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Generative Audio Design: Emergent Sound Art for an Open World Interface

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Generative Audio Design: Emergent Sound Art for an Open World Interface

A thesis submitted in partial satisfaction of the  
requirements for the degree Master of Fine Arts

in

Theatre and Dance [Design]

by

Blair Robert Nelson

Committee in charge:

Professor Shahrokh Yadegari, Chair  
Professor Allyson Green  
Professor Gabor Tompa  
Professor Michael Trigilio

2012

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The thesis of Blair Robert Nelson is approved in quality and form for publication  
on microfilm and electronically:

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Chair

University of California, San Diego

2012

## DEDICATION

I wish to dedicate this work to the explorers who improvise discovery through the adaptation of form and function.

To my anchors of understanding:

my brother, Drew  
my pups, Dax and Tobin

my muse, Andrew – the love of my life.

## EPIGRAPH

“I don't fumble – I improvise...yeah, I'm uh...adaptable.”  
Nathan Drake, Uncharted 2: Among Thieves

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## LIST OF SUPPLEMENTAL FILES

File 1. Aqueous Luna 011210 [05:06 WAV]

*When water was discovered on our Earth's moon, I responded by exploring how to listen to the process of ice melting in a community of diverse wine glasses. Each performer would discover his or her unique resonate glass to bring to the circle, freely pass around ice, and reflect on perspectives in orbit – generating an electroacoustic soundscape.*

File 2. Aqueous Luna 010811 [JPG]

*Concept design. Alicia mentioned the metal was chilly.*

File 3. Space Between 021211 – Excerpt B [27:09 MOV]

*Invited exposition to introductions, alongside observation. Shifting shifty. Shift space. Stream of consciousness song-narrative. Environmental stretching.*



## **ACKNOWLEDGEMENTS**

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ABSTRACT OF THE THESIS

Generative Audio Design: Emergent Sound Art for an Open World Interface

by

Blair Robert Nelson

Master of Fine Arts in Theatre and Dance [Design]

University of California, San Diego 2012

Professor Shahrokh Yadegari, Chair

Clink. Clank clink. Ink cling clong clang. Cank ling. Ang clang. Clink. Clink.  
Clink. Clink. Clock clink. Click. Click. Click click. Cling. Clink. Clink clock click.  
Clah cling clah clink. Clag king. Kink. Dink. Dank. Kank. Ka clang, clonk. Konp.  
Koh kah cloak clock klink donk. Dong kling. Pah. Klong. Kland. Dah koh. Onk.  
Donk. Dip. Ing dop. Dop drop drip. Drape kape. Drip. Drip. Drim dram. Dip kip.  
Rim ram. Hop. Hum. Dim. Kum. Dah dape. Dee. Drip. Drop. Krop din. Dink. Rang  
drahh. Rimmmm. Rahh dip. Doooo. Drum drip. Drip drip. Drip. Drip drrrr. Ahhhh.  
Ooooooo. Whooo. Ahhhhhhhhhh eee. Ooooo. Uhh. Ooooo. Ahhhhhh.  
Whahhhh. Whaaahh. Whahh. Wah. Wah wa wa wa. Wha. Whahh. Whahhhh  
ahhhhhhhhh.

Hearing process exposes the movement of audio; ice melts into a liquid – into a gas of overtones. What is perceived as music and what is perceived as sound emerges into a coexistent designed world of audio, sandbox style. Using Ableton Live, a MIDI controller and keyboard with a MacBook Pro and iPad, I explore the boundaries of sound and music and discover an evolving role in real-time. Listen how the function of audio becomes in conversation with a non-linear form for the interactive space generated.