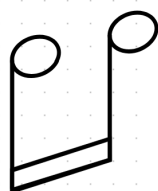


Puzzle of a Park

for the Cyberinet

Matthew A. Bardin
(2023)



MaB Music

On the Cyberinet:

The Cyberinet is an electronic enhancement to the standard B-flat clarinet. By replacing the barrel with the Cyberinet, the performer and composer gain access to an integrated collection of sensors that collect various performance data. This data can be wirelessly transmitted to a computer for electronic processing and software control. An ever-growing list of optional expansions is also available to be connected to the Cyberinet to allow for the performer to customize the instrument to their performance needs.

The complete list of hardware needed for this composition is:

- The Cyberinet

- Button Expansion

- Microphone

- Audio Interface

- Computer running the Max patch available here: matthewbardin.com/puzzle

The microphone should be positioned in a place where it picks up the performer with minimal feedback of the recordings.

Program Note:

A pleasant stroll through a park, built through several interconnected ideas. The whole scene can't come together until it has been built up from its various smaller pieces. Ideas often take on a different context when observed in a vacuum instead of as a whole, much like putting a large puzzle together to reveal the full image.

Performance Note:

Puzzle of a Park is performed by triggering audio recordings to begin, and then looping the playback of those recordings in order to turn a solo performance into a duet, then a trio and finally a quartet. The Max patch utilizes an automated click track on channel 3 if desired for a performance. If utilizing this click track, the duration of each loop is exactly 1 minute and 21 seconds, as the click track ignores fermats. If one loop of the music is performed out of sync, continue as if this was intended. Thematically, this represents trying to fit a piece of the puzzle where it doesn't actually go. A short pause between each repetition can be done if required, but should not be an excessive pause. Approximate time stamps are given above the beginning of each loop.

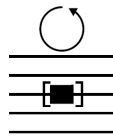
When performing with the Cyberinet, the button expansion is recommended but not required. Button 1 is programmed to trigger new recordings and playback. If not utilizing the button expansion, a quick, counterclockwise rotation of the Cyberinet will achieve the same goal. Button 2 on the expansion can be used to stop the playback in the event of a catastrophic failure. All of the gesture symbols are discussed in "On Notation".

Excluding tempo changes, the quarter note pulse is constant throughout the score. Occasional courtesy reminders are present throughout the solo line.

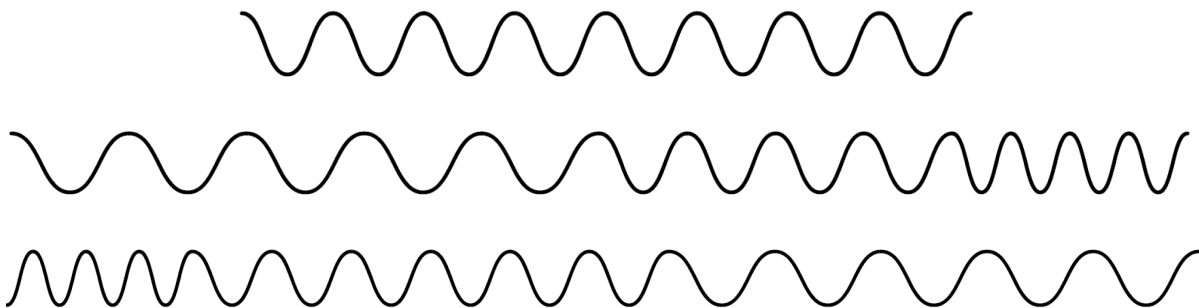
On Notation:

This version of the score is intended to show the intended alignment of the previously recorded loops along with the voice currently being played by the soloist. If the soloist only wants to look at their line without the playback indicated, that part is available at matthewbardin.com/puzzle. In this score, the performer should perform their line (the top of each system) from beginning to end without stopping.

Stemless notes shown with a bracketed, square notehead indicate when Button 1 should be pressed, or the rotation gesture should be performed (rotation indicated with circular arrow). Do not do both at the same time, choose one for your performance. These gestures, will cause the current recording to stop, start the new recording, and playback all previous recordings in sync. These triggers happen instantly, so triggers should happen in time.



Notes underneath a swooping line, shown below, symbolically indicate larger, slower, bell movements. Seeing 7 fluctuations does not necessarily indicate a need for 7 bell movements. While preparing, the performer should experiment to find their ideal gesture size and speed for the effect they desire. Larger bell movements will result in more of the electronic effect, discussed in "On Electronics". The gesture should be repeated for as long as the line continues. The three unique versions of this line are shown below. The symbols indicate keeping a constant speed, speeding up, and slowing down over the source of the gesture respectively.



On Electronics:

The Max patch is designed to handle all of the recording and playback for Puzzle of a Park. This is done utilizing either the button expansion, or if not present, a quick, counter clockwise rotation of the instrument. Two other effects are used to process the playback of recorded files. Airflow is utilized to control compression of the recorded files. As the performer blows more air through the instrument, the playback volume is ducked. This is designed to keep the playback from overpowering the live performance. The final effect is controlled with the vertical bell movement. As more movements occur, sound is fed into a low level, background noise generator. This effect is a quiet mass of noises that will respond to and automatically harmonize with the pitches produced by the performer. More movement results in more sound being fed into the effect.

Puzzle of a Park

Transposing Condensed Score

Matthew A. Bardin (2023)

For the Cyberinet

Looking Around (♩ = 50)

(0:00)

rec.

Cyberinet

Recorded Playback

The score for 'Looking Around' consists of two staves: 'Cyberinet' and 'Recorded Playback'. The 'Cyberinet' staff begins with a 2/4 time signature, followed by a key signature change to 6/4, then 4/4, 6/4, and finally 4/4. It contains a 'rec.' (record) symbol, a wavy line, and dynamic markings of *mp*, *f*, and *mp*. The 'Recorded Playback' staff is mostly empty, with some notes in the 6/4 section.

A Bouncy (♩ = 72)

6

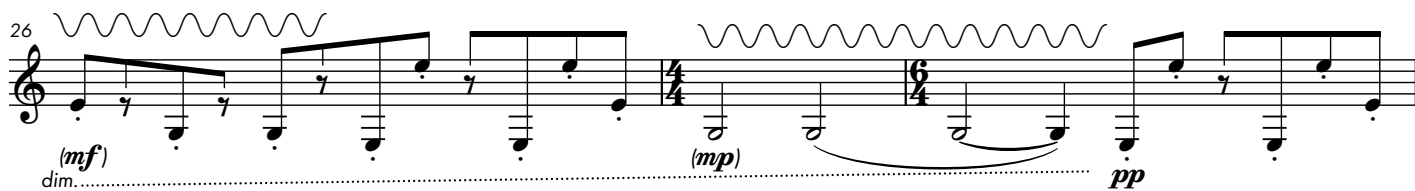
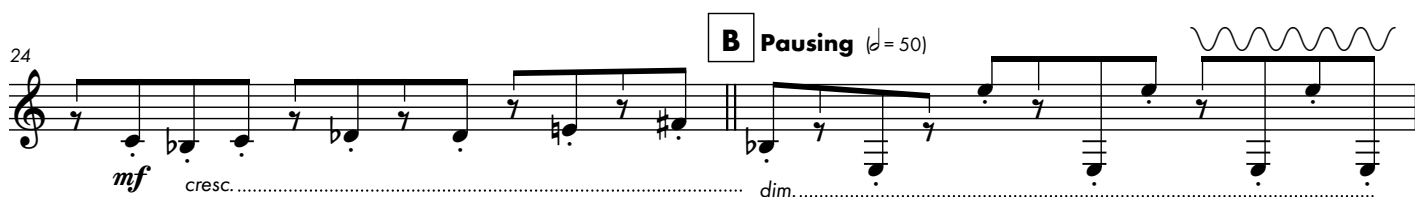
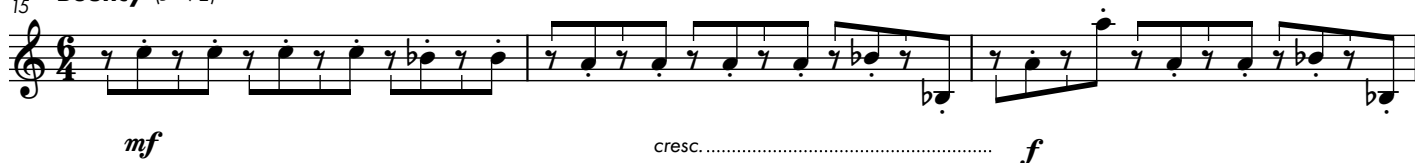
The score for 'A Bouncy' starts at measure 6. It features a single staff with a 4/4 time signature. The music is characterized by eighth-note patterns. Dynamic markings include *mf* with a 'dim.' (diminuendo) line, and *(mp)* (mezzo-piano) in parentheses.

10

The score continues from measure 10. It features a single staff with a 4/4 time signature. Dynamic markings include *p* (piano), *cresc.* (crescendo), *(mf)* (mezzo-forte) in parentheses, and *f* (forte) with a 'dim.' (diminuendo) line.

12

The score continues from measure 12. It features a single staff with a 4/4 time signature. Dynamic markings include *mf* (mezzo-forte) with a 'dim.' (diminuendo) line, *p* (piano), *cresc.* (crescendo), and *ff* (fortissimo) with an accent (>) and a wedge-shaped crescendo.

15 **Bouncy** (♩ = 72)

C Reflective

(1:22)

play/rec.

(♩ = ♩)

(♩ = 72)

33

mp *mp* *f*

mp *f* *mp* *mf* dim.

39

p *mf*

p *cresc.* *(mf)*

43

pp *cresc.* *(p)* *(mp)* *mf*

f *dim.* *mf* *dim.* *p* *cresc.*

46

D Bouncy (♩ = 72)

mf *cresc.* *f*

ff *mf* *cresc.*

49

mf

f

dim.

p

cresc.

52

p

f

f

55

E Pausing ($\text{♩} = 50$)

mf

p

cresc.

mf

cresc.

dim.

58

p

(mf)

(mp)

pp

61

rall.

a tempo

mp

pp

ppp

f

F Looking Around (♩ = 50)

(2:44)

play/rec.

65

Section F, 'Looking Around', begins at measure 65. The score is written for three staves. The top staff is in treble clef, and the bottom two staves are in bass clef. The time signature changes from 2/4 to 6/4 and back to 2/4. The tempo is marked as ♩ = 50. The music features a wavy line in the top staff, likely representing a vocal line. Dynamics include *mp* (mezzo-piano) and *f* (forte). There are also markings for 'rec.' (record) and 'play/rec.' (play/record).

G Bouncy. Synced Up ♩ = 72

70

Section G, 'Bouncy. Synced Up', begins at measure 70. The score is written for three staves. The top staff is in treble clef, and the bottom two staves are in bass clef. The time signature is 2/4. The tempo is marked as ♩ = 72. The music features a wavy line in the top staff, likely representing a vocal line. Dynamics include *p* (piano), *cresc.* (crescendo), *mf* (mezzo-forte), and *f* (forte). There are also markings for 'dim.' (diminuendo) and 'p' (piano).

74

Section G continues from measure 74. The score is written for three staves. The top staff is in treble clef, and the bottom two staves are in bass clef. The time signature is 2/4. The tempo is marked as ♩ = 72. The music features a wavy line in the top staff, likely representing a vocal line. Dynamics include *(mf)* (mezzo-forte), *cresc.* (crescendo), *f* (forte), *dim.* (diminuendo), *p* (piano), and *pp* (pianissimo).

H

77

Section H begins at measure 77. The score is written for three staves. The top staff is in treble clef, and the bottom two staves are in bass clef. The time signature is 2/4. The tempo is marked as ♩ = 72. The music features a wavy line in the top staff, likely representing a vocal line. Dynamics include *dim.* (diminuendo), *mf* (mezzo-forte), *cresc.* (crescendo), *ff* (fortissimo), and *p* (piano).

80

(mf)

dim......

cresc...... *f* *dim.*.....

mf

mf

83

p

cresc...... *f*

p *cresc.*..... *f* *f*

p

86

mp *cresc.*..... *f*

p *cresc.*..... *mf* *cresc.*.....

mf

89 **Deliberate** (♩ = 50)

ff *dim.*..... *mf* *p*

dim...... *(mf)* *(mp)* *pp*

p *p*

rall. **a tempo**

93

mp *f* *mp* *f*

97

J $\text{♩} = 50$

(4:14)

play/rec.

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

102

Happy, Energetic $\text{♩} = 72$

pp *mf* *(mf)* *mf*

106

Measures 106-108 of the musical score. Measure 106 features a treble clef with a melodic line starting on B-flat, marked *p* and *cresc.*. The piano accompaniment includes a wavy line in the right hand and a bass line in the left hand. Measure 107 continues the melodic line, marked *(mf)* and *cresc.*. Measure 108 features a more active melodic line, marked *(f)*. The piano accompaniment includes a wavy line in the right hand and a bass line in the left hand.

p *cresc.* *(mf)* *cresc.* *(f)*

109

Measures 109-111 of the musical score. Measure 109 features a treble clef with a melodic line starting on B-flat, marked *ff*. The piano accompaniment includes a wavy line in the right hand and a bass line in the left hand. Measure 110 features a melodic line with a wavy line, marked *f*. The piano accompaniment includes a wavy line in the right hand and a bass line in the left hand. Measure 111 features a melodic line with a wavy line, marked *f*. The piano accompaniment includes a wavy line in the right hand and a bass line in the left hand.

ff *f* *f*

112

Measures 112-114 of the musical score. Measure 112 features a treble clef with a melodic line starting on B-flat, marked *ff*. The piano accompaniment includes a wavy line in the right hand and a bass line in the left hand. Measure 113 features a melodic line with a wavy line, marked *mf*. The piano accompaniment includes a wavy line in the right hand and a bass line in the left hand. Measure 114 features a melodic line with a wavy line, marked *mf*. The piano accompaniment includes a wavy line in the right hand and a bass line in the left hand.

ff *mf*

115

f *ff*

p *cresc.* *f* *b* *p*

p *cresc.* *f*

118

mf *mf*

p *cresc.* *mf* *cresc.* *f*

mp *cresc.* *f*

121

mf *mp* *mp*

dim. *(mf)* *(mp)* *pp* *p*

ff *dim.* *mf* *p*

rall......

125

(slow trill)

mp *poco* *mf* *pp* *mp* *f*

pp

mp

f

ppp

f

mp

f

The musical score for 'Puzzle of a Park' begins at measure 125. It is written in 4/4 time and consists of four staves. The first staff features a melody with a wavy line above it, indicating a trill. The second staff has a wavy line below it. The third staff has a wavy line above it, and the fourth staff has a wavy line below it. The score includes dynamics such as *mp*, *mf*, *pp*, *ppp*, and *f*, as well as articulations like 'poco' and 'slow trill'. The score is marked with a 'rall.' (rallentando) at the beginning.

Completed 05/15/2023 in Baton Rouge, LA.
Approximately 5 minutes and 30 seconds in duration.