

Berklee College of Music

Paradigm Shift

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Abstract

Paradigm Shift is a short narrative film with audio-visual interaction centered thematically around two quotations:

“And those seen dancing were thought insane by those who could not hear the music.”

—Friedrich Nietzsche

“I became insane—with long intervals of horrible sanity.”

—Edgar Allan Poe

The dichotomy presented here is one that is explored through the cinematography, audio-visual interaction, and the compositional methodology.

1. Introduction

This project is informed by The Dance Plague of 1518, the most well-documented recording of a sickness of sorts in which about 400 people danced themselves to death.¹ Seemingly without cause, a woman simply started dancing, and gradually others joined her. Several explanations have been given for this, but none conclusive. This phenomenon has also occurred in other locations dating as early as the seventh century and as late as the eighteenth century.¹

The purpose of this work is to communicate in music and visuals what cannot be concisely and effectively expressed in words alone: to attempt to provide people with the opportunity to perceive the world and sounds around them as art. W.V. Quine proposed a thesis regarding the indeterminacy of translation, a term he uses to describe the impossibility of truly translating any word from one language to another.² In this work, this is abstracted to include music and visuals as independent languages. In order to more precisely present the emotional content of the piece, the quotations are used as an anchor to provide concrete context for the abstract sound design and visual aspects of the piece. If one cannot precisely state something, state it in as many contrasting formulations as possible in the hopes of providing a median.

¹ Waller, John. "Today." BBC News. September 12, 2008. Accessed June 13, 2018. http://news.bbc.co.uk/today/hi/today/newsid_7608000/7608874.stm.

² Seeloff, Robert, II. "Quine: Terms Explained." Indeterminacy of Translation. 1969. Accessed June 13, 2018. https://www.rit.edu/cla/philosophy/quine/indeterminacy_translation.html.

2. Review of the State of the Art

John Cage is a twentieth century composer and philosopher who pioneered aleatoric music, a type of music composition based on chance operations. He represents a figurehead of one of two seemingly opposing sides to twentieth century composition, the other being serialism. Aleatory is best represented in its execution on the website of the John Cage Trust.³ If one clicks on certain works, one is provided with a random excerpt from the work. Cage's work incorporated sounds that many would consider to be nothing more than noise. This was informed by his use of *musique concrete*, a style of electronic music in which recorded sounds are abstracted from their sources.

Ira Cohen was an American poet and filmmaker who worked predominantly in the later part of the twentieth century.⁴ His films *The Invasion of the Thunderbolt Pagoda* (1968), from here on referred to as "ITP," and *Kings with Straw Mats* (1986), or "KSM," heavily influenced the cinematography used in *Paradigm Shift*. The musical score of ITP, written by Angus MacLise, utilizes noise elements and rhythmic changes in camera angle in order to provide an immersive, almost trance-like experience.

Into the Void (2009) is a film shot completely in the first person. The camera angles and perspective are all used as a motif to supplement the overall narrative. The musical scores and cinematography of all of the aforementioned works in this section, combined with the methodology of *musique concrète* and aleatoric music provides for the basis of this culminating experience.

³ Cage, John. "John Cage :: Indeterminacy." John Cage :: Official Website. 2016. Accessed June 13, 2018. <http://johncage.org/indeterminacy.html>.

⁴ Gaddy, James. "Long, Strange Trip for a Hypnotic Film." The New York Times. August 27, 2006. Accessed June 13, 2018. <https://www.nytimes.com/2006/08/27/movies/27gadd.html>.

3. Description

The narrative takes the audience through a complete day of the invisible protagonist, which represents the artist. It begins with a shot of the ceiling above a bed, coupled with scattered Foley recordings of offscreen objects and sounds that one would typically hear in the morning: sheets rustling, chairs moving, typing on a keyboard, birds chirping, etc. The aleatoric elements of the work are mainly seen in the implementation of field recordings and the way in which the footage was filmed. Much of the recorded material is from a Tascam DR-22WL stereo condenser microphone that the artist carried with him throughout daily life in Valencia, Spain, for the majority of nine months from 2017 to 2018. Choice bias was applied in the subjective application of the artists perceptions regarding the message of the narrative, but this was offset by the use of random arpeggiators of sliced audio from field recordings in Ableton Live in sections of the piece. Settings include cafés and restaurants, various parades, Spanish holidays, and everyday background noises.

Certain actions are accented with drum hits, as a rhythm begins to emerge between background ambiences, such as bird calls, footsteps, and doors opening. The Ableton Live synthesizer Operator was used to create a synthesized bird call. When played by itself, it sounds quite electronic, but within the soundscape of birds in nearby trees, it is almost indistinguishable from a cleanly sampled bird call with a pitch modulation.

A microwave gets turned on for two minutes after the sound of the plate being set down locks the drum rhythm in place, and the hum grows into a sampled pad as the audience is shown multiple shots of walking down stairs overlaid. These shots are rhythmically interjected with shots of a playground from a balcony and from the street. This is where the phasing of timelines begins. There are multiple days being presented over one another, with the actions that are taken

every day being shown in distorted ways, while the individuality of each day is presented clearly. Musically this is represented through phrase alignment. As Western dance form has largely been in eight bar phrases for the entirety of its existence as such, eight bar phrases begin to phase, sometimes cadencing together, and sometimes not.

As the microwave sound grows, a House-style dance groove begins to emerge from the soundscape. A recording of an Argentinian man hitting randomly poured glasses of the liquor Fernet-Branca with chopsticks is introduced using a high pass filter in a classic House trope. As the audience begins to suspect a drop, the microwave dings and the soundscape collapses into the first section of “horrible sanity.”

This is demonstrated through slow, drawn out shots of long streets in the center part of Valencia coupled with operation-based pitch material with densely modulating soundscapes. During this section, the visuals are abstracted further as effects in Resolume Arena 5 are applied to the composition as a whole and matched with the tempo. As the soundscape builds in intensity, it reaches a point where it lofts the audience into a section of complete silence during which the visuals take on an almost painfully slow pace. It gradually becomes night as the we exit the “interval of sanity” and reenter another section of insanity that seemingly comes out of nowhere. The decision on how much silence to add took a period of self-reflection regarding the ability of such a trope to remain effective and “non-gimmicky.” The final product is thought to yield the desired result while maintaining a compelling narrative.

The previous sections pitch material is reintroduced in different subbass synthesizer patches in Serum. Footage of lightning is interjected rhythmically with various visual effects in Adobe AfterEffects and Resolume Arena 5. All of the pitch material is derived from the coordinates of the final hyperspace jump to Earth, the heroes’ new home, in the science fiction

series *Battlestar Galactica*, which the artist discovered during his year in Spain. This choice was made after much experimentation with various pitch class sets derived from every day places: the amount of time most used on the microwave, the temperature of the oven for a specific dish, or an address of a favorite restaurant combined with a simple substitution cypher. The most compelling result was chosen for the chosen emotional content.

The final step to the work was splicing together several different takes of “live” video mixing using Resolume Arena 5 coupled with audio reaction to different stems of the audio, often using an overlay blend mode in Adobe Premiere.

4. Innovative Aspects

The innovation of this project lies in the synthesis of a diverse body of ideas and techniques. Idiomatic fusion between art music, the *avant garde*, popular music, and underground electronic bass music is innovative simply by virtue of the fact that the latter is a relatively new style of music. While many films, such as *Wall-E* from Pixar, use sound design on a large narrative scale, the connection between sound design, score, and narrative is often neglected due to the schedule of post-production in high-budget films. This coupled with the use of aforementioned aleatoric ideals applied to audio and visual realms simultaneously in a symbiotic manner is, to my knowledge, novel.

5. New Skills Acquired

Throughout the year at Berklee the artist has improved in all aspects of recording and producing. Video recording, footage compilation techniques, and visual affectations are all completely new, however. Various improvements in gain staging, general mixdown capabilities, and sample choice have also been observed. The latter of which are believed by the artist to be mainly as a result of self-imposed ear training and analysis of listening suggestions made by Benjamin Cantil, Pierce Warnecke, and Nacho Marco, three of the artists professors at Berklee Valencia.

6. Challenges, both expected & unexpected

It was known from the beginning that visuals, being a new venture, would be the most difficult. It was the way that visuals and audio would inform one another, and the direction of this flow of information, that was completely unexpected. Certain decisions needed to be made regarding visual content in order to provide a framework for the audio, but the audio necessarily had to inform certain changes in video. The symbiotic nature that developed between the composition of both aspects of the work was much larger than initially anticipated. The music for the work flowed easily once a visual framework was defined.

7. Future Ramifications

Through the process of creating a standalone film with full musical score, the artist has realized a newfound talent for sound design for film. If the project was to be repeated, the filmography would be outsourced in order to utilize outside expertise which the artist found he lacked in the technical realm of film. Moreover, it would further inform the philosophical aspect from a visual side and help to universalize the particular concepts espoused through collaboration.

8. Conclusion

This project is the culmination of the entirety of the artists year ten-month experience in Valencia. It attempts to synthesize the lessons learned through the duration of the Music Production, Technology, and Innovation program with the previous work of the artist and frame it in an understandable, if abstract, way to the outside observer.

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