

Analytical perspectives on selected South African compositions, with a focus on Aural Sonology

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PREFACE

So many people have helped me on this extremely exciting journey. The journey has been sturdy, with many unanticipated tribulations, and yet I was never without moral support. Firstly, I would like to acknowledge and thank my family and friends for their support and constant enthusiasm. I am thankful to Marilize Hattingh, Mari Heystek and Jaco Fourie for all the moral support and laughter which helped me to keep things in perspective. I would also like to thank my parents for all their financial support and the trust they had in me to make a success of this journey.

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This mini-dissertation is accompanied by a portfolio of my own compositions, written for the requirements for the degree Master of Music (Composition). The curriculum structure is as follows: A mini-dissertation of 60 credits. Three composition portfolios of 40 credits each. The total credits add up to 180 credits.

“Sometimes you Win, sometimes you Learn.”
John C. Maxwell

ABSTRACT

This mini-dissertation explores three analytical perspectives on compositions by three South African composers: Jeanne Zaidel-Rudolph's *Four minim* for cello and piano (1982, revised in 1992), Hendrik Hofmeyr's *Partita Africana* for piano (1999–2006) and Hans Roosenschoon's *Timbila* for orchestra (1985). The first perspective came from existing analyses of the works in question, the second from my own Aural Sonology analyses of the same works, and the third from interviews with the composers themselves. Aural Sonology is an analytical method where the aim of analysis is the sonic aspect of the music; music as it is aurally perceived. Listening intentions are used to guide the analyst's attention towards extra-musical ideas (Thoresen, 2006:4). These extra-musical ideas are defined by using a *taxonomical* analysis in the aural isotopy category. This analysis then helps the analyst with the observations of form-structure. The synthesis of the three analytical perspectives offered a means for presenting South African compositions, through a holistic application of a systematic-formalistic method, to enable a better understanding of the music in a consistent strand of a musical gestalt. This serves as an alternative to a persistent emphasis on musical content and stylistic understanding.

Keywords

music analysis, Aural Sonology, aural isotopies, form-building transformations, Jeanne Zaidel-Rudolph, Hans Roosenschoon, Hendrik Hofmeyr, formalism, music gestalt.

TABLE OF CONTENTS

1.	Introduction	7
1.1	First perspective: Existing analyses of the chosen works	8
1.1.1	Hendrik Hofmeyr	9
1.1.2	Jeanne Zaidel-Rudolph	9
1.1.3	Hans Roosenschoon	10
1.2	Second perspective: Aural Sonology analyses	10
1.3	Third perspective: The composers' analytical views	12
1.4	Significance of this study	12
1.5	Purpose statement	13
1.6	Research questions	13
1.7	Procedures	14
1.7.1	Worldview, research approach, and research design	14
1.7.2	Role of the researcher and limitations	14
1.7.3	Participants	14
1.7.4	The process of collecting and analysing data	14
1.7.5	Ethical considerations	15
2.	First perspective: Existing analyses of the chosen works	16
2.1	Introduction	16
2.2	The three composers and their chosen works	18
2.2.1	Jeanne Zaidel-Rudolph's <i>Four minim</i> for cello and piano	18
2.2.2	Hendrik Hofmeyr's <i>Partita Africana</i>	20
2.2.3	Hans Roosenschoon's <i>Timbila</i> for Chopi Marimba and Orchestra	22
2.2.4	Aural Sonology in relation to the analysis of the chosen works	23
2.2.5	Form awareness	24
2.2.6	Organic form	24
2.2.7	Conclusion	25
3.	Chapter 3: Second perspective: Aural Sonology analyses	26
3.1	Aural Sonology as an analytical method	26
3.2	Listening intentions	26
3.3	Detailed analyses of the three selected compositions	28
3.3.1	Jeanne- Zaidel Rudolph's <i>Four minim</i> for cello and piano	28

i.	Graphic analysis of the first movement: <i>Esrog</i>	33
ii.	Graphic analysis of the second movement: <i>Lulav</i>	37
iii.	Graphic analysis of the third movement: <i>Hadassim</i> and <i>Arovos</i>.....	41
3.3.2	Hendrik Hofmeyr's <i>Partita Africana</i>	44
iv.	Graphic analysis of I. <i>Preludio</i> and II. <i>Umsindo</i>.....	50
v.	Graphic analysis of III. <i>Hartbreekrivier</i> and IV. <i>Kalunga</i>	55
3.3.3	Hans Roosenschoon's <i>Timbila</i> for Chopi Marimba and Orchestra	58
3.3.3.1	<i>Timbila</i> analysis summary (00:01-03:47 & 03:48-04:16).....	59
3.3.3.2	Analytical discussion of the form-field (05:09-10:32)	61
vi.	Graphic analysis of Hans Roosenschoon's <i>Timbila</i>.....	63
4.	Chapter 4: Third Perspective: the selected composers' perspectives on their own compositional processes and their analytical views	65
4.1	Jeanne-Zaidel Rudolph (<i>Four minim</i> for cello and piano)	66
4.2	Hendrik Hofmeyr (<i>Partita Africana</i>)	68
4.3	Hans Roosenschoon (<i>Timbila</i>).....	69
5.	Chapter 5: Conclusion and synthesis of the three perspectives	72
5.1	Existing analysis in the literature in accordance with the analytical views of the composer:	72
5.1.1	Jeanne Zaidel-Rudolph's <i>Four minim</i> for cello and piano	72
5.1.2	Aural Sonology analysis in accordance with the analytical views of the composer (Jeanne Zaidel-Rudolph) :	73
5.2	Existing analysis in the literature in accordance with the analytical views of the composer:.....	74
5.2.1	Hendrik Hofmeyr's <i>Partita Africana</i>	74
5.2.2	Aural Sonology analysis in accordance with the analytical views of the composer (Hendrik Hofmeyr) :	74
5.3	Existing analysis in the literature in accordance with the analytical views of the composer:.....	74
5.3.1	Hans Roosenschoon's <i>Timbila</i> for Chopi marimba and orchestra	75
5.3.2	Aural Sonology analysis in accordance with the analytical views of the composer	76

5.3.7	Final thoughts.....	77
	Addendum A.....	78
1.	Key terms and definitions	78
1.1	Aural Isotopy	78
1.2	Time fields.....	79
1.3	Dynamic form	81
1.4	Layers	83
1.5	Function and profile.....	84
1.6	Width	84
1.7	Interrelation	85
1.8	Entry- and ending-mode.....	86
1.9	Form-building functions, processes and transformations.....	86
1.10	Tonic, dystonic and complex sound objects.....	88
2.	Interview transcriptions.....	90
2.1	Jeanne Zaidel-Rudolph (<i>Four minim</i> for cello and piano).....	92
2.2	Hendrik Hofmeyr (<i>Partita Africana</i>)	94
2.3	Hans Roosenschoon (<i>Timbila</i>)	94
	References	100

Table of figures

Figure 1. Construction of the pitch magic square	19
Figure 2. <i>Esrog</i> , graphic analysis	33
Figure 3. <i>Lulav</i> , graphic analysis	37
Figure 4. <i>Hadassim and Arovos</i> , graphic analysis	41
Figure 5. Articulation diagram	43
Figure 6. I <i>Preludio</i> and II <i>Umsindo</i> , graphic analysis	50
Figure 7. III <i>Hartbreekrivier</i> IV <i>Kalunga</i> , graphic analysis	55
Figure 8. <i>Timbila</i> , graphic analysis	63
Figure 9. <i>Timbila</i> , graphic analysis continued	64
Figure 10. Compositional process, Jeanne Zaidel-Rudolph	67
Figure 11. Compositional process, Hendrik Hofmeyr	69
Figure 12. Structural process	71
Figure 13. Compositional process, Hans Roosenchoon	71
Figure 14. Analytical compositional process	76

1. Introduction

In this mini-dissertation I will explore three analytical perspectives on compositions by three South African composers: Jeanne Zaidel-Rudolph's *Four minim* for cello and piano (1982, revised in 1992) (Zaidel-Rudolph, 2015), Hendrik Hofmeyr's *Partita Africana* for piano (1999-2006) (May, 2007:17) and Hans Roosenschoon's *Timbila* for orchestra (1985) (Roosenschoon, 2015). The first perspective will come from existing analyses of the works in question, the second from my own Aural Sonology analyses¹ of the same works, and the third from interviews with the composers themselves. To conclude this mini-dissertation I will make a synthesis by taking each perspective into account, and then render a holistic answer to how these three perspectives influence the main research question (see 1.6 for the research questions).

The idea for this research stems from the interest I have in South African composers, and from the fact that Aural Sonology² has thus far not been used to analyse South African compositions. Taljaard (1997:15), via Van den Toorn (1995:ix), distinguishes between two main streams in music analysis: the humanist or hermeneutic approach, and the technical or intrinsic approach. While being aware that no generalised description for any analytical approach or group of approaches would be true in all instances, for the purpose of this study my analytical approach (Aural Sonology) will be referred to as both humanist and hermeneutic on the one hand, and technical or intrinsic on the other hand.

Whereas the former is characterised as being (among other things) “[...] nonspecialist, [...] literary and [...] expressive of the immediate impact of music on the individual listener” (Van den Toorn, 1995:ix), the latter is said to be formalist and, as far as possible, exclusive of the analysis of the manner of creating a work and ‘the way in which the work is perceived and interpreted’ (Taljaard, 1997:19). If this distinction is taken as a premise, Aural Sonology can be said to fall somewhere in between the two types: its method is technical, but its purpose is to analyse a perception of the work.

¹ In this study I use Aural Sonology not because it is the best or only analytical method that utilises sound to render information and structure data, but because this method allows for the exploration of alternative perspectives to those rendered by existing methods. It also serves to delimitate the study. Examples of other analytical methods that utilise sound can be found in the article “Sound, pattern, and structure: Novel methods for analysing music-as-heard” by Thoresen (2012).

² See section 1.2 (p. 10) for my explication of Aural Sonology.

For the purpose of the discussion that follows, Aural Sonology is viewed as a technical or formalist analytical method. The aim of this discussion is to contextualise the proposed Aural Sonology analyses (its method and function) within the broader landscape of music analysis in South Africa.

In my four years of undergraduate studies the analyses of South African works that I encountered were often of the type characteristic of a musicological practice of an earlier era. Thom (2006:3) describes these analyses as adhering to the so-called 'elements of music' (usually form, harmony, counterpoint, melody and rhythm), which leads to quasi-quantitative findings that are not truly synthesised. In addition to this, Van Schalkwyk (1974:1), in his thesis on South African orchestral works, states that compositional styles had – at that time – often been researched, but not many of these analyses tended to give more information in terms of the rules, tactics and strategies the composer used. In my view, this type of analysis lacks the potential to produce new technical information when compared to analyses in which formalist methods such as Schenker, Set Theory and Aural Sonology are applied. (Due to the limited scope of this research, the merits of formalist methods were not further explored, but were taken as a premise for this study.)

The literature on music analysis in which form-building transformation processes and concepts are linked with the rules, tactics and strategies for composing music in South Africa is non-existent. Formalist analyses of South African works are often limited to those that lead to interpretations in the field of musical aesthetics, as well as discussions about creativity in musical composition (see, for example, Herbst, 1988).

None of these analytical approaches break away from the score and analyse compositions from an aural perspective. My study aimed to address these problems by using Aural Sonology, and more specifically, form-building transformations as a theoretical-analytical approach.

1.1 First perspective: existing analyses of the chosen works

The first perspective was on the existing analyses of the three selected compositions. The aim of this is two-pronged: firstly, it served to show how the analytical methods used differed from the method I used. Secondly, it aimed to examine the content and results of these analyses. This perspective created a platform to present alternative analyses of the chosen compositions. Various analyses of other works by the composers of the pieces chosen for this study existed. The purpose of the

following discussions is to give the reader an idea of the nature of these analyses in general, rather than of the analyses of the chosen works themselves – this was, as has been mentioned, a function of the study itself. The general overview of music analysis in South Africa in the introduction of this mini-dissertation and the overview that follows should serve to contextualise the significance of my study in a narrower context.

1.1.1 Hendrik Hofmeyr

The focus of May's analysis of Hendrik Hofmeyr's song cycle *Alleenstryd* is on pitch organisation (May, 2003:43). In addition to this, May (2003:43) traces the evolution of Hofmeyr's musical language through a consideration of various elements such as style, the influence that African music had on his music, tonality, orchestration, the melodic unfolding of chords, structure, and the text-music relationship. Franke (2007) draws her conclusions on the style of Hofmeyr's orchestral works by considering a similar set of elements as May. Pooley's (2007) analysis of Hofmeyr's solo piano music, 'considers various formal and procedural elements that contribute to a sense of organic unity' (Pooley, 2007:72) in these works. Unlike the analyses of Hofmeyr's works mentioned thus far, the aim of Pooley's analysis is to not only conclude on the technical aspects themselves, but also on their wider implication with regard to artistic value. All the analyses mentioned are presented in an informal, narrative style (which may or may not have a bearing on their comprehensiveness).

1.1.2 Jeanne Zaidel-Rudolph

There are fewer analyses of Zaidel-Rudolph's and Roosenschoon's works than of those of Hofmeyr, as is evident from the shorter discussions that follow. Ferreira's (1999) analyses of three works by Jeanne Zaidel-Rudolph (the ballet *Abantubomlambo*, *Five African Sketches* for guitar and *Suite Afrique* for viola or cello and piano) are style analyses that demonstrate the use of so-called South African or African elements in these works. In these style analyses extracts of the work are taken and discussed. The discussion of short extracts focus either on the use of tone colour or rhythmic differentiation. In Van Wyk's (2008) article on Zaidel-Rudolph's *Three Dimensions* for piano, Van Wyk focuses on changing tone colours and the density of sounds as structure-giving elements. However, he does not use a formal method to structure his analysis.

1.1.3 Hans Roosenschoon

The focus in Jacobs's (1988) analysis of Hans Roosenschoon's entire output from 1972 to 1983 is, once again, on style. The analyses appear to be structured according to the so-called 'elements of music', including tone colour (see my discussion in the introduction on this type of analysis as a remnant of an earlier era in musicological research). In Fraser's (2013:4) thesis on pluralism and musical meaning in Roosenschoon's works, she provides an overview of the composer's borrowing techniques. These analyses focus on thematic, harmonic and structural elements in short extracts.

1.2 Second perspective: Aural Sonology analyses³

The so-called Aural Sonology Project is a new method to aural analysis in which, as Thoresen (2006) states, the focus is shifted from what the analyst views in a score to what they hear. This approach allows for an integration of *independent* readings of the sound and score to a larger extent than when sound is used as purely supportive of a reading of the score.

The foundations of the Aural Sonology method were developed by Pierre Schaeffer and adapted by Lasse Thoresen (Thoresen, 2007a/b:129). When I first started using the analytical approaches of Aural Sonology, the possibility of using this to analyse South African composers' music became very intriguing. Timbre was commonly regarded simply as a medium of colourisation, and was analysed in terms of orchestration (Thoresen, 2007a/b:129-141; Van Schalkwyk, 1974:1). The analytical information rendered by Aural Sonology stems from verbal reflections on the actual lived experience of sound (Thoresen, 2007a/b:129). The significance of studying the act of musical composition with this method therefore lies in its use as a practical tool for conceptualising and notating sound qualities, as well as form-building transformations and processes (Thoresen, 2007a/b:129; Hlavatý, 2009:119). Aural Sonology can be described as a 'holistic' approach in the sense that it can be used to analyse "time fields, dynamic form, layers and form-building elements, processes and transformations" (Hlavatý, 2009:112). This author continues by saying that "The form-

³ There are variables in this analytical method, and there are also other analytical methods with the same ideological outlooks (refer back to my previous footnote). I chose this analytical approach because of its exclusive practical application on the music-as-heard (i.e. in the absence of a score).

building category is concerned with transformations from one state to another between polarities like simplicity-complexity, wholeness-division and distinction-anonymity in the sound of the composition's structure and form" (Hlavatý, 2009:123).

This reflection upon experiences that posits the actual lived experience of sound as its primary object of research takes place through a number of different listening intentions (Thoresen, 2007a/b:129-141). These listening intentions serve to achieve a systematic analytical approach. Examples of listening intentions, in Hlavatý's (2009:14–15) words, are "images created in the mind, ideas concerning the composer's intentions, or thoughts connected to the performance and the performer or performers".

In music analysis a broad range of activities is considered to present in a variety of contexts towards, firstly, understanding the analytical process, secondly, understanding the compositional process, and thirdly, knowing the context in which all of the above is presented or why this is done (Wiggins, 2007:453). Therefore, my own eclectic approach is a deceptive rendition of how these selected compositions can be perceptively contextualised by not using an analytical context that supplies a non-reflexive analysis, but by using an analytical method that supports a phenomenological perspective, and constitutes a humanistic approach to what can be a more real-life world experience in music analysis (Thoresen, 2006).

Hlavatý's master's degree thesis (2009) has an appendix consisting of a detailed explication of key terms and definitions from Aural Sonology. In accordance with this author (Hlavatý',2009:4-5), I am applying Aural Sonology as the analytical technique in my mini-dissertation and since there is restricted over-all understanding regarding this topic and its techniques, I am in a field of research where I cannot accept that the reader has much previous knowledge. I have consequently assumed it obligatory to give the reader a definite amount of assistance and direction for them to be capable to better follow the analyses in this mini-dissertation, and the concepts on which this method is based. In the appendix I have also incorporated the three transcribed interviews with the three composers for reference purposes. An audio CD of the three compositions that were analysed is also included.

1.3 Third perspective: the composers' analytical views

According to Cope (2012:256), composers use a variety of processes to compose their music. Some of these processes cannot be easily explained, as they have unconscious or intuitive origins. By undertaking an Aural Sonology analysis of the three selected compositions I hoped to discover intuitive or unconscious compositional processes. Besides aiming to extract the composers' own analytical views on their works, the interviews also served to determine whether my findings matched the intentional processes that they used. More specifically, I wanted to know what the rules, tactics and strategies (RTS) (Cope, 2007:257) of the composers were while composing these three compositions.⁴ RTS represent some of the most important elemental processes used by the composer when composing these compositions. According to Cope (2007:257), compositional "[r]ules, whether applied consciously or not, constrains the amount and types of choices available". (This is not presented as a negative phenomenon; as self-limitation serves to achieve coherence in a work.) Cope (2007:257) continues to explain that "tactics" solve immediate problems created by these rules, and provide a means of control of the compositional setting. "Strategies" then again serve to achieve the greater compositional goals.

These three perspectives may lead to a holistic understanding of a structuralist-formalistic analysis, with a methodological approach in the constructivist world view, with its prominence on the lived experience (thus music as heard), understanding of intentionalities, and its emphasis on defining and contemplation on the experience, rather than on trying to describe the experience (Thoresen, 1988/89:153-177).

1.4 Significance of this study

This research contributed to the academic literature on South African compositions, and should benefit composers, music theory students and analysts. More specifically, this study paved the way for using Aural Sonology analysis as a means of understanding South African works, and the working processes of the composers. The presentation of existing analyses of the selected compositions, as well as the composers' own analytical perspectives on their works, in addition to my own analyses,

⁴ 'RTS' is a concept derived from game theory that Cope (2007:257) applies to music composition.

emphasised the advantages of viewing compositions from different analytical perspectives.

1.5 Purpose statement

In summary, the purpose of this intrinsic case study was to explore analytical perspectives on three South African compositions. The focus was on using Aural Sonology as an analytical approach to extract new information from South African compositions that had not been studied using this approach before. I aimed to demonstrate how Aural Sonology may be supporting a realising and more organic perception of South African composers' compositions, and to give perspectives on how the composers think about the analytical information residing in their own works. At this stage in the research, Aural Sonology is defined as an analytical approach in which sound is the object of research, and that is used to understand form concepts, transformations and processes in the compositions in question.

1.6 Research questions

Main question:

How can existing analytical perspectives on the selected compositions be broadened through Aural Sonology analyses and the composers' analytical views of their own works?

Subquestions:

- What are the results of existing analyses in the literature on the selected compositions?
- What are the aural isotopies (in the form-building transformations category) of the selected compositions?
- What are the composers' compositional processes and perspectives on their own compositions?

1.7 Procedures

1.7.1 Worldview, research approach, and research design

I conducted my research from a constructivist worldview. This means that I saw my reading of the compositions as relativist (i.e. my interpretation of data is one of many possibilities) (Denzin & Lincoln, 2013:27). The constructivist worldview also assumes multiple forms of collecting and analysing data. The understanding and interpretation of the data will therefore take place through an analytical lens where the questions asked are broad (Creswell, 2009:189). The research approach taken was qualitative. The research design was an intrinsic multiple case study.

1.7.2 Role of the researcher and limitations

In this research I was the primary instrument for collecting and analysing the data. My role in this project is best described by Denzin and Lincoln (2013:7–8) where they refer to the researcher as the so-called interpretive *bricoleur*, or a person who amalgamates images into a montage: “The interpretive bricoleur produces [...] a pieced-together set of representations [in my case, analytical representations] that are fitted to the specifics of a complex situation.” In Cope’s (2007:257) view, composing (and by extension a composition) can be viewed as a “complex situation”.

1.7.3 Participants

The three participants in this study were the three composers of the selected compositions that I analysed. The participants were interviewed on their own analytical perspectives on their works.

1.7.4 The process of collecting and analysing data

The line between data collection and data analysis in the field of music analysis is thin – even the process of assigning analytical symbols to a score, that may seem clear-cut and largely routine, is subject to interpretation and therefore analytical in nature. Data collection and analysis therefore followed an integrated approach, as presented in this section.

The data-collection process started with the selection of the three compositions under scrutiny.⁵ The use of timbre as structural element in these compositions made them particularly suitable for Aural Sonology analyses. The first phase was the broadening of my search for existing information on these compositions. I studied relevant articles, interviews and programme notes. The second phase was the analysis of the compositions. I used a pre-observation strategy to structure my analyses that were of a holistic approach to analyse the works. I observed, discerned and selected specific listening intentions, and identified and maintained a steady focus on selected aspects of the multifaceted experience of the music as heard. The third phase was the interviewing of the composers. The interviews were open-ended – they did not proceed as surveys with the same questions asked of each respondent; each interviewee was expected to have unique experiences and views.

Lastly I compared my findings to form-building transformations found in the score. This was done in order to see how results from Aural Sonology analyses differ from a score analyses. (The focused nature of this inquiry did not require a time-consuming, in-depth analysis of the scores.) Analytical findings were then integrated with information yielded by the interviews and the existing analyses of, and information on, the compositions.

1.7.5 Ethical considerations

Ethical issues in this study mostly pertained to the interviews with composers. Participant composers were given a letter of consent to sign that detailed the nature and purpose of the study in general, and the interviews in particular (see Appendix A). If one takes into account that the professional recognition and profile of the composers in question validated the choice of compositions for this study, their identities could not be kept secret. They were, however, free to withdraw from the study at any stage.

⁵ Refer to the first paragraph of this chapter for the names of the selected compositions.

2. First perspective: existing analyses of the chosen works

2.1 Introduction

The aim of this literature review is not to point out analytical mistakes, or critique previous analyses of the works in question, but to explain the way in which the analysts used a specific analytical method or approach to extract the results presented. The aim is also to highlight possible alternative analytical perspectives that could be presented by Aural Sonology. In addition to this, I point out where existing analytical techniques coincide with that of Aural Sonology. The description of subject terms relating to Aural Sonology that follows is a more thorough and in-depth look at what was briefly mentioned in Chapter 1. These descriptions should facilitate a better understanding of my use of these terms in the discussions of analyses further on. In Chapter 1 my discussion of music analysis was mostly focused on the description of the two main streams in music analysis, namely the humanist or hermeneutic approach, and the technical or intrinsic approach. While keeping this in mind, I define music analysis in general as an introduction to this chapter.

Music analysis is a term that refers to the study of the musical structure of an actual work or performance, as well as the study of the relation between musical structure, performance (Randal, 2003:42). In some instances, theorists write that analysis occupies a fundamental position in discussions about music, and that it constitutes an indispensable first part of many practices in most musical disciplines (Taljaard, 1997:23). The German philosopher and musicologist Theodor Adorno (1982:177) writes:

If without analysis such music [music of the 20th century] cannot be presented in even the simplest sense as being meaningful, then this is as much as to say that analysis is no mere stopgap, but is an essential element of art itself.

From the above I concluded that it is an essential element for a better understanding of art (music), and that by using different analytical approaches, a variety of meanings and opinions can be formed.

Aural Sonology is an analytical approach ‘with a level of intersubjective unanimity’ and is particularly useful for dealing with music in which there is no one-on-one correlation between the score and the aural event (Thoresen, 2006). This analytical approach has mostly been used as a tool to conceptualise and represent the information residing in contemporary compositions or performances thereof (Hlavatý, 2009:13; Moolman, 2014:12). The Aural Sonology Project as it exists now is an applied section of music theory analysis that is fashioned to not only inform an audience of readers and analysts, but to also enhance the artistic insights and comprehension of performers. Aural Sonology has also been used to stimulate creative thought, which has led to the creation of novel compositional techniques (Thoresen, 2006).

In order to understand the discussions of the existing analyses of the compositions in question that follow, a few technical descriptions⁶ and definitions used are given below. They are the direct words of Hlavatý (2009:111, 114, and 119):

- An ***aural isotopy*** is

found in a consistent strand of aural gestalt perceived to contain features for the organisation of long stretches of the musical discourse into contraries and opposites in functional relationships. The perception of such a strand of aural gestalt requires a corresponding, selective listening intention. The gestalt can then be reformulated (analysed) in structural terms (Hlavatý, 2009:111).

- ***Generalised aural isotopies*** is a theoretical model related to the terms and definitions below:
 - *Taxonomical analysis* refers to the forming of patterns that look more at reoccurrence, repetition and textural relatedness than harmonic progressions and thematic development in the sense of traditional form. This includes the following:
 - *Time fields* are groupings of musical elements based on audibly recognised and logically related units in which we deal with four different time levels: Object fields, phase fields, sentence fields and form fields.
 - *Dynamic fields* are categorisations of different time fields into forward-orientated, present-orientated or backward-orientated functions *Musical*

⁶ In Chapter 3 a more detailed description and explanation of these technical terms is given.

layers refer to relationships between simultaneous musical units, i.e. foreground and background in the musical material (Hlavatý, 2009:114).

- Form-building elements, processes and transformations are “relationships in form-building processes between elements of great similarity to elements of great difference.”

2.2 The three composers and their chosen works

2.2.1 Jeanne Zaidel-Rudolph's *Four minim* for cello and piano (1982, revised 1992)

In her paper entitled ‘An analytical study of *4 Minim* for cello and piano’, Leah H. Lesíník (1989) starts by giving the specific meaning of ‘minim’ (the Hebrew word meaning ‘four species’⁷) and continues to explain the use of symbolism in this work. Lesíník implies that these ‘four species’ play an important role in the composition. The word ‘minim’ may either refer to the four species, or it may refer to the musical note duration. This ‘pun’, as Lesíník points out, is “portrayed in the music by enclosing the [main] sections with minim note values” (Lesíník, 1989:53). In the introduction to the analysis the author also explains the way in which numerology functions in the structuring of the composition, which includes the use of the so-called ‘magic square’. The magic square functions as a system of pitch determination. This system is related to the twelve-tone system, but employs nine tones or pitches rather than twelve. The figure below (Figure 1), which serves to explain this system of pitch determination, was derived from the original sketches made by the composer.

⁷ According to Lesíník (1989: 53), “these species are taken from nature” and “is a symbol of livelihood [and] represent physical and material happiness and well-being.”

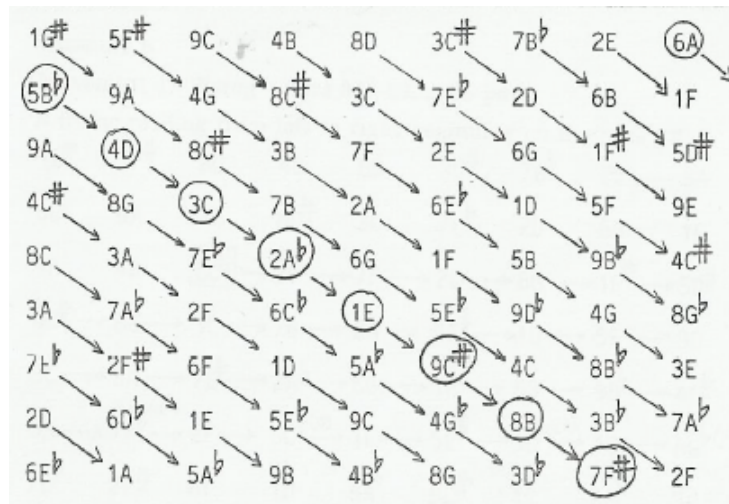


Figure 1. Construction of the pitch magic square (Lesiċnik, 1989:57)

By taking many of the durations and pitches from the magic square, strong unity is created, including a unified form. Lesiċnik uses the magic square as the starting point of her analysis. The pitch component is precisely explained and informs the reader about the nine-note theme and why the opening four notes of the theme have the same letter names as the beginning notes of Beethoven's Sixth Symphony (the 'Pastoral'). Lesiċnik explains this phenomenon by telling the reader that these notes were used because the composer felt that they exemplify the concept of nature. The analysis of the pitch component is in essence deconstructive in nature. Lesiċnik continues by explaining the significance of the intervals used in the main theme. She constructs this interval analysis by referring back to the pitches used and giving an example of the application of the nine-note theme. Further on in the analysis she discusses dynamic levels and the results of syncopated effects in selected extracts.

The work *Four minim* for cello and piano is a highly organised composition, referring to the use of the magic square to determine its structure and pitches that includes elements like instrumentation or particular instrumental techniques, tonality, numerological structures and tonality. Instrumentation or special instrumental techniques are used to densely saturate the composition (Lesiċnik, 1989: 55).

As has been mentioned, the analyses discussed above are deconstructive in nature. With an Aural Sonology analysis, aural isotopies in the analysis can shift to being taxonomical, and a functional relationship of understanding occurs where the depth and breadth of the composition is fully identified. Intentional fallacies⁸ are the most common assumptions in the existing analysis. The analyst is needed to establish

⁸ See Addendum A for terms and definitions on intentional fallacy.

the meaning or value of the composition and refer to the primary constructive elements of the work, which in this case is the magic square. A more detailed deconstruction through the use of Aural Sonology to solve this analytical intentional fallacy could take place by, as has been mentioned, using detailed generalised aural isotopy analyses. Therefore, the assumptions and intended meaning of the composition are crystallised and not polluted by assumptions and meanings based on the composer's intention rather than the analyser's perceptions.

2.2.2 Hendrik Hofmeyr's *Partita Africana*

The only research dealing with Hofmeyr's *Partita Africana* is Thomas Pooley's article entitled *Organic unity in Hendrik Hofmeyr's solo piano music* (2007). *Partita Africana* (2006) for solo piano consists of four pieces: *Preludio*, *Umsindo*, *Hartbreekrivier*, and *Kalunga*. The Baroque-inspired first piece, *Preludio*, is discussed by Pooley with regard to style, and includes references to "elements that are commonly found in African music, such as the pentatonic scale and modal inflections" and the ethical issue surrounding the use of African and Western styles together (Pooley, 2007:79). Pooley (2007:72) considers various formal and procedural elements that contribute to a sense of organic unity found in Hendrik Hofmeyr's solo piano music. He (Pooley, 2007) contends that Hofmeyr's way to deal with a musical piece is less postmodern – in the feeling of appropriating prior styles and procedures – than antimodern, or antimodernist, in the way that it takes 'auxiliary solidarity' as an unchallenged esteem. Pooley (2007:72) contends that this way to deal with solidarity is robotic, instead of natural in the Romantic sense, and that it is obliged in a structuralist way to deal with arrangement from the last part of the twentieth century. Pooley (2007:79) states that Hofmeyr swings to Western contrapuntal structures, notwithstanding that the material is apparently obtained from African sources.

Pooley's discussion and analytical approach are generally informed by a post-structuralist way of thinking that critiques the idea of unity as a criterion of value for works of contemporary art music. In Aural Sonology we can say that Pooley made an intentional fallacy and decided not to elaborate further on the 'depth' of the 'gestalt' found in the first movement. Pooley makes a conscious intentional fallacy in his conclusion where he insists that Hofmeyr's work is dependent on organic unity, despite what the material or formal procedures may be. A taxonomical view in Aural Sonology

may serve to render additional information with regard to material and formal procedures.

Kramer (2002:15) states that in quite a lot of contemporary music that embraces surface rather than depth, organic unity is not an appropriate index of musical value: Unity is “no longer a master narrative of musical structure”. This statement is strengthened by Pooley when he suggests that organic unity is an inappropriate measure of value for contemporary music (2007:72). As this author suggests,

many postmodern composers have in fact embraced conflict and contradiction, and have at times eschewed consistency and unity. [...]

[O]rganic unity has dominated Western thinking about art music: Music analysis as a discipline has tended to reinforce this notion not only through the repertoire it considers – the “masterpieces” of Western art music – but through a predominantly structuralist approach in which unity tends to be seen as the most important principle governing works (2007:72).

By using Aural Sonology to illuminate not only the ‘surface’ but the ‘depth’ of contemporary music as well, the gestalt as it is can be perceived as containing features of surface and depth.

Keeping in mind what Pooley said regarding organic unity not being an appropriate measure of valuing contemporary music, it is important to take note of Hlavatý’s (2009:4) contrasting view: “One of the main problems of contemporary music is its particularly demanding, highly developed form-awareness.” Form awareness in this statement can also be understood to mean emergent organic form. Pooley (2007: 79) also discusses the construction of organic unity that has organisational complexities. This is somewhat relevant but also not to the extent to which Aural Sonology may add to an evolving organic form understanding in Hofmeyr’s music.

2.2.3 Hans Roosenschoon's *Timbila* for Chopi Marimba and Orchestra

Hans Roosenschoon's *Timbila* (1985) for Chopi Marimba Orchestra and Symphony Orchestra is, according to Fraser (2013:115), one of this composer's most renowned compositions, and the one that has been written about the most.⁹ However, none of these sources contains theoretical analyses of the work in question and they are therefore not discussed. A few pages in Fraser's dissertation (2013) are devoted to matters concerning pluralism and the musical meaning of borrowing techniques. She also discusses the cultural diversity in Roosenschoon's music.

Fraser's analytical approach to this work entails the presentation of information retrieved from Roosenschoon's conference paper ('Between heaven and earth: Cultural diversity in the music of Hans Roosenschoon', 2009) and interviews with him. Brief descriptions of thematic, harmonic and structural elements are provided.

When reading about the way in which the composer had solved the problems regarding the contrasting tuning system of the evenly tempered Western and Chopi instruments (Fraser, 2013:117), it is significant to note that the author had thought about the sounds and how these can be seen as the trademark of this composition. However, no analysis, even regarding pluralism, that has an implication of being objective, obligatory and heterogeneous can solve the way in which the composer approached the analytical perspective of the composition (Fraser, 2013:9). Focusing on explaining the aural isotopy or generalised aural isotopies (to use Aural Sonology terms in reference to Fraser's analysis), Fraser shows musical extracts and constructions of how Roosenschoon produced the structure of the composition in the context of the score. The analysis refers to sections and attempts a juxtaposition of sections and motives (respectively).

Fraser introduces the composition by telling the reader in a narrative fashion what happens in the music. No schematic illustration or examples of notation are shown. This is what is called an intentional fallacy in Aural Sonology. The existing narrative analysis can be illuminated by using Aural Sonology perspectives regarding generalised aural isotopies and a taxonomical analysis. Fraser (2013:125) admits that her narrative analysis is not a very plausible way of analysing what the audience hears, a problem that could be solved by an Aural Sonology analysis.

⁹ See Hofmeyr (2006); Jacobs (1988); Spies (2014) and Grové (1991 & 1996).

In Hans Roosenschoon's conference paper on *Timbila* (2009), he talks about the syntax of the composition, and the analytical approaches remind of Cogan and Escot's approaches to sonic design¹⁰. Roosenschoon (2009) discusses a variety of elements with regard to sound, such as complexity and amplitude, pulse and transformation, layering sound complexes/objects and the stratification of the sound. The discussion of these elements is contextualised within the stylistic background of his compositions and the period in which this composition was composed.

Furthermore, the way in which Roosenschoon presents his analysis of *Timbila* falls in line with the aural isotopy and generalised aural isotopies categories of Aural Sonology. He includes some of the taxonomical analysis methods used in Aural Sonology and uses audio presentations to highlight the emergent musical forms. Even though the analytical representation of this work falls within the theoretical perspectives of Aural Sonology, intentional fallacy has a big influence on the analysis: the value and meaning of the work rest upon the information provided by the author-composer. What Roosenschoon attempted to do in his conference paper on *Timbila* was to shift the focus of musical analysis from applying concept to what the analyst views in a score, towards what they hear.

Roosenschoon, (2009:35) and Tracey (1985:35) both mention that when one listens to the work in an analytical way, the whole work seems to take on a different meaning than when one looks at the notation. This is what research into a novel approach to aural analysis attempts to do. The Aural Sonology Project renders information in which there is no unassuming one-on-one resemblance between the score and the aural phenomenon (Thoresen, 2006).

2.2.4 Aural Sonology in relation to the analysis of the chosen works

I use Aural Sonology as theoretical basis to conclude this chapter, and will specifically refer to two aspects I found that 'got lost in translation' in the movement from graphic notation to interpretation in the existing analyses. The first is form awareness, and the second is matters concerning an organic understanding of form.

¹⁰ See Cogan and Escot's, *Sonic Design: The Nature of Sound and Music* (1976)

2.2.5 Form awareness

The traditional concept concerning form (such as 'sonata form', 'rondo form' etc.) does not view form as something that develops temporally over time, as Hlavatý (2009:8) suggests, but rather as a preconceived spatial phenomenon. In reference to the analyses discussed in this chapter, it can be said that a temporal form-awareness is often lacking. One finds, for example, that when Lesićnik, (1989) mentions the construction and the use of the magic square in the composition *Four minim* for cello and piano, no specific correlation between that and the temporal form structure, or a detailed understanding of the primary or secondary taxonomical structure is given. The analysis of each movement is based on a given pitch edifice, and a detailed spatial representation of the pitch construction. If one needs to understand how the pitch construction works to sustain a consequential analysis, the grouping of musical elements such as dynamic form, time fields, form-building elements, layers, processes and transformations should be mentioned (Hlavatý, 2009:112).

2.2.6 Organic form

I found Pooley's statement about his article's consideration of various formal and procedural elements that contribute to a sense of organic unity/form in the chosen composition by Hendrik Hofmeyr (Pooley, 2007:72–73) of great interest for this mini-dissertation. The reason for my interest lies in its partial alignment with Aural Sonology, because organic form is concerned with the formation of form rather than formal schemata. This formation of form is only perceivable during or when thinking about listening (Hlavatý, 2009:9). The unifying elements sought in an organic form analysis, which could serve as the establishment of a hierarchical relationship and construction within the musical context of understanding the music, were merely objective/interpretive in Pooley's analysis. I would like to restate that the main goal of the Aural Sonology Project is to bolster the analyst's skill to conceptualise what they hear and perceive in the music. In the formalistic and interpretive context of analyses and the ability to conceptualise music, Pooley's analysis (2007) focuses on understanding the style and form of the music in an objectification of the music and to decrease its abstraction.

2.2.7 Conclusion

While reading, and discussing the analyses done on these works, I concluded that most of these analyses focused on the stylistic characters of the pieces, including the composers' contribution to and understanding of style and form. Different analytical approaches were used to analyse these compositions but the overview of the analyses are left in mid-air and the discussion points into a different direction concerning different phenomenological conclusions. Therefore, as far as using a new system (Aural Sonology) is concerned, more specifically focusing on the isotopies category of analyses, newly discovered ways of analysing and interpreting analyses will render new phenomenologically orientated versions in which the analyses can be seen.

A strong feeling for the aural aspect of present-day music in South Africa is neglected due to the dearth of analyses that focus on formalist and interpretive approaches to analyses and a composition. Therefore, the Aural Sonology Project seeks to enhance the way analyses is perceived, to appraise and encounter the aural results of any technical operation, by an explanation and conceptualisation of its recognised aural structure.

In all the sources that I came across, one of the main outcomes for an author was to give a stylistic background of the composers and the composition under discussion and the technical goals at hand. One of the main objectives of Aural Sonology is to extend the reader/listener's competence to conceptualise what they hear or perceive and therefore to be able to show aurally or graphically what leads to further possibilities of analyses (Hlavatý, 2009:13).

3. Second perspective: Aural Sonology analyses

In this chapter, analytical perspectives will be explored by conducting Aural Sonology analyses in order to ensure a better form awareness as suggested by the versatile material found in the compositions. The analysis is a first attempt at a detailed presentation of aural information through symbols and a detailed explanation of their meanings.

3.1 Aural Sonology as an analytical method

Because listening is an extremely vague and individual experience, the interpretations of what I hear (or think I hear) may vary significantly and muddle any discussion regarding interpretation. Therefore, I approach this analysis chapter from a constructivist worldview, as was mentioned in Chapter 1. It is important to note that there are a few aspects concerning theories of listening and those of listening intentions, as is evident in the theories of Pierre Schaeffer (Maridet, 2006), that contribute to the forming of the theoretical basis of Aural Sonology. When it comes to an Aural perception, Schaeffer catalogues numerous “listening intentions through which one and the same sound object may be” perceived/heard in many multiple ways. My goal as analyst was to shift between distinctive listening intentions and thereby gain entry to a truly multi-sided experience of the music.

3.2 Listening intentions

An introduction to an understanding of listening intentions requires extensive quoting. Thoresen (2007b) states the following regarding the listening experience and the interpretation thereof:

Music as heard is a phenomenon of enormous richness and ambiguity. People make sense of music in many very different ways, which tends to make a meaningful discussion about music problematic. Even when listening to the same piece of music, interpreted by the same musicians, the listening experience itself, and its interpretation in words varies greatly.

Hlavatý (2009:14) has the following to say about the same topic:

The musical experience consists of a synthesis of signs and signals transmitted as sound, and of the listening subject's own perceptions and conceptions of the music, i.e. his constitution of the musical object. Different listening intentions constitute different musical objects.

I used the statement by Thoresen as a primary approach to construct my findings when listening to the music. Because people have a natural tendency towards listening, it is mostly an automatic approach often taken as a subconscious approach. However, once we are aware of our options, as Thoresen states, two things must be in place in order to actively change between different listening intentions that are available. Firstly, that the listener knows there are different listening intentions, and secondly, that they are able to make clear-cut changes in perception, literally shifting from one attitude of perception to another (Hlavatý, 2009:14).

Listening intentions and the phenomenological attitude as mentioned above can be divided into two categories. In the direct words of Thoresen (2007a: 139)

- “Listening intentions through which the listener focuses directly on extra-musical concepts. These extra-musical concepts might be feelings that are evoked, imageries created in the mind, ideas regarding the composer’s life and being, or thoughts linked to the performance and the performer or performers.”
- “Listening intentions through which the listener’s focus is directed towards the interconnections given in the music that the listener is able to hear. This occurs when we experience the music as detached from any extra-musical connotation, or we refrain from experiencing music as expression, as symbol, as social ritual, and even forget about the causes of the sounds that make up the music we are listening to (Thoresen, 2007a).”

It is listening intentions according to the last category mentioned that are used in the upcoming analyses. Through this perspective of listening, where we experience the music as sound missing any extra-musical connotation, we can experience the music on three possible levels:

- Level 1: As the separate sounds of which it is created (sound elements).
- Level 2: As the patterns in which these sounds are merged (basic gestalt).
- Level 3: As the permutations of these patterns that create the compositional form of music (form gestalt). (Thoresen, 2007a).

In the analyses that followed I used the three above-mentioned levels to extract the interconnections in the music that are audible and perceivable. The three compositions and the analyses of the three chosen works ask the question: what are the aural isotopies found in the selected compositions and the way in which form awareness is perceived? Each analysis below is preceded by a brief discussion of the main taxonomical elements found in this work and how they are interpreted in the music, as well as the form-building elements that are found and the way in which they contribute to the data found in each analysis. By interpreting the music, and finding and analysing the taxonomical elements and form-building elements, a better understanding is gained as to how the form/structure coincides with the overall understanding of the composition.

3.3 Detailed analyses of the three selected compositions

3.3.1 Jeanne Zaidel-Rudolph's *Four minim* for cello and piano

In this analysis my main goal was to comprehend the prescribed structure of the movements through the chosen analytical techniques. For this purpose I chose to use a taxonomical analysis, which has a set of analytical techniques known as “time fields” dynamic form, layers and form-building elements, processes and transformations (Hlavatý, 2009:14).¹¹ I used these parameters and gave explanations of the specific elements from each of the four systems that I used.

In order to exemplify these analytical techniques, I chose to not refer back to the analytical discussion in Chapter 2, but to pertinently focus on elements not found in those analyses. However, the symbolic connotations of the music and the musical fundamentals can often give valuable evidence concerning interpretation whilst analysing, and the dynamic indications, tempo markings, and indications for the use of specific playing techniques in the score underline the need to also consider the technical varieties the composer has made from a symbolic angle.

*The enclosed graphical analyses of the four movements contain time markings that refer to the Audio CD track no. 1 (*Esrog*); no. 2 (*Lulav*); no. 3 (*Hadassim*); no. 4 (*Arovos*).

¹¹ A more detailed explanation of these parameters, together with the term *taxonomical*, is specified under Addendum A, Key Terms and Definitions, a taxonomical analysis.

The work, *Four minim* for cello and piano, is a densely saturated composition, which means that the work consists of numerous highly organised structures; for example the pitches used and the way it finds gestalt across the four movements. A thorough analysis of this piece showed that, as was mentioned before, numerological structures and symbolism had a big influence on this work. However, the main task in this analysis was to comprehend the formal structure of the movement through the selected analytical tools. This formal structure is explicated in the analysis below:

3.3.1.1 First movement: *Esrog*

Duration	Time field	Time field demarcation	Time-field positioning	Dynamic form	Degree of goal attainment
00:00–00:46	Sentence field	Cut demarcation	Separate positioning	Forward-oriented (emphasised), backward-oriented (faint)	Forward-oriented function attains its expected goal, backward-oriented function attains its goal, but different dimensions arrive at different points in time
00:47–01:23	Form field containing a phrase field and a sentence field	Open demarcation	Bridged positioning	Present-oriented (average)	Suspended goal attainment where the expected goal is first suspended, but arrives later; the present-oriented dynamic form has not been reached fully or not in the way one expected
01:23–02:39	Form field	Deferred demarcation	Bridged positioning	Forward-oriented, emphasised function leading to a present-orientated average function	The forward oriented emphasised function attains its expected goal, and leads into a present-oriented function where the goal attainment is still audible
02:40–03:15	Sentence field	Open demarcation	Joint positioning	Present-oriented averaged function	The present-oriented average function attains its expected goal
03:16–04:29	Sentence field	Open demarcation	Hinged positioning	Forward-oriented emphasised function	The forward-oriented emphasised function attains its expected goal
04:30–05:51	Sentence field	Conclusive demarcation		Forward-oriented emphasised function	The forward-oriented function attains its expected goal in full

The first movement is constructed from sentence fields and form fields. I mention sentence fields first and form fields second for the reason that the structure is mainly receive direction and momentum through dynamic form and instrumental techniques. In this analysis I only used the time fields and dynamic forms as the prime analytical devices. The timeline, as seen above, comprises two phases where the time fields are located over the dynamic forms.¹² The term ‘time field’ is intently connected to conventional musical terms such as musical phrase and musical sentence (Thoresen, 2007a:312). In a time-field analysis, the music is split as heard, into subsequent units of dissimilar lengths. The span and length of the field is distinctive, by the time level we want to use. In this analysis, we control these fields with three different time levels: object fields, phrase fields and sentence fields. The distinctive fields are joint in a categorised construction in correlation with the different time levels.

3.3.1.2 Taxonomical analysis: time fields and dynamic form

I chose to divide this movement into four time fields. First time field: The movement starts with a sentence field () that is divided by two dynamic forms. The dynamic forms coincide with two other time fields, namely a phrase field () and an object field () that is contained inside the sentence field. The phrase field has a dynamic form of a forward-oriented function that is emphasised, and the object field has a backward-oriented function that is faint – this means that the sentence field had a climax somewhere at the start of this movement.¹³

Second time field: this is a form field () that consists of two phrase fields () and a sentence field (). The sentence field contains two overlapping object fields that bridge this form field to the next time field. The dynamic form of this second time field is mostly of a present-oriented function where in the phrase field contains a forward-oriented function that is emphasised and then returns to the present-oriented function during the sentence field. When a forward-oriented

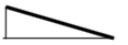
¹² In the graphic analysis brackets have been used to show the timelines of the analyses.

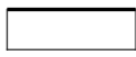
¹³ The reason why I do not insert the time as found in the audio is because of the way in which an Aural Sonology analysis lets the listener decide where the climaxes of sentence fields start and end.

function () is present most of the time, the goal attainment is expected ($\otimes \rightarrow \circ$), although in this time field it is followed by a present-oriented function (), “which means that a partial goal evasion is not reached fully or not in the way one expected [$\otimes$] .”

Third time field: this is a form field () that consists of two sentence fields that are bridged. This sentence field has a forward-oriented emphasised dynamic function that leads to a present-oriented dynamic function, which means that the two sentence fields in this form field may contain material found in the last part of the previous time field. Because time field 3 has a bridged positioning with time field 2, this correlation could be made.

Fourth time field: this time field is the longest of the four time fields – this has to do with the way in which I used the listening intentions. I chose to focus on the formal gestalt, which is the combination of these patterns that make up the compositional form of the music, and is seen in a taxonomically analytical way. The larger-scale direction of this time field is associated with the three sentence fields (), and because dynamic forms deal with the large-scale direction in the music that might be experienced together in relations of general dynamics (ranging from pianissimo to fortissimo) as well as tempo changes (accelerando to ritardando), I discuss only the dynamic form with the goal-attainment function.

The first sentence field () is again divided into two parts. This sentence field starts with a present-oriented function () that leads to a backward-oriented emphasised function () . The first sentence field of this time field has a joint positioning () where the next time field commences, just after the first one has concluded. However, because of the backward-oriented emphasised function that is found in the second half of the first time field, a suspended goal attainment ($\otimes \rightarrow \circ$) is reached. The expected goal of the dynamic form is first suspended in the present-oriented function and then arrives at the goal later when the backward-oriented emphasised function is reached. Although the goal is reached in the second sentence field, we encounter a goal evasion when a forward-oriented emphasised function is present.

Another forward-oriented emphasised function () is found at the end of the second sentence field () that leads to a present-oriented function (static tendency) with a blunted-goal attainment (), where a forward-oriented function attains its goal, but different dimensions arrive at different points in time. The last sentence field () has a “suspended goal attainment ( → ) that arrives with the forward-oriented emphasised function along with the present-oriented (static tendency) () function at the conclusive demarcation () at the end of the movement.”

When placing the form of this movement in a conventional interpretive context, one would refer to this movement as having an archetypal form, with a very loose ‘ABCA’ arrangement. The complexity of the dynamic form that drives this movement in a direction, demonstrates that the many possibilities of structural interpretations may be unified by the way in which the dynamic form reaches a degree of goal attainment. The ‘energy architecture’ of this movement is very reliant on the grouping of the time field and the time-field positioning. Thereafter the dynamic form deals with the large-scale direction of energy that has to either direct the movement into a certain direction to reach its goal, or not.

When detecting that the musical gestalt can be divided, the structure (time fields) becomes more natural. The relation that is emphasised in each sentence field, phrase field or object field has an organic form or function; this is found in the first, second, third and fourth timelines (00:01–00:46), (00:47–01:23), (01:24–02:39), (02:40–05:51). It is therefore evident that the emphasised dynamic form that reaches its goal or has a partial goal evasion can lead to a next kind of relation. This can be found in the analysis when one sentence field is in a hinged position, where the end of an object field of the preceding time field overlaps with the beginning of the one that follows, and the dynamic form has a forward-oriented function that is emphasised.

The manipulation of the coinciding time fields with the dynamic form has a structural implication in terms of pitch, register and timbre. When all of this is taken into account, the movement is understood on the basis of the correlation between the dynamic form function as the time-field positioning and the level of the time field.

i. Graphic analysis: *Esrog*

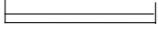
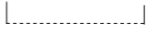
Figure 2. *Esrog*, graphic analysis

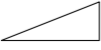
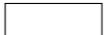
3.3.1.3 Second movement: *Lulav*

Duration	Time field	Time field demarcation	Time-field positioning	Dynamic form	Degree of goal attainment	Form-building functions, processes and transformations
00:00–01:37	Sentence field	Open demarcation	Joint positioning	Present-oriented function	Suspended goal attainment, where the expected goal of the forward-oriented function is first suspended, but arrives later	
00:44–01:35	Sentence field	Deferred demarcation	Overlapping position	Present average-oriented	Suspended goal attainment	Medium complex melodic elements, whereas the textures are relatively simple
01:36–02:25	Sentence field	Open demarcation	Separate positioning	Present-oriented function	A blunted goal attainment is reached where the function attains its goal but different dimensions arrive at different points in time	Relatively complex melodic elements are audible; the audible textures are relatively simple
02:26–02:59	Phrase field	Deferred demarcation	Close positioning	Forward-oriented emphasised function	A goal evasion is audible, the goal is cancelled, and is audibly not reached	The melodic elements are of a medium complexity
03:00–03:21	Sentence field	Open demarcation	Separate positioning	Forward-oriented emphasised function	The full expected audible goal is not reached (goal is cancelled)	There is a distinctive articulated element audible but the textural and melodic elements move to an anonymous articulation
03:41–04:06	Phrase field	Conclusive demarcation		Forward-oriented emphasised function	The forward-oriented function attains its expected goal	Relatively complex melodic elements are audible

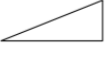
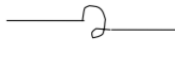
For this movement I divided the analysis into two clearly defined timelines; (00:01–02:25) and (02:26–04:06). This movement's first timeline can be divided into

three *sentence fields* (). Each sentence field contains specific secondary time-field analyses. Taking into account that the first timeline has a more complex dynamic form than the second timeline, an analytical perspective will clarify the musical gestalt.

In reference to the first sentence field, it is noted that the sentence field () contains two phrase fields ( ). Each of these phrase fields can be broken down into smaller segments that contain object fields (). The dynamic form function has an influence on the primary structure that is the sentence field. The dynamic form function is directly dependent on the two phrase fields and therefore represents different musical elements such, a melodic passage, a sound object or texture, or as a theme.

The first sentence field () is directed by a present-oriented average function followed by a forward-oriented function (), leading to a present-oriented average function (). The expected goal attainment is suspended ( $\rightarrow$ ), but arrives later when the second time field is audible, because of the overlapping time-field positioning (). The degree of goal attainment reached its expected goal in the second time field (01:35). However, before that happens in combination with the dynamic forms, we also find that there are two weigh points and an affirmation point () that reinforces previously stated musical elements (this can be material or a structural function that has been heard/used before) and what is found earlier in the music (thus referring back). The second sentence field concludes with a suspended goal attainment ( $\rightarrow$ ), because of the forward-oriented emphasised function. The third hinged positioning () sentence field starts with a weigh point, followed further on in the sentence field by a warning point, () which states that an accent can, attend to, as an “alert or warning” aimed at a upcoming event. When a blunted goal is attained with an emphasised present-oriented (static) tendency, it can be affirmed that the phrase field found in the third sentence field does not have a stable tendency, and consequently does not point towards a future event. Because of the sentence field’s relatively complex melodic elements, one may conclude that the next timeline will use different material than found in the first timeline.

As noted above in the second timeline, more has to happen in the field of complexity in reference to textures and melodic elements. Dynamic form plays a major role in commencing and concluding this time field.

Only forward-oriented dynamic form functions () are audible in the second timeline, where a large section of this part of the movement is a *sentence field* (). The first structural discourse is found when the phrase field () has a deferred demarcation () with the previous section, and has a forward-oriented function with a goal point (), and a blunted goal attainment () is audible. The forward-oriented function attains its secondary goal, but different dimensions arrive at different points in time. This coincides with the melodic elements that move from a relatively simple () line to a relatively complex () line. The last part of this movement concludes with a *phrase field* (), (03:41-04:06), that contains two separated positioned time fields. These two phrase fields conclude the movement by an emphasised forward-oriented function () and an average backward-oriented function () that coincides with a *goal point* () that accentuates the goal reached after the first phrase field, and concludes with a goal attainment () that is reached as expected. The degree of complexity found moves from a medium complex texture () and concludes with a very clear texture ().

The structuring of the harmonic syntax in accordance with the chronological order of the structure as discussed above mostly concerns the distribution of a time field. The subdivision of a larger musical entity is perceptible by finding sections of linear super-positioned sequences that contain inner vertical structures. In accordance with Lesińnik's (1989:67) statement that the most important material is presented in the final two bars of this movement, the analysis done shows that the vertical structure of the cello and piano is audible as a persistent complex sequence where the two object fields found in the phrase field part with the textural complexity and the dynamic form. All these taxonomical elements in the analysis contribute to a central idea – the 'minims' arranged as a perfect fifth that contribute to the symbolism, balance and unity of this movement (Lesińnik,1989:67).

ii. Graphic analysis: *Lulav*

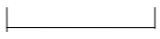
Figure 3. *Lulav*, graphic analysis

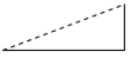
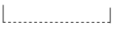
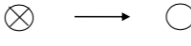
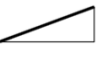
3.3.1.4 Third movement: *Hadassim*

Duration	Time field	Time-field demarcation	Time-field positioning	Dynamic form	Degree of goal attainment	Form-building functions, processes and transformations	Degree of similarity or dissimilarity
00:05–01:22	Sentence field	Cut demarcation	Separate positioning	Present-oriented function	A goal evasion is audible, whereas the goal is not reached in the way one expected	Melodic elements are of a medium complexity, and the textural audibility is relatively simple	Recurrence and variation
01:23–01:51	Phrase field	Disjointed demarcation	Separate positioning	Forward-oriented emphasised function	A goal evasion is audible, whereas the goal is not reached in the way one expected	The textural elements move from a simple element to a complex element	Recurrence
01:52–02:52	Sentence field	Conclusive demarcation		Forward-oriented emphasised function	A forward-oriented function attains its expected goal	Medium complex melodic elements are partitioned	Remote variation

3.3.1.5 Taxonomical analysis: time fields, dynamic form, layers and form-building elements, processes and transformations

In accordance with Lesićnik's (1989:67) explanation that this movement 'consists of three leaves', my analysis shows that this movement consists of three major time fields. The work starts off with a sentence field () (00:05-01:22) that has a cut demarcation

() where a sudden time field ends or an unexpected abbreviation occurs. The entire sentence field has a present-oriented dynamic form function that leads to a goal evasion (i.e. where the goal is not reached). The second time field is a phrase field () where an emphasised forward-oriented dynamic form function concludes with a separate positioning and a disjointed demarcation. The partial goal evasion is not reached in a way one expects. The third and last time field is a sentence field with another emphasised forward-oriented function that attains its expected goal.

Each of these three major time fields contains secondary divisions. In the first sentence field () there are two phrase fields (); the second phrase field has an influence on the goal evasion  , i.e. where the goal is not reached in the way one expects, because of the simplification to complication transformation movement in the music. This phrase field has a faint forward-oriented increasing tendency (). The second phrase field (01:23-01:51) has a few object fields () that are overlapping () each other where the second time field starts before the first one has concluded. The third time field contains two phrase fields that have a suspended goal attainment () where the expected goal of the emphasised forward-oriented function () is first suspended, but arrives later.

In reference to form-building functions, the degree of complexity located in both texture or melodic lines in the music and the changes between diverse degrees of complexity are important to note in this movement. Many slightly varied but easily recognisable repetitions are heard in the first sentence field; the degree of complexity for melodic and textural elements shifts from very simple  to relatively simple

 . This means that figures with only very few repeated pitches and rhythmic values, such as are found in very simple accompaniment figures, are audible, and then move to articulated (the sound objects audible that are distinctive from the basic gestalt) yet simple figures.

In the second time field a recurrence of elements is audible, and the object fields have a sustained tonic () sound with a clearly perceivable pitch. At this stage it is important to note that when listening to this time field the audibility and recognisability of the textural objects determine the perception of what are tonic, sustained or complex sound objects that form the gestalt at that moment.

The last time field (01:52-02:52) consists of medium complex melodic elements  with a partitioned medium complex texture  . A remote variation and not so easily recognisable repetition of elements are audible.

It is important to note that the first sentence field and the last sentence field are considered variations of each other. They are separated by a phrase field with reoccurring connotations to the first and last time fields. The polyphonic layering of the

last time field is the only part of the whole movement that has transformations separate from the two previous time fields. This might be because of the degree of goal attainment, i.e. where a suspended goal attainment is audible.

iii. Graphic analysis: *Hadassim* and *Arovos*

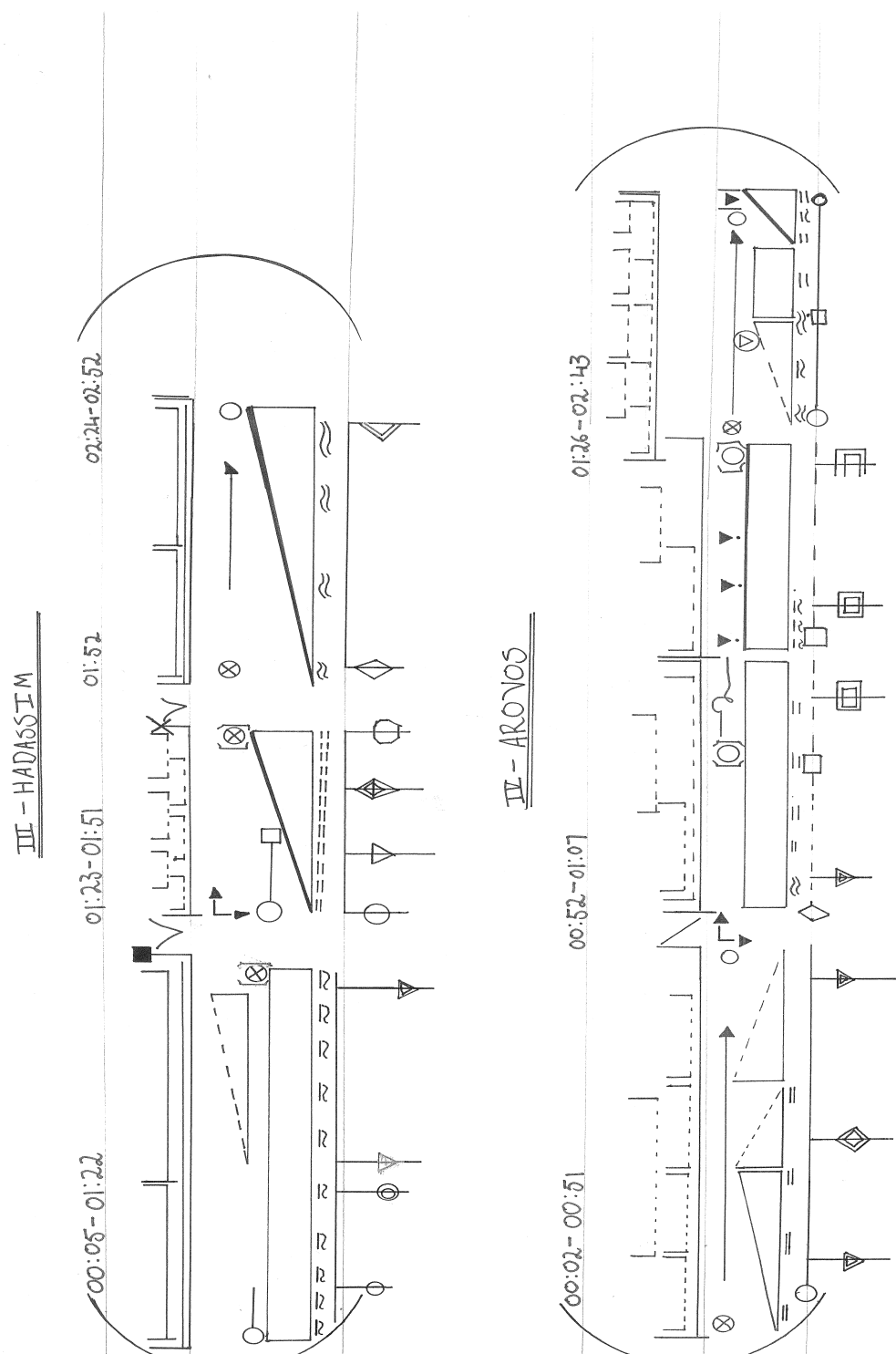


Figure 4. *Hadassim* and *Arovos*, graphic analysis

3.3.1.6 Fourth movement: Arovos

Duration	Time field	Time field demarcation	Time-field positioning	Dynamic form	Degree of goal attainment	Form-building functions, processes and transformations	Degree of similarity & dissimilarity
00:02–00:51	Phrase field	Open demarcation	Bridged positioning	Forward- to backward-orientated function	Suspended goal attainment, where the expected goal is first suspended, but arrives later	Relatively simple audible textures that are articulated with the forward-oriented function to medium complex textures; the backward- oriented function is then again associated with the relatively simple audible texture	Recurrence is used with the forward- and backward-oriented function
00:52–01:07	Phrase field	Deferred demarcation	Overlapping positioning	Average present-oriented function moves to an emphasised present-oriented function	Blunted goal attainment is audible	Relatively simple, audible textures move to a relatively complex textures that are both integral	Both remote variation and recurrence are audible
01:26–02:43	Phrase field	Conclusive demarcation		Faint forward-oriented function moves to an average present-oriented function; the movement then concludes with an emphasised forward-oriented function	Suspended goal attainment; the expected goal of the forward-oriented function is first suspended, but arrives later with the conclusive demarcation.	Tonic-sustained sounds are audible moves to a more complex sustained sound that is audible during the present-oriented function. The complex, sustained sound moves back to the tonic-sustained sound with the forward-oriented function	Recurrence, recurrence/variation, remote variation is audible

The analysis of the structure of this movement confirmed what Lesićnik (1989:70) said about the symbolic role this movement has with regard to water. The form structure of this movement is determined by textural and pitch functions. When looking at the form-building functions, processes and transformation, the complexity of the melodic elements and textures given in the analysis coincide with the process of a more complex articulated foreground. A presto, staccatissimo section played by the piano

contains textural and melodic complexities ranging from relatively simple



to

relatively complex transformations (00:02-02:43). When looking at this figured diagram given below, the relatively simple to relatively complex elements mentioned above span the spectrum of distinctive articulated transitions. When listening to the complexity of the sounds and melodic elements there are tonic, dystonic and complex sustained and iterated sounds audible; the perceived pitches are clear and sometimes a mixture of pitches in an object field that carry a wealth of overtones are heard. The complex iterated sounds heard in the analysis discern sound objects that are not of a clear pitch or clusters of pitches.

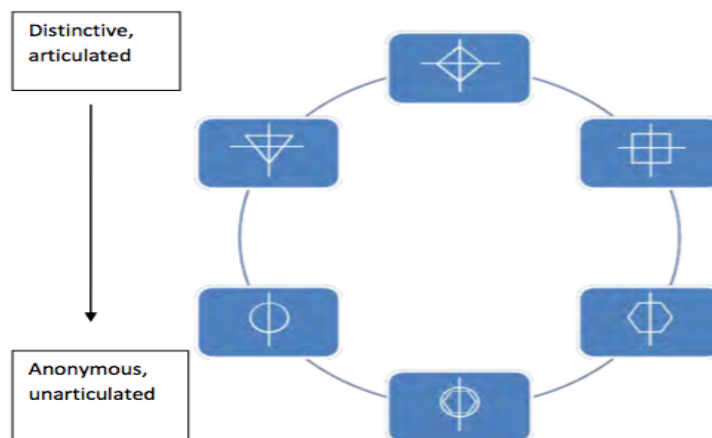


Figure 5. Articulation diagram

Structurally this movement entails four phrase fields (), with each phrase field containing several overlapping positionings () of object fields (). The several overlapping positionings of object fields have most certainly a correlation with the nine-note theme Lesićnik (1989:70) mentions. A summative consideration of this movement distinguishes it as the most complex when dealing with directionality. The first phrase field has a suspended goal attainment ($\otimes \rightarrow \circ$), and the two middle phrase fields (00:52–01:26) have blunted goal attainments where different dimensions arrive at different points in time. The third phrase field has an accent function (warning point $\nabla \bullet$) that is directed towards a future event. This ‘future’ event arrives at a termination point where the ending of a time field is marked by an accent.

Observations made regarding continuity and the layers of different parameters, which overlap and structure the work in a way that reinforces the concept of perfect stability and unity (Lesićnik, 1989:71), is confirmed by the results of my analysis. The taxonomical analysis has shown emergent musical forms and logically related units.

3.3.2 Hendrik Hofmeyr *Partita Africana*

These four movements were written in reverse order, whereas the third and fourth movements were written as commissions. The first two movements were added to complete the work.

Preludio is a traditional slow baroque-style prelude that integrates the styles of the baroque era, the fugal section consists of so-called 'African elements' such as the pentatonic scale and modal inflections, with monothematic occurrences. The chordal formations in the left hand is an announcement and serves as an opening idea, as a source for the lyrical motif heard in alternation with it, and as the subject of the fugal section. The latter concludes in a partial repetition of the opening motif and the lyrical motif

Umsindo's folk melody uses elements that are also found in African music, such as repetitive melodic figures, and an irregular metre built from groups of two and three quavers. The expanded ternary form found in this movement serves as a basis for the main idea (*a*), which is suggested against a bass ostinato (*b*), whereas the main section starts in m. 18. The superimposition of *a* and *b* leads to the reprise of the main section in m. 95. The coda (mm. 133–148) is again based on *b*, so the overall form can be represented loosely as A-B-A-B-A.

The composer suggests the following in relation to *Hartbreekrivier* (*River of Sorrow*) (Hofmeyr: 2006):

[It] is based on a folksong in which a mother laments by the river in which her child was drowned. The melody, which is repeated several times in a chain of chromatically related tonal plateaux, is imbedded in a flowing accompaniment, suggesting the murmuring waters, and derived from the type of texture often heard in marimba ensembles.

The toccata-style perpetuum in *Kalunga* influences the form of this movement, which depicts the incessant, macabre dance. The characteristics of many African-like

dances with its rapid compound metre, punctuation and irregular cross-rhythms are found in this movement. Much of the pitch material is also generated by juxtaposing two complementary forms of the pentatonic scale. The structure of the piece can be represented, in simplified form, as A-B-A-C-B-C-coda. (Hofmeyr, 2006).

In this analysis I am making use of the term generalised aural isotopies (time fields, layers, dynamic forms etc.), again related to a taxonomical analysis. The fact that the music needed to be divided according to structural and functional importance (as seen in the score), and certain elements of hierarchy found in the organic form observation, places importance on the way the structure contributes to the processional organic form of the music. As has been said before, Pooley (2007:72) argues that “Hofmeyr’s approach to musical composition is not so much postmodern – in the sense of appropriating earlier styles and processes – as antimodern, or antimodernist, in the way that it takes structural unity as an unquestioned value.” The individual parts and functions in this work create relationships between them that are never incidental, but have a specific meaning. These relationships are what keep the myriad of parts from threatening the “underlying unity” of the work (Schoenberg, 1967:20). Once organic form is established an underlying unity is needed, because if things cannot be related to one another, as in this work, due to some movements being composed before others without any relation to one another, they disintegrate in our aural perception. However, unity can become extremely tedious and uneventful, as Schoenberg (1967:20) points out. If nothing perpetually changes, adaptation and surprise are needed. This points to saying that organic form is the contradiction of joining underlying unity with the two: change and adaptation.

In this upcoming analysis I illustrate the particular relationships between the musical layers and forms, and use an analytical approach in the taxonomical category to naturally generate a higher awareness of:

- The subdivisions of a larger musical entity
- How different fields on the same and different levels connect with each other
- The dynamic form and the large-scale direction of the energy found in the music
- The directionality and whether the goal is attained or not
- The layers of the time fields
- Form-building functions, processes and transformations, based on the recurrence and contrast, which deal with the different degrees of complexity found in all the textures of the melodic lines

Because this composition is in the category of a particular, actual or pertinent generalised isotopy the above-mentioned pointers will help to understand the analysis.

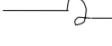
*The enfolded graphical analyses of the four movements are marked by time markings referring to the Audio CD track no. 5 (I. *Preludio*); no. 6 (II. *Umsindo*); no. 7 (*Hartbreekrivier*); no. 8 (*Kalunga*).

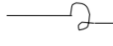
3.3.2.1 I *Preludio*

Duration	Time field	Time-field demarcation	Time-field positioning	Dynamic form	Degree of goal attainment	Form-building functions, processes and transformations	Degree of similarity or dissimilarity
00:03–00:53	Sentence field	Deferred demarcation	Separate positioning	Emphasised present-oriented	Emphasised present-oriented function attains its expected goal	Layers: Wide	Recurrence – the exact repetition of an element
00:54–01:26	Phrase field	Deferred demarcation	Joint positioning	Emphasised backward-oriented function	The emphasised backward-oriented function has a blunted goal attainment	Layers: Wide Relatively simple partitioned textures and melodic elements	Remote variation
01:27–02:29	Sentence field	Vague demarcation	Close positioning	Forward-oriented function	The forward-oriented goal attainment has a suspended goal attainment	The melodic elements shift from relatively simple to very simple; the textures found in this sentence field have a relatively simple partitioned element	Recurrence variation
01:30–02:59	Sentence field	Conclusive demarcation	Separate positioning	Emphasised forward-oriented function	The emphasised forward-oriented function attains its expected goal	Relatively simple elements are audible and are partitioned at times	Recurrence/ Variation
03:05–03:49	Phrase field	Deferred demarcation		Backward-oriented function	The backward-oriented function attains its expected goal	Relatively simple elements are audible and are partitioned	

3.3.2.2 Structure (time fields and time-field positionings) (the subdivisions of a larger musical entity)

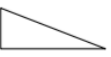
This movement with its monothematic structure, as Hendrik Hofmeyr (2006) points out, is evident in the analysis done. Referring to the deferred demarcation between the phrase field and sentence field (01:26–01:27), the structural analysis shows that the phrase field ends off the prelude, but leads directly into the fugal second part. The main structure has to be discussed before further analytical conclusions can be drawn.

Preludio, according to the analysis, can be divided into two time fields: (00:03–01:26) and (01:27–03:49). As was mentioned above, the phrase field and sentence field with its deferred demarcation () divide the movement into the slow Baroque-style prelude with its fugal second part (Pooley, 2007:79). The first part, namely the slow Baroque-style prelude, is divided into two time fields, starting off the movement with a sentence field that contains two phrase fields with a separated positioning where the first phrase field has a cut demarcation. This entire sentence field with its two phrase fields leads to a separated phrase field where a much varied and not easily recognisable repetition of elements is audible. This may be because of the two object fields found in the phrase field.

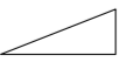
The fugal second part with elements frequently found in African music (Pooley, 2007:80) contains two sentence fields that have a deferred demarcation () and separated positioning with the last phrase field of this movement. Taking into account that Hofmeyr (2006) states that the lyrical motif is heard in alternation in the fugal section, the structural analysis shows that the two sentence fields have a recurrence/variation () where a slightly varied but easily recognisable repetition of an element/motif is audible.

3.3.2.3 Dynamic form and the large-scale direction of the energy found in the music

In this discussion it is now possible to observe in context (as indicated in the heading above) the starkness of the harmonic language (Hofmeyr, 2006). The movement starts out with an emphasised present-oriented static tendency (), characterised by a stable tendency, by neither being directed towards future nor past events. By mentioning this it can be made even more evident when listening to the second phrase fields () found in the first sentence field ().

The backward-oriented function () with its expected goal attainment () is evidence of the starkness of the harmonic language.

The fugal second part is technically comprehensible due to the forward-orientated functions

() found in the first sentence field, which later culminates in a partial reprise of the opening idea found at 01:30–02:59. This partial reprise is submerged to an emphasised forward-oriented function () with an expected goal attainment (). However, what makes it more evident is the goal point () that has been reached. The work ends with a backward-oriented function () with a final goal attainment ().

3.3.2.4 Form-building functions, processes and transformations

The form-building functions, processes and transformation are based on the recurrence and contrast, with the different degree of complexity found in all the textures of the melodic lines. The transformation processes found in this movement are mostly of an idiosyncratic nature, and therefore a brief discussion will follow, given that when a composition does not have many anonymous un-articulations there are just a few similarities and dissimilarities that refer to designations of sound elements found in the formal structure. For instance, each main section (sentence field 1, phrase field 2, sentence field 3, and phrase field 4) can be categorised as tonic sound objects (



) with a clearly perceivable pitch. Firstly, what makes it stimulating is that

section 1 (00:03-01:26) starts with relatively simple elements () that are articulated or refined by heterophony, or homophony with slight polyphonic elements. Secondly, the fascinating part lies in the second section of this movement where the

relatively simple elements are partitioned (), but it attains its specific goal eventually. The most salient unification of this movement in terms of organic unity is its structure that is depends on the goal attainment of the elements binding the prelude and the fugal second part.

iv. Graphic analysis: I *Preludio* and II *Umsindo*

Figure 6. I *Preludio* II *Umsindo*, graphic analysis

3.3.2.5 II *Umsindo*

Duration	Time field	Time-field demarcation	Time-field positioning	Dynamic form	Degree of goal attainment	Form-building functions, processes and transformations	Degree of similarity or dissimilarity
03:50–04:54	Sentence field	Deferred demarcation	Close positioning	Present-oriented	The goal is not fully reached in the way one expected (goal evasion)	Very simple elements with repetitive pitches and rhythmical values (monophony)	Recurrence with exact repetition of an element moves to a slightly varied but easily recognisable repetition of an element
04:55–05:26	Sentence field	Cut demarcation	Separate positioning	Present-oriented	The goal is not reached in the way one expected (goal evasion)	Very simple elements with repetitive pitches and rhythmical values (homophony)	Remote variation
05:27–05:30	Phrase field	Disjointed demarcation	Separate positioning	Backward-oriented function	Blunted goal attainment: The goal is attained but different dimensions arrive at different points in time	Very simple elements with repetitive pitches and rhythmical values that are partitioned	Related contrast/medium contrast; the elements presented are perceived as contrasts but at the same time are related to the previous elements
05:31–05:34	Phrase field	Deferred demarcation	Separate positioning	Emphasised forward-oriented function	A forward-oriented function attains its goal but different dimensions arrive at different points in time	Very simple repetitive figures that are partitioned	Remote variation
05:35–06:44	Sentence field	Conclusive demarcation		Forward-oriented function	A forward-oriented function attains its expected goal	Very simple partitioned elements move to very simple, integral elements	Related contrast/medium contrast; the elements presented are perceived as a contrast but at the same time related to the previous elements

3.3.2.6 Structure (time fields and time-field positionings), dynamic form and the large-scale direction of the energy found in the music

Although this movement is not based on a folk melody, but uses elements that are often found in African music, such as repetitive melodic motifs, modal inflections and irregular metre (Hofmeyr, 2006, Pooley, 2007:79), it is clear in the analysis that this movement has a great deal of repetition when considering the structure. The audibility of the music is highly vertical with a large-scale motion shaping the movement. The structure can be considered a constant play amongst two types of energy: “the dissolving (hereafter: the solve-parts)”, (03:50–04:54), and the solidifying (hereafter: the coagula-parts), (05:27–06:44). Therefore, the dissolution can be found in the first two sentence fields. Each of these sentence fields has a goal evasion that is not fully reached, whereas the second part of this movement firstly reaches a blunted goal attainment that has a solving part: suspended goal attainment. This suspended goal attainment reaches its expected goal with a forward-oriented function. The coagula¹⁴ part contains a suspended goal attainment with an emphasised forward-oriented function. This forward-oriented function has an accent mark-out.

This entire movement has a defining coagula-part feature where the following features can be heard. I use the words of Hlavatý (2009:72-73) to describe these features:

- “Pertinent pitch (meaning a sense of tonal gravity or centre-tone).”
- “Chord-like movements.”
- “Static blocks, where the main ‘frame’ or general pitch-range is kept steady while changes occur within the structure.”
- “Repeated patterns of varying types of rhythm and/or figuration.”

3.3.2.7 Form-building functions, processes and transformations

In contrast to the previous section with the same heading, this section refers to form-building functions, processes and transformations based on the recurrence and contrast, which deals with the different degree of complexity found in all the textures of the melodic lines. Even though this movement consists of only distinctive melodic and textural elements, form-building elements such as the repetitive figures with pertinent

¹⁴ This term refers to a change from one state to another; in organic form the change may be the way in which the creation of form changes. Schoenberg (1967:20) explains when every section of a piece of music has particular functions in proportion to other parts, the change from one part to another can therefore be a coagula part.

pitches and rhythmical values in the category of very simple melodic elements and textures will most likely link to organic form.

The partitioning of a *very simple melodic and textural element* () can be of a process and transformative value when considering *tonic sustained* sounds with a clearly perceivable pitch. The contrast, a recurrence of this movement, lies in the *release point* () that marks a beginning of a time field.

In a movement with repetitive elements such as this one, it is the degree of similarity and dissimilarity between sentence fields, phrase fields and object fields that orientates the direction in some instances to convey a particular subjective experience.

3.3.2.8 III *Hartbreekrivier*

Duration	Time field	Dynamic form	Degree of goal attainment	Layers	Form-building elements
00:03–05:19	Form field	Forward- to backward-oriented function	Suspended goal attainment	Interrelation between horizontal and vertical layers, with layered elements interrelated, emerging/and merging entry and ending mode	Relatively simple melodic and textural elements; distinctive articulated elements; remote variation, a much varied and not easily recognisable repetition of an element

In this analysis I emphasise the musical layers found in this movement, because of the African folksong that is repeated a number of times in a chain of chromatically linked tonal levels. The analysis of the musical layers suggests to us something about the relationship between the foreground, middle ground and background of the music as heard. A consideration of the flowing accompaniment reveals its structural influence on the layers because of its entwinement with the folksong melody. The overall profile of this entwinement shows a musical discourse of certain elements or layers, and they present themselves in a foreground and background function. In this movement the foreground changes between the folksong melody and the flowing accompaniment.

This movement has an overall wide layer, because the accompaniment has remote variations on the primary elements found in the initial flinch of the movement. The differentiation in the functions of the layers will be of value to structure the work and give it an energetic drive.

The graphic layer analysis in this analysis presents a vertical and horizontal function between the melody and the accompaniment. These two layers have been interrelated with each other, which means that when the forward- and backward-oriented functions meet, a merging entry field demarcation emerges. This can be because both layers enter once more or one layer emerges from another. In this case the melody is emerging and the accompaniment merges with the melody vertically and horizontally.

Seeing that this movement has plenty of repetitive material and the bigger structural conclusive demarcations are only audible when taking the degree of similarity/dissimilarity into account, I referred to the degree of goal attainment to help with further analysis/understanding of the work. Throughout the work goal evasions are audible, which means that the partial goal is not reached fully or not in the way one would expect. The expected goal of this movement is therefore only reached at the end of the work – it can be said that the entire work strives to be a suspended goal attainment.

v. Graphic analysis: III *Hartbreekrivier* and IV *Kalunga*

Figure 7. III *Hartbreekrivier* and IV *Kalunga* graphic analysis

3.3.2.9 IV Kalunga

Duration	Time field	Time-field demarcation	Time-field positioning	Dynamic form	Degree of goal attainment	Form-building functions, processes and transformations
00:00–00:23 00:23–00:40	Sentence field Sentence field	Vague demarcation	Hinged positioning	Multiple dynamic forms are present	Blunted goal attained; suspended goal attained	Horizontal and vertical emerging and merging layers occur
00:41–01:02 01:03–01:21	Sentence field Sentence field	Open demarcation	Hinged positioning	Emphasised forward-oriented function Emphasised present-oriented function Emphasised forward-oriented function	A forward-oriented function attains its expected goal	Horizontal and vertical emerging and merging layers occur

3.3.2.10 Structure (time fields and time field positionings), dynamic form and the large-scale direction of the energy found in the music

The structure of this movement is significant, as is illustrated by the four sentence fields that are found in the two separated timelines as presented in the analysis. According to the programme notes (Hofmeyr, 2006), Hofmeyr has structured the movement in simplified form, as A-B-C-B-C-coda. The analysis done found that the four sentence fields can be represented as A-B-C and coda. However, this even more simplified form can be interpreted and re-evaluated in the sense of breaking down the A-B-C structure into smaller time fields. This approach, discussed below, determines the time field, dynamic form, layers, and form-building elements, processes and transformation events in each section.

According to my analysis, there are two sentence fields: in the first timeline (00:00–00:40), with the two sentence fields each containing the same material, but structurally differing from each other. The first sentence field has object fields with vague demarcations that are hinged. Therefore, the material found in the previous object field coincides with the start of the next time field. This can be directly related to the goal attainment where the emphasised forward-oriented function, as found in the analysis, reaches its goal, but particular dimensions arrive at different points in time.

Once the emphasised forward-oriented function encounters its prescribed goal, a warning point is audible that serves as a warning directed towards a future event. In this case, it happens when the first sentence field is hinged with the second sentence field. One layer emerges from another and has a weigh point with important thematic material. The large-scale direction of the second sentence field has a static tendency, but declines and emphasises material with the increasing tendency of a forward-oriented function. This forward-oriented function merges with the expected goal. However, the goal point arrives later than expected. This is proven by the affirmation point of material that is heard previously, although it is suspended throughout the entire second sentence field.

In reference to the second timeline (00:41-01:21), there are again two sentence fields that establish the material in a more accented/emphasised manner. The directionality of these two sentence fields is of an increasing tendency, with a static tendency that again leads to a forward-oriented tendency. This is better explained as the A-B-C section that leads to the coda. The separation point that marks the border between the two sentence fields has a distinct function that marks the ending as well as the start of the C-section with its coda. The coda has an emphasised forward-oriented function with a goal attainment that is reached completely.

3.3.3 Hans Roosenschoon's *Timbila* for Chopi Marimba and Orchestra

This work is mostly a juxtaposition of a full symphony orchestra with a Mozambican Chopi timbila 'orchestra'. According to Barker (1996:71), the results are striking and yet ultimately unsatisfying. The reason that he gives for this is that with the formation of twentieth-century tone clusters the scene is set for a meeting of musical strangeness. The composer says that the first problem was the tuning of the Chopi instruments with the Western orchestral instruments (this is what Barker refers to as "strangeness".) Secondly, the structure of the music floats between a strict metre interchanging with *senza misura* passages most of the time, although the above interchange of structural differentiations in metre makes it possible for the orchestra to play *colla parte* with the Chopi, and because of the very strong rhythmic impact of the latter, the *senza misura* is often not perceived as such by the listener.

The clusters are artfully woven as a sonic haze, but not clear enough to be obvious. Although the clusters in this work are artfully woven, the pitches never fully reveal a pattern that might ultimately emerge the structural organisation or melodic elements do not contribute to a full understanding of the work, and the orchestral body absorbed the underlying three-note theme (Barker, 1997:71).

As was mentioned above, this problem has been written about in several articles¹⁵ and dissertations.¹⁶ The composer confirms (Roosenschoon, 2016) that the work has a problem. By using Aural Sonology as analysis method, I tried to show how the structure organisation and elements may contribute to a better understanding of the work, and that the pitch elements regarding melodic and textural orientations might ultimately lead to a revelation of emergent formations. By using the taxonomical analysis and form-building functions, processes and transformations, the idea of a problem is eliminated by a methodology of understanding the aural gestalt, and the musical discourse is organised into contraries and opposites of functional relationships (Hlavatý, 2009:111).

I similarly tried to effectively alter the way one is expected to approach this work by using an Aural Sonology listening intention perspective to help me understand the technical problems, as was mentioned above. When analysing *Timbila* through its non-emergent musical forms, the application of sonic analytical methods formed part of the

¹⁵ Alain Barker (1996); Roosenschoon, 2009

¹⁶ Fraser, 2013

analysis to reveal patterns that investigate “reoccurrence, repetition and textural relatedness more adequately than harmonic progression and the thematic development in the logic of traditional form” (Hlavaty, 2009:111).

The enclosed graphical analyses of this work are marked by time markings referring to the Audio CD track no. 9 (*Timbila*).

3.3.3.1 *Timbila* analysis summary (00:01–03:47 and 03:48–04:16)

Duration	Time field	Time-field demarcation	Time-field positioning	Dynamic form	Degree of goal attainment	Form-building functions, processes and transformations	Degree of similarity or dissimilarity
00:01–00:53	Sentence field	Vague demarcation	Overlapping position	Present-oriented function	Goal evasion	Relatively complex dystonic sound objects	Recurrence
00:49–02:12	Sentence field	Vague demarcation	Overlapping positioning	Present-oriented function	Goal evasion	Medium complex dystonic sound objects	Recurrence/variation
02:13–03:46	Sentence field	Vague demarcation	Hinged positioning	Backward-oriented	Goal evasion, goal is not reached in the way one would expect	Medium complex elements are partitioned, moving to very simple elements; dystonic sounds moving to tonic sound objects	Remote variation
03:48–04:16	Sentence field	Deferred demarcation	Close positioning	Emphasised present-oriented	Goal evasion, goal is not reached in the way one would expect	Relatively complex, with a great diversity of pitches Dystonic sound- tonic sound objects	Recurrence/variation
04:17–04:26	Phrase field	Deferred demarcation	Close positioning	Emphasised Present-oriented, forward-oriented function	Goal evasion	Relatively complex	Recurrence
04:27–04:55	Sentence field	Deferred demarcation	Joint positioning	Emphasised Present-oriented, forward-oriented function	Blunted goal attainment	Relatively complex elements moving to very simple elements	
04:56–05:08	Phrase field	Vague demarcation		Present-oriented function	Goal evasion	Dystonic sound objects	Recurrence

The overall structure of these two timelines, (00:01–03:47) and (03:48–05:08), is of significant value. From the first onset to the last the structure plays a vital role in positioning the listener’s perception of structure. The structure comprises valuable information regarding differentiation in material found in each time field. The entire first timeline (00:01–03:47) consists of three sentence fields that span a broad spectrum of

form-building functions, processes and transformations that occur in remote variations of the recurrences and variations of tonic and dystonic material. The sound elements consist of dystonic sound objects, varied with tonic sound elements. When the Chopi instruments are audible, a pitch content can be heard, although the pitch content is not very clear. This means that the objects of the audible sounds, which consist of mixtures of pitch components and non-pitched components, are ambiguous.

Within the first timeline, each time field behaves and develops at its own pace, and consists of remote varied sound elements that reoccur and develop from the previous time field. The structure leads itself to remote variations and reoccurrences, because of the different time-field demarcations and time-field positionings. This refers to vague demarcations, deferred demarcations and the hinged positioning that allows for materials to behave and develop in conjoint relations with the previous elements.

I have found that when listening to the first timeline, (00:01–03:47), each sentence field, despite its time-field demarcation and positioning, utilises three isotopies that are commonly found throughout the first two timelines. The first is the present-oriented function that has a stable tendency of sound, and the second is the degree of goal attainment where the expected goal is not reached at all, or only partially. The degree of goal attainment could be linked to the degree of similarity and/or dissimilarity of the sound elements found in each time field. The third isotopy is the accent marks/intensified points at the end or start of each time field. The accent points serve as a warning directed towards a future event or marks the border between successive time fields, distinguishing them from different time fields.

Because of the constant strand of tonic or dystonic sound elements and the accent points, the direction of energy of the positioning of the above-mentioned sound element is given. The energy architecture of the first two timelines is positioned at the end of each sentence field. This is audible in the second sentence field (00:49–02:12). The object fields, as marked in the graphic analysis, contain warning points that are played by the brass instruments, and that are directed towards future events. The construction of each sentence field is reliant on the directionality of the accent points, because of its tonic and dystonic complexities, and the dynamic form, which has a static tendency.

The relationship between the first timeline (00:01–03:47) and the second time line (3:48–04:16) has some differentiation in the category of spectromorphology¹⁷. The sustained tonic and dystonic sound objects become large phrase fields and sentence fields of tonic and dystonic impulses. This is followed by accent points with emphasised forward-oriented functions audible, and visualised in the graphic analysis at the end of the first and second sentence field with a deferred demarcation at (04:16) and (04:55). Another generalised aural isotopy originates from the dynamic form function that deals with the directionality of each sentence field. Wherever an emphasised forward-oriented function is audible (at the end of a sentence field) a goal is not reached, or only partially in a way one does not expect. A blunted goal attainment is one of the key energy-architectural constructions, where particular dimensions arrive at particular points in time. In the second timeline, the emergence of relatively complex elements with its polyphonic textures is a result of spectromorphological reasoning.

3.3.3.2 Analytical discussion of the form field (05:09–10:32)

I have chosen to change the focus and direction of the analysis from (05:09–10:32).¹⁸ This is done firstly because of the broad gestalt found in this form field, and secondly, because of the different counterparts being successive to time-field units found in the gestalt (form field). Thirdly, it is done because of the sound contents of various layers that are relatively synchronised, or relatively unsynchronised.

Analysing whether synchronised layers are vertically interrelated, are independent layers that are horizontally interrelated, whether the elements in this specific case passes to an alternative, or if one layer omens, initiates, and releases, to respond or echoes an occurrence in another layer, revealed that different layers release and initiate other layers. This can be seen and heard in the graphic analysis where the layers that are vertically interrelated merge with an offset of another layer (05:38–05:51).¹⁹ This kind of analysis can be done to find the differentiations of interrelation

¹⁷ Spectromorphology is an electronic analytical application used to represent the perception of what is heard in an analytical fashion. Although the use of a taxonomical analysis can be said to be based on the principles of spectromorphological analyses, Aural Sonology differs in that the representation of sound relies solely on the music as heard by the analyst.

¹⁸ This analysis is marked separately from the two previous time lines in the presentation of the analysis [on page 62,63].

¹⁹ Marked 1* and 2* in the graphic analysis.

(Thoresen, 2007a). The only differentiation is the textural alteration, altering between homophony and polyphony.

In combination with what was done, dynamic forms are presented in the graphic analysis to find the large-scale direction of energy found in this form field, and also in combination with dynamic forms. I also indicate the accent points that direct the form field and show the offset of each layer. The warning points are found throughout this entire form field, and are accompanied by either a present-oriented function or forward-oriented function. Lastly, I focus on the complexity found either in the texture or melodic lines, and show the different degrees of complexity. In this form field the textural differentiation is very static and the tendency to move from a relatively complex element to another is only audible when listening to a single strand of sound objects, which in this case are partitions of relatively simple elements.

Therefore, the distinctive articulated sound objects are very seldom present; the anonymous unarticulated sound objects can refer to the Chopi's sound has a continuous ample sound throughout this form field. None of the orchestra sounds ever merge with the Chopi's ample sound. It can therefore be said that the orchestral sounds have a foreground function and an energetic function that drives the form field, whereas the Chopi's continuous sound can be referred to as having a background function. The background function only contributes to the spectromorphological sound spectrum as dystonic sounds.

Subsequently, the form field ends (10:31) with a deferred demarcation and a tonic sustained sound is audible (strings). From this moment on a suspended goal attainment is anticipated, and the work ends when the warning point, as referred to earlier in the form field with its forward-oriented function, terminates and ends the work. The entire transformation of relatively complex sounds and a continuous strand of polyphonic elements are diminished and very simple elements (monophony/homophony) are audible.

vi. Graphic analysis: *Timbila*

Figure 8. *Timbila*, graphic analysis

Figure 9. *Timbila*, graphic analysis continued

4. Third Perspective: the selected composers' perspectives on their own compositional processes and their analytical views

In this chapter perspectives and explanations will follow to understand the processes the selected composers used to compose the works analysed in Chapter 3. Furthermore, I attempt to understand more about the conscious and unconscious compositional processes of each composer.

As was indicated in Chapter 1, Cope (2007:256) mentioned that composers use a variety of processes to compose their music, and that some of these processes cannot be easily explained, as they have unconscious or intuitive origins. I needed to find out whether the composers I used in my analytical research used a variety of processes to compose, and what these processes were. Each composer was interviewed personally. I chose to also focus on each individual composer's retrospective analytical view of their own composition. This can further the understanding of the analysis I carried out in contrast to what the composers' analytical view of their own composition are. With these above-mentioned perspectives it can then become clear whether the composer had intuitive²⁰ insight into composing the works, as analysed and mentioned, or whether there was an unconscious²¹ process whilst they wrote the composition. Neither conscious nor unconscious processes are good or bad; the conscious or unconscious process only determine the specific elaboration on the rules, tactics and strategies (RTS) the composer used. If the composer wrote intuitively or unconsciously, the RTS would differ. The RTS represents some of the most important basic processes used by the composer (Cope, 2007:257) when composing music.

The choices the composers made consciously or unconsciously relied on the selected compositional processes the composers used during the composing process, and therefore the one conscious choice influences the unconscious choices and vice versa. These choices then led to tactics that solved the immediate problems created when composing consciously or unconsciously. This in turn enacted a specific local control of the compositional process with regard to the strategies the composer used;

²⁰ The composers' writing is based on what they feel to be true even without conscious reasoning.

²¹ The part of the composer's mind which is inaccessible to the conscious mind, and which affects behaviour and emotions.

these strategies indicate where and how the composer can achieve the goals they set out for the composition.

In the discussion of each composer's analytical perspective on their own work and the RTS they used to compose the composition, I used themes that presented themselves in the interviews and correlated these themes with the extra-musical meaning and personal compositional experiences of the composers.

4.1 Jeanne Zaidel-Rudolph (*Four minim* for cello and piano)

The perspective of the composer's process whilst composing *Four minim* for cello and piano indicates both conscious and unconscious processes. The conscious process involves the use of a numerical system (magic square), as was mentioned in Chapter 2. The composer claimed that numbers play a very important role in her compositions – hence the process of having strategies, rules and tactics that relate to numerology (Zaidel-Rudolph, 2016).

The composer consciously deviated from the numerical system to suit her preferences in the fulfilment of her artistic goals (Zaidel-Rudolph, 2016). She stated that the sound result is the most important aspect that dominates her compositions. As has been mentioned, in Aural Sonology analysis this is called an intentional fallacy.

Cope (2007:257) mentions that composition has one or more possible 'complex situations' and in this case the composition is derived from and dependent on the 'magic square' that guides the conscious compositional process. However, the composer claimed to never stick to a set of rules (Zaidel-Rudolph, 2016), and has a combination of sources to work from: at first the composer starts out with a process where the 'ground plan' (magic square) is set and then she uses an 'architectural plan' to design [e.g. pitch, rhythm, and form] of the composition:

The 'basic stimulus', can be a design, a conceptual 'thing', it also can be for instance in the case of the *Four minim* a word play on different kinds of species²² (Zaidel-Rudolph, 2016).

The four different kinds of species already gave the composer some structural strategies to work with. Her process is enhanced by giving these species meaning, and in a very artistic and philosophical way a semiotic aspect is created. Therefore, the

²² Refer to Chapter 2.

composer's analytical process of her composition is to listen to the different kinds of stimulus within the sound world(s) she creates. The way in which the composer approaches this composition analytically is to determine the methodology used to compose the work and the pitch classes and rows (referring to the magic square) that are used. Unification of different factors, such as row construction and the way the row construction is translated into different kinds of sound worlds, is definitely a way the composer would analytically approach *Four minim* for cello and piano.

The composer mentioned that when she composes, the rules she sets out for herself and the way she adapts and deviates from these rules, consciously or unconsciously, pushes the artistic boundaries. Using a formula or mathematical equation is never an artistic solution for Jeanne Zaidel-Rudolph. As was mentioned, the method she uses to break these rules and strategies is to deviate from and adapt them. And ultimately it is the sound world that leads the composer into a conscious and unconscious compositional process according to the composer:

When I compose I am very conscious about the the way I deviate and adapt the RTS I set out for myself. But at the same time the rules and boundaries I set are there to be broken to make way for breaking the boundaries, and create a work that is artiscic and not dependent on the formulas and RTS that initated the compositional process (Zaidel-Rudolph, 2016).

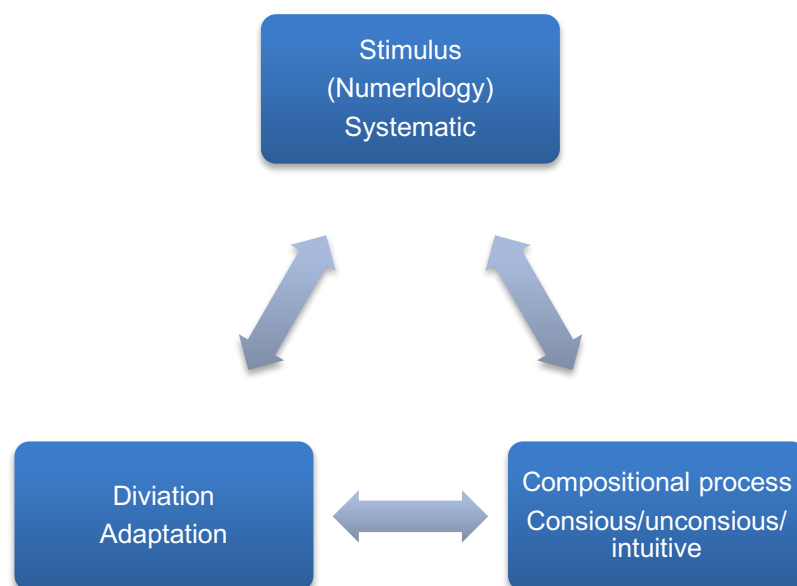


Figure 10. Compositional process: Jeanne Zaidel-Rudolph

4.2 Hendrik Hofmeyr (*Partita Africana*)

Hendrik Hofmeyr's perspective on composing points towards the inseparability of his application of technical compositional processes and extra-musical meaning. His use of rules, tactics and strategies is therefore somewhat of a complex situation. Analytically speaking, he refers to composing music and creating art as being based upon structure and form. Hofmeyr further states that the process he uses may be formalistic, but that he does not rigidly adhere to these rules, tactics or strategies when composing, but makes intuitive and conscious decisions on the creative process whilst composing. In the creative process he consciously thinks about what he wants to communicate/reproduce and that it is most of the time linked to the atmosphere/feeling and the motivic message (external meaning) he wants to convey. The most obvious origins of Hendrik Hofmeyr's compositional process lie in the little faith he has in art as an abstract thing. Another conscious decision the composer makes in his compositional process is linked to the specific medium in which he writes. This conscious decision to compose in a specific medium leads the composer into the possible tone colours and the specific playing techniques influence the composer's conscious compositional process.

Another perspective on compositional processes that focuses on rules, tactics and strategies is that the composer keeps in mind that when composing within a strict discipline, having a strong motivic structure is of value. He also states that the intellectual values can serve as a bridge between musicality and the emotional discourse.

Partita Africana has a unified form,²³ as the composer mentioned in the interview, and the sombre atmosphere was part of the plan and strategy when the composer composed this work. It can be said that the composer wanted to stay in this idiom of writing and therefore consciously made the decision to compose this work with somewhat of a rule and strategy in order to stay in the style idiom; the process then led him to compose with an intuitive/unconscious perspective:

Formalism is something I try to avoid but at the same time organic form as the motivic and thematic material is very important. It creates internal relationships between different ideas in the "equation" of the bigger compositional process. This

²³ Refer to programme notes on p. 46–47

is a very important relationship for me, to balance the level of organic form and formalism as an intuitive compositional process (Hofmeyr, 2016).

The intentional fallacy in Hendrik Hofmeyr's composition process, as suggested by Hofmeyr, is that the conscious and intuitive decisions were a necessary basis to decide on the intellectual value or external meaning of the composition. For this composer the most important approach towards this composition was to consciously stay in the idiomatic writing style (African music style, with a unified form), and the culminating patterns of African music subconsciously inspired the composer to intuitively compose *Partita Africana*. "Local control"²⁴ (Cope 2007:257) helped the unconscious process to intuitively direct the composer into ideas and solutions. This local control can then render the perspectives of the composer into what he consciously wants to compose (Cope, 2007:256).

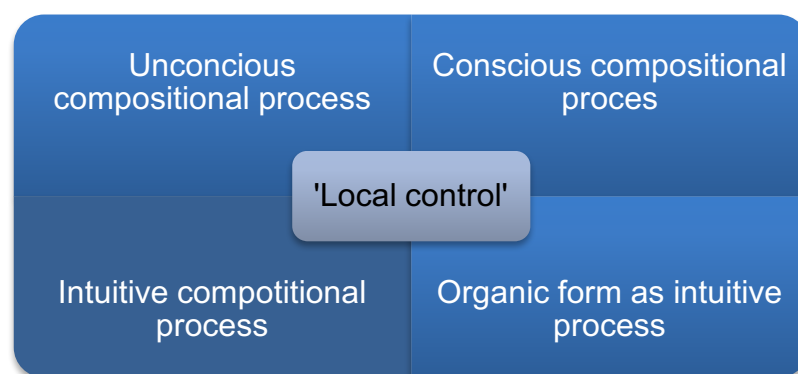


Figure 11. Compositional process: Hendrik Hofmeyr

4.3 Hans Roosenschoon (*Timbila*)

In the search for, and understanding of, the most basic processes Hans Roosenschoon used, the preferable sort of perspective he tended to perceive was an extra-musical idea. This extra-musical idea was the aforesaid inspirations that led to the development of an algorithm, which in turn led to sketches followed by the work itself. This perspective led the composer into not pursuing originality but rather to meeting the conscious technical challenges the composition presented. These technical challenges

²⁴ Local control: The composer's intuitive RTS is successfully internalised and does not influence the compositional process and unconscious compositional process.

were to accommodate the diverse tuning systems, timbres and textures of the Chopi instruments with the modern Western orchestra tuning system.

These challenges can be seen as rules that influenced the conscious and unconscious compositional process. This was proven by Roosenschoon when he mentioned that he identified his challenges and then repeated what was important in the composition (Roosenschoon, 2016). The composer also mentioned that the rules (challenges) are consciously made but from the moment the rules are set and the composing starts he reiterates what he has written, but also unconsciously revises slightly what he has written (Roosenschoon, 2016). Roosenschoon also mentioned that he revised material that he knew worked in this specific context, referring to the instrumentation and tuning system.

It is foreseen that the composer worked with extra-musical ideas but created technical compositional challenges for himself in *Timbila*. These challenges were created consciously and therefore when the composer decided to compose for two different ensembles, which also have different cultural origins and tuning systems, timbre and textures, the composer started out with a conscious compositional process. The composer used an existing compositional structure and sonority to achieve a stylistic mixture between avant garde and traditional African Chopi music.

In Figure 12 below the conscious structural process is visible, and the conscious structural planning lead to an intuitive sound world. The A section consists of a number of 'short starts' that are answered by the rest of the group in unison/octaves. In the B section everyone is playing a cyclical pattern of 12 pulses together, and in the C section, the do-re-me motif becomes a prominent feature of the whole Chopi group. By mentioning this elaboration on the compositional process with the conscious structural planning, the composer deliberately wanted to combine a modernist sound world. And in general the most conscious process for the composer was the composition of the orchestral part. This could be because of the knowledge and intuitiveness the composer has for Western music, which led the composer to unconsciously compose *Timbila* after the structure of the work had been planned. The word "planned" was continuously adapted in the interview to make it an evident principle that the composer was conscious of the technical challenges of each process in this composition (Roosenschoon, 2016).

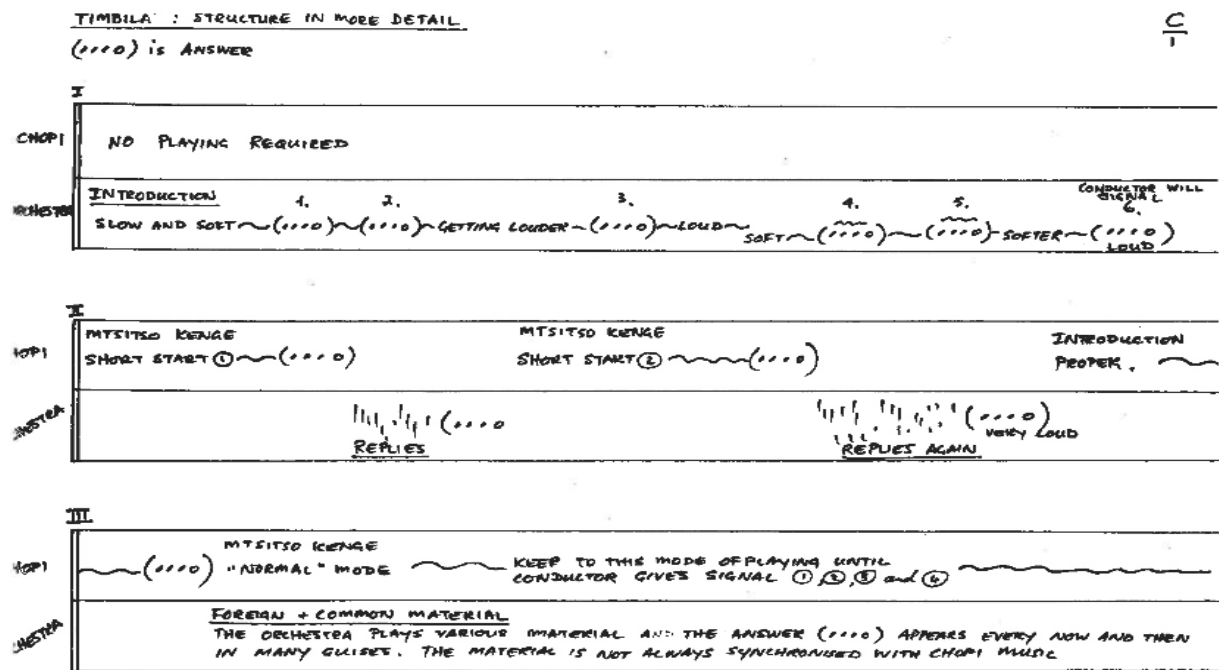


Figure 12. Structural process

Although the composer supported the conscious process with much enthusiasm and supported with examples, it can be said that the conscious compositional process lead the composer into a very unconscious²⁵ and intuitive²⁶ process of composing. The problem, as was mentioned in Chapter 3, was the result of a very conscious compositional process that led to a very unconscious and intuitive outcome regarding sounds and textures. The Chopi tuning system, and the deliberate combining of a modernist sound world with what the Western world refers to as 'world music', lead to a sonority of possibilities that influenced the compositional process, and the composer to work very consciously and still achieve a very natural unconscious sound world.

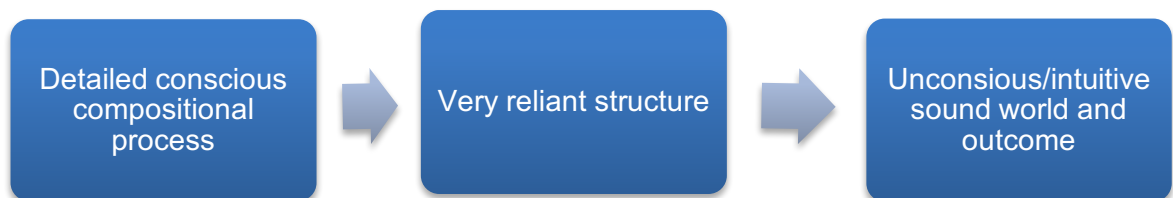


Figure 13. Compositional process: Hans Roosenchoon

²⁵ Unconscious: done without one realising what is happening during the process of composing.

²⁶ Intuitive: based on what one feels to be true even without conscious reasoning; instinctive adaptation of the compositional process.

5. Conclusion and synthesis of the three perspectives

Whilst researching and presenting the three different analytical perspectives and approaches, it became clear how Aural Sonology might be a useful means in realising a more organic perspective when analysing South African composers' music via the actual lived experience of the analyst. Yet, the non-reflexive aspects of Aural Sonology as a formalist approach acts as a contradiction to retrieve a "perspective with a pragmatic use of selected structuralist techniques" (Thoresen, 1985). (As has been mentioned, this aspect is not addressed in this mini-dissertation.)

This conclusion focuses on the synthesis of the data gathered in Chapters 3 and 4. I drew a focused conclusion on what was found in the literature and how that related to what the composers' analytical opinions and views on their own works were. I expanded the conclusion by relating my findings of the analysis to the composers' analytical views of their compositions. As was mentioned in Chapter 1, the worldview of this study is of a constructivist nature. Therefore, the reflections upon the actual lived experiences and the theories behind the hermeneutics of Aural Sonology are limited to my own, and the composers' opinions and analytical perspectives.

5.1 Existing analyses in the literature in accordance with the analytical views of the composer Jeanne Zaidel-Rudolph

5.1.1 Jeanne Zaidel-Rudolph's *Four minim* for cello and piano

It is evident that both the existing literature and the composers' analytical view focused on the numerological system that is consciously used. This system provides a basis for the analytical approach on which both the composer and the analyst (Lesićnik) based their findings. The composer elaborated on this numerical analytical approach. On the one hand Zaidel-Rudolph's technical approach is the numerological approach that is conscious, which is similar to Lesićnik's (1989:53) analytical approach that reviews the use of the numerological system (magic square) in the construction of the work. Lesićnik's humanist/hermeneutical approach is strictly focused on examining the function of the numerology in the music. This tends to supply the form and structure of the composition and creates a discourse in the analysis between the use of pitches, intervals, and themes. Lesićnik teases out the composer's technical approach through a

consideration of the extra-musical meaning in the use of the magic square – the four ‘species’ that structured the work and the technical use of the ‘magic square’ that influenced the composer to write and structure the work in a specific manner.

Evidently, the composer’s view of this composition originates from a technical or intrinsic approach, referring to the numerology that is consciously used. However, and in contrast, the conceptual basic stimulus was, according to the composer, a conceptual ‘thing’ (Zaidel-Rudolph, 2016) – a word play on different kinds of species that translated its semiotic origins into a technical approach. Eventually this technical process became a reflective practice in order to translate the work into a composition with an identity consisting of different sound worlds.

5.1.2 Aural Sonology analysis in accordance with the analytical views of the composer Jeanne Zaidel-Rudolph

A way to approach the synthesis of the Aural Sonology analyses in accordance with the analytical views of the composer is in terms of *form-based* choices. Form-based choices at this stage of the research are associated with Aural Sonology analysis as the methodology that constructs the composition. The unifying factor in the analysis, as was seen in Chapter 3, points to archetypical forms, structural implications in terms of pitch, register and timbre, correlations between the dynamic form functions and the way the time field is positioned. Also, the structuring of the harmonic syntax is in accordance with the compositional methodology that was used. This is correlated with the composer’s analytical view that states that the unifying factor, as mentioned above, has a parallel collaboration with the construction and use of the numerology. Although the general construction of the four movements was dependent on a mathematical formula, the Aural Sonology analysis in collaboration with the composer’s analytical view showed that the technical methodical approach shows emergent musical forms and logically related units.

5.2 Existing analyses in the literature in accordance with the analytical views of composer Hendrik Hofmeyr

5.2.1 Hendrik Hofmeyr's *Partita Africana*

When taking into consideration how the literature (Pooley, 2007) analytically approaches Hofmeyr's composition *Partita Africana*, there is a distinct factor that stands out. This can be called a surface understanding of the gestalt of the work, and the organic form the composer does or does not use. Pooley's (2007) analysis predominantly approaches this work with a surface reading. The analysis then takes a turn to a stylistic approach. This turn in Pooley's analysis is comparable to the composer's view, where Hofmeyr (2016) states that formalism is something he tries to avoid in general, but which influences the creative process a great deal. This statement refers to the organic form that links motivic and thematic material. This affects the RTS the composer used and is aligned with an intentional fallacy, whereas the basis of the work – value and meaning – upholds an elaboration on the formal procedures the composer tends to use or not use. As was stated by Hofmeyr (2016), the creative process is supported by the motivic message the composer wants to communicate, although this motivic message is definitely connected to the conscious or unconscious use of formalism as a basis to work from.

5.2.2 Aural Sonology analysis in accordance with the analytical views of the composer Hendrik Hofmeyr

The Aural Sonology analysis that was done arguably illustrates a very formalistic approach, but also tends to render a customising salient unification, in terms of organic unity with structural value, coinciding with a deeper understanding of the freely created/composed rules the composer used (Hofmeyr, 2016). The Aural Sonology analysis was based on listening intentions that involve a humanist approach, and with this said the analysis clearly shows similarities and dissimilarities between the composition's gestalt and the compositional process. Based in the form-building functions, processes and transformation used, the contrast is associated with the composer's strict discipline that is associated with strong motivic and structural as well as intellectual values, but provide a bridge between musicality and formalistic discourses (Hofmeyr, 2016).

In the Aural Sonology analysis that was done, the highly organic form – as associated with the composer's writing style – renders an increasingly complex understanding of structure and form transformations. As was seen in my analysis of the four movements, the structuring and categorisation of melodic and rhythmical elements and textures have a natural degree of importance that paves the way to a highly organic form and an intellectual value in composing. In my analysis Aural Sonology explicates a specific relation with the systematic form structure, which leads to different degrees of complexities that are found either in textures of melodic lines or in the structure that is dependent on the goal attainment of the elements binding the overall form.

5.3 Existing analyses in the literature in accordance with the analytical views of the composer Hans Roosenschoon

5.3.1 Hans Roosenschoon's *Timbila* for Chopi marimba and orchestra

The literature on *Timbila* and the context in which the music of Hans Roosenschoon is presented are historical, and pertain to pluralism (Fraser, 2013:13), as was mentioned in Chapter 2. In discussions about Roosenschoon's music, keywords such as musical time, musical space, intercultural music and African music are often used. The literature's focus on debates surrounding pluralism and musical meaning in Roosenschoon's music points towards the issue of reflexivity²⁷ and non-reflexivity. Reflexivity plays an important part in the process of composition to analysis, and then analysis to composition, as followed by Roosenschoon. This also suggests the process for analysing Roosenschoon's music. Consideration that, as explained in the analysis of Fraser (2013), the syntax in *Timbila* shows the basic thematic, harmonic and structural elements of the composition. For further consideration the diverse tuning systems, timbre and textures are seen as methods to echo the composer's analytical views of the composition. In my personal interview with the composer, he explained the precise structure and challenges of the composition by referring to the compositional process as being analytical in nature. This can be seen in the graphic illustration below. By consciously explaining what the structure entails and how the timbre is planned, the

²⁷ “**Reflexivity** refers to circular relationships between cause and effect. A **reflexive** relationship is bidirectional with both the cause and the effect affecting one another in a relationship in which neither can be assigned as causes or effects. In this context, reflexivity therefore comes to mean an act of self-reference where examination or action ‘bends back on, refers to, and affects the entity instigating the action or examination’ (Lambert et al, 2010:322).

composer's conscious analysis establishes a debate that renders a formalistic and humanist approach to the composition. The humanist approach is linked to the conscious planning of the structure because of the 'problem' the composer must work with. Roosenschoon solves this 'problem' by working with a formalistic approach.

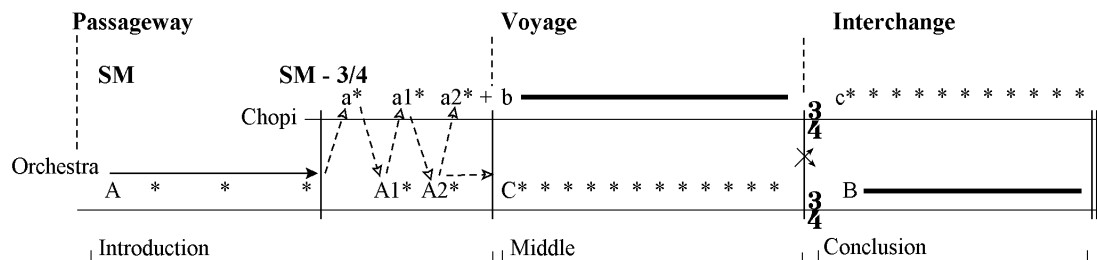


Figure 14. Analytical compositional process

In my analytical approach the composition was approached instinctively and holistically to develop a model to understand the structure of the work and the extra-musical ideas that shape these structures in the composition. The formalism attached to this reflexivity approach then renders an accurate representation of the composer's analytical view, and how it differs, in relation to that of the pluralistic view in the analysis of Fraser (2013).

5.3.2 Aural Sonology analysis in accordance with the analytical views of the composer Hans Roosenschoon

The structure, which the composer explains as an ABC form, with the A section consisting of several 'short starts' that leads to and answer in unison/octaves, is relatively similar to what my analysis shows. Sentence fields recur in which similarities in textures and structures are heard and seen. Keeping in mind that my analysis shows a noticeable overall recurrence and variation of textures, the composer states this (recurrence and variation in textures) as the do-re-me-do section. The Aural Sonology analysis presents a synchronisation of layers that are vertically interrelated, whereas the analytical view of the composer states that vertical and horizontal interrelations occur in the orchestra, as well as in the Chopi instruments. Therefore, when referring to the Aural Sonology listening intentions, it is important to note that the individual sounds played by the Chopi and the orchestra form different 'vertical and horizontal layers this is a contradiction in terms.' This contributes to the basic gestalt, which is analytically synthesised by the composer into a formalistic approach, as compositional processes

(as seen in Figure 14) and technical challenges lead to a consciously written composition with formalistically planned structures and textures that manifest in the work as different sound worlds.

5.4 Final thoughts

When working with this data – the three perspectives – the most important element that arose when they were synthesised is the new understanding of form-structure concepts by using aural isotopies. This serves as an alternative to a persistent emphasis on musical content and stylistic understanding. The tradition of interpretation in terms of extra-musical elements (without reference to its sound) “has driven itself into a corner by neglecting the sheer sensual aspect of the composition (Sontag, 2001:89)” as a musical gestalt. By focusing entirely on attempting to explain what something means in terms of generalised aural isotopies, the three perspectives provide a description that points out and describes *how* something appears and *what* the composer’s own process was.

An analytical study such as this one can evidently not only render information linked to the use of the Aural syntax and its variables, but can also benefit the reader by critiquing the system more and by considering ways in which this analytical method could be developed, rather than just working with it as it already stands. In other words, by considering how much the system can contribute to new ‘findings’ and information, may provide alternative perspectives on how it could be applied.

In terms of utilising what is learned in this analytical study, it is best to think about how to further the understanding and interpretation of information that was rendered in this study through creating a platform that could include other methods and approaches to analyse music-as-heard (whether ‘heard’ by listening to a recording or through ones inner-ear realisation of a score). In other words, you are incorporating other theoretical perspectives into the main analytical approach to effect a better understanding (and by extension application) of the data gathered. By incorporating other theoretical perspectives and methods of analysis the analyst and reader are also encouraged to link their prior knowledge of other analytical systems to the new data that is rendered by the analysis.

ADDENDUM A

1. Key terms and definitions

Point 1 in this addendum serves as a reference manual for the reader, and should not be considered part of the research project. It therefore mostly consists of quotations from a small number of available sources.

1.1 Aural isotopy

The following definitions are taken from Lasse Thoresen: *The Musical Phenomenon* from *Emergent musical forms: Aural explorations* (Thoresen, 2007a:129-141). In his own words,

- “An *aural isotopy* is found in a coherent component of aural gestalt perceived to contain features essential for the organisation of long stretches of musical discourse into contraries and opposites in functional relationships. The perception of such a strand of aural gestalts requires a corresponding, selective listening intention. The gestalt can then be reformulated in structural terms. The number of contrary relationships in an aural isotopy goes beyond the binary ones most often used in the semiotic square. Recurrence is one of the basic criteria for deciding about musical isotopies.”
- “*Generalised aural isotopies*: In our analytical method some commonplace musical isotopies are articulated as theoretical model (time fields, layers, dynamic forms, etc.). These are all Level III isotopies. However, aural isotopies may also be identified on the Level II, e.g. tonality, as used in the works of classical 18th century music, is a generalised formalised isotopy containing a number of contradictory terms (tonic, dominant, subdominant, mediant etc.) and functional implications.”
- “*Actual or pertinent isotopies*: In a given piece, particular generalised isotopies may be pertinent, while others may not; in music, particularly European music after Beethoven, each individual piece may frame a particular musical isotopy, or a particular constellation of isotopies into the status of a thematic problem field, or subject matter for musical discussion. The identification of pertinent isotopies presupposes a hermeneutical process in open dialogue with the music; the

generalised isotopies formulated can only form a potential reservoir of descriptive possibilities, so that analytical application of them do not guarantee that results are relevant or adequate.”

1.2 Time fields

Thoresen (2007a:310-312) defines a time field as: “(...) a subdivision of a large musical entity into smaller units or segments that are perceptible as such to the listener. Accordingly, a time field as mostly composed of several sonic objects, or of shorter time fields” (Thoresen, 2007a).

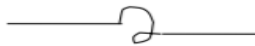
As seen in the analyses of the three compositions, “a time field consists of a grouping of musical elements based on the audibly recognisable and logically related units. There are four different time levels” (Thoresen, 2007a:310):

Level	Symbol
Object field	
Phrase field	
Sentence field	
Form field	

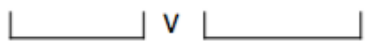
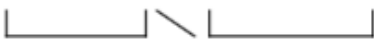
In the words of Thoresen (2007a:310-312)

“in a time-field analysis, after having identified the different time fields, we look at how fields on the same level are connected to one another. There are two different elements we look at, time-field demarcations and time-field positionings. Time-field demarcations tell us something about how the fields are concluded and whether the ending is open, abrupt, unexpected, etc.”

Thoresen (2007a:310-312) continues by proposing six different possibilities:

Time-field demarcation	Definition	Symbol
Vague demarcation	It is not clear exactly where one field starts and another ends.	
Open demarcation	A more or less rounded ending suggesting a continuation.	
Conclusive demarcation	The ending communicates a definite ending of the field, e.g. with a complete, authentic cadence.	
Cut demarcation	A sudden time-field ending or an unexpected abbreviation.	
Disjointed demarcation	A very abrupt, fragmented time-field ending.	
Deferred demarcation	A time-field is unexpectedly prolonged.	

Time-field positioning focuses on the juxtaposition of the fields and how they are connected to one another. Seven different instances are offered:

Time-field positioning	Definition	Symbol
Separate positioning	Two time fields are separated with a noticeable silence.	
Bridged positioning	Two time fields are joined by a transitional passage or by an uninterrupted background.	
Joint positioning	The next time field begins just after the first one is ended.	
Close positioning	The second time field takes over in very tight succession.	
Hinged positioning	The end object of the previous time field coincides with the beginning of the next.	
Overlapping positioning	The second time field begins before the first is ended.	

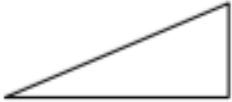
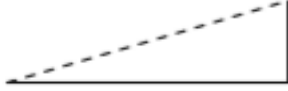
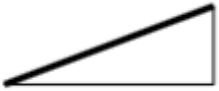
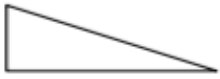
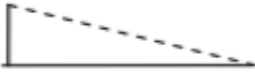
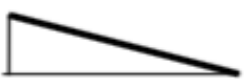
1.3 Dynamic form

Thoresen (2007a:314) defines dynamic form as follows:

“Dynamic form deals with the large-scale direction of the energy found in the music. The energetic tendencies that are at work in a piece of music can be experienced on all three levels of the musical spectrum: Level 1: sound objects, Level 2: elementary musical gestalts and Level 3: formal gestalts.”

“Dynamic forms are created through a mixture of tendencies and musical functions found especially on Level 2 in the musical discourse. Here we find both metric functions, such as upbeat and a downbeat, and harmonic functions such as tonic, dominant etc. Both these types of functions create small-scale tendencies of energy. However, the analysis of dynamic forms is mainly concerned with the emergent, overall design which occurs on Level 3 when the directional forces that are at work on Level 2 combine with dynamic tendencies and rise to shape Level 3. We might say that an analysis of dynamic forms seeks to uncover the energy-architecture of a piece of music.”

The three-main form-building functions that are all related to the element of directionality are (Thoresen, 2007a:314):

Function	Average	Faint	Emphasised
Present-oriented (static tendency)			
Forward-oriented (increasing tendency)			
Backward-oriented (declining tendency)			

“Since we are working with directionality, another central point is that of *goal attainment*, whether or not a directed movement attains its goal. The following symbols are linked to the four probabilities that we have”:

Degree of goal attainment	Symbols
Goal attainment: a forward-oriented function attains its expected goal.	
Blunted goal attainment: a forward-oriented function attains its goal but different dimensions arrive at different points in time.	
Suspended goal attainment: the expected goal of the forward-oriented function is first suspended, but arrives later.	
Goal evasion: in full goal evasion the goal is not reached (goal cancellation). In partial goal evasion it is not reached fully or not in the way one expected (goal evasion).	

Thoresen (2007a:314-315) says the following with regard to accents:

“In permutations with dynamic forms we also find the use of accent symbols. Accents are represented by intensified points in time, something which stands out from its surroundings, catching the listener’s attention. An accent might stand out for the listener by being louder, having a brighter spectrum, having sharper attack qualities or in other ways from our listening expectations. In a dynamic form analysis accents serve to articulate the dynamic forms, and their function is to mark features that are important relating to form-function and time-field articulations. The accent symbols are apportioned into seven groups according to their function”:

Accent functions	Symbol
General sign for accent; a weighted point.	
Goal point. An accent can mark out a goal for a musical movement, such as at the end of a forward-oriented form-building function.	

Separation point. An accent can mark the border between successive time fields, setting them apart from each other.	
Release point. An accent can mark the beginning of a time field, e.g. by the launching of a movement.	
Termination point. An accent can mark the ending of a time field or a form-building function.	
Affirmation point. An accent can affirm, repeat or reinforce another accent or previously stated musical element (therefore referring back).	
Warning point. An accent can serve as an alert or warning directed towards a future event.	

1.4 Layers

Thoresen (2007a:316) defines musical layers as: “counterparts to time fields being consecutive (and composite) units, layers being synchronised (and composite) units in a texture. Fields and layers form, so to express, the warp and weave of the texture, the sonic fabric of music.”

In the analysis I used different angles through which it was possible to examine layers. Thoresen (2007:316) describes these layers as follows:

- The function and profile of the layers
- The width of the layers
- The articulation of the layers
- The interrelation of the layers

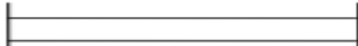
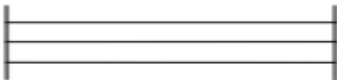
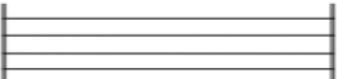
“Most of these (width, articulations, interrelations and the different entry and ending modes) are distinguished into graphic notation, which will be given below” (Thoresen, 2007a:316).

1.5 Function and profile

Thoresen (2007a:316) mentions the following about functions and profile: “In a musical discourse certain elements or layers of the music will render themselves as being more prominent. Their stance is more pertinent in our perception. We say that these layers have a strong intensity of profile. If this element or layer continues to have the same strong profile for a certain time it may be said to have a foreground function. In the same way layers with weak intensity of profile with duration over a certain time may be said to have a background function. In certain works of music, we might encounter a third layer or function where the intensity of the profile is more undetermined and ambiguous or constantly changing. These may be said to have a middle ground function.”

1.6 Width

Thoresen (2007a:316) provides the following definition of the term width: “layers may have a different width; one melody line alone gives a narrow layer, whereas a choral setting of big ambitus would give a wide layer”.

Designation	Graphic notation
Narrow	
Expanded	
Wide	
Ample	

1.7 Interrelation

The same article of Thoresen (2007c:129) gives the following explanation is given to the term interrelation:

“The sounding contents of various layers in a given piece may be relatively synchronised, or relatively unsynchronised. Synchronised layers are said to have a vertical interrelation (an analogy to the score). Independent layers are said to have a horizontal interrelation, i.e. the layers have little interaction. A third case is when the contents of one layer pass to another or when one layer heralds, initiates, releases, answers or echoes an occurrence in another layer. This kind of interaction we call diagonal interrelation (again an analogy to the score).”

“The elements of interrelation say something about how the content of the individual layers is synchronised or unsynchronised. This is relevant when dealing with expanded layers where a layer consists of several elements. In the analyses I have made use of the terms vertical and diagonal interrelation. When vertical interrelation occurs when the content of the layers is synchronised and they follow one another, a diagonal interrelation occurs when elements are passed from one element to another in an imitation or when one element initiates, answers or responds to another. Vertical interrelations are shown as diagonal lines drawn across in the same manner.”

In the analysis I only used interrelations in a way that explains the independent layers and horizontal layers where needed. The horizontal interrelations and vertical interrelations are graphically notated as (Thoresen, 2007c:129):

Designation	Graphic notation
Horizontal interrelation	
Vertical interrelation	
Diagonal interrelation	

1.8 Entry- and ending- mode

Thoresen (2007c:129) mentions that the area of field demarcations has a great similarity to entry and ending modes in layers. Thus, in these analyses we only used emerging/merging designations for the analyses where a layer emerges from another, or merges with another layer.



1.9 Form-building functions, processes and transformations

Thoresen (2007c:130-131) mentions the following aspects with regards to form-building elements (the quotation continues until the end of 1.9):

“form-building functions, i.e. dynamic forms; form-building processes, i.e. forms based on recurrence and contrast; and form-building transformations in Aural Sonology, which deal with the degree of complexity found in either texture or melodic lines in the music and the transformation between different degrees of complexity. The ‘typology’ of symbols used is given below. The partitioned elements given to the right in the diagram are used to advise the re-occurrence of either the opening or closing topographies of a pre-existing fundamental element (the element from which they have been partitioned). The symbols used

can relate to any level of the musical structure, like a theme, rhythmical pattern, polyphonic texture etc.: ²⁸

Melodic elements, lines		Textures		
Complexity	Integral	Partitioned		Integral
Very complex				
Relatively complex				
Medium complex				
Relatively simple				
Very simple				

Very simple elements. Examples: repetitive figures with a couple of pitches and even rhythmical values such as very simple accompaniment figures (lines); monophony or basic homophony (texture).

Relatively simple elements. Example: articulated yet simple figures such as scales/passages or refined accompaniment figures (lines); heterophony, or homophony with slight polyphony (texture).

Medium complex elements. Example: a classical, simple theme (lines); a two- or three-part simple polyphony (texture).

Relatively complex elements. Example: complex themes with great diversity of pitch and rhythm (lines); complex polyphony (texture).

Very complex elements. Example: extremely asymmetric lines using a large number of values in an unpredictable way (lines); accumulations in electro-acoustic and avant-garde music (texture).

²⁸ These examples are taken from the article: Thoresen, 2007b.

1.10 Tonic, dystonic and complex sound objects

Thoresen (2007c:136-139) gives the following suggestions on tonic, dystonic and complex sound objects (the entire 1.10 consists of a quotation):

- Tonic sound objects are sounds with a clearly perceived pitch.
- Dystonic sound objects are ambiguous sounds that consist of a mixture of pitch elements and non-pitch elements. In this category, we find mostly percussion instruments which, although they might be tuned in a specific pitch, carry such a wealth of overtones and non-pitched elements that they disturb our sense of pitch. The sound produced by tubular bells is a good example of a dystonic sound object.
- Complex sound objects are sounds where one is not able to discern a clear pitch. The crash of a cymbal is a good example of this.

These three suggestions may be seen as points along an emergent line, and in the analyses of the compositions these points of developing lines develop together rather than individually, as a sound might develop between them

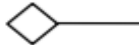
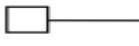
From the instant a sound is produced, unless it immediately stops, it creates a specific energy profile through the manner in which it is prolonged. The energy articulation of a sound object may move in two possible directions, both emanating from the starting point of an impulse, the point where the sound begins.

1. In one direction the impulse is prolonged into sustained sound. This sound may be sustained in an unbroken tone or crack up and become uneven, in which instance the energy is still sustained, but unpredictable and with ever-changing energy.
2. The one direction is that of iteration, where the object is still prolonged but this time by repetition as in a *tremolando*²⁹. Just like the first direction mentioned, this may also be brought to the extreme in the iteration pulse or occurrence, and the pitch of the sounds can also be made unpredictable.

The spectromorphological terms used can be visualised in simple graphic symbols which may be helpful in an analysis of works containing textural

²⁹ The fastest possible repetition of one or more notes or parts of chords.

objects where the categorisation of tonic, dystonic and complex sound objects is required.³⁰

Term	Sustained	Impulse	Iterated
Tonic			
Dystonic			
Complex			

³⁰ An expanded diagram of this typology is found in the article by Thoresen (2007c).

vii. Jeanne Zaidel-Rudolph (*Four minim* for cello and piano)

With this the focus on the subjective coherence between your subjective view on form and the rules tactics and strategies you used in this composition?

The numerological system used to compose this work was used as a basis to compose/structure the composition, but for me I don't want to be a slave to any mythological system or particular system to compose. But I took 'poetic license', and I have adapted where I needed to adapt, and adjusted where I needed to adjust. The numerological system I used – I deviated where I needed to deviate. Otherwise one can become obsessive about the system [numerological system]. You can see that some of the pitches are not all derived from the magic square. As with the numerological system used I intentionally adjusted the pitches, because I modified the pitches to suite my preference. This composition is a fairly odd one.

Composers use many different processes to compose their music. Some of these processes have intuitive or subconscious sources and cannot easily be explained, but in short, elaborate on the way you compose and the processes involved in composing *Four minim* for cello and piano.

I can never say that I stick to a set of rules. In my compositional process I use a combination of sources to compose. One starts with a ground plan and then from there on I use architectural plans to compose. So I always like to have some basic stimulus, and a stimulus can be a design, a conceptual thing, it can be for example, like in the *Four minim*, 'minim' is a wordplay on different kinds of species. So from there I started out with a conceptual frame work, but I'm interested in meaning, so something that has meaning for me, whether it is religious meaning, or architectural meaning, or artistic meaning, or literature meaning, I like to start with something that has meaning.

Then I translate that semiotic aspect across the arts. That can also come from nature in a particular meaning. So in this composition the four species already gave me the four movements in my head that could be translated to conceptual issues in music. There wasn't a particular music methodology until I decided that these elements in

³¹ The interviews have been transcribed exactly: no mistakes where corrected.

nature can be linked quite profoundly to the magic square. Because numbers play a very important role in my works. And using the magic square I already had two extra-musical ideas. So that's why I said to you there where no mistakes. If I would intentionally change the pitch, to suit my ear, and didn't like the sound or the look of it, then I would adapt.

When listening to the composition, in an aural sense, rather than looking at the magic square and the notation, would that be a better way of understanding the work?

First of all, the sound dominates my composition, I got to know what I am hearing, and that what I put down on paper, is the audio and has to be the overriding factor of the composition. Because we all would like to have a kind of stimulus to begin with, the sound world is what matters most.

It so often happens that when a composition is written that the form is dependent on the previous material already used. How did your compositional techniques effect the independent development of the form?

Here we have to look at the methodology used to compose the work, in this case it is the magic square. First of all, the unifying factor is the way in which the row is constructed. But at the stage, for example, on page 14, the diatonic rising fifths, I was not thinking about writing that. When I write for two instruments I don't like to give preference, I like it to be an equal collaboration. So, there are times where the piano has role and there are times the cello has a role to play, but you might have noticed that these roles are taken over later, and not simultaneously. I'm conscious when I compose about vertical and linear writing. I must be honest; my writing is usually mostly linear writing. I'm not one for a set or row of harmony entities. It's more than that for me.

Looking at this composition now, the way I wrote and the way I write now is very different. I moved through passages and ideas quicker than what I do now. These days I try to stick more to a realm of sounds, and sound sections for longer. When you are a younger composer you think that, in a structural kind of sense, you don't have such an established sense of time passing, so a thematic or motivic sound section would look longer on paper but not a lot of time has passed. Rules in compositions are there to be broken, pushing the boundaries of

the rules I set out for myself. I never have written in a way that it becomes a formula or mathematical, it is only the stimulus the idea that makes way for the artistic side to do its work.

And ultimately it is the sound world that the composer composes that at the end is the rules and tactics a composer followed and created (Zaidel-Rudolph, 2016).

viii. Hendrik Hofmeyr (*Partita Africana*)

With this the focus on the subjective coherence between your subjective view on form and the rules tactics and strategies you used in this composition?

I would say that I have almost no rules, tactics or strategies when composing, but I would say that my strategies to compose is the creative proses. For instance, in the creative proses I would think about what am I trying to communicate/reproduce and that it is most of the time linked to the atmosphere/feeling and the 'motivic message'. This is most of the time linked to the specific medium, for example writing for piano or clarinet, violin, suggesting certain things. The tone colour of the instrument, the possibilities of playing techniques is another example.

Talking about experimental music, I have very little faith in art as an abstract thing, experimental art/music had always perceived itself as an abstract thing and I know in the visual art they based abstract things on music, so to say that music is an abstract thing. But I think it is a big mistake, because music is based on structure and form. But from me the masters of Western music composed music and did it so good to use form to compose music, but their intentions weren't to use the structure or form as the message or key importance for the work.

When I was a young composer I was interested in specific Avant Garde practices, but less in the way structure was used, and in my first piano work (*Nag*) I tried to incorporate strict fugal writing but it also sounds like a free fantasia work.

I tried to use a rigid rule when composing, but also to make it sound that is was freely created/composed. I feel that the more rules you set out to compose by the more you will try not to compose with in the set of rules you set out for the composition.

That's also one of the reasons why I love writing in canon style, because I find in canon writing not that much of a strict discipline, but it has strong motivic and structural

values. It represents a sort of discipline, almost like, if you want an intellectual value, but also a bridging between musicality and emotional discourse.

When reading your (Hendrik Hofmeyr's) programme notes to a work, it is quite structured and detailed. Is it your own analysis of the work?

I had no prior knowledge about how the work was going to get its gestalt; you go where the music takes you. But it is interesting to note how someone like Thomas Pooley criticised me on the detailed extent of my programme notes, through making the acceptance that I planned the whole composition before the time and then only filled in the music as I went along with the composition.

The programme notes are only used to serve as a guide to those who listen to the music or play the music. And I think the more you try to understand the music you are listening to or playing the deeper is your appreciation for the music, it is definitely in my case true.

In the programme notes of *Partita Africana* you mentioned that the four movements were written in reverse order. The last two originated as a commission, and the first two were added to the set. Did your tactics, strategies and rules for composing the first two differ from the last two?

The entire suite has a unified form, with a 'sober' atmosphere. And the plan was to stay in that idiom of writing.

What influenced you to compose in an African idiom?

I didn't want to portray any African music, I am only a person in Africa, and my response was to just write in an African style, not for any other reason. The idea of cumulating patterns of African music was one of the inspirations.

Were there rules you set out for yourself when composing the works with regard to integrating the four movements, to form an aesthetic function and organic form? What is your opinion on organic form in relation to *Partita Africana*?

Formalism is something I try to avoid but at the same time organic form of the motivic and thematic material very important. It creates intern relationships between

different ideas in the equation to the bigger work, that is on a musical level very important for me (Hofmeyr, 2016).

ix. Hans Roosenschoon (*Timbila*)

Every composer uses some sort of rule, tactic or strategy when composing. It can be a mathematical equation (numeric) or an aesthetic (philosophical idea). What were your rules, tactics and strategies (RTS) whilst composing *Timbila*?

My music is often inspired by an extra-musical idea, be it from literature, visual arts, philosophy or nature etc. Existing vocal or instrumental music also finds its place in my work.

These aforesaid inspirations lead to the development of an algorithm, which in turn leads to sketches followed by the work itself. I tend to develop a new algorithm for each piece, or at least try to expand on something I have done before. This has less to do with pursuing originality *per se*; rather it has to do with how one meets the challenges that a composition presents.

In *Timbila* the challenges were:

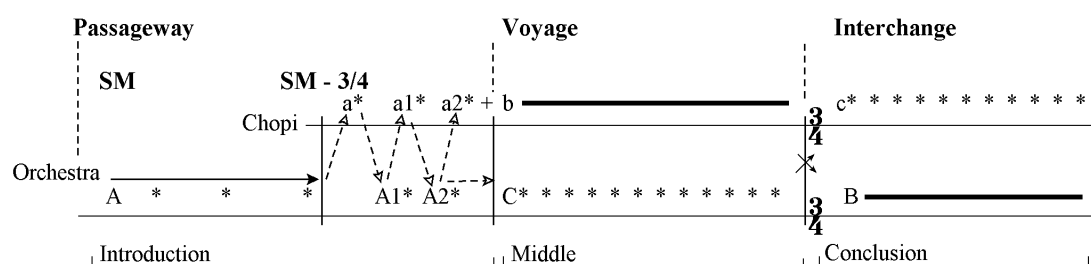
1. to write a work for two different ensembles that also have different cultural origins, the one (Western) following a score and the other (Chopi) performing intuitively
2. to accommodate diverse tuning systems, timbres, textures etc.
3. to use an existing composition (its structure, identifiable motifs/melodies and sonorities) by Venancio Mbande (his *Mtsitso Kenge*) as the basis of the new work, also as far as the latter's overall structure is concerned
4. to achieve a stylistic mixture between *avant garde* and traditional music.

From here on I reiterate what I have written elsewhere, but revised slightly. Apart from the fact that Mbande's music contains a very simple *do-re-mi-do* motif, it has an ABC form. The A section consists of a number of 'short starts' which the leader opens and which is answered by the rest of the group in unison/octaves. In the B section everyone is playing a cyclical pattern of 12 pulses together, and in the C- section, the *do-re-mi-do* motif becomes a prominent feature of the whole Chopi group, marking as it

does in this song, the end of every cycle. It is only the leader who now makes all sorts of excursions in an improvisatory manner. It is also interesting to note that this motif has a significant function as a kind of signal device in the music of the Chopi.

The structure of the music presented by the Western orchestra – simply put it is A-C-B form in relation to Mbande's music - finds passages in strict meter interchanging with *senza misura* ones all the time. This procedure makes it possible for the orchestra to play *colla parte* with the Chopi and because of the very strong rhythmic impact of the latter, the *senza misura* is often not perceived as such by the listener. While the Chopi is busy with their B-section, the symphony orchestra enacts the *do-re-mi-do* motif many times (as is indeed the case in the C-section of the Chopi music), and eventually the Western orchestra appear to convince the Chopi to follow suit. This is when the C-section of the Chopi starts. The orchestra now has floating material of which the texture gradually becomes louder and denser (refer to the double canon explained further on).

Here follows an overview that illustrates the above mentioned. The presence of the *do-re-mi-do* motif is marked by an asterisk.



What actually happens in the last section of the piece is a double canon in the orchestra based on notes that one can pick out after repeated listening to the Chopi song. The *do-re-mi-do* motif leads, as far as I am concerned, towards its logical conclusion in the rendering of *Frère Jacques* by the horns playing it *campana in aria* (that is to say whilst standing up). After this 'anthem' effect, references to the opening of the work, brings it to a gentle close.

Obviously, for practical reasons, the aforesaid procedure/structure was also necessary to guide the Chopi through their music and that of the symphony orchestra for the Chopi normally play independently in relation to their leader, Venancio Mbande.

Composers use many different processes to compose their music and in this composition (*Timbila*) there were different textures, sonorities and possibilities for controlled ad libitum combinations. Was this done consciously or unconsciously? Please elaborate on how you approached these different textures, sonorities and possibilities for controlled ad libitum combinations.

I discovered that buzzing and rattling qualities are important elements in African music and that create interesting sound textures. This is particularly the case in the music of the Chopi, mainly due to the construction of their instruments, their equidistant heptatonic tuning as well as their manner of executing a performance. This, to an extent, guided me in the choice of sonorities and textures of the symphonic part of *Timbila*.

But, as said earlier on, I deliberately wanted to combine a modernist sound world with what we as Westerners refer to as “world music”, in this case a very typical example originating from Mozambique. Furthermore, it was not possible for me to notate the music by Mbande (played by more or less 30 instruments on the recording of it made in 1973) in all its detail for the overall sound result is rather complex. I could only manage to extract some melodic patterns from it. I was also assisted by Andrew Tracey in this regard. Other than this, and unconsciously I think, I tried to create allusions of the Chopi sound in parts of my orchestration.

The controlled ad libitum (of which Lutoslawski is such a great master) is employed for more than one reason. On the one hand it is a technique that surfaced in the latter part of the 20th Century; on the other hand, it was a useful device in a situation where two ensembles are performing based on different premises e.g. notions of time and ensemble playing etc.

What was the most conscious process when you composed *Timbila*? And what part was the easiest to write? The Chopi sections or the orchestral part? Please elaborate extensively on this question.

The Chopi part was the easiest to notate. Firstly, I just gave it a presence in the score graphically and by notating an outline of the 12 pulses divided between 2 bars of $\frac{3}{4}$ meter that makes up the basic phrase structure of the Chopi music, including the do-re-mi-do motif – the musical kernel that plays such a generative role in the entire piece and that also acts as a signalling device. Secondly, there are cueing instructions for the conductor in order to align the different events. The ‘most conscious’ process was the

composition of the orchestral part. Here I would like to quote from my paper *Between heaven and earth: Cultural diversity in the music of Hans Roosenschoon* [(Roosenschoon, 2009)]. However, I am going to combine the remainder of Question 3 with my response to Question 4.

Did you plan the form and structure of the orchestral part and the Chopi part together? And if you did, how? And if it was your intention to merge the two sound worlds, what was your compositional process to merge the two sound worlds?

The following is a reduction of the *Introduction* (otherwise referred to as *Passageway*) of *Timbila*.

From the diagram above, a reduction of the score, it should be clear that the first bar is based on the up- and downward moving motif (and in this instance the full score makes it even clearer) and in my opinion tries to capture the ambience/timbre of the very high and undefined pitches that the Chopi instruments produce. Likewise, the third bar with its very low pitches captures the sound of the bass timbila (Chinzumana). The second bar takes the third interval (minor third this time) inverted, thus downward, the 4th bar repeats this idea but with a major 3rd interval.

After these introductory bars we find a woodwind passage consisting of chords that first change in timbre, but then change as sonorities. Looking at the top notes of these chords will reveal the slow progression from the note B, through to C-sharp, and then D. Yes! There it is again – the upward third. More obvious is the different trombone

entries, also based on the motif that coincides with these woodwind chords. And so the piece goes on.

Naturally, one can argue that to develop minute intervals or melodic ideas are the very ordinary processes followed in contemporary Western music. Furthermore, this is not really the kind of processes at work in the Chopi music!

Conclusion: Does this mean that the Chopi and Western components of *Timbila* are foreign to one another?

Also refer to the graph I compiled of the middle section (otherwise referred to as *Voyage*). This is provided as a separate document attached to my email. This gives an overview of how the *do-re-mi-do* motif makes an appearance continuously but texturally adjusted. The graph only gives the onset pitches of the motif. The double canon which takes place in the final section (*Interchange*) and that is superimposed over the Chopi music is in B major, the closest “key” to their tonal system!]

A1

A2

A3

Timbila (Conclusion: canon A in orchestra)

B1

B2

B3

Timbila (Conclusion: canon B in orchestra)

I think that from all these examples it should be evident that the composition of the work was driven by structural as well as textural principles. Finally, it is difficult to answer the last part of the question. In my programme note to *Timbila* I said that “It’s an attempt by one world of sound to embrace another, searching for, and hoping to strike points where they touch” [(Roosenschoon, 2009)].

That is to say that the intention was there to merge the two sound worlds. In retrospect I am unsure about this. The sound wall that Chopi music produced, as well as the sheer volume of their instruments, created huge challenges in terms of what we consider as good balance. On the other hand, a recording of the orchestral score by itself sounds incomplete without the Chopi (Roosenschoon, 2016).

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As ek nie was...

Die introspeksie van self en ander

**Armand J. Moolman
2016**

**Woorde:
Nathan Trantraal**

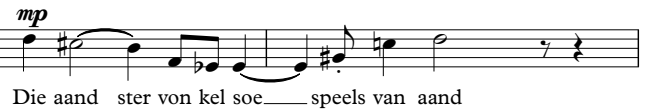


Duration: ca. 8 min

I Die Boodskapper

Armand J. Moolman
2016

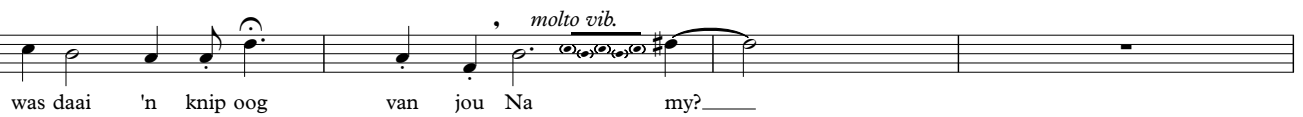
ad libitum, ma poco rubato (♩=69)



ad libitum, ma poco rubato (♩=69)

mp *p* *mp* *p* *p*

5



mp *mp* *mf* *p* *mp*

9



mp *p* *p*

14



mp *mp* *mp*

Oorvertel

17 *Andante rubato* (♩=60)

p *mp* *gliss.*

Her - in - ne - ringe

p

19

mp *p* *f* *mp* *3*

21 *mp* *3* *f* *Fine*

is soos 'n klomp kle - re in 'n kas.

mp *f* *fp* *mp* *Fine*

23 *f* *mf* *molto vib.* *mp* *p*

Jy stop net vol tot een - dag wan - neer jy suk - kel om

f *fff* *mp* *mp* *molto vib.*

25 die kas toe te kry. soos die kle - re wil

mp *pp* *mp* *p*

27 *mf* uit uit uit uit uit *mp* jy maak toe

30 *p* toe toe_ oe toe_ oe_ *p* maar hul le wil D.C. al fine

III Stille liefde

Rubato, Poco Adagio, dolcissimo (♩ = 46)

mf Djy ont - vlam my nie met ver -

Rubato, Poco Adagio, dolcissimo (♩ = 46)

mp sot - heid_ nie *mf* Wêk nooit_ droëme van ver - sot-

mp heid nie *mf* met ver - won - de - ring

mp *mf*

mf *gliss.* Inspire... *mp* *p* djy my heel - - laas nie.

p *p* *p*

IV As ek nie was...

23 **Adagio, Grave (♩ = 50)**

Adagio, Grave (♩ = 50)

p dolce

[Pluck strings in piano with finger nail]

pp

25

As

dim.

pp

pp

27

mf

ek nie was soos water van dood kon

p

pp

28 *mf* *gliss.* *mp*

ij you self nooit oor my werp soos brood so

[Pluck strings in piano with finger nail]

31 *mf* *f* *Andante mp*

keer ij you nie my duisternis nie nie! Liefde is nie haat

Andante mp

35 *mf*

nie want die liefde be - dek al - les

8va

38 *mf* *molto vib.* *f* *p dolce*

be halwe die liefde en die haat -

[Pluck strings in piano with finger nail]

Composition Portfolios

Armand J. Moolman

22744088

Masters in Composition

M.Mus.

Composition portfolio submitted in partial fulfillment of the requirements for the degree **Master of Music (Composition)** at the Potchefstroom Campus of the North-West University

Supervisor: Prof. Hannes Taljaard

November 2016

PREFACE

So many people have helped me on this incredibly interesting journey. The road has been tough with many unexpected tribulations, and yet I was never without support. Firstly, I would like to thank my family and friends for their support and unfailing optimism. I am indebted to Marilize Hattingh, Mari Heystek and Jaco Fourie for all the moral support and general mirth which helped me to keep things in perspective. I would also like to thank my parents for all their financial support and the trust they have in me to make a success of this journey. Lastly I would like to thank each musician and performer who premiered some of these compositions in this portfolio. It was an immense joy working with you and learning from you. I would like to mention the names of Olivier Barrier (Oboe), Magda de Vries (Marimba & percussion), Marilize Hattingh (Soprano), and my talented friends who sang so beautifully in the voice ensemble for *If I should Die* (a work for six voices).

Lastly, I would like to express my gratitude to Prof. Hannes Taljaard for his guidance and the enormous amounts of knowledge with which he supported me. This composition portfolio is accompanied with a mini-dissertation, to meet the requirements for the degree Master of Music (Composition). The curriculum structure is as follows: a mini-dissertation of 60 credits, and three composition portfolios of 40 credits each. The total credits add up to 180 credits.

When I set out to decide what to compose and for whom, I started to think about myself as a composer and performer, and more specifically how I as composer can learn whilst performing and working with performers. I then started to organise the portfolios according to the instruments I play, which is piano, clarinet and violin. Each of these instruments I can play on a high standard. Thus, it made the composition process a lot more interesting, because I could challenge myself in the compositional process as well as in the playing of the works, and then learn and develop my skills through the entire process.

In this introduction to the three portfolios I present an overview of the three portfolios and then discuss the compositions in each portfolio. I also give a few personal 'notes from my diary', about what I have learned while composing the works and working and performing with other performers. The challenges and possibilities [as composer/performer] are the focus point of the discussion of each composition.

1. COMPOSING FOR VOICE

I always found the human voice to be something that is very basic and natural, but still there are so many things the human voice can do apart from just singing words. When composing for the human voice, I found that there are technical challenges and possibilities that shaped my composition and the performances of each work. Composing for voice was an enormous challenge because I have not yet composed for voice in such a formal and technical demanding way. Firstly, the most challenging aspect of composing for voice, was the differences between the way I perceived the voice and the technical way professional singers perceive the voice. My best friend and I (Marilize Hattingh-Soprano) have performed together for many years. We have always worked on the basic repertoire: Schubert lieder, a lot of contemporary and church music. For me it was always just music that was meant to be sung. This picture changed very quickly when I had to compose a song cycle for piano and soprano and a work for six voices.

I began to recognise that the voice functions in ways that are very different from the violin or the clarinet. There are of course words that go with the pitches, but the matter is more complicated. Words in different registers and with different intervals unfold differently. This was one of my biggest challenges. Through my sketches I learned more about this unfolding of the words and how the meaning of the words and phrases change when they are not used in a correct register or with an unsuitable melisma.

1. *As ek nie was...* (Song Cycle)

These four songs depict the emotional struggle of a person that has lost someone dear. The four songs are written in a very free style, *ad libitum*, *ma poco rubato*, to give an emotional depth to each song that tells a short but intense emotional story. The piano and the soprano have to follow each other's musical elaboration on the music written, without any time signature, to convey a story-telling atmosphere. *Die Boodskapper* and *Oorvertel* are songs in which the singer remembers the person dear to her with longing. *Stille Liefde* and *As ek nie was...* enhances the remembrance by denying the other person's emotional hold on her. The statements in the last two songs are negative towards this other person the soprano; and this is a contradiction of the first two songs. The first two songs from this song cycle was performed at the yearly South African Music Concert in August 2016.

I chose to use the poems of Nathan Trantraal, who writes in what I think of as a Capetonian accent. This can be seen in the words given below. I chose to use this Capetonian accent because of the strength that lies in the depiction and pronunciation of the words. It gave me an extra-musical artistic tool to work with.

I. Die Boodskapper

Die aandstêr vonkel soe speels vanaand
Was daai 'n knipoog
Van jou
Na my?
Djy is soe naby
Soes die helderste stêr
Djy's die speed van 'n gedagte
Wag van my

II. Oorvertel

Herrinneringe is soos 'n klomp klere in 'n kas
Jy stop net vol tot eendag wanneer jy sukkel
Om die kas toe te kry soos die klere wil uit
Jy maak toe toe toe maar hulle wil uit uit uit
Maar hulle wil...

III. Stille Liefde

Djy ontvlam my nie met versotheid nie
Wêk nooit droëme van versotheid nie
Met verwondering
Inspire djy my
Helaas nie

IV. As ek nie was...

As ek nie was soos water van dood
Kon jy jouself nooit oor my werp soos
brood;
so keer jy jou nie my duisternis nie
Liefde is nie haat nie
Want die liefde bedek alles
Behalwe die liefde en die haat



As ek nie was...(Song Cycle), performance Aug 2016 (Marilize Hattingh-Soprano, Armand Moolman-Piano)

While composing and performing this song cycle there I identified a few challenges, which are listed below followed by the possibilities that I discovered through the challenges.

- The first challenge was the form-based choices I used. As composer I approach this song cycle in a contemporary way, where the music doesn't rely on having a fixed tonality as its foundation. The question I asked myself during the process was: What elements of prolongation are found within the music? These elements of prolongation, for this composition, are different stretches of chord based timbres. The second question was: What in the music helps the listener to mentally link the different sections of the music together? I created these links by using thematic and motivic material that is related, but which develop and remind the listener of timbres and chords that were heard earlier.
- Another challenge concerned the performance of the work. Because of the *ad libitum* style and the free floating rhythm, I had to construct a basis to make the

rubato and ad libitum style more understandable and clear to perceive. This challenge was met by the possibility of using longer stretches of the same chord progressions and repetition of similar rhythmic patterns.

- Another challenge was often that there was too much material in the piano accompanying part, when compared with basic melodic material in the soprano line. This was addressed by taking the highly dense rhythmic patterns and re-write it into more chordal formations. This also established a higher sense of stability in the tonality.

2. *If I should Die* (For six Voices)

This work for six voices, is a poem by Emily Dickinson that I set to music. The music has no tonic and shifts from one 'home' to another to convey the emotions of the words. The work can be divided into three sections. Each section plays in a different way on the words; this has mostly to do with the harmonies used.

If I should Die was also performed at the yearly South African Music Concert, held in August 2016.



If I Should Die Performance, Aug 2016

The challenges I experienced while composing this work for six voices and working with the performers meant to me that I had to avoid the trap of “customising” the music to suit the listeners by reducing and simplifying my musical ideas to become a simple “illustration” of the underlying story that is being sung about. I found this especially relevant when the music is being created as a self-sufficient work. I solved this problem by using a basic sarabande style. The tonality was based on the depiction of the words, and each section progresses into the tonality of the next sections. This made the work flow and created a basis for the tonality to be understood by performers and listeners.

COMPOSING FOR SOLO INSTRUMENTS

Before I started with this second part of the composition portfolio I read an article by Prof. Klatzow: The composer’s dilemma (Writing for the time and place and people [performers]). This article helped me, along with Prof. Hannes Taljaards advice. Through a seven month period of ‘starting to compose’ these pieces, I struggled to get performers to perform my works. I felt during this time that my composition portfolio had to become more personal. By taking this into account, I changed my portfolio to become works that I composed for performers I knew. In the article mentioned above, Klatzow’s conclusion offers a word of advice to young composers about composing for their time and place. Thus I started an important mind shift to write for people I know and myself as performer. Klatzow also talks about the importance of creating music based upon the possibilities of people at the right time and place. Then over a short period of one and a half months I composed the work *Estampes*, for oboe, clarinet and marimba. This was triggered by the notion of the collaborative aspects of the art of music. I thought that a composer needs to be ‘a step ahead’, and thus I developed exceptionally good relations with two performers from Pretoria. The biggest challenge with this work (*Estampes*) was to let performers accept the work into their hearts, minds and fingers. According to Klatzow that kind of music is likely to survive and withstand time.

Thus, in portfolio 2 I composed music for professional performers I know, and for myself to play. This lead me to the choices regarding the medium and the degree of difficulty. Writing for professional players and for myself proved to be a good way to show that my composing technique can be solidified to a standard that will challenge professional players, but still make musicians want to play the works.

1. *Estampes* (Oboe, Clarinet and Marimba)

This work is inspired by the industrial printing press that was used at the dawn of the Industrial Revolution. Using this as inspiration for the composition, I imagined the mechanics of the printing press as a technical aspect. The printing rhythm of the printing press and its staggered mechanics are portrayed in this work. It starts out with the oboe and clarinet, as the printing press warms up. The marimba then enters to give the pulse and expands the rhythmical drive of the printing press. Temple blocks then expands the sounds of the mechanics of the printing press.

This trio was composed to be played and explored in the ensemble. I had in mind to write for three instruments in an ensemble and allow each instrument to have its soloistic role. The sketching of this work started by getting to know and exploring each instrument individually, and understanding its soloistic possibilities before putting them into an ensemble. It can be seen in the composition that each instrument plays a soloistic role, and at the end contributes to make the composition an ensemble work.

Learning about the physical playing techniques of each instrument and the way sound is produced contributed to the way I approached the composition process of *Estampes*. I've found that the oboe can produce very interesting harmonics and multiphonics, but in some registers the sound changes when the duration of the harmonic or multiphonic is too long, and then again when it is too short the harmonic or multiphonic's sound quality disappears. Another aspect is that when using harmonics/multiphonics the tempo of the music also influences the harmonics/multiphonics. Thus, the material must be very clearly planned, according to the attacks and timing of the extended techniques used.

It was a challenge when we started to rehearse the trio. I was performing the clarinet part. Each role was important and this made it challenging to keep the character of the work. The soloistic roles each instrument made the performance of the work interesting but also challenging because in an ensemble context all the instrument can't be important all the time. The possibility to exchange roles and compliment the other instrument during its solo passage solved the challenge. Another challenge was that there were sections where the music had less rhythmical stability. Moving from a less rhythmical section into a very strict rhythmical section made the composition interesting but also very tricky to perform. These rhythmically unstable sections were later more clearly identified in the score by using dotted barlines. A performer following the

instrument's part, in that rhythmical unstable passage, has important thematic or motivic material. These passages marked with dotted barlines were then approached in a *rubato, ad libitum* style.

This work was also performed at the annual South African Music Concert in August 2016.



Olivier Barrier (Left), Magda de Vries (middle), Armand Moolman (Right) Backstage minutes before the performance of *Estampes*, Aug 2016 (Photo credits: Mareli Stolp).

2. THEARTIDOTE (Piano work- Four Cycles)

THEARTIDOTE piano cycle is a very dramatic and highly organised work that focuses on some of the techniques that George Crumb uses in his piano music. This composition depicts a poetic phrase that functions as an impetus for each cycle. The music is influenced by each of the poetic phrases, and tries to musically explain the phrase in a practical performance setting. The work is technical demanding and challenges the pianist to play the piano in a way different from the standard repertoire. Technical aspects such as stretches of the hand on the keys, and finding the essence of the pitch that is important in the chord, allow for artistic freedom. Glissandos in the piano over a range of registers and sudden changes in playing techniques allows this work to breathe and create an atmosphere that is very dramatic and personal.

Cycle I- *Your personality is not set in stone*

Cycle II- *Must the moon be full in order to be loved? And what of the heart?*

Cycle III- *Remember that everyone you meet is afraid of something, loves something and has lost something.*

Cycle IV- *I go through phases, some days I feel like the person I'm supposed to be and then some days, I turn into no one at all.*

Challenges in the compositional process:

- Finding a balance between detail concerning unity and form
- Working with diverse patterns of timbre and playing techniques
- Creating associations that links unity and form with timbres
- Finding the balance between a motivic link that leads to an important statement, that is either thematic or has a specific timbre relation

These four challenges were solved by composing at the piano, and recognising the effects by ear. In this way I could understand the difference between the different polarities that constitutes the music. When a theme is played the subsequent material must support the theme, and must be either complimentary to the theme or contribute to the sound world of the theme.

What I have learned whilst composing this work, can be summarised as follows.

- The piano can be played in very different ways and this brings about a large amount of different playing techniques. Combining extended techniques with normal playing, and to develop a mixture of sound worlds, is an interesting possibility.
- How to come up with a basic theme and to develop the theme through its motives and then combining it with a secondary theme/motive.
- Working with a few set classes and extending them into a interesting progressions that allow the listener to have a basis to work/listen from.
- Understanding your own playing technique and taking other performers' playing technique and their challenges into consideration while composing

I now understand that compositions which are compatible with the tastes, techniques, and instrumentation of performers will be performed sooner and more often than these geared to mislead performers and dissatisfy an audience.

COMPOSING FOR ENSEMBLE AND ORCHESTRA

Three compositions that constitute this portfolio are *Kosmosis*, *String Quartet No.2* and *The Temptation*.

These compositions were written for me as composer and performer to learn how to work with large instrumentation, musical material, and how to explore more interesting sound worlds. Portfolio III is very different and unique in the sense that my style of writing in these three compositions was geared towards developing a different compositional technique for each work. These three compositions were composed over a two year span. I worked on these compositions very systematically, rendering sketches throughout the entire two years.

1. *Kosmosis* (Ensemble work)

Kosmosis is a composition for Flute, Clarinet in B-flat, Violin, Cello and Piano. The very first sketches of this work started out with a basic but fascinating descending motif: B-flat, A, F-sharp. This three note motif can be found throughout the entire composition, transposed, retrograded or inverted. The goal of this composition was to create a sound world that is very clean and rhythmically on-point. The best way to describe the sound world at the start of this work is a crystal glass, when you hit it, the word 'ping' comes to mind. In bar 16 this can be heard when the piano enters. This material then develops into a different style. Ravel and Brahms were the inspiration behind the second part of this work. Traces of my inspiration can be heard in bars 21-32 & 61-81. These 'Ravel and Brahms moments' are interrupted by the clean and rhythmically on-point sound world.

The musical space is broad and sometimes limited to a very high register or very low register. There is a very definite distinction between foreground material, middleground material and background material. At the beginning of the composition one hears only foreground material, which later on becomes the middle-ground material while the cello & clarinet take the foreground along with the flute. The principle behind this involves the relationships between pairs of instruments. Each pair of instrument coincides with another pair of instruments to either play the role as foreground, middleground or

background. The piano interrupts these roles to give a wider spectrum of fascinating sounds.

During my graduate years I composed a similar work that was performed by an ensemble. What I have learned by composing and working with performers on an ensemble composition of this sort is the following.

- Make use of interesting playing techniques, but keep it to a limited amount at any time. Think well about this: when too many extended techniques are played or happening at the same time, the performers as well as the listeners get exhausted. The ear gets used to this mayhem and the work becomes less interesting.
- Know the technical challenges of the ensemble. This can impact the performance and influence the entire ensemble's way of playing.
- Make use of sufficient descriptions in the score and parts: this will help make the rehearsals easier.

2. String Quartet No.2

This string quartet is based on the book that Oprah Winfrey wrote, *What I Know for Sure*. I structured each movement according to a chapter in the book.

- i. Resilience*
- ii. Connection*
- iii. Gratitude*
- iv. The time that is given to you*

The work is based on a series of string playing techniques, which focus on different aspects of sound production: pizzicatos, harmonics [used extensively], dynamics, contrasting material and the use of different registers and timbres. The sketches and the process behind working with the sketches of the string quartet were done very intensively and thorough. I planned to use two set classes, a single hexachord that contains the notes C#-G-F-G#-C-D, and the Octatonic mode that is also used extensively. Small cells of motives and themes develop bit by bit, and later on they are heard in their fully developed states.

The atonal writing of this work was one of the challenges, and this gave me an almost extra-musical motivation to write rhythmically repetitive music. This repetitive rhythmical writing also contributes to the dimensions and activity of the pulse and impulses that can help the listener to have a sense of stability. The musical space in the beginning of this work is very limited, but later on it develops into a very broad spectrum of high and low sounding pitches. Natural harmonics as well as artificial harmonics plays a big part in shaping the colour of the sound. The colour of the sound also has a linguistic role, shaping how the compositional language is perceived.

The challenges as composer and performer were the following.

- Composing a work that meets the standard of existing string quartet repertoire.
- Working with a lot of material, and organising it into a systematically well thought through composition.
- Working with a large range of extended techniques, and exploring different ways of introducing these extended techniques in the score.
- Understanding the playing techniques used to successfully play/execute certain passages in a performance environment.

3. *The Temptation* (Orchestral work)

The inspiration behind this work is very personal, and among this the quote by Henry Ward Beecher "*No man knows what he will do till the right temptation comes*" gave me something to work with. This orchestral work is a very dramatic work and sketches a veiled picture of how a person goes through temptations and sometimes is overthrown as human being by the temptations.

The work is divided into two movements, and the first movement is more comprehensively and 'larger' than the second movement. The second movement can be seen/heard as an afterthought. The technical stimulus of this work started out at the piano. The motive, as seen in the example below, came to me while improvising at the piano. It then found its formal gestalt in the composition as a link between important thematic material.



In this orchestral work the musical language is very stark and straightforward. Chromatic tonal functions are used such as altered chords, modulations [directly], chromatic nonchord tones and diatonic vocabulary. Chromatic median relationships and doubly chromatic median relationships are spread throughout the entire composition.

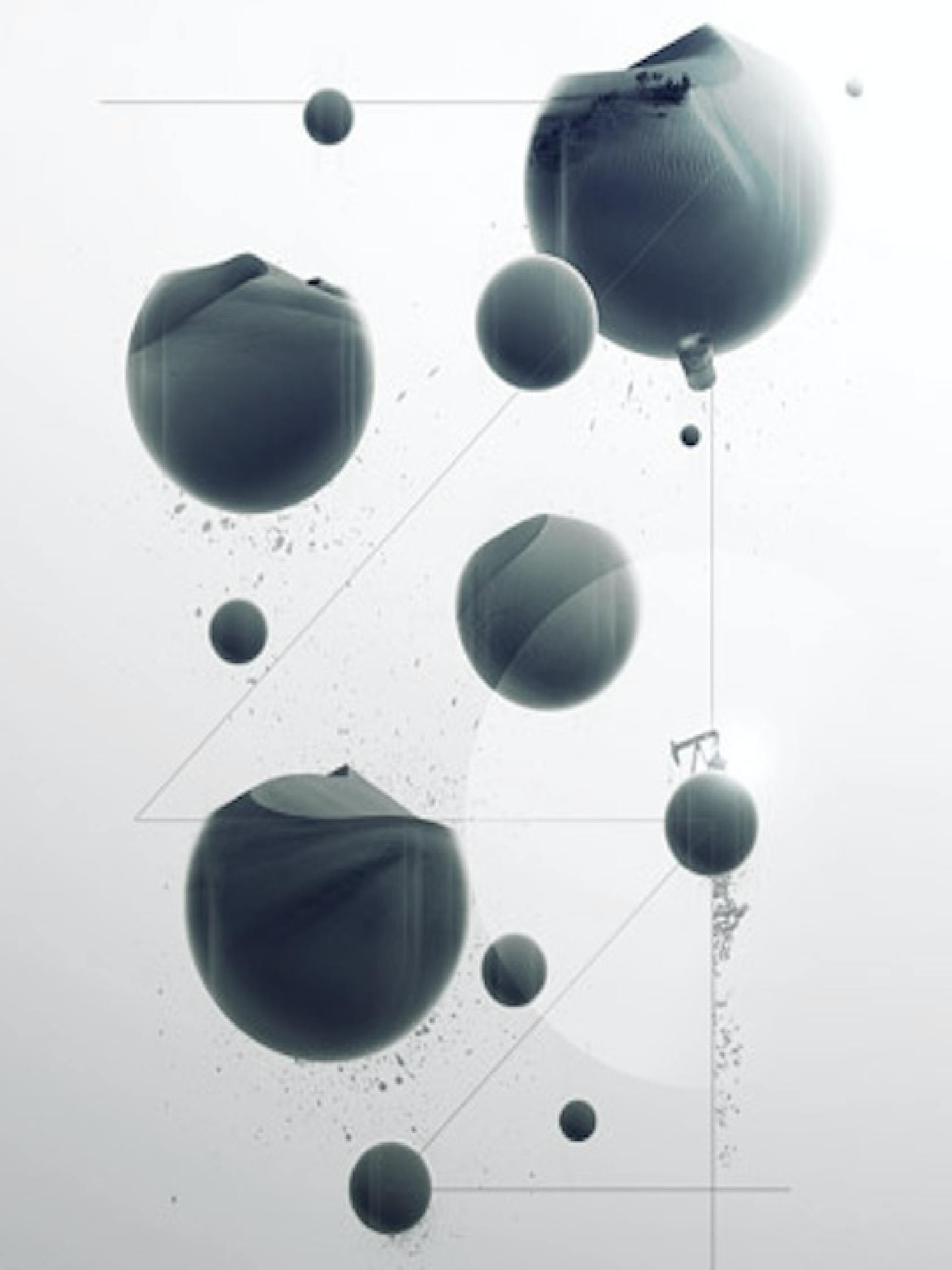
One of my own remarks in my sketches was that the chordal harmony is subjected to variations of register, dynamics and attacks. Adding notes to the basic chord can be seen as a change to modulation to link one section with another.

The musical space is populated by techniques also used by Debussy and Ravel. I wanted to create broad and thick sound structures that change into very soft and thinly spread timbres.

During the composition process of *The Temptation* there were a few aspects I focused on and did differently than in an orchestral work I composed earlier in my composition studies. I've approached this orchestral work with insight that I acquired by working and learning from working with the Cape Town Philharmonic orchestra that played my previous orchestral work.

The composition process and the aspects that I focused on in this orchestral work are pointed out below.

- During the previous orchestral work, the thematic material along with the change in colors was too sudden and too dim, and was impossible to recognize immediately. I focused on working with longer stretches of material, that are more specific and self-explanatory. For example, I used material in the same form in different instrument groupings.
 - Another aspect is related to accompaniment, making the background material less detailed, for the thematic material to flourish. But I also wanted to keep the accompaniment's color interesting, and I had to think of ways of spreading it over the entire orchestra.
 - The use of precise dynamic markings and the use of more dynamic markings than what I was used to, in order to give a clear indication to the orchestral players.
 - Keeping extended techniques and harmonics to the minimum and focusing on the basics. The use of too many extended techniques taught me that the orchestral sounds easily become too light or too heavy for my taste, or the sounds and timbres distances themselves too far away from the basic gestalt of the composition.
 - Using more percussion gives the composition more textural interest and drive in the rhythmical aspects.
 - Thinking about the orchestra as an ensemble, where the foreground, middleground and background are always on the move and change roles throughout.
-



Estampes
for Oboe, Clarinet
and
Marimba

Armand J. Moolman
2016

Composed for:
Olivier Barrier
Magda de Vries
Armand J. Moolman

Duration: ca. 6 min

Performance instructions:

The bars marked with dashed lines are to be played "*very freely*" (*v.f.*). The bars marked with solid lines are to be played "*Exactly*" (*ex.*)

This is marked in the score wherever it is applicable.

Sharpes and Flates which fall in a bar with a Time Signature in front, these sharpes and flates are applicable throughout the entire bar.

Wherease, Sharpes and Flates that is indicated in a bar where there is no Time Signature, these sharpes and flates only count for the note assigned to.

Score in C

Oboe

Suggestions for the various harmonics and multiphonics, alternate fingerings:

10

Überblaseffekte
Effects using over-blowing

The musical notation shows a sixteenth-note scale in G major (G4-A4-B4-C5-D5-E5-F#5-G5) with various articulation techniques indicated by symbols above the notes:

- Normaler Griff, wenig Lippendruck (normal fingering, slight lip pressure):** Indicated by a wavy line and a small 'x' above the first G4.
- Viel Lippendruck (much lip pressure):** Indicated by a small 'x' above the second A4.
- Wenig Lippendruck (slight lip pressure):** Indicated by a small 'x' above the third B4.
- Normaler Griff, starker Lippen- und Atemdruck (normal fingering, strong lip and breath pressure):** Indicated by a small 'x' above the fourth C5.
- Normaler Griff, wenig Lippendruck (normal fingering, slight lip pressure):** Indicated by a wavy line and a small 'x' above the fifth D5.
- Normaler Griff, starker Lippen- und Atemdruck (normal fingering, strong lip and breath pressure):** Indicated by a wavy line and a small 'x' above the sixth E5.

The fingering diagrams below the notation show the fingerings for each note:

- Normaler Griff, wenig Lippendruck:** G4 (1), A4 (2), B4 (3), C5 (4), D5 (5), E5 (1), F#5 (2), G5 (3).
- Viel Lippendruck:** G4 (1), A4 (2), B4 (3), C5 (4), D5 (5), E5 (1), F#5 (2), G5 (3).
- Wenig Lippendruck:** G4 (1), A4 (2), B4 (3), C5 (4), D5 (5), E5 (1), F#5 (2), G5 (3).
- Normaler Griff, starker Lippen- und Atemdruck:** G4 (1), A4 (2), B4 (3), C5 (4), D5 (5), E5 (1), F#5 (2), G5 (3).
- Normaler Griff, wenig Lippendruck:** G4 (1), A4 (2), B4 (3), C5 (4), D5 (5), E5 (1), F#5 (2), G5 (3).
- Normaler Griff, starker Lippen- und Atemdruck:** G4 (1), A4 (2), B4 (3), C5 (4), D5 (5), E5 (1), F#5 (2), G5 (3).

Marimba + 4 Temple Blocks

Note heads with a cross need to be played with the shaft of the mallet.

Please play with four medium hard mallets. The sound must be strong but also have a lasting bass resonance.

Estampes

(Oboe, Clarinet in A, Marimba, Temple Blocks)

Armand J. Moolman
2016

3

$\text{♩} = 60$

Oboe
mf *p* *ff* *mf* *p* *sfz* *ff* *mf* *sf* *sf* *p* *sfz-pp* *f* *sf* *sf*

Clarinet in A
pp *mp* *p* *sfz* *p* *sf* *pp* *mp* *mf* *f*

Temple Blocks
pp

Marimba

6 *ex.* *mp* *p* *3* *mp* *mf* *f* *f* *f* *molto vib.* *mf* *f* *3*

Cl. *p* *Bisbl.* *mp* *mf* *f* *f* *f* *f* *3* *Bisbl.*

T. Bl. *f* *f* *mf* *3*

Mar. *p* *3* *3* *f* *f* *f* *mp* *f* *5*

10 *ex.* *mf* *3* *mf* *Bisbl.* *fp* *fp* *f* *p* *ff* *p* *1*

Cl. *mf* *3* *mf* *mf* *f* *f* *f* *p* *ff* *p* *1*

T. Bl. *mf* *mf* *cresc.* *f*

Mar. *f* *mf* *cresc.* *f*

This musical score is for measures 21-24 of 'The Swan' from Swan Lake, featuring the Oboe (Ob.), Clarinet (Cl.), Trombone (T. Bl.), and Maracas (Mar.). The score is in 4/4 time and consists of four measures.

Measure 21: The Oboe plays a half note G4 (marked *sfz*) followed by a quarter note A4 (marked *f*). The Clarinet plays a half note F4 (marked *fp*) followed by a quarter note G4 (marked *fp*). The Trombone plays a half note G4 (marked *f*). The Maracas play a half note G4 (marked *f*).

Measure 22: The Oboe plays a half note A4 (marked *f*) followed by a quarter note B4 (marked *f*). The Clarinet plays a half note G4 (marked *f*) followed by a quarter note A4 (marked *f*). The Trombone plays a half note A4 (marked *f*). The Maracas play a half note A4 (marked *f*).

Measure 23: The Oboe plays a half note B4 (marked *mf*) followed by a quarter note C5 (marked *tr*). The Clarinet plays a half note A4 (marked *mp*) followed by a quarter note B4 (marked *mp*). The Trombone plays a half note B4 (marked *mf*). The Maracas play a half note B4 (marked *mf*).

Measure 24: The Oboe plays a half note C5 (marked *tr*) followed by a quarter note D5 (marked *tr*). The Clarinet plays a half note B4 (marked *mp*) followed by a quarter note C5 (marked *mp*). The Trombone plays a half note C5 (marked *mf*). The Maracas play a half note C5 (marked *mf*).

30

Ob. *mf* *p* *mf* *mf* *moltovib.* *mf* *Bisbl.* *sfz* *p* *Bisbl.*

Cl. *mf* *mp* *mf* *mp* *sfz* *p*

T. Bl. *p* *mp*

Mar. *mf* *p* *mf* *mp* *sfz* *p* *cresc.*

v.f. *Meno mosso* *accel.* *A tempo*

Gliss.

36

Ob. *f* *mf* *mp* *mf* *f* *sfz* *f* *f*

Cl. *f* *mp* *p* *mp* *mp* *f* *fp* *fp* *fp* *f*

T. Bl. *f* *ff* *ff* *f*

Mar. *f* *mp* *p* *p* *f*

44

Ob. *f* *p* *mf* *sf* *sf* *p* *ff* *p* *ff* *p* *Bisbl.*

Cl. *3* *mp* *mf* *fp* *fp* *f* *ff* *p*

T. Bl. *mf* *mf* *cresc.* *f* *f* *ff* *mf*

Mar. *mp* *f* *mp* *mf* *f* *mf*

Rubato, molto rit.

Con moto ♩ = 100

A tempo

[illegible]

This musical score is for measures 63 through 72 of 'The Swan' from 'The Nutcracker'. It features four staves: Oboe (Ob.), Clarinet (Cl.), Trombone (T. Bl.), and Maracas (Mar.).

- Ob.:** Measures 63-64 are marked *sf*. Measure 65 has a *mf* ³ marking. Measures 66-67 are marked *mf*. Measure 68 is marked *sf*. Measures 69-70 are marked *mf* with a ² marking. Measures 71-72 are marked *mf*. Measures 73-74 are marked *fp* with a ¹ marking. Measures 75-76 are marked *fp* with a ¹ marking. Measures 77-78 are marked *sf* and *mp*.
- Cl.:** Measures 63-64 are marked *mf* ³. Measures 65-67 are marked *p*. Measures 68-69 are marked *mf*. Measure 70 is marked *sf*. Measures 71-72 are marked *mf*. Measures 73-74 are marked *fp*. Measures 75-76 are marked *fp*. Measures 77-78 are marked *sf* and *mp*.
- T. Bl.:** Measures 63-64 are marked *mf*. Measures 65-67 are marked *mf*. Measures 68-69 are marked *mf*. Measures 70-71 are marked *mf*. Measures 72-73 are marked *mf*. Measures 74-75 are marked *mf*. Measures 76-77 are marked *mf*. Measures 78-79 are marked *mf*.
- Mar.:** Measures 63-64 are marked *mp*. Measures 65-67 are marked *mf*. Measures 68-69 are marked *mf*. Measures 70-71 are marked *mf*. Measures 72-73 are marked *mf*. Measures 74-75 are marked *mf*. Measures 76-77 are marked *mf*. Measures 78-79 are marked *mf*.

The score includes various musical notations such as dynamics (*sf*, *mf*, *p*, *fp*, *mp*), articulation (*acc.*, *sf*, *fp*), and performance instructions (*acc.*, *sf*, *fp*, *mp*). The key signature is one flat (B-flat), and the time signature is 2/4.

Full Score

If I Should Die

for six voices

Armand J. Moolman
2015

Words by:
Emily Dickinson



Duration ca. 3 min

If I Should Die

Emily Dickinson

Armand J. Moolman

2015

Lento Maestoso (♩=60)

Soprano *mf* If I should die, And you should live, And time should gur-gle on, *mp* and morn should beam,

Mezzo-soprano *mf* If I should die, And you should live, And time should gur-gle on, *mp* and morn should beam,

Alto *mf* If I should die, And you should live, And time should gur-gle on, *mp* and morn should beam,

Tenor *mf* If I should die, And you should live, And time should gur-gle on, *mp* and morn should beam,

Baritone *mf* And time should gur-gle on,

Bass *mf* And time should gur-gle on,

Rehearsal Piano **Lento Maestoso** (♩=60)

8

S. *mp* *cresc.* *mf* If birds should build as ear ly, And

M-S. *mf* *mp* *cresc.* *mf* As it has us-ual done; If birds should build as ear ly, And

A. *mp* *mf* *mp* *cresc.* *mf* And noon should burn, As it has us-ual done; If birds should build as ear ly, And

T. *mp* *mf* *mp* *cresc.* *mf* And noon should burn, As it has us-ual done; If birds should build as ear ly, And

Bar. *mp* *mf* *mp* *cresc.* *mf* And noon should burn, As it has us-ual done; If birds should build as ear ly, And

B. *mp* *mf* *mp* *cresc.* *mf* And noon should burn, As it has us-ual done; If birds should build as ear ly, And

Pno.

15

S. bees as bust - ling go,

M-S. bees as bust ling go, One might de - part at o-ption From en ter prise be - low.

A. bees as bust ling go, One might de - part at o-ption

T. bees as bust - ling go, One might de - part at o-ption

Bar. bees as bust - ling go, One might de - part at o-ption From en ter prise be - low

B. bees as bust - ling go,

Pno.

21

S. *mf* 'Tis sweet to know that stocks will stand When we with dai-sies lie, That com merce will con tinue, And *mf*

M-S. *mf* 'Tis sweet to know that stocks will stand That com merce will con tinue, And *mf*

A. *mf* 'Tis sweet to know that stocks will stand That com merce will con tinue, And *mf*

T. *mf* 'Tis sweet to know that stocks will stand That com merce will con tinue, And *mf*

Bar. *mf* 'Tis sweet to know that stocks will stand When we with dai-sies lie, That com merce will con tinue, And *mf*

B. *mf* 'Tis sweet to know that stocks will stand That com merce will con tinue, And *mf*

Pno.

27

S. trade as bris - kly fly. And make the part - ing tran - quil.

M-S. trade as bris - kly fly. And make the part - ing tran - quil.

A. trade as bris - kly fly. And make the part - ing tran - quil.

T. trade as bris - kly fly. And make the part - ing tran - quil.

Bar. trade as bris - kly fly. And make the part - ing tran - quil.

B. trade as bris - kly fly. And make the part - ing tran - quil.

Pno.

31

S. The gentle men so spring-ly con - duct the pleas-ing scene.

M-S. And keep the soul se - rene, The gentle men so spring-ly con - duct the pleas-ing scene.

A. The gentle men so spring-ly con - duct the pleas-ing scene.

T. The gentle men so spring-ly con - duct the pleas-ing scene.

Bar. And keep the soul se - rene, The gentle men so spring-ly con - duct the pleas-ing scene.

B. The gentle men so spring-ly con - duct the pleas-ing scene.

Pno.

The Temptation

"No man knows what he will do till the right temptation comes"-Henry Ward Beecher

Armand J. Moolman
2015-2016



Score in C

Armand J.Moolman
2015- 2016

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rit. Flz. nat. Andante ♩=80

Fl. 1 37 *p* *mp*

Fl. 2 *p* *mp*

Ob. 1 *mf* *mp*

Ob. 2 *mp* 3 3 *mp* 3

C. A. *mf* solo 5 *mp* 3 3 *mp* 3

Cl. *mp* 3 3 *mp* 3

Cl. *mp* 3

B. Cl.

Bsn. 1

Bsn. 2

Hn. 1 con sord. *mp*

Hn. 2 con sord. *mp*

Tpt. 1 con sord. *mp*

Tpt. 2 con sord. *mp*

Tbn. 1 con sord. *mp*

Tbn. 2 con sord. *mp*

Tba. *mp*

rit. Andante ♩=80

Timp. *mp*

T.-t. *p* *p* *p* *p* *p* *p*

T. Bl. *mf* *f* 3

Tub. B.

Orch. Bells *f* 3

Mar.

Hp. *f* 5 *mp* *p* *mp* *mp* *p* *mp* *mp* *p* *mp* *mp* *p* *mp*

rit. Andante ♩=80

Vln. I *f* *p* *mf* *p* *f* *p* *mp* *p* *cresc.* *mf* *p* *mp*

Vln. II *f* *p* *mf* *p* *f* *p* *mp* *p* *cresc.* *mf* *p* *mp*

Vla. *f* 3 *p* *mf* *p* *f* *p* *mp* *p* *cresc.* *mf* *p* *mp*

Vc. *f* *p* *mf* *p* *f* *p* *mp* *p* *cresc.* *mf* *mp* *mp*

Cb. *f* *p* *mf* *p* *f* *p* *mp* *p* *cresc.* *mf* *mp* *mp*

47

Fl. 1 *mp* 3 *cresc.* *f* *mf dolce* *mp*

Fl. 2

Ob. 1 *p* 3 *cresc.* *f*

Ob. 2 *mp cresc.*

C. A. *mp cresc.* *f* *mf espress.* *mp*

Cl. *p* 3 *mp cresc.* *f* *f espress.*

Cl.

B. Cl. *mp cresc.* *f* *f espress.*

Bsn. 1 *f dolce* 3 3 *ff* 5 *sf* *p*

Bsn. 2 *f dolce* 3 3 *ff* 5 *sf* *p*

Hn. 1 *nat.* *ff* *p*

Hn. 2 *nat.* *ff* *p*

Tpt. 1 *p* 3 *nat.* *ff* *p*

Tpt. 2 *nat.* *ff* *p*

Tbn. 1 *nat.* *ff* *p*

Tbn. 2 *nat.* *ff* *p*

Tba. *ff* 5 *sf* *p*

Timp. *ff* 5 *sf*

T.-t. *p* *f*

T. Bl. *f*

Tub. B. *f*

Orch. Bells 3

Mar.

Hp. *mp* *p* *mp* *mp* *p* *mp* *mp* *p* *mp* *gliss.* *mf* *ff*

Vln. I *mp* *mp* *mp* *mp* *p* *p* *p*

Vln. II *mp* *mp* *mp* *mp* *p* *p* *p*

Vla. *mp* *mp* *mp* *mp* *p*

Vc. *mp* *mp* *mp* *mp* *p* *ff* 5 *sf*

Cb. *mp* *mp* *mp* *mp* *p* *ff* 5 *sf*

57

Fl. 1 *mp* *fp*

Fl. 2

Ob. 1 *mf*

Ob. 2 *mf* *espress.*

C. A. *mp* *fp* *mf* *espress.*

Cl.

Cl.

B. Cl. *mp* *fp* *mf*

Bsn. 1 *mf* *espress.*

Bsn. 2

Hn. 1 *mp* *fp*

Hn. 2 *fp*

Tpt. 1 *mp* *fp*

Tpt. 2 *mp* *fp*

Tbn. 1 *fp*

Tbn. 2

Tba.

Timp. *molto rit.* *ff*

T.-t. *mf* *f*

T. Bl. *mf* *mf*

Tub. B. *mf* *f* *f*

Orch. Bells

Mar.

Hp. *ff* *ff*

Vln. I *p* *p* *p* *p* *p* *molto rit.* *pizz.* *ff*

Vln. II *p* *p* *p* *p* *p* *molto rit.* *pizz.* *ff*

Vla. *p* *cresc.* *mf* *ff* *pizz.*

Vc. *p* *cresc.* *mf* *ff* *pizz.*

Cb. *p* *cresc.* *mf* *ff* *pizz.*

[illegible]

78 nat.

Fl. 1 *p*

Fl. 2 *p*

Ob. 1 *p*

Ob. 2 *p*

C. A. *p*

Cl. *p*

Cl. *p*

B. Cl. *p*

Bsn. 1 *p*

Bsn. 2 *p*

Hn. 1

Hn. 2

Tpt. 1 *p*

Tpt. 2

Tbn. 1

Tbn. 2

Tba.

Timp. *pp*

T. t. *p*

T. Bl. *mp* *p*

Tub. B. *p*

Orch. Bells *mf*

Mar. *p* *p*

Hp. *p* *p* *p* *p*

Vln. I *pp* *pp* *pp* *pp*

Vln. II *pp* *pp* *pp* *pp*

Vla. *poco cresc.* *pp* *pizz.* *pizz.*

Vc. *poco cresc.* *pp* *pizz.* *pizz.*

Cb. *pp* *p* *p* *p*

[illegible]

115

Fl. 1 *f* *nat.* *f* *3* *sf* *p* *sf* *p* *f*

Fl. 2 *f* *3* *sf* *fp* *p* *sf* *p* *f*

Ob. 1 *f* *sf* *fp* *p* *sf* *p* *f*

Ob. 2 *sf* *fp* *p* *sf* *p* *f*

C. A. *f* *sf* *fp* *p* *sf* *p* *f*

Cl. *f* *3* *sf* *fp* *p* *sf* *p* *f*

Cl. *f* *3* *sf* *fp* *p* *sf* *p* *f*

B. Cl. *f* *3* *ff marcato* *5* *sf* *fp* *p* *sf* *p* *f*

Bsn. 1 *f* *ff marcato* *5* *sf* *fp* *p* *sf* *p* *f*

Bsn. 2 *mf cresc.* *f* *ff marcato* *5* *sf* *fp* *p* *sf* *p* *f*

Hn. 1 *f* *sf* *mf* *ff* *sf*

Hn. 2 *f* *sf* *mf* *ff* *sf*

Tpt. 1 *f* *3* *sf* *mf* *ff* *sf*

Tpt. 2 *f* *3* *sf* *mf* *ff* *sf*

Tbn. 1 *f* *3* *sf* *mf* *ff* *sf*

Tbn. 2 *f* *3* *sf* *mf* *ff* *sf*

Tba. *f* *3* *sf* *mf* *ff* *sf*

Timp. *mf* *ff marcato* *5* *sf* *mf* *arco 6* *f*

T. t. *mf* *ff* *f* *f* *mf* *mp*

T. Bl. *f*

Tub. B. *ff* *ff* *f* *solo* *f*

Orch. Bells

Mar. *f* *ff* *ff*

Hp. *f* *gliss.* *ff* *f* *gliss.*

Vln. I *pizz.* *mf* *pizz.* *mf* *arco* *f* *3* *ff* *f* *3* *f* *sf* *arco* *sf*

Vln. II *pizz.* *mf* *pizz.* *mf* *arco* *f* *3* *ff* *f* *3* *f* *sf* *arco* *sf*

Vla. *mf* *mf* *f* *3* *ff* *f* *3* *f* *arco 6* *f* *mp* *sf*

Vc. *mf* *pizz.* *mf* *arco* *f* *3* *ff marcato* *5* *sf* *mp* *f* *pizz.* *f* *arco* *f* *6* *mp* *sf*

Cb. *mf* *3* *ff marcato* *5* *sf* *mp* *f* *f* *6* *mp* *sf*

156

Fl. 1 *mp* *mf* *sf* *p* *sf* *p* *f*

Fl. 2 *mp* *mf* *sf* *fp* *p* *sf* *p* *f*

Ob. 1 *mf* *mf* *sf* *fp* *p* *sf* *p* *f*

Ob. 2 *mp* *mf* *sf* *fp* *p* *sf* *p* *f*

C. A. *mf* *mp* *mf* *sf* *fp* *p* *sf* *p* *f*

Cl. *mf* *mf* *mp* *sf* *fp* *p* *sf* *p* *f*

Cl. *mf* *mf* *mp* *sf* *fp* *p* *sf* *p* *f*

B. Cl. *mf* *mf* *mp* *ff marcato* *sf* *fp* *p* *sf* *p* *f*

Bsn. 1 *p* *mf* *mf* *mp* *ff marcato* *sf* *fp* *p* *sf* *p* *f*

Bsn. 2 *p* *mf* *mf* *mp* *ff marcato* *sf* *fp* *p* *sf* *p* *f*

Hn. 1 *mf* *p* *sf* *mf* *ff* *sf* *f*

Hn. 2 *mf* *p* *sf* *mf* *ff* *sf* *f*

Tpt. 1 *mf* *p* *p* *sf* *mf* *ff* *sf* *f*

Tpt. 2 *mf* *p* *p* *sf* *mf* *ff* *sf* *f*

Tbn. 1 *mf* *p* *sf* *mf* *ff* *sf*

Tbn. 2 *mf* *p* *sf* *mf* *ff* *sf*

Tba. *mf* *p* *sf* *mf* *ff* *sf*

Timp. *ff marcato* *sf* *mf* *f*

T. t. *ff* *f* *f* *mf* *mp*

T. Bl. *f*

Tub. B. *mf* *ff* *ff* *f* *solo* *f*

Orch. Bells

Mar. *f* *ff* *ff* *ff*

Hp. *f* *mp* *mf* *mf* *mp* *f* *sf*

Vln. I *mp* *mf* *mf* *mp* *ff* *f* *f* *f* *f* *sf*

Vln. II *mp* *mf* *mf* *mp* *ff* *f* *f* *f* *f* *sf*

Vla. *mp* *mf* *mf* *mp* *ff* *f* *f* *f* *f* *sf*

Vc. *mp* *mf* *mf* *mp* *ff marcato* *sf* *f* *pizz.* *f* *arco* *f* *mp* *sf*

Cb. *mp* *mf* *mf* *mp* *ff marcato* *sf* *f* *pizz.* *f* *arco* *f* *mp* *sf*

196 **Meno mosso, Lontano mancando** $\text{♩} = 50$

Fl. 1 *pp* *pp* *p* *p*

Fl. 2 *pp* *pp* *p* *mp*

Ob. 1

Ob. 2

C. A.

Cl. *pp* *pp* *pp* *cresc.* *mp* *mp*³

Cl. *pp* *pp* *pp* *cresc.* *mp* *mp*³

B. Cl. *pp* *pp* *pp* *cresc.* *mp*

Bsn. 1

Bsn. 2

Hn. 1 *p* *p*

Hn. 2 *p* *p*

Tpt. 1 *p* *p*

Tpt. 2 *p* *p*

Tbn. 1 *p* *p*

Tbn. 2 *p* *p*

Tba. *p* *p*

Meno mosso, Lontano mancando $\text{♩} = 50$

Timp. *p* *p*

T.-t. *mf*

T. Bl. *p*

Tub. B. *p*

Orch. Bells

Mar.

Hp. *p* *mf*

Meno mosso, Lontano mancando $\text{♩} = 50$

Vln. I *pp* *mute* *mp*

Vln. II *pp* *mute* *mp*

Vla. *pp* *mute* *mp*

Vc. *pp* *mute* *mp*

Cb. *pp* *mute* *mp*

206

Fl. 1

p *pp*

p

Fl. 2

p *pp*

p

Ob. 1

Ob. 2

C. A.

solo

mp

p

Cl.

p *pp*

pp

Cl.

p *pp*

B. Cl.

mp

p *pp*

Bsn. 1

p *pp*

dolce p

p

Bsn. 2

p *pp*

dolce p

Hn. 1

dolce p

senza sord.

Hn. 2

dolce p

senza sord.

Tpt. 1

dolce p

senza sord.

Tpt. 2

dolce p

senza sord.

Tbn. 1

Tbn. 2

Tba.

Timp.

T.-t.

pp

T. Bl.

mp

Tub. B.

Orch. Bells

Mar.

p

Hp.

Vln. I

Vln. II

Vla.

mute

p molto vib.

mute

p molto vib.

Vc.

Cb.

mp

218

Flz. *p* Flz. *pp* nat. *pp* nat. *sf* *sf* *sf*

Fl. 1 *p* *pp* *pp* *sf*

Fl. 2 *p* *pp* *pp* *sf*

Ob. 1 *p* *mp*

Ob. 2

C. A. *mp*

Cl. *p* *pp*

Cl. *pp* *sf*

B. Cl. *pp* *sf*

Bsn. 1 *p* *pp*

Bsn. 2

Hn. 1

Hn. 2

Tpt. 1

Tpt. 2

Tbn. 1

Tbn. 2

Tba.

Timp.

T.-t.

T. Bl.

Tub. B.

Orch. Bells

Mar.

Hp.

Vln. I *p* *p* *pp* *sf*

Vln. II *p* *p* *pp* *sf*

Vla. *p* *p* *pp*

Vc. *pp*

Cb. *pp*

228

Fl. 1 *p* *mp* *p* *pp*

Fl. 2 *p* *mp* *p* *pp*

Ob. 1

Ob. 2

C. A.

Cl. *pp* *cresc.* *mp* *3* *p* *pp* *pp* *f* *pp*

Cl. *pp* *cresc.* *mp* *3* *p* *pp* *pp* *f* *pp*

B. Cl. *pp* *cresc.* *mp* *p* *pp* *pp* *f* *pp*

Bsn. 1 *p* *pp* *pp* *f* *pp*

Bsn. 2 *p* *pp* *pp* *f* *pp*

Hn. 1

Hn. 2

Tpt. 1

Tpt. 2

Tbn. 1

Tbn. 2

Tba.

Timp.

T. t. *mp* *mp* *mp*

T. Bl. *ff* *ff* *ff*

Tub. B. *mp* *mp* *mp*

Orch. Bells

Mar. *f* *3* *3* *f* *3*

Hp. *mp* *mp* *f*

Vln. I *pp* *mute* *mp* *pp* *mute* *f* *pp*

Vln. II *pp* *mute* *mp* *pp* *mute* *f* *pp*

Vla. *pp* *mute* *mp* *pp* *mute* *f* *pp*

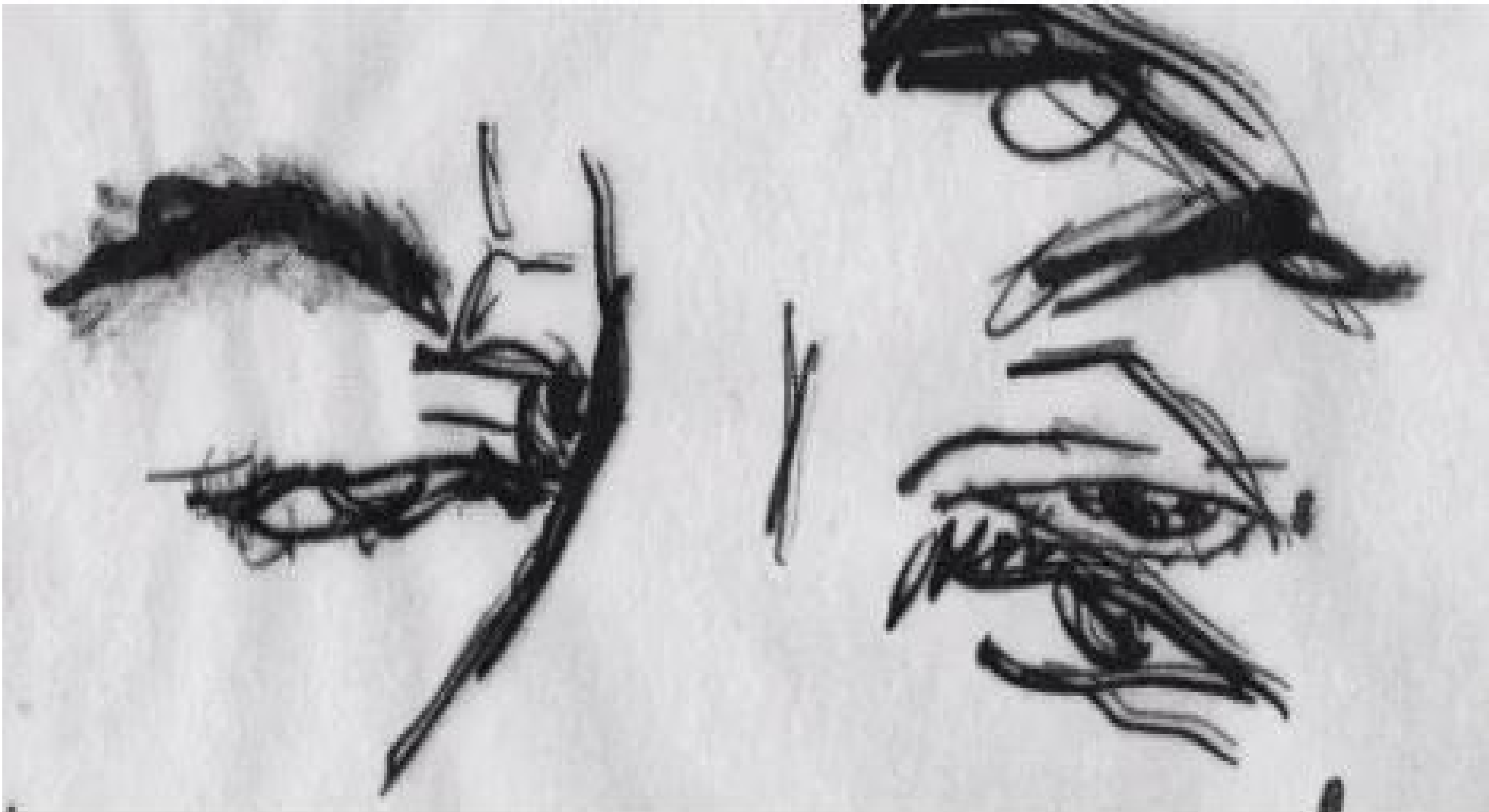
Vc. *pp* *mute* *mp* *pp* *mute* *f* *pp*

Cb. *pp* *mute* *mp* *pp* *mute* *f* *pp*

THEARTIDOTE

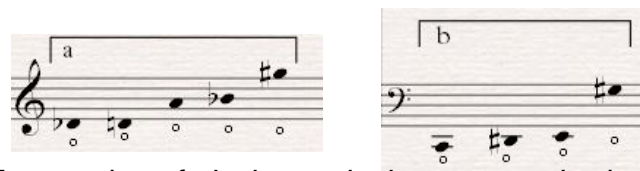
Piano Cycle

Armand J. Moolman
2015



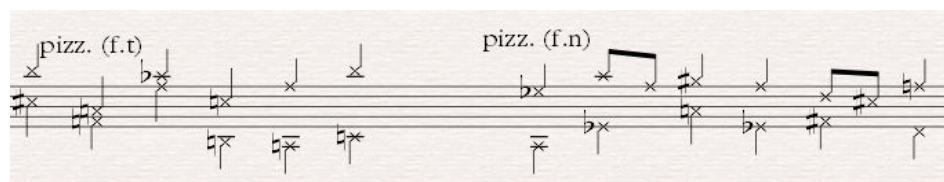
Performance Notes

- 1) Accidentals apply only to the notes they precede except in case(s) of immediate repetition of pitch or pattern of pitches.
- 2) All metronome indications are approximate and may vary slightly, depending on the acoustical properties of the hall.
- 3) In this work (Cycle II and III) requires several special techniques such as pizzicatos, muted tones, production of harmonics, etc. In order that the execution of these effects be accurate, it is important that the strings be clearly marked by bits of drafting tape with the pitches labeled thereon. For pizzicato and harmonics the tape should be placed in the damper; for muted tones, near the "bridge" (at the end of the string). The following table of pitches include all those to be specially marked (N.B. The precise nodal point for harmonics can be indicated by affixing a tiny sliver of tape to the string. The strings to be prepared in this manner are distinguished by the symbol [0]. The harmonics within bracket "a" are 5th partial [the node located near the dampers]; within bracket "b", 2nd partial [the node located at the exact center of the string]):

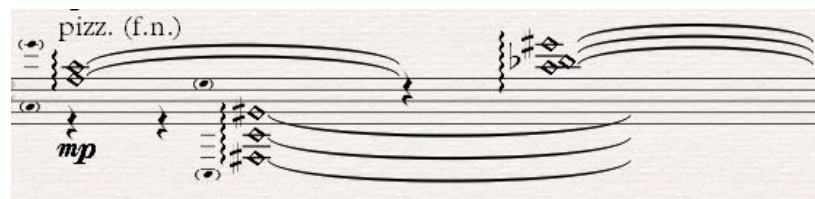


- 4) Two modes of pizzicato playing are required:
 - a) the string is plucked with the fingertip (towards the center of the string, indicated by "pizz.(f.t.);"
 - b) the string is plucked with the fingernail (at the center of the string, indicated by "pizz.(f.n.)."
 N.B. Normal playing on the keyboard is indicated by the instruction "on keys"

There are different indications as to how the *pizzicato* should be executed:
The notes marked with crosses indicate that the pianist must pluck the specific pitched string in the piano.



The diamond shaped notes should be silently depressed on the keyboard and glissando on the strings in the piano with the required pizz. indication [pizz.(f.t.) or pizz.(f.n.)]



When the **sostenuto ped.** is indicated only the indicated pitches must sound when glissandoing over the strings in the piano.



Glissandos over the strings are to be played with the required pizz indication [pizz.(f.t.) or pizz.(f.n.)]. The strings may be strummed in front of the dampers (i.e., between the front crossbeam and the pins) or behind the dampers; the choice, depends on the considerations of *timbre* and ease of performance, is left to the discretion of the pianist. The approximate range of the glissando is always given in the score.

Cycle I

Your personality is not set in stone

Andante Più mosso Rubato

The musical score is written for piano and 8va. It consists of five systems of staves. The first system (measures 1-5) begins with a treble staff marked *sfz* and a bass staff with *ff* and *fff* dynamics. The second system (measures 6-11) continues with *mp* and *f* dynamics, including a *rit.* marking at the end. The third system (measures 12-14) features *f* and *mp* dynamics, with a *senza Ped.* instruction. The fourth system (measures 15-18) includes *pp* and *p* dynamics, with a *Rubato* marking. The fifth system (measures 19-22) concludes with *pp* and *fff* dynamics, and a *rit.* marking. Various articulations like *pizz. (f.n.)* and *gliss.* are used throughout. Pedal markings (*Ped.*) and *senza Ped.* are indicated at the bottom of the staves. The score is marked with *Andante Più mosso Rubato* and includes a subtitle *Your personality is not set in stone*.

Cycle II

*Must the moon be full
in order to be loved?
And what of the heart?*

Tempo II ♩=45 senza Rubato

21

mf

pizz. (f.t)

mp

p

gliss. (f.n)

p

cresc.

pizz. (f.n)

mf

mp

sostenuto

Red.

*sostenuto Red. **

Tempo I ♩ = 50 con Rubato

mp *mf* *p* *mp*

ppp *pp*

(act. sound)

(5th par.)

p

Andante =60

35

Presto

Andante ♩=60

— $\circ$ niente

Cycle IV

*I go through phases, someday I feel like the person I'm supposed to be
and then someday, I turn into no one at all.*

♩=60 Scherzando Risoluto (senza Rubato)

The musical score for Cycle IV, measures 49-65, is presented in a system of five staves. The tempo is marked as ♩=60 Scherzando Risoluto (senza Rubato). The key signature is one sharp (F#). The score includes various musical notations such as triplets, dynamics, and performance instructions.

Measure 49: The piano part begins with a triplet of eighth notes (F#, A, C) followed by a quarter note (D). The right hand has a triplet of eighth notes (F#, A, C) followed by a quarter note (D). Dynamics include *mf*, *mp*, and *più sf*. A *Red.* (Reduction) instruction is present.

Measure 52: The piano part has a triplet of eighth notes (F#, A, C) followed by a quarter note (D). The right hand has a triplet of eighth notes (F#, A, C) followed by a quarter note (D). Dynamics include *mp*, *pp*, *mf*, and *mp*. A *Più Rubato* instruction is present. An *8va* (Octave) instruction is also present.

Measure 55: The piano part has a triplet of eighth notes (F#, A, C) followed by a quarter note (D). The right hand has a triplet of eighth notes (F#, A, C) followed by a quarter note (D). Dynamics include *mp*, *p*, *mf*, *f*, *p*, *mf*, and *f*. A *Red.* instruction is present.

Measure 60: The piano part has a triplet of eighth notes (F#, A, C) followed by a quarter note (D). The right hand has a triplet of eighth notes (F#, A, C) followed by a quarter note (D). Dynamics include *mp*, *p*, *p*, *subito p*, and *mf*. A *dolce mp* instruction is present. An *8va* instruction is also present.

Measure 65: The piano part has a triplet of eighth notes (F#, A, C) followed by a quarter note (D). The right hand has a triplet of eighth notes (F#, A, C) followed by a quarter note (D). Dynamics include *p*, *mf*, and *p*. A *dolce mp* instruction is present. A *sostenuto Red.* instruction is also present.

What I Know for Sure **String Quartet 2**

Armand J. Moolman
2015



Score Notes to the Performer

Special Notation:

senza v. Senza Vibrato

molto v. Molto vibrato, always means a rapid large vibrato unless otherwise specified. When vibrato markings are not specified, players can use their usual vibrato.

mm.89 Cello plays open C string (lowest string), and vibrato by touching fingerboard where the C-string bends over to the tuning pegs.
Rapid and large vibrato (SHAKING ACTION).

Portatos- Measured (Tied notes only indicate duration)

trill Always semitone trills unless otherwise specified

All glissandi should start immediately at the beginning of the note value. Pitches shown in brackets during a glissando shows the approximate speed of the glissando, and are not to be played with any accentuation or tenuto. The start value of the glissando also shows the duration of the glissando.

S.P. Always estremamente sul ponticello.

S.T. Sul tasto

N. Normal (used with S.P. and S.T., otherwise ord.)

Tremolando Always dense as possible.

mm.75,88 Fall, a sudden semitone or whole tone fall (glissandi)

Ad lib. In measure 88 the cello plays this passage at own tempo and taking time at and after each fall.

Spiccato using spiccato on repeated harmonic notes makes the harmonic sound fragile this is intentional.

Performance Duration ca.17 min

What I Know for Sure

I Resilience

Armand Moolman
2015

Adagio, Più mosso (♩=66)

Violin I: *Sul G* *ppp* *p* *ppp* *p* *ppp* *p* *pp* *p* *mp*

Violin II: *Sul G* *ppp* *p* *ppp* *p* *ppp* *p* *pp* *p* *mp*

Viola: *Sul C* *ppp* *p* *ppp* *p* *ppp* *p* *pp* *p* *mp*

Violoncello: *Sul C* *ppp* *p* *ppp* *p* *ppp* *p* *pp* *p* *mp*

4 *mp* *mf* *f* *pp* *p* *pp* *p* *fp* *sf*

7 *pizz.* *arco* *ff* *fp* *pp* *cresc.* *pp* *arco* *ff* *fp* *pp* *cresc.* *pp* *arco* *ff* *fp* *pp* *cresc.* *pp* *arco* *ff* *fp* *pp* *cresc.*

10 *mf* *f* *fp* *mf* *mf* *f* *fp* *mf* *mf* *f* *fp* *mf*

12 S.P. *pp* *f* *pp* *pizz.* *f* *arco* S.T. *p* *p*

molto v. *p* *f* *pp* *pont.* *pp* *pizz.* *mp* *mf* *mp* *arco* *p*

pp *f* *pp* *mp* *mf* *mp* *p sf* *p* S.T. *p*

pp *p* *mf* *p*

II Connection

16 *Lento* ($\text{♩} = 60$) *p* *tr* *mp* *pizz.* *arco* *mf*

Sul G *p* *cresc.* *mp* *mp* *mf*

molto vib. *p* *cresc.* *mp* *cresc.* *mf*

p *mp* *cresc.* *mf*

20 *p* *f* *p* *mf* *f* *gliss.* *p* *mp* *cresc.* *mf*

p *f* *p* *mf* *f* *gliss.* *p* *mp* *cresc.* *mf* S.T. *3*

p *f* *p* *mf* *f* *gliss.* *p* *mp* *cresc.* *mf* *molto vib.*

p *f* *p* *mf* *f* *gliss.* *p* *mp* *cresc.* *mf* S.T. *3* S.P.

25 *mp* *mf* *p* *3* *mf* *mp* *p* *mp*

3 *mp* *mf* *p* *mf* *mp* *p* *mp*

mp *mf* *p* *mf* *mp* *p* *mp*

mp *3* *mf* *mp* *p* *p* *mp*

mp *3* *mf* *mp* *p* *p* *mp*

30

pizz. arco

mf *mp* *mf* *p*

cresc. *mf* *p*

Sehr langsam (♩=54)

34

f *dim.* *ppp* *f* *p* *mp* *pp* *sf* *f*

f *dim.* *ppp* *f* *p* *mp* *pp* *sf* *f*

f *dim.* *ppp* *f* *p* *mp* *pp* *sf* *f*

f *dim.* *ppp* *f* *p* *mp* *pp* *sf* *f*

39

mf *pp* *p* *mp*

mf *pp* *p* *mp*

mf *pp* *p* *mp*

mf *pp* *p* *mp*

42

dim. *ppp* *mf* *pp* *dim.* *ppp* *mf*

dim. *ppp* *mp* *pp* *dim.* *ppp* *mp*

dim. *ppp* *mp* *pp* *dim.* *ppp* *mp*

dim. *ppp* *mp* *pp* *dim.* *ppp* *mp*

46

pp 3 3

dim. ppp mf pp dim. ppp mp pp

pp

dim. ppp mp pp dim. ppp mp pp

pp

dim. ppp mp pp dim. ppp mp pp

pp

dim. ppp mp pp dim. ppp

III Gratitude

Sehr langsam (♩=54)

50

p mf pp

p mp pp

p mp pp

p mp pp

f f f

f

p

mp pp

55

p sf f mf pp

p sf f mf pp

p sf f mf pp

p sf f mf pp

pp

pp

pp

58

p dim. ppp mf

p dim. ppp mp

p dim. ppp mp

p dim. ppp mp

p

p

p

p mp

62 *cresc.* *tr* *tr* *mf* *dim.* *ppp* *mf* *pp* *dim.* *ppp* *mp* *pp*

cresc. *mf* *dim.* *ppp* *mp* *pp* *dim.* *ppp* *mp* *pp*

cresc. *molto vib.* *mf* *dim.* *ppp* *mp* *pp* *dim.* *ppp* *mp* *pp*

cresc. *S.T.* *mf* *dim.* *ppp* *mp* *pp* *dim.* *ppp* *mp* *pp*

cresc. *S.T.* *mf* *dim.* *ppp* *mp* *pp* *dim.* *ppp* *mp* *pp*

IV The time that is given to you

67 **Sostenuto, molto calmo** (♩=50) *Sul A* *gliss.* *sf* *p* *cresc.* *Sul E* *gliss.* *sf* *p*

Sul D *gliss.* *sf* *p* *cresc.* *Sul G* *gliss.* *sf* *p*

Sul D *gliss.* *sf* *p* *Sul A* *gliss.* *sf* *p*

Sul D *gliss.* *sf* *p* *Sul C* *gliss.* *sf* *p*

70 *Sul A* *gliss.* *sf* *mp* *mp* *sf* *p*

Sul D *gliss.* *sf* *mp* *mp* *sf* *p*

Sul D *gliss.* *sf* *mf* *f* *sf* *p*

Sul D *gliss.* *sf* *mp* *mf* *sf* *p*

73 Sul E

mp *mf* *gliss.* *mf* *mp* *p* *mf* *p* *mf* *cresc.* *mf*

75 *mf* *mf* *sf* *pp* *mf* *sf* *pp* *pizz.* *arco* *pizz.* *mf* *arco* *pizz.* *sf* *arco* *pp* *mf* *sfz* *mp* *f* *sfz* *p* *pizz.* *arco* *pizz.* *sfz* *mp* *f* *sfz* *Solo*

79 Sul E *gliss.* *f* *mp* *f* *pizz.* *arco* *mf* *mf* *mp* *gliss.* *f* *mp* *f* *pizz.* *arco* *mp* *mp* *mf* *3* *f* *mf* *p* *pizz.* *arco* *mf* *arco*

82 *Sul E* *gliss.* *f* *mp* *Sul E* *gliss.* *f* *mp* *arco* *f* *arco* *f* *3*

[illegible][illegible]

101

This musical score is for measures 101 and 102 of a piece. It features four staves: Violin I, Violin II, Cello, and Double Bass. The key signature has one flat (B-flat), and the time signature is 4/4. Measure 101 begins with a *mf* dynamic. The Violin I staff has a melodic line with a slur and a *mf* dynamic. The Violin II staff has a *pizz.* (pizzicato) section with a *f* dynamic, followed by an *arco* (arco) section with a *p* dynamic. The Cello staff has a *pizz.* section with a *mf* dynamic, followed by an *arco* section with a *pp* dynamic. The Double Bass staff has a *f* dynamic section, followed by a *p* dynamic section. Measure 102 continues the *arco* sections. The Violin I staff has a *pp* dynamic section with a *sul pont.* (sul ponticello) instruction and a *molto vibrato* marking. The Violin II staff has a *p* dynamic section with a *Sul D* instruction and a *gliss.* (glissando) marking. The Cello staff has a *pp* dynamic section with a *sul pont. arco* instruction and a *molto vibrato* marking. The Double Bass staff has a *p* dynamic section with a *Sul C* instruction and a *gliss.* marking.

Violin I

mf

f

pp

sul pont.

molto vibrato

Violin II

pizz.

f

p

arco

Sul D

gliss.

Cello

pizz.

mf

f

pp

sul pont. arco

molto vibrato

Double Bass

f

p

Sul C

gliss.

103

pizz. *cresc.* *f*

pizz. *cresc.* *f*

pizz. *cresc.* *f*

pizz. *cresc.* *ff*

arco *mf*

106

arco *mp* *Spiccato* *gliss.* *mp* *fp* *f* *dim.* *p*

arco *mp* *Spiccato* *gliss.* *mp* *fp* *f* *dim.* *p*

arco *mp* *Spiccato* *gliss.* *mp* *fp* *f* *dim.* *p*

arco *mp* *Spiccato* *gliss.* *mp* *fp* *f* *dim.* *p*

109

Sul E *gliss.* *mp* *mf* *mp* *f* *dim.* *p* *mp*

gliss. *mp* *mp* *f* *dim.* *p* *mp* *molto vibrato*

pizz. *mf* *mp* *f* *dim.* *mp* *molto vibrato*

mf *mp* *f* *dim.* *mp* *molto vibrato*

111

pizz. *cresc.* *f* *f*

pizz. *cresc.* *f* *f*

pizz. *cresc.* *f* *f*

pizz. *cresc.* *ff*

113

arco
f 3 mp
mp cresc.
arco
mf mp cresc.
arco
f 5 mp cresc.
arco
mp cresc.

115

molto vib.
mf mf
pizz. arco pizz. arco pizz.
mf > p mp mp f
pizz. arco pizz. arco pizz.
p mp mf f
p cresc. mp mp cresc. mf f

120

arco 3 pizz. arco 3 cresc. sf > p
arco pizz. arco cresc. sf > p
arco pizz. arco 3 cresc. sf > p
arco pizz. arco 3 sf > p