This keynote presentation is available for you to download at http://www.bradyharrisonpercussion.com/learningteaching-resources.html

BE THE MUSIC:

LIVE INTERACTIVE ELECTRONICS

LIVE INTERACTIVE ELECTRONICS?

Sound

Light

Touch

Motion

MANY   POSSIBILITIES

ON THE "DRUM BUS"

Hihat	**Hot Hands USB Controller**
	Downstroke (breaks plane)
Bass	**Wiimote #1**
	Button A = Wet Sound
	Button B = Dry Sound
Snare	**Wiimote #1 Nunchuck**
	Button C = Wet Snare
	Button Z = Dry Handclap

All are MIDI Note Messages
from a button/switch
or accelerometer

THERE IS ONE CONTROL LEFT…

Volume	**Wiimote #1 Nunchuck**
	Vertical Angle

This is a MIDI
Control Change Message
from an accelerometer

HARMONY

Wiimote #2 Controller ⟷ Leap Motion Controller ⟷ Wiimote #2 Controller

C Chord- Up Arrow

Individual notes- X Axis (left-right)

F Chord- Down Arrow

Volume of Sound 2- Pitch/angle

G Chord- Left Arrow

Volume of Sound 1- Y Axis (height)

d min Chord- Right Arrow

Sustain- B Button

Wax on, wax off...

Bring them up, bring them down...

MELODY

Wiimote #3 Controller

B- 2   **A**- down arrow
C- 1   **B**- left arrow
D- -   **C**-up arrow
E- home   **D**- right arrow
F- +   **E**- B
G-A

All are MIDI Note Messages

from a button

Wiimote #3 Nunchuck

Volume of Melody- Pitch/angle

**This is a MIDI
Control Change Message**

from an accelerometer

ELECTRONIC SOUNDS ONLY?

LIVE CONTROLLER AUDIO EFFECTS CAN BE FUN AND EFFECTIVE ON ACOUSTIC INSTRUMENTS!

(especially on a variety of percussion instruments)

BACH CHORALE #371– CHRIST LAG IN TODESBANDEN

Leap Motion Controller

Amount of Effect 1 (slow motion drive) -   Y Axis (up and down)

Amount of Effect 2 (grain delay) -   Z Axis (forward and back)

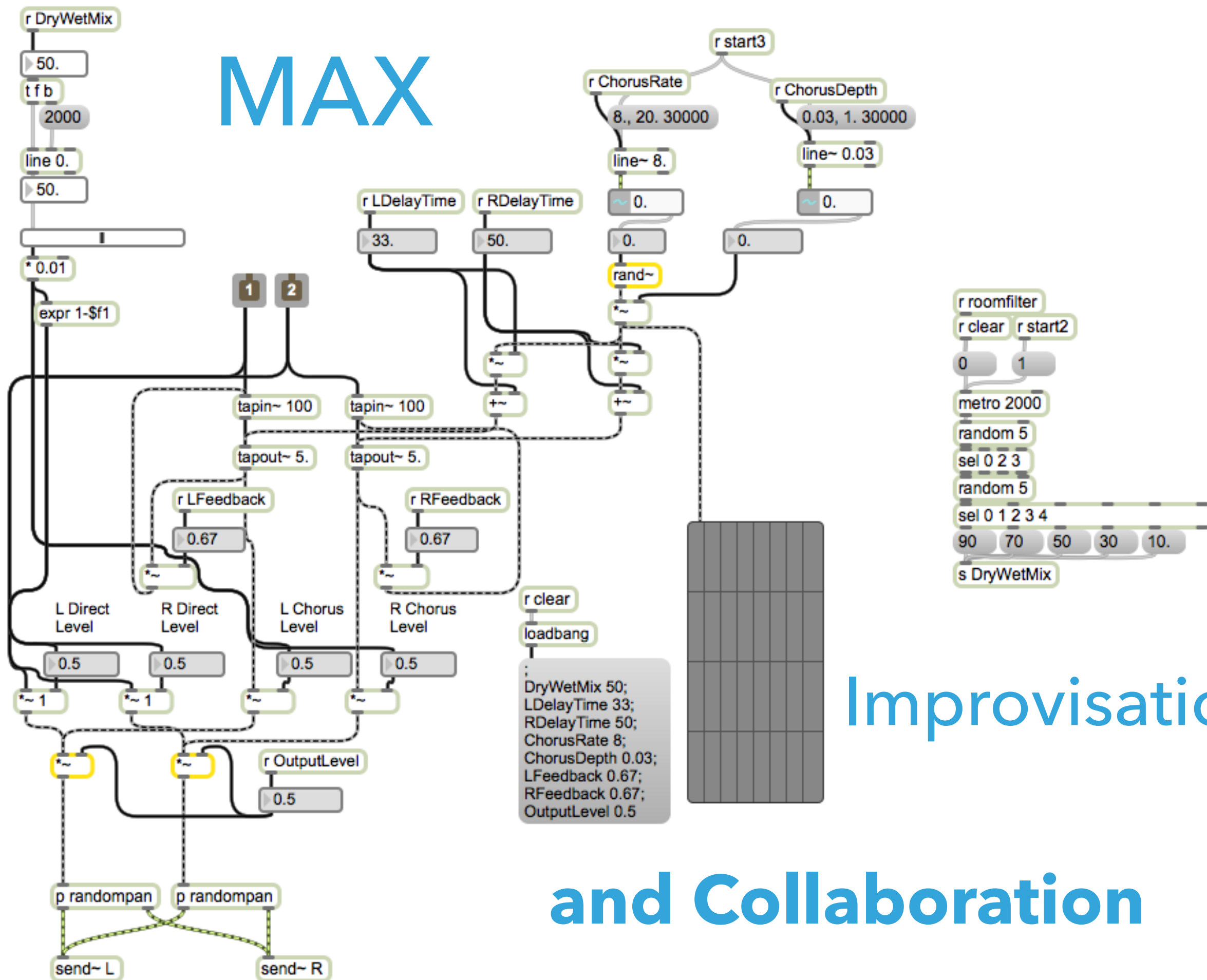Frequency Shift (for both effects) -   X Axis (left to right)

Remember the box.

SOFTWARE

▸ DAW- Digital Audio Workstation

▸ Osculator- OSC Routing (air traffic controller)

▸ Geco- for Leap Motion Interpretation

▸ MAX/MSP (or PD)- for Highly Customizing Patches

▸ There are **free** versions of all of this software.

PERCUSSIVE METAMORPHOSIS FOR PERCUSSION ENSEMBLE

▸ Every player uses some kind of controller, and these only represent a few of the possibilities.

▸ Most controllers are very affordable, or you probably already have them!

▸ These tools foster student engagement from a broader population because of their collaborative nature.

▸ Special Thank You to Yamaha, Sabian, Innovative Percussion, and Xavier University for your support!

XAVIER UNIVERSITY PERCUSSION ENSEMBLE

PERCUSSIVE METAMORPHOSIS

by Brady Harrison