

UC San Diego

UC San Diego Electronic Theses and Dissertations

Title

Aeriality : music for orchestra

Permalink

<https://escholarship.org/uc/item/2h4228pb>

Author

Anna S. Þorvaldsdóttir, Anna S. Þorvaldsdóttir

Publication Date

2011

Peer reviewed|Thesis/dissertation

UNIVERSITY OF CALIFORNIA, SAN DIEGO

AERIALITY
Music for orchestra

A dissertation submitted in partial satisfaction of the
requirements for the degree Doctor of Philosophy

in

Music

by

Anna S Thorvaldsdottir

Committee in charge:

Professor Rand Steiger, Chair
Professor Lei Liang
Professor Rebecca Jo Plant
Professor Steven Schick
Professor Yolande Snaith

2011

©

Anna S Thorvaldsdottir, 2011

All rights reserved.

The Dissertation of Anna S Thorvaldsdottir is approved, and it is acceptable in quality and form for publication on microfilm and electronically:

Chair

University of California, San Diego

2011

DEDICATION

To my husband Hrafn Ásgeirsson – thank you for more than I can ever express.

I would like to dedicate my graduate studies, and this dissertation, to my grandmother V. Anna Guðmundsdóttir, born February 9th 1925. To a woman of great intellect who relentlessly continues her self-educated search for knowledge, inspired by literature and life.

For all my wonderful family and friends.

TABLE OF CONTENTS

Signature page.....	iii
Dedication.....	iv
Table of contents.....	v
List of Illustrations.....	vi
Vita.....	vii
Abstract.....	viii
Introduction.....	1
AERIALITY.....	16
Program notes.....	46

LIST OF ILLUSTRATIONS

Illustration 1: Fundamental pitches.....	9
Illustration 2: Fundamental harmony.....	10
Illustration 3: Sections.....	11

VITA

2004	Bachelor of Arts, Iceland Academy of the Arts
2007-2010	Teaching Assistant, Department of Music University of California, San Diego
2008	Master of Arts, University of California, San Diego
2011	Associate in Music, University of California, San Diego
2011	Doctor of Philosophy, University of California, San Diego

DISCOGRAPHY

Roto con moto, Njuton Ensemble, released by Bad Taste Records in 2007 (SMK60). *Aton* for a small ensemble.

Heyr mig mín sál, Hymnodia chamber choir, released by the Iceland Music Information Centre in 2009 (ITM908). *Heyr þú oss himnum á* and *Heyr mig mín sál*, for choir.

Ljósið þitt lýsi mér, Mótettukór Hallgrímskirkju choir, released by Mótettukór Hallgrímskirkju in 2009 (MHCD015). *Heyr þú oss himnum á* for choir.

Rhízōma, Anna Thorvaldsdottir, released by Innova Recordings in 2011 (innova810). *Dreaming* for orchestra, *Hrim* and *Streaming Arhythmia* for chamber orchestra and *Hidden* for percussionist on grand piano. Performed by the Iceland Symphony Orchestra, the CAPUT Ensemble, and percussionist Justin DeHart.

ABSTRACT OF THE DISSERTATION

AERIALITY
Music for orchestra

by

Anna S Thorvaldsdottir

Doctor of Philosophy in Music

University of California, San Diego, 2011

Professor Rand Steiger, Chair

As a composer, my primary objective is to write music over words. I prefer to express myself in sounds rather than prose, which is why the piece *AERIALITY*, written for a large orchestra in 2010/2011, constitutes the primary content of this Dissertation. As the focus is on the music itself, via the music score, the amount of written text is minimal.

The introduction to the Dissertation is an introduction to *AERIALITY*, describing the inspiration for the piece and the conceptual approach to the music. The main section of the Dissertation presents the music score. (Since the work is written for a large

orchestra, the music notation had to be reduced considerably in size to fit the format of the Dissertation.) The music is written for a large orchestra of 41 individual parts that are at times divided even further within instrumental sections. The music features layers of sound structures and moments of lyrical emphasis. Quartertones are used as a device to construct walls of sounds beyond the chromatic scale in order to achieve a massive sound structure. The final section of the dissertation presents the program notes that are written to accompany the work for performance.

AERIALITY is the seventh piece I write for orchestra, and it distinctly reveals my passion to search for sound-worlds that are produced by a large instrumental force. It presents layers of internally related materials, often within a chromatic and quartertone setting that is constructed around a harmonic progression that the music flows through from beginning to end. This progression is presented both in the form of collective orchestral efforts going through the same materials as well as in layered entities of smaller instrumental alliances to create a conjuration of a musical atmosphere that does not dwell within a single melodic sphere but rather travels between the various sonic fields that are inspired by the visual indication that the title suggests.

INTRODUCTION

As a composer, my primary objective is to write music over words. I prefer to express myself in sounds rather than prose, which is why I have chosen to let the piece *AERIALITY*, written for a large orchestra in 2010/2011, constitute the primary content of this Dissertation. As the focus will be on the music itself, via the music score, the amount of written text will be minimal.

The introduction to the Dissertation is an introduction to *AERIALITY*, describing the inspiration for the piece and the conceptual approach to the music. The main section of the Dissertation presents the music score. (Since the work is written for a large orchestra, the music notation had to be reduced considerably in size to fit the format of the Dissertation.) The final section of the dissertation presents the program notes, written to accompany the work for performance.

The title ‘AERIALITY’ is not to be understood as indicating *insubstantiality*, but rather as the state of gliding through the air with nothing or little to hold on to, similar to flying. The title draws its essence from various aspects of the meaning of the word ‘aerial’ and refers to the visual perspective – and inspiration – that such a view provides. ‘AERIALITY’ is also a play with words, combining the words ‘aerial’ and ‘reality’, so as to suggest two different worlds; the sky – the untouchable – or *aerial*, and the ground, *reality*.

ON NATURE AND INSPIRATION

Nature provides me with my greatest inspiration when it comes to writing music. These inspirations – and the internal listening that results from them – provide me with

musical concepts that motivate me to portray these visualizations in music. Of course, this particular approach is not present in the same way in all my music, but I do find this to be a pattern in my creative process. Landscapes and various other portraits from nature have for a long time nurtured my creative imagination and they seem to have different ways of inspiring me for every new piece I write.

In my music, inspiration from nature nurtures my sense of proportion and natural flow. I use this inspiration as a tool to listen and search for my music. I listen to nature, not only to natural elements that present sounds, but to everything around me. Generally, I do not find it desirable to try to imitate the actual sounds heard in nature. The listening is in the form of hearing what the visualization presents me with. I look at the sky, I see the moon aligned with a very bright star. Instantly I hear the harmony of this image – it is still, but moving slightly as the light from the star pulsates ever so lightly, changing the image, and therefore also the sound. I look at a mountain – from a distance it looks very still, as if it were a substance of a single color. I listen, and as I move closer the details become clearer. From there I can choose how to listen. I can listen to the entire image or pick out parts of it to concentrate on.

I notice how in nature everything acts together. However rigorously structured it may be, it presents all the different components that together create the massive force that it is. As I stand at the waters edge with my feet in the sand, I notice the way the water naturally flows in and draws back. This looks so peaceful, yet strong and steady. I look for ways to interpret this in music. I know the ocean is endlessly deep, but all I can see is

the surface, which sometimes is very rough and moving even though it may be absolutely still and peaceful down under, or vice versa. How can I reflect the waves of the sea in the music in a poetic and interesting way? How does a mountain turn into music?

My wish is to portray an alternative world through music, different from the one we live in. It seems as if I strive to project the fantasy that I frequently enter when listening to the sounds around me.

Initially I listen for the structure of the piece inside the mind. It varies from one piece to the next what form this listening takes, and also how much time it takes until the piece has formed a structure. This stage of composing is often referred to as a *pre-compositional* process, but to me this stage is one of the most important ones in the whole process of composing. This is where the ideas behind the piece, its structure and form, are largely determined and where the piece takes its initial form. This initial *notion* of the piece is then defined and developed throughout the entire compositional process.

An emotional and/or conceptual approach can be helpful when it comes to writing music. In my case the music starts as a strong sensation but then turns into a world of its own with its own means of communication and its own meaning. The sensation becomes the source of the music and thus the concept behind the piece. I sense the piece before I start to write it down on paper, get to know the atmosphere inside it, make the themes and other musical material and think of possible developments.

The conceptual thinking in my compositions is not to try and turn emotions or ideas into music. The conception consists in making an atmosphere that indicates certain

emotions. That way, in each piece, I go through a certain process that includes brainstorming on various ideas and feelings that have nothing to do with music. This process is directly connected to the music, although in different ways than the methods of writing and developing the music material are connected to it.

INSPIRATIONS AND NEW DIRECTIONS

I have usually been inspired by the *horizontal* viewpoint of nature – the view as seen from the ground. The inspiration behind *AERIALITY* however is somewhat different. Rather than limiting the sensational “experience” to the scenery as visualized from the ground, and to a linear overlook, I further imagined the landscape as seen from above. By imagining this visualization, the view inevitably changes rather drastically. The dimensionality of the various objects in the landscape, and therefore in the sonic perception, changes – seen from the ground, the visual field is quite different than if seen from above. This is what I strive to put into a musical context, by imagining and portraying alternative projections of the *same* material.

To take an example, material that is presented as a lyrical line in one instrument or two later becomes a sustained layer of all the pitches from that particular line – as if seen from above rather than from a horizontal point of view. Or a single sound is extracted from its primary source, such as an airy attack in the brass, which is a fundamental part of all tones performed on brass instruments. By extracting it and playing it as a single entity, the focus is drawn to a smaller component within the sound – within the landscape. The same goes for the use of quartertones, where the sense of pitch is blurred to gain an even better sense of the mass of the whole rather than individual

elements within the entire image. The quartertones are used to “fill in the gaps” between the traditional pitches in order to reveal a more detailed presentation of the view.

Another important objective in this piece is that I wanted to search for ways in which I could allow myself to let go of some of the devices that I tend to hold on to when I write music. I wanted to provide myself with a set of wings to fly more freely by letting go of certain “anchors” that I tend to cling to in the creational process. This is not to be understood in such a way that I wanted to liberate myself from my musical aesthetics and the characteristics that my music embodies – quite the contrary – but I wanted to push myself further than I have done before in using, and exploring, particular types of sound materials. In my previous pieces I have usually relied on droning sustained materials to provide a *foundation* for various types of lyrical materials, but in *AERIALITY* I wanted to bring this sustained sound-world into the foreground, without the sense of a fundamental pitch.

My musical aesthetics frequently motivate me to write long passages of layered harmonies and materials that often resolve into some sort of melodic field that serves as a “destination point”. These *melodic releases* vary in emphasis from one piece to the next and take various forms, from being a single measure of briefly blooming pitch emphasis, to being longer lyrical lines that can last as long as several minutes, underlined with a strong harmonic foundation that supports the melody. This musical characteristic serves both my aesthetics as well as my desire to generate a momentum in the music. In order for these moments of melodic release to serve their purpose in any given piece, the

surrounding materials need to generate some sort of contrast, allowing the melodic material to be recognized as “release”.

In *AERIALITY*, the sense of “importance” attached to the notion of melodic release is significantly different from my previous works for orchestra, as these melodic characteristics are somewhat overpowered by layers of sound materials. For this reason, *AERIALITY* can in some sense be said to be on the border of symphonic music and sound-art. Although lyrical material has its place in this work, the proportion of *layered sustained material* versus *melodic material* is different from most of my previous pieces. The piece flows for the most part as a unified orchestral effort, through fields of harmony and quartertones, and the layered, somewhat droning, effects have a stronger presence in the music than the melodic material. However, lyrical moments give rise to the sense of more traditional orchestral music only to remind us of the medium with which we are presented. The droning effect, which is almost noisy at times, is never too far away, though, and it reappears to take the listener back into the stream of a layered sound-world. This chromatic, droning sound-mass leaves the listener with no or little sense of direction – a sense of flying without a line to hold on to – by abandoning the somewhat “more balanced” proportions of sound-materials and lyrical materials, thereby leaving more room for the sound-mass. I think that this in fact gives the very short lyrical event an even stronger presence in the work.

OPENING

The musical representation of the conceptual notion behind the piece starts “on the ground”. Beginning with a horizontal view of the landscape, the attention is brought to how the visual representation of objects located at various distances can – from that perspective – be naturally thought of as linear in form. Initially, the ground is represented by a percussive attack in lower brass, strings, piano, and percussion on low F# which immediately releases f# in upper octaves in the other voices that sustain and dominate the harmonic field. More pitches from the harmonic series of F# begin to appear as a rising and falling shapes of landscapes, presented in selected instruments such as piano, violins and flutes. These textures indicate the horizon that is presented over the sustained F# that still remains the fundamental ground. The attacks are presented a few times over the first 22 measures on F# – varying subtly in instrumentation and dynamics each time – in order to further establish the ground. In m. 22 the final attack occurs but now on E, F, F# and G. As more pitches are added to the texture, the fundamental moves from F# to a chromatic field of the surrounding pitches.

HARMONIC PROGRESSION

The fundamental harmonic emphasis of the entire piece moves through a chromatic sphere from F# to C from beginning to the end. Following is a representation of the harmonic chart, demonstrating the order in which pitches are introduced into the harmonic field:

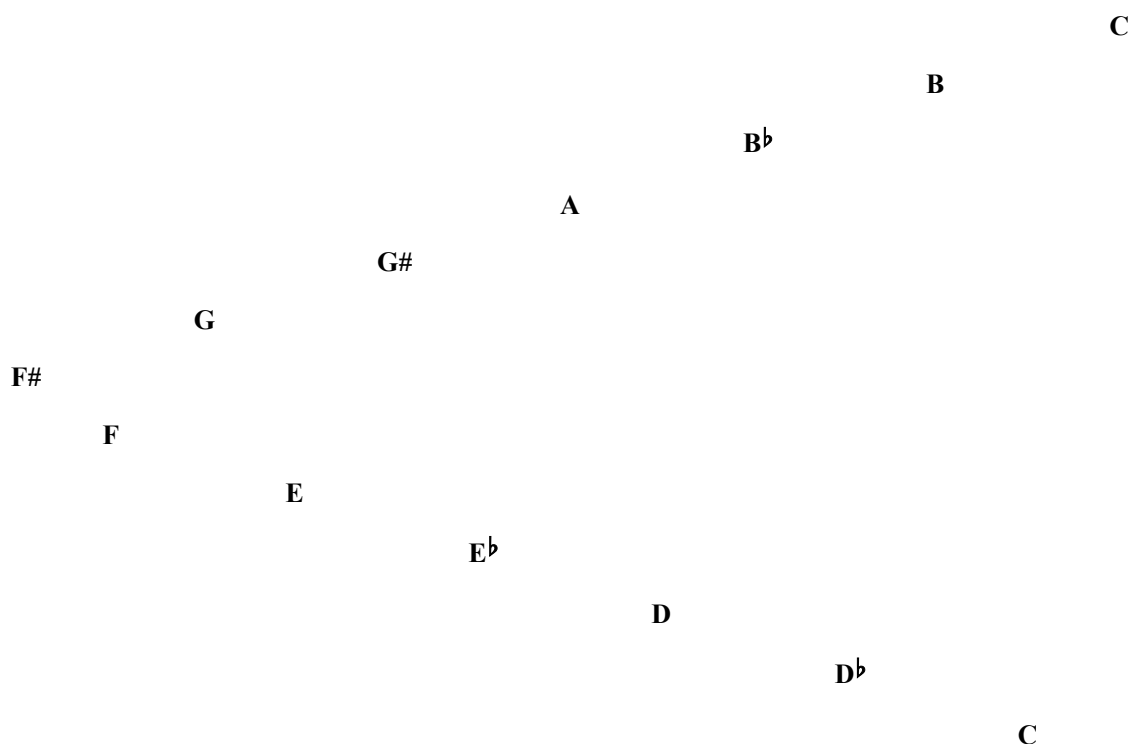
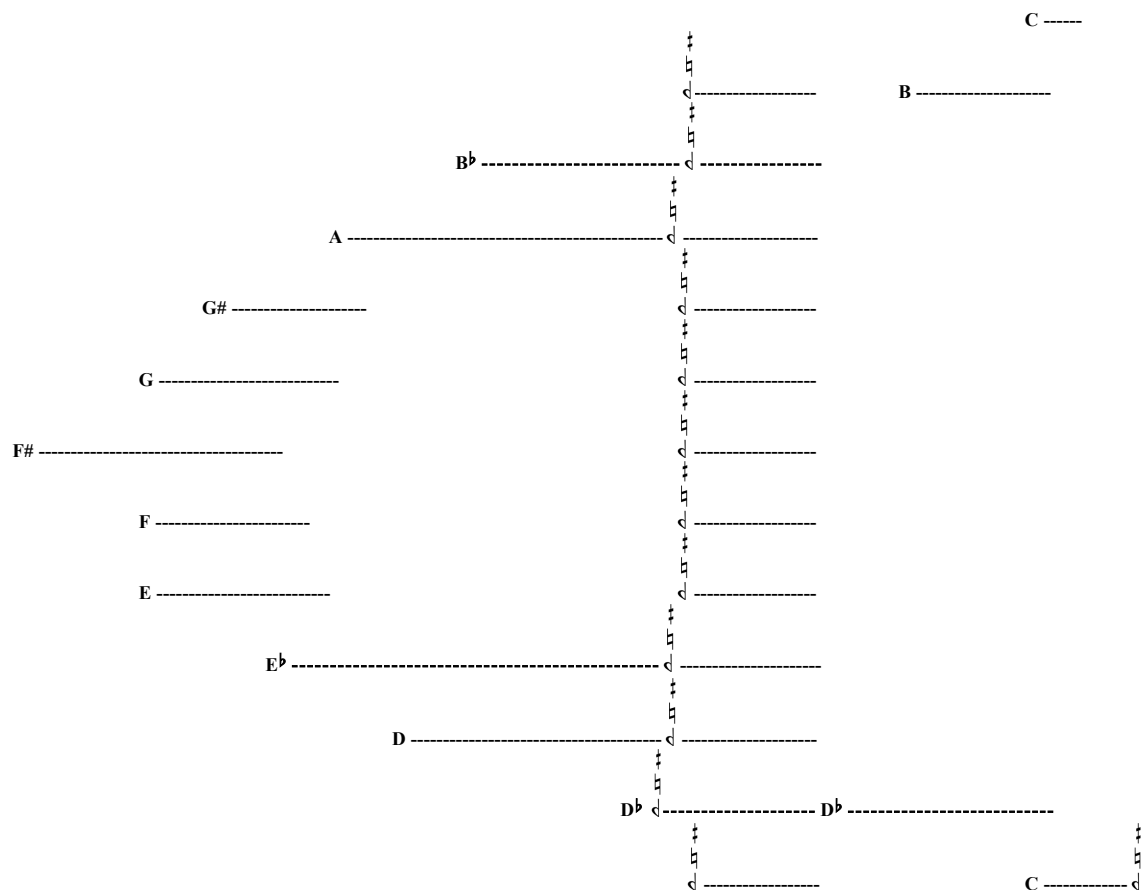


Illustration 1: Fundamental pitches

As a new pitch enters the harmonic texture, it layers with the previous pitches, creating a harmony that is simultaneously chromatic and, as more pitches enter, overlapping into other chord progressions. The following two images show a) how the pitches overlap in the harmonic foundation – i.e. how the pitches enter and exit and contribute to the structure of the fundamental harmonies throughout the work, and b) the fundamental sections of the piece, relative to the harmonic progression:

a)

**Illustration 2:** Fundamental harmony

b)

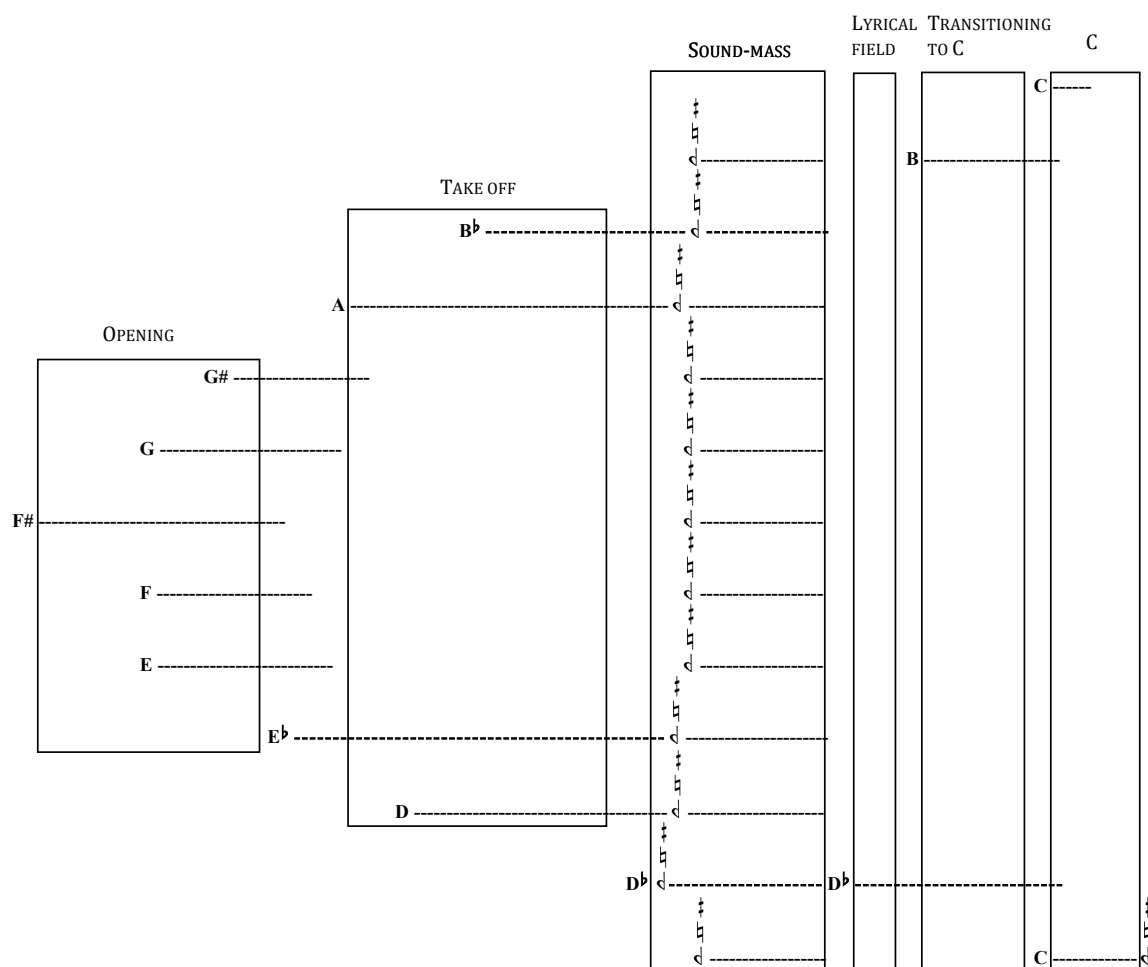


Illustration 3: Sections

The harmonic chart provides an overlap of two perfect fifths, D-A, and Eb-Bb.

This is *the* set of fifths that becomes the central harmonic panel of *AERIALITY*, and the fundamentals that contribute to the notion of “take off” in the music.

TAKE OFF

The “take off” refers to the idea of the attention being slowly taken upwards from the ground, in order to get an alternate look *over* the same landscape. Visually conceived, this presents a new view over the entire field of the music material, which now moves to a scene that is constituted by colorful masses rather than linear (horizontal) forms.

Through orchestration, the harmony grows thicker with the use of the fundamental pitches, as the fifths, D-A and E^b-B^b, and their harmonic series’, are used as a tool to get the music to *take flight* at mm. 40-48. As the view changes, the harmony and layers of rhythms represent the new perspective. The notion of flying brings a sparser texture to the music and the different layers alternate between merging and separating. Instead of facing in one direction at a time – on the ground – the view now presents a larger representation of the *same* scenery.

At this point, choosing a focus point becomes important. Do you keep the entire image in view, or do you concentrate on a particular element within the visual field? Do you listen to the entire mass, or concentrate on extracted parts of it?

SOUND-MASS

This part of the work brings a more sustained texture of material – a droning sensation of pitches – which right at the point of take off is supported by the alternating fifths of D-A and E^b-B^b. Earlier in the music, the horizontal landscape was represented with pitch material moving upwards and downwards in a linear fashion. Here, the

droning textures become denser and the orchestra begins to move together into an ocean of sound.

In m. 54 selected strings start to play slow glissandos between half tones and quartertones and more strings gradually enter this texture. In m. 61 low woodwinds and low strings signal the “entrance” to the orchestra drone – i.e. the sound-mass – with chromatic quintuplets, on D^b , D, E^b and A^b , A, B^b and B. Here, the collective effort of all the instruments in the orchestra, except for percussion, start to contribute to a massive chromatic drone. As a sort of layered juxtaposition to the droning sensation, the percussion provides rhythmic non-resonating metallic sounds, of metal plates and hi hats, that breathe in and out of focus.

In m. 71, the ultimate sound-wall is achieved. Here, all the instruments, except percussion, have settled on designated pitches that throughout the orchestra range from a low $C^{\sharp}$ to f, in a chromatic setup with quartertones, with a non-salient D^b fundamental. Each string voice is divided into two separate parts, with each section already divided into three and four voices. This results in a total of 34 pitches in the string sections alone. The entire sound-wall becomes a combination of 53 voices playing 46 pitches over the range of two and a half octaves.

LYRICAL FIELD

The chromatic mass is sustained over a long fermata in a measure of 4/2, the total duration of which is up to the conductor’s interpretation. This clutter of sound is released into a harmony on D^b that passes into a lyrical field over the D^b fundamental in m. 76.

This is the first, and only, point in the piece at which a melody is in the foreground. This is also the largest sense of resolution, or relief even, appearing in the work, as the music transforms into a lyrical sphere after a massive, chromatic wall of droning sound. This brief lyrical field almost immediately fades out at the peak of its own urgency, only to remain a shadow. This release can be likened to clouds clearing up in the sky, revealing the beauty that lies behind the mass.

The lyrical passage occurs over the course of six measures, and the music then moves back to a flowing sensation of sounds that have now taken the form of sustained pitches combined with layers of rhythms that through combined efforts create a moving stream.

TRANSITIONING TO C

After the lyrical emphasis, the harmony briefly settles on a harmony from a C fundamental in m. 81. This is a sneak peak of the final destination, C. The pitches B and D^b are emphasized from mm. 85-92 to serve as leading tones to the C, which in m. 93 becomes the fundamental – and *sole* – pitch, as all the instruments play unisono in octaves. The final quintuplets, and the triplet, from mm. 97-104, which contain a quartertone sharp and a quartertone flat from C, serve as the final echoes of a fundamental, and can be said to refer to the attacks at the beginning of the piece.

The work ends on sustained C with quartertone additions that fade out into a mist of airy sounds from the back sections of the strings playing without pitches.

AERIALITY

The metaphorical presentation of the fundamental notion of this piece is an important part of the creational process of the music. Of course it is in no way essential for the listener to know the conceptual facts about the fundamental ideas behind the process of the piece, but it gives an insight into a process that is usually entirely hidden to those who listen.

AERIALITY is the seventh piece I write for orchestra, and it distinctly reveals my passion to search for sound-worlds that are produced by a large instrumental force. It presents layers of internally related materials, often within a chromatic and quartertone setting that is constructed around a harmonic progression that the music flows through from beginning to end. This progression is presented both in the form of collective orchestral efforts going through the same materials as well as in layered entities of smaller instrumental alliances to create a conjuration of a musical atmosphere that does not dwell within a single melodic sphere but rather travels between the various sonic fields that are inspired by the visual indication that the title suggests.

AERIALITY

AERIALITY

SCORE IN C

Instrumentation:

2 Flutes
1 Alto Flute
1 Oboe
1 Cor Anglais
Plays oboe in mm. 12-14
2 Clarinets
1 Bass Clarinet
2 Bassoons
1 Contra bassoon

4 Horns
2 Trumpets
2 Trombones
1 Tuba

Timpani
Percussion I:
cymbal
hi-hat
1 metal plate
big almglocken - D $\flat$
big tom tom
bass drum
1 bow
Percussion II:
cymbal
hi-hat
1 metal plate
big almglocken - B
big tom tom
bass drum
1 big gong – low C
1 bow
Percussion III:
big tam tam
marimba
1 big gong – low F $\sharp$
1 bow

Harp
Piano

Violin I desk 1
Violin I desk 2 & 3
Violin I desk 4 & 5
Violin I desk 6 & 7

Violin II desk 1
Violin II desk 2 & 3
Violin II desk 4 & 5
Violin II desk 6 & 7

Viola desk 1
Viola desk 2 & 3
Viola desk 4 & 5

Cello desk 1
Cello desk 2 & 3
Cello desk 4 & 5

Double bass desk 1
Double bass desk 2 & 3
Double bass desk 4 & 5

Performance notes:

Time signatures are written for convenience only. First beats of bars should generally not be given more emphasis than other beats – keep in natural flow from one note/sound to the next.

*

"When you see a long sustained pitch, think of it as a fragile flower that you have to carry in your hands and walk the distance on a thin rope without dropping it or falling. It is a way of measuring time and noticing the tiny changes that happen as you walk further along the same thin rope. Absolute tranquility with the necessary amount of concentration needed to perform the task" (~Anna~)

*

Techniques for all instruments:

—————> : Former effect/sound/technique/indication gradually becomes the following one.

 : All glissandos should be played throughout the duration of the note value it is written by. For example  : slow glissando that starts at the beginning of the note and glissandos throughout the four beats of the note value. Similar with  : faster glissando (depending on the destination of the following pitch).

Accidentals apply to one measure at a time.

Quarter tones:

 : Quartertone flat

 : Quartertone flat from $\flat$

 : Quartertone sharp

 : Quartertone sharp from $\sharp$

Woodwinds:

When notes are slurred through an extended period of time - breathe where necessary - not synchronized between instruments.

Bass clarinet in score is written in the sounding octave.

Note heads:

 : Wind/air sounds, no pitches sounding - the notehead is placed on the middle line of the staff, but should not represent that pitch.

 : Play on air. The various positions produce a slight changes of color to the air sound.

 : Play with flutter tongue.

Brass:

When notes are slurred throughout an extended period of time - breathe where necessary - not synchronized.

Note heads:

 : Wind/air sounds – no pitch sounding.

 : Tongue flick on air, written in rhythmic patterns – (as a controlled flutter).

 : Play with flutter tongue.

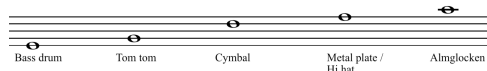
 : Rhythmic tongue flutter, also appears on air 

Percussion:

Never stop resonance of instruments, or dampen unless otherwise indicated.

Percussion setup on staves is as follows:

Percussion I & II



Hi hat abbreviated HH. Metal plates abbreviated MP.

Hi hats are to be closed throughout the piece.

Percussion III

Tam tam material is written on a single line staff.
Marimba has a designated staff.

Gongs have a designated staff.

Techniques:

Never stop resonance of instruments unless otherwise indicated.

Strings:

Harp:

Never stop resonance of instrument, or dampen, unless otherwise indicated.

In glissando phrases: small noteheads that are written in beginning and end of glissando phrases merely indicate the start and finish of glissandos but should not be played.

Where asked to "mute strings with other arm and gliss. on stopped strings": place arm over strings and press to mute, then glissando over the muted strings as written.

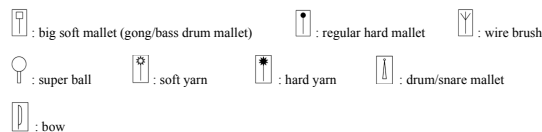
Piano:

Pedal is held pressed over large portions of the piece as written.



Right hand should be placed inside the piano pressing on the base of the written string with finger and released on the attack of the note in left hand. Produces a percussive attack that is let to resonate with the pedal held pressed.

Mallets:



When indicated to play with hands or wire brush (for example in circular strokes) it refers to playing simultaneously with both hands or two wire-brushes, unless otherwise indicated or simultaneous indication of another mallet.



Sustained back and forth tremolo strokes on cymbal. Also indicated on tam tam in percussion III.



When written with regular mallets, refers to playing quick whirl rather than rhythmic 32nd notes. When written with wire-brush on tam tam or cymbal, play as indicated, e.g. in sustained tremolo strokes back and forth over the instrument.

String sections:

Double basses need to have pitch extension down to C or tune the E string down to C

When notes are slurred throughout an extended period of time - change bow where necessary - not synchronized.

No vibrato unless otherwise indicated.

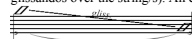
Note heads and effects:

Where there are written effects, the string/-s that the particular effect should be played on is indicated with a small regular note head, below the effect note head (that refers to way of playing). Effect note heads are written around approximate pitch areas and are not to suggest specific pitches but sounds.



Place left hand (not only one finger) lightly on indicated string, *around* given pitch area, not on harmonic. Fingers are not to be placed on exact pitches. This produces an un-pitched wind sound. This note head is written with a small note head below that indicates the open string where the

technique should be played. When this note head is indicated with a *gliss.*, move hand up or down the string as indicated (this will produce various harmonic colors in the wind sound as hand glissandos over the string/s). An example of this, taken from cello part:



When noteheads, like the ones above, are indicated with ord., it refers to playing ordinary on the written effect and serves e.g. to take back sul pont. etc.



Three tremolo lines refer to playing quick tremolo notes rather than rhythmic 32nd notes.

Note-values without noteheads are written as reference through glissando or other effects - they are never written for a longer note value than a.

In mm. 85-92 the 32nd notes and triplets indicated with: "sul pont. very light bow pressure airy effect with **very vague pitches Avoid open strings**" in this section it is not necessary to synchronize the rhythms within the instrumental sections, this should produce an airy fluttering effect.

The quintuplets and triplets in mm. 97-102 should be rhythmically synchronized.

♩ = 40

Copyright © Anna Thorvaldsdottir

Fl. 1

Fl. 2

A. Fl.

Ob.

C. A.

Cl. 1

Cl. 2

B. C.

Hr.

Trp.

Perc. 1

Perc. 2

Gong

Hrp.

Pan.

Vln. I

Vln. II

Vla.

Vcl.

Db.

This page of a musical score, numbered 21, contains staves for various instruments. The staves are arranged in three main sections. The top section includes Flute 1 & 2 (Fl. 1, Fl. 2), Oboe (Ob.), Clarinet 1 & 2 (Cl. 1, Cl. 2), Bassoon 1 & 2 (B. 1, B. 2), Bassoon (Bsn.), and Contrabassoon (Cbn.). The middle section includes Horns (Hr.), Trumpets (C. Trp.), Trombones 1 & 2 (Tbn. 1, Tbn. 2), Trombone (Tbn.), Timpani (Timp.), Percussion 1 & 2 (Perc. 1, Perc. 2), Percussion 3 (Perc. 3), and Maracas (Mar.). The bottom section includes Violins 1 & 2 (Vln. 1, Vln. 2), Viola 1 & 2 (Vla. 1, Vla. 2), Violoncello 1 & 2 (Vcl. 1, Vcl. 2), Double Bass 1 & 2 (Db. 1, Db. 2), and Double Bass (Db.). The score includes various musical notations such as notes, rests, and dynamic markings like *pp*, *mf*, *f*, and *ppp*. A specific instruction for Percussion 3 reads: "wire brush in sustained back and forth tremolo strokes on tam tam".

This page of a musical score, numbered 22, contains staves for various instruments. The woodwind section includes Flutes 1 and 2, Oboe, Clarinets in A and C, Bassoon, and Contrabassoon. The string section includes Harp, Violins I and II, Violas, Cellos, and Double Basses. The percussion section includes Timpani, Percussion 1, 2, 3, and 4, and a large drum. The score is written in a standard musical notation with various dynamics and articulations. Key markings include *pp* (pianissimo), *p* (piano), *mp* (mezzo-piano), *f* (forte), and *sf* (sforzando). Articulations such as *acc.* (accents), *stacc.* (staccato), and *sfz.* (sforzando) are used throughout. The woodwinds and strings play complex, often rapid, passages, while the percussion provides a steady rhythmic foundation. The large drum part features a prominent, rhythmic pattern. The overall texture is dense and dynamic, typical of a large orchestral work.

This image shows a page from a musical score, likely for a symphony. The score is written for a large ensemble of instruments, including woodwinds, brass, percussion, and strings. The staves are arranged in a traditional orchestral layout, with woodwinds at the top, brass in the middle, and strings at the bottom. The score includes various musical notations such as notes, rests, and dynamic markings (p, f, pp). A specific instruction "CHANGE TO OBEO" is visible in the woodwind section. The page is numbered "11" in the top left corner.

FL 1

FL 2

A. Fl.

Ob.

C. A.

CL 1

CL 2

B. CL

Bsn

Chn

Ha

C Tpt

Trn 1

Trn 2

Trn

Tim

Perc 1

Perc 2

Perc 3

Hrp

Pno

Vln I
div 1

Vln I
div 2 & 3

Vln I
div 4 & 5

Vln II
div 1

Vln II
div 2 & 3

Vln II
div 4 & 5

Vln II
div 6 & 7

Vln
div 1

Vln
div 2 & 3

Vln
div 4 & 5

Vc
div 1

Vc
div 2 & 3

Vc
div 4 & 5

Dbl
div 1

Dbl
div 2

Dbl
div 3 & 4

CHANGE BACK TO COR ANGLAIS

ATTACH STRAP

pp

mp

p

This image shows a page from a musical score, likely for a symphony. The score is written for a large ensemble of instruments, including woodwinds, brass, percussion, and strings. The notation is complex, featuring many notes, rests, and dynamic markings. The instruments listed on the left side of the page are: Fl. 1, Fl. 2, A. Fl., Ob., Cl. 1, Cl. 2, B. Cl., Bsn., Chm., Hr., C. Trp., Trb. 1, Trb. 2, Trb., Timp., Perc. 2, Perc. 1, Hy., Pno., Vln. I, Vln. II, Vla. I, Vla. II, Vcl. I, Vcl. II, Cb., and Db. The score is divided into measures, and the instruments are grouped into systems. The notation includes various musical symbols such as clefs, time signatures, and dynamic markings like 'pp' (pianissimo) and 'ff' (fortissimo). The overall style is that of a professional musical score, with clear and detailed notation for each instrument.

[illegible]

[illegible]

This image shows a page from a musical score, likely for a symphony. The score is written for a large ensemble of instruments, including Flutes (Fl. 1, Fl. 2), Oboes (Ob.), Clarinets (Cl. 1, Cl. 2), Bassoons (B. Cl.), Basses (Bsn.), Contrabasses (Cbn.), Horns (Hr.), Trumpets (Tpt.), Trombones (Tbn. 1, Tbn. 2, Tbn. 3), Percussion (Perc. 1, Perc. 2, Perc. 3), Violins (Vln. I, Vln. II), and Cellos/Double Basses (Vcl., Dbl.). The score is written in a standard musical notation with various dynamic markings (e.g., *pp*, *p*, *mp*, *f*) and articulation marks (e.g., *acc*, *sforz*). The page is numbered 27 in the top left corner. The score is divided into measures by vertical bar lines, and the instruments are grouped by horizontal staves.

This page of the musical score contains the following staves and markings:

- Flutes (Fl. 1, Fl. 2):** Fl. 1 has a *pp* marking. Fl. 2 has a *p* marking.
- Oboes (Ob.):** An *pp* marking is present.
- Clarinets (Cl. 1, Cl. 2):** Cl. 1 has a *pp* marking. Cl. 2 has a *pp* marking.
- Bassoons (B. 1, B. 2):** B. 1 has a *pp* marking. B. 2 has a *pp* marking.
- Horns (Hr.):** Multiple staves with various dynamic markings including *pp*, *p*, and *f*.
- Trumpets (Tr. 1, Tr. 2, Tr. 3):** Tr. 1 has a *pp* marking. Tr. 2 and Tr. 3 have *pp* markings.
- Percussion (Perc. 1, Perc. 2, Perc. 3):** Perc. 1 and Perc. 2 have *mp* markings. Perc. 3 has a *mp* marking.
- Violins (Vln. I, Vln. II):** Multiple staves with various dynamic markings including *pp*, *p*, *f*, and *mp*. Some staves have "end" and "soft point" markings.
- Violas (Vla. I, Vla. II):** Multiple staves with various dynamic markings including *pp*, *p*, *f*, and *mp*. Some staves have "end" and "soft point" markings.
- Cellos (Vcl. I, Vcl. II):** Multiple staves with various dynamic markings including *pp*, *p*, *f*, and *mp*. Some staves have "end" and "soft point" markings.
- Double Basses (Db. I, Db. II):** Multiple staves with various dynamic markings including *pp*, *p*, *f*, and *mp*. Some staves have "end" and "soft point" markings.

100

This page of a musical score is for a large orchestra. It contains staves for the following instruments:

- Fl. 1 & 2
- Oboe (Ob.)
- Clarinet 1 (Cl. 1)
- Clarinet 2 (Cl. 2)
- Bassoon (B. Cl.)
- Bassoon (Bsn.)
- Chamber Music (Chm.)
- Horn 1 (Ho.)
- Horn 2
- Trumpet 1 (C. Trp.)
- Trumpet 2
- Trumpet 3
- Timpani (Timp.)
- Percussion 1 (Perc. 1)
- Percussion 2
- Percussion 3
- Harp (Hr.)
- Piano (Pno.)
- Violin I (Vln. I)
- Violin II (Vln. II)
- Viola (Vla.)
- Cello (Vcl.)
- Double Bass (Db.)

The score includes various musical notations such as notes, rests, and dynamic markings like *p*, *mp*, and *pp*. There are also performance instructions like "in three sustained strokes on skin" for the percussion.

This page of a musical score contains the following instruments and parts:

- Fl. 1
- Fl. 2
- A. Fl.
- Ob.
- C. A.
- Cl. 1
- Cl. 2
- B. Cl.
- Bsn.
- Chsn.
- Hr.
- C. Trp.
- Trb. 1
- Trb. 2
- Trb.
- Trmp.
- Perc. 1
- Perc. 2
- Perc. 3
- Hrp.
- Perc.
- Vln. I
- Vln. I. A.
- Vln. I. B.
- Vln. I. C.
- Vln. I. D.
- Vln. II
- Vln. II. A.
- Vln. II. B.
- Vln. II. C.
- Vln. II. D.
- Vln. III
- Vln. III. A.
- Vln. III. B.
- Vln. III. C.
- Vln. III. D.
- Vln. IV
- Vln. IV. A.
- Vln. IV. B.
- Vln. IV. C.
- Vln. IV. D.
- Vcl.
- Vcl. A.
- Vcl. B.
- Vcl. C.
- Vcl. D.
- Vcl. E.
- Vcl. F.
- Vcl. G.
- Vcl. H.
- Vcl. I.
- Vcl. J.
- Vcl. K.
- Vcl. L.
- Vcl. M.
- Vcl. N.
- Vcl. O.
- Vcl. P.
- Vcl. Q.
- Vcl. R.
- Vcl. S.
- Vcl. T.
- Vcl. U.
- Vcl. V.
- Vcl. W.
- Vcl. X.
- Vcl. Y.
- Vcl. Z.

The score includes musical notation, dynamics (p, pp, f), and a rehearsal mark (W.).

[illegible]

This image shows a page from a musical score, likely for a symphony. The score is written for a large ensemble of instruments, including Flutes (Fl. 1, Fl. 2), Oboes (Ob.), Clarinets (Cl. 1, Cl. 2), Bassoons (B. Cl.), Horns (Hr.), Trumpets (Tpt.), Percussion (Perc. 1, Perc. 2, Perc. 3), Violins (Vln. I, Vln. II), Violas (Vla.), Cellos (Vcl.), and Double Basses (Db.). The score is written in a standard musical notation with various dynamic markings such as *pp* (pianissimo) and *f* (forte). There are also performance instructions like "No pitch" and "No pitch" with arrows indicating specific moments. The page is numbered 77 in the top left corner.

*** LYRICAL FIELD ***
with passion

This musical score is for a section titled "LYRICAL FIELD" with the instruction "with passion". It is a multi-staff score for a large ensemble and vocalists. The score is divided into three main systems of staves.

First System (Measures 1-4):

- Flutes (Fl. 1, Fl. 2):** Play melodic lines with dynamic markings *pp* and *p*.
- Woodwinds (A. Fl., Ob., C. A., Cl. 1, Cl. 2, B. Cl.):** Mostly rest or play sustained notes.
- Reeds (Bsn., Chn.):** Play melodic lines with dynamic markings *pp*, *mf*, and *p*. The Chn. part includes the instruction "lyrically".

Second System (Measures 5-8):

- Horns (Hr.):** Play melodic lines with dynamic markings *pp*, *mf*, and *p*. The Hr. part includes the instruction "lyrically".
- Strings (Str.):** Play sustained notes with dynamic markings *pp*, *mf*, and *p*. The Str. part includes the instruction "lyrically".
- Other Instruments (Tbn. 1, Tbn. 2, Tbn. 3, Trp., Perc. 1, Perc. 2, Perc. 3):** Mostly rest or play sustained notes.

Third System (Measures 9-12):

- Vocalists (Vln. 1, Vln. 2, Vln. 3, Vln. 4, Vln. 5, Vln. 6, Vln. 7, Vln. 8, Vln. 9, Vln. 10, Vln. 11, Vln. 12, Vln. 13, Vln. 14, Vln. 15, Vln. 16, Vln. 17, Vln. 18, Vln. 19, Vln. 20, Vln. 21, Vln. 22, Vln. 23, Vln. 24, Vln. 25, Vln. 26, Vln. 27, Vln. 28, Vln. 29, Vln. 30, Vln. 31, Vln. 32, Vln. 33, Vln. 34, Vln. 35, Vln. 36, Vln. 37, Vln. 38, Vln. 39, Vln. 40, Vln. 41, Vln. 42, Vln. 43, Vln. 44, Vln. 45, Vln. 46, Vln. 47, Vln. 48, Vln. 49, Vln. 50, Vln. 51, Vln. 52, Vln. 53, Vln. 54, Vln. 55, Vln. 56, Vln. 57, Vln. 58, Vln. 59, Vln. 60, Vln. 61, Vln. 62, Vln. 63, Vln. 64, Vln. 65, Vln. 66, Vln. 67, Vln. 68, Vln. 69, Vln. 70, Vln. 71, Vln. 72, Vln. 73, Vln. 74, Vln. 75, Vln. 76, Vln. 77, Vln. 78, Vln. 79, Vln. 80, Vln. 81, Vln. 82, Vln. 83, Vln. 84, Vln. 85, Vln. 86, Vln. 87, Vln. 88, Vln. 89, Vln. 90, Vln. 91, Vln. 92, Vln. 93, Vln. 94, Vln. 95, Vln. 96, Vln. 97, Vln. 98, Vln. 99, Vln. 100):** Play melodic lines with dynamic markings *pp*, *mf*, and *p*. The vocalists include the instruction "lyrically".
- Other Instruments (Vln. 101, Vln. 102, Vln. 103, Vln. 104, Vln. 105, Vln. 106, Vln. 107, Vln. 108, Vln. 109, Vln. 110, Vln. 111, Vln. 112, Vln. 113, Vln. 114, Vln. 115, Vln. 116, Vln. 117, Vln. 118, Vln. 119, Vln. 120, Vln. 121, Vln. 122, Vln. 123, Vln. 124, Vln. 125, Vln. 126, Vln. 127, Vln. 128, Vln. 129, Vln. 130, Vln. 131, Vln. 132, Vln. 133, Vln. 134, Vln. 135, Vln. 136, Vln. 137, Vln. 138, Vln. 139, Vln. 140, Vln. 141, Vln. 142, Vln. 143, Vln. 144, Vln. 145, Vln. 146, Vln. 147, Vln. 148, Vln. 149, Vln. 150, Vln. 151, Vln. 152, Vln. 153, Vln. 154, Vln. 155, Vln. 156, Vln. 157, Vln. 158, Vln. 159, Vln. 160, Vln. 161, Vln. 162, Vln. 163, Vln. 164, Vln. 165, Vln. 166, Vln. 167, Vln. 168, Vln. 169, Vln. 170, Vln. 171, Vln. 172, Vln. 173, Vln. 174, Vln. 175, Vln. 176, Vln. 177, Vln. 178, Vln. 179, Vln. 180, Vln. 181, Vln. 182, Vln. 183, Vln. 184, Vln. 185, Vln. 186, Vln. 187, Vln. 188, Vln. 189, Vln. 190, Vln. 191, Vln. 192, Vln. 193, Vln. 194, Vln. 195, Vln. 196, Vln. 197, Vln. 198, Vln. 199, Vln. 200):** Play sustained notes with dynamic markings *pp*, *mf*, and *p*.

[illegible]

STRINGS: sul pont. very light bow pressure tip of bow, AIRY effect with vague pitches - avoid playing open strings
 Not necessary to synchronize rhythms within sections - chaos effect

Written indications for strings when playing 32nd notes is the following: *sul pont. very light bow pressure airy effect with very vague pitches Avoid open strings*

The musical score is written for a large ensemble. The first system includes staves for Flutes 1 and 2, Oboes, Clarinets 1 and 2, Bassoon, and Contrabass. The second system includes staves for Horns, Trumpets 1 and 2, Trombones 1 and 2, Timpani, Percussion 1 and 2, and Mallets. The third system includes staves for Violins 1, 2, 3, 4, Viola, Violoncello, and Double Bass. The score features complex rhythmic patterns, including 32nd notes, and dynamic markings such as ppp, p, and mp. There are also performance instructions like 'sul pont.' and 'very light bow pressure'.

This page of the musical score contains the following parts and markings:

- Flutes (Fl. 1, Fl. 2):** Fl. 1 has a key signature change to one flat and a dynamic of *mp*. Fl. 2 has a dynamic of *mp*.
- Oboes (Ob.):** One staff with a dynamic of *mp*.
- Clarinets (Cl. 1, Cl. 2):** Cl. 1 has a key signature change to one flat and a dynamic of *mp*. Cl. 2 has a dynamic of *mp*.
- Bassoons (B. Cl.):** One staff with a dynamic of *mp*.
- Trumpets (Trp. 1, Trp. 2):** Trp. 1 has a dynamic of *mp*. Trp. 2 has a dynamic of *mp*.
- Percussion (Perc. 1, Perc. 2, Mar.):** Perc. 1 has a dynamic of *mp*. Perc. 2 has a dynamic of *mp*. Mar. has a dynamic of *mp*.
- Violins (Vln. I, Vln. II):** Vln. I has a dynamic of *mp*. Vln. II has a dynamic of *mp*.
- Violas (Vla.):** One staff with a dynamic of *mp*.
- Cellos (Vcl.):** One staff with a dynamic of *mp*.
- Double Basses (Db.):** One staff with a dynamic of *mp*.

The score includes various musical notations such as notes, rests, and slurs. Dynamics include *mp* (mezzo-piano), *f* (forte), and *ppp* (pianissimo). Performance instructions include "Back and forth towards middle the bell" and "no pitch".

97

Fl. 1 & 2

Oboe

Clar. 1 & 2

Bassoon

Contrabassoon

Horn

Trumpet

Trombone 1 & 2

Tuba

Timpani

Perc. 1

Perc. 2

Perc. 3

Gong

Maracas

Harp

Violin I

Violin II

Violin III

Violin IV

Viola

Viola II

Viola III

Viola IV

Cello

Double Bass

Double Bass II

Perc. 2: PLAY GONG - C - IN MM 95-96

87

Fl. 1

Fl. 2

Ob.

C. A.

Cl. 1

Cl. 2

B. 1

B. 2

Hrn.

Cbn.

Hr.

Cym.

Tin. 1

Tin. 2

Tom.

Sn.

Bd.

Vln. I

Vln. II

Vla.

Vcl.

Cb.

88

89

90

91

92

93

94

95

96

97

98

99

100

101

102

103

104

105

106

107

108

109

110

111

112

113

114

115

116

117

118

119

120

121

122

123

124

125

126

127

128

129

130

131

132

133

134

135

136

137

138

139

140

141

142

143

144

145

146

147

148

149

150

151

152

153

154

155

156

157

158

159

160

161

162

163

164

165

166

167

168

169

170

171

172

173

174

175

176

177

178

179

180

181

182

183

184

185

186

187

188

189

190

191

192

193

194

195

196

197

198

199

200

201

202

203

204

205

206

207

208

209

210

211

212

213

214

215

216

217

218

219

220

221

222

223

224

225

226

227

228

229

230

231

232

233

234

235

236

237

238

239

240

241

242

243

244

245

246

247

248

249

250

251

252

253

254

255

256

257

258

259

260

261

262

263

264

265

266

267

268

269

270

271

272

273

274

275

276

277

278

279

280

281

282

283

284

285

286

287

288

289

290

291

292

293

294

295

296

297

298

299

300

301

302

303

304

305

306

307

308

309

310

311

312

313

314

315

316

317

318

319

320

321

322

323

324

325

326

327

328

329

330

331

332

333

334

335

336

337

338

339

340

341

342

343

344

345

346

347

348

349

350

351

352

353

354

355

356

357

358

359

360

361

362

363

364

365

366

367

368

369

370

371

372

373

374

375

376

377

378

379

380

381

382

383

384

385

386

387

388

389

390

391

392

393

394

395

396

397

398

399

400

401

402

403

404

405

406

407

408

409

410

411

412

413

414

415

416

417

418

419

420

421

422

423

424

425

426

427

428

429

430

431

432

433

434

435

436

437

438

439

440

441

442

443

444

445

446

447

448

449

450

451

452

453

454

455

456

457

458

459

460

461

462

463

464

465

466

467

468

469

470

471

472

473

474

475

476

477

478

479

480

481

482

483

484

485

486

487

488

489

490

491

492

493

494

495

496

497

498

499

500

501

C# fade out - piece finishes on air sounds in strings - no pitch

The image shows a page from a musical score, likely for a symphony. The score is written for a large ensemble of instruments, including Flutes (Fl. 1, Fl. 2), Oboes (Ob.), Clarinets (C. A., C. 1, C. 2), Bassoons (B. C.), Horns (Hr.), Trumpets (Trp.), Timpani (Timp.), Percussion (Perc. 1, Perc. 2, Perc. 3), Violins (Vln. I, Vln. II), Violas (Vla.), Cellos (Vcl.), and Double Basses (Db.). The score is written in 2/4 time and includes various musical notations, dynamics (e.g., *ppp*, *f*, *p*), and performance instructions (e.g., "No pitch - only the airy sound of the horn on the string"). The page is numbered 10 at the top left.

PROGRAM NOTES

AERIALITY is a work for a large instrumental force, written in 2010/2011, consisting of vast sound-textures combined – and contrasted with – various forms of lyrical material. The piece was commissioned by the Iceland Symphony Orchestra to be premiered November 24th 2011, conducted by Ilan Volkov in Harpa, the new Concert and Conference Center in Reykjavik, Iceland. The work constitutes the Dissertation piece for the composer's PhD defense in Music Composition from the University of California, San Diego, in the of fall 2011.

AERIALITY refers to the state of gliding through the air with nothing or little to hold on to – as if flying – and the music both portrays the feeling of absolute freedom gained from the lack of attachment and the feeling of unease generated by the same circumstances. The title draws its essence from various aspects of the meaning of the word 'aerial' and refers to the visual inspiration that such a view provides. 'AERIALITY' is also a play with words, combining the words 'aerial' and 'reality', so as to suggest two different worlds; "reality", the ground, and "aerial", the sky or the untouchable.

AERIALITY can be said to be on the border of symphonic music and sound art. Parts of the work consist of thick clusters of sounds that form a unity as the instruments of the orchestra stream together to form a single force – a sound-mass. The sense of individual instruments is somewhat blurred and the orchestra becomes a single moving body, albeit at times forming layers of streaming materials that flow between different instrumental groups. These chromatic layers of materials are extended by the use of quartertones to generate vast sonic textures. At what can perhaps be said to be the climax

in the music, a massive sustained ocean of quartertones slowly accumulates and is then released into a brief lyrical field that almost immediately fades out at the peak of its own urgency, only to remain a shadow.

The piece is in one movement and is approximately 12 minutes in duration.