

**Portfolio of Works: Exploring Multimovement Structure, Storytelling through Large
Ensemble Orchestration, and Creating Music with Social Impact**

by

Mari Alice Conrad

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Master of Music

in

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Abstract

This portfolio includes three original music compositions that explore long forms with multimovement construction, story telling through large ensemble orchestration, and writing music that has social impact. Instrumentation for these pieces range from a minimum of two to seventy performers and include writing for a saxophone quartet, a large wind ensemble, and various combinations of open instrumental chamber works where one of which includes fixed electronics.

The first piece, *Twenty-Six Punctographic Preludes*, explores long form through twenty-six short musical snapshots, one for each letter in the braille alphabet. Through exploring the writings of her grandfather and saxophonist, Arthur George Lacey, the author was interested in Lacey's experience of losing his sight and the impacts this change had on his relationship to music. The sonic shaping, extended techniques, colouring, and timbral choices for each piece were inspired by the relationship of six dots within each braille cell. The braille letters are then categorized into ten groups that explore elements of the process of losing one's sight such as disconnect, time, space, sensations, subconscious, limited world, and the body and introspective consciousness.

The second work, *the mountains rend themselves apart*, is a large ensemble piece written for wind ensemble and explores storytelling through sound depicting the tragic rockslide event that occurred in the small town of Frank, Alberta in 1903. Specific compositional elements include utilizing and manipulating the number nine through intervallic shapes and rhythmic groupings as well as harmonic elements in chord clusters, polychords, and drones. Colouration, timbre, and instrumental and ensemble glissandi were also explored.

The last work, *Six Arctic Experiments*, is a collection of six pieces designed for developing musicians that explore the social issue of climate change. Inspired by and using elements from an expedition to Canada's High Arctic, the piece reflects on the delicacy and urgency of the climate crisis and curates a platform for youth to explore, engage, and participate in this issue through the experience of music-making. Compositional elements explore forms of improvisation, graphic scores, score creation, hands-on experimental creative components, open instrumentation, movement, spatialization, electronics, audience participation, sonification, sound art, and poetry.

Preface

This thesis is an original work by Mari Alice Conrad.

Figures 1 and 2 in Chapter 1 – *Twenty-Six Punctographic Preludes: for Saxophone Quartet* were created by the author but modelled from samples from the website page “Braille” provided on the CNIB *Canadian National Institute for the Blind*: <https://www.cnib.ca/en/sight-loss-info/living-blindness/braille?region=on>

The title of the piece in Chapter 2 – *the mountains rend themselves apart: for wind ensemble* was inspired by the poem, “At Crow’s Nest Pass” from *Flint and Feather: The Complete Poems of E. Pauline Johnson (Tekahionwake)* (The Musson Book Co., Limited, 1917) by Emily Pauline Johnson. This poem is in the public domain.

The ice map graphics used in “concentration” in Chapter 3 – *Six Arctic Experiments: for open chamber ensembles* were accessed through the Government of Canada Website> Environment and natural resources> Weather, climate and hazards> Aviation, marine, ice and other weather services> Ice Forecasts and Observations> Canadian Ice Service Archive> Ice Charts: <https://www.canada.ca/en/environment-climate-change/services/ice-forecasts-observations/about-ice-service.html>

Individual Ice Maps can be found at the following link:
<https://iceweb1.cis.ec.gc.ca/Archive/page3.xhtml>

The poem and title of “lines of weakness” used in Chapter 3 – *Six Arctic Experiments: for open chamber ensembles* was written by artist Sam Wilson Fletcher and is included in this thesis with permission from the author.

The photographs included in Photo Appendix A and B in Chapter 3 – *Six Arctic Experiments: for open chamber ensembles* were taken by the author of this thesis, Mari Alice Conrad.

Acknowledgements

As I reflect on the last two years of my educational and artistic experiences, I wish to acknowledge those who have and continue to support and influence my growth.

Foremost, I wish to thank my husband Evan, along with my children Joseph, Porter, and Carson for their unrelenting support in my desire to learn and create. Every step of the way, they have been there to encourage me.

I further wish to thank my parents, Larry and Barbara Crofts, who collectively worked hard to provide the means for my initial music education, and my mother who patiently sat with me at the piano as a young child nurturing an impactful connection between music-making and relationships.

Thank you to my sister, Catherine Crofts Francis, who spent time collecting history and information from family and friends about my grandfather and compiling her findings which informed one of the projects in this portfolio, *Twenty-Six Punctographic Preludes*.

Thank you to faculty members at the University of Alberta, specifically Dr. Scott Smallwood, Dr. Mark Hannesson, and Dr. Andriy Talpash who have been my most impactful mentors during my degree.

Thank you to The Edmonton Saxophone Quartet: Kendra Heslip, Charles Stolte, Ben Whittier, and Allison Balcetis, as well as Raymond Baril and the Edmonton Winds Ensemble (in conjunction with the Edmonton Winds David Erdmann Memorial Scholarship), and Shelley Younge, Don Ross, James Cockell, Conrad Sobieraj, Maria Protodykonova, and director Dr. Andriy Talpash who have embraced my work, generously given of their time and expertise, and have performed or directed the works included in this portfolio. Thank you to Russell Baker and Mike Malone for providing recordings of the compositions included in this thesis.

I further wish to thank the Experimental Improvisation Music Ensemble members at the University of Alberta and ensemble directors Mark Segger and William Northlich who have provided valuable collaborative opportunities for workshopping and performances of my work.

A special thank you to Sam Wilson Fletcher, an artist based in the Netherlands, whom I met in the Canadian High Arctic. I am grateful for his meaningful collaboration and willingness to write a poem for the composition “lines of weakness” in the collection, *Six Arctic Experiments*.

I wish to also thank the Social Sciences and Humanities Research Council of Canada, Canada Graduate Scholarship—Master’s Program: Fall 2021 Competition and the Walter H Johns Graduate Fellowship for providing funding that assisted in the creation of the third project in this portfolio, *Six Arctic Experiments*.

Finally, I wish to thank my classmates and colleagues in the university community, whose valuable interactions have and continue to inspire and influence my creativity and development.

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Introduction

In my educational experiences over the past two years, I have been interested in compositional techniques that explore long forms using a multimovement structure, storytelling through large ensemble orchestration, and creating music that has a social impact. Each of the projects presented in this portfolio have fostered compositional growth, self-reflection, mindful research, and collaborations that have fundamentally expanded my skillset, confidence, and capabilities.

Through the process of writing these works, I have specifically explored extended techniques for wind instruments, studied cohesiveness and connection in multimovement forms, sought to develop my orchestration techniques, honed percussion writing including organization, layout and planning, researched and workshopped many forms of improvisation, explored multiple pre-compositional techniques, created graphic and text scores, experimented with electronics to create an audio score, and discovered ways to make music inclusive, approachable, and adaptable.

During my creative process, I have worked with elements of land and place as inspiration. As a non-Indigenous person of settler-European heritage, I acknowledge and respect the land of Treaty Six Territory that I have had the honour of growing up and creating on. I deeply value and respect the Indigenous knowledge keepers and their views and ways of learning. I am grateful to live, create, and work as an uninvited visitor on this land. I acknowledge that my life has been one of privilege and understand that my opportunities for healthcare, education, and employment have stemmed from an oppressive colonial society. I am committed to continuing my part in reconciliation and to assist in making our community a better place now and for future generations.

In essence, this thesis, in multifaceted ways, represents my growth over the past few years and demonstrates the ways in which I have expanded and strengthened my overall compositional practice.

CHAPTER ONE

Twenty-Six Punctographic Preludes

for Saxophone Quartet

Conceptual Background and Context

Twenty-Six Punctographic Preludes is a multi-movement piece consisting of twenty-six small movements written for saxophone quartet. The concept for the creation of the piece stemmed from a desire to learn more about my maternal grandfather, Arthur George Lacey. Arthur was a saxophonist who performed in dance bands and led military bands in High River, Alberta during World War II. I never had the opportunity to meet him in-person, as he passed away before I was born, but I was led to learn about him through his journals and speaking with family. Through this process, I was able to draw materials and inspiration that informed this project. In his later years, Arthur suffered from a brain tumor that caused blindness. I have always been drawn to my grandfather because of his musical abilities and have been curious to learn how his experience of blindness impacted his musical experiences. This piece explores my fascination with the transformative, human process of losing one's sight.

During research for the project, I discovered other individuals who have also experienced this process and made remarkable contributions to humanity in creating ways to increase awareness and communication despite visual barriers. My research led me to the life of Louis Braille, who at the young age of 15, modified the raised dot system to a six-cell format, and Dr. John M. Hull, a university professor who documented his own experiences of losing sight in his forties.

While reading my grandfather's journals and articles about his life in addition to Hull's book, *Touching the Rock: An Experience of Blindness* (Hull 1990), I was inspired by their personal experiences which provided greater depth and understanding of this process.

Summary of Method

The piece, *Twenty-Six Punctographic Preludes*, explores the raised print or dot system found in braille and the process of losing one's sight through twenty-six short musical snapshots, one for each letter in the braille alphabet.

1	4
2	5
3	6

The sonic components in each piece were inspired by the relationship of dots within each braille cell for the different letters. The braille cells are outlined for demonstrative placement in Figure 1.

The structure of the piece was designed to parallel the reoccurring patterns of the braille cells. Like the alphabet letters, the pieces are categorized into ten groups as organized below in Figure 2.

Figure 1: Braille cell numbering system modelled from a diagram found on Canadian National Institute for the Blind website (CNIB: The Braille Cell 2022).

a	b	c	d	e	f	g	h	i	j
k	l	m	n	o	p	q	r	s	t
u	v	x	y	z	w				

Figure 2: Braille alphabet system modelled from diagram found on Canadian National Institute for the Blind (CNIB: The Braille Cell: 2022). *Colour-coding added to outline relationships in compositional structure found in Figure 3.

A breakdown of the structure is as follows: groups one to six include three pieces each and explore the ideas of disconnection, time, space, sensations, subconscious, and the world limited to a blind person. Groups seven to ten have two pieces each and collectively explore the

role of the body and sense of self, or introspective consciousness (see Figure 3 below for reference).

Group	Letters	Title of Movement	Theme/Concept
One	a k u	abyss knowing unknown	Disconnect
Two	b l v	breeze light vibrations	Sensations
Three	c m x	clock momentary existential	Time
Four	d n y	dreams nothingness yearning	Subconscious
Five	e o z	echo organ zone	Space
Six	f p w	faceless perception wandering	Limited World
Seven	g q	grief quiet	The Body and Introspective Consciousness
Eight	h r	heartbeat rain	
Nine	i s	invisible smile	
Ten	j t	journey territory	

Figure 3: Colour-coded chart to accompany Figure 2 to emphasize the structural framework used in composition.

Compositionally, each grouping of two or three pieces are related to one another. For example, Group Three (*clock, momentary, and existential*) explore the concept of time in the context of a person experiencing blindness. For this group, there is a motif of a clock present in each of the movements with an interval of a repeated major third as well as rhythmic elements in a repeated pattern to represent time passing. Although distorted and rearranged in the

following movements, this element connects the group of pieces and offers familiarity to the listener providing a sense of structure and continuity. Patterns such as these, though sometimes hidden and indistinguishable, are implemented in all the groupings.

Twenty-Six Punctographic Preludes

for saxophone quartet

MARI ALICE CONRAD

Twenty-Six Punctographic Preludes

for saxophone quartet

by Mari Alice Conrad

November 2021

Duration: ca. 26'

Instrumentation:

soprano saxophone

alto saxophone

tenor saxophone

baritone saxophone/bass saxophone

Additional items:

Soprano saxophone	Nylon drum brush C Harmonica
Alto saxophone	Superball mallet Nylon drum brush Extra music stand
Tenor saxophone	Nylon drum brush Extra music stand
Baritone/bass saxophone	Nylon drum brush G Harmonica

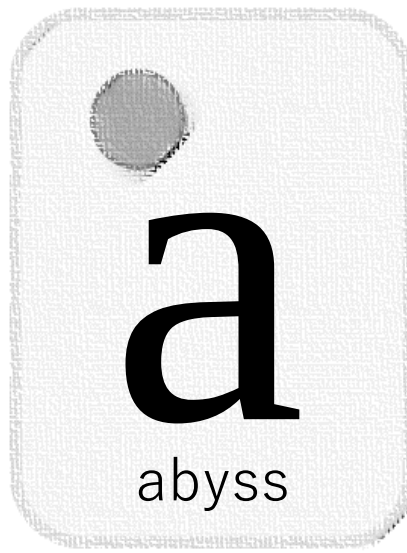
performance notes:

Global Instructions:

- Although this piece is written with a more traditional performance practice set-up, the performers are encouraged to consider performing the work with spatial modifications, as desired.
- Additional items below can be placed on a small table or extra music stand:

Soprano saxophone	Nylon drum brush C Harmonica
Alto saxophone	Superball mallet Nylon drum brush Extra music stand
Tenor saxophone	Nylon drum brush Extra music stand
Baritone/bass saxophone	Nylon drum brush G Harmonica

- There is to be as little time as possible in between each movement.
- Vibrato:
 - Espressivo or espress. = vibrato to be used at the discretion of the performer.
 - no vib = no vibrato, straight, pure tone
 - meno vib. = slight vibrato
 - molto vib. = excessive vibrato
 - wide vib. = intervallic, wide vibrato
 - matching vib. = ensemble matches vibrato
- Key clicks:
 - high, medium, low (to be determined by performer)
 - with or without air blowing through instrument as indicated on score
- Bending notes:
 - Long bend – (within a P5) to be played prior to destination note 
 - Short bend – (within one whole tone) to be played prior to destination note 
- Slap tongue (written on score):
 - Open slap: pitched (louder)
 - Closed slap: slight pitch (softer)
 - Secco/dry slap: unpitched (softest)
- Flutter tongue:
 - Gentle flutter
 - Regular flutter
 - Growl – guttural flutter
- Percussive effects for “rain” and “heartbeat”
 - The aleatoric boxes are to be repeated either at proportional rhythms or in time, as indicated on score.
 - Extra music stands are used for percussion effects with superball mallets and nylon drum brushes
 - Ad. Lib at the performer’s discretion to create desired effect
- Harmonicas
 - Graphic of harmonica indicates (black square) which holes align with written notes
 - Harmonica noteheads are square
 - + is inhale, and o is exhale
 - More articulate rhythms, you may use “t” sound
- Falls/Glissandi
 - Fall down to approximately a P4 or P5 below the note indicated 
 - Gliss down or up between the two indicated notes 



Expansive; senza misura

Mari Alice Conrad

hold notes inside brackets for duration of one ensemble breath; bass saxophone to circular breathe, if possible.

Sheet music for Soprano Sax, Alto Sax, Tenor Sax, Bass Sax, S. Sax., A. Sax., T. Sax., and Bs. Sax. The music is in 4/4 time and features various dynamics and articulations.

First System:

- Soprano Sax:** no vib, p to pp , then p to mf to p . Includes vibrato markings: no vib, meno vibrato, molto vibrato.
- Alto Sax:** no vib, p to pp , then mp to pp .
- Tenor Sax:** no vib, gliss up 1/4 tone, pp to p to pp , then mp to pp .
- Bass Sax:** no vib, pp to p to pp , then pp to p to mp to pp .

Second System:

- S. Sax.:** p to p , then mp to f . Includes a bracketed note for duration of one ensemble breath.
- A. Sax.:** mp to pp , then mp to f . Includes a bracketed note for duration of one ensemble breath.
- T. Sax.:** mp to pp , then mp to f . Includes a bracketed note for duration of one ensemble breath.
- Bs. Sax.:** pp to mp to pp , then mp to f . Includes a bracketed note for duration of one ensemble breath.

Third System:

- S. Sax.:** p to p , then mp to f . Includes a bracketed note for duration of one ensemble breath.
- A. Sax.:** mp to pp , then mp to f . Includes a bracketed note for duration of one ensemble breath.
- T. Sax.:** mp to pp , then mp to f . Includes a bracketed note for duration of one ensemble breath.
- Bs. Sax.:** pp to mp to pp , then mp to f . Includes a bracketed note for duration of one ensemble breath.

Fourth System:

- S. Sax.:** p to p , then mp to f . Includes a bracketed note for duration of one ensemble breath.
- A. Sax.:** mp to pp , then mp to f . Includes a bracketed note for duration of one ensemble breath.
- T. Sax.:** mp to pp , then mp to f . Includes a bracketed note for duration of one ensemble breath.
- Bs. Sax.:** pp to mp to pp , then mp to f . Includes a bracketed note for duration of one ensemble breath.

Diagram:

A diagram showing the fingering for the Soprano Saxophone. It includes a vertical sequence of notes: 8, C₅, (131), C₄, (74), C₅, E_b, C, (121), and #8. The notes are connected by lines, indicating a sequence of fingerings.



With shimmer and movement ♩ = 120

no vib

Soprano Sax

Alto Sax

Tenor Sax

Bass Sax

p *mf* *f* *p* *pp* *f* *sfz*

no vib

p *f* *pp* *pp* *f* *sfz*

pp *f* *sfz*

f *sfz*

S. Sax.

A. Sax.

T. Sax.

Bs. Sax.

f *p* *p* *flz.* *mf* *f* *sfz*

p *ord.* *p*

f *sfz*

b: breeze

9

S. Sax.

A. Sax.

T. Sax.

Bs. Sax.

ppp

pp

mf

pp

p

pp

AIR

130

S. Sax.

A. Sax.

T. Sax.

Bs. Sax.

ppp

p

p

p

pp

71

20

S. Sax.

A. Sax.

T. Sax.

Bs. Sax.

pp

pp

pp

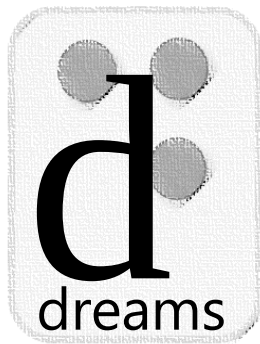
pp

mp

rit. ----- a tempo



ff



Resting ♩ = 80

C Harmonica (Sop Sax)

Alto Sax

Tenor Sax

G Harmonica (Bari Sax)

mf like a resting heartbeat

pp *delicato* no vib

p *delicato* no vib

mp *delicato* no vib

f

as if breathing while sleeping

8va

(ya)

very delicate flutter flz.

6

C Harm.

A. Sx.

T. Sx.

G.Harm.

ord.

p

mp

p

mf

f

(ya)

p

flz.

p

p

10

C Harm.

A. Sx.

T. Sx.

G.Harm.

ord.

mf

flz.

very delicate flutter flz.

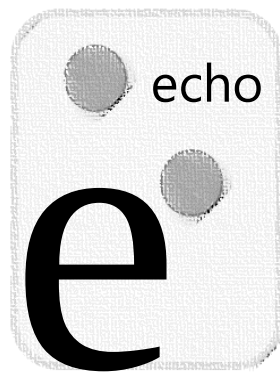
pp

pp

f

mf

p



Mysteriously $\text{♩} = 90$

Soprano Sax

Alto Sax

Tenor Sax

Baritone Sax

mf *p* *mf* *mp* *pp* *molto vibrato*

mf *p* *mf* *mp* *pp* *molto vibrato*

mf *p* *mf* *mp* *pp* *molto vibrato*

mf *p* *mf* *mp* *pp* *molto vibrato*

mf *p* *mf* *mp* *pp* *molto vibrato*

$\text{♩} = 160$
animato; with energy
in strict time to end

S. Sx.

A. Sx.

T. Sx.

B. Sx.

f *p* *pp*

f *p* *pp*

f *p*

f *p*

S. Sx.

A. Sx.

T. Sx.

B. Sx.

mp *f* *mp* *f*

mp *f* *mp* *mf*

mp *f* *mp*

mp *f* *mp*

e: echo

21

S. Sx.

A. Sx.

T. Sx.

B. Sx.

f *mp* *mf* *f* *sfz*

f *mp* *mf* *f* *sfz*

f *mp* *mf* *f* *sfz*

f *mp* *mf* *f* *sfz*

27

S. Sx.

A. Sx.

T. Sx.

B. Sx.

mp *pp* *sfz* *mp* *p* *pp* *sfz* *mp* *p*

mp *pp* *sfz* *mp* *p* *pp* *sfz* *mp* *p*

mp *pp* *sfz* *mp* *p* *pp* *sfz* *p* *p*

mp *pp* *sfz* *mp* *p* *pp* *sfz* *mp* *p*

34

S. Sx.

A. Sx.

T. Sx.

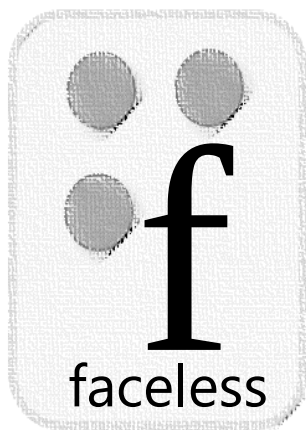
B. Sx.

pp *ppp* *sfz* *mf* *mp* *p* *pp* *ppp*

pp *ppp* *sfz* *mf* *mp* *p* *pp* *ppp*

pp *ppp* *sfz* *mf* *mp* *p* *pp* *ppp*

p *pp* *ppp* *sfz* *mf* *mp* *p* *pp* *ppp*



With curious examination ♩ = 70

Score for Soprano Sax, Alto Sax, Tenor Sax, and Baritone Sax. The score is divided into three systems, each containing four staves. The key signature is one sharp (F#) and the time signature is 4/4. The first system includes dynamics such as *p*, *mp*, *p*, *mf*, and *no vib*. The second system includes dynamics such as *p*, *pp*, and *p*. The third system includes dynamics such as *mp*, *pp*, and *p*. The score includes various musical notations, including triplets, slurs, and articulation marks.

System 1:

- Soprano Sax: *p* *mp* *p* *no vib*
- Alto Sax: *p* *mp* *p* *no vib*
- Tenor Sax: *mf* *espress.* *3* *p* *mp* *mf*
- Baritone Sax: *p* *mp* *p* *no vib*

System 2:

- S. Sax: *p*
- A. Sax: *p*
- T. Sax: *pp* *p*
- B. Sax: *p* *3*

System 3:

- S. Sax: *mp* *pp* *p*
- A. Sax: *mp* *pp* *p*
- T. Sax: *mp* *pp* *p*
- B. Sax: *mp* *pp* *p*

14

S. Sx.

A. Sx.

T. Sx.

B. Sx.

mp

p

mp

pp

18

S. Sx.

A. Sx.

T. Sx.

B. Sx.

p

pp

pp

p

pp

ppp

pp

ppp

ppp

p

pp

pp

ppp

flz.

ord.

flz.

ord.



Mourning a part of oneself; molto rubato ♩ = 70

Soprano Sax SOLO

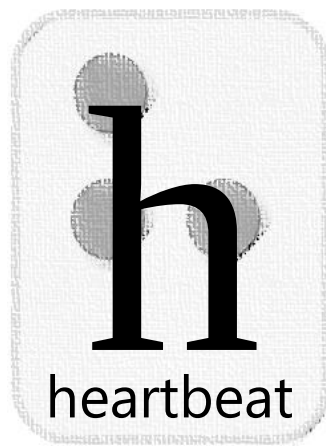
espressivo

mp *f* *mp* *sotto voce pp* *p* *mp* *ord.; espressivo*

5 *(slowly bend)* *f* *mp* *sotto voce pp*

10 *sotto voce pp* *p* *delicato* *ppp* *mp* *ord.; espressivo* *mf* *f*

15 *sotto voce pp* *p* *pp* *f* *mp* *(mp)* *mf* *pp* *(slowly bend)*



Strictly in-time ♩ = 60

no vib

Soprano Sax

gliding superball mallet on music stand desk

superball mallet extra music stand

Alto Sax

p

nylon brush extra music stand

rub small circles on surface of music stand with nylon brush (in time)

Tenor Sax

pp

no vib

Bass Sax

pp

pp

pp

p

To nylon brush

simile

pp

pp

pp

ppp

pp

p

ppp

roll inside bell with nylon brush

To superball mallet

gliding superball mallet on music stand desk

S. Sax.

A. Sax.

T. Sax.

Bs. Sax.

mp

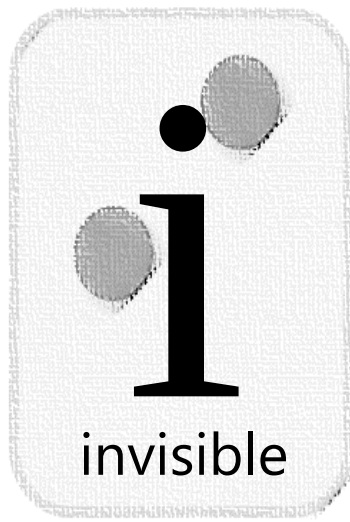
p

pp

p

pp

ppp



With slow, awkward rocking motion ♩ = 60

Tenor Sax SOLO

114 20 114

pp *pp* *pp*

T. Sax.

50 114 20

pp *pp* *pp*



Energetic and determined ♩ = 140

Sheet music for Tenor Sax (T. Sax.) and Bass Sax (Bs. Sax.) in 4/4 time, featuring energetic and determined passages.

System 1:

- T. Sax.:** Measures 1-4. Dynamics: *p*, *f*, *p*, *f*, *p*. Includes accents and slurs.
- Bs. Sax.:** Measures 1-4. Dynamics: *mf*, *f*, *p*, *f*, *p*. Includes flz. (flute) and ord. (order) markings.

System 2:

- T. Sax.:** Measures 5-8. Dynamics: *ff*, *p*, *mf*. Includes flz. and ord. markings.
- Bs. Sax.:** Measures 5-8. Dynamics: *ff*, *p*, *f*, *p*. Includes ord. marking.

System 3:

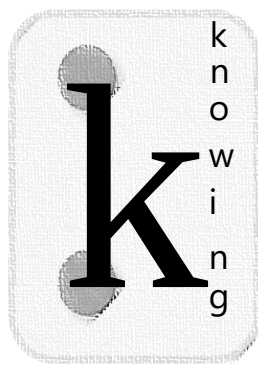
- T. Sax.:** Measures 9-12. Dynamics: *p*, *f*, *p*, *f*. Includes flz. and ord. markings.
- Bs. Sax.:** Measures 9-12. Dynamics: *f*, *p*, *f*, *p*, *ff*. Includes slurs and accents.

System 4:

- T. Sax.:** Measures 13-16. Dynamics: *ff*, *p*, *f*, *p*, *f*. Includes ord. marking.
- Bs. Sax.:** Measures 13-16. Dynamics: *p*, *(p)*, *f*, *p*, *f*, *p*. Includes ord. marking.

System 5:

- T. Sax.:** Measures 17-20. Dynamics: *p*, *f*, *p*, *f*, *p*, *f*. Includes slurs and accents.
- Bs. Sax.:** Measures 17-20. Dynamics: *f*, *p*, *f*, *p*, *f*, *p*. Includes slurs and accents.



Deliberately (♩ = 60)

Soprano Sax
no vib, *pp*, *f*, *pp*, key clicks with air, *pp*, no vib, *pp*

Alto Sax
no vib, *pp*, *f*, *pp*, key clicks with air, *pp*, no vib, *pp*

Tenor Sax
no vib, *pp*, *f*, *pp*, key clicks with air, *pp*, no vib, *pp*

Bass Sax
no vib, *pp*, *f*, *pp*, key clicks with air, *pp*, no vib, *pp*

S. Sax.
8, *ff*, *molto vibrato*, *mp*, *delicato*, *pp*, *ppp*

A. Sax.
ff, *sub. p*, *ff*, *pp*, *delicato*, *pp*

T. Sax.
ff, *mp*, *pp*, *delicato*, *ppp*

Bs. Sax.
ff, *mp*, *pp*, *delicato*, *ppp*

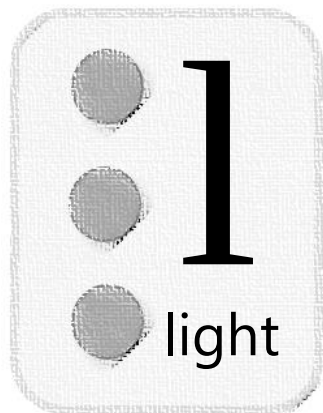
11

S. Sax.
no vib, *pp*, *sfz*, *mp*, *p*, *mp*, *mf*, *pp*, *espress.*

A. Sax.
no vib, *pp*, *sfz*, *pp*

T. Sax.
no vib, *pp*, *sfz*, *pp*

Bs. Sax.
no vib, *pp*, *sfz*, *pp*



Ominous with moments of shimmer ♩ = 70

no vib

Soprano Sax

Alto Sax

Tenor Sax

Baritone Sax

pp

ff

pp

pp

slightly pitched clicking; with AIR

mf

no vib

1

2

4

S. Sax.

A. Sax.

T. Sax.

B. Sax.

pp

mf

f

AIR

no vib

p

1

mf

p

1

ff

pp

pp

ff

pp

I: light

7

S. Sx. *p* *mf* *p* *f* *p* no vib AIR

A. Sx. *mf* *f* AIR

T. Sx. *ff* *p* *p* ① B $\flat$

B. Sx. slightly pitched clicking; with AIR *mf* *f* *pp* *ff* ② B $\flat$

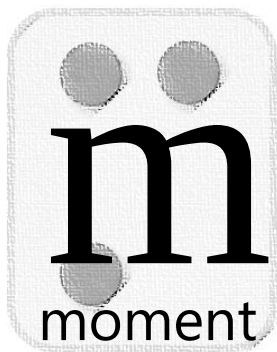
10

S. Sx. *f* *mf* *pp* *p* *pp* AIR no vib

A. Sx. *p* *(p)* *mf* *pp* no vib

T. Sx. *ff* *p* *pp* ① A

B. Sx. *pp* *mp* *pp* ① A



Evanescent; with frustration ♩ = 60

Soprano Sax

Alto Sax

Tenor Sax

Baritone Sax

pesante growl

ff

mp

mp

mf

p

pesante growl

ff

mp

mp

f

p

pesante growl

ff

mp

flz.

open slap

agitato

sfz

f

sfz pp

pesante growl

ff

mp

flz.

open slap

agitato

sfz

f

sfz pp

S. Sx.

A. Sx.

T. Sx.

B. Sx.

mf

f

mf

f

flz.

f

sfz

f

pp

furioso

agitato

f

pp

flz.

sfz

furioso

agitato

f

pp

S. Sx.

A. Sx.

T. Sx.

B. Sx.

mf

f

mf

f

mp

f

pp

f

p

p

pp

f

p

p

pp

[illegible]

23

open slap

S. Sx.

f *pp*

A. Sx.

flz.

mp *pp* *f* *pp* *p*

molto espressivo

T. Sx.

open slap

sfz *pp* *p*

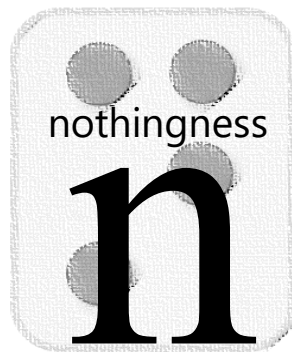
molto espressivo

B. Sx.

open slap

f *mp* *pp* *mp* *sfz* *sfz* *f* *pp* *mp*

[illegible]



(3+2+2)
With movement ♩ = 130

Score for C Harmonica (Sop Sax), Alto Sax, Tenor Sax, and G Harmonica (Bari Sax).

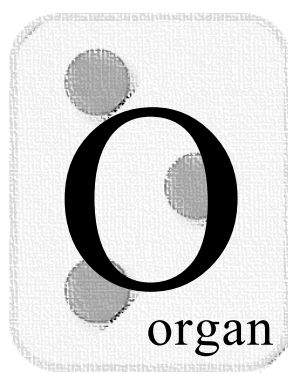
Measures 1-7: C Harmonica (Sop Sax) plays a rhythmic pattern (3+2+2) with *f* dynamics. G Harmonica (Bari Sax) plays a similar pattern with *f* dynamics. Dynamics transition to *mp* in measure 4.

Measures 8-13: C Harmonica (Sop Sax) plays a melodic line with *f* dynamics. G Harmonica (Bari Sax) plays a melodic line with *f* dynamics. Dynamics transition to *mp* in measure 10. Tenor Sax and Alto Sax enter in measure 8 with *pp* dynamics. Tenor Sax has a *delicato no vib* marking. Alto Sax has a *delicato no vib* marking. Dynamics transition to *mp* in measure 10. Tenor Sax has a *very delicate flutter* marking.

Measures 14-19: C Harmonica (Sop Sax) plays a melodic line with *f* dynamics. G Harmonica (Bari Sax) plays a melodic line with *f* dynamics. Dynamics transition to *mp* in measure 16. Tenor Sax and Alto Sax continue their melodic lines with *mp* dynamics. Tenor Sax has a *ord.* marking. Alto Sax has a *ord.* marking. Dynamics transition to *mf* in measure 18. Tenor Sax has a *espressivo* marking.

n: nothingness

[illegible][illegible]



Whimsical and playful ♩ = 130

Soprano Sax

Alto Sax

Tenor Sax

Baritone Sax

ppp *mf* *ppp* *mf* *ppp* *mf* *ppp* *mf*

6 no vib $\text{♩} = 70$ $\text{♩} = 130$

S. Sx. *p* *pp* *f* *mp*

A. Sx. no vib open slap *p* *sfz* *pp* *f* *mp*

T. Sx. no vib open slap *p* *sfz* *pp* *f* *mp*

B. Sx. no vib open slap *p* *sfz* *pp* *f* *mp*

12 $\text{♩} = 70$ flz.

S. Sx. *p* *sfz* *pp* flz.

A. Sx. *p* *sfz* *pp* flz.

T. Sx. *p* *sfz* *pp* flz.

B. Sx. *p* *sfz* *pp* flz.

o: organ

ord.; no vib

16

S. Sx.

ppp

ord.; no vib

f

p

♩ = 130

A. Sx.

ppp

ord.; no vib

f

p

open slap

sfz

sfz

sfz

T. Sx.

ppp

ord.; no vib

f

p

open slap

sfz

sfz

B. Sx.

ppp

ord.; no vib

f

p

open slap

sfz

sfz

21

S. Sx.

A. Sx.

T. Sx.

B. Sx.

flz.

flz.

flz.

flz.

mf

mp

p

mp

p

sfz

sfz

mf

mp

p

mp

p

sfz

sfz

mf

mp

p

mp

p

sfz

26

no rit.
ord.

S. Sx.

mf

ppp

ord.

A. Sx.

mf

ppp

ord.

T. Sx.

mf

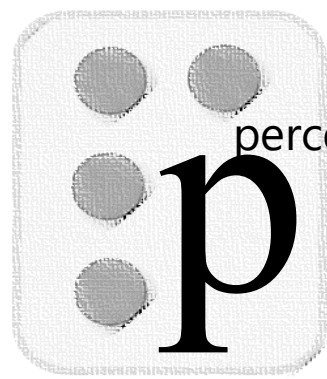
ppp

ord.

B. Sx.

mf

ppp



perception

p

With desperation ♩ = 90

Score for Saxophone Quartet (Soprano, Alto, Tenor, Baritone) and Saxophone Section (Soprano, Alto, Tenor, Baritone).

First System:

- Soprano Sax:** *f* (forte), melodic line with slurs.
- Alto Sax:** *f* (forte), melodic line with slurs.
- Tenor Sax:** *f* (forte), melodic line with slurs, including a triplet and a growl/guttural flutter.
- Baritone Sax:** *f* (forte), melodic line with slurs, including a triplet.

Second System (Measures 4-7):

- S. Sx.:** *ff* (fortissimo) to *mf* (mezzo-forte), melodic line with slurs, including a harsh! mark.
- A. Sx.:** *ff* (fortissimo) to *mf* (mezzo-forte), melodic line with slurs, including a harsh! mark.
- T. Sx.:** *ff* (fortissimo) to *mf* (mezzo-forte), melodic line with slurs.
- B. Sx.:** *ff* (fortissimo) to *mf* (mezzo-forte), melodic line with slurs, including a harsh! mark.

Third System (Measures 8-11):

- S. Sx.:** *p* (piano) to *mp* (mezzo-piano), melodic line with slurs, including a no vib (no vibrato) mark.
- A. Sx.:** *p* (piano) to *mp* (mezzo-piano), melodic line with slurs, including a no vib (no vibrato) mark.
- T. Sx.:** *p* (piano) to *mp* (mezzo-piano), melodic line with slurs, including an ord. espress. (orderly, expressive) mark.
- B. Sx.:** *p* (piano) to *mp* (mezzo-piano), melodic line with slurs, including a no vib (no vibrato) mark.

Fourth System (Measures 12-15):

- S. Sx.:** *p* (piano) to *ff* (fortissimo), melodic line with slurs, including an ord. (orderly) mark.
- A. Sx.:** *p* (piano) to *ff* (fortissimo), melodic line with slurs, including an ord. (orderly) mark.
- T. Sx.:** *p* (piano), melodic line with slurs.
- B. Sx.:** *p* (piano), melodic line with slurs, including an ord. (orderly) mark.

p: perception

13

S. Sx.

A. Sx.

T. Sx.

B. Sx.

p *ff* *p* *ff*

ff *mp* *ff* *p*

[scream]

fff *fff* *sfz*

ff *sfz* *p* *ff* *p*

17

S. Sx.

A. Sx.

T. Sx.

B. Sx.

p *ff* *sfz* *p* *sfz* *fff*

ff *p* *sfz* *sfz* *fff*

fff *ff* *fff* *sub. mp*

ff *p* *ff* *sfz* *p* *sfz* *fff*

20

S. Sx.

A. Sx.

T. Sx.

B. Sx.

p *pp* *pp* *p* *pp* *ppp*

p *pp* *p* *ppp*

pp *pp* *ppp*

p *pp* *ppp*

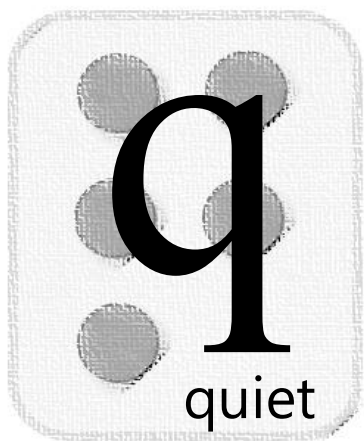
ord. flz. ord. no vib half air

ord. flz. ord. no vib half air

ord. flz. ord. no vib half air

ord. no vib half air

ppp *ppp* *ppp* *ppp*



Baritone Sax SOLO

Angrily with eventual acquiescence ♩ = 70

furioso

accelerando

a tempo

harsh guttural flutter/scream

fff *mp* *mf* *f* *ff* *sfz* <

ord.

Frantically ♩ = 100

fff *mp* *fff* *sfz* >

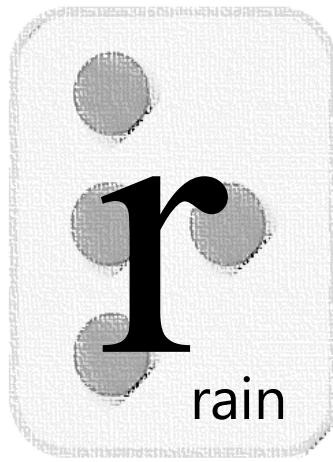
Tempo I ♩ = 70

con dolore no vib

delicato

subtone

mp *f* *p* *pp* *mp* *pp*



Slowly unfolding; senza misura*

ca 40 seconds

tutti crescendo poco a poco

nylon brush
Soprano Sax

nylon brush
extra music stand
Alto Sax

Tenor Sax

nylon brush
LH
Baritone Sax
RH

tap bell with nylon brush
pp

tap edge of music stand
with nylon brush
p 3 3

key percussion slapped with random keys
mp

key percussion slapped
with the F-key
mp

low key clicks (popping)
mp

ca 15 seconds

ca 30 seconds

tutti climax *mf*

diminuendo to end

tutti niente

S. Sax.

A. Sax.

T. Sax.

LH
B. Sax.
RH

tap bell with nylon brush
mp

key percussion slapped with random keys
mf

key percussion slapped with random keys
mf

key percussion slapped
with the F-key
mp

tap edge of music stand
with nylon brush
p 3 3

*repeat boxes for duration of arrow at proportional rhythms (molto ad lib.) beginning sporadically and increasing intensity toward the "tutti climax" and then dying down toward the "tutti niente."
Ensemble dynamics are indicated on the top of the system and individual instrument dynamics are indicated inside the boxes.



Slightly playful but without reciprocity ♩. = 45

Alto Sax SOLO

espressivo

p *f* *p* *pp* *mf* *f* *p* *ord.; espressivo*

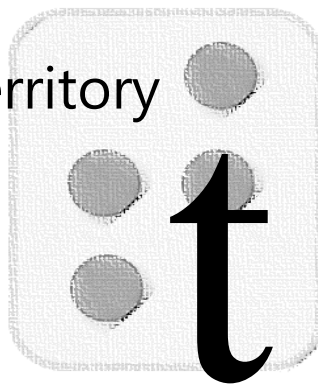
f *mp* *f* *p* *mf* *f* *pp*

p *f* *ff* *p* *pp* *mf* *p* *f* *ff* *pp*

closed slap *key clicks* *ord.; espressivo*

5 11 2

territory



Energetic and disturbing ♩ = 140

Sheet music for Saxophone Quartet, measures 1 through 12.

Measures 1-4:

- Soprano Sax:** Rests in measures 1-2. Measures 3-4: *p* (half note), *f* (half note), *p* (half note), *f* (half note).
- Alto Sax:** *mf* (half note), *f* (half note), *p* (half note), *f* (half note).
- Tenor Sax:** *p* (half note), *f* (half note), *p* (half note), *f* (half note).
- Bass Sax:** *mf* (half note), *f* (half note), *p* (half note), *f* (half note).

Measures 5-8:

- S. Sax:** *p* (half note), *f* (half note), *p* (half note), *ff* (half note).
- A. Sax:** *f* (half note), *ff* (half note), *p* (half note).
- T. Sax:** *ff* (half note), *p* (half note), *mf* (half note).
- Bs. Sax:** *ff* (half note), *p* (half note), *f* (half note), *p* (half note).

Measures 9-12:

- S. Sax:** *p* (half note), *f* (half note), *f* (half note), *p* (half note).
- A. Sax:** *f* (half note), *p* (half note), *f* (half note), *p* (half note).
- T. Sax:** *p* (half note), *f* (half note), *f* (half note), *p* (half note).
- Bs. Sax:** *f* (half note), *p* (half note), *p* (half note), *f* (half note).

t: territory

System 1 (Measures 13-16):

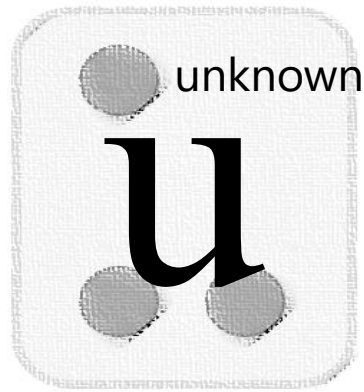
- S. Sax.:** Measure 13: *ff*. Measure 14: *p*. Measure 15: *ord.*, *f*. Measure 16: *p*.
- A. Sax.:** Measure 13: *ff*. Measure 14: *p*. Measure 15: *ord.*, *p*. Measure 16: *f*, *p*, *f*.
- T. Sax.:** Measure 13: *ff*. Measure 14: *ord.*, *p*. Measure 15: *f*, *p*, *f*. Measure 16: *p*, *f*, *p*, *f*.
- Bs. Sax.:** Measure 13: *p*. Measure 14: *ord.*, *p*. Measure 15: *f*, *p*, *f*. Measure 16: *p*, *f*, *p*.

System 2 (Measures 17-20):

- S. Sax.:** Measure 17: *f*, *p*, *f*, *p*, *f*, *p*, *f*, *p*. Measure 18: *f*, *p*, *f*, *p*. Measure 19: *f*, *p*, *f*, *p*. Measure 20: *f*, *p*, *f*, *p*.
- A. Sax.:** Measure 17: *p*, *f*, *p*, *f*. Measure 18: *p*, *f*, *p*, *f*. Measure 19: *p*, *f*, *p*, *f*. Measure 20: *p*, *f*, *p*, *f*.
- T. Sax.:** Measure 17: *p*, *f*, *p*, *f*. Measure 18: *p*, *f*, *p*, *f*. Measure 19: *p*, *f*, *p*, *f*. Measure 20: *p*, *f*, *p*, *f*.
- Bs. Sax.:** Measure 17: *f*, *p*, *f*, *p*. Measure 18: *f*, *p*, *f*, *p*. Measure 19: *f*, *p*, *f*, *p*. Measure 20: *f*, *p*, *f*, *p*.

System 3 (Measures 21-24):

- S. Sax.:** Measure 21: *f*, *p*, *f*, *p*. Measure 22: *f*, *p*, *f*, *p*. Measure 23: *flz.*, *ord.*, *ff*. Measure 24: *molto vibrato*, *pp*.
- A. Sax.:** Measure 21: *p*, *f*, *mf*. Measure 22: *flz.*, *ord.*, *ff*. Measure 23: *flz.*, *ord.*, *ff*. Measure 24: *molto vibrato*, *pp*.
- T. Sax.:** Measure 21: *p*, *f*, *p*, *f*. Measure 22: *p*, *f*, *p*, *f*. Measure 23: *flz.*, *ord.*, *ff*. Measure 24: *molto vibrato*, *pp*.
- Bs. Sax.:** Measure 21: *f*, *p*, *f*, *p*. Measure 22: *f*, *p*, *f*, *p*. Measure 23: *flz.*, *ord.*, *ff*. Measure 24: *molto vibrato*, *pp*.



With confusion; agitato (♩ = 60)

espress.

Score for Soprano Sax, Alto Sax, Tenor Sax, Bass Sax, S. Sax., A. Sax., T. Sax., and Bs. Sax. The score is divided into three systems, each containing four staves. The first system (measures 1-4) is in 4/4 time. The second system (measures 5-8) is in 4/4 time. The third system (measures 9-12) is in 4/4 time. The score includes various dynamics (p, mf, pp, ff, sfz, ppp, sub. p), articulations (espress., no vib, key clicks with air, closed slap, tongue ram, open slap, growl; guttural flutter), and performance instructions (With confusion; agitato, molto vibrato, delicato, ord. delicato). The score is written for Soprano Sax, Alto Sax, Tenor Sax, Bass Sax, S. Sax., A. Sax., T. Sax., and Bs. Sax. The first system (measures 1-4) is in 4/4 time. The second system (measures 5-8) is in 4/4 time. The third system (measures 9-12) is in 4/4 time.

13

S. Sax. *sub. p* *ff*

A. Sax. *sub. p* *ff*

T. Sax. *sub. p* *ff*

Bs. Sax.

15

S. Sax. *fff* *sfz*

A. Sax. *fff* *sfz*

T. Sax. *fff* *sfz*

Bs. Sax. *ff* *fff* *sfz* *ff* *sfz* *fff* *sfz*

17

S. Sax. *f* *mf* *mp* *p* *p* *pp* *ff*

A. Sax. *f* *mf* *mp* *p* *p* *pp* *ff*

T. Sax. *f* *mf* *mp* *p* *pp* *ff*

Bs. Sax. *f* *mp* *pp* *ff*

no vib



With a sense of oscillation ♩ = 80

molto vibrato; espressivo

42



wandering

Uncomfortably energetic ♩ = 140

Musical score for Soprano Sax (S. Sx.) and Alto Sax (A. Sx.) in 4/4 time. The score consists of five systems, each with two staves. The key signature has one flat (B-flat), and the time signature is 4/4.

System 1 (Measures 1-5):

- S. Sx.:** Measures 1-5. Measure 1 has a whole note B-flat with an *espressivo* marking. Measures 2-5 contain eighth-note patterns with dynamic markings *p*, *f*, *p*, *f*, *p*.
- A. Sx.:** Measures 1-5. Measure 1 is a whole rest. Measures 2-5 contain eighth-note patterns with dynamic markings *mf*, *f*, *p*, *f*, *p*.

System 2 (Measures 6-9):

- S. Sx.:** Measures 6-9. Measure 6 starts with a sixteenth-note pattern (*ff*). Measure 7 has a half note (*p*). Measure 8 has a quarter note (*mf*). Measure 9 has a whole note B-flat.
- A. Sx.:** Measures 6-9. Measure 6 has a whole note B-flat (*ff*). Measures 7-9 contain eighth-note patterns with dynamic markings *p*, *f*, *p*.

System 3 (Measures 10-13):

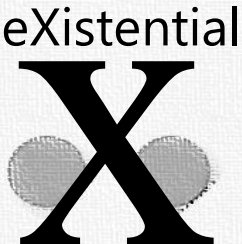
- S. Sx.:** Measures 10-13. Measure 10 has a half note (*p*). Measure 11 has a quarter note (*f*). Measure 12 has a half note (*p*). Measure 13 has a whole note (*f*).
- A. Sx.:** Measures 10-13. Measures 10-13 contain eighth-note patterns with dynamic markings *f*, *p*, *f*, *p*, *ff*.

System 4 (Measures 14-17):

- S. Sx.:** Measures 14-17. Measure 14 has a half note (*ff*). Measure 15 has a quarter note (*p*). Measure 16 has a half note (*f*). Measure 17 has a whole note (*p*).
- A. Sx.:** Measures 14-17. Measures 14-17 contain eighth-note patterns with dynamic markings *p*, *p*, *f*, *p*, *f*, *p*, *f*, *p*.

System 5 (Measures 18-21):

- S. Sx.:** Measures 18-21. Measure 18 has a half note (*f*). Measure 19 has a quarter note (*p*). Measure 20 has a half note (*f*). Measure 21 has a whole note (*pp*).
- A. Sx.:** Measures 18-21. Measures 18-21 contain eighth-note patterns with dynamic markings *p*, *p*, *f*, *p*, *f*, *p*, *f*, *p*.

[illegible]



With intense longing for hope ♩ = 70

Sheet music for the first system, measures 1-6, in 4/4 time. The score includes parts for C Harmonica (Sop Sax), Alto Sax, Tenor Sax, and G Harmonica (Bari Sax). The C Harmonica part features a diagram of a C-clef with a key signature of one sharp (F#) and a dynamic of *p*. The Alto Sax part features a diagram of a G-clef with a key signature of one sharp (F#) and a dynamic of *p*. The Tenor Sax part features a diagram of a C-clef with a key signature of one sharp (F#) and a dynamic of *p*. The G Harmonica part features a diagram of a G-clef with a key signature of one sharp (F#) and a dynamic of *p*. The music includes various dynamics such as *pp*, *mf*, and *p*, and articulations like *delicato no vib*, *very delicate flutter flz.*, and *flute-like ord.*. The tempo is marked as ♩ = 70.

Sheet music for the second system, measures 7-11, in 4/4 time. The score includes parts for C Harm., A. Sx., T. Sx., and G.Harm. The C Harm. part features a diagram of a C-clef with a key signature of one sharp (F#) and a dynamic of *p*. The A. Sx. part features a diagram of a G-clef with a key signature of one sharp (F#) and a dynamic of *p*. The T. Sx. part features a diagram of a C-clef with a key signature of one sharp (F#) and a dynamic of *p*. The G.Harm. part features a diagram of a G-clef with a key signature of one sharp (F#) and a dynamic of *p*. The music includes various dynamics such as *mf*, *mp*, *f*, and *p*, and articulations like *espressivo*. The tempo is marked as ♩ = 70.

Sheet music for the third system, measures 12-16, in 7/8 time. The score includes parts for C Harm., A. Sx., T. Sx., and G.Harm. The C Harm. part features a diagram of a C-clef with a key signature of one sharp (F#) and a dynamic of *f*. The A. Sx. part features a diagram of a G-clef with a key signature of one sharp (F#) and a dynamic of *mf*. The T. Sx. part features a diagram of a C-clef with a key signature of one sharp (F#) and a dynamic of *f*. The G.Harm. part features a diagram of a G-clef with a key signature of one sharp (F#) and a dynamic of *f*. The music includes various dynamics such as *f*, *mf*, and *mp*, and articulations like *flz.*. The tempo is marked as ♩ = 130.

17

C. Harm.

f

A. Sx.

mp *f* *mp* *pp* *p*

ord.

T. Sx.

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

G. Harm.

f

mp

espress.

27

C Harm.

A. Sax.

T. Sax.

G.Harm.

f

mf

mp

p

pp



Hypnotic; Molto Espressivo ♩ = 60

Soprano Sax

Alto Sax

Tenor Sax

Baritone Sax

match vib.

mf *p* *mf* *mp*

mf *p* *mf* *mp*

mf *p* *mf* *mp*

mf *p* *mf* *espress.* *mp*

3

7

S. Sax.

A. Sax.

T. Sax.

B. Sax.

matching molto vibrato

pp *p* *pp* *p*

no vib; no expression;
as if time frozen in time

no vib; no expression;
as if time frozen in time

no vib; no expression;
as if time frozen in time

no vib; no expression;
as if time frozen in time

3

12

S. Sax.

A. Sax.

T. Sax.

B. Sax.

sim.

pp *ppp* *ppp* *ppp*

gliss up 1/4 tone

pp *ppp* *ppp* *ppp*

pp *ppp* *ppp* *ppp*

pp *ppp* *ppp* *ppp*

pp *ppp* *ppp* *ppp*

CHAPTER TWO

the mountains rend themselves apart

for wind ensemble

Conceptual Background and Context

I have always been fascinated with the Frank Slide site in the Crowsnest Pass region of the Alberta Rocky Mountains. I grew up close to this area and remember driving through the site as a child and being captivated by the remnants of the disastrous rockslide that occurred in 1903. The magnitude and power of the visual landscape was overwhelming to me and, like many who travel through this area, left me with many questions.

Recently, I had the opportunity to visit this site with my son. His curiosity led us to visit the interpretive centre where we asked questions, read, and hiked around the area. My research led me to a poem, “At Crow’s Nest Pass” (Johnson 1917, 118) by the Canadian poet, E. Pauline Johnson, who lived during the late 19th century and early 20th century. When reading her poem through the lens of the tragic event that was yet to occur, I felt her words were visionary and ominous and possessed a reverence and powerful respect for nature. I sought to explore and express this important moment in Alberta’s history through music.

At Crow’s Nest Pass

At Crow’s Nest Pass the mountains rend
Themselves apart, the rivers wend
A lawless course about their feet,
And breaking into torrents beat
In useless fury where they blend
At Crow’s Nest Pass.

The nesting eagle, wise, discreet,
Wings up the gorge’s lone retreat
And makes some barren crag her friend
At Crow’s Nest Pass.

Uncertain clouds, half-high, suspend
Their shifting vapours, and contend
With rocks that suffer not defeat;
And snows, and suns, and mad winds meet
To battle where the cliffs defend
At Crow’s Nest Pass. (Johnson 1917, 118).

Summary of Method

This piece was written for wind ensemble with the instrumentation of piccolo, C and alto flutes, clarinets, oboes, bassoons, contrabassoon, bass clarinets, alto/tenor/baritone saxophones, trumpets, French horns, trombones, euphoniums, tubas, string bass, harp, piano, timpani, and six percussionists.

The work embraces the idea of storytelling and explores the imaginary sounds of the town of Frank as a booming coal mine town nestled against Turtle Mountain experiencing the tragic event on the morning at 4:10am on April 29, 1903.

The piece is divided into three main sections reflecting a loose ternary structure. I learned that “more than 90 were killed” (Government of Alberta 2023) and decided to use compositional elements that included the number nine through intervallic shapes as well as rhythmic elements grouped in 9/8 time.

Harmonic elements include cluster chords, polychords, and sustained drone-like elements in the percussion and low brass/woodwinds/bass. Melodic components, which are often less formal and somewhat hidden within textures, include a structured variation of a nine-note fragment.

The overall metric map consists of a more open first and third sections creating an expansive and ominous atmosphere. The second (middle) section provides a contrasting motor-like rhythm in 9/8 metre with accented groupings and patterns. This element was also used in the percussion to propel and add dimension to the patterns in the ensemble. The layered effect of the ensemble gradually intensifies this section, adding a sense of confusion and chaos. The third and final section returns to the seemingly loose and open time with echoes of the same atmosphere established in the beginning while creating a slight sense of resolution providing space for the listener to listen and imagine components of the story.

The colouration and timbre of instruments explored through orchestration were meant to create an eerie, dark, ominous, unknowing, and ghostly atmosphere. This was achieved through pairing the high metal percussion with harp and piano over a sustained cluster on two vibraphones. The exposed piccolo creates a vulnerable and delicate effect. The use of metallic instruments in the percussion were used to highlight the metal tools used in the coal mining town, some of them more elegant, like silverware shuffling in a newly constructed hotel (represented through the garden windchime) and the abrasive metal clash of the brake drum and hammer to reflect the large metal tools used to shovel, extract, and transport coal.

A foundational motif throughout the work was the use of glissandi through the instruments of a water gong/cymbal, trombone, timpani, piccolo, and alto flute. This concept was also implied through tight descending cluster-like overlapping voicings in the woodwinds. Creating sounds to compliment the story and encourage imagination was the overall effect. I used images such as rocks cracking, rubbing, rolling, as well as confusion, fear, and panic. The boisterous sonic images contrasted with more delicate ones such as dust settling, disorientation, feeling alone, afraid, and moments of hope.

the mountains rend themselves apart

for Wind Ensemble

MARI ALICE CONRAD

concert score

the mountains rend themselves apart

for wind ensemble

composed by Mari Alice Conrad

April 2022

Duration: ca. 9'

Written for the Edmonton Winds Ensemble under the direction of Raymond Baril in fulfillment of the David Erdmann Memorial Scholarship, Composition Cycle for 2021-2022.

Instrumentation:

- Piccolo
- Flute 1
- Flute 2/Alto Flute
- Oboe 1
- Oboe 2
- Bassoon 1
- Bassoon 2
- Clarinet in Bb 1
- Clarinet in Bb 2
- Clarinet in Bb 3
- Bass Clarinet 1
- Bass Clarinet 2
- Contrabassoon
- Alto Saxophone 1
- Alto Saxophone 2
- Tenor Saxophone
- Baritone Saxophone
- Harp
- Piano
- Trumpet in Bb 1
- Trumpet in Bb 2
- Trumpet in Bb 3
- Horn in F 1
- Horn in F 2
- Horn in F 3
- Horn in F 4
- Trombone 1
- Trombone 2
- Bass Trombone
- Euphonium 1
- Euphonium 2
- Tuba
- Double Bass
- Timpani
- Percussion 1
- Percussion 2
- Percussion 3
- Percussion 4
- Percussion 5
- Percussion 6

Perfromance Notes:

At Crow’s Nest Pass

By Emily Pauline Johnson

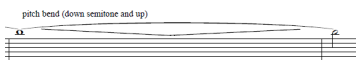
At Crow’s Nest Pass the mountains rend
Themselves apart, the rivers wend
A lawless course about their feet,
And breaking into torrents beat
In useless fury where they blend
At Crow’s Nest Pass.

The nesting eagle, wise, discreet,
Wings up the gorge’s lone retreat
And makes some barren crag her friend
At Crow's Nest Pass.

Uncertain clouds, half-high, suspend Their
shifting vapours, and contend
With rocks that suffer not defeat;
And snows, and suns, and mad winds meet
To battle where the cliffs defend
At Crow’s Nest Pass.

The title of the piece was inspired by the poem, “At Crow’s Nest Pass” from *Flint and Feather: The Complete Poems of E. Pauline Johnson (Tekahionwake)* (The Musson Book Co., Limited, 1917) by Emily Pauline Johnson. This poem is in the public domain.

Global Performance Instructions:



Flute: to slowly bend the pitch down a semitone or more and return up to given note.



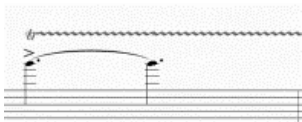
Clarinets: the fanning arrows mean there is a split divisi approaching that will be in two staves



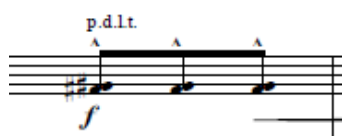
Clarinets: these arrows signify the divisi is over and resume to three part (one staff per part).



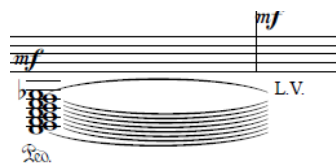
Upper Woodwinds: Staggered breathing as specified to create a sustained effect.



Woodwinds: ALL trills are to be a semitone up from written pitch.



Harp: Prés de la table: pluck strings near the soundboard



Piano: Forearm cluster. This may also be a two-handed cluster splitting up the pitches between two hands if that is more comfortable. The only accidental in the cluster is Bb.

Percussion Legend, Materials, and Instructions:

Score for Percussion 1 through Percussion 6, showing various instruments and their parts.

Percussion 1: Bass Drum, Water Gong/Cymbal, Triangle

Percussion 2: Vibraphone, Tamtam, Suspended Cymbal

Percussion 3: Vibraphone, Roto toms (low, medium, high)

Percussion 4: Glockenspiel, Tom toms (medium, high, low), Cymbal (high sound)

Percussion 5: Crotales (bowed), China/Splash Cymbal, Cymbal (mid), Woodblocks, Brake Drum, Bass Drum Frame (with Rute mallets)

Percussion 6: Garden Windchime, Tubular Bells, Crash cymbal, Vibraslap, Snare drum

Part	Items/Instruments	Beaters
Timpani	3 Timpani drums: 32", 30", 28"	Soft timpani mallets (2)
	Pitches (E – G - B)	Hard timpani mallets (2)
	<i>*Assisting Perc. 1 with Water Gong/Cymbal</i>	n/a
Percussion 1	Bass drum (set on its side)	Soft, rolling mallets (2)
		Hard, articulating mallets (2)
	Water container on wheels (full of water)	n/a
	Small table with towel	Place water gong/cymbal on table
	Water gong/cymbal with handle	Rolling mallets for gong/cymbal (2)
Percussion 2	Triangle (small)	Metal triangle beater
	Vibraphone	Soft yarn mallets (4)
	Tamtam (large)	Superball mallet (large)
Percussion 3	Suspended Cymbal	Tamtam rollers (2)
		Yarn mallets (2)
	Vibraphone	Soft yarn mallets (4)
Percussion 4	Roto toms (set of 3 tuned high, med, low)	Rubber mallets (2)
		Drumsticks (2)
	Concert Tom toms (3) Low, Med, High	Drumsticks (2)
Percussion 5	Glockenspiel	Medium hard rubber mallets (2)
	Cymbal (high sound)	Bow (1)
		Yarn mallets (2)
Percussion 6	Crotales (C4 set)	Bow (1)
	China/splash cymbal	Drumstick (1)
	Brake Drum set on small table	Hammer (2)
	Cymbal (mid-sound)	Bow (1)
	Woodblocks (on stand)	Hard rubber mallets (2)
	Bass Drum Frame	Rute Mallets (2)
Percussion 6	Tubular Bells (Chimes)	Chime Hammer (2)
	Snare Drum	Drumsticks (2)
	Vibraslap	n/a
	Crash Cymbals (on stand)	n/a
	Garden Windchimes (small + delicate + metal)	n/a

**please see recommended percussion set-up on following page*

Timpani: *crescendo*

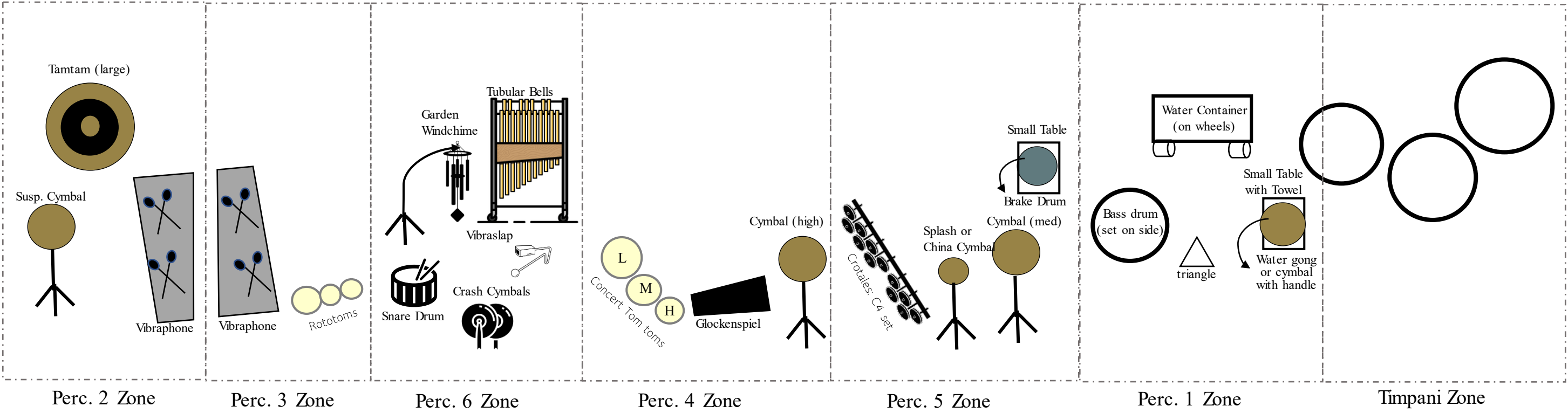
Timpani: Slowly move pitch up while rolling stopped on destination note in score.

Timpani Assisting Perc 1
with Water Gong/Cymbal

mp
cymbal/gong roll as descending into water

Timpani and Water Gong/Cymbal: Timpanist to hold and slowly descend gong/cymbal into container of water while Perc 1 rolls on the top part. After finished, the gong/cymbal is to be placed on the nearby table with towel.

Recommended Percussion Set-up



Conductor

Mari Alice Conrad

58

A

the mountains rend themselves apart

[illegible]

the mountains rend themselves apart

[illegible]

the mountains rend themselves apart

62

the mountains rend themselves apart

25

Picc.

Fl. 1

A. Fl.

Ob. 1

Ob. 2

Bsn. 1

Bsn. 2

B♭ Cl. 1

B♭ Cl. 2

B♭ Cl. 3

B. Cl. 1

B. Cl. 2

C. Bn.

A. Sx. 1

A. Sx. 2

T. Sx.

B. Sx.

25

Hp.

Pno.

25

B♭ Tpt. 1

B♭ Tpt. 2

B♭ Tpt. 3

Hn. 1, 2

Hn. 3, 4

Tbn. 1

Tbn. 2

B. Tbn.

Euph. 1

Euph. 2

Tuba

D.B.

25

Timp.

Perc. 1

Perc. 2

Perc. 3

Perc. 4

Perc. 5

Perc. 6

Garden Windchime

Tubular Bells

29

Picc.

Fl. 1

A. Fl.

Ob. 1

Ob. 2

Bsn. 1

Bsn. 2

B♭ Cl. 1

B♭ Cl. 2

B♭ Cl. 3

B. Cl. 1

B. Cl. 2

C. Bn.

A. Sx. 1

A. Sx. 2

T. Sx.

B. Sx.

29

Hp.

Pno.

29

B♭ Tpt. 1

B♭ Tpt. 2

B♭ Tpt. 3

Hn. 1, 2

Hn. 3, 4

Tbn. 1

Tbn. 2

B. Tbn.

Euph. 1

Euph. 2

Tuba

D.B.

29

Timp.

Perc. 1

Perc. 2

Perc. 3

Perc. 4

Perc. 5

Perc. 6

64

the mountains rend themselves apart

65

the mountains rend themselves apart

D

39

Picc.

Fl. 1

Fl. 2

Ob. 1

Ob. 2

Bsn. 1

Bsn. 2

B♭ Cl. 1

B♭ Cl. 2

B♭ Cl. 3

B. Cl. 1

B. Cl. 2

C. Bn.

A. Sx. 1

A. Sx. 2

T. Sx.

B. Sx.

39

Hp.

Pno.

39

3♯ Tpt. 1

3♯ Tpt. 2

3♯ Tpt. 3

Hn. 1, 2

Hn. 3, 4

Tbn. 1

Tbn. 2

B. Tbn.

Euph. 1

Euph. 2

Tuba

D.B.

39

Timp.

Perc. 1

Perc. 2

Perc. 3

Perc. 4

Perc. 5

Perc. 6

China/Splash Cymbal

Crash cymbal

66

the mountains rend themselves apart

50

Picc.

Fl. 1

Fl. 2

Ob. 1

Ob. 2

Bsn. 1

Bsn. 2

B♭ Cl. 1

B♭ Cl. 1A

B♭ Cl. 2

B♭ Cl. 2A

B♭ Cl. 3

B♭ Cl. 3A

B. Cl. 1

B. Cl. 2

C. Bn.

A. Sx. 1

A. Sx. 2

T. Sx.

B. Sx.

50

Hp.

Pno.

50

B♭ Tpt. 1

B♭ Tpt. 2

B♭ Tpt. 3

Hn. 1, 2

Hn. 3, 4

Tbn. 1

Tbn. 2

B. Tbn.

Euph. 1

Euph. 2

Tuba

D.B.

50

Timp.

Perc. 1

Perc. 2

Perc. 3

Perc. 4

Perc. 5

Perc. 6

the mountains rend themselves apart

E

This page of a musical score is for a large orchestra, spanning measures 54 to 60. The instruments listed on the left include Piccolo (Pic.), Flute 1 (Fl. 1), Flute 2 (Fl. 2), Oboe 1 (Ob. 1), Oboe 2 (Ob. 2), Bassoon 1 (Bsn. 1), Bassoon 2 (Bsn. 2), Clarinet 1 (Cl. 1), Clarinet 1A (Cl. 1A), Clarinet 2 (Cl. 2), Clarinet 2A (Cl. 2A), Clarinet 3 (Cl. 3), Clarinet 3A (Cl. 3A), Clarinet 1 (Cl. 1), Clarinet 2 (Cl. 2), Contrabassoon (C. Bn.), Saxophone 1 (Sx. 1), Saxophone 2 (Sx. 2), Tenor Saxophone (T. Sx.), Baritone Saxophone (B. Sx.), Harp (Hp.), Piano (Pno.), Trumpet 1 (Tpt. 1), Trumpet 2 (Tpt. 2), Trumpet 3 (Tpt. 3), Trombone 1, 2, 3, 4 (Tbn. 1, 2, 3, 4), Tuba (Tbn.), Euphonium 1, 2 (Euph. 1, 2), Tuba (Tuba), Double Bass (D.B.), Timpani (Timp.), Percussion 1-6 (Perc. 1-6).

The score includes various musical notations such as notes, rests, and dynamic markings. Key dynamics include *ff* (fortissimo), *f* (forte), *mp* (mezzo-piano), and *mf* (mezzo-forte). Performance instructions are provided for several instruments:

- Percussion 1:** "superball mallet in circular motion" (measures 54-55).
- Percussion 2:** "Vibraphone" (rubber mallets; brighter sound) (measures 54-55).
- Percussion 3:** "Cymbal (high)" (bowed) (measures 54-55).
- Percussion 4:** "Crotales" (bowed) (measures 54-55).
- Percussion 5:** "Tubular Bells" (distant (far-off)) (measures 54-55).

The score is written in 4/4 time and features a key signature of one sharp (F#). The page number 60 is visible at the bottom right.

the mountains rend themselves apart

58

Picc.

Fl. 1

Fl. 2

Ob. 1

Ob. 2

Bsn. 1

Bsn. 2

B♭ Cl. 1

B♭ Cl. 1A

B♭ Cl. 2

B♭ Cl. 2A

B♭ Cl. 3

B♭ Cl. 3A

B. Cl. 1

B. Cl. 2

C. Bn.

A. Sx. 1

A. Sx. 2

T. Sx.

B. Sx.

58

Hp.

p.d.l.t.

f

Pno.

mp

58

B♭ Tpt. 1

B♭ Tpt. 2

B♭ Tpt. 3

Hn. 1, 2

Hn. 3, 4

Tbn. 1

Tbn. 2

B. Tbn.

Euph. 1

Euph. 2

Tuba

D.B.

58

Timp.

Perc. 1

Perc. 2

Perc. 3

Perc. 4

f

mp

Perc. 5

mf

[Cymbal (med)]
bowed

mp

Perc. 6

Garden Windchime

the mountains rend themselves apart

62

Picc.

Fl. 1

Fl. 2

Ob. 1

Ob. 2

Bsn. 1

Bsn. 2

B♭ Cl. 1

B♭ Cl. 1A

B♭ Cl. 2

B♭ Cl. 2A

B♭ Cl. 3

B♭ Cl. 3A

B. Cl. 1

B. Cl. 2

C. Bn.

A. Sx. 1

A. Sx. 2

T. Sx.

B. Sx.

Hp.

Pno.

62

B♭ Tpt. 1

B♭ Tpt. 2

B♭ Tpt. 3

Hn. 1, 2

Hn. 3, 4

Tbn. 1

Tbn. 2

B. Tbn.

Euph. 1

Euph. 2

Tuba

D.B.

62

Timp.

Perc. 1

Perc. 2

Perc. 3

Perc. 4

Perc. 5

Perc. 6

[Crotales bowed]

[Tubular Bells]

the mountains rend themselves apart

F

69

Picc.

Fl. 1

Fl. 2

Ob. 1

Ob. 2

Bsn. 1

Bsn. 2

B♭ Cl. 1

B♭ Cl. 2

B♭ Cl. 3

B. Cl. 1

B. Cl. 2

C. Bn.

A. Sx. 1

A. Sx. 2

T. Sx.

B. Sx.

69

Hp.

Pno.

69

B♭ Tpt. 1

B♭ Tpt. 2

B♭ Tpt. 3

Hn. 1, 2

Hn. 3, 4

Tbn. 1

Tbn. 2

B. Tbn.

Euph. 1

Euph. 2

Tuba

D.B.

69

Timp.

Perc. 1

Perc. 2

Perc. 3

Perc. 4

Perc. 5

Perc. 6

the mountains rend themselves apart

the mountains rend themselves apart

the mountains rend themselves apart

the mountains rend themselves apart

This page of a musical score is for a large orchestra and percussion ensemble. It features staves for various instruments, including woodwinds (Piccolo, Flutes 1 & 2, Oboes 1 & 2, Bassoons 1 & 2, Clarinets 1, 2, & 3, Bass Clarinet 1 & 2, Contrabassoon, Saxophones 1 & 2, Tenor Saxophone, Baritone Saxophone, Harp, Piano, Trumpets 1, 2, & 3, Horns 1, 2, 3, & 4, Trombones 1 & 2, Baritone Trombone, Euphoniums 1 & 2, Tuba, Double Bass, Timpani, and various Percussion instruments (Perc. 1-6). The score includes dynamic markings such as *mf*, *f*, *ff*, *sfz*, and *sf*, as well as articulation marks like accents and slurs. A large '93' is written in the left margin, and a '4' is written in the center margin. The score is written in a key signature of one flat (B-flat) and a 4/4 time signature. The tempo is marked as 'Allegro'.

(♩=♩)

Picc.

Fl. 1

Fl. 2

Ob. 1

Ob. 2

Bsn. 1

Bsn. 2

B♭ Cl. 1

B♭ Cl. 2

B♭ Cl. 3

B. Cl. 1

B. Cl. 2

C. Bn.

A. Sx. 1

A. Sx. 2

T. Sx.

B. Sx.

96

Pno.

96

B♭ Tpt. 1

B♭ Tpt. 2

B♭ Tpt. 3

Hn. 1, 2

Hn. 3, 4

Tbn. 1

Tbn. 2

B. Tbn.

Euph. 1

Euph. 2

Tuba

D.B.

96

Perc. 1

Perc. 2

Perc. 3

Perc. 4

Perc. 5

Perc. 6

the mountains rend themselves apart

105

[illegible]

105

Hp.

Pno.

The image shows two sets of empty musical staves. The top set is for the Harp (Hp.) and the bottom set is for the Piano (Pno.). Each set consists of a grand staff with a treble clef and a bass clef. The staves are empty, with no notes or rests written on them.

105

The image shows a page of a musical score for a brass ensemble. The score is divided into two systems. The first system contains staves for B♭ Tpt. 1, B♭ Tpt. 2, B♭ Tpt. 3, Hn. 1, 2, Hn. 3, 4, Tbn. 1, Tbn. 2, B. Tbn., Euph. 1, Euph. 2, and Tuba. The second system contains staves for D.B. and Tuba. The music is in 4/4 time and features a melodic line in the tubas and euphoniums, with a strong dynamic marking of *ff* (fortissimo) in the second system.

105

82

the mountains rend themselves apart

109

Picc.

Fl. 1

Fl. 2

Ob. 1

Ob. 2

Bsn. 1

Bsn. 2

B♭ Cl. 1

B♭ Cl. 2

B♭ Cl. 3

B. Cl. 1

B. Cl. 2

C. Bn.

A. Sax. 1

A. Sax. 2

T. Sax.

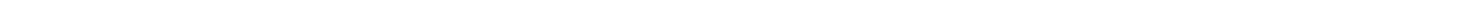
B. Sax.

109

f

109

Hp.



An empty musical staff for a Harp (Hp.) instrument. It consists of two staves: a treble clef staff on top and a bass clef staff on the bottom. The staff is divided into four measures by vertical bar lines. There are no notes or other markings on the staff.

Piano accompaniment for the first system. The music is written for piano (Pno.) in 2/4 time. The key signature has one flat (B-flat). The melody is in the right hand, starting on a whole note G4, followed by a half note A4, and then a half note Bb4. The left hand provides a simple harmonic accompaniment with a whole note chord of G4-Bb4 in the first measure, and then a half note G4 followed by a half note Bb4 in the second measure.

109

B $\flat$ Tpt. 1

B $\flat$ Tpt. 2

B $\flat$ Tpt. 3

Hn. 1, 2

Hn. 3, 4

Tbn. 1

Tbn. 2

B. Tbn.

Euph. 1

Euph. 2

Tuba

D.B.

109

109

Timp.

Perc. 1

Perc. 2

Perc. 3

Perc. 4

Perc. 5

Perc. 6

f

fp

ff

sfz

ff

fp

ff

mp

p

ff

83

the mountains rend themselves apart

113

This image shows a page from a musical score, likely for a symphony or concert band. The score is written for a large ensemble, including the following instruments:

- Picc. (Piccolo)
- Fl. 1, Fl. 2 (Flutes)
- Ob. 1, Ob. 2 (Oboes)
- Bsn. 1, Bsn. 2 (Bassoons)
- B♭ Cl. 1, B♭ Cl. 2, B♭ Cl. 3 (B-flat Clarinets)
- B. Cl. 1, B. Cl. 2 (Bass Clarinets)
- C. Bn. (Contrabassoon)
- A. Sx. 1, A. Sx. 2 (Alto Saxophones)
- T. Sx. (Tenor Saxophone)
- B. Sx. (Baritone Saxophone)
- Hp. (Harp)
- Pno. (Piano)
- B♭ Tpt. 1, B♭ Tpt. 2, B♭ Tpt. 3 (B-flat Trumpets)
- Hn. 1, 2, Hn. 3, 4 (Horns)
- Tbn. 1, Tbn. 2, B. Tbn. (Tenor and Baritone Trombones)
- Euph. 1, Euph. 2 (Euphoniums)
- Tuba
- D.B. (Double Bass)
- Timp. (Timpani)
- Perc. 1 through Perc. 6 (Percussion)

The score is written in 4/4 time and features various dynamic markings, including *ff* (fortissimo), *mf* (mezzo-forte), *p* (piano), and *f* (forte). A section of the score is marked "Tamtam" (cymbal). The page number "113" is visible in the bottom left corner.

117

Picc.

Fl. 1

Fl. 2

Ob. 1

Ob. 2

Bsn. 1

Bsn. 2

B♭ Cl. 1

B♭ Cl. 2

B♭ Cl. 3

B. Cl. 1

B. Cl. 2

C. Bn.

A. Sx. 1

A. Sx. 2

T. Sx.

B. Sx.

Hp.

Pno.

117

B♭ Tpt. 1

B♭ Tpt. 2

B♭ Tpt. 3

Hn. 1, 2

Hn. 3, 4

Tbn. 1

Tbn. 2

B. Tbn.

Euph. 1

Euph. 2

Tuba

D.B.

117

Timp.

Perc. 1

Perc. 2

Perc. 3

Perc. 4

Perc. 5

Perc. 6

the mountains rend themselves apart

121

Picc.

Fl. 1

Fl. 2

Ob. 1

Ob. 2

Bsn. 1

Bsn. 2

B♭ Cl. 1

B♭ Cl. 2

B♭ Cl. 3

B. Cl. 1

B. Cl. 2

C. Bn.

A. Sx. 1

A. Sx. 2

T. Sx.

B. Sx.

121

Hp.

Pno.

121

B♭ Tpt. 1

B♭ Tpt. 2

B♭ Tpt. 3

Hn. 1, 2

Hn. 3, 4

Tbn. 1

Tbn. 2

B. Tbn.

Euph. 1

Euph. 2

Tuba

D.B.

121

Timp.

Perc. 1

Perc. 2

Perc. 3

Perc. 4

Brake drum

Perc. 5

Perc. 6

44

44

44

44

the mountains rend themselves apart

J

Mysteriously $\text{♩}=60$

Picc.

Fl. 1

A. Fl.

Ob. 1

Ob. 2

Bsn. 1

Bsn. 2

B♭ Cl. 1

B♭ Cl. 2

B♭ Cl. 3

B. Cl. 1

B. Cl. 2

C. Bn.

A. Sx. 1

A. Sx. 2

T. Sx.

B. Sx.

124

Hp.

Pno.

124

B♭ Tpt. 1

B♭ Tpt. 2

B♭ Tpt. 3

Hn. 1, 2

Hn. 3, 4

Tbn. 1

Tbn. 2

B. Tbn.

Euph. 1

Euph. 2

Tuba

D.B.

124

Timp.

Perc. 1

Perc. 2

Perc. 3

Perc. 4

Perc. 5

Perc. 6

Vibraphone

Vibraphone

rim tapping with Rute on bass drum frame

pp

pp

ppp

ppp

ppp

pp

ppp

the mountains rend themselves apart

[illegible]

K

Picc.
 Fl. 1
 A. Fl.
 Ob. 1
 Ob. 2
 Bsn. 1
 Bsn. 2
 B♭ Cl. 1
 B♭ Cl. 2
 B♭ Cl. 3
 B. Cl. 1
 B. Cl. 2
 C. Bn.
 A. Sx. 1
 A. Sx. 2
 T. Sx.
 B. Sx.
 Hp.
 Pno.
 B♭ Tpt. 1
 B♭ Tpt. 2
 B♭ Tpt. 3
 Hn. 1, 2
 Hn. 3, 4
 Tbn. 1
 Tbn. 2
 B. Tbn.
 Euph. 1
 Euph. 2
 Tuba
 D.B.
 Timp.
 Perc. 1
 Perc. 2
 Perc. 3
 Perc. 4
 Perc. 5
 Perc. 6
 Tubular Bells

the mountains rend themselves apart

the mountains rend themselves apart

L

Picc.

Fl. 1

A. Fl.

Ob. 1

Ob. 2

Bsn. 1

Bsn. 2

B♭ Cl. 1

B♭ Cl. 2

B♭ Cl. 3

B. Cl. 1

B. Cl. 2

C. Bn.

A. Sx. 1

A. Sx. 2

T. Sx.

B. Sx.

Hp.

Pno.

B♭ Tpt. 1

B♭ Tpt. 2

B♭ Tpt. 3

Hn. 1, 2

Hn. 3, 4

Tbn. 1

Tbn. 2

B. Tbn.

Euph. 1

Euph. 2

Tuba

D.B.

Timp.

Perc. 1

Perc. 2

Perc. 3

Perc. 4

Perc. 5

Perc. 6

Garden Windchime

150

Picc.

Fl. 1

A. Fl.

Ob. 1

Ob. 2

Bsn. 1

Bsn. 2

B♭ Cl. 1

B♭ Cl. 2

B♭ Cl. 3

B. Cl. 1

B. Cl. 2

C. Bn.

A. Sx. 1

A. Sx. 2

T. Sx.

B. Sx.

150

Hp.

Pno.

150

B♭ Tpt. 1

B♭ Tpt. 2

B♭ Tpt. 3

Hn. 1, 2

Hn. 3, 4

Tbn. 1

Tbn. 2

B. Tbn.

Euph. 1

Euph. 2

Tuba

D.B.

150

Timp.

Perc. 1

Perc. 2

Perc. 3

Perc. 4

Perc. 5

Perc. 6

M

94

158

Picc.

Fl. I

A. Fl.

Ob. 1

Ob. 2

Bsn. 1

Bsn. 2

B♭ Cl. 1

B♭ Cl. 2

B♭ Cl. 3

B. Cl. 1

B. Cl. 2

C. Bn.

A. Sax. 1

A. Sax. 2

T. Sax.

B. Sax.

Hp.

Pno.

158

B♭ Tpt. 1

B♭ Tpt. 2

B♭ Tpt. 3

Hn. 1, 2

Hn. 3, 4

Tbn. 1

Tbn. 2

B. Tbn.

Euph. 1

Euph. 2

Tuba

D.B.

158

Timp.

Perc. 1

Perc. 2

Perc. 3

Perc. 4

Perc. 5

Perc. 6

CHAPTER THREE

Six Arctic Experiments

for open chamber ensemble

Conceptual Background and Context

In 1963, James Baldwin invited educators to help unlock the minds of youth to “examine the society” and guide them to “look at the world for [themselves] . . . ask questions of the universe, and then learn to live with those questions” in a process of “achiev[ing] [their] own identity” (Baldwin 1998, 678). As a graduate student, composer, nature enthusiast, and community music educator in Canada, I actively embrace this call to action by curating opportunities for youth to see and process the world around them through the mode of musical expression within small music ensembles.

In the creation of this work, I had the opportunity to travel to the Canadian High Arctic where I witnessed the raw beauty of this wild and unforgiving landscape and the impacts and changes of the warming climate. This collection of pieces, written for developing musicians (ages 14-19+) concentrates on creating an entry point to contemporary music by composing accessible and inclusive works that respond directly to the needs of youth to connect with others, to express themselves musically, and to increase awareness of social issues.

In contrast to large music ensembles found in schools, small ensemble music (chamber music) creates an exceptional collaborative platform where leadership is dispersed among the participants, who, through careful and mindful listening, can adapt, discover, interpret, communicate, cooperate, and respond to one another in the crafting of a unified interpretation.

This composition explores the exciting potential of a small ensemble ecology and suggests that chamber music can be an inclusive, participatory way of knowing that empowers youth to express their ideas and critically consider and engage with the world around them.

Summary of Method

Each piece in the collection explores multiple compositional elements and is outlined and discussed separately below.

The first piece, *concentration – in five maps*, is for six or more instruments (open instrumentation) and is inspired loosely on the idea of sonification through interpreting data sourced from ice maps from the Canadian High Arctic (Government of Canada 2022). The five maps include colour coding for the concentration levels of ice and span across eighteen years from 2004 to 2022. Through improvising to a set of instructions, the players follow the map with pre-determined durational guideposts and sonify the difference in ice concentration levels over time. The instructions are clearly organized to easily track which performer plays which part and offers opportunities for group discussion about climate change and performative elements as well as collective decision-making.

The second piece, *biocontamination*, is the only piece in the collection specifically for pitched instruments and includes minimal (optional) spatial elements. The concept of the piece came from a quote found in the 2018 AMAP (Arctic Monitoring and Assessment Programme) document which states that “Chemical pollutants transported via the atmosphere, oceans and rivers are deposited in Arctic ecosystems, where they bioaccumulate in organisms and biomagnify through food webs” (AMAP 2018).

The melodic material (or a row of notes) is collectively composed by the ensemble which once decided, becomes processed live through a series of steps. The piece challenges the performers to track their own musical material as the piece progresses in addition to heightening their ensemble listening. The tempo and duration of the piece will depend on how many ensemble members are in the group and their collective pulse and note value decisions. This piece is process-centred which empowers the participants with the compositional creativity

while further enabling communication, discussion, listening, and interaction within the ensemble.

The third piece in the collection is *migration*. This piece is for cell phones and headphones (no instruments) and incorporates movement. The score is a quick response code, also known as a QR code, which directs the performer to an audio score. The score includes a soundscape created by amalgamating numerous field recordings I recorded in the Arctic as well as verbal instructions. The concept includes the performers embodying narwhals and crafting a stage experience that is influenced by what they hear in their headphones as well as communicating and cooperating visually with the ensemble.

In this piece, I wanted to explore the barrier between the audience and the performer. The barrier created in this piece, to me, represents a lack of communication like that experienced between humans and narwhals. We can understand gestures and study behaviours of narwhals but can only assume through research and data what they are trying to communicate. In this case, the audience is not privy to the sounds and instructions the performer is receiving through their headphones, but experiences the piece only through what the performers create and communicate on stage.

The fourth piece, *isostatic rebound*, explores physical symbolism and improvisation. The piece is written for prepared trampoline, one movement artist, and one or more performer(s) each with an instrument and object. The instructions outline what the participants represent. For example, the movement artist represents the melting glaciers that move and change their pressure on the landscapes and water around them, the objects represent the landforms that shift and change such as mountains, hills, rocks, vegetation, water levels, etc, and the trampoline surface represents the earth's crust, or the lithosphere, that, by the weight of the glacier, is depressed or

elevated as the glaciers melt. The lithosphere (or trampoline surface) becomes the dynamic score in which the movement artist manipulates while the performers improvise in real-time.

The fifth piece in the collection is *lines of weakness* written for open instrumentation of three or more performers. This piece is based on a poem written by Sam Wilson Fletcher about icebergs and includes hands-on creative decisions where the performers interact with one another to collectively create a graphic score. There are extra materials required for this piece, including a wedge, hammer, and an ice block. In essence, the score is created by choosing three photographs found in Appendix A where which the participants trace the profile of three icebergs onto transparency paper which then is secured to a large piece of cardboard. Once the traced lines are mounted, the ensemble places the fracture pieces on the line. The line becomes a collective guide, score, and structure for the piece. Using the poetry, the ensemble chooses a line of text and creates a musical idea by responding to the text emotionally. The text informs the quality of the musical idea while the iceberg profile line provides a shape to the overall ensemble sound. Once the ensemble encounters a fracture on the line the ice block is to be fractured with the wedge and hammer. The piece continues and repeats as long as needed until the ice block splits.

The sixth piece in the collection, *katabatic winds*, explores the idea of audience participation, transforming crafted art objects to sound objects by the ensemble, and wind machines. The ensemble is directed to create eloian¹ objects from recycled materials and implement images from Appendix B into their work in any way they choose. The ensemble sets up these objects in addition to wind machines prior to the performance and by using signs and gestures, the ensemble allows the audience to determine the duration of the piece.

¹ An eloian object in this context is any object that creates sound as wind moves through it.

When the piece begins, the ensemble members place and/or direct wind machines to interact with the eloian objects. This piece has an open duration and can be used as an installation piece or can be adapted in multiple ways to customize various venues, spaces, materials, or size of ensemble and audience involvement flexible to increase or decrease interaction as needed. In essence, this piece challenges audience participation in a way that the performer becomes the audience, and the audience becomes the performer creating an opportunity for both audience and performer to think about their impact on the climate crisis and how their choices impact the environment.

Overall, this collection of six works is curated to appeal to the needs and interests of youth by creating a point of entry that is welcoming, approachable and inclusive regardless of musical training, background, experience, or instrumentation. The work is designed to foster internal reflection and social interaction and enables cooperation, respect, communication, and creativity within an exploratory experience that is interactive and meaningful. Through creating this musical experience, youth can situate themselves in the heart of the Canadian Arctic and engage with elements of climate change. These experiences and discussions will hopefully lead to exploring solutions and foster conversations in their own homes and communities that will heighten awareness and galvanize change.

Six Arctic Experiments

MARI ALICE CONRAD

Six Arctic Experiments

Written for developing musicians (approx. ages 14-19yrs+)

Pieces in this collection may be performed together (in any order) or separately

November 2022
Mari Alice Conrad

concentration (in five maps)

for six or more instruments
open instrumentation
open duration

biocontamination

for five or more pitched instruments
open duration

migration

open performers
for cellphones and headphones (no instruments)
ca. 6'30"

isostatic rebound

for one or more instruments (and objects)
one movement artist and prepared trampoline
open duration

lines of weakness

poem by Sam Wilson Fletcher
for three or more performers
open instrumentation
open duration

katabatic winds

for three or more performers
wind machines and eolian objects
open duration

The creation and development of *Six Arctic Experiments* is supported in part by funding from the Social Sciences and Humanities Research Council.



Social Sciences and Humanities
Research Council of Canada

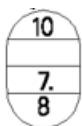
Conseil de recherches en
sciences humaines du Canada

Canada

concentration

in five maps

All five *Ice Analysis Maps (2004 - 2022)* sourced from *Environment Canada Ice Services, Government of Canada* website: <https://www.canada.ca/en/environment-climate-change/services/ice-forecasts-observations.html>



The following symbol is an Ice Egg Code and does not affect the reading of the score. For more information on understanding these codes, please visit: <https://www.canada.ca/en/environment-climate-change/services/ice-forecasts-observations/publications/interpreting-charts/chapter-1.html>

for six or more instruments

collectively choose order of all five maps

read maps from bottom to top

length of each map is determined by the ensemble

"

 boxes may be filled-in for durational reference [" = seconds]; a timer may be used

collectively pause between maps

choose a colour and its corresponding rhythmic grouping

each colour is represented by at least one performer

Colour	Rhythmic Grouping	Name of Performer(s)
WHITE	of one continual sustained sound	
BLUE	of 1 transient*	
GREEN	of 2 and/or 3 transients*	
YELLOW	of 4, and/or 5, and/or 6 transients*	
ORANGE	of 7 and/or 8 transients*	
RED	of 9 and/or 10 transients*	

*transient = the onset of a sound; also known as the "attack"

white colour instructions:

sustain sound for the duration of the map

blue, green, yellow, orange, and red colour instructions:

choose two sounds (sound 1 and sound 2)

create rhythmic groupings for sound 1 and sound 2 using specified transient(s)

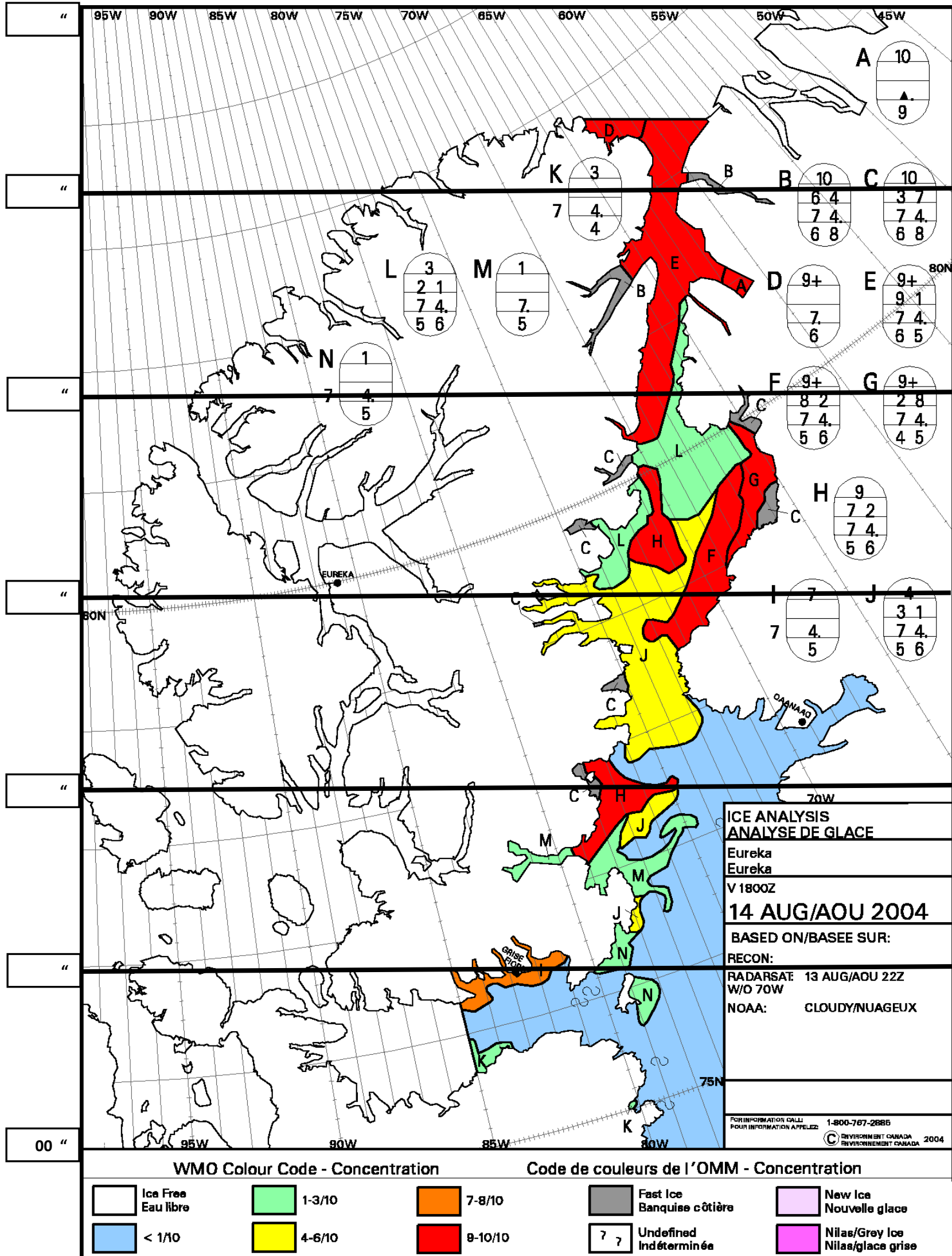
performers may choose their own pulse

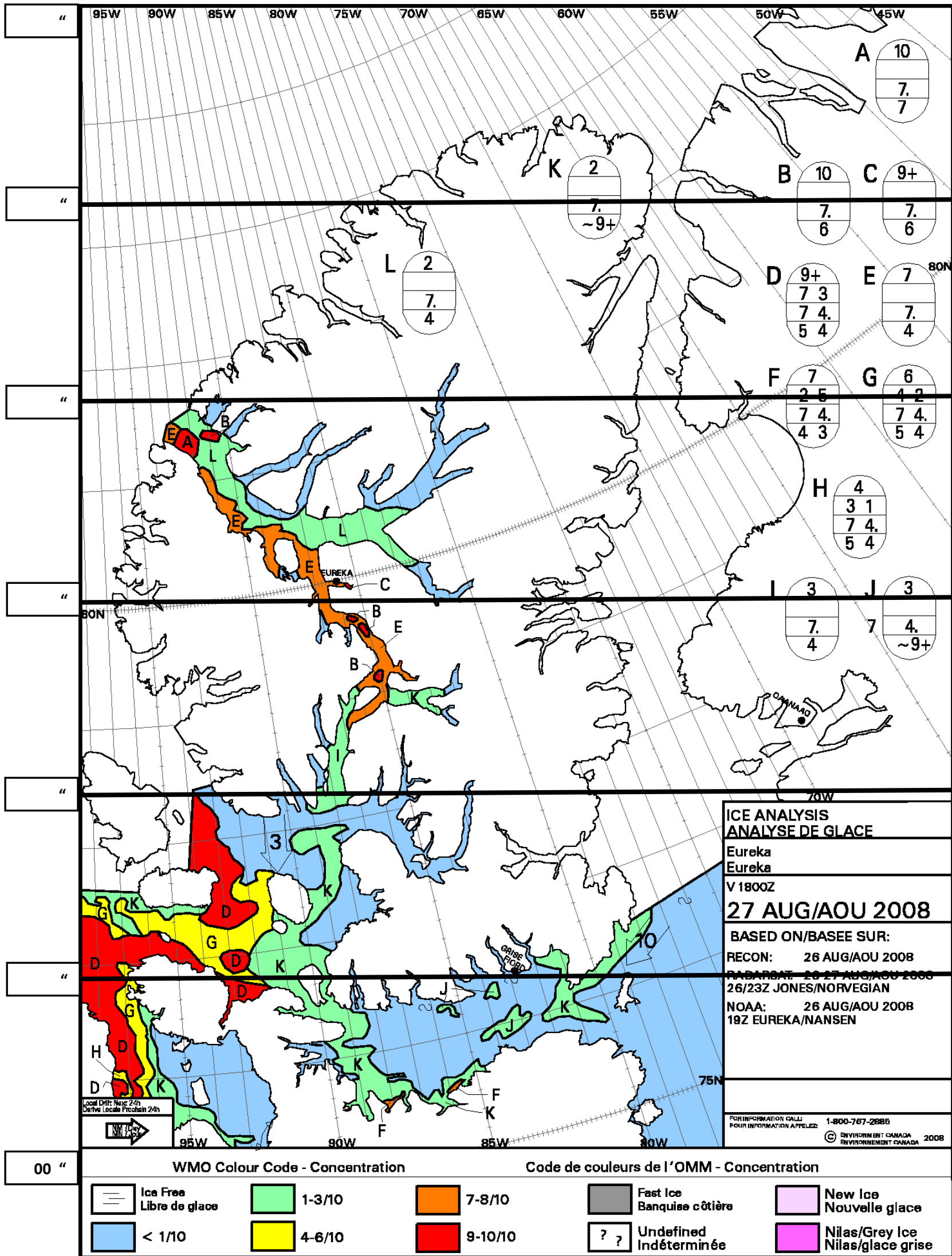
when corresponding colour is passed through on the map:

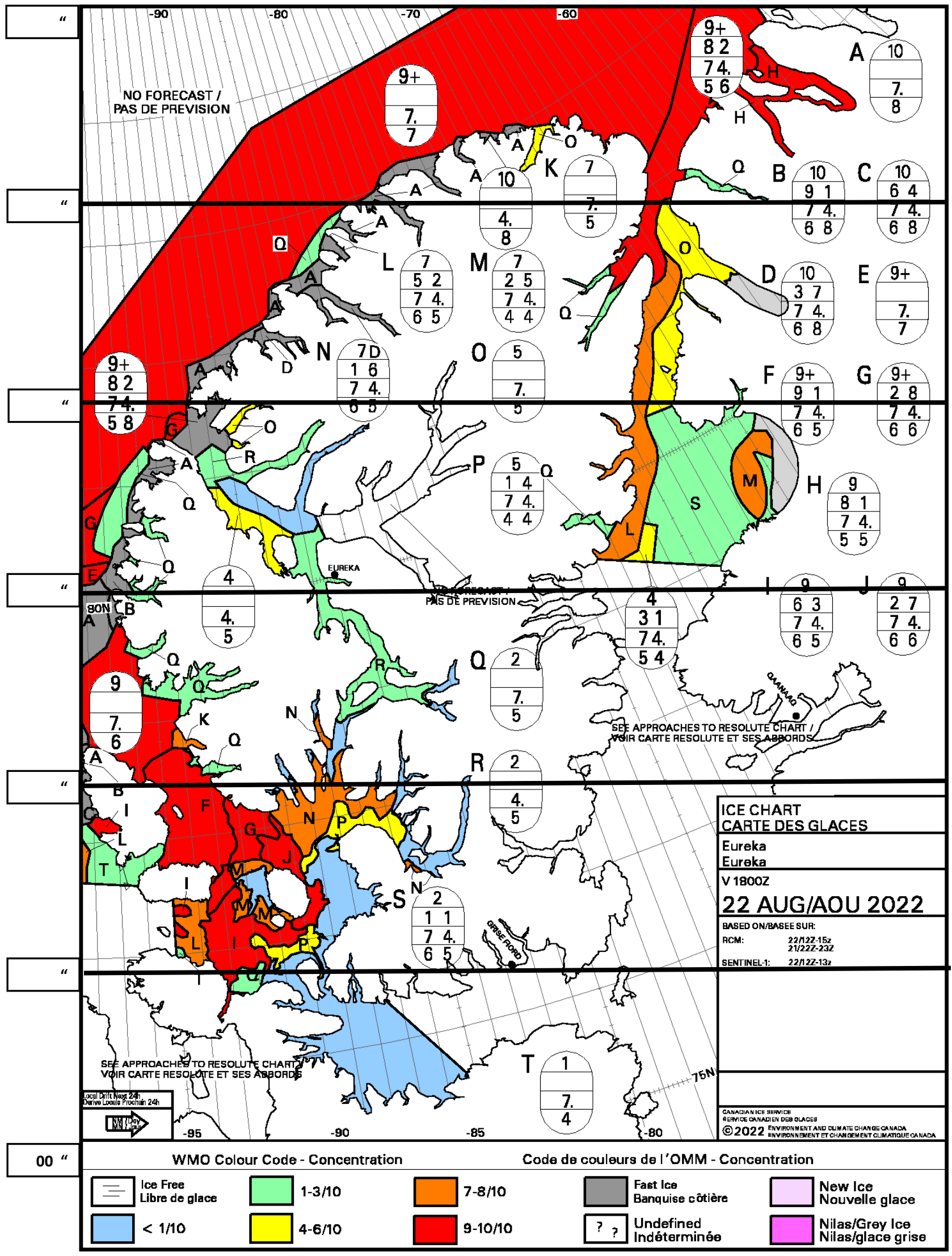
~sound 1 plays for a full rhythmic grouping followed by sound 2 for another full rhythmic grouping (sounds 1 and 2 do not overlap)

~repeat this pattern as long as the corresponding colour is visible

~vary sound characteristics to reflect contours of the colour







biocontamination

“Chemical pollutants transported via the atmosphere, oceans and rivers are deposited in Arctic ecosystems, where they bioaccumulate in organisms and biomagnify through food webs.” 🍃

Quotation taken from the 2018 AMAP (Arctic Monitoring and Assessment Programme) document titled: Biological Effects of Contaminants on Arctic Wildlife and Fish: Summary for Policy Makers. Accessed November 16, 2022: <https://www.amap.no/documents/download/3297/inline>

for five or more pitched instruments

instructions:

X = number of performers

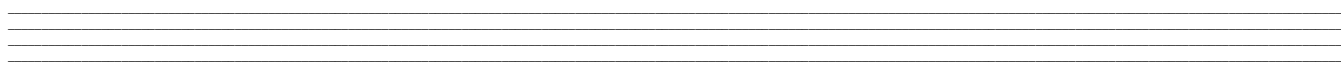
collectively create a row of X pitches

mutually determine pulse, length, dynamic, and rhythm of pitches

follow the steps on score in a continuous repeating pattern without stopping

performers to stand/position in a pyramid shape as shown in diagram below; platforms optional

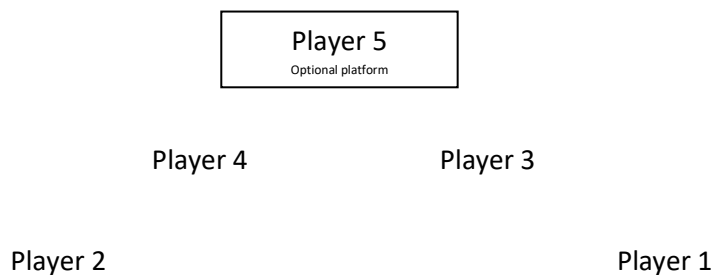
(row of pitches may be written on the staff below or on separate staff paper)



score:

1. repeat the row of pitches X times, unison
2. player 1 contaminates* one pitch and repeats this pattern; others continue original pattern
3. player 2 contaminates two pitches and repeats this pattern; player 1 repeats their altered pattern and all others continue original pattern
4. player 3 contaminates three pitches and repeats this pattern; player 1 and 2 repeat their altered pattern, all others continue original pattern
5. player 4 contaminates four pitches and repeats this pattern; player 1, 2, and 3 repeat their altered pattern, all others continue original pattern
6. player 5 contaminates five pitches and repeats this pattern; player 1, 2, 3, and 4 repeat their altered pattern
7. continue pattern until all players have altered their pattern then...
8. all players repeat altered patterns X times while gradually becoming louder, more dense, and chaotic until the last note

*play a different note



migration

for cell phones and headphones

(no instruments)

make movement inaudible

begin together

changing climate

changing sea ice

shipping traffic

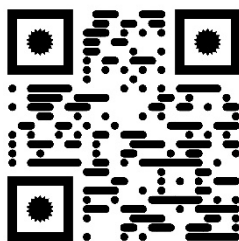
human noise

affect

migration patterns

of

narwhals



isostatic

u
o
b n
e d
r

for prepared trampoline,
one movement artist,
and one or more instruments (and objects)

performance notes:

the trampoline represents the lithosphere

the movement artist represents the glaciers that melt, move, and add weight or pressure to the lithosphere

the objects represent the mountains, valleys, or coastal landscapes that shift, form, adapt, and continually react to glacial movement

lithosphere = score

prior to performance:

prepare lithosphere by attaching sound-objects to springs and frame but not on surface
(prepared objects must be safe for human interaction)

percussive, preowned, recycled, borrowed, or found materials are encouraged

instructions:

the movement artist begins the piece by activating the lithosphere

instrumentalists choose one object (safe for human interaction on trampoline) and one instrument

at a desired time, instrumentalists place their object on the lithosphere

the movement artist interacts with the objects placed on the lithosphere

instrumentalists improvise sound on their instrument informed by their object's movement on the lithosphere

the movement artist maintains contact with the surface of the lithosphere for duration of piece

instrumentalists may be stationary or may move around perimeter of lithosphere

the piece ends when the movement artist stops moving

the piece may be performed outdoors

open duration

lines of weakness

SAM WILSON FLETCHER was born in Lewisham, London and trained as a scientist at Oxford and Harvard.

Recent publications include New Adjacent Possible Empty Niche (Veer2), Six Poems (Earthbound Poetry Series, Vol. 2), Dark Ecology (anthology: 100 Poems to Save the Earth, Seren Press) and Maybe This Is About Grief (Magma).

Recent artists' residencies include an Atlantic crossing and expeditions to Antarctica and the Canadian Arctic & Greenland. Text, photographs, drawings, collage, film, field recordings and icemelt samples gathered during these residencies together form the basis of forthcoming books, exhibitions and performances.

Great sloping sheens,
 runneled down their
 lines of weakness. Blue scars:
 cracks in the glacier
 that filled up with rain that froze blue.

The icebergs all
 grounded on bedrock, or
 moraine: indicated by
 the wavecut notches
 at the waterline.

A sky of bruised browns
 and purples against
 which the white and synthetic
 and starkly outlined. blue bergs stand clean
 Rock-hard and glazed with melt.

The irregular glasslike
 broken face
 of a distant berg sequined with light.

Smooth bergs and
 fractious, dirty bergs

oranged with sediment:
 dust ground off the
 continental landmass.
 Topsides ragged and
 ice-bouldered and
 chossy. Others smoothed
 or waved: likely
 flipped in the past.
 (Bergs grow slowly top-
 heavy, lose their
 footing,
 turn over like
 seabeasts, green water
 streaming off.)

Cooling off. An
 iron-grey sea, smaller
 bergs. The far horizon
 lit up bright with
 points of light. A bird
 in outline white as the
 ice. Ice weathered like a
 lung.

Sheer-sided bergs with
 sloping tops, bergs
 like dishes, lenticular
 clouds. All gashed like some
 mad spirit dragged its
 sled that way.

open instrumentation
open duration
for three or more performers

materials:

ice block (10lb min/4.5L)	wedge	mallet or hammer	table
black felt pen/marker	clear tape	towel	foamboard
safety goggles	fractures*	transparency paper*	gloves

*provided

1 person to perform on the ice block with wedge, safety goggles and mallet or hammer
1 or more person(s) to perform a sustained/drone sound
1 or more person(s) to perform on instruments

score:

collectively choose three of the iceberg photos provided in appendix A
trace the top profile of the icebergs with a black felt pen/marker onto transparency paper
tape transparencies to the foamboard, connecting iceberg profiles to create one uninterrupted line
the foamboard is the score
choose where to place the "fracture pieces" on the iceberg profile line and tape in place



= fracture pieces

instructions:

the overall sound is to be reflective, reverent, warm and expressive, with moments of disruption

instrument performers individually choose one sentence from the right-hand column of the text and create/repeat/build a musical idea, reacting to the chosen text emotionally

the sustained/drone performer(s) provide an introduction; the remaining performers then enter together and move simultaneously through the score

when a fracture is encountered on the line (cued):

- the ice block is struck with the wedge and mallet
- the sustained/drone performer(s) create a sudden/violent sound event, then create a new sustained/droning sound
- other performers create an emotion-led sound response and then resume the musical idea inspired by their chosen sentence

the line may be repeated as many times as desired

the piece ends when the wedge has split the ice block

katabatic winds

for three or more performers,
wind machines, and eolian objects

preparations:

create eolian objects (fixed or moving) such as mobiles or wind chimes from recycled, borrowed, used, or found materials

eolian objects must incorporate all photos found in appendix B

safely place or suspend the eolian objects throughout the performance space

set up as many wind machines as desired¹ in the performance space

connect wind machine power cables into one power bar at the front of the space

place the sign "press here" facing downwards near the power bar²

performance instructions:

performers begin on stage in an organized formation then proceed to designated area

performer one silently presents the "press here" sign to the audience and places it next to the main button; they then sit down in the audience

two or more performers may situate behind a wind machine and operate the direction and speed of air flow once switched on, or they may sit in the audience

an audience member must press the button to begin the piece

to end the piece, an audience member may turn off the button, or performer one will turn off the button and sit back in the audience

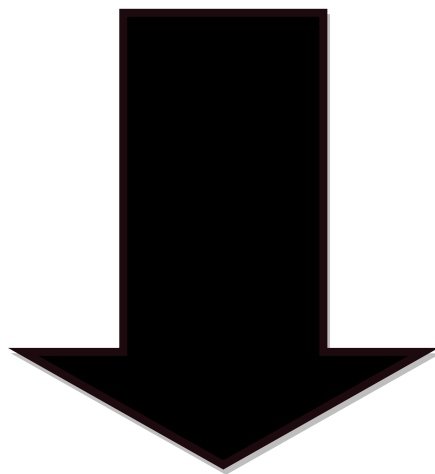
this piece is recommended to be performed last in the collection

¹ it is recommended to hide the wind machines from the audience by covering them with a lightweight fabric or foam board barrier that is light enough to blow away when the machines are powered on

² a large switch or button could be used rather than the power bar switch itself; it is important that the audience does not see the "press here" sign prior to this piece

(print on cardstock and tent fold)

**PRESS
HERE**



Six Arctic Experiments Appendix A

[lines of weakness]







































































Six Arctic Experiments Appendix B

[katabatic winds]























































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Appendix: Accompanying Media

This document summarizes the performance information for the audio and media in the thesis.

Title of Piece	Performance Information	Performers
Twenty-Six Punctographic Preludes	Graduate Composition Recital December 14, 2022, 7:00pm Convocation Hall University of Alberta Edmonton, Alberta	The Edmonton Saxophone Quartet: Soprano Saxophone: Allison Balcetis Alto Saxophone: Kendra Heslip Tenor Saxophone: Charles Stolte Bari/Bass Saxophone: Ben Whittier Audio recording by Russel Baker
Link to Audio of <i>Twenty-Six Punctographic Preludes</i>		
the mountains rend themselves apart	Something Old, Something New, Something Borrowed, Something Blue Friday June 3, 2022 7:30pm Convocation Hall University of Alberta Edmonton, Alberta	Edmonton Winds Ensemble Directed by Raymond Baril. Audio recording by Mike Malone
Link to Audio of the <i>mountains rend themselves apart</i>		
biocontamination <i>from Six Arctic Experiments</i>	Graduate Composition Recital 7:30pm December 15, 2022 Convocation Hall University of Alberta Edmonton, Alberta	Flute - Shelley Younge Clarinet - Don Ross Violin - James Cockell Cello - Conrad Sobieraj Piano - Maria Protodykonova Conductor – Dr. Andriy Talpash Audio recording by Russel Baker
Link to audio of <i>biocontamination</i>		
concentration <i>from Six Arctic Experiments</i>	Graduate Composition Recital 7:30pm December 15, 2022 Convocation Hall University of Alberta Edmonton, Alberta	Flute - Shelley Younge Clarinet - Don Ross Violin - James Cockell Cello - Conrad Sobieraj Piano - Maria Protodykonova Synthesizer – Cole Dorchester Conductor – Dr. Andriy Talpash Audio recording by Russel Baker
Link to audio of <i>concentration</i>		
lines of weakness <i>from Six Arctic Experiments</i>	Graduate Composition Recital 7:30pm December 15, 2022 Convocation Hall University of Alberta Edmonton, Alberta	Flute - Shelley Younge Clarinet - Don Ross Violin - James Cockell Cello - Conrad Sobieraj Piano - Maria Protodykonova Conductor – Dr. Andriy Talpash Audio recording by Russel Baker
Link to audio of <i>lines of weakness</i>		