

LORX Aeterna, by Perry R. Cook, for PLOrk, 4/12

Approximately Six Minutes

For Six Singers

with Six Hemis

with Six Speakers

Idea: Capture slow vocal clusters, with visual+audio signal processing magic.

SETUP: Be sure you never run this without at least headphones plugged in, or HORRIBLE feedback will be the result as the internal speakers hear the internal mic. Ideally, use a hemi located beneath you on the floor, as you stand. Try to space out the singers and hemis so the internal mics hear mostly your voice and not the other sound sources (some crosstalk is inevitable, but the hope is to isolate your voice in your mic/capture). Initially, have SystemPreferences-Audio open, mic selected with the gain down fairly low, so you can see the little VU meter displaying the level. Then turn up your mic until you get good capture without feedback. Hemi and Subwoofer levels must also be iteratively adjusted for best result. My hope is that the subs carry the drones well, and the hemis result in beefy choral sound with captured voices, while still allowing your natural voice to not sound anemic when the speakers are quiet.

After unzipping, run the App once, and Homer Simpson will tell you to calibrate your accelerometers (they are different for different versions of the Mac and OS). Tilt your laptop forward (lean your body forward) and to the left. No matter where the marble rolls, the software will figure it out and create little file within the App that remembers your tilt orientation. Then you can run the App after that. NOTE: If you ever change computers this may get messed up, and you should start from a clean un-zipped version of the App.

INTERACTION: The main technique here is to tilt the laptop to capture, release, and manipulate your singing as picked up by the internal microphone.

When the laptop is tilted forward away from you, you begin singing each thing to be captured, then once it's stable, you tilt the laptop up and back, bringing the laptop into the ensemble (visually for the audience, and also engaging the buffer capture). The little green marble will roll to the top (like it's bubble floating inside) and settle on the capture bar. At this point, nothing gets put into the buffers and the audio you've capture remains until you tilt back down, releasing the captured audio and triggering the next section/score/instruction.

NOTES: There is danger of feedback and/or capturing things you don't want into the fairly long (2 second) buffers. So when you say "Lo" you have to hold it for at least 3 or more seconds (to let the "L" part clear), sing steady "O", then capture while still holding it steady. Capture should be fairly rapid, but not too quick. Beware little creaks your laptop and cables make while tilting, as these will be captured too. I find that holding the base of the laptop on one flat palm, and holding the base and lid from the side with the other hand, helps to keep things stable and less noisy.

Each section is triggered by a full sing/capture/tilt cycle. Stuff you're supposed to do is displayed to you on the interface, but once you've learned the piece, you will likely do some things a little early (before that part of the score pops up). For example, when you're releasing one section, in some cases you can start singing the next, making more audio/visual magic as your speaker fades out and your pure voice is heard, as you tilt your laptop away.

Rough idea of the piece, in text form:

Sections 1-3:

|:Repeat this 3 times, On F, then G, then F
 "LO - - - - - (like British "law")
|: tilt capture :|

Section 4: Last time on LO:

 "LO - - - - - KS!"
 Machine capture KS, mess with it in 6 channels.

Section 5: 3X Tone Clusters, capture, with tilt detune play

 "Ae - - - - - te - - - - - na - - - - -"
 (don't roll/pronounce the "r" in Aete(r)na)

(Coming soon . . .)

Section 6: "LO - - - X Pe - - - - (r)pe - - - tu - - - - a - - -"
Speeding that up, into a pattern in three,
Singers pick randomly one of the three
syllables, one of three notes, switching around.
Looping with themselves and other singers in
Rhythm (group adopted, reinforced by delays).

Something changes about that.

Fade...