

THESE THINGS HAPPEN (or not)

Edmund J. Campion (2021)

5-octave Marimba with Electronics (duration: 12-14')

(Aide à l'écriture d'une œuvre musicale originale de la Direction régionale des affaires culturelles Auvergne-Rhône-Alpes)

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Electronics and Computer Set-up

The Max/Msp patch is designed to be operated by the performer from the stage with the laptop computer placed in front of the marimba where the performer can see clearly the browser-based visual metronome. Everything is included in the Max/MSP patch (see the help video at edmundcampion.com for installation).

The piece can be played and rehearsed with stereo out from the laptop fed directly to two loudspeakers placed directly underneath the marimba (see Sound Diffusion below).

(Tech Rider and Electronics)

Electronics and Equipment for Rehearsal and Performance:

Computer with MAX-MSP (a license for the software is recommended but not required)
These Things Happen Max-MSP (www.edmundcampion.com).
One sustain pedal (0-127) for electronic cues
Two high-quality small speakers placed under the marimba

Optional for best-quality performance:

Two microphones at special locations as described below
Two or more microphones in overhead position for reinforcement and as described below
Two auxiliary speakers near the marimba
Four (quad) speakers in surround position around the audience

CUES and Timing Indications in the Max/MSP patch:

The overall tempo is fixed at one beat per second for the entire piece and the Max patch will flash accordingly. The minute/second timer will recalibrate to a revised time point/display as CUES are executed. (this feature allows the performer to breath between cues or extend improvisational moments as desired.) (Note: the Max/MSP clock display corrects itself on the cues so the actual length of the piece will vary.)

Sound Diffusion:

The diffusion/mixing strategy involves placing a quality smaller speaker pair under the marimba at left and right positions and pointing upwards toward the marimba keys (skyward). The goal is to create a seamless integration of live marimba and electronics without use of reverb or excessive amplification of the acoustic sound. This performance situation alone is adequate for semi-professional or small-venue presentations of the piece. Overall, try for the most natural acoustic-like sound possible.

The diffusion plan for professional-level presentations involves a full mixing and use of the multi-channel option that is found on the front page of the Max/MSP patch.

The smaller stereo pair below the Marimba is reserved exclusively for the stereo electronics from the Max-MSP patch. The combined live playing and electronic sound are captured together through the overhead microphone array and only then routed to the house system. No sound from the MAX-MSP patch should be sent directly to the external/house speaker system and no amplified sound should be sent to the stereo pair below the marimba.

For the professional-level presentation, the option exists to add two larger loudspeakers nearby the marimba, to use the max/msp patch quad-mix outputs for surround sound, and to include several microphones as described below.

If possible, the under-marimba speakers should be hidden from view. If the speakers are mid-sized they can be placed on the far ends of the instrument and pointed upward. In that case, a larger overhead microphone array might be needed. The smaller speakers can also be placed on mic stands near the array, but the composer finds the floor placement best for mixing.

For Professional performance, The combined Marimba and floor electronics are amplified in two ways:

- 1) Stereo overhead microphones above the keys mixed to the external/house speaker array.
- 2) Two auxiliary microphones called in the score mic-one and mic-two are used for hyper-amplified special effects:

mic-one is placed as close as possible to the high G key on the marimba.
(The performer will play at PPP dynamics with the resulting hyper-amplified sounds mixed to the external speaker array as indicated in the score.)

mic-two is placed over the lowest octave.
(The performer will play PPP dynamics using only fingers with the resulting hyper-amplified sounds mixed to the external speaker array as indicated in the score.)

Accidentals cancel and reset with each new measure as in traditional notation.

Courtesy accidentals are often provided.

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Marimba with Electronics*

These Things Happen (or not)

(Dedicated to and composed in collaboration with Jean Geoffroy.)

Edmund J. Campion

00:00 *ad lib: uneven, loose, unstable, across any of the indicated keys and in any order*
(pitches are specific with articulations and rhythms only suggestive)

(♩ = 60) (♩ = 120)

Mba. (two sticks in each hand (reverse mallets)) *p*

Elec. (INIT cue shows blinking tempo and time) **cue 1** (begin playing exactly on the cue mark!)
 (Mixing Cue: mic-one on) (max/msp begins countdown to 0:00 seconds on cue 1)

5" *8^{va}* *sim.* 10" *f*

Mba. *p*

Elec. (Mixing Cue: very slowly raise gain on mic-one and mix to house system)

15" *8^{va}* *sim.* 20" 25"

Mba. *p* (right hand similar to left hand but never synchronized)

Elec. *pp*

30" 35" 40" (moving downward smoothly and with similar gestures and with no special emphasis on the pitch changes, but keeping within notated pitch ranges) *mf*

Mba. *p*

Elec. (Mixing Cue: very slowly raise gain on mic-two and mix to house system) (mic-one and mic-two both on)

45" 50" 55" *f*

Mba. *f*

Elec.

* accidentals hold through the bar line as in traditional notation. Courtesy accidentals are often provided.

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quick light roll, freely bouncing around pitch collection, always quick, nimble, and moving

01:00 01:05 01:10 01:15 01:20 01:25 01:30

Mba. *(two sticks or rattan in each hand)* *(add in some new pitches to come)*

Elec. *sub. p cue 2* *sim.* *p sim.* *(no special emphasis when the pitches change)*
(cue resets clock to adjusted correct time) *(Mixing Cue: slowly remove gain on mic-one and mic-two)*

01:35 01:40 01:45 01:50 01:55

Mba. *(add in some new pitches to come)* *(add in some new pitches to come)*

Elec. *p* *mf* *p*

02:00 02:05 02:10 02:15 02:20 02:25 02:30 02:35

Mba. *(add in some new pitches to come)*

Elec. *mf cue 3* *poco* *p* *mf* *f*

02:40 02:45

Mba. *(migrate to two sticks only)* *f r.h.* *(as smooth a transition as possible)*

Elec. *mf* *f l.h.* *pp* *(two sticks continue to play across three notes)*

02:50 02:55 03:00 03:05 03:10

Mba. *(transition to two sticks sandwiched between Do-Re)* *(two sticks sandwiched between the Do-Re bars)* *tremelo, fast uneven, loose, slightly unstable* *sfz sim.* *(random, loud bangs with stick(s) on metal resonator)*

Elec. *cue 4*

03:15 03:20 03:25

Mba. *sffz*

Elec.

(clock resets!)
03:30

(take special mallets as needed)

Mba.

Elec. **cue 5**

(Mixing Cue: electronics in cue 5 are mixed for quad surround. Stereo mix OK if quad not available. See the Max-MSP patch settings. Throughout the Improv Section I, the mixer can explore slowly adding and subtracting amplification from each of the special closely placed microphones, either separately or together, but always gradual and subtle.)

IMPROVISATION SECTION I GENERAL INSTRUCTIONS:

During the guided improvisation sections (cues 5, 28), the performer listens carefully, responding and reacting to the electronic material. Dialog and interact with the tape.

The right hand takes a **bristle scrub brush** and the left hand takes **thick brushes (broomsticks, rattan, plastic)** or mallet of choice capable of making atypical sounds on the surface and side of the marimba.

Play on top of the wooden keys or any part of the instrument, but do not focus solely on pitch production. Concentrate on dynamic, variable rubbing and scratching, mixed with discrete and heterogenous noise-like impulses. Create unpredictable clicking sounds, and other sounds atypical of ordinary marimba tone. Dynamics are generally soft.

The playing range in relation to the human body is always in front of the body with a comfortable distance between hands. Occasional singular distant "leaps" are allowed but not common.

(Mixing CUE: special care should be given when the two special amplification points are in use.)

1-minute to 1-minute + 20-seconds in length (variable)

r.h bristle scrub brush (houshold kitchen brush)
l.h. wood sticks, broomstick brush, rattan sticks/brush, plastic rattan, or other

r.h. rubbing with brush (constantly varying the sound and speed of action)

Mba.

l.h. playful and unpredictable impulses

(c. 04:30)

(without hurry, take 4 very soft mallets before launching cue 6.)

Mba.

(Mixing Cue: slowly remove all amplification from mic-one and mic-two.) (electronics continue until cue 6 triggered)

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(four very soft yarn mallets: smooth, quick, expressive glissandi across black and white keys with light rolls if needed to make keys sound.)
(clock resets!)

04:30 (black keys only) *freely* 04:35 04:40

Mba. *mp* (notated pitches show the range only. The mallets can touch any keys in this general shape and range.)
(white keys only)

Elec. cue 6 (Mixing Cue: all amplification off for special mic-one and mic-two)

04:45 04:50 04:55

Mba.

Elec.

05:00 05:05

Mba.

Elec.

05:10 05:15

Mba.

Elec. cue 7

05:20 05:25 (c. 05:30)

Mba. (medium/hard mallets with time as needed)

Elec. *pp* (electronics continue until trigger at cue 8)

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(clock resets!) 05:30 (♩ = 60) (medium to hard mallets) 05:36 05:42

Mba. *ff*

Elec. cue 8

(Mixing Cue: electronics in cue 8 are mixed to quad surround. Stereo mix is OK as before.)

05:48 smoothly and evenly 7 (pitches are approximate with hands overlapping on black keys or white keys) 7

Mba.

Elec. *sfz* *sub. p*

(clock resets!) 05:53

Mba. *ff*

Elec. cue 9

05:59

Mba.

Elec. *sfzp* cue 10

(clock resets!) 06:04 06:10

Mba. *ff*

Elec. cue 11

06:13

Mba. *p*

Elec. *sfzp* cue 12

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6 (clock resets!) 06:18

Mba. *ff*

Elec. *ff* cue 13

06:24

Mba.

Elec. cue 14 *n.*

06:29 (clock resets!) *p*

Mba.

Elec. cue 15

06:35

Mba. *p*

Elec. *sfz* cue 16 *n.*

06:40 (clock resets!) *pp* 06:46 (2 medium mallets) 06:52

Mba.

Elec. cue 17 cue 18 *n.*

06:55 *mp* (continually, freely, and slowly move from the center bar to the nodes and back again varying the timbre with more or less strike sound) *very even throughout*

Elec. (Mixing Cue: extreme amplification on mic-one -- there are no added electronics in this section.)

The score is divided into several systems, each with Mba. and Elec. staves. The Mba. parts include complex rhythmic patterns, often with 7-measure and 3-measure groupings, and dynamic markings such as *ff*, *p*, *pp*, and *mp*. The Elec. parts consist of rhythmic cues (cue 13 through cue 18) with dynamic markings like *ff* and *sfz*. Time signatures change throughout, including 6/4, 5/4, and 3/4. Performance instructions include 'very even throughout' and a note about extreme amplification on mic-one.

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07:00

Mba.

Elec.

07:05

Mba.

Elec.

07:10

(ad lib. slightly slowing and returning to speed, eventually slowing down at 7'20")

Mba.

Elec.

c. 07:15

Mba.

Elec.

c. 07:20

c. 07:25

c. 07:30

(c. 07:40)

(clock resets!)

07:57

take 4 medium mallets

(♩ = 60)

(ad lib.)

(very evenly and gradually slow)

Mba.

Elec.

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08:00 **Preciso** (rhythm phrase 1) **mf** 08:05

Elec. (Mixing CUE: no special amplification) 08:10 08:15 (rhythm phrase 1)

Elec. cue 20

Elec.

Elec. cue 21

Elec. cue 22

Elec.

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09:00 (rhythm phrase2) 09:05

Mba.

Elec. cue 23

09:10 09:15 (rhythm phrase2)

Mba.

Elec. cue 24

09:20 09:25

Mba.

Elec.

09:30 (rhythm phrase2) 09:35

Mba.

Elec. cue 25

09:40 09:45 (rhythm phrase2)

Mba.

Elec. cue 26

09:50 09:55 *attaca*

Mba.

Elec.

IMPROVISATION SECTION II GENERAL INSTRUCTIONS:

During the guided section II (cue 28), the performer listens carefully, responding and reacting to the electronic material. Dialog and interact with the tape.

The right hand takes a light weight **seed pod shaker (see: toca percussion)** and the left hand takes **very soft mallet**, or mallet of choice, capable of making very soft resonant sounds on any mid-low keys.

Play on top of the wooden keys sweeping the seed pod lightly on top of keys, sometimes lifting and lightly grasping or weakly shaking the seed pods, sometimes glissing across the keys, always very, very slowly. The resonating mallet very softly strikes and/or rubs any mid and low range keys to produce very faint resonances.

Arrive to the lowest octave for a smooth transition to the fingers only section.

10:00

Mba.

Elec.

cue 27
(Mixing Cue: no amplification)

c.10:05 1-minute to 1-minute + 15-seconds in length (variable)

(clock resets!) (r.h + l.h. fingers only, drumming very quickly and lightly across keys)

11:00

Mba.

Elec.

cue 28 (no electronics sound in this cue)
(Mixing Cue: special lower mic-two gradually up to full)

c. 11:05 (drum more freely across white and black keys)

c. 11:10 c. 11:15 through to c. 12:00

(drum freely, with slight fluctuations in dynamics, durations, with more irregularities)

Detailed description of the musical score: The score is divided into several sections. The first section starts at 10:00 with a Mba part consisting of a single horizontal line on a grand staff, indicating a sustained or glissando effect. Below it, the Elec part has a cue marker for 'cue 27' with the instruction '(Mixing Cue: no amplification)'. The second section begins at approximately 10:05, with a Mba part showing a series of rhythmic patterns (beamed notes) that gradually descend in pitch over a duration of '1-minute to 1-minute + 15-seconds in length (variable)'. The Elec part remains silent. The third section starts at 11:00, marked '(clock resets!) (r.h + l.h. fingers only, drumming very quickly and lightly across keys)'. The Mba part features a complex rhythmic pattern of beamed notes, with dynamic markings of *pp* and *ppp*. The Elec part has a cue marker for 'cue 28' with the instruction '(no electronics sound in this cue) (Mixing Cue: special lower mic-two gradually up to full)'. The fourth section begins at approximately 11:05, with the instruction '(drum more freely across white and black keys)'. The Mba part continues with rhythmic patterns, including a section with a '6' above it. The fifth section starts at approximately 11:10 and continues to 12:00, with the instruction '(drum freely, with slight fluctuations in dynamics, durations, with more irregularities)'. The Mba part shows more varied rhythmic patterns, including a section with a '10' above it. The Elec part remains silent throughout.

take one larger softer mallet to match electronic onset

Mba. *pp*

Elec.

c. 12:00 through to c. 13:00-14:00 (time clock stops!)

(take as much time as desired) (continue to play lightly with knuckles and fingernails of free hand)

Mba. *sempre pp*

Elec. *f* cue 29

Take your time!

Mba.

Elec. *f* cue 30 *f* cue 31 *f* cue 32

(As sound installation continues in the electronics, the percussionist slowly and quietly hides behind marimba, out of site from audience.)

(Percussionist may continue to make faint scratching or quiet knuckle impulses on marimba resonators as desired.)

Mba. CUE 33 triggers a 30-second fade-out of electronics. When possible, fade house lights to nothing in the first 15 seconds of this period. (Stay hidden until the electronic sounds have faded to nothing. Be silent when the electronics are over, and remain hidden for a few seconds before rising for a bow.)

Elec. cue 33