africa ed il sogno fu realta’! Con te mi sento cittadino del mondo, ho imparato a volare come, come aquila libera va dove la mente segretamente desidera..

I built this cathedral...for the beauty of the flower..

[A+B+T: It leaves me astonished-Lasciandomi imbambolata]

…And hide a secret inside a secret soul to tell my story to you! [Solo Music]
Description of scene: Crazy day/night at the market, Damtew and Castagna. They are coming from afar already drunk like kids knowing they did or will do naughty things. Music and the following actions take place: they play, gamble, speak of serious things, and go to a special market.

**Castagna + Damtew:** Siamo ubriachi.....no no no no no- si –si si si si si!
Siamo lucidissimi.....!

**Damtew:** (With slow and unstable voice) Shall we do our usual tour?

**Castagna:** Yes but not like the other day, gambling can be very dangerous you can lose your mind...

**Damtew:** You can lose your money..but I L I K E I T!

**Castagna:** I don’t dislike it too, so we like it!

**Damtew:** So we like it! So we like it!

**Castagna + Damtew:** So we like it!

**Damtew:** Going to the market you get many things old and new is up to you!

*He gets near Castagna’s ear and talks gently with a soft voice and shouting:*

“**BUT I PROMISED THERE’S MUCH MORE!”**

**Castagna:** (talking) Please go on...

**Damtew:** If you are lucky enough you can buy beautiful burnt chestnuts...

**Castagna:** *(He looks surprised)* Are you teasing me!

**Damtew:** *(Ironically)* Sorry, my dear “Mister Chestnuts” I mean *(speaks Italian)*

**Castagna:** *(Laughing)*

**Damtew:** *(Speaking gently in his ear)* she is eternally young she lives just one day,

**Castagna:** this is very young indeed!!!

**Damtew:** *(Laughing and getting the voice back to loudness)* Look at that Lady butterfly my Dear, you can buy that one just for fun…………..!

**Castagna + Damtew:** *Siamo ubriachi-- (no no no no no- si –si si si si) Siamo lucidissimi -----!*

During the music they see a beautiful young woman slave ready to be bought from the market, Castagna buys her and starts to flirt with her.

**Castagna:** I am the girl like you! *(Looking with desire at the slave girl Armarhà)*

**Damtew:** Are you surely a girl?

**Castagna:** I have long hair like you!

**Damtew:** *(with fun voice like a woman)* Are we surely a girl? *(Looking at Armarhà)*

**Damtew + Castagna:** We have long legs like you…. Are we surely girls?

**Damtew + Castagna:** We are just girls like you…(Looking with desire at the slave girl).. Are we surely girls?

**Castagna:** but is she the girl?

Castagna is drunk and he is running after the girl Armarha’ sings for her an invented Sicilian song like tune.

**Sicilian song:**

1. O mia bella bambolina odore di rose la tua manina
Nei tuoi occhi paura e amore
forse devo chiamare un dottore
Dottore, Dottore venga qua! Un po’ di soccorso ci sta!

2. O mia bella creatura quanto sei bella di natura
Piedi e mani seducenti
Poi pensar ai tuoi seni ….gaudenti!
Dottore dottore venga qua! Oh il mio cuor esplodera’!

3. Oh mia bella creatura il tuo corpo perfetta scultura
Nei tuoi occhi paura e amore
forse devo chiamare un dottore
Dottore, Dottore venga qua! Un po’ di soccorso ci sta!

Female voices: Ci sta ci sta ci sta!

4. Oh buon Dio calma il mio cuore altrimenti vo io dal dottore!
Le tue gambe sinuose e lunghe
Fantasie la mia povera mente
Dottore, Dottore venga qua! Un po’ di soccorso ci sta!

[Castagna and Armarhà spend the night together]

Armarhà solo:
Io vorrei essere una signora (una signora);
Io vorrei fermarmi in questo momento unico
essere una signora andar… dove nessun va..

[She is looking at him …while Castagna is sleeping next to her]
Io maldestramente osservo la mia anima, felice d’essere qui fra le braccia e gli sguardi di uno sconosciuto che neanche sa forse d’esser qui con me..(Con me)
Ma il mio vivere e’ tutto qui
Nessuno che mi prenda per mano
Mi aspetti
Mi sogni,
Mi respiri
Che ami se stesso e cosi’ la mia vita
Indesideratamente desiderata desisto.. che sia!

[Castagna wakes up and still believing it is just a dream sings a duet]

Castagna + Armarhà Duet:
Castagna: Ti vedo
Armarhà: Ti vedo
Castagna: Nella tua bellezza
Armarhà: Ti sento
Castagna: Nella tua energia
Armarhà: Ti sento
Castagna: Reazione automatica
Armarhà: Segreta paura
Castagna: Sento un rilascio veloce e poi tutto calmo
Armarhà: Mi sento inebriata
Castagna: Irreale
Armarhà: Lucido-Ireale
Castagna: Lucido

[Castagna kisses Armarhà]
Castagna + Armarhà:
“Bacio”
Rubato
che si
nasconde
nel buio
Poi ritorna se stesso…

Armarhà:
Sleeping safe in a warm nest and cuddling cozy cuddles
The inner heart jumps. Suddenly a surprise that’s all
And no one knows if it is going to ever return. In nights flowery instants!

Castagna + Armarhà:
IN NIGHTS, in nights inner tensions
INSPIRING VITAL unexpected ENERGY”… from the unknown.
INSPIRING Energy and all comes unknown.

Castagna:
Mi raccolgo come un feto attorcigliandomi nell’intimo per abbracciarmi
Non posso permettermi di perdermi di piu’
Non posso lasciare il mio cuore ad Armarhà’

Part III:
Damtew + Castagna: The slave’s matter duet.
Castagna: this is not a dream.
Damtew: it is reality and we have a matter to solve …
Castagna: I cannot remember much of last night
Damtew: I know… too much fun … but now back in the real world!
We have…we have to find a solution for your brave night with Armarhà?
Castagna: Armarhà’?
Damtew: Yes!
Castagna: Armarha’ is familiar. What shall we do?
Castagna +Damtew: what shall we do?
Castagna: I cannot keep her with me
Damtew: The king would kill you for sure… your blue eyes would not work this time!!
Castagna: yes I understand.. I want to meet and marry Belinè… this is just… a little mistake.
Damtew: … a little mistake..
Damtew: so we could kill Armarhà…
Castagna: no… too much blood
Damtew: we could hide her…
Castagna: no… too dangerous
Damtew: we could sell her back to the market…
Castagna: no… too much stress poor girl.
Damtew: Here it is: you can give her as a nuptial present to my aunty Belinè!
Castagna: Yes so I can keep an eye on her..
Damtew: She does not need looking after. I shall keep an eye on you .ehhehehe! Be fair on Belinè.
Castagna: deal done!
Damtew: Matter solved!
Castagna: Matter solved!
Castagna +Damtew: Matter solved!
**Damtew + Belinè duet:**

**Belinè:** where is he from? Those blue eyes I have never seen before!

**Damtew:** Dearest aunty princess Belinè he is my friend... Maybe dangerous but generous man!

**Belinè:** mm. My heart always knew him those eyes voglio incontrar..incontrar

**Damtew:** Il tuo volere e’ gia’. Lui e’ qua!

**Belinè:** (Spoken) sento dei passi.....

**Damtew:** Poi senti la sua voce

**Belinè:** la sua voce

---

**Proposal Castagna to Belinè**

**Castagna:** This sound I created is by my side, don’t be scared!

**Belinè:** But I am.

**Castagna:** What is in your heart Belinè?

**Belinè:** I am worried for my people

**Castagna:** I have the same concern

**Belinè:** I would like to feel safe.

**Castagna:** I would like to make you feel safe and fight for your world

**Belinè:** But can you?

**Castagna:** Just accept.

**Belinè:** I...

**Castagna:** Stai con me!

**Belinè:** What does it mean “Stai con me”?

**Castagna:** Be my wife!

**Belinè:** My heart says yes!

**Castagna:** mia sposa

**Belinè:** I tuoi occhi si specchiano nei miei

**Castagna:** I miei sentono

**Belinè + Castagna:** abbiamo le stesse emozioni...

**Castagna:** il calore delle tue gemme

**Belinè + Castagna:** abbiamo le stesse emozioni...

**Castagna:** and here is my nuptial gift for you; your helper Armarhà

**Belinè:** Honored honored!

**Castagna:** il mio cuore batte per te...sarà una grande festa , Damtew, il re and your family will be there with you

**Belinè’:** What about your family?

**Castagna:** My family is here already.

**Belinè’:** Are they?

**Castagna:** No they are in my heart, far away with their minds they don’t understand my dreams, the way I feel, why I came and I am here in love with the New Flower and with you my princess!

**Belinè:** you must miss them.. but please..

**Castagna:** I will write a letter to my mother that’s all I feel

**Belinè:** please do...

I cannot believe my heart rejoices. My eyes’ view is wide enough to cross your look. I adore you Castagna. You have my word; Ethiopia is now your country

**Belinè’:** What about your family?

**Castagna:** My family is here already.

**Belinè’:** Are they?

**Castagna:** No they are in my heart, far away with their minds they don’t understand my dreams, the way I feel, why I came and I am here in love with the New Flower and with you my princess!

**Belinè:** you must miss them.. but please..

**Castagna:** I will write a letter to my mother that’s all I feel

**Belinè:** please do...

I cannot believe my heart rejoices. My eyes’ view is wide enough to cross your look. I adore you Castagna. You have my word; Ethiopia is now your country

**Belinè + Castagna:** and we shall lift it and we shall lift it up together.

**King:** a new flower for you Belinè you have to believe in this new love!

**Belinè:** I dreamt of the eight moons... mother moon care for us! I feel some tears

**King:** No Tears just hope! There is no time for sadness. All will be fine. I feel you will have a great future, Castagna is a man of many talents he will take care of you as he has taken care of Addis Ababa. You have my blessing.
Duet: Belinè + Castagna: [It is a simultaneous scene. Beline’ sings from the past side Castagna from the modern side inside the Cathedral].

Castagna: In this scary night someone is following me
Belinè: Death I feel you
Castagna: I feel you too near.
Belinè: In the danger is his journey, wild spirits around you night and day.

Castagna: they are surrounding my soul
Belinè: Blu’ notte senza stelle, nel cuore sento terrore... morte ti sento vicino non circondar il mio cuore piccino, morte ti sento vicino non circondar il mio amor.
Castagna: Mi fanno viaggiare come cieco per non scoprire dove si nasconde Damtew...
Belinè: gli stanno addosso, maledetti spirits!

Lasciatelo andar: la sua immagine svanisce... riportatelo da me, riportatelo da me!
Castagna: mi sento braccato potrei non rivederla.. adorata sposa Beline’. E tu sogno di una notte
Armarhà!

il nuovo giorno...una luce calda ecco vedo Damtew...non piu’ ombre ne’ piu’rumori
Belinè: E solo un sogno ma e’ cosi’ vero dove sei Sebastiano? Sei in pericolo lo sento...All this to save my Nephew Damtew!

Castagna, after many nights of traveling blinded and in fear of danger arrives. Finally he is able to see. He has brought with him some candles and champagne to try to convince Damtew to surrender and have his life spared. However, the many years since their younger crazy days and the affectionate memories are not enough to help Damtew make his decision.

Castagna + Damtew: Duet
Damtew: To our great past! (They drink)
Castagna: Surrender for your family...they pray for your safety!
Damtew: (Change to a stronger voice) No... my troops still resist against the Italians!
Castagna: Why be stubborn? Surrender for your safety
Damtew: Those Italians are different...you know why!! You are one of us... your vision is wider!!!!...

I don’t trust them! (He changes his voice becomes sweeter).

I want to be with you like years ago.
Castagna: Enjoying life together!
Damtew: I should listen to you and your prayers.
Castagna: I dreamed eight moons appeared and bowed to me. I succeeded seven times... you are the eighth. This could be my last mission.

Damtew: Be careful of danger... you have been followed!
Castagna: I am not here for duty but for you and those who love you!
Damtew: My life will end anyway... you know what they do to us.
Castagna: I came to stop this pain! Surrender or they will continue.
Damtew: Maybe... (Thinking) ....

(Long Silence)....

Damtew: I have decided. Take my family to safety. The king will understand! Leave me to my fight. I will not give up!

Castagna: My spectrum is around us I feel it. (Shouting strongly) Don’t listen to him!!
Damtew: I cannot betray my men... I will stay! Be careful. They follow you like a savage beast... they are all around you... I tuo spettri sono ovunque!

Castagna: I know these mountains
Damtew: I asked you to come blindfolded to protect you from telling them where I am... even under torture!

Castagna is coming down from the mountain where “unknown enemies” will decapitate him. Armarhà and Belinè are crying out their pain.
Armarhà: Questo buio mi terrorizza assai, la precarieta’ della sua vita. Sento ormai tutto tremare, gli spiriti intorno a me mi abbracciano per l’ultima volta si appendono alla mia anima. Oramai e’ veramente notte per Castagna.
Belinè & Armarhà: sentiamo il dolore lui non c’e piu’
Belinè: Those eyes 
Armarhà: so his heart 
Belinè: his heart 
Armarhà: those eyes 
Belinè: those eyes 
Armarhà & Belinè: eternally loved
Armarhà & Belinè: eternally young
Belinè: Those eyes 
Armarhà: so his heart 
Belinè: his heart 
Armarhà: those eyes 
Belinè: those eyes 
Armarhà & Belinè: eternally loved
Armarhà & Belinè: eternally young
Armarhà & Belinè: la sua forza intelligenza il suo cuore 
Belinè: il suo cuore 
Armarhà: il suo cuore
Belinè: Debole 
Armarhà: forte lo rendono 
Belinè: Immortale 
Armarhà: Immortale
Armarhà & Belinè: ma umano.. 
Eternamente il nostro cuore pianta , ci hai lasciato per sempre. Le nostre figlie piangono. Noi ti sentiamo sempre attorno a noi. dentro le mura della tua cattedrale, noi ci inchiniamo alla tua forza, e amore infinito verso tutti noi.. il tuo suono sara’ eterno per le generazioni future.....
(Castagna meets his future generation)
Castagna: 
Now that my story everybody knows
My heart and brain are again reunited 
My heart is now free 
I now give my elegant final bow (Castagna hugs the little girl). 
I feel free to rest in peace. 
I feel free no more spectre around me 
Just you princess my little girl 
My future generation to come here with me now forever free now!
Tutti: Free…The Spectre around you is gone!

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Appendix 2.5 Blake’s *Project Electronic Sequence* full duration 9.05 minutes.

See timeline below with the description of each moment and which parts heard in the opera.

<table>
<thead>
<tr>
<th>Duration/Sections</th>
<th>Timeline description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Section 1-2: 0-3,22: Subdivisions.</td>
<td>See below from 0-3,22 Used in the opera</td>
</tr>
<tr>
<td>0-0,19 seconds</td>
<td>Introduction</td>
</tr>
<tr>
<td>0,20-0,40 seconds</td>
<td>This is the main piano fragment heard in the electronics that will be used in the opera especially in Part III Mark S as Blake electronic reminiscent theme. Part III, bar 464</td>
</tr>
<tr>
<td>0,41-0,57 Seconds</td>
<td>Instruments back in like flutes violins pedal plus piano.</td>
</tr>
<tr>
<td>0.58 -1,19 Minutes</td>
<td>Special effect Ostinato I,</td>
</tr>
<tr>
<td>1,20-1,46 Minutes</td>
<td>Piano theme and development, pedal with instruments.</td>
</tr>
<tr>
<td>1,47-2,30 Minutes</td>
<td>Double voices effect: English &amp; Italian: Both use Blake’s Poem (See original poem below*). Voice II English (Mezzo piano): I made a variation for first two stanzas of Blake’s poem.</td>
</tr>
</tbody>
</table>

*Original translations of Blake’s poem are used in the opera with English and Italian voices.*

**Voice I Italian (Mezzo forte):** The original translation of Blake’s project by Ungaretti, has been artistically re-adapted and implemented by me.

**Voice II English (Mezzo piano):** I made a variation for first two stanzas of Blake’s poem.

Il mio spettro è ovunque Attorno a me Notte e giorno come bestia selvatica Sorveglia la mia via Ed io mi sento perso Soffoco Anelo alla liberta Ma liberta’ non è’.

My spectre around me Night and day around me Like a wild beast guards my way; Night and day around me My spectre follows thee behind My Emanation far within My Emanation far within Weeps incessantly for my sin.
<table>
<thead>
<tr>
<th>da lungi</th>
<th>Around me night and day</th>
</tr>
</thead>
<tbody>
<tr>
<td>In un pianto incessante il mio peccato piange</td>
<td>Like a wild beast guards my way;</td>
</tr>
<tr>
<td>Il mio spettro e’!</td>
<td></td>
</tr>
</tbody>
</table>

2,31-2,34
Silence

2,35-3,22:
This piano rhythmical dramatic element will be important the opera score. It will be linked to Castagna’s Drama. See Part III rehearsal mark O.

Section 3
3,24-4,02
Solo piano cadenza plus instrumental crescendo, refrain till shooting effect diminuendo

4,03-4,17
Coda preparation to main point

4,18-4,38
Piano Opera theme – Important coda with tutti

4,39-6,33:
Voice I plus piano recitativo
Il mio spettro e’ ovunque
Attorno a me
Notte e giorno (Forte with orchestra+ Piano)
Come bestia selvatica sorveglia la mia via
Ed io mi sento perso
Soffoco
Anelo alla liberta
Ma liberta’ non e’.
Temo me stesso
Vago nel mio sogno
(Much more instrumental)
In me la mia emanazione dall’ungi
In un pianto incessante
Il mio peccato piange
Il mio spettro (Silence).e’!

5,39-6,33:
Attacca subito strong / forte and loud piano part.
Piano back to liquid effect.

6,37-7,21:
From afar tutti piano
Solo then dramatic orchestra voices shooting (6,49)-robotic

7,22-8,18:
**Never Never I return**

8,19-8,30-9,00
Solo brief music coda violins
*Blake original Poem: first two stanzas.*

My Spectre around me night and day
Like a wild beast guards my way;
My Emanation far within
Weeps incessantly for my sin.

A fathomless and boundless deep,
There we wander, there we weep;
On the hungry craving wind
My Spectre follows thee behind.

My adaptation of the last stanzas of Blake’s poem, which I used for the end of the Blake’Project.

Never, Never, I return.

Never, Never, I return
Let us agree to give up love
And root up the Infernal Grove;
Still for victory I burn.

Never, Never, I return
Living, thee alone I'll have;
And when dead I'll be thy grave.
The worlds of happy Eternity.
Then shall we return and see
I sin against her three more and more

Never, Never, I return
And never will from sin be free
Till she forgives and come to me

Never, never, I return
Appendix 2.6 Analysis-Catalogue of Music themes of the Opera.
Introduction & Part I (See the score pages 1-15): list of main musical themes and elements.

1. MT1.Introduction Theme: Bar 1  (It will be used at also the end of opera with addition of Tenor-Castagna vocal line).

2. MT2.Chord main material for deportation: bars 22 & 27.

3. MT3.Use of main chords to create Instrumental & Vocal lines: bars 46-47.
4. MT4. Kings theme: bar 66 (Blake’s theme see analogies).

```
He is not a sol__ dier! Look at his eyes, mi__
```

5. MT5. Damtew: bar 77.

```
No my King you are giv-ing them life
```


```
```


```
IN THE WAR
```

```
HE WAS
```

9. MT9. Lied like to comfort the King: bar 129.

10. MT10. Entrance of Tegna, bar 141. MT10b. The use of G - G#: they are important pitches, bar 149.


12. MT12. Damtew: Lied form of accompaniment—see piano, from bar 161) also used in Part III Duet Belinè-King, from bar 276.


14. MT14. Voices see end of part I: also see use of interval in Damtew's vocal part.
Part II (Score pages 16-55) Bars start from bar 1: list of main musical themes and elements for opera Chapter II, 5. Analysis.

1. MT1. Mark A page 16 (From bar 1). Tegna Vocal & Complexity also piano part. See also Mark B page 18 (From bar 23) friendship Damtew-Castagna same vocal then A).


Tegna: “Sento freddo”
3. MT3. Also Mark D “il mio cuore turbato” - Tegna music like a minuet contrast with words. From bar 50.

4. MT4. Lied kind of accompaniment used In part I (Damtew): from bar 61.

6. MT6. H (From bar 117) and Musical solo (from bar 124)

SOLO PIANO

7. MT7. Music from Blake's project solo Mark I. From bar 142.


15. **MT15. Castagna: “Con te mi sento” – important theme Mark R. From bar 330.**


17. **MT17. Little girl’s poem. From bar 356.**


20. MT.20 Damtew: Shall we do our usual tour. From bar 402.

22. MT 22. Damtew: “Going to the market”. From bar 423.

23. MT 23. Damtew: “listen to me”. From bar 441.

25. MT 25. Duet Damtew & Castagna: “we are the girls”. From bar 497.


27. MT 27. Armarhà Aria Mark X. From bar 549.


```
B \( j = 63 \)

35
A.
```

```
Piano
```

```
SLEEPING SAFE IN A WARM NEST AND Cuddling
```


```
Quasi recitativo \( j = \text{slower} \)

52
A.
```

```
Piano
```

```
NOURISHED IN-NER TENSIONS IN SPIRING VI-TAL UN_ EX PEC-
```

5. MT5. Solo Piano SES. From bar 80.
6. MT6. Castagna- Damtew: This is not a dream. Mark D-From bar 83.


8. MT8. Duet Damtew & Belinè: Where is he from. Mark F-From bar 142.

10. MT10. – Belinè: What is in your heart. From bar 177.

11. MT11. Belinè: I would like to be safe. From bar 183.


17. MT17. Duet Belinè & Castagna. From bar 265.


20. MT20. King – there is not time for sadness. From bar 285.


26 MT26. Like Tegna- Rhythm. From bar 351.
27 MT27. Solo Music Blake project. Mark O-From bar 360.

Agitato

(Castagna going up to the mountains to find Damtew)


32 MT32. Damtew: I have decided. From bar 426.

33 MT33. Castagna: My spectre is around us. From bar 433.

34 MT34. Damtew: I cannot believe. From bar 437.
35  MT35. Solo Music Blake Project Castagna down Mountain – Decapitation
Mark S-From bar 454.


38 MT38. Duet Beline’ Armarha’ Mark V-From bar 509.


41 MT41. Solo music like intro + voice Castagna. Mark X-From bar 564.
42 MT42. Free Tutti and solo piano. From bar 603.

43 MT43. Castagna: My spectre around is gone. From bar 611.

44 MT44. Final singing bowls. From bar 614. Page 94.

(All singers walk to singing bowls)

Ad lib.

Chant until singing bowls decay.

Freely chant: My spectre around me is gone
Appendix 3.1

Swirling Yellow Original Sketches and Progressive Visual Image of Big Bang
Appendix 3.2  Structure sketches

Appendix 3.3  Score draft on letter Q
Appendix 3.4 Cadenza Percussionists I and II
Appendix 7.1 Excerpt of the Program Note

SPECIAL EVENT

“Six artists seeking a composer”

Friday 26 October, 2012, 7pm
MUSIC WORKSHOP

Project made possible under a 2011 New and Contemporary Classical Music performance Grant awarded to Ursula Caporali by the Sydney Conservatorium of Music.
Starting Roles of Tonight's Performance:

1. Ursula Caporali, Artistic director/composer/pianist
2. Peter McNamara, Composer
3. Alex Pozniak, Composer
4. Ivan Zavada Composer/Multimedia - Electroacoustic
5. Rebecca Černec, Composer - Electroacoustic
6. Anisha Thomas, Composer - Electroacoustic
7. Julia Ryder, Cellist
8. Jihyeon Lim, Pianist
9. Alisa Bernhard, Harpist/Pianist
10. Corinne Urquhart, Dancer and Choreographer
11. Claire Nakasawa, Painter
12. Matte Rochford, Actor
13. Laura Crocco, Singer
14. Kiran Porey, Singer

But at the end …we can be any role… “One, no one, thousand hundred”

Order of Concert sequence:

* * Some compositions are played as excerpts or in a different way for theatrical reasons.
Cd1* (Of the eight electronic tracks, four are composed by Rebecca Černec and four by Anisha Thomas. They will be alternated during the concert).

1-Six dimensions of seven for Harp – Composer Peter McNamara, Harpist Alisa Bernhard, Painter Claire Nakasawa.

Cd 2*(electronic 1 minute each)
2-Mercurial for Cello - Composer Alex Pozniak, Cellist Julia Ryder, Painter Claire Nakasawa, Dancer Corinne Urquhart.

Cd3*
3-Uninterrupted oneric fantasy of saudade reminiscent for two Pianos – Composer Ursula Caporali, Pianist Jihyeon Lim (II piano Ursula Caporali) - Painter Claire Nakasawa, Dancer Corinne Urquhart, Actor Matte Rochford.

4-Cadenza for Cello - Composer Pete McNamara, Cellist Julia Ryder, Actor Matte Rochford.

5-**Crush for Piano- Composer Alex Pozniak, Pianist Jihyeon Lim (Zubin Kanga’s recording), Dancer Corinne Urquhart, Actor Matte Rochford.

Cd4*
6-Studio I for Harp - Composer Ursula Caporali, Harpist Alisa Bernhard, Painter Claire Nakasawa.

Cd5*
“Vorrei essere una signora” Armagh solo Aria Recitativo Cantabile from the new Opera “An Italian in Ethiopia”
2012 - Composer/Pianist Ursula Caporali, singer from audience soprano Laura Crocco.

7-Exhibited Symmetry for Piano - Composer Peter McNamara, Dancer Corinne Urquhart, Video (Corinne Urquhart).

Cd 6*
8-Figure in White for Harp - Composer Alex Pozniak, Harpist Alisa Bernhard, Painter Claire Nakasawa, Actor Matte Rochford.

Ananta Ratri for voice and electronics - Composer Anisha Thomas, singer from the audience Kiran Porey.

9-**Mutabor – Cadenza V for Cello and Video art - Composer Ursula Caporali (Score) Ivan Zavada (video art), Cellist Julia Ryder, Actor Matte Rochford.

Cd 7*
10-Cage’s Project for readers - Composer/idea Ursula Caporali, Actor Matte Rochford.

Cd 8*
11-Masks Finale: “Tutti”
10. Endnotes

Endnotes to Chapter 1

1. en.wikipedia.org/wiki/Howard_Carter
2. www.shabtis.com
3. www.akhet.co.uk/shabti.html
5. www.ancient-egypt.org/glossary/miscellaneous/senet.html
6. en.wikipedia.org/wiki/Gematria
7. en.wikipedia.org/wiki/tutankhamun’s_trumpet
8. classics.uc.edu/music/Michigan
9. www.harphistory.info/index.php?option=com_content...id
10. www.osirisnet.net/mastabas/akhethtp_ptahhtp/e_akht_ptah_03.htm
11. en.wikipedia.org/wiki/circles_(Berio)

Endnotes to Chapter 2

3. “Musical-rhetorical figures were devices meant only to decorate and elaborate on a basic affective representation and to add dramatic musical stress to words and poetic concepts. They functioned in music just as figures of speech function in oratory – as part of the decoration”. By the turn of the 17th century, for example in Caccini’s preface to his Le Nuove Musiche (1602-1602), the musical goal of the singer became the moving of the soul’s affects (“di muovere l’affetto dell’animo”).

Endnotes to Chapter 3

1. “A hypothetical, massive subatomic particle with zero electric charge. A fundamental particle of the Higgs field, the hypothetical quantum field responsible for giving subatomic particles their mass, after Peter Ware Higgs (born 1929), British physicist.” Definition from Collins English Dictionary 2003.
2. Particle Zoo: Image from www.newscientist.com
3. Collider Tunnel: http://www.lhccloser.es/php/index.php?i=1&s=3&p=5&e=0:
Endnotes to Chapter 5

1. *Goldberg-Variationen*, by Johann Sebastian Bach, BWV 988
2. *Fantasy C major op. 17 (Piano Solo)*. by Robert Schumann. Edited by W. Boetticher

Endnotes to Chapter 7

1. Pirandello, Luigi, *Sei Personaggi In Cerca D’Autore*, by Einaudi Edizione, 2005

Endnotes to Chapter 8

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12 Discography

Please note that each score has on the back page a DVD or a CD of the concert attached. The discography material is listed below in chapter order.

Chapter 1
1 DVD of the live performance of the Shabtis concert held on 16 September 2010 at the Sydney Conservatorium. (Duration 18 min)
YouTube [http://www.youtube.com/watch?v=CyLLam1eXQM](http://www.youtube.com/watch?v=CyLLam1eXQM)

Chapter 2
1 CD & 1 DVD of the live performance of the Opera An Italian in Ethiopia held on 22 February 2013 at the Sydney Conservatorium. (Duration 90 minutes).

Chapter 3
1 DVD of the live performance of the Ensemble Concert Swirling Yellow held on 14 September 2012 at the Sydney Conservatorium. (Duration 15 min). Ensemble of 16 players.

Chapter 5
1 CD of the live performance of the Piano Solo Uninterrupted Fantasy held on 3 August 2013 at the Sydney Conservatorium. (Duration 15 min).

The DVD at the back of the Mutabor Semper score has two tracks: the Piano Solo and the Cello Solo.

Chapter 6
1 DVD of the live performance of Cello Solo, Mutabor Semper held on 3 April 2013 at the Sydney Conservatorium. (Duration 16 min).

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13. Bibliography


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Calvino Italo, Lezioni americane-Sei proposte per il prossimo millenio (Six Memos for the next Millenium), by Arnoldo Mondadori, Milan, 1993.


Ellis John, article from the NewScientist, Physics, space and technology- Supersymmetry paragraph, by Sunita Harrington, weekly 16 October 2010.


Guglielminetti M, Pirandello, by Salerno Editrice, Roma, 2006

Hofstadter Douglas R, Godel, Escher, Bach: An Eternal Golden Braid (Un’eterna ghirlanda brillante. Fuga metaphorica su menti e macchine nello spirito di Lewis Carroll.), by Adelphi Milan, Published in Milan, in 1979 (# used also for conclusions and piano chapters).


Paternoster Renzo, *La decapitazione -quando nella storia si perdere la testa.*
www.storiain.net/arret/num175/artic1.asp


Pirandello Luigi, *Sei Personaggi In Cerca D’Autore*, by Einaudi Edizione, Torino, 2005


