

Allure and Hoodwink

Piano, violin, computer (synchronised electroacoustic sounds and live processing)

18'00 (2014), 2020 revision for MaxMSP-8

Natasha Barrett



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Allure and Hoodwink entices and deceives. It plays with the contrast of visual and non-visual sound, and with large and small physical actions of sound production. The performers are set within an unseen electroacoustic sound world. The instrumental sound mutates in space and the performers explore the boundary between themselves and the listeners. *Allure and Hoodwink* is inspired by the extremes of sonority and counterpoint found in the sound-worlds of Feldman and Ravel.

Allure and Hoodwink was commissioned by Heloisa Amaral and Karin Hellqvist with support from the Norwegian Composers' fund.

Allure and Hoodwink exist in two versions:

- An 8-channel, fully spatialised version with performed electronics, and where the violinist moves through and around the audience. This version is a trio requiring a computer performer and a sound technician.
- A stereo version with multichannel diffusion, where the live electronics are distributed over six loudspeakers, and where the violinist remains on stage. The computer part is controlled by the violinist and only needs a sound technician.

The differences between these two versions are in the live electronics and how these are controlled by the violinist, pianist and computer performers. The instrumental parts of the scores are the same, while there are differences in the computer score. Due to the complexities of the 8-channel version, this is only available when the composer is present to perform the work. Over the years, the version most commonly performed has been the stereo version with multichannel diffusion.

This is the version described here.

Technical requirements for the stereo version:

- Three low noise condenser microphones: two for the piano, one for the violin.
- One miniature DPA 4060 (or similar) bridge mic for the violin.
- MacOSX computer (current version compatible for OSX 10.14). Rather than providing a CPU specification, please check that the performance patch is running at less than 50% CPU at peak processing. The patch was designed in 2009 for the fastest laptop available at that time, and is therefore unlikely to create significant CPU overheads on a 2020 computer.
- MaxMSP 8.
- MIDI faders to control MaxMSP.
- Audio interface for two inputs and two outputs.
- Mixer with four mic-inputs, two line-inputs, and 6 outputs
- Concert loudspeaker system of 6 loudspeakers (high quality e.g. L'acoustics, Meyer, D&B).

Note: the computer materials are at a sample rate of 44.1 kHz. To obtain the computer materials, please contact at www.natashabarrett.org.

Piano preparation

The piano is prepared with different types of materials that have been selected to not damage the instrument. The score indicates when to add and remove these materials. They consist of:

- Heavy ceramic tile wrapped in felt fabric: to dampen string notes for a percussive result.
- Small ceramic tiles on a mesh: to vibrate on the strings.

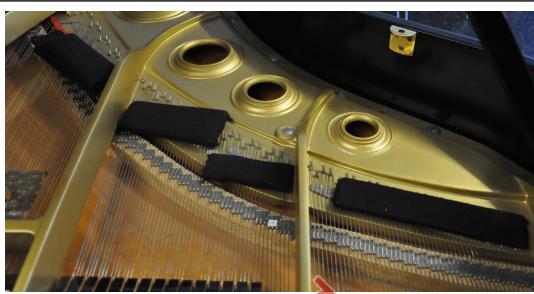


Figure 1: felt-wrapped tiles when not in use

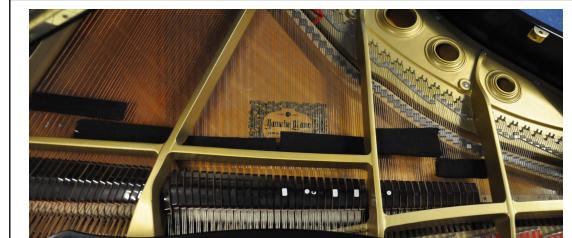


Figure 2: felt-wrapped tiles in use

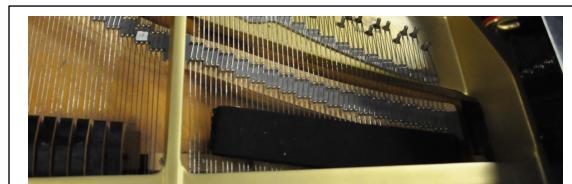


Figure 4: felt-wrapped tiles in use

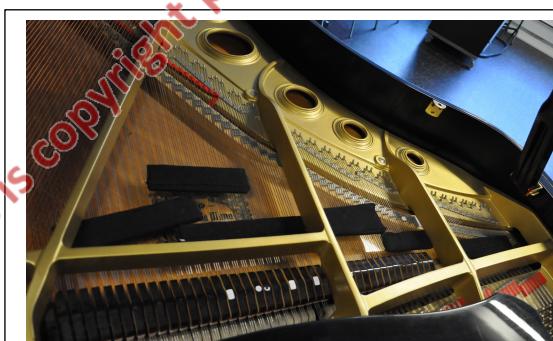


Figure 3: felt-wrapped tiles in use

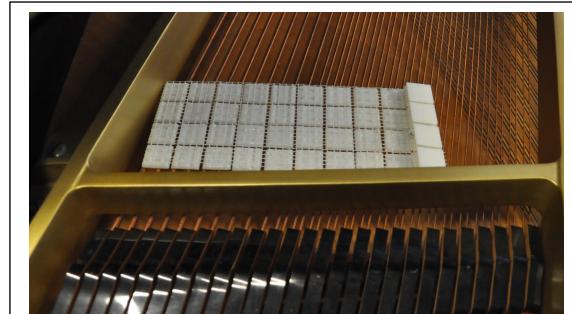


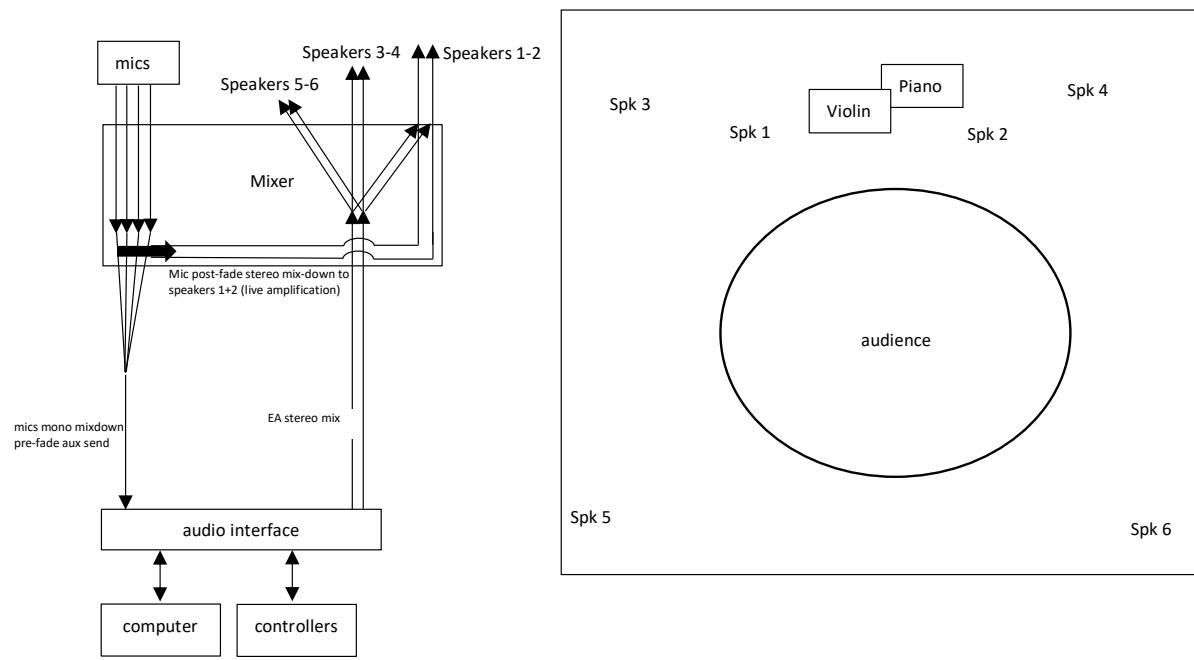
Figure 5: small tiles in use

Technical requirements for the stereo version:

Computer instructions

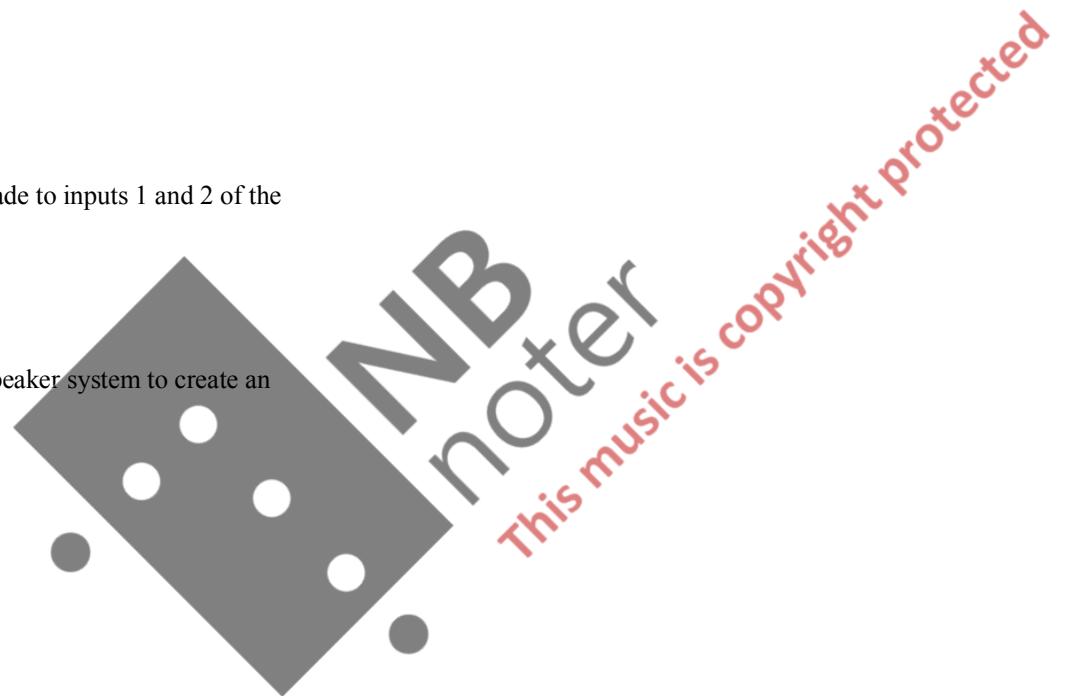
- Use a full version of MaxMSP-8.
- Copy all materials into one folder.
- Launch MaxMSP-8
- Open the main Max-patch: "Allure_and_Hoodwink_simple_stereo.maxpat"
- Check for any errors in the Max Console and solve these before going further. If the work has been correctly copied there should be no errors. Also check the console in the first run-through for any warning messages.
- Follow the instructions on screen. Take care to route two midi foot pedals correctly.

Signal routing



To balance the sound

- Ensure the live mics are mixed to stereo at the mixer, and then routed pre-fade to inputs 1 and 2 of the max patch.
- The live amplification is routed only to speakers 1 and 2.
- In the max patch set the volume of the ‘stereo_EA’ and the ‘clonk’.
- In a smaller or dry concert hall, add a little reverb.
- Adjust the mix of the live mics and the electroacoustic materials over the speaker system to create an immersive sound picture.



Allure and Hoodwink

*Note: The following score contains several pages of musical notation. The notation includes multiple staves for different instruments (Computer, Violin, Piano), various dynamics (e.g., *p*, *mf*, *f*, *pp*, *mp*), and specific performance instructions. The score is divided into sections by measure numbers (e.g., 1, 2, 3, 4, 5, 6, 7, 8) and subsections (e.g., 1.1, 1.2, 1.3, 2.1, 2.2, 2.3, 3.1, 3.2, 3.3, 4.1, 4.2, 4.3, 5.1, 5.2, 5.3, 6.1, 6.2, 6.3, 7.1, 7.2, 7.3, 8.1, 8.2, 8.3). The notation also includes various markings such as *col legno tratto*, *Pre-prepare upper octave with dampening*, *una corda*, *tre corda*, *Half Crushed*, *Rapid texture with upper notes*, *Without pedal*, *quiet piano echoe*, *Extremely rapid and random*, *Upper octave prepared with dampening*, *Clear silence*, and *S.P. sfz*. The score is set against a background featuring a large red watermark reading "NB Noter" and "This music is copyright protected".*

Allure and Hoodwink

Computer

Violin

Piano

8 sync violin (sustain and ascent) *mp*

col legno tratto → *nat.* *not harmonic*

mf *f* *5*

the dash note head = col legno tratto

rit. *gliss.* (see sound example)

f (subito) *rit.*

Preparation: buzz rattle

Equivalent to approx 7 bars at 90, or approx. 18 seconds.

9 sync piano (attack-sustain) *f*

(silence)

j = 90

rit.

f (subito) *rit.*

15mb

Preparation: buzz rattle

10 approx with violin (sustain and descent) *mp*

a tempo

sul pont → *nat.*

col legno tratto (top)

nat. (bottom) Rhythmically exact with piano

mf

11 approx with violin and piano *mp*

col legno tratto

p

pp

12 approx with violin *mp*

nat.

mp

pp

Preparation: buzz rattle

1/2

Preparation: buzz rattle

Computer

Vln.

Pno.

11

a tempo

10 approx with violin (sustain and descent) *mp*

sul pont → *nat.*

col legno tratto (top)

nat. (bottom) Rhythmically exact with piano

mf

11 approx with violin and piano *mp*

col legno tratto

p

pp

12 approx with violin *mp*

nat.

mp

pp

Preparation: buzz rattle

1/2

Preparation: buzz rattle

Allure and Hoodwink

25

13 approx with violin *mp*

Computer

Vln.

Pno.

nat.

p

5

4

4

legato

p

8va

36

15 *mp*

Computer

Vln.

Pno.

nat.

mp

5

4

4

col legno tratto

mp

3

()*

16 *mp*

17 *mp*

47

Computer

Vln.

Pno.

sffz-mp

p

mp

3+2+3

8va

5

3

(to crush but not too loud)

nat., sul tasto

over

mf

*Clear silence
Let sound file
play out for approx.
30 seconds.*

mf

una corda

p

2ed.

A

A

Allure and Hoodwink

4

$\text{J} = 50$

Computer

Violin

Piano

19 *mp*
Position 2
Precise rhythm and tempo

20 *mp* sync with violin

21 *mp*

22 *mp*

23 *mp* approx with violin

G# to G# []
mp
ped.
una corda

ped.

10

Computer

Vln.

Pno.

$\text{J} = 42$

Computer

Vln.

Pno.

24 *mp*
Position 2
3
Position 1

25 *mp* approx with piano

molto sul pont
p
tre corda
mf
mp
ped.

legato

sim.

Balance volume of prepared and natural as much as poss.

Preparation : Wood-rubber dampener
Bb to G# (maybe a bit more?)

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Allure and Hoodwink

Computer

Vln.

Pno.

Computer

Vln.

Pno.

Computer

Vln.

Pno.

Allure and Hoodwink

6

Musical score for orchestra and piano, page 6, measures 41-48. The score includes parts for Computer, Vln., and Pno. Measure 41: Computer plays a sustained note with a grace note, followed by a measure of eighth notes. Vln. has a melodic line with grace notes. Pno. has a harmonic bass line. Measure 42: Computer rests. Vln. continues melodic line. Pno. rests. Measure 43: Computer rests. Vln. continues melodic line. Pno. rests. Measure 44: Computer rests. Vln. continues melodic line. Pno. rests. Measure 45: Computer rests. Vln. continues melodic line. Pno. rests. Measure 46: Computer rests. Vln. continues melodic line. Pno. rests. Measure 47: Computer rests. Vln. continues melodic line. Pno. rests. Measure 48: Computer rests. Vln. continues melodic line. Pno. rests.

sync violin

Computer

Vln.

Pno.

sync violin

36

crushed

nat.

col legno tratto

37

nat.

ped. [1/2]

ped. [1/2]

ped. [1/2]

Follow violin location throughout this section

Follow violin location
throughout this section

52  m_1  m_2

Computer

Vln.

Pno.

Buzzy preparation across scale

light bow bouncing on string during gliss

Position 1 Start movement path to position 3

molto sul tasto no bounce

II:8

II:8

II:8

II:8

Remove buzz prep., add dampened prep. across as much as possible

Red. 1/2

Allure and Hoodwink

Computer sync piano

Vln. 11:8 11:8 11:8 11:8 10:8 10:8 10:8 10:8 10:8 10:8 10:8 10:8

Pno. 10:8 10:8 10:8 10:8 10:8 10:8 10:8 10:8 10:8 10:8 10:8 10:8

$\text{Ped. } [1/2]$

Computer sync piano

Violin at tempo 164 start here, written out at approx. tempo 65 for reference.

Vln.

Pno.

64

40

Arrived at position 3

10:8 6:4 6:4 6:4 6:4

Ped. 1/2

Allure and Hoodwink

8

67

41

Follow path to position 4
Violin at tempo 164 start here, written out at approx. tempo 65 for reference. See "violin loop1-notated"!

Computer

Vln.

Pno.

Pedal slow release

69

Computer

Vln.

Pno.

$\frac{3}{4}$ = 100 for violin, piano maintain original speed 65

$\frac{5}{4}$

72 $\frac{5}{4}$ = 72

$\frac{4}{4}$ = 57

$\frac{3}{4}$

$\frac{3}{4}$ = 43

$\frac{4}{4}$ = 60

Directly into next

$\frac{5}{4}$ Position 4

Computer

Vln.

Pno.

$\frac{5}{4}$

$\frac{13}{5}$ $\frac{13}{5}$

p

Allure and Hoodwink

9

Computer

$\text{♩} = 95$
(Position 4)

Violin

Piano

$\text{♩} = 95$

5

Computer

5

Vln.

Pno.

(silence)

Follow path from position 4 to position 1
gliss

9

Computer

Vln.

Pno.

Allure and Hoodwink

Computer 12 $\text{♩} = 95$ rall.

Vln. long wavy gliss, increasing crush

Pno. rall.

43 f sync piano attack-sustain

Computer 16 44 f sync piano attack-sustain

Vln. straight gliss

Pno. Position 1 All damped Give time to add preparation

Wait for preparation to be complete

manual fade to silence if piano needs more time

45 plectrum pizz

Computer 21 46 mp sync piano Clear silence

Vln.

Pno. Remove preparation

Allure and Hoodwink

11

$\text{♩} = 50$

Computer

Violin

p

Piano

Pre-prepare buzz preparation

p una corda

mp

6

6

Computer

Vln.

Pno.

8va

3

3

2

4

3

3

4

legato

tre corda

Prepare dampened top
Prepare bass buzz ready for later

49

12

Computer

Vln.

con sord.
light top

III #

IV

long gliss detune

f

Pno.

f 15^{mb}

Reo.

50

Allure and Hoodwink

12

19

Computer

Vln.

Pno.

retune
senza sord.

8va

3

4

f

51

(15)

2d.

2d.

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24

Computer

Vln.

Pno.

f

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25

Computer

Allow sound to continue
for approx. 30 seconds, then
fade in overlap with next section.

Vln.

Pno.

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Allure and Hoodwink

13

52 sync piano *mp*

Computer $\frac{4}{4}$

Violin $\frac{4}{4}$ *mp*
Loosen bow tension,
flautando on small
note heads.

Piano $\frac{4}{4}$ *mp*
Legato
(Phrases with half pedal)

7

Computer $\frac{4}{4}$

Vln. $\frac{4}{4}$

Pno. $\frac{4}{4}$

(8)

14

Computer $\frac{6}{4}$

Vln. $\frac{4}{4}$ *p*

Pno. $\frac{6}{4}$ *p*

rall.

53 sync piano *mp*

(8) *Ped.*