

Piece for Luca  
for flute octet

Ethan Hayden  
2011

## Instrumentation:






- Eight C flutes

LUCA stands for "Last Universal Common Ancestor" and refers to the most recent organism from which all living organisms on Earth have descended. The creature, a unicellular micro-organism, is believed to have lived circa 3.6 million years ago, during the Paleoproterozoic era.

In *Piece for Luca*, the flute ensemble is treated as a single entity, with each player's part consisting of individual harmonics of various overtone clusters. The goal is to present a single sonic form, which gradually changes shape, color and texture throughout the course of the work.

The piece was composed for Barry Crawford and PLOSION Flute Ensemble, to whom it is dedicated with heartfelt gratitude, in the Spring of 2011.

## Performance Notes:

- Since the chords in the piece are derived from the overtone series, several microtonal accidentals are necessary:
  -  Quarter-tone accidentals are used for the 11th and 13th harmonics, these pitches should be played with alternate fingerings
  -  Slightly flatted accidentals are used for the 7th harmonic. These pitches should sound about a sixth-tone flat, which can be approximated simply by a slight change in embouchure.
- Fermati appear in two forms in this piece:
  -  Short fermata - ca. 1-2"
  -  Long fermata - ca. 3-5"
- The following are other notation symbols used in the piece:
  -  Bisbigliandi, or color trills
  - WT Whistle tones

**Duration ca. 7'**

"Therefore I should infer from analogy that probably all the organic beings which have ever lived on this earth have descended from some one primordial form, into which life was first breathed."

- Charles Darwin  
*The Origin of Species*



# Piece for Luca

Ethan Hayden  
2011

ca. 54 - 60

Musical score for eight flutes (Flute 1 to Flute 8) across measures 54 to 60. The score is written in treble clef with a key signature of one sharp (F#). The time signature changes from 4/4 to 2/4, then back to 4/4, and then to 6/4, 5/4, 3/4, and 5/4. Dynamics include *pppp*, *p*, *pp*, *mp*, *mf*, and *f*. The score is divided into measures 1 through 7.

Fl. 1: *mp* (measures 8-9), *mf* (measures 10-11), *f* (measures 12-13), *pp* (measures 14-15)

Fl. 2: *mf* (measures 8-9), *f* (measures 10-11), *pp* (measures 12-15)

Fl. 3: *mp* (measures 10-11), *pp* (measures 12-15)

Fl. 4: *mf* (measures 8-9), *mp* (measures 10-11), *pp* (measures 12-15)

Fl. 5: *pp* (measures 8-9), *mf* (measures 12-15)

Fl. 6: *mf* (measures 12-15)

Fl. 7: *pp* (measures 8-9), *mf* (measures 12-15)

Fl. 8: *mf* (measures 12-15)

8

9

10

11

12

13

Fl. 1: *ppp* (measures 14-15), *f* (measures 16-17), *mf* (measures 18-20), *gliss.* (measures 17-18)  
 Fl. 2: *mp* (measure 14), *pp* (measure 15), *mf* (measures 16-17), *pp* (measures 18-20), *gliss.* (measures 18-19)  
 Fl. 3: *p* (measures 14-15), *mp* (measures 16-17), *p* (measures 18-20), *gliss.* (measures 18-19)  
 Fl. 4: *p* (measures 14-15), *mp* (measures 16-17), *f* (measures 18-20), *gliss.* (measures 17-18)  
 Fl. 5: *mp* (measures 14-15), *p* (measures 16-17), *f* (measures 18-20), *gliss.* (measures 17-18)  
 Fl. 6: *mp* (measures 14-15), *p* (measures 16-17), *f* (measures 18-20)  
 Fl. 7: *p* (measures 14-15), *mf* (measures 16-17), *pp* (measures 18-20)  
 Fl. 8: *f* (measures 14-15), *ppp* (measures 16-17), *mf* (measures 18-20), *gliss.* (measures 17-18)

14

15

16

17

18

19

20

Fl. 1 *mp* *f*

Fl. 2 *f*

Fl. 3 *mf* *f*

Fl. 4 *pp* *f*

Fl. 5 *mf* *f*

Fl. 6 *pp* *f*

Fl. 7 *f*

Fl. 8 *pp* *f*

21

22

23

24

25



Fl. 1: *ppp*, *gliss.*, *f*, *mp*

Fl. 2: *pp*, *gliss.*, *p*

Fl. 3: *p*, *gliss.*, *mf*, *mp*

Fl. 4: *p*, *gliss.*, *pp*, *mf*

Fl. 5: *mp*, *gliss.*, *mf*

Fl. 6: *mp*, *pp*

Fl. 7: *gliss.*, *mf*, *mp*, *p*

Fl. 8: *gliss.*, *pp*

Fl. 1: *f*, *mp*, *f*  
 Fl. 2: *pp*, *mf*, *mp*, *mf*  
 Fl. 3: *f*, *mp*, *mf*, *ppp*, *gliss.*  
 Fl. 4: *mp*, *p*, *mp*, *pp*, *gliss.*  
 Fl. 5: *p*, *f*, *mf*, *mp*, *gliss.*  
 Fl. 6: *mf*, *p*, *mf*, *mp*, *gliss.*  
 Fl. 7: *f*, *pp*, *mf*, *p*, *gliss.*  
 Fl. 8: *p*, *pp*, *ppp*, *p*, *gliss.*

Measure numbers: 32, 33, 34, 35, 36, 37

Fl. 1: *mp*, *p*, *pp*  
 Fl. 2: *pp*, *mp*, *mf*  
 Fl. 3: *mf*, *mp*, *pp*, *f*  
 Fl. 4: *mf*, *pp*  
 Fl. 5: *mf*, *pp*  
 Fl. 6: *pp*, *mf*, *pp*  
 Fl. 7: *f*, *pp*  
 Fl. 8: *p*, *pp*, *f*

Measures: 38, 39, 40, 41, 42, 43, 44, 45

Fl. 1 *mf*  
 Fl. 2  
 Fl. 3 *ppp*  
 Fl. 4 *ppp*  
 Fl. 5 *mp*  
 Fl. 6  
 Fl. 7  
 Fl. 8 *p*

Musical score for eight flutes (Fl. 1-8) across measures 46-49. The score includes dynamic markings (*mf*, *ppp*, *mp*, *p*), articulation (accents), and various musical notations like slurs, ties, and ornaments. The time signature changes from 2/4 to 5/4, then to 3/4, and finally to 4/4.

Fl. 1 *f* *mf*  
 Fl. 2 *f* *mp*  
 Fl. 3 *f* *mp*  
 Fl. 4 *f* *p*  
 Fl. 5 *f* *p*  
 Fl. 6 *f* *mp*  
 Fl. 7 *f* *mp*  
 Fl. 8 *f* *mf*

50

51

52

53

Musical score for eight flutes (Fl. 1-8) across measures 54, 55, 56, and 57. The score includes dynamic markings (*f*, *mp*, *mf*, *p*), articulation marks, and fingerings.

Fl. 1: *f* (measures 54-55), *mp* (measures 56-57). Includes a 5/4 fingering diagram above measure 56.

Fl. 2: *f* (measures 54-55), *mf* (measures 56-57). Includes a 7/8 fingering diagram above measure 56.

Fl. 3: *f* (measures 54-55), *mp* (measures 56-57). Includes a 5/4 fingering diagram above measure 56.

Fl. 4: *f* (measures 54-55), *p* (measures 56-57).

Fl. 5: *f* (measures 54-55), *mp* (measures 56-57). Includes a trill marking above measure 54.

Fl. 6: *f* (measures 54-55), *mf* (measures 56-57). Includes a 5/4 fingering diagram above measure 56.

Fl. 7: *f* (measures 54-55), *mp* (measures 56-57). Includes a 3/4 fingering diagram above measure 56.

Fl. 8: *f* (measures 54-55), *p* (measures 56-57). Includes a 5/4 fingering diagram above measure 56.

This musical score is for eight flutes, labeled Fl. 1 through Fl. 8. The score is divided into four measures: 58, 59, 60, and 61. The time signature changes from 4/4 in measure 58 to 3/4 in measure 59, and then to 6/4 in measure 60, which continues into measure 61.

The notation for each flute part includes:

- Fl. 1:** Starts with a whole note in 4/4, followed by a half note in 3/4, and then a melodic line in 6/4. Dynamics range from *f* to *mf*.
- Fl. 2:** Similar to Fl. 1, with a whole note in 4/4, a half note in 3/4, and a melodic line in 6/4. Dynamics range from *f* to *mf*.
- Fl. 3:** Similar to Fl. 1, with a whole note in 4/4, a half note in 3/4, and a melodic line in 6/4. Dynamics range from *f* to *mf*.
- Fl. 4:** Similar to Fl. 1, with a whole note in 4/4, a half note in 3/4, and a melodic line in 6/4. Dynamics range from *f* to *mf*.
- Fl. 5:** Similar to Fl. 1, with a whole note in 4/4, a half note in 3/4, and a melodic line in 6/4. Dynamics range from *f* to *mf*.
- Fl. 6:** Similar to Fl. 1, with a whole note in 4/4, a half note in 3/4, and a melodic line in 6/4. Dynamics range from *f* to *mf*.
- Fl. 7:** Similar to Fl. 1, with a whole note in 4/4, a half note in 3/4, and a melodic line in 6/4. Dynamics range from *f* to *mf*.
- Fl. 8:** Similar to Fl. 1, with a whole note in 4/4, a half note in 3/4, and a melodic line in 6/4. Dynamics range from *f* to *mf*.

The score uses various musical notations including slurs, dynamic markings (*f* for fortissimo and *mf* for mezzo-forte), and time signature changes. Dashed lines above the staves indicate the continuation of notes from the previous page.

Fl. 1

Fl. 2

Fl. 3

Fl. 4

Fl. 5

Fl. 6

Fl. 7

Fl. 8

WT

*p*

62

63

64

65



Fl. 1 *pppp* *mp* *pppp*

Fl. 2 *pppp* *mp* *pppp*

Fl. 3 *pppp* *mp* *pppp*

Fl. 4 *pppp* *mp* *pppp*

Fl. 5 *pppp* *mp* *pppp*

Fl. 6 *pppp* *mp* *pppp*

Fl. 7 *pppp* *mp* *pppp*

Fl. 8 *pppp* *mp* *pppp*

Fl. 1: *pp* — *mp* — *pp* | *pp* — *mf* | 5/4 | *mf* (acc) | 2/4  
 Fl. 2: — | *pp* — *mp* — *pp* | — | 5/4 | — (acc) | 2/4  
 Fl. 3: *pp* — *mp* — *pp* | *pp* — *mf* | 5/4 | *mf* (acc) | 2/4  
 Fl. 4: — | *pp* — *mp* — *pp* | — | 5/4 | — (acc) | 2/4  
 Fl. 5: — | *pp* — *mp* — *pp* | — | 5/4 | — (acc) | 2/4  
 Fl. 6: *pp* — *mp* — *pp* | *pp* — *mf* | 5/4 | *mf* (acc) | 2/4  
 Fl. 7: — | *pp* — *mp* — *pp* | — | 5/4 | — (acc) | 2/4  
 Fl. 8: *pp* — *mp* — *pp* | *pp* — *mf* | 5/4 | *mf* (acc) | 2/4

70

71

72

73

74

Fl. 1 *f* *pp* *flz.* *mf*

Fl. 2 *f* *pp* *flz.*

Fl. 3 *f* *pp* *flz.* *mf*

Fl. 4 *f* *pp* *flz.*

Fl. 5 *f* *pp* *flz.* *mf* *pp* (ord.) *flz.*

Fl. 6 *f* *pp* *mf* *pp* (ord.) *flz.*

Fl. 7 *f* *pp* *flz.* *mf* *pp* (ord.) *flz.*

Fl. 8 *f* *pp* *flz.* *mf*

75 76 77 78

Fl. 1 *f* *mp* *pp* *mp* *gliss.* *mf*  
 Fl. 2 *f* *pp* *mp* *mp* *gliss.*  
 Fl. 3 *f* *mf* *pp* *mp* *gliss.* *mf*  
 Fl. 4 *f* *pp* *mf* *mp* *gliss.* *mf*  
 Fl. 5 *f* *mf* *pp* *mp* *gliss.*  
 Fl. 6 *f* *pp* *mf* *mp* *gliss.*  
 Fl. 7 *f* *f* *pp* *mp* *gliss.*  
 Fl. 8 *f* *pp* *f* *mp* *gliss.* *mf*

79 80 81 82 83 84

Fl. 1  
Fl. 2  
Fl. 3  
Fl. 4  
Fl. 5  
Fl. 6  
Fl. 7  
Fl. 8

*f* *ff* *mf* *ff* *f*  
*f* *ff* *mf* *ff* *f*  
*f* *ff* *mf* *ff* *f*  
*f* *ff* *mf* *ff* *f*  
*f* *ff* *mf* *ff* *f*  
*f* *ff* *mf* *ff* *f*  
*f* *ff* *mf* *ff* *f*  
*f* *ff* *mf* *ff* *f*

6/4 3/4 4/4 6/4 3/4 4/4 6/4 3/4 4/4 6/4 3/4 4/4 6/4 3/4 4/4 6/4 3/4 4/4 6/4 3/4 4/4

Fl. 1: *mf* (measures 88-89), *pp* (measures 90-92)

Fl. 2: *mf* (measures 88-89), *pp* (measures 90-92)

Fl. 3: *p* (measures 88-89), *mp* (measures 90-92)

Fl. 4: *p* (measures 88-89), *mp* (measures 90-92)

Fl. 5: *p* (measures 88-89), *pp* (measures 90-92)

Fl. 6: *pp* (measures 90-92)

Fl. 7: *mf* (measures 88-89)

Fl. 8: *p* (measures 88-89), *mp* (measures 90-92)

Fl. 1: *mf* (measures 93-94), *ppp* (measures 95-96)  
 Fl. 2: *mp* (measures 93-94), *pp* (measures 95-96)  
 Fl. 3: *mp* (measures 93-94), *p* (measures 95-96)  
 Fl. 4: *pp* (measures 93-94), *p* (measures 95-96)  
 Fl. 5: *mp* (measures 93-94), *mp* (measures 95-96)  
 Fl. 6: *mf* (measures 95-96)  
 Fl. 7: *pp* (measures 93-94), *mf* (measures 95-96)  
 Fl. 8: *f* (measures 95-96)

93

94

95

96

Fl. 1:  $pp$ ,  $ppp$ ,  $p$   
 Fl. 2:  $p$ ,  $pp$ ,  $mf$   
 Fl. 3:  $mp$ ,  $p$ ,  $pp$ ,  $p$   
 Fl. 4:  $mp$ ,  $p$ ,  $ff$   
 Fl. 5:  $p$ ,  $mp$ ,  $p$ ,  $mp$   
 Fl. 6:  $mp$ ,  $mf$ ,  $ff$   
 Fl. 7:  $mp$ ,  $mf$ ,  $f$   
 Fl. 8:  $mf$ ,  $f$ ,  $fff$

97

98

99

100

101



Fl. 1

Fl. 2

Fl. 3

Fl. 4

Fl. 5

Fl. 6

Fl. 7

Fl. 8

*mp*

*p*

*p*

*mf*

4/4 3/4 4/4 6/4

4/4 3/4 4/4 6/4

4/4 3/4 4/4 6/4

4/4 3/4 4/4 6/4

4/4 3/4 4/4 6/4

4/4 3/4 4/4 6/4

4/4 3/4 4/4 6/4

4/4 3/4 4/4 6/4