

Strata Tempora – for Soundings UBC 2020

Instrumentation: Carillon (two-manual keyboard), eight brass players.

Score Notes:

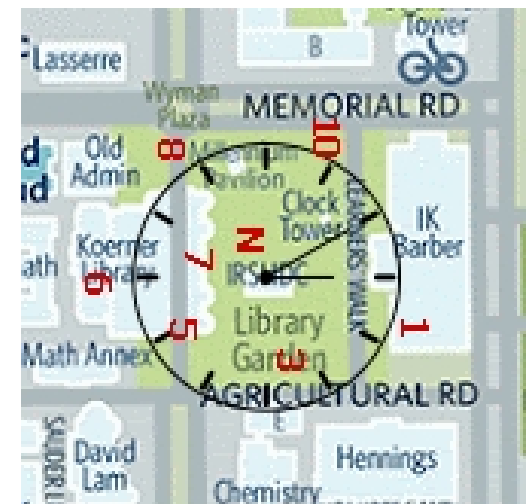
I wanted to present the physical elements of Olivia Whetung's *Strata* using sound. The slow-changing harmonies are meant to represent the colour blocks that the beading creates. Fugue subjects from Bach's Well-Tempered Clavier are presented out of their tonal context to symbolize the beads themselves. The opening Cs are to represent the six loops that hold *Strata* to the nail in the wall. The carillon drops out before the end, symbolizing the threads that continue to run even after all the beads have been strung.

For most of the piece, three sets of time coexist: the carillon playing in time, the ensemble interjecting in time, and the ensemble playing in unmetered time. For the players, the part they play is not dependant on their instrument, but rather, their position around the carillon. I wanted to deconstruct elements of the score through the juxtaposition of metered and unmetered time. Metered time and aleatoric elements coexist until the end of the piece, where the ensemble's fluidity emerges to the foreground.

The parts are distributed not by instrument type but based on the players' position around the region where the UBC Carillon is located. All brass players play off the full score, which is available in multiple transpositions.

In the score, the players are referred to as follows:

- I - IKB (centre left)
- III - Library Garden region
- V - Region in front of Koerner Library (Main Mall)
- VI - President's Balcony
- VII - Balcony by IRSHDC
- VIII - Region by Millennium Pavilion (Memorial Rd.)
- X - Behind UBC Carillon (somewhere between the Carillon and Memorial Rd.)
- N - Centre of Learner's Pavilion



Score layout and timing:

The Carillon player will have access to their part only. The brass players will have the carillon part notated in full, usually at the top of every page. The piece is to be played with a stopwatch. The music is to begin after a full minute has passed on the stopwatch. Because the players will be spread out over a large area, I suggest using a synchronized stopwatch, such as chronograph.io, on smartphones or similar devices. Make sure that the screen display is set so that the screen stays awake for the entire piece. Timestamps are given at the start of new systems or following textural changes and should be used to align larger gestures together.

Although the carillon always plays in time, for the others, there are two main types of textures in the piece: in time and senza misura. There are moments where these textures are happening simultaneously. The score employs cutaway staves to visually organize material and make it easier to follow. The stopwatch should help with alignment, but it is okay if there is some deviation with so much unmeasured material. So long as gestures and entrances are more or less aligned, that is good enough. Try to align the gestures with the carillon part as much as possible, but do not be too concerned with ensemble unity. Although there are metre changes in the piece, each bar after the opening Cs in the carillon is 3 seconds long. From section b to the second last page, each page has 6 bars and is 18 seconds long.

Unwritten/implicit conventions:

- For any melodic material that a player is assigned, the player may choose to transpose that unit up or down one octave to better fit their instrument's range.
- In the senza misura section, play the cells unmeasured. Until section F, for notes with and without beams, follow sequence of notes exactly, e.g. (1:27) play E, F sharp, and B in that order.
- In the Senza misura section, a player may take breaks from playing to breathe, but the rest must not last longer than 3 seconds.
- The ensemble is expected to jump between their in time melodic fragments and the senza misura texture using the carillon part and/or the timestamps as reference.
- Melody fragments should be played in time relative to the Carillon part. Any part can read from the Melody staves, so players should note where their fragment is in context to the other fragments and to the carillon part.
- The ensemble is expected to jump between their in time melodic fragments and the senza misura texture using the carillon part and/or the timestamps as reference.

- Melody fragments should be played in time relative to the Carillon part. Any part can read from the Melody staves, so players should note where their fragment is in context to the other fragments and to the carillon part.

- The UBC carillon manuals can be set to any timbre setting that allows for the full range of the keyboards to be used. Timbre settings will be left to the player's discretion, but one timbre per manual (two timbres together) would be preferable.

Description of notation (in order of appearance):

1:27 – the eighth notes with the slash: play those three notes in that order moderately fast to very fast. The speed of the notes can fluctuate within that range.

1:27 – Empty notehead without stems: play those notes in that order at a moderate to slow speed. The speed of the notes can fluctuate within that range.

The bold line that is first seen in the third system and onwards indicates that the notated cell should be repeated.

1:45 – Dyads and chords in the ensemble: the player can choose whichever note they want to play within the chord. "div." is notated above chord as a reminder.

1:45 – Notes with ties and no second note: Hold for one breath. The end of the note is meant to be uncoordinated among the ensemble. "one breath" is notated above note as a reminder.

TACET is written after a senza misura section or phrase ends.

2:03 – Filled noteheads without stems: play those notes in that order at whatever speed. Notes should be articulated

2:03 – Dynamics in the box with a dash: play the cell within that dynamic range. The volume of the notes can fluctuate within that range.

3:00 – Eighth notes with breath marks: play with even rhythm at any moderate speed. The speed of the notes must not fluctuate during the gesture. Notes should be spaced and articulated.

3:21 – Dynamics in a box with a right arrow: start at the first dynamic level and end at the second dynamic level around XX seconds later.

3:54 – One-line staff with rhythms and key indication: The player should improvise a melodic fragment based on that rhythm and have the specified note be prominent in that fragment (does not have to be in that "key" per se).

5:00 – Black bar chord: play whatever note covering that range with any accidental.

5:39 – Filled noteheads without stems with a dotted slur: play those notes while playing other notes between them – think outlining a melody. Consistently return to notated notes but play additional notes in between.

After 5:39 – Eighth notes with slur and "like the carillon": play with even rhythm at any moderate speed. The gesture is meant to be reminiscent of the carillon motif. The speed of the notes must not fluctuate during the gesture.

Summary of sectional divisions:

Sections are divided by rehearsal markings, with double bar lines indicating notable changes in harmony or form.

Section A is the carillon's shining moment and sets the tone for the piece. The ensemble accompanies with two ostinati that end with a sustained chord.

Section B is a harmonic transition from the chord in section A to section C. The ensemble plays through the harmonic progression *senza misura*, occasionally playing a melodic fragment in time with the carillon. The in-time melodic fragments are notated in the top three staves, and labels indicate which player plays what. The fragments are fugue subjects from Bach's Well-Tempered Clavier.

Section C is a sort of reprise of section A with the new harmony. The ensemble has more presence here than in section A.

Section D is a sort of reprise of section B. There is more flexibility with pitch material in the melodic fragments, which ends with all players playing in time with the carillon.

Section E is a combination of the previous four sections.

Section F is the end of the piece for the carillon, but the other players continue for another minute. This section is highly uncoordinated but provides the harmonic resolution of the piece. Do not align quasi in time with beats or bar lines, just with the timestamp at the beginning of the systems. The "what time?" section is meant to be wholly unmetered, and the piece ends with no bar line.

Original score in C

Strata Tempora

Soundings UBC 2020

Athena Loredo
based on work by Olivia Whetung

1:00 $\text{♩} = 60$

1:06

Upper Man.
UBC Carillon
Lower Man.

f

section a

1:12 $\text{♩} = 80$

UBC Car.

mf *f*

1:27

UBC Car.

mp

SENZA MISURA

1:27

N, V, VII, X
I, III, VI, VII

pp *p* *mp*

pp *p* *mp*

1:39 1:45

UBC
Car.

ff

1:39 1:45

N, V,
VII, X

p

div. one breath TACET

mf *ppp*

I, III,
VI, VII

p

div. one breath TACET

mf *ppp*

1:51

UBC
Car.

mp *f*

section b

2:03

♩ = 80 (♩. = ♩)

UBC
Car.

Musical score for UBC Car. in 4/4 time. The score consists of two staves. The first staff (treble clef) begins with a whole note chord of G#4 and C5. The second staff (bass clef) begins with a whole note chord of G#2 and C3. The first measure is marked *mf*. The second measure contains a whole note chord of G#3 and C4. The third measure contains a whole note chord of G#4 and C5. The fourth measure contains a whole note chord of G#4 and C5. The fifth measure contains a whole note chord of G#4 and C5. The sixth measure contains a whole note chord of G#4 and C5. The seventh measure contains a whole note chord of G#4 and C5. The eighth measure contains a whole note chord of G#4 and C5. The ninth measure contains a whole note chord of G#4 and C5. The tenth measure contains a whole note chord of G#4 and C5. The eleventh measure contains a whole note chord of G#4 and C5. The twelfth measure contains a whole note chord of G#4 and C5. The thirteenth measure contains a whole note chord of G#4 and C5. The fourteenth measure contains a whole note chord of G#4 and C5. The fifteenth measure contains a whole note chord of G#4 and C5. The sixteenth measure contains a whole note chord of G#4 and C5. The seventeenth measure contains a whole note chord of G#4 and C5. The eighteenth measure contains a whole note chord of G#4 and C5. The nineteenth measure contains a whole note chord of G#4 and C5. The twentieth measure contains a whole note chord of G#4 and C5. The score is marked *mp* from the fifth measure onwards.

IN TIME (align approx.)

Mel.

Mel.

Mel.

VIII

I

SENZA MISURA

2:03

I & V

p-f

N & VI

p-f

III & VIII

p-f

VII & X

p-f

2:21

UBC
Car.

mf mp p

Mel. X

ff

Mel. N

ff

2:21

I & V

N & VI

III &
VIII

VII
& X

2:39

UBC
Car.

Musical notation for UBC Car. showing a piano accompaniment with chords and a fermata.

Mel. **V**
ff

Mel. **V**
ff

Mel. **III**
ff

Mel. **III**
ff

Mel. **VI**
ff

Mel. **VI**
ff

Mel.

Mel.

Mel. **VII**
ff

Mel. **VII**
ff

2:39

I & V

Musical notation for I & V showing a piano accompaniment with chords.

N & VI

Musical notation for N & VI showing a piano accompaniment with chords.

III &
VIII

Musical notation for III & VIII showing a piano accompaniment with chords.

VII
& X

Musical notation for VII & X showing a piano accompaniment with chords.

section c

3:12 ♩. = 80 (♩ = ♩.)

2:57

UBC
Car.

Musical score for UBC Car. consisting of two staves. The upper staff is in treble clef and the lower in bass clef. The music features a series of chords and melodic lines. Dynamics include *p* and *mp*. There are hairpins indicating volume changes. A time signature change to 12/8 is visible at the end of the section.

p *mp*

Mel.

Mel. musical staff showing a short melodic phrase in bass clef.

SEMPRE SENZA MISURA

3:12

2:57

I & V

N & VI

III &
VIII

VII
& X

Musical score for four staves: I & V, N & VI, III & VIII, and VII & X. The music is in treble clef for the first two and bass clef for the last two. It features a series of chords and melodic lines. Dynamics include *mp* and *fff*. Performance instructions include "div." (divisi) and "one breath". A time signature change to 3:12 is visible at the end of the section.

3:15

UBC
Car.

Main musical score for UBC Car. The score consists of a piano (right) staff and a bass (left) staff. The piano staff contains a melodic line with eighth notes and some chords. The bass staff contains a bass line with chords and some melodic fragments. Dynamic markings include *f* (forte) and *mf* (mezzo-forte).

I *ff* → *pp* (~21 sec)

III *ff* → *pp* (~21 sec)

V *ff* → *pp* (~21 sec)

VI *ff* → *pp* (~21 sec)

VII *ff* → *pp* (~21 sec)

VIII *ff* → *pp* (~21 sec)

X *ff* → *pp* (~18 sec)

N *ff* → *pp* (~18 sec)

3:33

UBC
Car.

Musical score for UBC Car. The score consists of two staves. The upper staff is in treble clef and the lower staff is in bass clef. The key signature has two flats (B-flat and E-flat). The time signature is 3/8. The score begins with a piano introduction marked *mp* (mezzo-piano) and *f* (forte). The introduction includes a melodic line in the upper staff and a harmonic accompaniment in the lower staff. The score ends with a double bar line.

TACET

TACET

TACET

TACET

TACET

TACET

div. one breath

Musical notation for instrument X. It shows a bass clef staff with a dynamic change from *pp* (pianissimo) to *mp* (mezzo-piano) indicated by a wedge-shaped hairpin. The notation includes a dotted quarter note and an eighth note.

pp < *mp*
div. one breath

Musical notation for instrument N. It shows a bass clef staff with a dynamic change from *pp* (pianissimo) to *mp* (mezzo-piano) indicated by a wedge-shaped hairpin. The notation includes a dotted quarter note and an eighth note.

pp < *mp*

section d ♩ = 80 (♩. = ♩)

3:51

UBC
Car.

UBC Car. musical notation in 4/4 time. The score consists of two staves. The upper staff has a treble clef and contains notes G^b2, B^b2, and D3. The lower staff has a bass clef and contains notes G^b2, B^b2, and D3. The dynamic marking *mf* is present at the beginning.

IN TIME (align approx.)

Mel.

Mel. N in D musical notation. A box labeled 'N' is above the staff. The notation shows a sequence of notes: G^b4, A4, B4, C5, D5, E5, F5, G5, A5, B5, C6, D6. The dynamic marking *ff* is below the staff.

Mel. V musical notation. A box labeled 'V' is above the staff. The notation shows notes G^b4 and B^b4. The dynamic marking *ff* is below the staff.

Mel.

Mel. I in E musical notation. A box labeled 'I' is above the staff. The notation shows notes E4, G4, A4, B4, C5, D5, E5. The dynamic marking *ff* is below the staff.

Mel.

Mel. X in F musical notation. A box labeled 'X' is above the staff. The notation shows notes F3, A3, B3, C4, D4, E4, F4. The dynamic marking *ff* is below the staff.

SENZA MISURA

3:51

I & V

I & V musical notation. The staff shows notes G^b4, B^b4, D5, G^b5, B^b5, D6. The dynamic marking *mp-ff* is in a box below the staff.

N & VI

N & VI musical notation. The staff shows notes G^b4, B^b4, D5, G^b5, B^b5, D6. The dynamic marking *mp-ff* is in a box below the staff.

III & VIII

III & VIII musical notation. The staff shows notes G^b4, B^b4, D5, G^b5, B^b5, D6. The dynamic marking *mp-ff* is in a box below the staff.

VII & X

VII & X musical notation. The staff shows notes G^b4, B^b4, D5, G^b5, B^b5, D6. The dynamic marking *mp-ff* is in a box below the staff.

4:09

UBC
Car.

UBC Car. staff with six measures of chords. The notes are:
 Measure 1: C4, G4, C5
 Measure 2: Bb3, C4, G4
 Measure 3: C4, G4, C5
 Measure 4: Bb3, C4, G4
 Measure 5: C4, G4, C5
 Measure 6: Bb3, C4, G4

Mel.

Mel. staff, first three measures:
 Measure 1: C4, G4
 Measure 2: C4, G4
 Measure 3: Bb3, C4

Mel. staff, measures 4-6:
 Measure 4: Rest, G4
 Measure 5: A4, Bb4
 Measure 6: A4, G4, F#4, E4
 Dynamics: **ff**
 Annotation: **N** in G

VI in A

Mel.

Mel. staff, measures 7-10:
 Measure 7: Rest, G4
 Measure 8: A4, Bb4
 Measure 9: A4, G4, F#4, E4
 Measure 10: A4, G4, F#4, E4

VI

ff

Mel.

Mel. staff, measures 11-14:
 Measure 11: Rest, G4
 Measure 12: A4, Bb4
 Measure 13: A4, G4, F#4, E4
 Measure 14: A4, G4, F#4, E4

ff

VII

Mel. staff, measure 15:
 Measure 15: Rest, G4, A4, Bb4
 Dynamics: **f**

4:09

I & V

I & V staff, measures 11-14:
 Measure 11: Bb3, C4
 Measure 12: Bb3, C4
 Measure 13: Bb3, C4
 Measure 14: Bb3, C4

N & VI

N & VI staff, measures 11-14:
 Measure 11: Bb3, C4
 Measure 12: Bb3, C4
 Measure 13: Bb3, C4
 Measure 14: Bb3, C4

III &
VIII

III & VIII staff, measures 11-14:
 Measure 11: Bb3, C4
 Measure 12: Bb3, C4
 Measure 13: Bb3, C4
 Measure 14: Bb3, C4

VII
& X

VII & X staff, measures 11-14:
 Measure 11: Bb3, C4
 Measure 12: Bb3, C4
 Measure 13: Bb3, C4
 Measure 14: Bb3, C4

section e

4:27 4:33 4:39

UBC
Car.

ff *sub. p*

Still IN TIME (align approx.)

Mel.

N one breath

ff

Mel.

III one breath

f *ff* one breath

Mel.

ff one breath

4:27 4:33 4:39

I & V one breath

sub. p *ff*

N & VI one breath

sub. p *ff*

III & VIII one breath

sub. p *ff*

VII & X one breath

sub. p *ff*

TACET

4:45

UBC
Car.

UBC Car. musical score showing two staves with notes and rests.

pp

IN TIME (align approx.)

Mel.

Mel. musical score with a 'V' box above the first measure.

p

N

Mel.

mp

Mel. musical score with a 'N' box above the first measure.

SENZA MISURA

4:45

I & V

Musical score for I & V staff.

ppp → *mp* (~14 sec)

Musical score for I & V staff ending with accents.

mp → *fff* (~16 sec)

N & VI

Musical score for N & VI staff.

ppp → *mp* (~14 sec)

Musical score for N & VI staff ending with accents.

mp → *fff* (~16 sec)

III &
VIII

Musical score for III & VIII staff.

ppp → *mp* (~14 sec)

Musical score for III & VIII staff ending with accents.

mp → *fff* (~16 sec)

VII
& X

Musical score for VII & X staff.

ppp → *mp* (~14 sec)

Musical score for VII & X staff ending with accents.

mp → *fff* (~16 sec)

5:03 ♩. = 80 (♩=♩.)

UBC
Car.

The musical score for 'UBC Car.' consists of two staves. The upper staff is in treble clef with a key signature of one sharp (F#) and a 12/8 time signature. It contains a melodic line of eighth notes, starting with a half rest followed by a dotted quarter note, and continuing with eighth notes. The lower staff is in bass clef with a 12/8 time signature and contains a bass line of dotted half notes. The piece begins with a *cresc.* (crescendo) marking and ends with a *f* (forte) marking.

5:03

I & V

N & VI

III &
VIII

VII
& X

This section contains four staves of music, each with a dynamic marking of *fff* (fortississimo). The first staff (I & V) is in treble clef and shows a melodic line with a strong accent. The second staff (N & VI) is also in treble clef. The third staff (III & VIII) is in bass clef. The fourth staff (VII & X) is also in bass clef. Each staff contains a few notes with a strong accent and a *fff* dynamic marking.

5:21

section f
5:27 ♩ = 80 (♩. = ♩)

TACET

UBC
Car.

I

mf

III

mf

5:27

I & V
f


N & VI
f

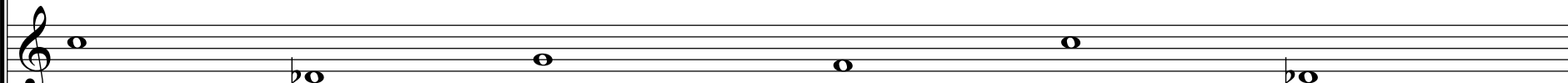
III & VIII
f


VII & X
f


QUASI IN TIME

5:39

I 

III 

V 

VI 

SENZA MISURA

5:39

VII 

VIII 

X 

N 

pp-ff like the carillon

pp-ff

pp-ff

pp-ff

like the carillon

5:57

The musical score consists of eight staves, labeled I through N. Staves I, III, V, and VI are full staves with clefs and dynamics. Staves VII, VIII, X, and N contain partial staves with specific musical phrases. The score includes various musical notations such as notes, rests, slurs, and dynamics.

Staff I: Treble clef, key signature of one flat (B-flat), dynamic *mp*. Notes: G4 (quarter), B-flat4 (quarter), G4 (quarter), E4 (quarter), G4 (quarter).

Staff III: Treble clef, dynamic *mp*. Notes: G4 (quarter), B-flat4 (quarter), G4 (quarter), B-flat4 (quarter), B-flat4 (quarter), B-flat4 (quarter).

Staff V: Bass clef, dynamic *mf*. Notes: G3 (quarter), G3 (quarter), A-sharp3 (quarter), G3 (quarter), A-sharp3 (quarter), G3 (quarter), A4 (quarter).

Staff VI: Treble clef, key signature of one sharp (F-sharp), dynamic *mf*. Notes: G4 (quarter), G4 (quarter), E4 (quarter), G4 (quarter), E4 (quarter), G4 (quarter), F-sharp4 (quarter).

Staff VII: Treble clef. First phrase: G4 (quarter), F4 (quarter), E4 (quarter) with a slur. Second phrase: F-sharp4 (quarter), G4 (quarter), A4 (quarter), G4 (quarter) with a slur. The text "like the carillon" is written above the second phrase.

Staff VIII: Bass clef. Notes: G3 (quarter), F3 (quarter), E3 (quarter) with a slur.

Staff X: Bass clef. Notes: G3 (quarter), F3 (quarter), E3 (quarter), D3 (quarter) with a slur.

Staff N: Bass clef. Notes: G3 (quarter), F3 (quarter), E3 (quarter) with a slur.

WHAT TIME?

ca. 7:00

The musical score consists of nine staves, each representing a different instrument. Each staff begins with a dynamic marking box containing the sequence *ff* → *pp* → *mf*. The notes are half notes, and the first two staves (I and III) include a flat key signature. The right side of the score shows a continuation of the notes, each with a slur and the instruction "one breath". The dynamic marking *mf* is placed below each of these notes. The time signature "ca. 7:00" is repeated on the right side of the score.

I *ff* → *pp* → *mf* *mf* one breath

III *ff* → *pp* → *mf* *mf* one breath

V *ff* → *pp* → *mf* *mf* one breath ca. 7:00

VI *ff* → *pp* → *mf* *mf* one breath

VII *ff* → *pp* → *mf* *mf* one breath

VIII *ff* → *pp* → *mf* *mf* one breath

X *ff* → *pp* → *mf* *mf* one breath

N *ff* → *pp* → *mf* *mf* one breath