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A Collection of Three Pieces for Solo Instrument and Electronics

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A COLLECTION OF THREE PIECES FOR SOLO INSTRUMENT AND ELECTRONICS

by

Carolyn Borcherding

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A COLLECTION OF THREE PIECES FOR SOLO INSTRUMENT AND ELECTRONICS

Carolyn Borcherding, M.M.

Western Michigan University, 2018

This collection of three musical compositions for solo instruments and electronics explores the interaction between acoustic instruments and electronic media with a specific focus on musical form. The musical form is apparent due to clear musical segmentations, and the coherence of each work is maintained by the inter-contextual relationships evident in the musical material. Each piece is divided into three parts: beginning, middle, and end. Each beginning sets up a strong relationship between the two media by using closely timed action-reaction gestures. The middle section diverges away from these reactionary gestures, while the ending then brings about a short return of earlier material. Both the electronic and acoustic parts adhere to this structure.

Each piece combines live and fixed electronics with a different instrumental type in order to explore the potential relationships between both media. Live electronics process sound in real time whereas fixed media is a combination of set audio files that sound the exact same way each time they are played. “Tangled Illusions” is written for koto, a plucked stringed instrument, and triggered fixed media. “Empyrean Tides” is written for alto flute, a wind instrument, and a combination of predominantly triggered fixed media and live electronic effects. “Learning to Speak” is written for woman’s voice, a vocal instrument, and a combination of predominantly live electronic effects and triggered fixed media.
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TANGLED ILLUSIONS

Score ......................................................................................................................... 1

EMPYREAN TIDES

Score .......................................................................................................................... 12

LEARNING TO SPEAK

Score ....................................................................................................................... 22
vib.

oshide

vib.

oshide gradually

vib.

oshide

vib.
oshide gradually

oshide on 3

oshide on 3
add pitches downward as rapidity increases

oshide gradually

scrape along string 6
palm slaps moving upward in pitch on both sides of the bridges
end delay + reverb
Learning to Speak

Carolyn Borcherding

\[ \text{\textbf{Voice}} \quad \text{\textbf{Elec.}} \]

\[ \text{Top} \quad \text{Mid} \quad \text{Bottom} \]

\[ \text{Hm} \quad \text{Hm} \quad \text{Hm} \quad \text{Hm} \quad \text{Hm} \quad \text{Na} \quad \text{Nah} \quad \text{ah} \quad \text{Yuh}! \quad \text{Yuh} \quad \text{Yuh} \quad \text{Yuh} \quad \text{Yuh} \quad \text{Yuh} \]

\[ \text{spectral delay: on} \quad \text{spectral delay: off} \]

\[ \text{classically sung} \quad \text{time delay: on} \quad \text{sound: "yuh gasp"} \]

\[ \text{flanger: on} \quad \text{time delay: off} \quad \text{flanger: off} \]

\[ \text{Hm} \quad \text{Hm} \quad \text{Hm} \quad \text{Hm} \quad \text{Hm} \quad \text{Na} \quad \text{Nah} \quad \text{ah} \quad \text{Yuh!} \quad \text{Yuh} \quad \text{Yuh} \quad \text{Yuh} \quad \text{Yuh} \quad \text{Yuh} \]

\[ \text{time delay: off} \]

\[ \text{flanger: on} \quad \text{time delay: off} \]

\[ \text{Hm} \quad \text{Hm} \quad \text{Hm} \quad \text{Hm} \quad \text{Hm} \quad \text{Na} \quad \text{Nah} \quad \text{ah} \quad \text{Yuh!} \quad \text{Yuh} \quad \text{Yuh} \quad \text{Yuh} \quad \text{Yuh} \quad \text{Yuh} \]

\[ \text{time delay: off} \]

\[ \text{flanger: on} \quad \text{time delay: off} \]

\[ \text{Hm} \quad \text{Hm} \quad \text{Hm} \quad \text{Hm} \quad \text{Hm} \quad \text{Na} \quad \text{Nah} \quad \text{ah} \quad \text{Yuh!} \quad \text{Yuh} \quad \text{Yuh} \quad \text{Yuh} \quad \text{Yuh} \quad \text{Yuh} \]

\[ \text{time delay: off} \]

\[ \text{flanger: on} \quad \text{time delay: off} \]

\[ \text{Hm} \quad \text{Hm} \quad \text{Hm} \quad \text{Hm} \quad \text{Hm} \quad \text{Na} \quad \text{Nah} \quad \text{ah} \quad \text{Yuh!} \quad \text{Yuh} \quad \text{Yuh} \quad \text{Yuh} \quad \text{Yuh} \quad \text{Yuh} \]

\[ \text{time delay: off} \]

\[ \text{flanger: on} \quad \text{time delay: off} \]

[17] time delay: on

[18] time delay: off

[19] flanger: on

[20] flanger: off

[21] sound "sh"

[22] spectral delay: on

[23] incoherent mumble

[24] spectral delay: off

flanger: on
don't need don't need don't need don't need

speak-sung

speak forcefully

suddenly act

Wait for electronics to fade out completely.

don't need don't need don't need don't need

incoherent mumble

Am Not!

[32]

time delay: off

evenly, robotic

[sibilant shuffle]

[sibilant shuffle]

[sibilant shuffle]

[sibilant shuffle]

[sibilant shuffle]

duh duh ah! I

[33]
sound "hiss"

sound "whispers"

wha(t) no(t) nah ha ha ha ah I
d d d don t

[34]

flanger: on
faster frenzied

I am not I am not I am not Ah!

[72] spectral delay: on
flanger: off
distortion increases
sound "ah!"
spectral delay: off

[73] [74] [75]

[76] sound "delay laugh"
time delay increases
distortion: off

[77] distortion: on

[78] sound "gasp"

[79] time delay: off
distortion: off
cut off electronics
distortion increases
electronics off

[80] [81] [82]