Thesis Project Proposal

CARNIVÀLE GLASS

Sound Reflection Object

Research Question and Aim

How can local ambient sounds of an urban area be used to visually actuate and engage viewers to produce social awareness of the effects of noise pollution on humans?

The aim of this project is to visualize the real-time ambient sound of a location that causes the viewer to reflect on the issue of noise pollution. The proposed portable sound sculpture will be activated by temporal nature of the city and its flaneurs or observers. *Carnivàle Glass,* will capture ambient sound with a microphone. The sound will motivate a video distortion effect of a real-time image of the environment. The video feed will be output to a monitor mounted in a portrait position. The output will distort as it reacts to the intensity of the sound via a set of predetermined parameters. The sound-object will explore the Bakhtin's themes of the Carnivàlesque and the grotesque to create humour by the distorting the viewer's face and the environment captured by the gaze of the camera's lens. The viewer's role is not only that of spectator but will initiates the distortions in the spectacle though conversations that take place nearby the mirror. By prioritizing the public's voice over the noise pollution my hope is to provide a forum for conversation regarding noise in the environment.

Method

This Intonarumori or the sound object should evoke a modern twist on the carnival funhouse mirror that utilizes the notion of the modern spectacle of media. In this case the physical funhouse mirror exchanges its reflection with one of modernity in the form of a screen. The digital screen is the output device for real-time reflection of the environment that is

animated by sound events. The input sound data from environment will be paired with visual disruptions to create a fleeting sensation of a carnival mirror that distorts the spectator.

Max Jitter combined with Wekinator and Open Sound Control (OSC) technology will be used to design the programing used to run this new twist on the intonarumori. Either through machine learning with Wekinator or by setting parameters within Max for specific amplitudes sound will trigger to create a distortion.

Max will be used to organize the video images and trigger distortions that occur when sounds are recognised. Max will be used to control the inputs to a microphone and camera and control real-time sound and distortion interactions with live video. The data captured by the microphone will trigger a disruption of the real-time image. Each environmental sound will require its own reaction. The loudest sound captured in the environment will determine style and severity of the distortion displayed.

Text may be enlisted in the form of humorous euphemisms and idioms that are related to the theme of noise pollution will simultaneously be triggered by the sound. The texts will humorously cajole the viewer's recognition of what effects the mise en abyme.

Sound Triggers (intensity of distortions from high to low)

- Trucks
- Construction
- Automobile
- Dogs
- Ambient voices
- Direct verbal engagement with the mirror

ANNOTATED BIBLIOGRAPHY

Amazing Max Stuff. 2017. *Video Effect Remake in Max/MSP*. YouTube.

https://www.youtube.com/watch?v=UwfFY6KTd7w

This tutorial demonstrates and provides code examples for video effects produced by sound and triggered by amplitude thresholds to manipulate the colours within still images.

Amazing Max Stuff. 2018. *Audio Reactive Tutorial #1*. YouTube.

https://www.youtube.com/watch?v=PXh8Z1kiJnw.

Amazing Max Stuff shows how affect lines in a mesh to produce 3D audio reactive video output.

Bakhtin, Mikhail. 1936. *Rabelais and His World.* Translated by Helene Iswolsky. Indiana University Press. 33-89 303-330.

The World of Rabelais is inspiration to this installation. The case of this project the world of carnival will be used as metaphor for the distorting effects of sound on the human form: But it also speaks to universal accessibility of laughter through a personal encounter with a grotesque visual parody that mocks societies flaws. Carnivàle created a forum for citizens to satirize the ruling religious and political powers without penalty or reprisal. So, should the *Carnivàle Glass* empower its spectators to discuss and consider the distortions. The idea of the grotesque can be aptly utilized as it describes the visual effects displayed on the monitor with the physical effects of noise pollution on the entire body.

Banash, D. 2000. *Activist Desire, Cultural Criticism, and the Situationist International.* Iowa Journal of Cultural Studies. 2-17.

Banash, discusses the Situationist theory of the interaction of dérive, the flaneur and psychogeography. Psychogeography is the effect of a location has upon the flaneur or observer's emotions and behaviour, while the dérive entails a journey or the observer's ability to wander aimlessly in urban spaces.

Cardiff, Janet, Burres-Miller, G. 2010. *The Carnie.* http://www.cardiffmiller.com/artworks/inst/the_carnie.html.

Canadian artist Cardiff and Millar experiment with the themes of the carnival and the spectacle. Manipulating sounds into unexpected places the pair deconstruct the carousel's sound.

Cycling 74. 2015. *Vizzi Visions: Episode.* Cycling 74. https://www.youtube.com/watch?v=s5v_b3cbBUk

This tutorial features Vizzi objects and creates pre-sets using PRESETTR Module and patch routers in Max. Also covers discussion on setting various parameters.

Cycling 74. 2015. *Gen Patch-a-Day.* Cycling 74: Tools for Sound, Graphics and Interactivity. https://cycling74.com/forums/gen-patch-a-day

This article features list of experimentations using gen patches to create different effects. Patch Day 2 is similar to the mirror effect with a live video feed that I will be trying to achieve.

Debord, Guy. 1963. *The Society of the Spectacle.* Originally published in France as La Soci't

du Spectacle, 1967. Translation by Donald Nicholson Smith. Zone Books, 1994.

The Society of the Spectacle discusses the link between society, media and the formation of the spectacle.

Fiebrink, Rebecca. 2018. *Machine Learning for Musicians and Artists.* Kadenze, Goldsmith, University of London. https://www.kadenze.com/courses/machine-learning-for-musicians-and-artists-v/info.

Rebecca Fiebrink is the original programmer and author of Wekinator. The course was designed by her to be accessible to artists and musicians of all levels. I am currently working to finish this full online course.

Höller, Carsten. 2006. *Carousel Mirror*. Gagosian, Sudeley Castle, Winchcombe, UK https://www.gagosian.com/artists/carsten-holler/selected-works

Höller often plays with the theory of the Carnivàle and the spectacle as seen in his work Carousel Mirror and the piece Carousel in 2006. He plays with human perception and makes art a spectacle and an experience for the public.

Johns, D. A. 2017. *Caring, killing, euphemism and George Orwell: How language choice undercuts our mission.* Elsevier, School of Government, Portland State University, 174-176.

Euphemisms are used to understate and soften impact more accurate language might have, when used to describe a person, situation, habit or event. Euphemisms and idioms will be used to describe the issue of noise pollution. Playing with the euphemism and idioms will

silently temper the language concerning the issue of noise pollution and entitlement used within the project.

Justen, William. 2018. *Awesome Audio Visualizations.* GitHub, Inc. YouTube. https://github.com/willianjusten/awesome-audio-visualization#libraries-visualization. A selection of curated audio visualizations by William Justen.

Kuwait N. Z., Al-Mutairi M. A., Al-Attar, Al-Rukaibi F. S. 2010. *Traffic-generated noise pollution: exposure of road users and populations in Metropolitan.* Environmental Monitoring & Assessment is the property of Springer Science & Business Media B.V., 69-75.

This was a helpful support article discusses the evidence of the negative effects of noise pollution on human health. Secondarily there is evidence that supports a correlation between noise pollution and vehicle emissions on physical and emotional health.

Nicolai, Carsten. 2013-16. *Reflektor Distortion.* http://www.carstennicolai.de/?c=works&w=reflektor_distortion

Nicolai plays with perception and sound as he distorts water reflections with centrifugal force to elicits a response from the viewer.

Nicolai, Carsten. 2013-16. *Uni (psycho) Acoustic.* http://www.carstennicolai.de/?c=works&w=uni_psycho_acoustic

In this case Nicolai plays with sound perception and image to produce psychoacoustic results in his viewer.

Piper, Leanne. 2016. Max MSP Jitter: *Voice Recognition Patch Demo.* YouTube. *https://www.youtube.com/watch?v=G-OyqekEydM*.

This video demonstrates a simple voice or sound recognition patch.

Vic, Chris. 2017. *Selfie Sunday 003: [jit.bfg] Funhouse Mirror.* YouTube. http://chrisvik.com/selfie-sunday-003-jit-bfg-funhouse-mirror/

Vic designs a version of a funhouse mirror using Max Jitter objects.

Wright, Matt. 2018. *Programming Max: Structuring Interactive Software for Digital Arts.* Stanford University. https://www.kadenze.com/courses/programming-max-structuring-interactive-software-for-digital-arts-i.

Programming Max is an online course I discovered to replace the tutorials taught by the Max online tutorials associated with the programing. I found the instructions written by Max were very difficult to understand and achieve a consistent outcome. This course is straight forward and informative. I am currently working to finish this full online course though it has already refreshed my skills and broadened my understanding of Mac MSP Jitter for use in this project.