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**The Development of an  
Individual Compositional Voice  
with a Related Critical Commentary**

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Volume 1 of 2

Degree of Master of Arts in Composition

Submitted to Waterford Institute of Technology



Waterford Institute *of* Technology  
INSTITIÚID TEICNEOLAÍOCHTA PHORT LÁIRGE

August 2019

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## Declaration

I hereby certify that all the work contained in the submission of this portfolio is my own.

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Márton Sipos

## Acknowledgements

I would first like to thank my supervisor Mr. Jonathan Bulfin. He was most generous in helping me as my mentor whenever I encountered difficulties in creating my compositions and in writing this thesis. I cannot thank him enough for his huge support.

I am thankful to all my teachers in the Institute who provided me with such high-quality education. I would particularly like to thank Bridget Knowles, my classical singing teacher in the Institute who gave me her full support in my becoming a better singer and musician.

I would also like to thank all the people who influenced me in my earlier musical education, prior to my years in the Institute.

Special thanks to my first teacher, Gyöngyi Balázs, who recognised my talent as a child for singing Hungarian folk songs and encouraged me to start my music education.

I am privileged in knowing the late Zoltán Kallós, Transylvanian Hungarian ethnomusicologist who was undoubtedly the strongest contemporary representative of Kodály's musical heritage. I thank him for introducing to me the merit and beauty of folk music and for fostering the music talent in me as a child.

I thank Mária Somodari, my first music teacher, who introduced me to the world of classical music and taught me solfeggio and music theory.

Mária Petrőcz, my first classical singing teacher deserves my special thanks too. She fostered in me a love of classical singing and had a determining impact on the formation of my musical taste. Mária is not only my teacher, but also a real mentor both in music and in life.

I must express my profound gratitude to my parents and to both my grandmothers for providing me with unfailing support and continuous encouragement throughout my nearly twenty years of music study. This accomplishment would not have been possible without them.

## Abstract

This portfolio shows an insight into the development of my individual compositional voice towards pre-determined directions, in the light of five original works. The compositional materials for this body of work are drawn from: existing sources of musical scales, musical forms and instrumental combinations. This set of works consists of compositions for voice, various solo and instrumental ensembles written in a combination of tonal and chromatic styles.

My means towards developing a varied individual compositional voice were mainly based on experimental challenges, reflecting practical applications of the selected compositional and orchestration skills I am intending to acquire. The five works are deliberate representations of selected influences, compositional language, styles and forms from the 18<sup>th</sup> century through to the 21<sup>st</sup> century, accompanied with analysis and critical commentary.

I am aware that to develop as a composer, I need to specially integrate contemporary forms and techniques. To this end, I have explored the compositional processes used by Joseph Schillinger to see how relevant they might be to my own style and influences. Schillinger was a Russian-born music-theorist, composer and composition teacher who developed a mathematical based compositional system in New York circa 1940's. Students of Schillinger include popular musicians and composers such as George Gershwin, Tommy Dorsey, Benny Goodman and Oscar Levant. The Schillinger System can be adapted for composing in any existing musical style while providing practical methods towards solving problems arising during the compositional process.

The central point of this work is to demonstrate how I have effectively adopted the above styles and techniques.

# INTRODUCTION

This body of work contains two volumes. Volume 1 is about the detailed description of the concepts of developing an individual compositional voice through these works with commentaries and analysis.

The first two chapters outline a detailed presentation of the aims and methods of creating compositions for the portfolio.

**Chapter 1.** – The Schillinger System of Musical Composition

**Chapter 2.** – Preparation and Planning for the Compositional Process

The rest of the chapters include an introduction, a detailed analysis and a reflection of the five pieces in a variety of methods.

**Chapter 3.** – *Idegenben/In a Foreign Land*

**Chapter 4.** – Pentabass

**Chapter 5.** – Four Movements for Wind Quintet

**Chapter 6.** – Varied Moments

**Chapter 7.** – Orchestral Sketch

**Chapter 8.** – Reflection on Developing an Individual Compositional Voice

Volume 2 represents the scores of the compositions and the overall conclusion of the portfolio.

The compositional material for these pieces was drawn from existing sources of pitch material such as diversity of musical scales, musical forms and instrumental combinations.

My aims and objectives when composing the pieces were:

- To explore a wide range of instrumental use, both solo and ensemble.
- To present compositions that reflect influences and compositional language, styles and forms of the 18th century through to the 21st century.
- To improve upon my orchestration skills.
- To study in more depth the styles and instrumental technique of composers who inspired my own compositions.
- To demonstrate how I adopted the above-mentioned styles and techniques effectively.
- To present a thorough analysis of the above works in a critical commentary and draw conclusions.

During the period I was working on this body of work, my aim was to develop an individual compositional voice through the inspiration of composers I admire. The question concerning my compositional voice was if it could be developed without imitating and copying another composers' music. However, I have also recognised the fact that the willingness to try new approaches is necessary for developing a personal style; furthermore, it is an especially useful approach for less experienced composers regarding their professional experience.

It is reassuring to know that significant composers such as Mozart and Beethoven have had their influences also. Through copying and transcribing the work of other composers, they were able to develop their own styles, which were later used as a framework for their own work.

It can be said that the circumstances and conditions today are more conducive for composition. Availability of resources and communication between artists has become easier. In previous centuries, due to limitations in travel, it was likely that for instance, a French and a Russian composer would be unlikely to meet or be influenced by each other's style. In addition, the geographical and social hierarchical differences, as in the case of civic and peasantry, diversely determined musical styles. For instance, Franz Liszt's so-called Hungarian style was basically rooted in a constantly renewed urban Gypsy music. His urban civic isolation from villages kept

him out of the influences of the authentic, pure ancient Hungarian folk music known among peasants. In later years Kodály and Bartók discovered and collected this music thus influencing their compositional styles.

Today's composers can consciously select musical stimuli through different means regardless of their location in the world. It could be argued that we have all the compositional tools we need for developing our own compositional style due to the unlimited series of musical influences accessible today. Internet has an enormous role to play in this since we can search instantly for any music from any existing genre; unlike Mozart, who had to travel around Europe to encounter different styles of music.

It could be argued that traditionally, developing a personal style required proficiency in the craft of composition through mastering harmony, counterpoint and orchestration. Before one begins to move towards a personal style, it is necessary to be aware of one's current influences.

Though there have been many musical influences in my life, Hungarian folk music has been the most important. I was born in Transylvania as a native Hungarian and later moved to Hungary. I was influenced by folk music having competed in many folk song competitions. From the viewpoint of the Kodály method, Hungarian folk music is my musical mother tongue.

I was thirteen when I came across a recording on cassette tape of both Mozart's G minor symphonies, which I listened to many times for many years. I found these symphonies so attractive that I could hear them mentally from beginning to the end. This practice apart from fostering my interest in classical music, helped improve my 'inner' musical hearing.

My classical music education began at the age of fourteen with singing and piano. One year later I started working in the Pannon Theatre as an actor in Veszprém, Hungary. I worked there for the next five years. During that time, I was playing in several musicals and other plays. An important influence at this point was encountering the music of Frank Wildhorn and Leslie Bricusse through their musical *'Jekyll and Hyde'*. It was at that point that I aspired to write musicals.

I was twenty-one when I encountered the *'Cologne Concert'* recording of Keith Jarrett, another significant influence. His style and expressive language inspired me to improvise on piano. The music of the minimalists, Philip Glass and Michael Nyman also helped me.



As an undergraduate student, I encountered lieder and opera. During the four years as an undergraduate I also started my studies of composition on a higher level. I learned more about the various styles of modern composers such as Stravinsky, Shostakovich, Bartók, Messiaen, Cage and Ligeti. Their styles have been very influential in my compositional development as I began my postgraduate studies.

As stated in the previous section, my influences have come from Hungarian folk and contemporary music. I also realised that over the years, my musical style has developed through other factors as well as conducted research.

It can be argued that a composer can obtain various musical influences passively at random, e.g. while walking down the street, listening to radio or watching television, or actively when they are in the environment of a style of music. Through these influences, direct or indirect, musical ideas may emerge. Such indirect factors have become a part on my own compositional style. My compositional preference is composing melodies on piano with rich harmonies in a tonal lyrical style within a formal framework. My earlier compositions were created mainly by recorded improvisations and based on musical flow and spontaneity. They were, however, lacking in formal character. For this reason, many have remained unrevised or notated.

Before creating my portfolio, I decided to research Eastern and Western European as well as Russian composers of the past. My aim was to find out the secret to their popularity and quality of music that have existed for ages despite changes in the music industry.

The first composer who influenced me was Béla Bartók. His works have influenced most of the current musicians and developments in Eastern Europe music. Folk music is the identification of this region mainly because of Bartók. My main influences from his works were '*The Miraculous Mandarin*', '*Concerto for Orchestra*' and his string quartets.

Ligeti was my next influence to find out more about music in this region. The '*Five Pieces of Wind Quintet*' demonstrates his exemplary and unique style in music. It is compared to Bartók's style, the two are from Hungary, which explains the similarity in their music pieces. Ligeti's life and his counterparts' lives coincided with various circumstances to explain the impact of music in society. His piece '*Musica Ricercata*' also influenced my compositions and creation part of this portfolio.

The third person who significantly influenced creation of this portfolio was Miklós Rózsa. He was a composer who began his journey in Hungary where he faced multiple challenges in the art but later emerged with the same inspiration as Ligeti and Bartók. Rózsa was a distinguished film composer because of his integration of Hungarian style with different music styles. This Hungarian film composer's music marked the beginning of a revolution and change in the industry. I was inspired by his works '*Ben Hur*' and '*The Private Life of Sherlock Holmes*'.

Besides the three in Eastern Europe, I came across Claude Debussy, Maurice Ravel and Francis Poulenc. Transitions in French music are attributed mostly to these three because of their flexibility and open mindedness when it comes to composition. The two have independently contributed to a revolution in music history, not only in French music but across the world. I was eager to learn of styles used in 20<sup>th</sup> century pieces; Debussy and Poulenc all used impressionistic style to present their music in a unique way. I got to learn about the effect of impressionistic style in music.

In England, Gustav Holst was my main influencer. I came across this name while going through music works by John Williams and Hans Zimmer who mention Holst as their source of inspiration. '*The Planets*' is cited as one of the best suites and works by Holst. The style and method of representation in music is incredible. Holst is not like any other English composer, he employed unique styles and themes in every piece of his compositions.

From Russia, Igor Stravinsky, Sergei Prokofiev and Dimitri Shostakovich influenced me the most because of the styles employed in the various works. While Russian style is unique, it can be compared to Rózsa's and Ligeti's styles in the Eastern European patriotic essence.

During my research I came across the Schillinger System too, based on the mathematical concepts of Joseph Schillinger and their subsequent application to musical composition. After an in-depth study of his system, I choose to implement them in some of the works I composed for this portfolio. Schillinger's methods and techniques will be discussed in detail in the next chapter.

Please find the audio CD included on the back cover of Volume 2. The tracks present audio recordings and MIDI sequences of the five completed compositions. Since the MIDI recordings use virtual instruments, these may sound different in some places.

<b>Track 1</b>	<b>Song Cycle: Idegben/<i>In a Foreign Land</i></b> Performed by Mária Petrőcz (voice), Oxana Meh (piano)
<b>Track 2</b>	<b>Pentabass</b> Performed by Aleksandra Churukovska (double bass)
<b>Track 3</b>	<b>Four Movements for Wind Quintet</b> Performed by MIDI instruments
<b>Track 4</b>	<b>Varied Moments</b> Performed by MIDI instruments
<b>Track 5</b>	<b>Orchestral Sketch</b> Performed by MIDI instruments

# Chapter 1

## The Schillinger System of Musical Composition

### Overview

The name of Joseph Schillinger may not rank among the musical innovators of the 20<sup>th</sup> century such as Arnold Schoenberg. Despite having influenced the musical output of George Gershwin and Glenn Miller, he is not widely known today. Gershwin composed his opera *'Porgy and Bess'* based on technical and orchestration methods of the Schillinger System which were also revised by Schillinger himself. Gershwin also applied his techniques in other works such as in *'I Got Rhythm'*. Schillinger's other prominent student Glenn Miller composed the famous *'Moonlight Serenade'* as a compositional exercise based on the System.

According to Schillinger, music is a 'form of movement' and mathematics can also be applied to musical composition. In his work, Schillinger attempted to explain art in a scientific manner. Numbers, mathematical formulas and geometric shapes can be represented by musical language and applied to all building components of music. This theory includes the rhythm, melody, harmony, counterpoint, instrumental forms and semantic composition. The semantic composition examines the emotional expressions of music and provides techniques for achieving these desired emotions.

Schillinger's techniques however do not require strict compliance of applications laid out in his books when it comes to composing music. Schillinger presents a variety of technical approaches, but a composer can also develop freely their own compositional techniques based on the System. The techniques however provide practical solutions for technical problems arising during work on a composition. By applying these techniques to existing musical material, the composer can discover new ideas which can help him to continue working on a given composition without waste of time.

Practicing the methods, the composer will be able to notate his musical ideas with numbers, mathematical formulas and graphical notation which can later be developed into musical scores or even completed compositions.

Because of the mathematical approach it can be used effectively for musical improvisations too. For instance, Yaron Hermann became an excellent pianist within a few years of using Schillinger's method for his improvisations.

The presentation of the Schillinger System however was not free of criticism. It was widely debated as to whether the pieces written using the System, became too mathematical and mechanical, thus replacing the composer's talent and not a true reflection on the composer's style. Schillinger's techniques, being flexible, are suitable for composing in a range of styles, without fear of becoming 'stereotypical' or 'Schillingerian'.

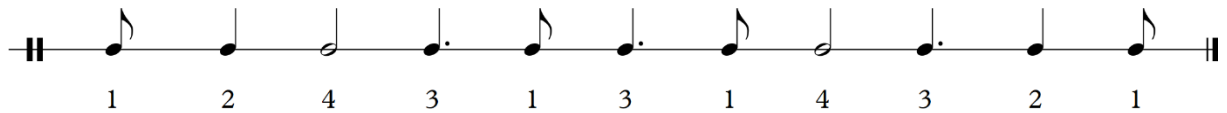
One of the merits of the system is that the techniques are not a 'mechanical' replacement of the composer, but the 'expansion' of one's compositional tools. Since the techniques can be used in countless ways, Schillinger recommends that composers use only a limited number of techniques for a given work of composition. This avoids unnecessary complexities which can easily motivate the composer to over complicate the compositional process.

Schillinger gives special importance to planning a composition before any note is written down. This procedure gives a clear overview for the composer, who can compose more easily by following a given compositional plan, but more on this in the next chapter.

## **Numbers to music**

In Schillinger System, any arbitrary series of numbers can be translated into music; it may be either a phone number or a series of random numbers, the possibilities are endless. Numbers can be correlated or superimposed with musical components: rhythm, scales, melody, harmony and various instrumental forms which Schillinger discusses in his book.

Rhythm and number correlations are created by, for e.g. marking the smallest value of rhythm to number 1. If 1 = quaver, then other larger numbers multiply this number. Let us say if 1 = quaver, 2 = crotchet, 3 = dotted crotchet and so on. Take for example a random series of numbers: 12431314321, which will be converted into rhythms where 1 = quaver; see **Figure 1.1**.



**Figure 1.1**

A similar procedure is conducted in writing melodies, in this case the notes of the selected pitch scale are being translated into numbers and the series of numbers determines the succession of notes which later will be optionally rhythmmed.

In the examples below, the numbers indicate the notes of the C major scales in a successive manner; see **Figure 1.2**.



**Figure 1.2**

This later will be applied to a chosen rhythm thus designing a melody; see **Figure 1.3**.



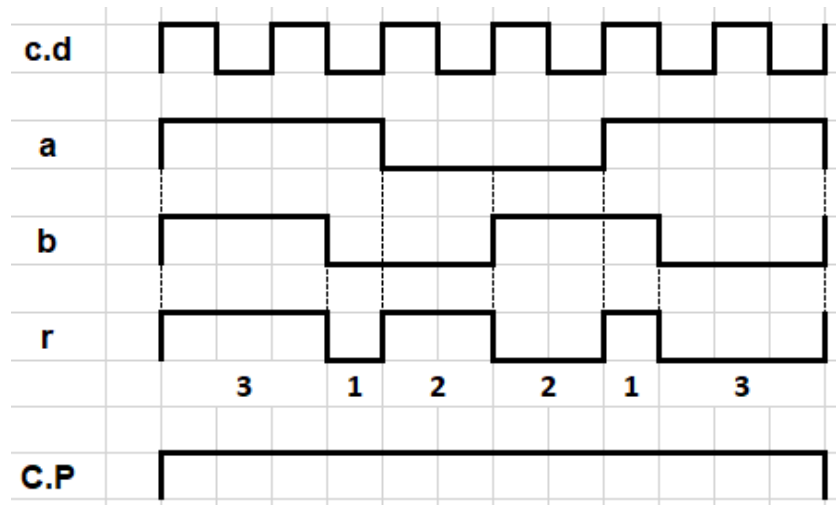
**Figure 1.3**

Over and above, virtually all musical components and techniques can be correlated with numbers such as musical intervals, units, entry points and orchestration techniques.

## **Interferences of periodicities**

Schillinger outlines the basic methods of his system in his first book, *Theory of Rhythm*. The methods presented in this book are a prerequisite to understanding the other more elaborated techniques. One scientific method established by Schillinger is a way by which new rhythms can be formed as an interference of two or more different rhythms playing simultaneously. The bigger number of the periodicity generator is called the ‘major generator’ and the smaller one the ‘minor generator’. The new rhythms are called ‘resultants’; these repetitive resultants are

symmetrical as long as the number is equal to or smaller than nine. Since the resultants are symmetrical, the characteristics of recurrence, balance, contrast and inversions are equally functioning. In the example of r4:3 the balance can be found (2+2), the contrast (3+1) and the symmetry (3 + 1 + 2) + (2 + 1 + 3); see **Figure 1.4**.



**Figure 1.4**

With the use of rhythm generating technique, Schillinger's goal was to avoid monotony by creating syncopation. However, those pairs of numbers such as r4:2, r6:3, r8:4 and 9:3 are omitted because of the same number of numbers as resultants which is a monotony Schillinger wanted to avoid. The resultants of r4:2 are 2, 2, 2, 2. The resultants of r6:3 are 3, 3, 3, 3, 3.

Similarly, in interference of two numbers the same way, three or more generators can also be used to create series of new resultants. In this case, two interrelated resultants are created so that one can be used for a theme and the other as its counter theme.

### ***Rhythmic resultants from two generators***

$$r_{3:2} = 2, 1, 1, 2$$

$$r_{4:3} = 3, 1, 2, 2, 1, 3$$

$$r_{5:2} = 2, 2, 1, 1, 2, 2$$

$$r_{5:3} = 3, 2, 1, 3, 1, 2, 3$$

$$r_{5:4} = 4, 1, 3, 2, 2, 3, 1, 4$$

$$r_{6:5} = 5, 1, 4, 2, 3, 3, 2, 4, 1, 5$$

$$r_{7:2} = 2, 2, 2, 1, 1, 2, 2, 2$$

$$r_{7:3} = 3, 3, 1, 2, 3, 2, 1, 3, 3$$

$$r_{7:4} = 4, 3, 1, 4, 2, 2, 4, 1, 3, 4$$

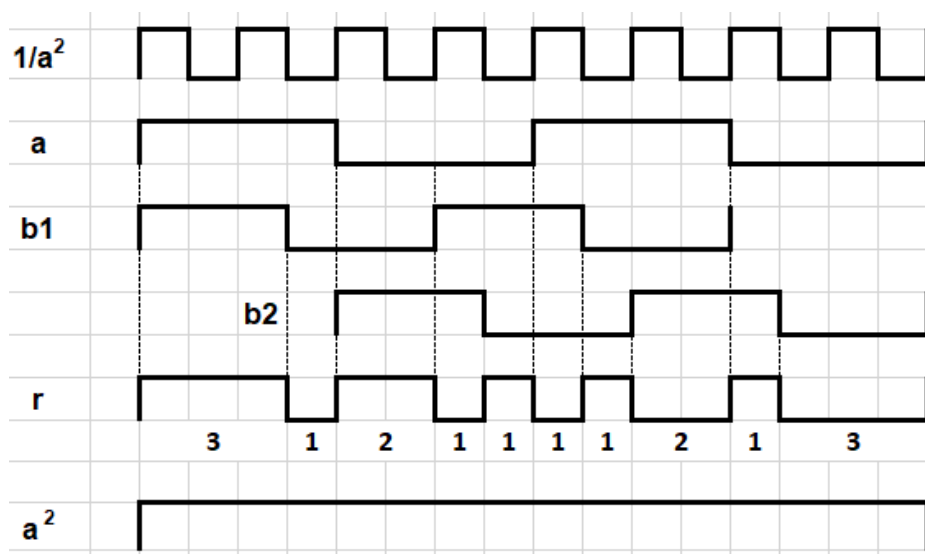
$$r_{7:5} = 5, 2, 3, 4, 1, 5, 1, 4, 3, 2, 5$$

$r_{7:6} = 6, 1, 5, 2, 4, 3, 3, 4, 2, 5, 1, 6$   
 $r_{8:3} = 3, 3, 2, 1, 3, 3, 1, 2, 3, 3$   
 $r_{8:5} = 5, 3, 2, 5, 1, 4, 4, 1, 5, 2, 3, 5$   
 $r_{8:7} = 7, 1, 6, 2, 5, 3, 4, 4, 3, 5, 2, 6, 1, 7$   
 $r_{9:2} = 2, 2, 2, 2, 1, 1, 2, 2, 2, 2$   
 $r_{9:4} = 4, 4, 1, 3, 4, 2, 2, 4, 3, 1, 4, 4$   
 $r_{9:5} = 5, 4, 1, 5, 3, 2, 5, 2, 3, 5, 1, 4, 5$   
 $r_{9:7} = 7, 2, 5, 4, 3, 6, 1, 7, 1, 6, 3, 4, 5, 2, 7$   
 $r_{9:8} = 8, 1, 7, 2, 6, 3, 5, 4, 4, 5, 3, 6, 2, 7, 1, 8$

I used resultants for shaping the compositions of *'Varied Moments'* and *'Orchestral Sketch'* from two generators and *'Pentabass'* with one of the resultants from three generators; see **Chapter 6, Chapter 7** and **Chapter 4**.

## Fractioning

Since the available symmetrical resultants are limited, Schillinger applies the fractioning technique as variation for temporal extensions of the resultants. In this case, the larger rhythm value being squared, the smaller is double entered below the larger rhythm, at its first two successive entering points; see **Figure 1.5**.



**Figure 1.5**



### *Rhythmic resultants with fractioning from two generators*

$$r_{3:2} = 2, 1, 1, 1, 1, 1, 2$$

$$r_{4:3} = 3, 1, 2, 1, 1, 1, 1, 2, 1, 3$$

$$r_{5:2} = 2, 2, 8(1), 1, 8(1), 2, 2$$

$$r_{5:3} = 3, 2, 1, 2, 4(1), 1, 4(1), 2, 1, 2, 2$$

$$r_{5:4} = 4, 1, 3, 1, 1, 2, 1, 2, 1, 1, 3, 1, 4$$

$$r_{6:5} = 5, 1, 4, 1, 1, 3, 1, 2, 2, 1, 3, 1, 1, 4, 1, 5$$

$$r_{7:2} = 2, 2, 2, 18(1), 1, 18(1), 2, 2, 2$$

$$r_{7:3} = 3, 3, 1, 2, 1, 2, 12(1), 1, 12(1), 2, 1, 2, 1, 3, 3$$

$$r_{7:4} = 4, 3, 1, 3, 1, 2, 1, 1, 2, 6(1), 1, 6(1), 2, 1, 1, 2, 1, 3, 1, 3, 4$$

$$r_{7:5} = 5, 2, 3, 2, 2, 1, 2, 2, 1, 1, 1, 2, 1, 2, 1, 1, 1, 2, 2, 1, 2, 2, 3, 2, 5$$

$$r_{7:6} = 6, 1, 5, 1, 1, 4, 1, 2, 3, 1, 3, 2, 1, 4, 1, 1, 5, 1, 6$$

$$r_{8:3} = 3, 3, 2, 1, 2, 1, 2, 18(1), 18(1), 2, 1, 2, 1, 2, 3, 3$$

$$r_{8:5} = 5, 3, 2, 3, 2, 1, 2, 2, 1, 2, 1, 1, 1, 1, 2, 1, 1, 1, 1, 1, 1, 1, 2, 1, 1, 1, 2, 1, 2, 2, 1, 2, 3, 2, 3, 5$$

$$r_{8:7} = 7, 1, 6, 1, 1, 5, 1, 2, 4, 1, 3, 3, 1, 4, 2, 1, 5, 1, 1, 6, 1, 7$$

$$r_{9:2} = 2, 2, 2, 2, 32(1), 1, 32(1), 2, 2, 2, 2$$

$$r_{9:4} = 4, 4, 1, 3, 1, 3, 1, 1, 2, 1, 1, 2, 16(1), 1, 16(1), 2, 1, 1, 2, 1, 1, 3, 1, 3, 1, 4, 4$$

$$r_{9:5} = 5, 4, 1, 4, 1, 3, 1, 1, 3, 1, 1, 2, 1, 1, 1, 2, 8(1), 1, 8(1), 2, 1, 1, 1, 2, 1, 1, 3, 1, 1, 3, 1, 4, 1, 4, 5$$

$$r_{9:7} = 7, 2, 5, 2, 2, 3, 2, 2, 2, 1, 2, 2, 3, 1, 1, 2, 3, 2, 1, 1, 3, 2, 2, 1, 2, 2, 2, 3, 2, 2, 5, 2, 7$$

$$r_{9:8} = 8, 1, 7, 1, 1, 6, 1, 2, 5, 1, 3, 4, 1, 4, 3, 1, 4, 3, 1, 5, 2, 1, 6, 1, 1, 7, 1, 8$$

I used resultants with fractioning in composing '*Varied Moments*' and '*Orchestral Sketch*'; see **Chapter 6** and **Chapter 7**.

### **Sub-grouping the time signature**

The sub-grouping the time signature technique introduces the creation of a 'seed' which can be anything, often one unit of rhythms in a bar which can be divided into elements. With this method, harmonious accompaniments can be created. Firstly, the time signature must be determined then dividing the given rhythms into elements.

Let us take the number 4 and its possible divisions in 4/4 time signature.

(3 + 1), (1 + 3), (1 + 2 + 1), (2 + 1 + 1), (1 + 1 + 2), (1 + 1 + 1 + 1); see **Figure 1.6**.

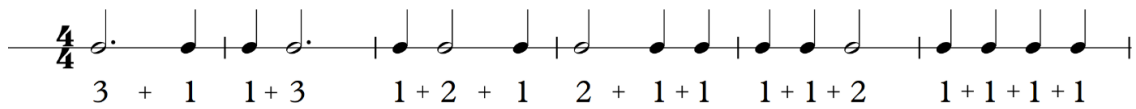


Figure 1.6

I used the resultants sub-grouping technique in composing the pieces *'Varied Moments'* and *'Orchestral Sketch'*; see **Chapter 6** and **Chapter 7**.

### Squaring the sub-groups

Irrespective of the style and theme employed in any music piece, rhythm is crucial. One of the ways of grouping patterns to achieve consistency and harmony in music is through squaring technique.

Squaring technique is demonstrated as follows, squaring of 3 and 1:

$$4 = (3+1) (3+1)^2 = (9+3) + (3+1)$$

The technique is in line with creation of counter theme to explain the variations in rhythm and style; see **Figure 1.7**.

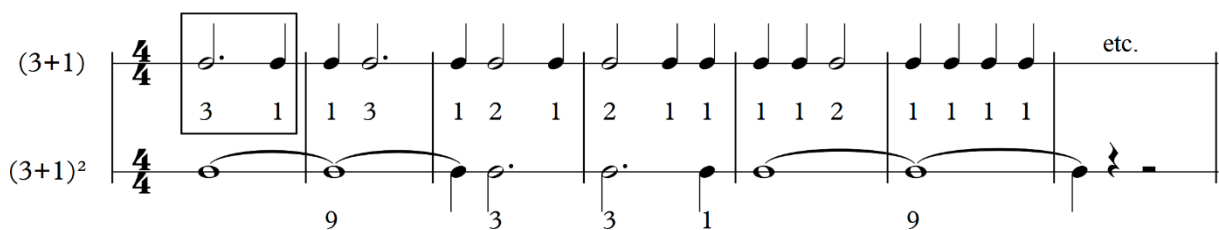


Figure 1.7

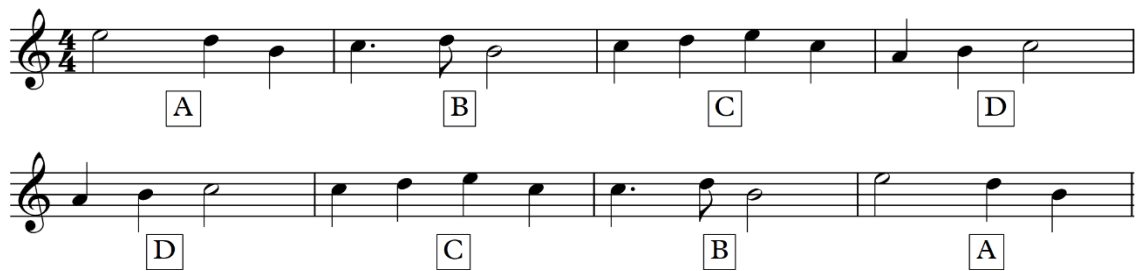
The steps to implementing the technique to create a counter theme:

- Write the melody.
- Identify sub-grouping of time signature and create rhythmic patterns.
- Develop a harmonious counter theme that correlates with the rhythmic patterns in line with the melody.

I used the sub-group squaring technique in composing '*Varied Moments*' and '*Orchestral Sketch*'; see **Chapter 6** and **Chapter 7**.

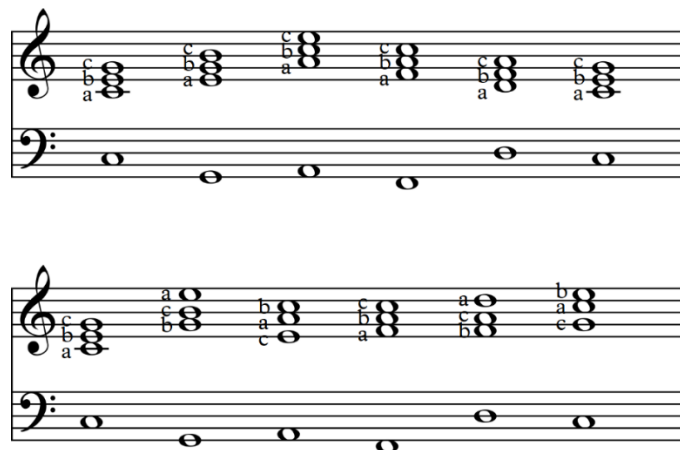
## Permutations

Composers often use permutation techniques instinctively when they are working on variations of musical materials. With the use of permutations, any musical component can be varied from rhythms to pitch scales. Schillinger classified the applications of permutations into two categories, general and circular permutations. General permutation refers to all existing permutations in every possible order, while the more limited circular permutation goes either clockwise or counterclockwise direction; see **Figure 1.8**.



**Figure 1.8**

The permutation technique can be used among others for creating a voice leading for chord progressions; see **Figure 1.9**.

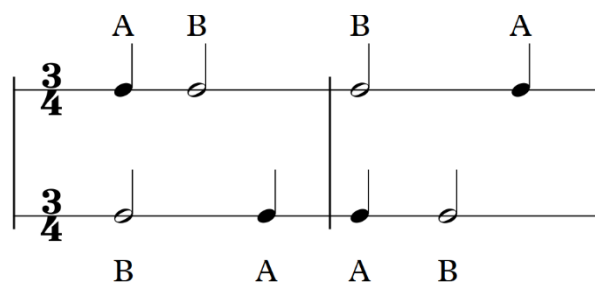


**Figure 1.9**

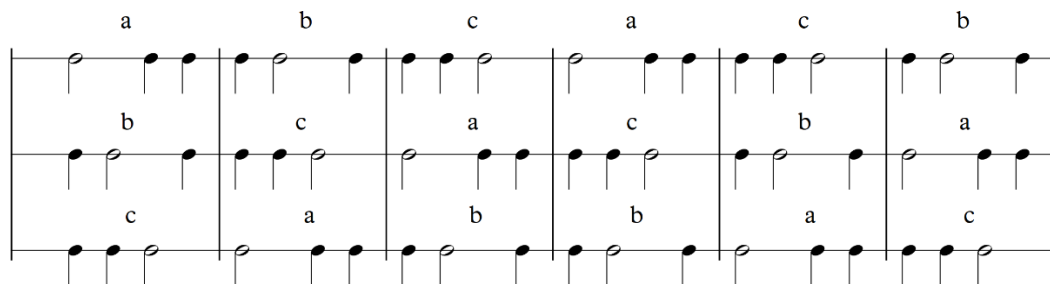
As one of my favourite Schillinger techniques, permutation was used in nearly all the compositions of this portfolio, except in the song cycle '*In a Foreign Land*' and '*Varied Moments*'; see **Chapter 4**, **Chapter 5** and **Chapter 7**.

## Split unit groups

In the case of split unit group, the rhythms change places between the parts. The split unit groups can be used for orchestration too, when all the notes of the selected rhythm pattern sound simultaneously in different instrumental layers. This technique is worth a try when the composer is arranging the music; see **Figure 1.10** and **Figure 1.11**.



**Figure 1.10**



**Figure 1.11**

I applied the split unit group techniques when composing instrumental layers for '*Orchestral Sketch*'; see **Chapter 7**.

## Geometrical inversions

Schillinger re-used the concept of serial rows known from Serialism, in a different way and named it geometrical inversions; see **Figure 1.13**. He advised on making inversions of the composed melody, thus creating a further three variations. These variations can be used or replaced by each other by combining the geometrical inversions.



**Figure 1.13**

Schillinger advises the composer to keep the music material he composed, then make variations. He mentioned Gershwin when he composed his opera '*Porgy and Bess*.' One of the themes of the opera was originally written in a form, the composer was not satisfied with, so he used one of the inversions at the end.

As in the case of the permutation technique presented above, I applied the geometrical inversion techniques in all the compositions of this portfolio, except in the song cycle '*In a Foreign Land*'; see **Chapter 4, Chapter 5, Chapter 6 and Chapter 7**.

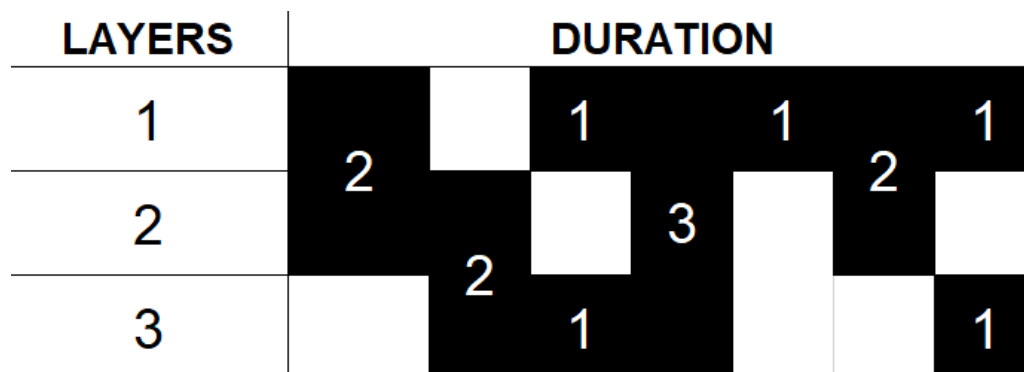
## Density

Musical density means the number of instruments playing simultaneously in a given section of the music. The density of musical texture is usually not predetermined by the composer. The final form of the patterns is often the result of the orchestration. This is often dictated by the style of orchestration and the composer's own judgement.

Schillinger taught the technique of creating 'density mask' patterns, which can be created in several ways. We can analyse all existing musical scores in terms of density and can deconstruct them into numbers, durations and shapes - in other words into density mask patterns. The

density mask pattern determines which instrumental parts are played and their duration. The combination is a matter of mathematical choice such as Schillinger resultants, or random factors.

The technique can be best used for arrangement and orchestration. According to the technique, when analysing a trio for instance, as the total of 3 instrumental layers is given in the ensemble, the maximum number of instrumental layers which can play together at the same time in *tutti* is 3, the minimum is 1. Thus, the density can vary between 1 and 3; see **Figure 1.14**. In some cases, there are *tutti* rests where no instrumental layers are playing for a short period of time, but it still counts as a form of density, since rests are part of the patterns too.



**Figure 1.14**

The composer can approach this technique in different ways. One way is to create the mask pattern in advance and write music to it. The alternative is when a composer writes a *tutti* section where all the instruments are playing and applies a density mask pattern to it.

The application of the technique can result in musical variations of selected parts too. The composer assigns numbers or other visual forms to determine the duration of each density mask. In this case, like the second option, when the composer writes for *tutti*, the density pattern ‘hides’ different sections at a given time and when they are hidden visually, the instrumental parts are omitted from the score as long the pattern lasts.

When a theme is being repeated, it often needs to be varied in some way from its previous statement. The density mask pattern is a good way to compose thematic variations for a theme. Applying the patterns for variations often results in good music which the composer can include in the composition as a varied theme. In other cases, the results are not completely satisfactory,

but if there is any promising material in the variation, the composer can use it as a preliminary template to help develop the thematic unit further.

Though I did not use this technique strictly, I kept the concept in mind when I approached the orchestrations of *'Four Movements for Wind Quintet'* and *'Orchestral Sketch'*; see **Chapter 5** and **Chapter 7**.

## Graphical notation

Schillinger emphasised the graphical notation on graph paper as a visual representation of music to help the composer to literally see the shapes and durations of the notes. Schillinger showed ways of creating melodies with trajectories, even dealing with the psychology of music and which mood can create certain melodic lines.

The graphical notation method is very similar to today's used MIDI editors. One of the advantages is that when applying this method, the composer has more flexibility to create modifications, experimenting with the melodies or complex textures, by dragging and moving the MIDI notes with the mouse or a MIDI controller without being afraid of losing the original context and texture. This is a well-established, controlled way of creating musical variety with the help of music technology.

To demonstrate the technique visually, Schillinger illustrates it with a short melody excerpt by Bach in standard musical score; see **Figure 1.15**. To see the same melody with the graphical notation method; see **Figure 1.16**. The similarities between the graphical notation method and the MIDI editor is presented in **Figure 1.17**.



**Figure 1.15**

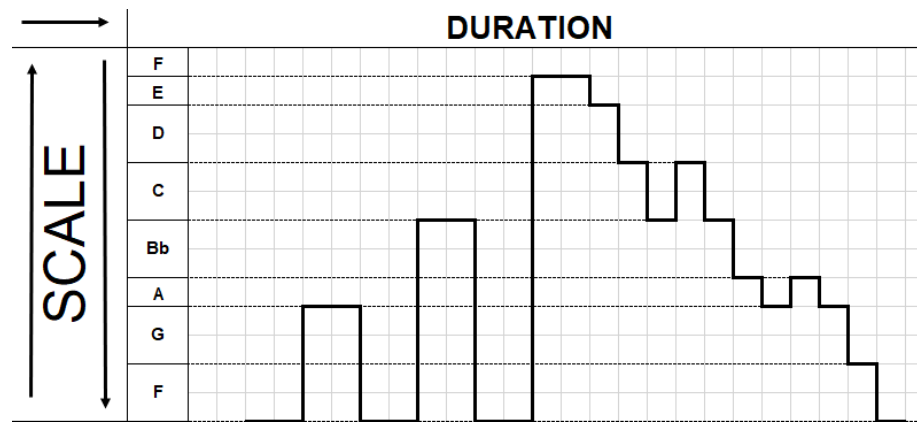


Figure 1.16

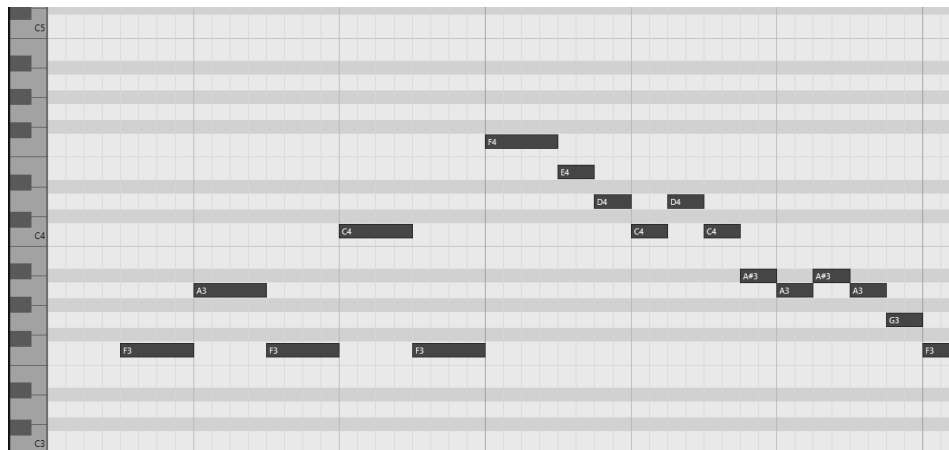


Figure 1.17

The method can be used for making music with plotted shapes too. It is said that Schillinger once used a New York Stock Market charts and created melody from that shape when he demonstrated the technique to his class.

Due to the MIDI editors, several composers use them nowadays to create music visually, something Schillinger dreamt of, with the use of graph paper.

The future of the compositional tools lies in MIDI editors for many composers, so I decided to explore this approach further alongside the traditional notation systems.

I used graphical notation in composing the *'Orchestral Sketch'*; see **Chapter 7**.





part as the preliminary score and significant time is spent on it when working on the details and even in composing long thematic continuities along with them.

The technique approaches the composition from simple to complex. It does not start with the complex rhythms or themes but the simple preliminary versions of them. The philosophy behind this is that if the preliminary version sounds good, the modifications of it are more likely to be better than that. Therefore, it can be reassuring for the composer that he has progressed forward significantly with the music, even if there are no clear melodic or harmonic patterns formed yet.

It is possible to create the skeletons of the music, even from start to finish, in this way. The composer can use this as a template afterwards and if the skeleton of the template sounds good, the details of melodising, harmonising and orchestrating are mainly a matter of mechanical approaches. Therefore, the primary goal of starting with preliminary templates is not necessary to create perfect music the very first time but to be good enough in quality to enable the composer to continue his workflow with the least possible compositional barriers. If the foundations are good, the composer can revise the music later, ‘moulding’ it until he is satisfied with the result.

I used this technique and its variations when I was working on the compositions of *‘Pentabass’*, *‘Varied Moments’* and *‘Orchestral Sketch’*; see **Chapter 4**, **Chapter 6** and **Chapter 7**.

### **The ‘FROGS’ abbreviation**

Composer, Jeremy Arden created the ‘FROGS’ abbreviation to simplify the fundamental Schillinger concepts in one formula; see next page.

<b>F</b> usion	Joining durations together
<b>R</b> otation (repetition)	Permutation elements of a pattern
<b>O</b> mission	Silence
<b>G</b> rouping	Grouping elements into phrases
<b>S</b> ubdivision	Enrichening and decorating through subdivision

**Fusion** (3,1,2,2,1,3) → (3, 1, 5, 3), (3, 9) etc.

**Rotation** (3,1,2,2,1,3) → (1, 2, 2, 1, 3, 3), (2, 2, 1, 3, 3, 1) etc.

**Omission** (3,1,2,2,1,3) → ( \_,1, 2 ,2, 1, 3), (,\_, \_ , 2, 1, 3) etc.

**Grouping** (3,1,2,2,1,3) → (3, 1, 2), (2, 1, 3), (3), (1, 2), (2,1), (3) etc.

**Subdivision** (3,1,2,2,1,3) → (2+1,1, 2, 2, 1, 3), (1+1+1,1,2,2,1,3) etc.

This formula helped me greatly as a visual reference guide to the Schillinger techniques, which was applied to four of the compositions from this portfolio.

## Chapter 2

### Preparation and Planning for the Compositional Process

#### Overview

In this chapter, I examine the processes involved in the preparatory stage of my compositions. The following describes my own reflections on new approaches I adopted in my compositions. Furthermore, I am presenting a way of compositional approach according to Schillinger's theories.

Much has been written about the 'genius' of classical and romantic composers. While this debate is inconclusive perhaps it can be agreed that, regardless of innate talent, renowned composers have developed individual styles through study and experimentation. Along with this, composers invested a great amount of time and energy in the practical aspects of their compositions. Through this, innovation was possible.

In every compositional process there are experimental phases when composers are exploring different compositional alternatives. By such means the composers can seek out a way that achieves the best possible results with the least possible time and energy invested. This is where Schillinger's approach come into play. The more resources the composer employs, the more it is possible to produce music of quality.

According to Schillinger, composers should use scientific and mathematical approaches when it comes to developing their musical ideas. This can be achieved either based on conscious planning or by relying on spontaneous musical imagination. If a composition is not properly assembled in a planned way, it counts merely as an improvisation and is the hardest to compose continuity from it.

## Schillinger's theory of composition

The direction of the development of a compositional voice also partly depends on compositional planning since it determines the style of music that will be composed. The individual compositional voice styles can be developed in harmony with the musical elements contained within the composition.

In Schillinger's point of view, composers should use both scientific and intuitive approaches when it comes to developing their musical ideas. Based on his insight, music can either be composed on 1) the basis of scientific planning, 2) by relying on spontaneous musical imagination or 3) the combinations of the two. Schillinger outlines these three basic approaches as follows:

1. Free composition without taking into consideration the musical forms and structures. The weak point of this approach is that the themes may not fit into each other as a result.
2. Composition through improvisation. This is a "start to finish" approach and it may lead to looser structures due to excessive repetitions and lack of coherence and proportion. With this approach alone, good improvisations can be created, though there is little probability of producing a well-constructed composition.
3. Composing to pre-planned forms. According to this approach, the composers shall plan the whole composition in advance or at least the major parts of it. Schillinger compared this with: "... the molding of a sculptured piece." (Schillinger, 1978, p. 1277)

Musical ideas may be conceived in a spontaneous way, but according to Schillinger:

Music, as well as other arts, still relies upon cave-age methods of production. One may build spontaneously and without computation a simple hut, a cave, a tent, or a cabin; but spontaneous creation of a skyscraper would only result in disaster. (Schillinger, 1948, p. 31.)

Schillinger emphasises the third approach as planning the compositions in advance. He also concludes that with the pre-planning approach, the compositional process can be more controlled than that which is created by spontaneity. Based on the above insight, there are two basic practical planning approaches by Schillinger. The first one I call the 'constructivist' approach and the second, the 'complementary' one. Schillinger outlines the first approach only.

In addition, however, Schillinger also draws the attention to the combinations of the approaches mentioned above:

Each approach contains different ratios of the intuitive and the rational elements by which the process of composition is accomplished. Works of different quality may result from each of these three basic approaches. Often these forms of creation are fused with one another. (Schillinger, 1978, p. 1277.)

The ‘constructivist’ approach begins with the initial planning of the complete composition. In this case, the composers are spending a significant amount of time in the planning process, which later will work as a guideline for ‘constructing’ their compositions. It is also a vital point for the composers to determine the limitations of the piece. The ‘complementary’ approach by contrast, deals with the analysis and deconstruction of pre-existing musical materials, on which the planning process is built. Such material could provide references for composing new planned variations and themes which serve musical continuity.

Schillinger goes into the details of applying his techniques in practice starting from the very basic elements of a musical composition. He divides music into ‘thematic units’ as basic elements. He defines it the following way:

We shall define a thematic unit as a variable quantity with a constant potential of quantitative aggregation. Variable quantity in this case refers to the duration of any component and its potential - the tendency by which such a component may grow. (Schillinger, 1978, p. 1279.)

When a technique is used, it contains two components according to Schillinger. In a given thematic unit there is 1) a major component and 2) a minor component which derives from the major component. Schillinger compares this i.e. the major component, to a nucleus which attracts minor components. (Schillinger, 1978, p. 1279.) He categorises seven sources of thematic units from which can be developed: rhythm, pitch scales, melodies, harmonies, ‘melodization’ of harmony, counterpoint and orchestral forms. (Schillinger, 1978, p. 1279.) Any of these seven thematic unit types can be both major and minor components. For instance, where the melody is the major component or the ‘musical nucleus’, the other selected components such as harmony, counterpoint or orchestration etc. are the minor components.

Schillinger also outlines 10 preparatory steps:

- (1) Decision as to the clock-time duration of the entire composition.
- (2) Decision as to the degree of temporal saturation.
- (3) Decision as to the number of subjects and thematic groups.
- (4) Decision as to the form of the thematic sequence.
- (5) Temporal definition and distribution of thematic groups.
- (6) Organization of temporal continuity.
- (7) Composition of thematic units.
- (8) Composition of thematic groups.
- (9) Intonational coordination (axial synthesis) of thematic continuity.
- (10) Instrumental development. (Schillinger, 1978. p. 1353.)

A composer rarely composes well-constructed compositions in a spontaneous way without prior planning. A composer, while avoiding unnecessary errors, cannot leave this to chance and should focus on 'scientific' planning instead.

I realised from experience that by proficient planning, I was able to save time and energy, as opposed to a 'trial and error' approach. My compositional planning was to combine the spontaneous approach with the pre-planned one.

Pre-planning composers could be compared to chemists who combine elements to invent new compounds. In my opinion one who follows the planning techniques above must be experienced in both 'constructivist' and 'complementary' approaches mentioned above.

I also found that this method helped me observe details in complex compositions. When I am writing music intuitively, I can later model and deconstruct with the 'complementary' approach into its basic components using Schillinger's methods. So, when I am doing this 'deconstruction', I am more interested in the result of the observed piece rather than how it was created.

## Chapter 3

### **Idegenben/*In a Foreign Land***

*Song cycle for mezzo-soprano and piano accompaniment with  
Hungarian text by Katalin Szücs*

#### **Overview**

When I was considering which music to include in this portfolio, I was advised to write a song cycle with Hungarian text. As a native speaker I was interested to see how musical rhythms would blend with characteristics of the Hungarian language. This resulted in composing a song cycle '*In a Foreign Land*' for mezzo-soprano and piano.

I asked Katalin Szücs, a Hungarian writer from Dublin to provide the text. This collaboration involved an initial exchange of musical ideas and lyrics. From this collaboration came the music and lyrics for the first song '*In a Foreign Land*'. The main theme of the song deals with moving abroad and leaving behind loved ones. From this, came the idea that the subject of the subsequent songs would follow the theme of living abroad in a '*In a Foreign Land*'. At a later stage we read through her poem collection and I choose three more poems linked to this theme.

The first song '*In a Foreign Land*' presents the difficulties of separation from loved ones due to moving abroad, balanced with the promise of a new life. The second song, '*Modern Solitude*' deals with the process of integration into a new environment. It starts from loneliness progressing to finding new friends and enjoying their company. The third song '*The Moment of Rejection*' recounts rejection in love and the feelings involved. The fourth and last song of the cycle, '*Balbriggan Chanson*', describes a romantic reminiscence of events by a couple in Balbriggan (Co. Dublin, Ireland). Therefore, these four songs form a unifying theme, as mentioned above.



As the language of the poems i.e. Hungarian, had its own speech rhythm, I did not want to alter this by forcing it into unconventional musical rhythms. It follows then that these songs are derived from melodised texts and that I was dealing with poems rather than lyrics.

I divided the technical process of writing into two basic steps: 1) writing melodies to the texts, 2) writing a reflective piano accompaniment. Since these are freely constructed poems, the time signatures of the songs constantly varied. As already mentioned above, the rhythms within the verses are close to speech rhythms, therefore the time signatures were a reaction to these. Prior to composing, I recited the poems out loud to get a sense of their structure, storyline and mood. Then, I tried putting different melodies to these words. The next step was to harmonise the melody and structure it into a piano accompaniment.

The challenge was to work within the restrictions posed by the language of the poems. For the first song I collaborated with the poet, but for the remaining three I worked on my own. What was new for me was that it happened the first time when I was composing music for poems, but not when lyrics were put to my music. Composition of music first can be easier due to the freedom of the composer; if one idea does not work in a given rhythm it can be replaced by another one. This is not the case where lyrics are written first, in such cases the given structure and rhythmical limitations must be strictly followed.

Katalin's style was between the regular and free form when writing her poems. Writing music in a classical/romantic style to her contemporary poems was a real challenge because of the structural irregularity. My experience as a classical singer and my piano skills helped me in judging the vocal and pianistic qualities required in the songs. These also helped me provide practical musical solutions.

Incidentally, while I have not used Schillinger's methods in these works, it is possible to observe some of these characteristics e.g. pre-planning in a given restriction. In this case it is the rhythms within the poems.

The analysis will take the form of translation of the poems and a verse by verse breakdown to explain the derivation of each song from the collection. The songs can be analysed based on three aspects: 1) prose, 2) melody and 3) piano accompaniment. All the three serve the purpose of expressing the meaning of the song as much as possible.

*Katalin Szücs, my close friend  
and the author of the poems,  
passed unexpectedly in 2017  
during the time these songs were written.*

\*

*I dedicate this work to her loving memory.*

## Idegenben/*In a Foreign Land*

*Ködben a Nap,  
tüze elhalt,  
torkomban ég,  
üres a pad,  
a balkon hallgat.  
A néma dalban hosszú a szünet.  
Retteg a hang.*

Sun in the fog,  
its fire died down,  
it is burning in my throat,  
the bench is empty,  
the balcony is silent.  
Long is the pause in the mute song.  
The sound is dreading.

*Bennem a meleg feketébe zárva  
didergő, silány.  
Festő szavaid színes virága  
lelkemnek hiány.*

The warmth inside me is closed to blackness  
shivering, poor.  
The colourful flower of your picturesque  
words is absence to my soul.

*Gyere haza, talány a messzi  
távlat,  
Együtt könnyebb járni világosságban.*

Come home, as the faraway vista is an  
enigma,  
Proceeding in clearness is easier together.

*A múlt mögöttem, terhét felejttem,  
kehelybe töltött nektárját örzöm.  
A kétely elmúlt,  
a tűz most éled,  
Tüdőmben izzik a vándor ének.*

The past is behind me, forgetting its burden,  
I am guarding its nectar poured to chalice.  
The doubt has ended,  
the fire just flickering now,  
the wanderer song is glowing in my lungs.

*Büszkeséged felemel téged,  
de ki tart meg,  
ha magad maradsz,  
idegenben egyedül,  
ha elsodor az ismeretlen?*

Your pride lifting you up,  
but who will keep you,  
when you are staying on your own,  
in a foreign land, alone,  
if the unknown is drifting you?

*Csak emelt fővel láthatod, hogy  
merre lépdelsz,  
a "Messze" törje  
mindenen áthat,*

Only with your head up you can look toward  
where you are walking,  
the dagger of the "Afar"  
pervades in everything,

*sebzi szívem.*

wounding my heart.

*Megérzésem mutatja merre,  
északnak, délnek, vagy haza éppen.*

My divination shows me to where,  
to north, south or even to home.

*Jó iránytű lesz,  
ha nem teszek zsebre múlt generáló  
mágnes szeletet.*

It will be a good compass  
if I will not take past generating magnet bits  
into my pocket.

*Repülj gyermek! Varázsod keljen!  
Éledjen!*

Fly child! May your appeal awaken!  
May awake!

'*In a Foreign Land*' was composed as the first song of the song cycle. This song, unlike the other three, was composed using a different compositional approach. In the latter I was writing music for existing poems, whereas in this song the poem and music were created simultaneously in a 4/4-time signature.

One melodic idea from a piano improvisation was given as a starting point for the song which I retained for further development. From this idea, the poet supplied some potential lyrics.

When I started planning the entire song cycle, I decided to reuse this idea with new lyrics. While I was experimenting with the lyrics and the melody, it became obvious that the first bar of the melody fitted the opening words: 'Repülj haza!/*Fly home!*' From this, the idea of a theme based on a dialogue between a mother and daughter emerged. This dialogue centred around separation, caused by moving to another country.

Taking the concept of the dialog between mother and daughter, I decided to base the whole song on contrasting musical themes and their variations, representing the characters of mother and daughter. The mother is mature, calm and experienced, unlike the daughter who is youthful, lively, passionate and adventurous. The poet agreed with this concept, so we started to work on the song.

To begin with, I took the melodic sketch mentioned above and expanded upon theme **(A)** which became the theme representing the mother. Following this, I composed a theme to represent the daughter's character theme **(B)**. This theme is also divided into two parts.

Then, I created a short audio recording and commentaries based on these themes which I sent to Katalin. I suggested that it was not necessary to adhere to the rhythm too rigidly when writing the lyrics. To provide more interest to the song I varied the repeats rhythmically and melodically.

After composing the musical themes, I wrote a two-bar introduction for piano whose variations are later used as a connection between the verses.

The song can be divided into seven parts as variations of the **(A)** and **(B)** themes in the following order: **(A1) – (A2) – (B1) – (A3) – (B2) – (A4)**

<b>Themes and Verses</b>	<b>Story line</b>
<b>(A1) – Verse 1, Verse 2</b>	The mother remembers.
<b>(A2) – Verse 3</b>	The mother tries to persuade her daughter to return home in a positive way.
<b>(B1) – Verse 4</b>	The daughter tells her mother about her plans to stay abroad in a passionate way.
<b>(A3) – Verse 5, Verse 6</b>	The mother continues convincing her daughter and draws her attention to the possible negative impacts she could suffer abroad. The mother gives her good advice for life in a concerned manner.
<b>(B2) – Verse 7</b>	The daughter reassures her mother about her intentions.
<b>(A4) – Verse 8</b>	The mother let her daughter go with her blessing. Here the mood is calm, optimistic and resigned.

After we finished the song we changed the "proposed title *Repülj haza!/Fly home!* to '*Idegenben/In a Foreign Land*' as this better expressed the sentiments.

## Analysis

### Opening (piano): Bars 1 – 2

A two-bar piano sets the introduction to the piece as seen in **Figure 3.1**. The melancholic mood in *adagio* is set by this initial chord. It also begins with the use of pedals, which will be maintained throughout the piece.

Figure 3.1

### Verse 1 (A1): Bars 3 - 11

<i>Ködben a Nap,</i>	Sun in the fog,
<i>tüze elhalt,</i>	its fire died down,
<i>torkomban ég,</i>	it is burning in my throat,
<i>üres a pad,</i>	the bench is empty,
<i>a balkon hallgat.</i>	the balcony is silent.
<i>A néma dalban hosszú a szünet.</i>	Long is the pause in the mute song.
<i>Retteg a hang.</i>	The sound is dreading.

This verse is an *adagio* in mood. Here, the mother introduces her melancholic expression. C-A-B $\flat$ -G notes for variation define the melody line. The piano part is an accompaniment of chords in *arpeggio down* and *arpeggio up* style. **Figure 3.2** represents how the *arpeggio* chords reveal the melancholic and remembrance mood.

3 *mf* 3 4 5 *cresc.*

Köd - ben a Nap, tü - ze el - halt, tor - kom - ban ég,

6 *dim.* 7 *rit.*

ü - res a pad, a bal - kon hal - gat.

The score consists of two systems. The first system (bars 3-5) features a vocal line with a triplet of eighth notes in bar 3, a quarter note in bar 4, and a triplet of eighth notes in bar 5. The piano accompaniment includes chords and a bass line with a triplet of eighth notes in bar 3. The second system (bars 6-7) shows a vocal line with a quarter note in bar 6 and a quarter note in bar 7. The piano accompaniment includes chords and a bass line with a quarter note in bar 6. Dynamics include *mf*, *cresc.*, *dim.*, and *rit.*

Figure 3.2

## Verse 2 (A1): Bars 12 - 16

*Bennem a meleg feketébe zárva  
didergő, silány.*

The warmth inside me is closed to blackness  
shivering, poor.

*Festő szavaid színes virága  
lelkemnek hiány.*

The colourful flower of your picturesque  
words is absence to my soul.

There are four bars in the melody line with a musical question-answer formation. The question is represented by bar 12 and 13 while the answer is represented by 15-16. Bar 14 defines the division of the two parts as represented in **Figure 3.3**.

Figure 3.3

## Verse 3 (A2): Bars 19 – 22

<i>Gyere haza, talány a messzi</i>	Come home, as the faraway vista is an
<i>távlat,</i>	enigma,
<i>Együtt könnyebb jární világosságban</i>	Proceeding in clearness is easier together.

In this verse, the mother attempts to lure her daughter; see **Figure 3.4**. She uses a positive tone as she tries to make her change her mind. The goal is to lure her to come back home. The mother desperately needs her to be restored. This mood is expressed in *con brio*. This change is critical to depict hope and a sign for happiness and relief.



19 *mf*  $\text{♩} = 100$  *cresc.* 20  
 Gye-re ha-za, ta-lány a mesz-szi táv-lat.

21 *mf* *cresc.* 22  
 e-gyütt köny-nyebb jár-ni vi-lá-gos-ság-ban!

Figure 3.4

## Verse 4 (B1) Bars 23 - 30

*A múlt mögöttem, terhét felejttem,  
 kehelybe töltött nektárját örzöm.*

*A kétely elmúlt,  
 a tűz most éled,  
 tüdőmben izzik a vándor ének.*

The past is behind me, forgetting its burden,  
 I am guarding its nectar poured to chalice.

The doubt has ended,  
 the fire just flickering now,  
 the wanderer song is glowing in my lungs.

In this verse, you will notice an *agitato* expression. The use of *sfz* here represents the daughter's response. It is rebellious and aggressive. There is an emergence of an energetic character evident. **Figure 3.5** represents this agitated response. It is a sudden change from the previous verse, which brought happiness and hope. This verse contradicts the previous one with a violent response not easily expected.

23 **Agitato** *f* 24 25 **rit.**

A múlt mő-gő-ttem, ter-hét fe-lej-tem, ke-hely-be töl-tött nek-tár-ját ör zöm.

**Agitato** **rit.**

26  $\text{♩} = 80$  27  $\text{♩} = 100$  *f*

A ké - tely el - múlt, a tűz most é - led,

*mf* *sfz* *sfz* *sfz*

28 29 30  $\text{♩} = 80$  **rit.**

tü-dőm-ben i - zzik a ván - dor é - nek.

*sfz* *sfz* *mf*

Figure 3.5

## Verse 5 (A3): Bars 31 - 37

*Büszkeséged felemel téged,  
de ki tart meg,  
ha magad maradsz,  
idegenben egyedül,  
ha elsodor az ismeretlen?*

Your pride lifting you up,  
but who will keep you,  
when you are staying on your own,  
in a foreign land, alone,  
if the unknown is drifting you?

Just like the first verse, the fifth uses the C-A-B $\flat$ -G circle of notes to build. This is almost a repetition of verse 1 expect for the rhythms of the voice. Together with the piano accompaniment, they adjust to accommodate the text.

### Verse 6 (A3): Bars 38 - 41

*Csak emelt fővel láthatod, hogy  
merre lépdelsz,  
a "Messze" törje  
mindenen áthat,  
sebzi szívem.*

Only with your head up you can look toward  
where you are walking,  
the dagger of the "Afar"  
pervades in everything,  
wounding my heart.

The mother's response to her daughter's aggression is revealed here in *Verse 6*. Her resigned tone is evident. The syncopated rhythmical piano part her plays the role of emphasising this sad feeling. The entire verse brings out the mothers' disappointment with her daughter's negative reaction. She did not expect her daughter to reject her proposal to come back home. **Figure 3.6** shows this slump in tone.

38 *mf* 39  
Csak e-melt fő - vel lát - ha - tod, hogy me - rre lép - delsz,  
40 41  
a "Messz - e" tör - je min - de - nen át - hat, ... seb - zi szi - vem.

**Figure 3.6**

**Verse 7 (B2): Bars 42 - 4**

*Megérzésem mutatja merre,  
északnak, délnek, vagy haza éppen.  
Jó iránytű lesz,  
ha nem teszek zsebre múlt generáló  
mágnes szeletet.*

My divination shows me to where,  
to north, south or even to home.  
It will be a good compass  
if I will not take past generating magnet bits  
into my pocket.

The daughter's response here in **Verse 7** is expectedly rude and negative. It is depicted by tempo 100 and an *agitato* tone. The verse shows a variation of the previous reaction from the daughter. Her theme is beginning to take shape and her character exposed.

**Verse 8 (A4): Bars 48 - 52**

*Repülj gyermek! Varázsod keljen!  
Éledjen!*

Fly child! May your appeal awaken!  
May awake!

The eighth verse opens with the *adagio* character of the mother. Her response exposes her persuasive nature. This part is the beginning of the ending of the song at bar 48 as depicted in **Figure 3.7**.

48 **Adagio** *mf*

49 **Adagio** *mf*

Re - pülj gyer - mek! Va - rá - zso - d kel -

50 jen!

51 rit. *rit.*

52 **Adagio** *mf*

É - led - - jen!

*Ped.* \* *Ped.* \* *Ped.* \*

Figure 3.7

## Modern Magány/*Modern Solitude*

*Itthon ülsz,  
megint kezekben könyvvel,  
az asztalon nyitott kompjutereddel.  
Nézed a falat, a Nap miként  
halad,  
az árnyékok megnyúlnak az ablakod alatt.*

*Mennél is, nem is,  
tétova a kedved,  
csábító társaság, mind együtt lesznek.*

*Örömtelenül kevered,  
keserű a bor, nem kedveled.  
Nincs magyarázat.  
Miért is keresed?  
A magány az úr.*

*Nyílik az ajtó, hát közönyös képpel  
üres fejeddel oldalra nézel.  
Belép egy barátod  
és jön vele még egy,  
és még jó néhányan az ismerősökkel.*

*Körbe kerülnek és megölelgetnek,  
a szemeidre mosolyt nevetnek.*

*Itt van a tánc,  
folyik tovább az édes bor  
az éjszakán át.*

*Ellépegetett a hallgatás,  
pirkadat elől oson a magány.*

You are sitting here at home,  
again, with a book in your hands,  
with your opened computer in the desk.  
You are looking at the wall, how the Sun  
passes,  
the shadows elongate beneath your window.

You would like to go and not to go,  
your mood is hesitant,  
inviting company, they will all be together.

You are mixing it with joyless,  
the wine is bitter, you do not like it.  
There is no explanation.  
Why are you even searching?  
The solitude is the lord.

The door is opening so you are looking  
sideways with a stolid face.  
One of your friends' steps in  
and accompanied by another,  
and yet some more with the acquaintances.

Surrounding and cuddling you,  
laughing smiles to your eyes.

Here is the dance,  
the sweet wine gushing forth  
overnight.

The silence is walking across,  
the solitude stealthily from the dawn.



Unlike the previous song, which was a collaboration between me and the poet, the text for this song already existed. Modern poems tend to be free in structure, requiring a flexible compositional approach. Therefore, my approach to the poem as outlined below, was determined by its structure.

As a first step I began to analyse the poem to create musical themes. The poem contains seven verses, with each verse containing an irregular number of lines. This format suggested a theme and variation approach i.e.: (A), (B), (C), (D) and their variations in order:

(A1) – (B1) – (C1) – (A2) – (B2) – (D) – (C2)

Here I was dealing with a freely structured poem without a rhyming scheme. The theme (A1) contains four lines, (A2) three lines. Theme (B1) and (B2) both contain two lines. Theme (C1) four lines, (C2) two lines. Theme (D) acts as a transition between (B2) and (C2).

The melodic basis of each line remains the same to maintain the original melodic character.

## *Analysis*

### **Introduction: Bars 1 - 3**

The introduction is represented by a 4/4 time signature, *ritardando* and tempo 100. It starts with a piano introduction of three bars. A chromatic group of notes forms the basis of the musical material. **Figure 3.8** shows them and their variations in a descending order (D, D $\flat$ , C, B, B $\flat$ ). These two bars show the mood of the song at the introduction.

The musical score for the introduction consists of three measures. Measure 1 is in 4/4 time, marked *mf* and *Andante* with a tempo of 100. Measure 2 is in 2/4 time, marked *mp* and *rit.*. Measure 3 is in 2/4 time, marked *cresc.* and *8va*. The score shows a chromatic group of notes (D, D $\flat$ , C, B, B $\flat$ ) forming the basis of the musical material.

**Figure 3.8**

### Verse 1 (A): Bars 4 - 12

<p><i>Itthon ülsz, megint kezekben könyvvel, az asztalon nyitott kompjutereddel. Nézed a falat, a Nap miként halad, az árnyékok megnyúlnak az ablakod alatt.</i></p>	<p>You are sitting here at home again, with a book in your hands, with your opened computer in the desk. You are looking at the wall, how the Sun passes, the shadows elongate beneath your window.</p>
--	---

*Verse 1* sets the introduction by laying out the basis of the song's melodic patterns. This first verse is crucial to the entire song because it is the foundation of the characters. It uses broken chords to support the establishment of the solitude mood. **Figure 3.9** represents the first verse and its essence in the song. It is a representation of the foundation of the melody.

The musical score for Verse 1 (A) consists of three systems of music. Each system includes a vocal line and a piano accompaniment. The tempo is marked as  $\text{♩} = 100$ . The key signature has one sharp (F#). The score includes lyrics in Hungarian and English, dynamic markings (mf, mp, dim., cresc., rit.), and performance instructions like 'Ped.' for the piano part.

**System 1 (Bars 4-7):** The vocal line starts with a *mf* dynamic. The lyrics are: "Itt-hon ülsz, me-gint ke-zed-ben könyv-vel, az asz-ta-lon nyi-tott". The piano accompaniment features broken chords and a steady bass line.

**System 2 (Bars 8-10):** The vocal line continues with lyrics: "komp-ju-te-re-ddel. Né-zed a fa-lat, a Nap mi-ként ha-lad, az". Dynamics include *dim.*, *mp*, and *cresc.*. The piano accompaniment continues with broken chords and a steady bass line.

**System 3 (Bars 11-12):** The vocal line concludes with lyrics: "ár-nyé-kok meg-nyül-nak az ab-la-kod a-latt.". Dynamics include *mf* and *rit. dim.*. The piano accompaniment concludes with broken chords and a steady bass line.

**Figure 3.9**



**Verse 2 (B): Bars 13 - 17**

<p><i>Mennél is, nem is, tétova a kedved, csábító társaság, mind együtt lesznek.</i></p>	<p>You would like to go and not to go, your mood is hesitant, inviting company, they will all be together.</p>
--	--

F-minor scale is the basis of this verse. Bars 13-14 is based on its ascending and descending variations. The vocal melody is built on this with the last note varied from the original F-to F#. The purpose of this variation is to present the unmotivated mood. The arpeggiated piano accompaniment helps to depict this lack of motivation in small intervals that reveal the state of the person. The person's mood is revealed as very unmotivated. They are so unmotivated that they cannot rise to higher intervals.

Bars 15-17 have a change of mood. I have changed the lack of motivation to some minor mood changes. There is a brighter scale represented in these bars. The uses of accented block chords in addition to the arpeggiated chords are evident in the piano accompaniment. This mood verse is represented in **Figure 3.10**.

The musical score for Figure 3.10 is presented in two systems. The first system covers bars 13 and 14. The second system covers bars 15, 16, 17, and 18. The vocal line is in the upper staff, and the piano accompaniment is in the lower staff. Dynamics include *mf*, *cresc.*, *dim.*, and *f*. Performance markings include *rit.* and *ped.* The piano accompaniment features arpeggiated chords in bars 13-14 and accented block chords in bars 15-17.

**Figure 3.10**

### Verse 3 (C): Bars 19 - 26

Örömtelenül kevered,  
keserű a bor, nem kedveled.

Nincs magyarázat.

Miért is keresed?

A magány az úr.

You are mixing it with joyless,  
the wine is bitter, you do not like it.

There is no explanation.

Why are you even searching?

The solitude is the lord.

The third verse, like the second is unmistakably unmotivated. It was meant to be short and stumbling. Written in *f*, this verse uses a lazy style. It shows the de-motivation as the most evident of expressions in the composition.

The lack of happiness is enhanced in bars 19-22. The lazy movements make it seem like a drunkard song. The resultant stumbling rhythm is in 4/4, 2/4 and 3/4 as shown in **Figure 3.11**. To symbolise this character, the entire collection of rhythms in the piano accompaniment contributes to this purpose. They were selected intentionally to highlight the joyless feeling and stumbling character.

Figure 3.11 shows a musical score for four bars (19-22). The tempo is marked as quarter note = 100. The piano part features staccato chords and block chords in 4/4, 2/4, and 3/4 time signatures. The vocal part has lyrics in Hungarian and English.

Bar 19: *mf*, 4/4 time. Lyrics: Ö-röm-te-len-ül ke-ve-red, ke-ser-rü a bor, nem ked-ve-led.

Bar 20: 2/4 time.

Bar 21: 3/4 time.

Bar 22: *cresc.*, 3/4 time.

The piano accompaniment includes pedal markings (Ped.) under each bar.

**Figure 3.11**

There is a vital role played by *staccatos* plus block chords in the piano accompaniment. Bars 23-24 represent the culture that lures and motivates people from fantasy. This way of life is symbolised by a knock on the door as shown in **Figure 3.12**.

I used this verse to create a basis of the environment and background of the song. Different styles are crammed up here to help support this role.

23 *f* Nincs ma-gya-rá - zat. 24 *dim.* 3 Miért is ke - re - sed?

Figure 3.12

#### Verse 4 (Av): Bars 29 - 36

<p><i>Nyílik az ajtó, hát közönyös képpel üres fejjel oldalra nézel. Belép egy barátod és jön vele még egy, és még jó néhányan az ismerősökkel.</i></p>	<p>The door is opening so you are looking sideways with a stolid face. One of your friends' steps in and accompanied by another, and yet some more with the acquaintances.</p>
---	--

*Verse 4* is a model of the first verse. It has been created by adjusting verse 1. Remodelling of the first verse gave rise to change in theme and structure. You will notice the change in the text but a major resemblance to the first verse.

Block chords play a vital role in bar 31 with *ritardando*. It is here that she notices her friends are approaching to visit. **Figure 3.13** represents this situation.

31 *rit.* 3 *dim.* 3 ü - res fe - je - ddel ol - dal - ra né - zel. *mf*

Figure 3.13

**Verse 5 (Bv): Bars 37 - 40**

*Körbe kerülnek és megölelgetnek,  
a szemeidre mosolyt nevetnek.*

Surrounding and cuddling you,  
laughing smiles to your eyes.

This fifth verse is a re-model of *Verse 2B*. It keeps a similar melodic accompaniment character as shown in **Figure 3.14**. The significant changes can be seen in the different time signatures and rhythms of the vocal part. There is a perfect fit in the piano's *arpeggio*. It represents the character of the environment with warm cuddly friends.

$\text{♩} = 100$   
**Legato**  
*mf*  
 37 Kör - be ke - rül - nek és meg - ö - lel - get - nek,  
*cresc.*  
 38 *dim.*

$\text{♩} = 100$   
**Legato**  
*mf*  
*cresc.*  
*dim.*

39 *cresc.* a sze-me-id-re mo - solyt ne - vet - nek.  
 40 *rit.*  
*rit.*

**Figure 3.14**

**Verse 6 (D): Bars 41 - 45**

*Itt van a tánc,  
folyik tovább az édes bor  
az éjszakán át.*

Here is the dance,  
the sweet wine gushing forth  
overnight.

**Verse 6** introduces a fresh theme that is short and precise. This verse begins with a *crescendo* and later turns into a knocking *staccato* motion sense. The *staccato* style returns in bar 42 of the piano part. It plays the role of representing the loud knocking on the door exactly like in **Verse 3(C)** as depicted in **Figure 3.15**.

42  
fo - lyik to - vább

**Figure 3.15****Verse 7 (Cv): Bars 46 - 51**

*Ellépegetett a hallgatás,  
pirkadat elől oson a magány.*

The silence is walking across,  
the solitude stealthily from the dawn.

**Figure 3.16** shows how **Verse 7** represents a coda conclusion of the sudden mood changes. The piano *arpeggios* and other accompaniment serve as the termination of this character. There are stepping block chords throughout the seventh verse.



46 *mf* El - lé - pe - ge - tett a hall - ga - tás,

47 *rit. cresc.*

48 *accel.*

49 *f*  $\text{♩} = 100$  pir - ka - dat e - lől

50 *mf cresc. f* o - son a ma - gány.

*mf*

*f*

*mf*

*f*

8<sup>va</sup>

Figure 3.16

Bar 50 has many *tenuti* that serve as the walking of the silence before the song closes. It closes with a fermata chord in *mp* in bar 51 as shown in Figure 3.17.

51

*mp*

Figure 3.17

### **Az elutasítás pillanata/*The Moment of Rejection***

<p><i>Le kell szállnom a témáról, csak körbe, körbe jár. Elhagy szép lassan arcod, és én haladok is tovább.</i></p>	<p>I must leave off this argument, it just circles around. Your face will slowly leave me behind, and I am just progressing forward.</p>
<p><i>Nem üldöz hangod, édes, vagy mogorva. Marad a hangtalan néma alkony ma és a bizonyosság.</i></p>	<p>Your voice is not chasing me, be it sweet or surly. The soundless, silent, twilight remaining today and the certitude.</p>
<p><i>Szeretni együgyü, egyszeri szempillantás. Nincsen a múlt és a jövő sem férhet hozzá. Egyetlen mozdulat ontja a lángokat, nem baj, ha nincs folytatás.</i></p>	<p>Loving is a silly, simple onefold glance. There is no past and neither can the future access it. One single movement spouting the flames, it does not matter if there is no carry on.</p>
<p><i>Szerelem-pillanat ne tovább, ne legyen többé ingovány! Szerelem-pillanat ne tovább, ne legyen többé ingovány!</i></p>	<p>Love-moment no further, no quagmire anymore! Love-moment no further, no quagmire anymore!</p>

This is the shortest of the four songs describing the pain of rejection in thirty-one bars. The musical structure of this song emphasises the emotionally charged text. The mood expresses excitement, restlessness, stubbornness and is passionate in tone.

I tried to compose different recurring musical themes at first but, due to the brevity of the poem, I opted for a through-composed, continuous and free structured approach. This prevented the overuse of continuously changing musical material which resulted in a continuous but intense emotional rush.

By choosing the through-composed approach I also had to ensure that the musical motifs between the verses had to serve as smooth transitions. Therefore, the song can be also seen in

structure as a thirty-one-bar single musical theme which has an introduction, middle section and a coda to the end.

## *Analysis*

### **Verse 1: Bars 1 - 5**

*Le kell szállnom a témáról,  
csak körbe, körbe jár.  
Elhagy szép lassan arcod,  
és én haladok is tovább.*

I must leave off this argument,  
it just circles around.  
Your face will slowly leave me behind,  
and I am just progressing forward.

This verse ushers the song with a sudden vibrant beginning. Bar 1 has a 100 tempo in *allegro appassionato*. The purpose of this design is to serve as retaliation towards the angered obsessive thoughts; see **Figure 3.18**.

**Figure 3.18**

The vocal part joins in bar 2. The part highlights the obsessive mind. They sing consistently circling around as shown in **Figure 3.19**. I needed to select the rhythms that symbolise the circle movements appropriately in order to write music for this section. The result is the dotted crotchet plus quaver and dotted quaver plus semiquaver combinations. This rhythm selection is appropriate because it fits smoothly into the text. This fit helped to make a proper circle of rhythmic representation and thus the application.



2

kör - - be, kör - be jár.

Figure 3.19

Bar 3 and 4 show the vocal line with block chords in the piano accompaniments. **Figure 3.20** represents this depiction. Here; we see that the rhythm depicts the steady process of forgetting on the piano.

3 *mf* 3 4 *rit.* *dim.*

El - hagy szép las - san ar - cod, és én ha - la - dok is to -

*mf* *rit.*

Figure 3.20

Bar 5 has the *ritardando*, which gives the notion of ending the verse. It is shown in **Figure 3.21**. The rhythms of minims and crochets are a symbol of a walking rhythm. This rhythm reflects the vocal line singing about a positive attitude towards the future. The piano chords ascend to a high register using brightened tones. The purpose of the bright tones is to represent the optimism of ridding the person from the singer's mind.

5

- vabb

Figure 3.21

**Verse 2: Bars 6 - 10**

<i>Nem üldöz hangod, édes, vagy mogorva.</i>	Your voice is not chasing me, be it sweet or surly.
<i>Marad a hangtalan néma alkony ma és a bizonyosság.</i>	The soundless, silent, twilight remaining today and the certitude.

This verse has a sudden surge by beginning with a tempo 100 too. Bar 6 has altered *arpeggios* on the piano in a semiquaver rhythm as shown in **Figure 3.22**. The purpose of this is to symbolise the capricious feel. This feeling represents self-consolation towards forgetting a person.

This verse plays a vital role in the entire song. It highlights the theme of the song by showing that the emotions are effective. Self-persuasion is vital in the attempt to wipe out a memory.

**Figure 3.22****Verse 3: Bars 12 - 24**

<i>Szeretni együgyü, egyszери szempillantás.</i>	Loving is a silly, simple onefold glance.
<i>Nincsen a múlt</i>	There is no past
<i>és a jövő sem férhet hozzá.</i>	and neither can the future access it.
<i>Egyetlen mozdulat ontja a lángokat,</i>	One single movement spouting the flames,
<i>nem baj, ha nincs folytatás.</i>	it does not matter if there is no carry on.

Verse 3 has an *andante* in bar 12. It gives the walking feeling in *mf* again. The entire tone technique in the subsequent bars also (12-17) show the lyrical character of the song. This varies from the character of the second verse as shown in **Figure 3.23**.

The image shows a musical score for Figure 3.23, consisting of vocal and piano parts. The tempo is marked "Andante" with a quarter note equal to 100. The music is in 4/4 time. The vocal part starts in bar 12 with a triplet of eighth notes. The lyrics are: "Sze - ret - ni egy - ü - gyü, egy - sze - ri szem - pill - an - tás." The piano part provides accompaniment with chords and single notes. In bar 15, there is a triplet of eighth notes. In bar 16, there is a "cresc." marking. The lyrics for bars 15-17 are: "nín - csen a múlt és a jö - vő sem fér - het hoz - zá." The piano part continues with chords and single notes.

**Figure 3.23**

Bars 18 to 24 have a 3/4 time signature. Music changes into a waltz as shown in **Figure 3.24**. This is also a representation of the kindness and softness as the singer shows the feeling of love currently without the hope of the future. There is a tonal and rhythmic reflection from the piano part. The verse has a go slow with a *fermata* on top of the last note in bar 24. It depicts the song is about to end.

This verse is used as a depiction of the intention to finish the song. The *fermata* is strategic to let the singer and audience tell of the conclusion of the story. I used it to avoid a sudden end to the song. Instead, I chose a predictable end to help the audience keep their attention and expectation for the end part.

18 *mf* 19 20 21  
 Egy - gyet - len moz - du-lat ont - ja a lán - go - kat,  
 22 23 24  
 nem baj, ha nincs foly - ta - tás.

Figure 3.24

## Verse 4: Bars 26 - 33

*Szerelem-pillanat ne tovább,  
 ne legyen többé ingovány!  
 Szerelem-pillanat ne tovább,  
 ne legyen többé ingovány!*

Love-moment no further,  
 no quagmire anymore!  
 Love-moment no further,  
 no quagmire anymore!

The whole verse is divided into two segments; there are only two variations from 26 to 29; see **Figure 3.25**. The love theme in this verse is evident in the vocal line. The steady rhythms and triplets of ornamental settings characterise the verses. Octave doubling and chord blocking enhances rhythm in the song.

Figure 3.25 shows a musical score for a vocal piece. The tempo is marked "Andante" and the dynamics are "f". The score consists of two systems of music. The first system covers measures 26 and 27, and the second system covers measures 28 and 29. The vocal line is in 4/4 time, and the piano accompaniment is in 4/4 time. The lyrics are: "Sze - re - lem - pil - la - nat, ne to - vább, ne le - gyen töb - bé in - go - vány!".

Figure 3.25

Bar 31 marks the beginning of *Verse 2* that ends in 33. It is the same text of melody and rhythm all through the vocal lines. They help in alleviating and pain related to love. Running emotions throughout this verse creates tension and slows the rhythm bar.

It all ends with a *fermata* sign from the beginning. A dotted crotchet ends the vocal part with piano accompaniment.

Figure 3.26 shows a musical score for a vocal piece. The tempo is marked "rit." and the dynamics are "mf". The score consists of two systems of music. The first system covers measures 31 and 32, and the second system covers measure 33. The vocal line is in 4/4 time, and the piano accompaniment is in 4/4 time. The lyrics are: "Sze-re-lem-pil-la-nat, ne to-vább, ne le-gyen töb-bé in-go-vány!".

Figure 3.26

## Balbriggan sanzon/*Balbriggan Chanson*

*Dalt hallgatok,  
iszom az est italát,  
pillanat pelyhe és súly  
a hajó tatján.*

I am listening to a song,  
drinking the evening's drink,  
the flakes of moment and weight are  
on the ship's stern.

*Irgalom, remegő reggel, lebegő,  
lázasan várakozás.*

Graciousness, trembling morning, floating,  
waiting feverishly.

*És úszik a feledett kép,  
az arcom most pirosan ég.  
Egy évvel ezelőtt, kezdetek  
kezdetén,*

And the forgotten image is swimming,  
my face is burning in red.

*Egy évvel ezelőtt, kezdetek  
kezdetén,*

One year ago, at the beginning of the  
beginning,

*Balbriggan, napsugár, sóhajtó ég.*

Balbriggan, sunshine, sighing sky.

*Megjött mit vártam,  
belopakodott.*

What I was waiting for has arrived,  
sneaked in.

*Ismerős kavargás, álom, holló.*

Familiar whirl about, dream, raven.

*Szembe került velem a forró vágy,  
elképzelt életem valóra vált.*

The hot desire confronted me,  
my imagined life has come true.

*Szerelmem áthidalt ámító szurdokot,  
liluló, fakuló képmutatást.*

My love has bridged illusory glens,  
purpled, fading hypocrisy.

*És úszik a feledett kép,  
az arcom most pirosan ég.  
Egy évvel ezelőtt, kezdetek  
kezdetén,*

And the forgotten image is swimming,  
my face is burning in red.

*Egy évvel ezelőtt, kezdetek  
kezdetén,*

One year ago, at the beginning of the  
beginning,

*Balbriggan, napsugár, sóhajtó ég.*

Balbriggan, sunshine, sighing sky.

*Hát, emlékszel, mennyire kétséges volt?*

Do you remember how doubtful it was?

*Nem hittük el, hogy  
öröm a szó.*

We could not believe that the word is  
rejoicing.

*Hogy méltón zúdul az izgalom*

That the excitement worthily showered

*ránk,  
s, nem tudtad, vagyok-e neked,  
s, nem tudtad, lehetsz-e valóban,  
valóban kedves hozzám.*

*Vagy játszik az ölelés  
s, káprázat lesz a szobánk,  
s, a tele arany pohár  
nem állt üresen azon a napon.  
Mégis csak, mégis mámort kíván.*

*És úszik a vásznon a kép,  
egy évvel ezelőtt épp.  
Balbriggan, napsugár, sóhajtó ég.*

*De jó, hogy jöttél,  
jókor érkezted,  
csüörtök van és hallgató,  
huhog a szürkülő néma hang.*

*Mert, minthogyha köd lenne, homály  
lapulna  
A szívemnek halovány szírma alatt.  
Átlátok leplén  
és újra tiszta.  
De jó, hogy jöttél,  
jókor érkezted,  
csüörtök ég madara.*

*És úszik a feledett kép,  
az arcom most pirosan ég.  
Egy évvel ezelőtt, kezdetek  
kezdetén,  
Balbriggan, napsugár, sóhajtó ég.*

*to us,  
and you did not know whether I am for you,  
and you did not know that if you can be  
truly, verily dear with me.*

*Or the embrace is playing  
and our room will be a mirage,  
and the full golden glass  
was not standing empty on that day.  
Still and yet wishing intoxication.*

*And the image is swimming on the canvas,  
Just one year ago,  
Balbriggan, sunshine, sighing sky.*

*It is so good that you came,  
you arrived in good time,  
it is Thursday and taciturn,  
the greying silent sound ululates.*

*As if there is mist, the gloom would  
lie low  
beneath the pale petals of my heart.  
But I see through its perianth  
and it is clean again.  
It is so good that you came,  
you arrived in good time,  
sky bird of Thursday.*

*And the forgotten image is swimming,  
my face is burning in red.  
One year ago, at the beginning of the  
beginning,  
Balbriggan, sunshine, sighing sky.*

*Emlékszel?*

## Do you remember?

This song is an evocation of a romantic memory from Balbriggan (Co. Dublin, Ireland). As this is the longest song in the song cycle, it was the most challenging and time-consuming to compose.

The title ‘chanson’ has no specific reference to the French genre and merely reflects the romantic nature of the song. I found it helpful to listen to songs of a similar genre e.g. Debussy, paying attention to the interaction between piano accompaniment and voice.

When I began to plan the song, I concluded that the ideal approach would be to find a way to fit the poem into a lyric form as much as possible. In this song I used similar methods to the earlier songs. At first, I analysed the verses and divided them into recurring varied musical themes. As the verses do not follow the same metrical rhythms, I needed to modify the melodies to fit them into the poem’s rhythms. There is one verse which occurs four times during the poem, three times repeating the same way and once varied. Therefore, I set these verses to music first.

What I needed to do then was to build up the song according to the verses and refrains contained in the poem. There are eight verses and four refrains, linked by bridging passages on piano. As mentioned above, there was one verse repeated four times throughout the poem, which I chose as the refrain for the song. I began by composing the melody and accompaniment for the refrain.

Following this, I composed the melody for the remaining verses, keeping the same melodic line according to the rhythmic structure of the poem. I decided to keep *Verse 1* as an introduction to create contrast with the remaining verses. Due to the length of the song, I aimed to keep a balance between verses, refrains and the Interludes.

In conclusion, the composition of this song taught me about writing music according to the limitations of the poem’s rhythmic structure. Due to this the composition of this song necessitated many drafts to do justice to the poem’s rhythms and moods.



## Analysis

### Verse 1: Bars 1 - 7

*Dalt hallgatok,  
iszom az est italát,  
pillanat pelyhe és súly  
a hajó tatján.*

I am listening to a song,  
drinking the evening's drink,  
the flakes of moment and weight are  
on the ship's stern.

The vocal line expresses the introduction character of the song based on the notes of chromatic intervals in bars 1-4, in *p*; see **Figure 3.27**. This chromatic character is used to show the contemplative mood of the singer.

The musical score for Verse 1 (Bars 1-7) is presented in two systems. The top system shows the vocal line in treble clef, starting in 4/4 time with a tempo of quarter note = 100 and a dynamic of piano (*p*). The lyrics are: "Dalt hall - ga - tok, i - szom az est i - ta - lát." The bottom system shows the piano accompaniment in grand staff (treble and bass clefs), also in 4/4 time with a tempo of quarter note = 100 and a dynamic of piano (*p*). The piano part features a steady eighth-note accompaniment in the right hand and a bass line in the left hand. The score includes bar numbers 1 through 4 above the vocal line and a *rit.* marking in the piano part at the end of bar 12.

Figure 3.27

### Verse 2: Bars 8 - 12

*Irgalom, remegő reggel, lebegő,  
lázasan várakozás.*

Graciousness, trembling morning, floating,  
waiting feverishly.

Written in *mf*, the verse represents the appearance of emotions and their intensity and is comparatively different from the previous quiescent introduction verse; see **Figure 3.28**.

The *ritardando* in bar 12 lays emphasis on the end of the first verse, thus paving the way for a smooth transition to the introduction of the upcoming refrain.

8 *mf* Ir - ga - lom, re - me - gő reg - gel, le - be - gő,  
 9  
 10  
 11 lá - za - san vá - ra - ko - zás. És  
 12 *rit.*

Figure 3.28

**Refrain 1: Bars 12 - 24**

*És úszik a feledett kép,  
 az arcom most pirosan ég.  
 Egy évvel ezelőtt, kezdetek  
 kezdetén,  
 Balbriggan, napsugár, sóhajtó ég.*

And the forgotten image is swimming,  
 my face is burning in red.  
 One year ago, at the beginning of the  
 beginning,  
 Balbriggan, sunshine, sighing sky.

The variations between the tempo of 110 and 100 along with *ritardando* and *accelerando* aim to introduce the refrain of the song for the first time, thus suggesting that the refrain will reappear again; see **Figure 3.29**.

12 rit. . . . .  $J = 110$   
 zás. És ú - szik a fe - le - dett kép, az

15 rit. . . . .  $J = 100$  accel. . . . .  
 ar - com most pi - ro - san ég. Egy év - vel ez - e - lőtt,

19 rit. . . . .  $J = 100$   
 kez - de - tek kez - de - tén, Bal - bri - ggan, nap - su - gár, só - haj - tó ég.

Figure 3.29

**Interlude 1: Bars 25 - 34**

The dominance of the downward progression of the interlude provides a contrast to the upward melodic progression of the previous refrain; see **Figure 3.30**.

25  $\text{♩} = 120$  26 27 28 29

30 31 32 33 34

Figure 3.30

## Verse 3: Bars 35 - 43

*Megjött mit vártam,  
belopakodott.*

*Ismerős kavargás, álmom, holló.*

*Szembe került velem a forró vágy,  
elképzeltem életem valóra vált.*

What I was waiting for has arrived,  
sneaked in.

Familiar whirl about, dream, raven.

The hot desire confronted me,  
my imagined life has come true.

To conclude the verse, the piano accompaniment is used to emphasise and decorate the vocal line rhythmically in bars 41-43; see **Figure 3.31**. Similarly, the *ritardando* in bar 43 accentuates the vocal part, when ‘my imagined life has come true’ is sung.

41 42 43 rit. . . . .

el - kép - zelt é - le - tem va - ló - ra vált.

rit. . . . .

Figure 3.31

**Verse 4: Bars 44 - 49**

*Szerelmem áthidalt ámító szurdokot,  
liluló, fakuló képmutatást.*

My love has bridged illusory glens,  
purpled, fading hypocrisy.

The *andante* rhythmical style in the piano accompaniment symbolises the emotion of dreamy love; see **Figure 3.32**.

44  $\text{♩} = 110$   
*mf*  
Sze-rel-mem át-hi-dalt á-mi-tó szur-do-kot,  
Ped

45 Ped

46 Ped

47 Ped

48  
li-lu-ló, fa-ku-ló kép-mu-ta-tást. És  
Ped

49 Ped

**Figure 3.32****Refrain 2: Bars 49 - 61**

*És úszik a feledett kép,  
az arcom most pirosan ég.  
Egy évvel ezelőtt, kezdetek  
kezdetén,  
Balbriggan, napsugár, sóhajtó ég.*

And the forgotten image is swimming,  
my face is burning in red.  
One year ago, at the beginning of the  
beginning,  
Balbriggan, sunshine, sighing sky.



This is the original version of the refrain. The previously introduced *Refrain 1* was modified to fit in with the song's introductory character. The difference between *Refrain 1* and the present one lies in tempo changes which are the variations between *ritardando*, *accelerando* and the rhythmical alternations in the piano accompaniment.

### Interlude 2: Bars 61 - 70

The *Interlude 2* begins in bar 61 and overlaps with the last bar of the refrain based on the exact repetition of *Interlude 1*; see **Figure 3.33**. The *ritardando* in bar 70, aimed to establish the emotional transition to the next verse, starts with an upbeat here.

The musical score for Interlude 2 (bars 61-70) is presented in three systems. The first system (bars 61-64) shows a vocal line with a fermata in bar 61 and piano accompaniment with a tempo marking of quarter note = 120. The second system (bars 65-67) continues the piano accompaniment. The third system (bars 68-70) shows the vocal line with a fermata in bar 68, followed by piano accompaniment with a 'rit.' marking in bar 70 and a 'Hât.' marking in bar 70. The piano accompaniment includes 'Ped.' markings under the bass line.

Figure 3.33

**Verse 5: Bars 70 - 92**

*Hát, emlékszel, mennyire kétséges volt?*

*Nem hittük el, hogy öröm*

*a szó.*

*Hogy méltón zúdul az izgalom*

*ránk,*

*s, nem tudtad, vagyok-e neked,*

*s, nem tudtad, lehetsz-e valóban,*

*valóban kedves hozzám.*

Do you remember how doubtful it was?

We could not believe that the word is  
rejoicing.

That the excitement worthily showered  
to us,

and you did not know whether I am for you,

and you did not know that if you can be  
truly, verily dear with me.

This verse stands out and is different from all other verses in every respect. For the first time, the vocalist addresses another person and evokes romantic memories and the structure, therefore, also follows this storyline.

The melody starts with an upbeat in bars 70-71 and with a major sixth interval up from G to E; see **Figure 3.34**. To give this verse a different character in comparison to the previous one, it starts with a rather big interval. Here, I decided to use a waltz-like approach in 3/4 time. This rhythmical approach can be interpreted in this way: A couple is dancing together while remembering the past.

The image shows a musical score for two staves. The top staff is the vocal line, and the bottom staff is the piano accompaniment. The time signature is 3/4. The tempo is marked as 120. The key signature is one flat (B-flat). The score is divided into two measures, 70 and 71. Measure 70 is marked 'rit.' and contains a rest for the vocal line. Measure 71 is marked 'f' and contains the lyrics 'em - lék - szel,'. The piano accompaniment starts in measure 70 with a waltz-like rhythm and continues through measure 71.

**Figure 3.34**

Bars 91-92 slow down with a *ritardando*, thus clearly dividing this verse from the next one which is similar in tonality; see **Figure 3.35**. With the *ritardando* and the tempo mark of 120 of the succeeding verse, it gives a contrast in tempo, therefore, creating a feeling of a run.

The image shows a musical score for two bars, 91 and 92. The top staff is a vocal line in 3/4 time. Bar 91 contains a long note with a 'rit.' marking above it. Bar 92 contains a shorter note. The lyrics 'zám.' and 'Vagy' are written below the vocal line. The bottom two staves are the piano accompaniment, with the right hand playing eighth-note chords and the left hand playing a steady eighth-note bass line. The key signature has one sharp (F#) and the time signature is 3/4.

**Figure 3.35**

#### Verse 6: Bars 92 - 104

*Vagy játszik az ölelés  
s, káprázat lesz a szobánk,  
s, a tele arany pohár  
nem állt üresen azon a napon.  
Mégis csak, mégis mámort kíván.*

Or the embrace is playing  
and our room will be a mirage,  
and the full golden glass  
was not standing empty on that day.  
Still and yet wishing intoxication.

In bars 92-99, I used the variations of *arpeggio-up* and *down* techniques in every second bar of the piano part; see **Figure 3.36**. This approach was chosen to illustrate the passionate, lyrical description together with a sense of picturesque style and fluidity.



The figure displays a musical score for a song, consisting of three systems of staves. The top system (measures 92-94) shows a vocal line in treble clef and piano accompaniment in bass clef. The tempo is marked as  $\text{♩} = 120$ . The lyrics under measure 92 are "Vagy ját - szik az ö - le - les". The second system (measures 95-97) features a vocal line with triplet markings and piano accompaniment. The lyrics are "s,káp - rá - zat lesz a szo-bánk, \_\_\_ s,a te - le a-rany - po - hár-". The third system (measures 98-99) continues with the vocal line and piano accompaniment, with lyrics "nem állt ü - re - sen". The piano accompaniment in all systems consists of chords in the left hand and melodic lines in the right hand, with some measures marked with  $\text{Ped.}$ .

Figure 3.36

In bars 101-104, the theme became quieter after the climax of the previous bars; see **Figure 3.37**. The chords in the piano with minims, dotted minims and a semibreve also supported the changes in tempo here. The approach was chosen to ensure a smooth transition between the verse and the following refrain.

101  $\text{♩} = 100$  102 103 104

mé - gis csak, még - is má - mort ki - ván. És

$\text{♩} = 100$

And

Figure 3.37

### Refrain 3: Bars 104 - 112

<i>És úszik a vásznon a kép,</i>	And the image is swimming on the canvas,
<i>egy évvel ezelőtt épp.</i>	Just one year ago.
<i>Balbriggan, napsugár, sóhajtó ég.</i>	Balbriggan, sunshine, sighing sky.

In comparison to the previous refrains, the music follows it with intonational and interval changes to fit to the song structure; see **Figure 3.38**.

The aim of the variations of *accelerandi* and *ritardandi* throughout the refrain was to express the sense of hesitancy and a resting point after the previous climax part, before balancing the main direction of the song. The *ritardando* finish stresses the slow ‘return-back’ sense.

104 *mf* *accel.* *rit.*  
 kí - ván. És ú - szik a vász - non a kép,  
*mf*  
 Ped

107 *mf* *accel.* *rit.*  
 egy év - vel ez - e - lött épp. Bal - bri - ggan,  
*mf*  
 Ped

110 111 112  
 nap - su - gár, só - haj - tó ég.  
 Ped

Figure 3.38

## Verse 7: Bars 113 - 119

*De jó, hogy jöttél,  
 jókor érkezted,  
 csütörtök van és hallgató,  
 huhog a szürkülő néma hang.*

It is so good that you came,  
 you arrived in good time,  
 it is Thursday and taciturn,  
 the greying silent sound ululates.

In this verse, a warm welcome to memory is presented along with a mixture of upward *arpeggios* and variations of arpeggiated block chords in the piano part; see **Figure 3.39**. Arpeggiated notes were included in the lower piano part to create a sense of rush. Furthermore, chords were used to lay emphasis on the text.

The figure displays a musical score for three systems of music, each with a vocal line and a piano accompaniment. The tempo is marked as  $\text{♩} = 110$ .

**System 1 (Measures 113-115):** The vocal line is in 4/4 time. Measure 113 contains the lyrics "De jö, hogy jött - él," with a triplet of eighth notes. Measure 114 contains "jó-kor ér-kez-tél," and measure 115 contains "csü-tör - tők van és". The piano part features arpeggiated chords in the right hand and upward-moving eighth-note patterns in the left hand.

**System 2 (Measures 116-117):** The vocal line changes to 5/4 time in measure 116, with lyrics "hall - ga - tag". Measure 117 is in 4/4 time with lyrics "hu - hog a szür - kü - lő" and a triplet of eighth notes. The piano part continues with arpeggiated accompaniment.

**System 3 (Measures 118-119):** The vocal line is in 6/4 time in measure 118, with lyrics "né - ma hang." and a fermata. Measure 119 is in 3/4 time with the lyric "Mert". The piano part features arpeggiated accompaniment.

**Figure 3.39**

**Verse 8: Bars 119 - 134**

<p><i>Mert, minthogyha köd lenne, homály lapulna A szívemnek halovány szírma alatt. Átlátok leplén és újra tiszta. De jó, hogy jöttél, jókor érkeztél, csüörtötök ég madara.</i></p>	<p>As if there is mist, the gloom would lie low beneath the pale petals of my heart. But I see through its perianth and it is clean again. It is so good that you came, you arrived in good time, sky bird of Thursday.</p>
--	---

Bars 119-123 start with an *andante* style, chords and *arpeggios* in the piano part; see **Figure 3.40**.

The image shows a musical score for four bars (120-123) in 3/4 time. It consists of a vocal line and a piano accompaniment. The vocal line is in treble clef, and the piano part is in grand staff (treble and bass clefs). The lyrics are: 'mint - hogy - ha köd len - ne, ho - mály la - pul - na a'. The piano part features a steady bass line in quavers and arpeggiated chords. The tempo/style is indicated as 'Andante'.

**Figure 3.40**

In bars 127-130, the 3/4 time gives a waltz sense as the singer expresses that she can see the situation more clearly; see **Figure 3.41**. The piano part accompanies the above in a steady 3/4 dance rhythm, mixed accented chords and single notes with an arpeggiated bass line in quavers.



127 128

át - lá - tok lep - lén és

129 130

új - - - ra tisz - ta.

Figure 3.41

#### Refrain 4: Bars 134 - 147

*És úszik a feledett kép,  
 az arcom most pirosan ég.  
 Egy évvel ezelőtt, kezdetek  
 kezdetén,  
 Balbriggan, napsugár, sóhajtó ég.  
 Emlékszel?*

And the forgotten image is swimming,  
 my face is burning in red.  
 One year ago, at the beginning of the  
 beginning,  
 Balbriggan, sunshine, sighing sky.  
 Do you remember?

The last refrain is the exact repetition of *Refrain 2* with slight variation. The ending in bar 147 suggests ‘unfishiness,’ where the singer asks the question: ‘Do you remember?’; see **Figure 3.42**.

Figure 3.42 shows a musical score for a vocal line and piano accompaniment. The vocal line is in 4/4 time and begins at bar 147 with the lyrics "Em - lék - szel?". The piano accompaniment is also in 4/4 time and features a triplet of notes in the right hand and a triplet of notes in the left hand, both marked with a "3" and a slur. The tempo is marked "rit." (ritardando) above the staff. The piano part includes a forte dynamic "f" and a "Ped" (pedal) marking.

Figure 3.42

### Interlude 3: Bars 148 - 157

The last interlude in this piece is based on the variation of *Interlude 1*.

### Ending section: Bars 158 - 160

The ending section of the song is written for piano in the mixture of 4/4 and 3/4-time signatures and with a gradual *ritardando*, which started in bar 161, used throughout the section; see **Figure 3.43**. The theme keeps its constant upward progression. Arpeggiated chords are used to gradually slow down tempo in bars 159-160 to create a satisfying end feeling to the song, while simultaneously finishing off the whole song cycle.

Figure 3.43 shows the ending section of the song, bars 158-160. The score is in 4/4 time and features a piano accompaniment. The tempo is marked "rit." (ritardando) above the staff. The piano part includes a forte dynamic "f" and a "Ped" (pedal) marking. The score shows bars 158, 159, and 160, with the time signature changing from 4/4 to 3/4 in bar 159 and back to 4/4 in bar 160.

Figure 3.43

## Chapter 4

### Pentabass

#### *Solo for double bass*

##### Overview

In writing for double bass there were several factors I had to consider. Firstly, the instrument is traditionally used orchestrally and seldom as a solo instrument. Secondly, the repertoire for this instrument contains fewer pieces than for e.g. violin or cello. Even though I have written for string groups, I have not used double bass. So, the challenge was to understand the technical limitations of the instrument and to understand its melodic, harmonic and rhythmic potential. Furthermore, as the piece would be about 8 minutes in duration, I had to consider making it interesting for both the player and the audience.

Creating a framework prior to composition is essential to effective composition, according to Schillinger. This is one of Schillinger's basic concepts. I wanted to compose a piece using the number five. I constructed a framework which established various permutations of the number five, resulting in five movements of twenty-five (5x5) bars, each using 5/4-time signature. While not based strictly on serial principles, I incorporated inversions and retrograde techniques. Each movement involves different uses of these concepts.

This framework allowed me to develop my ideas in a controlled way. I started by studying the technical potential of the instrument by collaborating with a double bass player, sending me ideas. Through this, I learned what was practical for the player.



## I

This movement is built on a pentatonic scale (la, do, re, mi, so), though not adhering strictly to those five notes. As the title suggests, the number five is significant e.g. there are five musical ideas referred to here as motifs. Though marked *allegro* (circa 100) it is characterised by frequent changes in dynamics and tempo.

### *Analysis*

#### **Bars 1 - 4**

Basing on the solmisation system setting, the piece is dominated by the pentatonic scale, especially within the first four bars of this piece; see **Figure 4.1**. The scale is based on note variations depicted by different characters. There is little about music flow and rhyme in the four bars. You do not have to change each of the bars every time you are playing because they integrate with each other. Bar four is an enhancement of bar 3, which is an enhancement of bar 2 and the system continues. It is considered an altered 'la' note because of the variations.



**Figure 4.1**

#### **Bars 5 - 8**

Bars 5 and 6 run on the same pentatonic scale. This is because they change every time you transition to a new tone. The pentatonic scales are inverted in these four bars. They are also considered a coda-like section because of the different tonal sequences. Bars extend beyond 8 to create music flow from the verse. The dynamic and rhythmic element in these verses depicts integration of bars 6 and 7; see **Figure 4.2**.

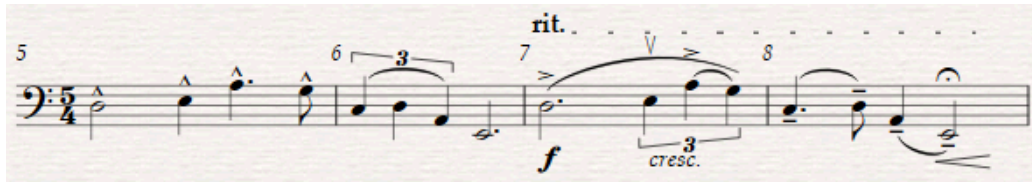


Figure 4.2

### Bars 9 - 15

All these bars vary in music style and variation. You do not have to worry about changing tone and style when you transition between bars 9 and 15. The music is segmented in two motifs for easy positioning of the sections and characters for the instrument. The tonality and playing techniques are also varied between the bars to enhance music flow and rhyme. Motifs 5, which closes this section with repetition in alterations of previous tones in motifs 1-4; see **Figure 4.3**.



Figure 4.3

### Bar 16

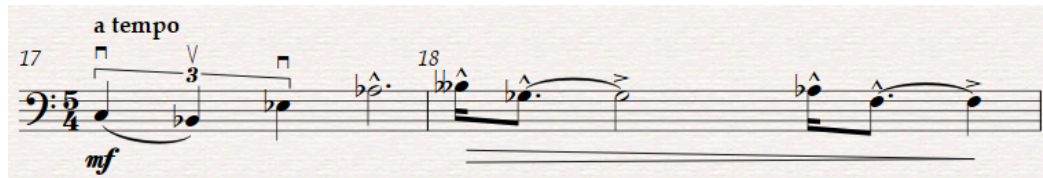
This section is more of a bridge between different music sections; see **Figure 4.4**. The sections depict tonal movement from piece to piece to increase variability within the motifs. There is more imitation than elsewhere in the piece. The imitation and enhancement in tone and rhythm attribute to style and tone in the verse.



Figure 4.4

### Bars 17 - 18

The first bar in this section, bar 17, is an inversion of bar 7 that runs in the beginning of the piece. They all begin with bowing techniques that are triggered from note C. Just like previous sections, every bar introduced is characterised by different rhythms and variations in tone. New motifs are introduced in bar 18; see **Figure 4.5**.



**Figure 4.5**

### Bars 19 - 21

You will find new motifs and quavers in the first bar of this section; see **Figure 4.6**. Bar 19 is dominated with semiquavers that attribute to doubling of rhythm units and how they vary throughout the verse. The 3 bars are in harmony thus forming a continuation of the verse in different segments of the piece. Repetition also characterises bars 19-21; bar 21, for instance, borrows variations and inversions from bar 5. The characters are also similar.



**Figure 4.6**

### Bars 22 - 25

The four bars mark ending of the piece where playing techniques and rhythm styles are all gathered in a pentatonic scale; see **Figure 4.7**.

The image shows a musical score for two staves in 5/4 time. The first staff, measures 22-23, is marked 'molto accel.' and 'f'. It features a series of eighth notes with slurs and accents, and a triplet of eighth notes. The second staff, measures 24-25, is marked 'rit.', 'mp', and 'lunga'. It features a series of eighth notes with slurs and accents, and a triplet of eighth notes. The third staff, measures 26-27, is marked 'molto accel.' and 'a tempo', ending with 'ff'. It features a series of eighth notes with slurs and accents, and a triplet of eighth notes.

Figure 4.7

## II

Marked *adagio espressivo* (circa 60), the movement is based on a variation of five rhythm durations over twenty-five bars. It uses the Schillinger System to produce its resultant techniques. For this I chose from Schillinger resultants which includes five different numbers with different variations which are long enough to complete the twenty-five bars. I wanted this to determine the rhythms of the movement in a 5/4-time signature, therefore I used the preliminary technique. I decided upon the r5:3:13 resultants from which I chose series of numbers arbitrarily and mixed them with random numbers chosen by me.

### *Analysis*

See the numbers of the resultants below:

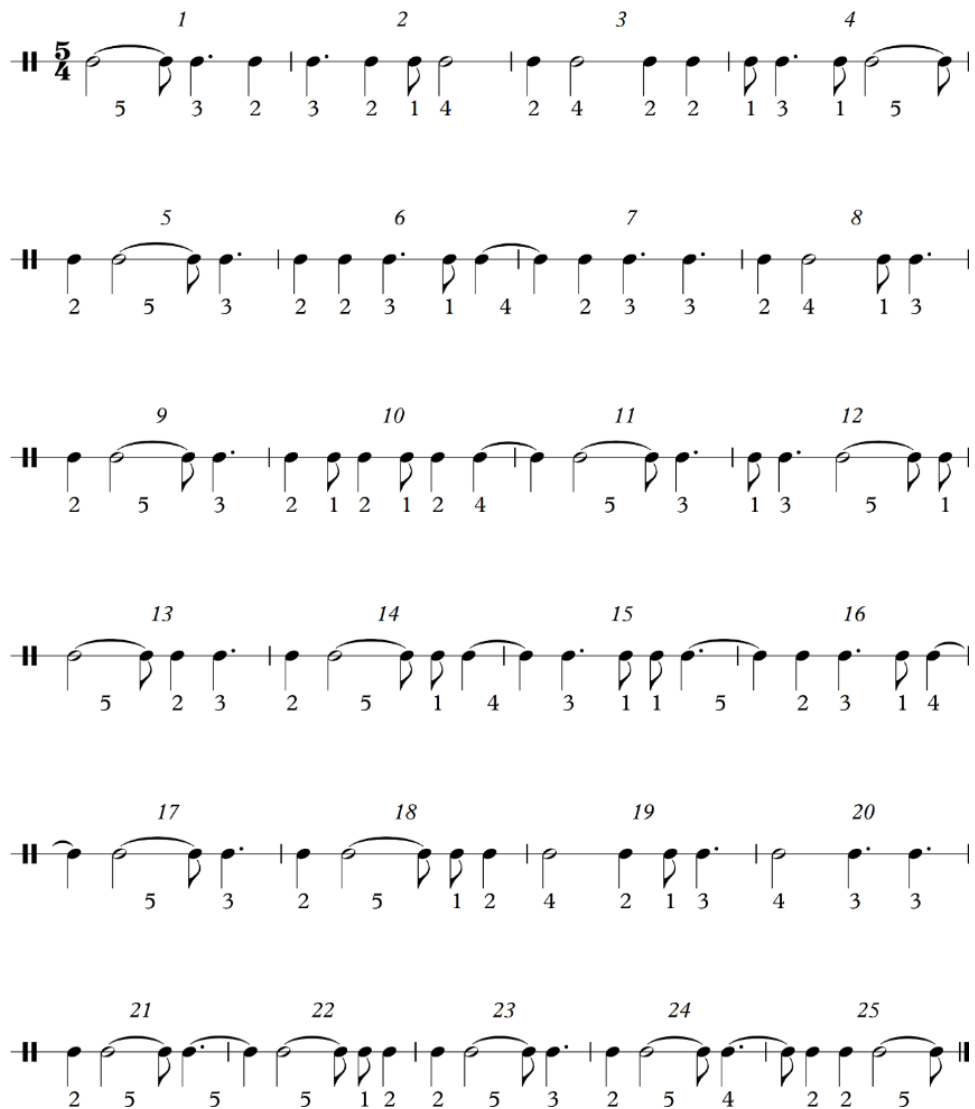
$r_{5:8:13} = 5, 3, 2, 3, 2, 1, 4, 4, 1, 1, 4, 2, 3, 4, 1, 5, 3, 2, 2, 3, 1, 4, 4, 1, 5, 2, 3, 3, 2, 5, 3, 2, 1, 4, 1,$   
 $4, 4, 1, 5, 2, 3, 2, 3, 5, 3, 2, 5, 1, 4, 3, 1, 1, 5, 2, 3, 1, 4, 5, 3, 1, 1, 5, 1, 4, 2, 2, 1, 5, 2, 3, 5, 5, 3,$   
 $2, 5, 1, 4, 1, 3, 1, 5, 2, 2, 1, 5, 5, 2, 1, 2, 5, 1, 4, 4, 1, 5, 2, 1, 2, 5, 5, 1, 2, 2, 5, 1, 3, 1, 4, 1, 5, 2,$   
 $3, 5, 5, 3, 2, 5, 1, 2, 2, 4, 1, 5, 1, 1, 3, 5, 4, 1, 3, 2, 5, 1, 1, 3, 4, 1, 5, 2, 3, 5, 3, 2, 3, 2, 5, 1, 4, 4,$   
 $1, 4, 1, 2, 3, 5, 2, 3, 3, 2, 5, 1, 4, 4, 1, 3, 2, 2, 3, 5, 1, 4, 3, 2, 4, 1, 1, 4, 4, 1, 2, 3, 2, 3, 5$

The aim here was, to present new rhythms created by myself. This includes, not only the rhythmic resultants appearing here, but also a mixing of the series. To do this, I gave each musical unit a representational number e.g. 1 = quaver 2 = crotchet, 3 = dotted crotchet, 4 = minim, 5 = dotted minim.

I created the following series of numbers, modelled on the Schillinger resultant above, to fill the twenty-five bars:

5, 3, 2, 3, 2, 1, 4, 2, 4, 2, 2, 1, 3, 1, 5, 2, 5, 3, 2, 2, 3, 1, 4, 2, 3, 3, 2, 4, 1, 3, 2, 5, 3, 2, 1, 2, 1, 2,  
 4, 5, 3, 1, 3, 5, 1, 5, 2, 3, 2, 5, 1, 4, 3, 1, 1, 5, 2, 3, 1, 4, 5, 3, 2, 5, 1, 2, 4, 2, 1, 3, 4, 3, 3, 2, 5, 5,  
 5, 1, 2, 2, 5, 3, 2, 5, 4, 2, 2, 5

Following on from this, I created the resultant rhythms; see **Figure 4.8**.



**Figure 4.8**

The above acts as a preliminary score, as Schillinger mentions in several places in his book, what gives the framework of the movement.

The next step was to create the melody. To do this, I had to choose a scale determined by the position of the melody. I chose the Hungarian Gypsy ‘Aeolian’ scale build on C; see **Figure 4.9**.



**Figure 4.9**

I composed this movement mostly on piano by composing melodies to the rhythms. I began by composing melodies based on the rhythms. I decorated these rhythms in some places, based on two techniques: subdivision and omission based on the 'FROGS' technique. To represent the semiquavers in the movement, I used  $\frac{1}{2}$  i.e. half of the quaver, but only as ornamentation.

This movement represents a case where melody is being created to given rhythms. However, using Schillinger's methods too mechanically often produces unsatisfactory results. The challenge was to use the method with more flexibility to avoid a mechanical result.

There are two limitations here: firstly, the given rhythm and secondly, the scale. In the case of the rhythm the above-mentioned techniques can be used freely. However, there is more strictness with the notes of the scale. These variations and alterations were consistently shaped within this framework.

After decorating the melody, I considered it important to have rests and links between the bars. Finally, on completing the piece, I decided upon the dynamics and playing techniques of the music, see the completed score in Volume 2.

### III

I built up the character of the movement considering different aspects. This movement is out of the five where most of the chords are. I can present the chord playing techniques of the double bass, both in *arco* and *pizzicato* ways. The harmonic character primarily appears in one third of the movement. It also presented the *sff* techniques to emphasise the chords.

The tempo of the piece is between circa 60 and 100. These are varied. Besides that, I often used *ritardando* as transitions between the tempos. The semiquaver in quintuplets represents the number five in this piece.

The movement has the characteristics of the variations of different pitches. My aim here was for the double bass to play in high pitches. The presence of the high pitches is also important,

especially when playing the chords, because the clarity of harmonies tend to be lost in low pitches. In the notation the clefs are also varied.

The other characteristics are the varied dynamics, the variations of *mf*, *mf*, *p* in the end. I expanded the character of the piece with these dynamics.

## *Analysis*

### **Bars 1 - 3**

The goal in this first section is to slow down the rhythm, tempo and tone of the piece; see **Figure 4.10**. Bar 1 plays a significant role in this section by enforcing playing techniques through the *c60* tempo to achieve the primary goal of a slow movement. *Ritardando* style characterises this section considering every other aspect of the piece is dependent on the first section. Evidently, I put emphasis on this section to set direction for the subsequent sections of the piece.



**Figure 4.10**

### **Bars 4 - 7**

The technique in this case is to change elements of *arcos* and *pizzicatos* for ease and smoothness in chords; see **Figure 11**. This section is easy to implement because of this strategy.

There are three goals of slowing down the piece. First, I intended to make the notes and rhythm noticeable, which makes the piece interesting. Secondly, it is a challenge for bass players to play two or more notes simultaneously. However, the notes cannot be presented in any different



way; the solution remains on reducing the tempo for ease and distinction of the bass sound. Both styles of music are used in this case; a player has to switch between *arcos* and *pizzicatos*, which is only easier with a slower tempo.



Figure 4.11

### Bar 15

The bar is formed with an obvious representation of the semi and full quaver movements throughout this section; see **Figure 4.12**. Obvious does not mean ambiguous because you have to shift to crotchets and notes to realise the impact of F-F-A.



Figure 4.12

### Bars 18 - 20

These three bars mark the climax of this movement because all music techniques and styles are implemented in this section; see **Figure 4.13**. I used retrograde technique to present note variations and different tones in an inverted way. The effect is incredible. Bars 18-20 make up this movement; the beats and blending in of instruments at specific points of the piece is attributed to changes of tone and rhyme through sections. The bars blend in smoothly to create a smooth flow in the transitions.

Figure 4.13

### Bar 21

This is a resting point between the two sections; see **Figure 4.14**. The fast rhythm and slowing down of tempo in the first section are merged at this point. The movement comes to a quick end hence merging of the fast rhythm, climax and closing section. The three sections come in successions, which can be overwhelming for the instrument players. Bar 21 serves as a bumper and shock absorber, it is a point of rest in the piece.

Figure 4.14

### Bar 22 - 25

There is definite movement of notes in this section; see **Figure 4.14**. They only vary between B $\flat$  and C for five times. The note variations do not go beyond number 5; in fact, the bar is a representation of number 5. *P* denotes the end of the movement, which is the last movement of this piece. Repetition in this section attribute to the beauty and length of bar 22 to bar 25. It is an enhancement of previous sections and helps in smoothing transitions, not only between the motifs in this section, but also in subsequent sections of the movement. My intention was to present a non-finished feeling in this piece.

Figure 4.15

## IV

In this movement my aim was to express emotions with double bass. The piece was written in circa tempo 100. I wanted to present the agitative mood by forming a mental image about how it feels when we are excited and what musical tools can be used to express that. The recurring motifs are the main pillars of the movement. The movement is based broadly on the series of variations of the motifs found in the first four bars.

I used dotted rhythms as one of the ways to express the agitative emotional state. I applied the variations of *crescendo*, *diminuendo*, *f* and *mf* dynamics.

I also used different playing techniques such as *marcato*, *tenuto*, *accent*, *staccato* and *sff* playing style what helped to present the contrasts of the agitative mood.

## Analysis

### Bar 1 - 4

This is a melodic pattern evident in the development stages of the movement; see **Figure 4.16**. Being the first section of the piece, these four bars are long and comprehensive. Instrument players have to understand details and hit the notes at specific parts of the piece to bring out the original idea in the composer's mind. Because it is an introductory part of the piece, the question theme is dominant in the section, which is later answered in subsequent sections. *Motif A* use in this section helps in creating a rhythmical and dynamic variation in the semi-quavers used in this section.

The *agitato* character is introduced in the first bar of the piece in note F# in a dynamic technique.

Bar 2 presents contrast in the piece, which is crucial in expressing tension and agitation throughout the movement.



**Figure 4.16**

### Bars 8 - 10

The rhythm in this section is built on variations in bar 1; see **Figure 4.17**



**Figure 4.17**

### Bars 11 - 13

This section distinguishes the movement from others in the genre because of this sudden shift in tone and rhythm that goes to a slow and relaxed environment; see **Figure 4.18**. You can only appreciate contrast in a piece after playing these three bars as directed by the composer.



**Figure 4.18**

### Bars 17 - 25

Agitative emotions and pulsation form the fundamentals in this section; see **Figure 4.19**. Dotted rhythms and the beauty of variations are evident bar 17 to 20. Triplet ornaments also distinguish this section from other parts of the piece. Retrograde technique is also applicable in these bars to generate interest and increase energy in the piece. The ascension and descends are blended through the bars to improve energy and meaning of sounds with respect to theme of this movement.

**Figure 4.19**

## V

The movement is characterised by the fast, *allegro* style in a toccata style and it was inspired by Sergei Prokofiev's 'Toccatà' (op.11) piece. Prokofiev built his work to fast semi-quaver rhythm and ostinatos. It was indicated as *allegro marcato* technique, so I used the same in here for this movement since. The toccata is being written for keyboard instruments and presents the virtuosity of the player. I came up with the idea to apply these to double bass which is not primarily designed as a virtuoso instrument. Considering the different playing techniques and expression of virtuosity I focused on the *accents* and *marcato* techniques. Considering the rhythmical pulsation, all the movement is continuous, consisting of almost uninterrupted semiquavers. Sometimes the slow rhythmic characters give the speed contrasts and link the themes.

The focus of the movement is the application of the Schillinger's Geometrical inversion techniques such as inversions and retrogrades. These can be known from the Serialism. This gives the base of variations through the piece. Since this is about motivic variations and their inversions and that the movement is short in time, the occurrence of the themes needed to be limited.

The piece is built on three main motifs which are presented right in the first three bars. The closing bar 25 is the exception to this, in that it closes the movement with a new rhythm. In all situations I applied different alterations. In most cases the different motifs do not sound the same, one after another.

The different applications of the dynamics are: *forte*, *mezzo forte*, *fortissimo* and *sforzando*.

The playing techniques are as follows: *accent*, *marcato*, *upbow*, *downbow*, *staccato*, *ritardando* and *molto accelerando*.

The piece was originally written in the tempo of 120 before I sent it to a double bass player for corrections. After he studied and played it through several times, he suggested to me to slow it down to 90 because it is very challenging to play with semiquavers for the player in tempo 100. He also gave suggestions on the variations of down-bow and up-bow techniques. These suggestions reflected his own playing techniques and I trusted his insights and accepted them.

## Analysis

### Bars 1 - 3

Music themes are first introduced in these bars to set pace and direction of this movement; see **Figure 4.20**. It is important for instrument players especially a drum player to pick the theme and mood of the piece immediately. A drum player is also expected to pick up the beats, which should be consistent and in agreement with notes and tone of the piece. The movement of this section is divided into various sections that determine rhythm flow and tone. 12+8 is the standard movement of tone and rhyme in this section that is dominated by semiquavers and crotchets.

Allegro marcato ♩ = c90

*f*

2

3

Figure 4.20

### Bars 4 - 5

In this section, you learn how to quickly transpose the tone without interfering with style and tempo of the movement; see **Figure 4.21**. C note based on *Motif 1* is transposed one note higher, which contrasts sound with the previous section. The original *f* sound is emphasised on bar 5.

4

*mf*

5

*f*

Figure 4.21



### Bars 6 - 8

Octave changes and grouping style is completely different in this section of the piece; see **Figure 4.22**. The notes are played backwards to create contrast and blend with previous sections. Group character is a new style introduced in bar 7 to integrate with different playing techniques that decorates and softens rhythm and tone as compared to music flow in bar 2. **Motif A** utilises retrograde technique to group characters and from 12-8, which is a standard beat in the movement. In bar 7, there are up-bows and down-bows that mix playing techniques to develop an interesting piece.

Instead of starting at G, bar 8 begins from note F to modify the music flow. Contrast is the focus in this section. Octave changes and alterations in tone establish direction of the piece with respect to the first section. Bar 1-3 set the piece in a smooth and slow tempo state that is altered in previous sections. Bars 6-8 come to reverse the music effect and prolong the climax. It is more of resting point in the piece where the highs and lows of tones and beats are balanced. Rhythm remains the same in this section, which is a basis of the next section.

**Figure 4.22**

### Bars 9 - 11

The accents here replaced by retrograde techniques that alter effect of *marcato* and other aspects of tone. This section is divided into two groups; **Motif B** dominates the bars to maintain rhythm as the movement nears the end; see **Figure 4.23**.



Figure 4.23 shows musical notation for measures 9, 10, and 11. Measure 9 is a long melodic line with accents. Measure 10 features a rhythmic pattern with accents. Measure 11 continues the melodic line with accents.

Figure 4.23

### Bars 12 - 16

There are no bowing techniques used in this section; see **Figure 4.24**. The variation in bar 12 is enough to create contrast and repetition in the four remaining bars. *Motif D*, *Motif C* and *Motif E* are main functional components in this section.

Figure 4.24 shows musical notation for measures 12, 13, 14, 15, and 16. Measure 12 starts with a forte (*f*) dynamic. Measure 13 has a mezzo-forte (*mf*) dynamic. Measure 15 starts with a forte (*f*) dynamic.

Figure 4.24

### Bars 17 - 18

Bar 17 is replication of bar 1, which is implemented in *Motif A*. Bar 2 also returns in bar 18 to emphasise on the accents and playing techniques; see **Figure 4.25**.



Figure 4.25

### Bars 19 - 24

This section is repetition and replacement of accents, down-bow, up-bow, *marcato* and *legato* styles; see **Figure 4.26**.

*Motif F*, *Motif E* and *Motif C* are represented in bar 20, 21 and 22 respectively. In the last bar of this section, I focused on tonal variation and repetition of styles in previous sections.

Figure 4.26

### Bar 25

Semi-quaver *arpeggios* and *molto accel.* enhance contrast on this closing bar of this piece; see **Figure 4.27**.



25 **molto accel.**

*ff*

The image shows a musical score for a single staff in 4/4 time. The key signature has one sharp (F#). The score begins at measure 25, marked with a forte (*ff*) dynamic. The tempo instruction is **molto accel.** (very accelerated). The melody consists of a series of eighth notes: C4, D4, E4, F#4, G4, A4, B4, C5, D5, E5, F#5, G5, A5, B5, C6. The piece concludes with a final chord of C5, F#5, and C6.

Figure 4.27

## Chapter 5

### Four Movements for Wind Quintet

*For flute, oboe, clarinet, horn in F and bassoon*

#### Overview

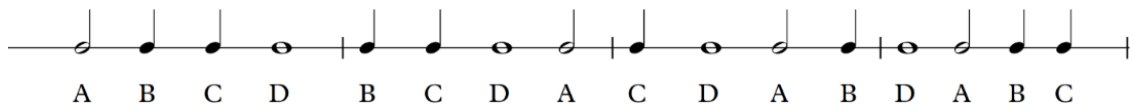
This piece is written in four short movements. My aim here was to further the use of Schillinger compositional techniques. I found that a woodwind quintet would be a useful medium for exploring timbres and some degree of experimentation with tonal and rhythmic processes.

I used different compositional approaches in each movement. When I was working on this piece, I started to experiment in more detail with the Schillinger System. However, it is not strictly a Schillinger piece, since I mainly used the techniques as inspirations rather than of completely relying on them. The piece ‘wrote itself’ afterwards, when along the way I ended up with good quality ideas for continuations.

#### 1.

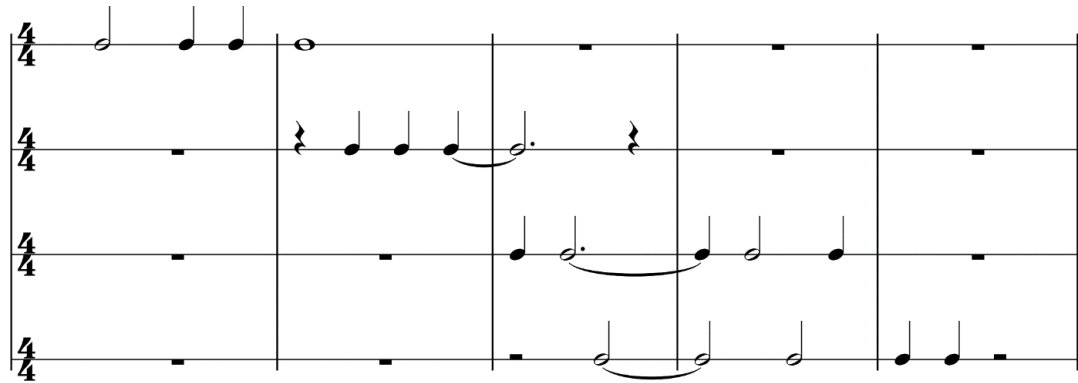
The first movement is based on the Schillinger permutation techniques. The main emphasis in this movement is on the rhythmic variations.

The horn starts with the melody in the first two bars. I permuted this rhythm throughout the piece. It contains four rhythm patterns; see **Figure 5.1**.



**Figure 5.1**

The piece starts with the four permutations of this rhythm, introduced gradually by four instruments and creating a contrapuntal sense between the instruments; see **Figure 5.2**.



**Figure 5.2**

After varying the rhythms, I could continue with musical material not strictly related to the Schillinger techniques. I used the rhythm as an influence to write a melody to the counterpoint between the other instruments. This movement gave the basis for the upcoming movements since much of the material is the result of experimenting with these melodies.

### *Analysis*

Geometrical inversions such as retrograde and inversions are commonly applied by Schillinger as a method of creating new musical variations to an existing material. I started to implement them in this movement.

### Bars 1 - 5

In bars 1-5 the main theme is presented and it is based on rhythmic variations of the four permutations created above. However, the essence of the patterns stayed the same; see **Figure 5.3**.

The musical score for bars 1-5 is in 4/4 time with a tempo of Lively (♩ = 110). The score includes four parts: Oboe, Clarinet in Bb, Horn in F, and Bassoon. The Oboe part starts in bar 2 with a melodic line annotated with 'B C Dv Av' and a dynamic marking of *mf*. The Clarinet in Bb part starts in bar 4 with a melodic line annotated with 'D A B C' and a dynamic marking of *mf*. The Horn in F part starts in bar 1 with a melodic line annotated with 'A B C D' and a dynamic marking of *mf*. The Bassoon part starts in bar 4 with a melodic line annotated with 'C D A B' and a dynamic marking of *mf*.

Figure 5.3

### Bars 11 - 14

Bars 11-12 and 13-14 are the non-exact retrograde variations of each other in the flute and oboe parts, when the flute and oboe interchange their parts at bar 13-14. The last notes in the flute and oboe sections are different than in bar 12; see **Figure 5.4**.

The musical score for bars 11-14 is in 4/4 time. The score includes four parts: Flute (Fl.), Oboe (Ob.), Clarinet (Cl.), and Bassoon (Bsn.). The Flute and Oboe parts are the primary focus, showing a non-exact retrograde variation between bars 11-12 and 13-14. The Flute part starts in bar 11 with a melodic line. The Oboe part starts in bar 11 with a melodic line. The Clarinet and Bassoon parts are mostly silent, with some notes in bar 12. The Flute and Oboe parts interchange their parts at bar 13-14. The last notes in the flute and oboe sections are different than in bar 12.

Figure 5.4

### Bars 17 - 18

The bars 17-18 in the clarinet part are the retrograde transposed versions of the bassoon part at bar 3-4. I adjusted the horn and bassoon parts here as a harmonic counterpoint for the clarinet part; see **Figure 5.5**.

Figure 5.5 shows a musical score for three instruments: Clarinet (Cl.), Horn (Hn.), and Bassoon (Bsn.), spanning bars 17 and 18. The music is in 4/4 time and D major. The Clarinet part (top staff) begins with a half note G4 (marked *mf*) in bar 17, followed by a half note A4 in bar 18. The Horn part (middle staff) begins with a half note G4 (marked *mf*) in bar 17, followed by a half note F#4 in bar 18. The Bassoon part (bottom staff) begins with a half note G3 (marked *mf*) in bar 17, followed by a half note F#3 in bar 18. A large slur covers the Clarinet and Horn parts across both bars, and another slur covers the Bassoon part across both bars.

**Figure 5.5**

### Bars 22 - 24

The bars 22-24 parts are mirroring (retrograde) each other with variations; see **Figure 5.6**.

Figure 5.6 shows a musical score for four instruments: Flute (Fl.), Oboe (Ob.), Clarinet (Cl.), and Horn (Hn.), spanning bars 22, 23, and 24. The music is in 4/4 time and D major. The Flute part (top staff) begins with a half note G4 (marked *mf*) in bar 22, followed by a half note A4 in bar 23, and a half note B4 in bar 24. The Oboe part (second staff) is silent in bars 22 and 23, then plays a half note G4 (marked *f*) in bar 24. The Clarinet part (third staff) begins with a half note G4 (marked *mf*) in bar 22, followed by a half note A4 in bar 23, and a half note B4 in bar 24. The Horn part (bottom staff) is silent in bars 22 and 23, then plays a half note G4 (marked *f*) in bar 24. A large slur covers the Flute and Clarinet parts across all three bars, and another slur covers the Oboe and Horn parts across all three bars.

**Figure 5.6**

## Bars 25 - 26

The movement closes with the rhythmic variations of the above-mentioned motif in the flute part; see **Figure 5.7**.

The image shows a musical score for five instruments: Flute (Fl.), Oboe (Ob.), Clarinet (Cl.), Horn (Hn.), and Bassoon (Bsn.). The score covers bars 25 and 26. The flute part has a melodic line with a slur over bars 25 and 26, ending with a fermata and the instruction 'mf attacca'. The other instruments provide harmonic support with sustained notes and slurs. The dynamic marking 'mf' is present at the end of each staff.

**Figure 5.7**

## 2.

In this movement I started in *attacca* from the first movement. I focused mainly on instrumental duos and trios and their balances with *tutti* continuations. There are rhythmic characters which occur several times. Some permutation techniques were used here, but not as predominantly as in the first movement. I also used geometrical inversions of selected motifs based on the Schillinger System.



## Analysis

### Bars 1 - 9

The theme “A” presents itself from bars 1-6 in flute and oboe where they complement each other melodically with contrapuntal and imitative style; see **Figure 5.8**.

Lively but majestic ♩ = 110

The musical score for Figure 5.8 consists of five staves: Flute (Fl.), Oboe (Ob.), Clarinet (Cl.), Horn (Hn.), and Bassoon (Bsn.). The music is in 4/4 time and begins with a tempo marking of 'Lively but majestic' and a quarter note equal to 110 beats per minute. The first six bars (1-6) feature the flute and oboe playing a contrapuntal theme 'A' in a forte (*f*) dynamic. The flute part starts with a quarter rest in bar 1, followed by a series of eighth and sixteenth notes. The oboe part starts with a quarter note in bar 1, followed by a series of eighth and sixteenth notes. Bars 7-9 show the flute playing a melodic line in mezzo-forte (*mf*) dynamics, while the oboe, clarinet, horn, and bassoon provide harmonic support in forte (*f*) dynamics. The clarinet part starts with a quarter rest in bar 7, followed by a series of eighth and sixteenth notes. The horn and bassoon parts start with quarter notes in bar 7, followed by quarter notes in bars 8 and 9.

**Figure 5.8**

### Bars 24 - 25

Theme B starts at bar 24, which is based on the tonal, rhythmical and echoing variations of the materials at bars 24-25; see **Figure 5.9**.

Figure 5.9 shows a musical score for measures 24 and 25. The score is in 4/4 time and features five staves: Flute (Fl.), Oboe (Ob.), Clarinet (Cl.), Horn (Hrn.), and Bassoon (Bsn.). The key signature is one sharp (F#). The Flute part begins in measure 24 with a melodic line consisting of eighth notes, with three triplet markings. The dynamic marking is *mf*. The Oboe part has a single note in measure 24 and a triplet of eighth notes in measure 25. The Clarinet part has a triplet of eighth notes in measure 25. The Horn part has a long note spanning both measures. The Bassoon part is silent in both measures.

**Figure 5.9**

**Bars 38 - 46**

Theme “A” returns at bars 38-46.

**Bars 48 - 54**

The *coda* section closes the movement at bars 48-54 which is based on the echoing and rhythmic character of theme “B.”; see **Figure 5.10**.

The image displays a musical score for five instruments: Flute (Fl.), Oboe (Ob.), Clarinet (Cl.), Horn (Hn.), and Bassoon (Bsn.). The score is divided into two systems. The first system covers measures 48 to 51, and the second system covers measures 52 to 54. The time signature is 4/4. The key signature has one flat (B-flat). The Flute part features a melodic line with triplets and slurs. The Oboe, Clarinet, and Bassoon parts play rhythmic accompaniment, primarily using triplets. The Horn part has a more melodic role with slurs. The second system (measures 52-54) is marked with a forte (*f*) dynamic and features more complex rhythmic patterns, including sixteenth-note triplets and slurs. The score concludes with a double bar line at the end of measure 54.

Figure 5.10

## 3.

This work is a canonical imitation and a variation of a four-bar theme and is minimalistic in character. The material of this movement is the result of experimenting with the Schillinger techniques, when writing the first movement. In the end, these motifs were not included in the movement, but I kept them as drafts. Later I revisited it and I still found that it sounded good, so I decided to create a separate short movement with it.

The composition material is short, the whole piece is elaborated from the theme of the first four bars. I varied the melody within the different instruments and in different pitches. I saw the opportunity to explore techniques to create and write music within these limits. I used this advantage to experiment with minimal musical material and to elaborate a one-minute piece in a balanced way, where all instruments take part.

For this, I continued to use permutation techniques. Each statement is a permutation of the original. I deliberately created dissonance with minor and major seconds, which also serves the purpose of becoming more familiar with the chromatic writing.

## *Analysis*

### **Bars 1 - 4**

The theme is built on permutations of the same two notes of F# and G# with rhythmic variations in bars 1-4; see **Figure 5.11**.

Slowly with feeling  $\text{♩} = 100$

Flute *mf*

Clarinet in Bb *mf*

Horn in F *mf*

Bassoon *mf*

**Figure 5.11**

### Bars 5 - 7

In bars 5-7 the clarinet plays the permuted version of the theme where it started with the material at bar 4 and continues with bar 1, bar 2, bar 3; see **Figure 5.12**. It can be concluded that the theme is divided into four parts, 1, 2, 3, 4. When the theme was presented, it was introduced in order 1,2,3,4 and the clarinet permuted this to 3,4,1,2.

Figure 5.12 shows a musical score for three measures (bars 5, 6, and 7) in 4/4 time. The top staff is for the Flute (Fl.) and the bottom staff is for the Clarinet (Cl.). The key signature has one sharp (F#). In bar 5, the Flute plays a whole note G4 (F#4) and the Clarinet plays a whole note G3 (F#3). In bar 6, the Flute plays a half note G4 (F#4) and a half note A4 (G4), and the Clarinet plays a half note G3 (F#3) and a half note A3 (G3). In bar 7, the Flute plays a half note G4 (F#4) and a half note B4 (A4), and the Clarinet plays a half note G3 (F#3) and a half note B3 (A3). The Flute part has a slur over bars 6 and 7, and the Clarinet part has a slur over bars 5, 6, and 7.

**Figure 5.12**

### Bars 9 - 12

In bars 9-12, the oboe keeps the rhythmic character of the theme; see **Figure 5.13**.

Figure 5.13 shows a musical score for four measures (bars 9, 10, 11, and 12) in 4/4 time. The top staff is for the Flute (Fl.), the middle staff is for the Oboe (Ob.), and the bottom staff is for the Clarinet (Cl.). The key signature has one sharp (F#). In bar 9, the Flute plays a whole note G4 (F#4) and the Oboe plays a quarter note G4 (F#4) and a quarter note A4 (G4). In bar 10, the Flute plays a whole note A4 (G4) and the Oboe plays a quarter note A4 (G4) and a quarter note B4 (A4). In bar 11, the Flute plays a whole note B4 (A4) and the Oboe plays a quarter note B4 (A4) and a quarter note C5 (B4). In bar 12, the Flute plays a whole note C5 (B4) and the Oboe plays a quarter note C5 (B4) and a quarter note D5 (C5). The Flute part has a slur over bars 9, 10, 11, and 12, and the Oboe part has a slur over bars 9, 10, 11, and 12. The Clarinet part is silent in all four bars. The dynamic marking *mf* is present in the Flute and Oboe parts in bar 9.

**Figure 5.13**

### Bars 13 - 16

Bars 13-14 are the non-exact retrograde repetition of bars 15-16 or vice versa in the flute and clarinet parts; see **Figure 5.14**.

The image shows a musical score for three instruments: Flute (Fl.), Oboe (Ob.), and Clarinet (Cl.). The score is in 4/4 time and consists of four measures, numbered 13, 14, 15, and 16. The Flute part has a melodic line with slurs and ties. The Oboe part has a similar melodic line, often playing in unison with the Flute. The Clarinet part has a more rhythmic line, often playing in unison with the Oboe. The key signature has one sharp (F#).

**Figure 5.14**

### **Bars 22 - 25**

In bars 22-25 the movement continues with the variation of the main motif at bars 22-23 its retrograde version of bars at bars 24-25 in the clarinet, French horn and bassoon parts; see **Figure 5.15**. The retrograde variation at bars 24-25 is different in the way that the permutation technique was used here.

It can be illustrated in order as:

**A, B, A retrograde, B retrograde.**

The mirrored retrograde would have looked like this: **A, B, B retrograde, A retrograde**. In this case the geometrical inversion technique was combined with the permutation technique and created a good result.



Figure 5.15 shows a musical score for measures 22 through 25. The score is in 4/4 time and features four woodwind parts: Flute (Fl.), Clarinet (Cl.), Horn (Hn.), and Bassoon (Bsn.). The key signature has one sharp (F#). The dynamic marking *mf* (mezzo-forte) is present in measures 22 and 23. In measure 22, the Flute and Bassoon have whole rests, while the Clarinet and Horn play quarter notes. In measure 23, the Flute and Horn have whole rests, while the Clarinet and Bassoon play quarter notes. Measures 24 and 25 show the Clarinet and Bassoon playing quarter notes, while the Flute and Horn have whole rests. The Clarinet part in measure 25 includes a slur over four notes.

Figure 5.15

**Bars 26 - 29**

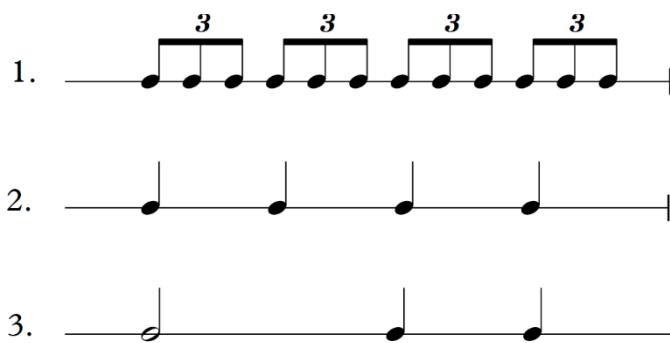
The movement closes at bars 26-29, based on the material at bars 19-21; see **Figure 5.16**.

Figure 5.16 shows a musical score for measures 26 through 29. The score is in 4/4 time and features five woodwind parts: Flute (Fl.), Oboe (Ob.), Clarinet (Cl.), Horn (Hn.), and Bassoon (Bsn.). The key signature has one sharp (F#). The tempo marking *rit.* (ritardando) is indicated above measure 26. The dynamic marking *mp* (mezzo-piano) is present in measures 28 and 29. In measure 26, the Flute plays a quarter note, while the Oboe, Clarinet, and Horn have whole rests. In measure 27, the Flute plays a quarter note, while the Oboe, Clarinet, and Horn have whole rests. In measure 28, the Flute plays a quarter note, while the Oboe, Clarinet, and Horn have whole rests. In measure 29, the Flute, Oboe, Clarinet, and Horn play quarter notes, while the Bassoon plays a quarter note. The Flute part in measure 29 includes a slur over four notes.

Figure 5.16

## 4.

This movement is based on rhythmic variations of three rhythmic patterns; see **Figure 5.17**.



**Figure 5.17**

In this, I experimented with Schillinger's density technique. However, I did it inversely. Instead of planning the composition in advance with a density pattern of the five representing layers, I first created *tutti* sections and then omitted instruments in a varied way.

I predetermined the minimum and maximum amount of density. The minimum density was 3 and the maximum was 5 (*tutti*). My goal there was to create repetitive musical materials based on short motifs, combining them with the density technique. I mixed these motifs using many variations and I determined 3 as the minimum instrument numbers playing together at the same time. The density number constantly varied between 3 and 5, resulting in a score where there is no solo or duo lines.

Apart from density, I used rhythmic variation techniques and geometrical inversions. I first chose the basic themes and then I composed the same repetitions repeatedly. Next, I repeated it in different order and changed the staves and the octaves to fit the range of the instruments. I tried out variations of what sounded best, starting with a short pattern.

Furthermore:

1. I chose *Pattern 1* as the major component of the thematic material.
2. I used the geometrical inversion technique.
3. I treated each beat individually.
4. I used the *omission* technique.



Schillinger emphasises that it is possible to create long durations of music, even starting with little musical material. This technique is also useful when creating different variations for a theme. It is a productive approach to create these materials in advance, when planning the composition. The themes created in this way are related to the original motifs, therefore the materials are ready as building blocks to insert into the composition if needed, when the composer is looking for related materials.

## *Analysis*

### **Bars 2 - 3**

The material for the movement is based on bars 2-3. Each part is present throughout the score, except at the end. These three layers control the five instrumental parts of the score, where *Pattern 1* controls the whole movement as a major component; see **Figure 5.18**.

The image shows a musical score for five instruments: Flute (Fl.), Oboe (Ob.), Clarinet (Cl.), Horn (Hn.), and Bassoon (Bsn.). The score is in 4/4 time and consists of three measures. The first measure is marked with a '2' above the Flute staff. The second measure is marked with a '3' above the Flute staff. The third measure is marked with a '3' above the Flute staff. The Flute part starts with a dynamic marking of *f* and ends with *mf*. The Oboe part starts with a dynamic marking of *mf* and ends with *mf*. The Clarinet part starts with a dynamic marking of *mf* and ends with *mf*. The Horn part starts with a dynamic marking of *mp* and ends with *mp*. The Bassoon part starts with a dynamic marking of *f* and ends with *mf*. The score includes various musical notations such as slurs, accents, and dynamic markings.

**Figure 5.18**

## Bar 6

I used the Omission technique to create variations, for example in the *First pattern* in bar 6; see **Figure 5.19**. The second and fourth triplet were omitted in the clarinet part, the third triplet pattern was omitted in the oboe part. This part is based on bar 3.

**Figure 5.19**

## Bar 9

Bar 9 is the exception, where I make a variation of the second triplet in the clarinet part; see **Figure 5.20**.

**Figure 5.20**

**Bars 29 - 35**

The final part of the movement is from bars 29-35; see **Figure 5.21**. Bar 1 repeated in bar 30, returning to the mood of the start for a short period prior to the end of the movement.

The image displays a musical score for five woodwind instruments: Flute (Fl.), Oboe (Ob.), Clarinet (Cl.), Horn (Hn.), and Bassoon (Bsn.). The score is divided into two systems, covering bars 29 through 35. The key signature is one sharp (F#) and the time signature is 2/4. The first system (bars 29-31) features a dynamic marking of *f* (forte) for the Flute, Oboe, and Clarinet parts, and *mf* (mezzo-forte) for the Horn and Bassoon parts. The second system (bars 32-35) features a dynamic marking of *ff* (fortissimo) for all instruments. The score includes various musical notations such as triplets, slurs, and dynamic markings. The Flute part has a triplet in bar 29 and a triplet in bar 32. The Oboe part has a triplet in bar 30 and a triplet in bar 32. The Clarinet part has a triplet in bar 30 and a triplet in bar 32. The Horn part has a triplet in bar 30 and a triplet in bar 32. The Bassoon part has a triplet in bar 30 and a triplet in bar 32. The score ends with a double bar line in bar 35.

**Figure 5.21**

## Chapter 6

### Varied Moments

*For clarinet, timpani and marimba*

#### Overview

'*Varied moments*' is a unique piece composed for marimba, timpani and clarinet. The first two are percussive instruments that integrate with clarinet, which is a wind instrument in creating complex melodies hence the name '*Varied Moments*'.

Schillinger techniques were applicable in this case to build different themes that present differences in the instruments. Rhythm and style are crucial in this piece; differentiation of each style brings the music element and harmony. I integrated the Schillinger techniques with my intuition in music composition to bring out a preferred music taste.

Ligeti's '*Musica Ricercata*' was a special source of inspiration for creating this piece. Though the orchestration is different, I spent time in studying the score. I paid special attention to how Ligeti solved compositional problems in creating music, by following his pre-planned rules and limitations. I was inspired by how Ligeti handled music in such a minimalistic way. When I studied this piece, my goal was not to copy the style, but to study the score to see how Ligeti changed the structure of the piece. The style of the piece is minimalistic in different parts.

In this piece, I also demonstrate how the Schillinger resultants, sub-grouping the time signature, permutations and geometrical inversions can be used for creating musical elements. Due to the piece emphasising the rhythmic characters of the instruments, it was an ideal compositional environment for use of these techniques.

I assigned the instruments to different parts of the piece based on instrument characteristics.

- The clarinet was primarily for melody. It also supported other instruments in creating harmony and melody.

- Timpani's primary role was creating rhythm pulse and emphasising on harmonic notes of the piece.
- Marimba provides harmony for the piece and plays melody.

At specific points in the piece, I combined primary and secondary roles of the instrument to make the orchestration more interesting.

The analysis below details only the parts where Schillinger techniques were used. There are parts created by the Schillinger techniques which are repeated or varied throughout the piece, however, due to the similarities of the elements, only the first appearance will be analysed in detail.

### *Analysis*

In bars 31-40, I used the sub-grouping the time signature technique for 4/4 and 3/4 in the timpani part as follows:

$$4 = (4), (2+2), (3+1), (1+3), (1+1+1+1), (1+1+2), (2+1+1)$$

$$3 = (3), (1+2), (2+1)$$

The time signatures alternate each other; see **Figure 6.1**.

Figure 6.1 shows a musical score for three instruments: Clarinet (Cl.), Timpani (Timp.), and Marimba (Mar.). The score is divided into three systems, each containing three measures. The first system covers measures 31-34, the second system covers measures 35-37, and the third system covers measures 38-40. The tempo is marked as  $J = 110$  and the dynamic is  $mf$ . The time signature changes from 4/4 to 3/4 and back to 4/4. The Clarinet part features melodic lines with slurs and accents. The Timpani part includes rhythmic patterns indicated by numbers (1, 2, 3) below the notes. The Marimba part provides harmonic accompaniment with chords and single notes.

Figure 6.1

The rhythm in the timpani in bars 67-69 is represented by a series of numbers: 1,1,2,2,1,2,2,1,2,2,1,1,2,1,1,2, where 1 = crotchet. The marimba part plays the retrograde version of the timpani parts but half of the rhythm duration in bars 67-68 what the timpani plays, here 1 = quaver; see **Figure 6.2**.

Figure 6.2 shows a musical score for two instruments: Timpani (Timp.) and Marimba (Mar.). The score covers measures 67, 68, and 69. The Timpani part is in 3/4 time and features a rhythmic pattern indicated by numbers (1, 2) below the notes. The Marimba part is in 3/4 time and features a retrograde rhythmic pattern indicated by numbers (2, 1) below the notes. The dynamic is marked as  $mp$ .

Figure 6.2



In bars 83-84, the Schillinger resultant of  $r3:2$  (2,1,1,2) was used to determine the length of the slurs of the semiquaver groups in each beat, in the clarinet part, where 1 = 1 beat. Each starting point of the slurs also determines the *accent* of the first note; see **Figure 6.3**.

Figure 6.3 shows a musical score for three instruments: Clarinet (Cl.), Timpani (Timp.), and Maracas (Mar.). The score is in 4/4 time and consists of two bars, 83 and 84. The Clarinet part features a continuous stream of eighth notes with slurs and accents. The slurs are labeled with the numbers 2, 1, 1 in bar 83 and 2, 2 in bar 84, corresponding to the Schillinger resultant (2,1,1,2). The Timpani part plays a rhythmic pattern of eighth notes and rests. The Maracas part plays a steady eighth-note accompaniment.

**Figure 6.3**

In bars 103-104, the original version of bar 103 repeats with the retrograde version in the consecutive bar 104 at the clarinet part; see **Figure 6.4**.

Figure 6.4 shows a musical score for three instruments: Clarinet (Cl.), Timpani (Timp.), and Maracas (Mar.). The score is in 4/4 time and consists of two bars, 103 and 104. The Clarinet part features a continuous stream of eighth notes with slurs and accents. The first bar (103) is labeled 'Original' and the second bar (104) is labeled 'Retrograde'. The Timpani part plays a rhythmic pattern of eighth notes and rests. The Maracas part plays a steady eighth-note accompaniment.

**Figure 6.4**

The resultant  $r3:2$  (2,1,1,2) was used in bars 133-134 in order to determine the length of the slurs for the semiquavers which run in the clarinet, where 1 = 1 beat; see **Figure 6.5**.

Figure 6.5 shows musical notation for measures 133 and 134. The score is in 4/4 time and features three staves: Clarinet (Cl.), Timpani (Timp.), and Maracas (Mar.). Measure 133 shows a complex rhythmic pattern with a 7-measure phrase in the Cl. staff, a 2-measure phrase in the Timp. staff, and a 1-measure phrase in the Mar. staff. Measure 134 shows a similar pattern with a 7-measure phrase in the Cl. staff, a 2-measure phrase in the Timp. staff, and a 1-measure phrase in the Mar. staff.

Figure 6.5

In bars 148-150, the resultant of  $r5:2$  (2,2,1,1,2,2) determines between *mf* and *f* with the alternated variations of *crescendo* and *decrescendo* hairpins, where 1 = 1 beat; see Figure 6.6.

Figure 6.6 shows musical notation for measures 148, 149, and 150. The score is in 2/4 time and features three staves: Clarinet (Cl.), Timpani (Timp.), and Maracas (Mar.). Measure 148 shows a 2-measure phrase in the Cl. staff, a 2-measure phrase in the Timp. staff, and a 2-measure phrase in the Mar. staff. Measure 149 shows a 2-measure phrase in the Cl. staff, a 2-measure phrase in the Timp. staff, and a 2-measure phrase in the Mar. staff. Measure 150 shows a 2-measure phrase in the Cl. staff, a 2-measure phrase in the Timp. staff, and a 2-measure phrase in the Mar. staff.

Figure 6.6



The resultant of  $r4:3$  (3,1,2,2,1,3) was used in bars 156-158 determine the variation between *accelerando* and *ritardando*, where 1 = 1 beat; see **Figure 6.7**.

The image displays a musical score for three instruments: Clarinet (Cl.), Timpani (Timp.), and Maracas (Mar.). The score is divided into two systems. The first system covers bars 156 and 157, and the second system covers bars 158 and 159. The key signature is one sharp (F#) and the time signature is 4/4. Above the Clarinet staff, tempo markings are indicated: 'accel.' followed by a dotted line, 'rit.' followed by a dotted line, 'accel.' followed by a dotted line, and 'rit.' followed by a dotted line. Numerical values are placed above these markings: '3' above the first 'accel.', '1' above the first 'rit.', '2' above the second 'accel.', and '2' above the second 'rit.'. The Clarinet part features a melodic line with slurs and dynamic markings of *mf* and *f*. The Timpani part consists of a rhythmic pattern of quarter notes and rests. The Maracas part features a steady eighth-note accompaniment. Bar numbers 156, 157, and 158 are clearly marked at the beginning of their respective staves.

**Figure 6.7.**

In bars 178-183, the clarinet uses the Schillinger resultant of  $r3:2$ , where 1 = 1 bar. The number of the resultants (2,1,1,2) determine the bar lengths of the modulations. In each pair of bars, modulation of a major 2<sup>nd</sup> was made; see **Figure 6.8**.

The image displays a musical score for three instruments: Clarinet (Cl.), Timpani (Timp.), and Maracas (Mar.), spanning measures 178 to 183. The score is organized into three systems, each with two measures. The key signature is one sharp (F#) and the time signature is 4/4.   
 - **System 1 (Measures 178-179):** The Clarinet part features a long note with a slur and a breath mark, with a '2' above measure 179. The Timpani part has a rhythmic pattern of eighth notes with accents. The Maracas part consists of a steady eighth-note accompaniment.   
 - **System 2 (Measures 180-181):** The Clarinet part has a slur and a breath mark, with a '1' above measure 180. The Timpani part continues its rhythmic pattern. The Maracas part has a steady eighth-note accompaniment.   
 - **System 3 (Measures 182-183):** The Clarinet part has a slur and a breath mark, with a '2' above measure 183. The Timpani part has a rhythmic pattern of eighth notes with accents. The Maracas part has a steady eighth-note accompaniment.

Figure 6.8

## Chapter 7

### Orchestral Sketch

*For chamber orchestra*

#### Overview

The '*Orchestral Sketch*' is written for chamber orchestra. Writing for a variety of instruments was a complex and challenging task for me, mainly due to the appropriate instrumental combinations which were required to create the final orchestrated score. The primary reason I chose to write in this medium was to practise and demonstrate the application of the Schillinger techniques for planning the composition and orchestration.

Due to the complexity of the piece, I separated the compositional stage from the orchestration stage and so managed to simplify the whole creative process. The composition consists of three short themes and their variations. I orchestrated the themes after the compositional stage.

The analysis below is different from the previous pieces of analysis, in the sense that in this case I am analysing the compositional methods in the preliminary approach and the orchestration in pre-planned instrumental combinations. In both cases, I created the composing method of the pieces in advance. These serve as the foundation of the composition and the analysis is based on the presentation of these ideas.

## Analysis

### Composition

The composition is built on three themes and their variations; **(A)**, **(B)** and **(C)**, whose basic structure are created by the Schillinger's preliminary templates.

To create a template for theme **(A)**, I applied the sub-grouping time signature technique in 5/4. I used the subgroups of 1,3,1, where 1 = crotchet.

The results of the squaring process were  $(1,1,3)^2 = (1,1,3) (1,1,3) (3,3,9)$

I used these numbers to create two rhythmic layers from the same numbers. Layer 1 presents the numbers in order, while layer 2 uses the same numbers backwards, thus forming the following series:

Layer 1: 1,1,3,1,1,3,3,3,9

Layer 2: 9,3,3,3,1,1,3,1,1

I composed 5 bars of rhythmic materials for the two layers; see **Figure 7.1**. The two layers created the rhythms of both the melody and countermelody.

Figure 7.1 shows two layers of musical notation in 5/4 time. Layer 1 (top) consists of five bars with rhythmic values 1, 1, 3, 1, 1, 3, 3, 3, 9. Layer 2 (bottom) consists of five bars with rhythmic values 9, 3, 3, 3, 1, 1, 3, 1, 1. The notation uses stems and beams to represent the durations of notes.

**Figure 7.1**

The next step for melodising the template was to write a chord progression where each bar represents one chord. I continued the composition with a MIDI editor from this stage as it was practical for illustrating the Schillinger graphical notation method due to the similarity of the two techniques. The chords in Layer 3 founded the inspiration for shaping the melody and countermelody lines; see **Figure 7.2**. I selected the chord progressions intuitively, while sustaining tonally the above-mentioned influence of Miklós Rózsa's music.

**A1**

The musical score for Figure 7.2, labeled 'A1', is presented in three layers. Layer 1 is the top staff, Layer 2 is the middle staff, and Layer 3 is the bottom staff. The music is written in 5/4 time. Layer 1 features a melodic line with various intervals and accidentals. Layer 2 provides a counter-melody. Layer 3 consists of a bass line with chords and intervals. The overall structure is complex and layered.

**Figure 7.2**

I followed the logic of Schillinger here, whilst creating the melodic foundations of the composition with it. It was also a practical way of shaping the composition, since the rhythms of the melodies were created in advance. Having created the melodies with the geometrical inversions, I simply multiplied the available scores by four.

For doubling the materials, I made the retrograde inversion of the themes, thus creating an additional 5 bars for the composition. I created 5 more bars in this way and now I had 10 bars based on one five bar composition. Here, I followed the logic of Schillinger who advised his students to create the geometrical inversions of the materials too, so they had an abundance of choice of materials before starting their composition. Since all melody can be easily transposed into its retrograde, inversion and retrograde inversion, by following this method only, it is possible to multiply any music material by at least four times in length.

It was also possible to double these materials in length by making the inverted version of them all. Now 40 bars of materials were produced. To double these materials further, I swapped the two layers and transposed them in octaves, e.g. when Layer 1 played the higher range, now Layer 2 played the higher range and Layer 1 the lower range, thus 80 bars were ready to help the workflow.

To make a contrast to this theme, I made a melodic variation version of the original theme, (**A2**); see **Figure 7.3**. It produced another 40 bars, thus 80 bars were at my disposal related to the original five bars of which the variations were made.

**A2**

**Figure 7.3**

I continued the variations of the same techniques presented above when composing for theme **(B)** and theme **(C)**. I created big numbers of materials from these themes too.

The preliminary template for theme **(B)** was composed for two layers. Layer 1 is built up with sub-grouping time signature of  $3/4$  in different numbers:

$$3 = (3), (1+2), (1+1+1), (2+1), (3), (1+2), (1+1+1), (2+1), (3), (1+2).$$

Layer 2 is made of the  $r3:2$  resultant with fractioning: 2,1,1,1,1,2.

The two layers formed the following series of numbers:

Layer 1: 3,1,2,1,1,1,2,1,3,1,2,1,1,1,2,1,3,1,2

Layer 2: 2,1,1,1,1,1,2,2,1,1,1,1,1,2,2,1,1,1,1,2,2,1

I composed 12 bars of rhythmic materials for the two layers from these numbers; see **Figure 7.4**.

Layer 1

Layer 2

Layer 1

Layer 2

**Figure 7.4**

After this, I created the two preliminary versions of **(B)**; see **Figure 7.5**.

**B1**

Layer 1

Layer 2

**B2**

Layer 1

Layer 2

Layer 1

Layer 2

**Figure 7.5**

The template for the two themes of **(C)** was created by means of the split unit technique for three layers in 4/4 time.

As a result, all three layers are created from a single thematic line in both variation of the theme, varied in different places, by following the split unit technique; see **Figure 7.6**.

Figure 7.6 consists of three musical staves, labeled Layer 1, Layer 2, and Layer 3, each in 4/4 time. The staves are divided into three measures by vertical bar lines. Each measure contains three themes, labeled a, b, and c, which are repeated in different layers and octaves.

- Layer 1:**
  - Measure 1: Theme a1
  - Measure 2: Theme b1
  - Measure 3: Theme c1
- Layer 2:**
  - Measure 1: Theme b1
  - Measure 2: Theme c1
  - Measure 3: Theme a1
- Layer 3:**
  - Measure 1: Theme c1
  - Measure 2: Theme a1
  - Measure 3: Theme b1

The second and third systems of staves follow a similar pattern with themes a2, b2, and c2 in the first system, and a3, b3, and c3 in the second system. The notation includes various rhythmic values such as eighth and sixteenth notes, and rests.

**Figure 7.6**

Following this, I composed the melody of theme; see **Figure 7.7**. The template unlike the previous themes was created without harmony and in a counterpoint setting, like a canon, where the voices are busy repeating the same materials but with different variations. The three layers are divided into three different octaves; thus, the voices can keep their independent lines without clashing with each other in range.



C

Figure 7.7 shows a musical score for three layers (Layer 1, Layer 2, Layer 3) in 4/4 time. The score is divided into three systems. Layer 1 is in treble clef, Layer 2 is in treble clef, and Layer 3 is in bass clef. The music consists of complex rhythmic patterns and melodic lines with various accidentals (sharps, flats, naturals).

Figure 7.7

To continue from this stage, I started to shape the composition based on the collections of material. My compositional process from here was mainly based on intuitive approaches rather than mechanical approaches. I used the produced materials as the framework of the composition and tried out different combinations of sounds.

### Orchestration

A composer must be keen and accurate in decision making with regards to approach in choice of instruments and integration with scores. It is easy to get lost in the middle of a piece because of the instrumental combinations. However, it is possible to get everything right by devoting time to analyse instruments and make the right decisions.

Part of Schillinger's techniques is a pre-planning approach that sets limitations on the number of instruments and sounds in a piece, thereby increasing fluency and transparency. To increase the density of the orchestration doublings in unison or octaves are necessary.

I created rules for unison and octave doubling.

*Rules for unison and octave doubling*

- Brass doubles brass in octaves only.
- Winds doubles brass only when a string double.
- Strings doubles in both brass and winds.
- Brass doubles strings with horn only.
- Flute plays in unison with violin I and doubles violin II in lower octave.
- Violin I doubles with violin II in lower octave.
- Double bass doubles with cello in octave.
- Double bass doubles with bassoon in octave.

These doubling combinations were not strictly adhered to. They served as a template for a starting point for selecting instrumental colours and were later altered in places where the musical textures required it.

The composition started to evolve during the orchestration process. I made changes in intonations and rhythms. Also, new complementary materials were added to the preliminary ones. The final structure of the piece was also decided during the orchestration process.

The resulting composition is the reflection of the methods above.

## Chapter 8

# Reflection on Developing an Individual Compositional Voice

### Overview

My principal aim throughout this course of study was to find different ways to develop my individual compositional voice. My starting point was to familiarise myself with the works of as many composers as I considered relevant to my studies. I decided in which musical direction I aimed to progress. Meanwhile, I was striving to see my style reflected in the context of the music of this century. My aim, combined with the use of the Schillinger System, then led me to some unique musical results.

### Reflection on the five compositions

When composing the song cycle *'In a Foreign Land'* I relied completely on my previous classical singing experience and my piano skills. My aim was to develop my song writing style by reflecting the poem's characteristics. I learned much about how to reflect the verses melodically and rhythmically, while keeping their original story characters at the same time.

To modify my own limited style for the piano accompaniments, I studied scores, to gain inspiration from such accompaniment patterns. Debussy's piano patterns both impressed and influenced me the most. These patterns inspired me to decorate the piano accompaniments already composed. This also gave me an insight into the writing of such piano parts which both sounds well and look good in a score.

*'Pentabass'* was my first work in this portfolio, where I began to use a pre-planned compositional template, in other words: preliminary template. The piece was centred around the number five for double bass solo. When I composed the piece, I had just started to become familiar with the Schillinger System, therefore, I simply applied the techniques occasionally

throughout the piece. This was beneficial in developing my skills for writing a double bass solo and a good starting point for applying the Schillinger System in practice.

In *'Four Movements for Wind Quintet'* I gained experience in working with woodwind ensembles and in balancing the dynamics between the instruments. I used the basic Schillinger techniques, such as permutation, geometrical inversions and density techniques. I learned methods about how to create long musical durational materials, based on short motifs. It was also a practical experience in contrapuntal writing for a different range of instruments.

I applied different Schillinger techniques in *'Varied Moments'*, as factors to help me to make complex compositional decisions in a controlled way. I discovered considerable potential for using the Schillinger resultants, sub-grouping the time signature and geometrical inversions. This approach changed my mindset about the process of composition and presented me with new perspectives.

Composing *'Orchestral Sketch'* required a different approach on my part, as I used in the previous compositions. The application of the preliminary template and pre-planning techniques by Schillinger, allowed me greater development of my compositional and orchestration skills. Due to the techniques, there was already an abundance of materials available when I started to piece together the composition, which allowed me to experiment with short music elements and their individual multiplications at the same time. This approach is different from creating music without any precomposed materials and provides a solid workflow for the composer.

Since writing the piece was based on experiments of combinations of the parts, I could easily create music materials relying on the pre-created short themes and develop them organically with the use of geometrical inversions technique. By using the techniques above in combination with my intuitive approach, I was able to create a unique composition while simultaneously developing significantly my compositional style.

## **Reflection on the Schillinger System of Composition**

I did not consider applying different sources of inspiration other than music until I encountered the Schillinger System. Having become familiar with the system, I started to apply its techniques in the composition of my next pieces. This system presented me with a new way of thinking about the field of composition and orchestration. It extended my opportunity to find musical inspiration in unusual ways, such as with numbers, permutations, geometrical forms and combinations of these.

Most of my compositions presented in this thesis were partly planned in line with Schillinger's planning methods. I concluded that a composer, while avoiding unnecessary errors, cannot leave this to chance and should instead focus on 'scientific' planning. My planning was to combine the spontaneous approach with a pre-planned one. I realised that by proficient planning, I was able to save time and energy, as opposed to a 'trial and error' approach.

Prior to knowing the Schillinger System, I stubbornly refused to approach music in a mathematical way. However, through studying and applying the techniques, I came to reconsider my rejection of the mathematical approach.

The techniques I applied often provided good quality musical results beyond my own personal style. My dilemma the first time was that: even though I often liked the results, I still doubted whether I composed these melodies myself; which lacked my own compositional blueprint.

However, as much as I was stubbornly against mathematical compositional approaches then, I am now open to the merit of such approaches. It was reassuring to discover that, with practice, it allowed me to be more creative. I realised that these techniques gave more inspiration and ideas for composing good quality compositions, without having to sacrifice my own compositional input in the process.