

**stars from the earth**  
**stars from the stars**

for amplified flute, clarinet, violin, cello,  
and percussion with electronics

Julio Zúñiga (2019)



In the fall of 2016, several U.S. diplomats working for the American embassy in Havana fell victim to what was initially described as a sonic weapon supposedly devised by the Cuban government. In part due to lack of evidence and the seemingly complete absence of communication between U.S. and Cuban scientists investigating the case, the explanation that circulated in the news media for several months was that cicadas on the island were so loud that they made the U.S. officials ill.

In 1978, Mercedes Sosa recorded María Elena Walsh's song "Como la cigarra," which became a popular protest song against the Latin American authoritarian regimes of the second half of the 20<sup>th</sup> century. "Singing to the sun like the cicada /after a year underground, / like a survivor / returning from war," goes the chorus. In fact, most periodic cicadas spend 17 years underground as nymphs before emerging to reproduce and die.

At the beginning of the 20<sup>th</sup> century, Jakob von Uexküll discovered that a tick completely deprived of nourishment could survive in an inert state for as long as 18 years.

After that time, when provided blood, the animal awoke to feed and died.



**stars from the earth**  
**stars from the stars**

for Madison Greenstone and  
the [Switch~ Ensemble]

Julio Zúñiga (2019)

The musical score consists of two parts. The first part is a graphic of a circle divided into four quadrants, labeled 1, 2, 3, and 4. Below it is a tempo marking of  $\text{♩} = 44$ . The second part is a musical staff for prepared piano (PICC). It features a treble clef, a key signature of three sharps, a common time signature, and a eighth-note time signature. The dynamic is marked as *mp*. The staff shows a series of eighth-note pairs connected by curved lines, followed by a measure of rests. The number "1" is enclosed in a small square box at the beginning of the staff.

15

**PICC**

*prepared*

*mp*

$\text{♩} = 55$

$\text{♩} = 66$

$\rightarrow$  bass fl

VN

bridge  
fingerboard  
bridge  
fingerboard

*pp*

*ppp* *pp*

VC

*pp*

*ppp* *pp*

CB CL

*mp sempre*

stop w/  
tongue

simile

3

3

3

3

3

3

3

2

22

B FL      **25"**

VN

VC

CB CL      **p**

*decresc. to niente over 25"*

**3**

OCTAVE PEDAL **ON**  
(setting 1)

32

CB CL      **10"**

*fl: → remove picc preparation*

OCTAVE PEDAL **OFF**

SNES      **4**

**5**      **20"**

+64Hz

62Hz

( $\downarrow = 66$ )

34

CB CL

**[6]**

$\downarrow = 66$

embouchure gliss.

*p*

measured vib.

(full tone)

*mp*



40

CB CL

*mp*

*p*

**3**

46

**x4**

CB CL



74

(no pitch! but retain exact same gesture)

CB CL

7

1 2  
3 4

pre-recorded Eb cl

TAPE sounding

8''

mf

Musical score for three instruments: PICC, VC, and TAPE.

**PICC:** Treble clef, key signature of one sharp. Measure 79 starts with a dynamic ***pp***. The score includes two sets of whistle tones (marked with dots and parentheses) and a bass flute part (marked with 'X' and arrows). The bass flute part begins at the end of measure 79 and continues through measure 9. Measure 9 is labeled with a box containing the number **9**.

**VC:** Bass clef. Measures 79 and 9 start with a dynamic ***pp***. The score includes a sustained note from measure 79 to measure 9.

**TAPE:** Measures 79 and 9. A gray bar labeled "mids" spans both measures.

Performance instructions:

- At the end of measure 79, an arrow points to the bass flute part with the text "bass fl + prepare picc again".
- At the end of measure 9, an arrow points to the 8<sup>th</sup> pedal setting with the text "cl: → 8<sup>th</sup> pedal ON (setting 2)".

80



recording of sunrise, 4:30-6 AM on Sunday, August 4, 2019, 9°10'03.0"N 83°43'19.8"W

**B FL**

**VN**

**VC**

**CB CL**

**10**

**CANYON SHIMMER** **ON**

**5''**

**81**

**$\text{♩} = 88$**

**bridge**

**fingerboard**

**IV**

**III** — **3** —

**5**

**— 5 —**

**2** **4**

**no decresc.**

**stop bow on string**

**curve bow gradually**

**II**

**III**

**p**

**pp**

**ppp**

**p**

**mp**

**pp**

**ppp**

**p**

**mp**

**ppp**

**slowly bring FX LVL up by about 15%**

B FL

86

*f* → *mp* > *pp* *p* *ppp* *ppp*

VN

*mp* *p* *pp* *ppp* *ppp sempre*

... always as close to l.h. as possible

VC

*mf* *p* *ppp* *almost imperceptible*

CB CL

*f* → E<sup>b</sup> Cl

11

vln

91

*no cresc.*

*8va*

2  
4

$\text{♩} = 74$

96

prepared PICC

12

VC

2  
4

TAPE

“ ... cantando al sol... ”

102

remove picc preparation

prepared PICC

13

VC

v  
mf

14

prepare 2<sup>nd</sup> string

TAPE

107

PICC      8va  
 1 2  
 3 4

VN      15ma  
 1 2  
 3 4

TAPE

*"pp" always*

*pp constantly adjust to match piccolo's dynamic level at onsets; ignore piccolo's decrescendi*

*(sempre 8va)*

*(sempre 15ma)*

*grains*

115

PICC      8  
 5

VN      5

TAPE

*ppp almost imperceptible*

123

PICC

VN

TAPE

131 (8) . . .

PICC | VLN | TAPE

keep very, very stable

16

==

139

PICC | VLN

==

147

PICC | VLN

17

TAPE

PICC

VN

TAPE

155 (8) . . .

(15) . . .

—3—

—3—

—3—

—3—

This musical score excerpt shows two staves: PICC (Piccolo) and VN (Violin). The PICC staff begins with a measure of eighth-note pairs followed by grace notes, indicated by a circled '8'. The VN staff follows with a similar pattern. The measure number 155 is at the top left, and measure 156 starts below it. Measure 156 includes dynamic markings '(8)' and '(15)' with dots above the notes, and various performance instructions like grace notes and slurs.

PICC

VN

TAPE

163

—8—

—5—

—8—

—5—

This musical score excerpt continues from the previous one. The PICC staff starts with eighth-note pairs and grace notes. The VN staff follows with eighth-note pairs and grace notes. Measure 163 ends with a dynamic marking '-8-' over the PICC staff and '-5-' over the VN staff. Measure 164 begins with a dynamic marking '-8-' over the PICC staff and '-5-' over the VN staff. The PICC staff has a series of eighth-note pairs with grace notes, and the VN staff has a similar pattern.

$\text{♩} = 88$

**PICC**: 170. Measure 18 starts with a dynamic of **(8)**. A note on the 4th string has a vertical bar above it. Measure 19 starts with a dynamic of **5**.

**VN**: Measure 18 starts with a dynamic of **4**. Measure 19 starts with a dynamic of **5**.

**VC**: Measure 18 starts with a dynamic of **mp**. Measure 19 starts with a dynamic of **f**. Pedal markings: 1, 2, 3, 4. Notes in measure 19 are labeled **II (rattling on prepared 2<sup>nd</sup> string)** and **no rattling: cover 2<sup>nd</sup> string if necessary**.

**E♭CL**: Measure 18 starts with a dynamic of **(both pedals [OFF])**. Measure 19 starts with a dynamic of **mf**. Pedal markings: 1, 2, 3, 4.

**SINES**: Measure 18 starts with a dynamic of **mf**. Measure 19 starts with a dynamic of **90"**. A bracket indicates a frequency of **41.2Hz**.

**Notes:**

- digital reverb on picc and vn + vol level suddenly comes down 9-12dB (triggered by cl)** → **reverb wet signal increases while dry signal decreases to nothing over the next 18 seconds**
- (w/o losing fundamental)**
- gradually emphasize upper pitch only**
- machine TAPE**

175 (8) . . .

PICC      VN

**p poss.**

hold pitch for 11"

rearticulate but do not overemphasize

levels for picc and vn go down significantly but not completely here; audio file triggered by cl cuts them off definitively at m. 190

bass fl

(15) . . .

hold pitch for 11"

rearticulate but do not overemphasize

VC

15<sup>ma</sup>

pp

approach mic as much as possible

21

contra 8<sup>ve</sup> pedal (setting 2)

30"

TAPE

machine

20

sweep

SINES

43.8Hz

( $\downarrow = 88$ )

**B FL**

191

**22**

**23**

move slightly away from microphone

**VN**

metal+rubber mute on

**fp**

metal+rubber mute on

**VC**

**ff**

prepare 2<sup>nd</sup> string

OCTAVE PEDAL **ON** **5**

**CB CL**

**24**

**25**

9"

highs

poco a poco decrescendo

PERC triggers audio file here →

**vn**

**184**  **$\downarrow = 74$**

**$8^{\text{va}}$**  very slow bow  
very close to l.h.  
gradually detach bow from 1<sup>st</sup>  
string and remain only on 2<sup>nd</sup>

[rearticulate every 8 beats]

**pp**

**1'**

**vc**

**$\frac{3}{2}$**  very slow bow  
very close to l.h.  
gradually detach bow from 2<sup>nd</sup>  
string and remain only on 3<sup>rd</sup>

[rearticulate every 8 beats]

**pp**

**1'**

**TAPE**

1 2  
+SUB

**sol: 24.5Hz**

**(25)**

**PERC**

r.h.: chain

i.h.: brush on snare 1

vib. speaker on snare 2 . . .

mayo - octubre de 2019  
Puntarenas, C.R. - Cambridge, MA