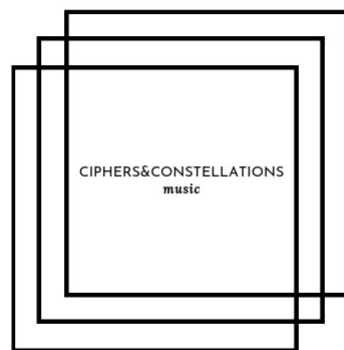


# **change is the only constant**

a sound poem for chamber orchestra  
(2019)

**Maya Miro Johnson**



## Program Notes

***change is the only constant*** was written in spring of 2019 for that year's Composers Workshop at the Cabrillo Festival of Contemporary Music. The piece explores the concept of expansion and contraction in sound, movement, and the natural laws and physical properties of the universe.

As a composer and creator, I am fascinated by movement and its connection to sound. Rather obviously, there is no sound that can be created without motion (sine waves being movement personified, our eardrums and cochlea thrumming and expanding/contracting upon receipt of sound), and no motion that can be entirely soundless (except for in the vacuum of space, perhaps). The backdrop of Santa Cruz and its incredible natural beauty partially inspired the extensive use of such concepts, as well as mathematical oddities like the Fibonacci sequence, among others, in the piece.

The piece is centered around a rather unusual percussion section, which includes Slinky, Singing Glasses, Flexatones, and Sound Hose (more child's toy than instrument), collectively serving to manifest the sonic principles of expansion and contraction explored in the piece visually. I sought to represent this idea singularly throughout the piece, and it personifies itself in many different ways.

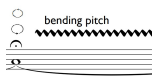
The piece is also about perspective and perhaps itself has one: that of a researcher who is coming to a realization about the nature of matter by examining different samples independently and gradually piecing their similarities together like a jigsaw puzzle.

No motif occurs the same way twice throughout the piece (just as no snowflake is exactly the same as another, no chemical sequence in a strand of DNA, no piece of art seen the same way twice), whether that variation occurs through orchestration, pitch, timbre, velocity, length, texture, quality, or even rhetorical intention. This is a tribute to the 5th century BCE Greek philosopher Heroclitus. I realized that his philosophy, with its *flux doctrine*, *unity of opposites*, and *material monism* (fancy words for the idea that opposites are fundamentally borne of the same material which endlessly recycles itself in constant change throughout all levels of the universe), actually mirrors my *musical* philosophy, with the latter's emphasis on unifying contrast of dichotomies. In this piece, I depict how change can be gradual or acute, beautiful or grotesque, transformative or destabilizing. Its nature (and nature's nature, for that matter) is to contain and enfold a glorious symphony of contradictions, cacophonous and ordered simultaneously.

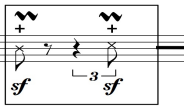
**Maya Miro Johnson**

June 3rd, 2019

## Performance Notes



**Water glasses:** these accoutrements need not be tuned specifically. They are most effective if a little under 3/4 full. If you choose to purposefully tune the water glasses, an  $A\flat$  is requested, as notated in the part.



A wavy line indicates creating a bend or glissando in the sound by holding the stem of the glass in one hand, placing the other hand's pointer finger on the rim of the glass, and slowly rotating both hands counterclockwise, allowing the water to dip towards the rim, thus creating a bend in the sound. If no wavy line is given, simply play a long tone.

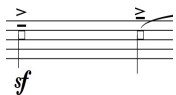
A short note value indicates tapping on the glass with the independent hand and shaking the glass slightly with the holding hand, causing a percussive wobble in the sound.

Percussion 4 can amplify the singing glass by placing it on a timpano tuned to an  $E\flat$ .

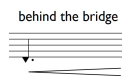


**Sound Hose:** a sound hose works by whirling a long tube in a vertically-oriented circle. It typically has four pitches (or "levels" of energy input). The faster the rotation, the higher the pitch. It follows the overtone series closely so that Level 1 should be an  $A\flat$  3rd partial, Level 2 an  $E\flat$ , Level 3 a C, and Level 4 a microtonally flattened  $G\flat$ .

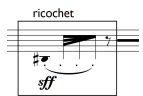
A small circumference should be cleared around the percussionist so as not to hit anyone or knock anything over



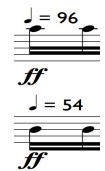
**Air Tone:** blowing air through the instrument without pitch. For double reed instruments, this includes removing your reed.



**Behind the bridge:** play on the area of string between the tailpiece and the bridge, as if playing normally.



**Ricochet in box notation:** throwing the bow down and allowing it to accelerate and decelerate at random. Repeat entirety of box, including rests. With growing intensity throughout the loop.



**Multitempo fermatas:** at measures 65 and 66, the conductor is simply to give the downbeat and wait an instructed number of seconds before giving the next measure's downbeat. Each player will play in their own given tempo (approximately). This should be a moment of joyful and manic organized chaos.



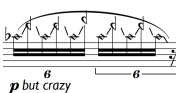
**Harp:** placing a long metal object such as a screwdriver in between the two strings, shake the hand wildly, bending the strings into colliding.



**Unpitched run:** a notation indicating a noise-based gesture upwards, indicated in each player's part as either key clicks, air tones, or tongue rams. An airy but percussive sound. With momentum and breathlessness.



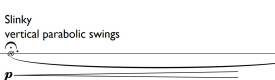
**Long glissando with left hand tremolo:** begin the glissando almost unnoticeably, then increase in speed and intensity (though not necessarily volume). A feathery and delicate yet almost unnerving texture, like quicksand. The conductor should treat these bars as fermatas and give downbeats and a slight pulse when the rhythm begins to shorten and move.



**Crowing reed:** remove the reed and blow into it, creating wild high-pitched glissandi within a 3rd, as if testing a new reed.



**Harmonics:** natural harmonics are notated with a diamond notehead and a string indication. Artificial harmonics are notated as per usual. The seventh partial and above on each string are naturally microtonal, so do not attempt to adjust the tuning.



**Slinky:** holding either end of the slinky two arm's lengths apart, begin to rotate the slinky in a conical circle so that it appears to be an oscillating parabola (or sin wave) to the audience. This effect is almost entirely a visual manifestation of the sonic concepts of expansion and contraction explored throughout the piece, though it does produce a minimal metallic "whooshing" sound.

**Instrumentation**

2 Flutes

2 Oboes

1 Clarinet in B $\flat$

1 Bass Clarinet in B $\flat$

2 Bassoons

2 Horns in F

1 Trumpet in C

1 Trombone

Timpani

Percussion 1: Vibraphone, Flexatone

Percussion 2: Sound Hose, Snare Drum, Flexatone

Percussion 3: Slinky, Snare Drum

Percussion 4: Singing Glass, Guiro, Tam-Tam

Harp

5 1st Violins

4 2nd Violins

3 Violas

3 Violoncellos

2 Double Basses

**Duration**

ca. 7 minutes

Premiered July 30th, 2019 by the Cabrillo Festival Orchestra and participants in the Cabrillo Festival Conductors' Workshop in Santa Cruz, California.



**A** ♩ = 60

**poco accel.** . . . . . **poco rit.** . . . . .

Fl. 1  
Fl. 2  
Ob. 1  
Ob. 2  
Cl. 1  
B. Cl.  
Bsn. 1  
Bsn. 2  
Hn. 1  
Hn. 2  
C Tpt. 1  
Tbn.  
B. Tbn.  
Timp.  
Vib.  
Perc. 3  
Perc. 3  
T.-t.  
Hp.  
Vln. 1.1  
Vln. 1.2  
Vln. 1.3  
Vln. 1.4  
Vln. 1.5  
Vln. 2.1  
Vln. 2.2  
Vln. 2.3  
Vln. 2.4  
Vla. 1  
Vla. 2  
Vla. 3  
Vc. 1  
Vc. 2  
Vc. 3  
Db. 1  
Db. 2

remove reed  
remove reed  
motor on  
pp l.v. poss.  
p l.v. poss.  
Slinky vertical parabolic swings  
p  
pp l.v.  
non vib.  
pp  
vib.  
accel.  
rit.  
ff  
pp  
IV  
V  
pp

pp calm  
3  
5  
3  
n

wavering in and out of harmonics with RH 1/2 pressure  
ppp

**B** | 1 2 3 4 5 6 | 7

Fl. 1: air tone, *ppp* thick and static

Fl. 2: air tone, *ppp* thick and static

Ob. 1: air tone, *ppp* thick and static

Ob. 2: air tone, *ppp* thick and static

Cl. 1: air tone, *ppp* thick and static

B. Cl.: air tone, *ppp* thick and static

Bsn. 1: air tone, *ppp* thick and static

Bsn. 2: air tone, *ppp* thick and static

Hn. 1: air tone, *ppp* thick and static

Hn. 2: air tone, *ppp* thick and static

C Tpt. 1: air tone, *ppp* thick and static

Tbn.: air tone, *ppp* thick and static

B. Tbn.: air tone, *ppp* thick and static

Timp.: *pppp* quasi n

Vib.: (silence)

Perc. 3: Sound Hose level 1 → level 2 → level 3 → level 2 → level 1. *n*, *mp*, *f*, *mp*. To S. D.

Slinky: (silence)

T.-t.: *pppp* quasi n

Hp.: (silence)

Vln. 1.1: *ppp* viscous, sempre glissando; free bowing. delicate and light; fragile but moth-bitten

Vln. 1.2: *ppp* viscous, sempre glissando; free bowing. delicate and light; fragile but moth-bitten

Vln. 1.3: *ppp* viscous, sempre glissando; free bowing. delicate and light; fragile but moth-bitten

Vln. 1.4: *ppp* viscous, sempre glissando; free bowing. delicate and light; fragile but moth-bitten

Vln. 1.5: *ppp* viscous, sempre glissando; free bowing. delicate and light; fragile but moth-bitten

Vln. 2.1: *ppp* viscous, sempre glissando; free bowing. delicate and light; fragile but moth-bitten

Vln. 2.2: *ppp* viscous, sempre glissando; free bowing. delicate and light; fragile but moth-bitten

Vln. 2.3: *ppp* viscous, sempre glissando; free bowing. delicate and light; fragile but moth-bitten

Vln. 2.4: *ppp* viscous, sempre glissando; free bowing. delicate and light; fragile but moth-bitten

Vla. 1: *ppp* viscous, sempre glissando; free bowing. delicate and light; fragile but moth-bitten

Vla. 2: *ppp* viscous, sempre glissando; free bowing. delicate and light; fragile but moth-bitten

Vla. 3: *ppp* viscous, sempre glissando; free bowing. delicate and light; fragile but moth-bitten

Vc. 1: *ppp* viscous, sempre glissando; free bowing. delicate and light; fragile but moth-bitten

Vc. 2: *ppp* viscous, sempre glissando; free bowing. delicate and light; fragile but moth-bitten

Vc. 3: *ppp* viscous, sempre glissando; free bowing. delicate and light; fragile but moth-bitten

Db. 1: *ppp* viscous, sempre glissando; free bowing. delicate and light; fragile but moth-bitten

Db. 2: *ppp* viscous, sempre glissando; free bowing. delicate and light; fragile but moth-bitten













46

Fl. 1, Fl. 2, Ob. 1, Ob. 2, Cl. 1, B. Cl., Bsn. 1, Bsn. 2, Hn. 1, Hn. 2, C Tpt. 1, Tbn., B. Tbn., Timp., Flex., Slinky, Gro., Hp., Vln. 1.1-1.4, Vln. 1.5, Vln. 2.1-2.3, Vln. 2.4, Vla. 1-3, Vc. 1-3, Db. 1, Db. 2

*f cantabile*, *sfp*, *gliss.*, *p*, *sf*, *sf sharp, staccatissimo*, *begin swinging slinky quickly from side to side (horizontally)*, *rotational*, *behind the bridge*, *sul II*, *sul III*, *sul IV*, *mp*, *mf*, *f*, *fff*



55

Fl. 1 *p*

Fl. 2 *p*

Ob. 1 *mf*

Ob. 2 *p*

Cl. 1 *p*

B. Cl. *p*

Bsn. 1 *p*

Bsn. 2 *p*

Hn. 1 *p*

Hn. 2 *p*

C Tpt. 1 *sf*

Tbn. *p*

B. Tbn. *p*

Timp. *pp* on the rim

Vibraphone bowed, motor on

Flex. *p*

Sound Hose level 1 → level 2 *p*

S. D.

Gro.

Hp.

Vln. 1.1

Vln. 1.2

Vln. 1.3

Vln. 1.4

Vln. 1.5 *sf* ricochet

Vln. 2.1

Vln. 2.2

Vln. 2.3 *sf* ricochet

Vln. 2.4

Vla. 1 *sf* ricochet

Vla. 2 *sf* ricochet

Vla. 3 *sf* ricochet sul III

Vc. 1

Vc. 2 *sf* ricochet

Vc. 3 *sf* ricochet

Db. 1 *sf* ricochet

Db. 2 *sf* ricochet

Fl. 1 *mf* *sfz*

Fl. 2 *mf* *sfz*

Ob. 1 *mf* *sfz*

Ob. 2 *mf* *sfz*

Cl. 1 *mf* *sfz*

B. Cl. *mf* *sfz*

Bsn. 1 *mf* *sfz*

Bsn. 2 *mf* *sfz*

Hn. 1 *mf* *sfz*

Hn. 2 *mf* *sfz*

C Tpt. 1 *mf* *sfz*

Tbn. *p* *sfz*

B. Tbn. *p* *sfz*

Timp. *pp*

Vib. becoming more and more frantic with bowing

Sound Hose level 3 level 4

S. D. *ppp*

Gro.

Hp.

Vln. 1.1 *sfz* ricochet

Vln. 1.2 *sfz* ricochet

Vln. 1.3 *sfz* ricochet

Vln. 1.4 *sfz* ricochet

Vln. 1.5 *sfz* ricochet

Vln. 2.1 *sfz* ricochet

Vln. 2.2 *sfz* ricochet

Vln. 2.3 *sfz* ricochet

Vln. 2.4 *sfz* ricochet

Vla. 1 *f* sul II gliss. with LH trem. gliss.

Vla. 2 *f* sul II gliss. with LH trem. gliss.

Vla. 3 *f* sul II gliss. with LH trem. gliss.

Vc. 1 *sfz* ricochet

Vc. 2 *sfz* ricochet

Vc. 3 *sfz* ricochet

Db. 1 *sfz* ricochet

Db. 2 *sfz* ricochet







67  $\text{♩} = 80 \text{ accel.}$

Fl. 1 *fp* *ff* *ff*

Fl. 2 *fp* *ff* *ff*

Ob. 1

Ob. 2

Cl. 1 *fp* *ff* *ff*

B. Cl. *fp* *ff* *ff*

Bsn. 1

Bsn. 2

Hn. 1 *fp* *ff* *ff*

Hn. 2 *fp* *ff* *ff*

C Tpt. 1 *fp* *ff* *ff*

Tbn. *fp* *ff* *ff*

B. Tbn. *fp* *ff* *ff*

Timp. *ff* *ff* *ff* *ff* *sf* *sf* *sf* *sf* *ff* *ff* *ff* *ff*  
allowing mallet to dribble limply after first attack gliss.

Vib.

Sound Hose

Slinky

Tam-tam

T.-t.

Hp.

Vln. 1.1 *ff* *fff*

Vln. 1.2 *ff* *fff*

Vln. 1.3 *ff* *fff*

Vln. 1.4 *ff* *fff*

Vln. 1.5 *ff* *fff*

Vln. 2.1 *ff* *fff*

Vln. 2.2 *ff* *fff*

Vln. 2.3 *ff* *fff*

Vln. 2.4 *ff* *fff*

Vla. 1 *fff*

Vla. 2 *fff*

Vla. 3 *fff*

Vc. 1 *ff* *fff*

Vc. 2 *ff* *fff*

Vc. 3 *ff* *fff*

Db. 1 *mf* *gliss.*

Db. 2 *mf* *gliss.*

**J** Tranquillo

1

2

3

4: phase in gradually

5

Fl. 1, Fl. 2, Ob. 1, Ob. 2, Cl. 1, B. Cl., Bsn. 1, Bsn. 2, Hn. 1, Hn. 2, C Tpt. 1, Tbn., B. Tbn., Timp., Vib., Sound Hose, Slinky, T.-t., Hp.

*fff* l.v., *pp*, *f*, *mf*, *p*, *f*, *p*, *ff*, *ff*

bowed (2 bows)

level 1 → level 2 → level 3 → freely transitioning between levels 2, 3, and 4

rotational (parabolic)

Singing Glass

bending pitch

Vln. 1.1, Vln. 1.2, Vln. 1.3, Vln. 1.4, Vln. 1.5, Vln. 2.1, Vln. 2.2, Vln. 2.3, Vln. 2.4, Vla. 1, Vla. 2, Vla. 3, Vc. 1, Vc. 2, Vc. 3, Db. 1, Db. 2

*fff*

*fff* like spattering rain

col legno

gradual and continuous rit.  $\text{♩} = 120$  —————  $\text{♩} = 20$

6: phase out gradually, asynchronously

**K** ♩ = 80

Fl. 1, Fl. 2, Ob. 1, Ob. 2, Cl. 1, B. Cl., Bsn. 1, Bsn. 2, Hn. 1, Hn. 2, C Tpt. 1, Tbn., B. Tbn., Timp., Vib., Sound Hose, Slinky, Singing Glass, Hp.

pp, ff overtaking

level 2, level 1

pure tone again, To T.-t.

with harmon mute, stem removed

Vln. 1.1, Vln. 1.2, Vln. 1.3, Vln. 1.4, Vln. 1.5, Vln. 2.1, Vln. 2.2, Vln. 2.3, Vln. 2.4, Vla. 1, Vla. 2, Vla. 3, Vc. 1, Vc. 2, Vc. 3, Db. 1, Db. 2

mf, pp, ff overtaking, ff overwhelming, p

sul IV, sul III, sul II



86

Fl. 1

Fl. 2

Ob. 1

Ob. 2

Cl. 1

B. Cl.

Bsn. 1

Bsn. 2

Hn. 1

Hn. 2

C Tpt. 1

Tbn.

B. Tbn.

Timp.

Vib.

Sound Hose

Slinky

T.-t.

Hp.

Vln. 1.1

Vln. 1.2

Vln. 1.3

Vln. 1.4

Vln. 1.5

Vln. 2.1

Vln. 2.2

Vln. 2.3

Vln. 2.4

Vla. 1

Vla. 2

Vla. 3

Vc. 1

Vc. 2

Vc. 3

Db. 1

Db. 2

*pp calm*

*n*

*p*

*n poss.*

*to air*

*3*

*5*

*3*

*7*

*l.v.*

real note gliss to harmonic

real note gliss to harmonic

real note gliss to harmonic

real note gliss to harmonic

1/2 pressure RH to create harmonic

beyond the fingerboard gliss.

*n*

sul IV

gliss.

*n*