Deconstructing, Refocusing and Reframing the Postdramatic Experience

By

Grace Roberts

Tasmanian College of the Arts

Submitted in partial fulfilment of the requirements for the Masters of Fine Arts
University of Tasmania April, 2017.
Signed Declaration of Originality

This thesis contains no material which has been accepted for a degree or diploma by the University or any other institution, except by way of background information and duly acknowledged in the thesis, and to the best of my knowledge and belief no material previously published or written by another person except where due acknowledgement is made in the text of the thesis, nor does the thesis contain any material that infringes copyright.

Signed: Grace Roberts
Date: 18/04/17

Signed Statement of Authority of Access

This exegesis may be made available for loan and limited copying and communication in accordance with the Copyright Act 1968.

Signed: Grace Roberts
Date: 18/04/17
Abstract:

Deconstructing, Refocusing and Reframing the Postdramatic Experience is an investigation of connections within hierarchy roles in Postdramatic theatre, and the relationship audiences have with those structures. The traditional hierarchy consists of director/playwright at the top, however the Postdramatic style is centred on images and symbols, therefore this existing structure must change. The overall objective of this investigation is to explore the balance between audience’s involvement in a live Postdramatic theatre piece and how much a purely scenographic and design based performance can influence that experience. And what the nature of that experience could be. Although there is an overall objective for this investigation, the project is divided into cycles of practice where each cycle will examine one particular technical design component in a certain context. Cycle One investigates sound and Cycle Two investigates lighting. The aim of this project is to examine relationships between the theatre scenographer and audience through an experimentation with aesthetic structures within theatrical works. The project aims are to highlight the hierarchy at play in different theatre styles, while putting the scenographer at the centre of the process and also to break down the assigned importance of the text in the process of a production. This investigation will have its base in a staged interpretation of Samuel Beckett’s Quad (1981). Due to the non-conventional nature of a piece, it is important to address the scenographic structures in relationship to the reception of a theatre work. It is also important to understand each role the technical components and design play within a Postdramatic theatre setting due to the strong reliance on non-text based components.
Acknowledgements:

I would like to acknowledge and sincerely thank a number of people who have assisted me throughout this project. Thank you to my supervisors, who guided me through this research journey and all the patience and kind words of encouragement when I needed it most.

I want to thank my family. My parents, Mike and Deb, who continuously support me and my passion for theatre, ever since primary school. Your love and care is always with me. My brothers, Luke and Josh, who always offered their help and time when I needed it.

Thank you to all my audience members who have already and who will continue to participate in my projects. Thank you for welcoming my concepts and design with an open mind and embracing my work in the community.

A massive thank you to my tech crew: Tom Crawford, Katie Hill, Alyd Taylor and Chris Jackson. Without you, my performance wouldn’t exist. The time and dedication you selflessly offered to this project is amazing and I cannot thank you enough.

Lastly, I would like to thank Chris Jackson for being my rock. Chris’ constant support, expertise and love is what has gotten me this far. Thank you for listening to my ideas and complaints. Thank you for always being a calming voice when I needed it. Thank you for tackling this concept with me and for never telling me that something wasn’t possible. Thank you for being another eye whilst I was writing this exegesis, as well as designing my performance. Thank you for never doubting me and always reminding me to keep my chin up.

Thank you.
Contents:

Signed Declaration of Originality ii
Signed Statement of Authority of Access ii
Abstract iii
Acknowledgements iv
List of Images vii

Introduction 10

- Methodologies 11

Chapter 1: Sound 13

- Sound Art and the Phenomenological 19
  - Practice Cycle One (and a response to the Literature) 24
  - Beckett 25

Chapter 2: Postdramatic 29

- Postdramatic Theatre 30
  - Postdramatic Performance 31

Chapter 3: Audience/Immersive Theatre 35

Chapter 4: Light 38

- Lighting and the Phenomenological 38
  - History of Lighting 40
  - Beckett’s Quad 44
  - Post-Human 45
  - Mechanisms of Light 47
  - Practice Cycle Two (and a response to the Literature) 54
<table>
<thead>
<tr>
<th>Conclusion</th>
<th>58</th>
</tr>
</thead>
<tbody>
<tr>
<td>References</td>
<td>61</td>
</tr>
<tr>
<td>Appendix 1</td>
<td>66</td>
</tr>
<tr>
<td>Appendix 2</td>
<td>67</td>
</tr>
</tbody>
</table>
List of Images:

<table>
<thead>
<tr>
<th>Image</th>
<th>Artist</th>
<th>Title</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Murray Schafer</td>
<td>Examples of sound recordings of different frequency sounds.</td>
<td>1994</td>
</tr>
<tr>
<td>2</td>
<td>Tristan Perich</td>
<td>Microtonal Wall</td>
<td>2011</td>
</tr>
<tr>
<td>3</td>
<td>Ryoji Ikeda</td>
<td>Superposition</td>
<td>2012</td>
</tr>
<tr>
<td>4</td>
<td>Marina Rosenfeld</td>
<td>Teenage Lontano</td>
<td>2008</td>
</tr>
<tr>
<td>5</td>
<td>Silvia Mercuriali</td>
<td>Notmyvoice</td>
<td>2017</td>
</tr>
<tr>
<td>6</td>
<td>Grace Roberts</td>
<td>Waiting for <del>insert title here</del></td>
<td>2017</td>
</tr>
<tr>
<td>7</td>
<td>Violinist Viajador</td>
<td>Examples of cones in the colour spectrum</td>
<td>2003</td>
</tr>
</tbody>
</table>
**Image 8**  
R. Nave  
*Cone mosaic, showing the percentages of colour sensitivity of cones.*  
2000

**Image 9**  
Max Keller  
*Coloured light on pigmented objects*  
2010

**Image 10**  
Grace Roberts  
*Test of the gel filters in lamps onto a white sheet.*  
2016

**Image 11**  
Grace Roberts  
*Showing of three primary overlapping shadows behind a white light from multiple lamps*  
2016

**Image 12**  
Grace Roberts  
*Three secondary additive colours in three different lamps, creating primary colours in shadows*  
2016

**Image 13&14**  
Grace Roberts  
*Using two opposite colours in the light spectrum to create white light and double shadows.*  
2016

**Image 15**  
Grace Roberts  
*Colour examples of pigmented material under white light.*  
2016
Image 16  Grace Roberts

*Colour examples of pigmented material under green light.*

2016

Image 17  Kate Prior

*A Dramaturgy of Sound: On Complicite’s “The Encounter” and Being Alone Together.*

2017
**Introduction:**

It was 2013. I sat with a new script in my hand and my mind raced with the possibilities of its execution. Knowing that this play had already been staged many countless times before, I was determined to make mine different. But how? The words would be the same. The delivery of the lines would vary but not so much as to lose the narrative. It was at this moment that I realised it was my design that would set it apart. The images and shapes I put out into the space would change how it was viewed. I could alter an audience’s experience based on my scenographic choices. It was through this revelation that I decided to pursue research in design. This project started as an extreme example of what a design could achieve without boundaries, and as it went on it developed into a Postdramatic installation performance piece which the audience is integral to, and physically a part of. When first devising this piece, the audience were a secondary element, but, during the course of my research, I discovered the vitality of the audience in my work, specifically the desire to create something unique for each participant.

At the beginning of my research into design, I endeavoured to cover every aspect of scenographic process: Lighting, Sound, Set, Costume, Audio Visual. However, after what felt like cutting limbs off a tree, I narrowed down my research pathway to two prominent components in theatre design and have focused my research on two main cycles of practice. These cycles deal with the fundamental and direct forms of how we perceive the physical reality of a performance: sound and light.

This exegesis is constructed as a narrative and I, the researcher, its narrator. It is a story of how Postdramatic theory and practice has informed my own practice and the significant contribution made by the theory of emergence. Although emergence theory has many different meanings in different fields of study, which are beyond the scope of this project. I will be using it in the context that “through smaller ideas, larger ones became clear” (Ablowitz 1939, p. 37).

The first chapter of this exegesis focuses on sound theory, as it is where I started my research journey. Following that, I discuss the staged performance that was a result of that investigation. My research then turned to the component of light in theatre and the discussion centres around the investigation that led me to my final practical submission; lighting in a single performance piece. As the field of scenography is vast, I acknowledge that certain
pathways were not taken due to the impossibility of investigating all avenues of theatrical design in this study. Postdramatic is a genre that requires defining whenever used as it has many different interpretations. In the context of this research project, I use Postdramatic as a style that focuses on the technical components of a production as entities in their own right, and sees the text as a framework to inspire the design and not to be the driver of the entire creation. This use of Postdramatic guided my research into design and the ‘reshuffling’ of the hierarchy to remove the importance of the text and actors in a theatre piece. I use the term audience, participants and viewers interchangeably. This is due to the roles I am casting for the audience, where at different times, they are required to act in different roles.

**Methodologies:**

The methodological frame I am using is Phenomenology: a method of practice based on the phenomenon of experience. This fits nicely with the concepts I will be utilising from emergence theory mentioned previously. Due to theatre and performance’s subjective nature, Phenomenology is fitting for these disciplines and my research project as it focuses on the individual’s experience.

Phenomenology is defined as “An approach that concentrates on the study of consciousness and the objects of direct experience” *(Oxford English Dictionary Online 2017)*. Don Ihde’s *Listening and Voice: A Phenomenology of Sound* (1976) describes Phenomenology as a practice that can be seen to be easily taken on due to its preoccupation with personal experience. However, he also talks of the challenges Phenomenology creates due to our inability to truly know our own experience as we cannot have an objective view. As my project is an invitation for audience participation, the results are never collated as scientific, objective, quantitative data, but rather, as qualitative; a record of individual experience and shared presentation of the audience’s custom works. This data is collected through observation of participants by me, the artist. This is due to the ethical considerations when recording biological data without permission. In order to create a performance environment that is accessible for everyone, no private information is stored for later use. The use of Phenomenology as an experience based methodology runs along the same track as the research undertaken in this exegesis. The use of experience based data is something that is discussed in Chapter 1: Sound, in reference to Schafer’s notion of hearing being as intimate as touch (see pg 15) and finding that connection between the work and the audience member. Establishing a connection between the audience member and the work is the key goal in this
investigation. As the Postdramatic style augments the already highly ephemeral nature of theatre, I can be said that audiences are having a Phenomenological experience in those Postdramatic works. As my project sits in the style of the Postdramatic, an experience based methodology is the obvious choice.

The cycles of practice in my research investigation are as follows: Cycle One, which resulted in a staged interpretation of Beckett’s Breath (1969) and draws on theories of sound and Cycle Two which draws on lighting theories. These culminate in a final performance piece based on Beckett’s Quad (1981).

The key words that inform the research are Audience, Beckett, Immersive, Performance, Phenomenology, Postdramatic, and Theatre. I will be utilising these key words to frame a literature discussion demonstrating the progress and development of my research, and how each section of the literature links back to my project’s practice.

Chapter 1: Sound:

The sense of hearing cannot be closed off at will. There are no earlids. When we go to sleep, our perception of sound is the last door to close and it is also the first door to open when we awaken (Schafer 1994, p. 11).

Murray Schafer in *Our Sonic Environment and the Tuning of the World* (1994) examines sound and our relationship to it. As sound is the first sense the body recognises, the best approach was to start this project with an investigation into sound theory and its relationship to practice. Initially my literature survey contained examples of strictly theatre sound designs. However, through further research into sound and the soundscapes that surround everyday life, my exploration branched out to performance, and what those differences were between everyday sound and performance sound, which I will define in this chapter.

Through my exploration into how sound interacts with human ears, Steve Goodman’s *Sonic Warfare* (2010) emerged. It discusses the effect sound and sonic waves can have on human bodies. Goodman asserts “ultimately, *Sonic Warfare* is concerned with the production, transmission and mutation of affective tonality” (Goodman 2010, p. xv). He addresses the situations where sound has been used in a negative/offensive way to create harm in many different scenarios and talks of the phenomenon of ‘shellshock’ amongst soldiers and how military forces would use this as a targeted weapon to induce fear in their enemies. He also describes how the use of sonic weaponry has evolved over the years and how sound doesn’t always equal volume when causing an effect.

The capacity and use of sound in order to harm is important to understand as there is a risk and an ethical duty when designing to impact the audience. It was important for me to understand how people deployed and experienced these tactics of *sound trauma* as I wanted to understand the thresholds, limits and concerns when designing my own soundscapes.

Goodman is referring to the sonic booms the Israeli air forces were using in the Gaza Strip under the cover of darkness. These sonic booms aim to traumatising citizens without affecting surrounding infrastructure: “Despite complaints from both Palestinians and Israelis, the government protested that the sound bombs were ‘preferable’ to the real ones” (Goodman 2012, pp. 1-2). The sound bombs consisted of sonic booms: “a high-volume, deep-frequency effect of low-flying jets travelling faster than the speed of sound” (Goodman 2012, p. 1). These sonic booms can reach 200Db which is enough sound pressure to rupture an ear drum.
Although, the frequency of a sonic boom is only between 0.1 – 100 htz which is very low as humans can only hear above 20htz. This means that humans cannot consciously, truly perceive the sound of sonic booms, but we can feel them through the vibrations and pain that is caused by them. These examples show the potential dangers in dealing with sound on members of the public.

When designing my soundscape for Cycle One, I initially wanted to explore the concept of fear through purely sound stimuli; however, the ecology of fear opens up many other doors which were unrelated to my main objective for design. As I have a particular fascination with fear, I knew my design would err on the unsettling side. Fear and pain are two very different feelings, fear being emotional and pain being physical. My investigation takes all these factors on sound’s effect on an individual into consideration when creating my own sound design for Beckett’s *Breath* (1969).

Ross Brown’s *Sound: a Reader in Theatre Practice* (2010), discusses the amount of noise pollution there is in the world, and that we have grown accustomed to the overexposure of sounds. He argues the notion of music and noise being one and the same, and talks about the environments in which they can collide and combine. He uses the concept of Theatrum Mundi which runs along the same track as “All the world’s a stage” (Shakespeare 1599, p. 51) and discusses examples of theatre interspersed with everyday life. One example is at Oslo airport where there are noise-cancelled zones where members of the public can step into and be transported into a different world of sound. Music has become a familiar sound in day to day life, as it is used to mask other unwanted sounds in cafes, supermarkets and libraries. Yet the idea that is posed by Brown is that “Music can be a part of the subjective experience of noisy, environmental randomness; and that the same everyday randomness can itself be taken as music” (Brown 2010, p. 2).

The concept of everyday sounds creating a musical composition, directed my thinking when I was deciding to compose my own soundscape. As I am no musician, I decided to take a different approach to creating the *Breath* soundscape. Using Brown’s and Schafer’s concepts of everyday music, I decided to create the soundscape purely using breath sounds. This choice came from my interpretation of the original work where I saw the piece as being a representation of every breath we take from birth to death.

Most of the sounds that we associate with and are affected by come from external forces. Goodman’s stories on sonic warfare and the ecology of fear with sound, curbed my thinking
towards Schafer’s discussion into each person’s individual internal rhythm, and how it sits above the average hearing threshold where “discriminating against low-frequency sounds, (the) human ear conveniently filters out deep body sounds such as brainwaves and the movement of blood in our veins” (Schafer 1994, p. 207).

Schafer addresses the parallels between the range of human hearing with the deep sounds of the human body. He highlights that the human ear cannot hear below 20htz, where the sound of the circulatory system and brain waves sit. Our bodies have filtered out unwanted or unnecessary sounds which led Schafer to point out the positioning of the ears on a human’s head. He imagines what it would be like to have them next to our mouths, where every noise from eating would be heard. Schafer’s view on everyday sound has prompted me towards the internal soundscape of our own bodies. Each person has their own individual rhythm and pace and therefore each sound each person hears is different depending on their own internal beat. My thinking shifted towards how I could use an individual’s internal rhythm as part of my sound design and how I might utilise the deep body sounds generated by audience members as a representation of the rubbish present in Beckett’s Breath. My project aims to explore the notion that a soundscape can adapt to the unique pattern of a listener’s body.

Although we have evolved so as we cannot hear these functions, as Schafer mentioned, we can feel them.

Touch is the most personal of senses. Hearing and touch meet where the lower frequencies of audible sound pass over to tactile vibrations (at about 20htz). Hearing is a way of touching at a distance and the intimacy of the first sense is fused with sociability whenever people come together to hear something special (Schafer 1994, p.11).

Cycle One was an interactive performance in which I investigated the internal soundscape of our own bodies, live sound and the experiences it can offer to both audience and performer. In Liveness: Performance in Mediatised Culture (1999), Phillip Auslander alerts us to a societal change in relationship with aspects of the ‘live’ in recorded performance. Liveness, in its purest form, is almost non-existent as we have mediatised everything to fit with our evolved experience, such as Schafer’s flat line drone (see pg. 17 of this exegesis); it has become white noise. Cycle One aimed to challenge the idea of live theatre through the use of the mediatised live.

Cycle One’s investigation aims to explore the notion of affecting an audience purely by sound and therefore influencing their perception of a performance they’re viewing. Affective
tonality describes the influence sound can have on mood, atmosphere and ambiance and is a key factor for many businesses that cater for the public. In *Affective Reactions to Interior Aircraft Sounds* (2003), Västfjäll, Kleiner and Gärling explore experiments designed to determine the effects aircraft sounds had on passengers. The authors found that sound heard by passengers in an aircraft directly affects their personal experiences. If the sound is too loud or at a certain frequency a passenger’s enjoyment on their flight will be disrupted; though they may not be able to pinpoint why, they could therefore blame the airline and potentially refuse to fly with them again. The same use of affective tonality applies to music in shops. Sounds can affect the body in many ways without us even realising. “As soon as volume exceeds 80db blood pressure rises. The stomach and intestine operate more slowly, the pupils become larger, and the skin get paler – no matter whether the noise is found pleasant or disruptive, or is not even consciously perceived” (Berendt 1985, p. 79). Berendt describes our unconscious reactions when in contact with sounds, which this project aims to connect with in the *staged* performance of *Breath* (1969).

When designing the staging of *Breath* (1969), I needed to consider the environment and style of its execution and in order to do this it was important to understand how each of these sound styles are created and what affect they have on the human body. Sound in the theatre spans across many forms; from soundscapes, music placement and sound effects, live voices, voice overs and infrasound. Sounds are all around us, and we can process those sounds based on the aural receptors in our ears which feed information to the brain to decipher. Those sounds are shaped according to many factors within our environments: the shape of the space we’re in, the distance between our ears and our perception of where the sound is coming from. What were to happen if an artist manipulated those factors to alter the perception of the audience and in turn, subconsciously confused the processors in the brain?

Cycle One’s investigation aims to test the human auditory system and seek deeper understanding of unconscious brain reactions when triggered by performance. This understanding will come through the reactions audiences will have to the experience, and whether they felt as if the soundscape was in tune with their internal rhythms. I will be using my research to create a sound performance that an audience member can not only explore with their imagination, but also instinctively react to it without completely understanding why.
Schafer (1994) discusses the sounds that are already evident in the world around us and our relationship to them. Schafer uses definitions of noise to distinguish between people’s perception of sound and how each individual processes it; “Of the four general definitions, probably the most satisfactory is still ‘unwanted sound’. This makes noise a subjective term where ‘One man’s music is another man’s noise’” (Schafer 1994, p. 183). As art is also subjective; my sound project aims to connect to each individual personally and therefore attempt to cut out the danger of noise by any individual definition.

Schafer also discusses the influence the industrial revolution has had on sound reproduction and how the mechanisation of society has created a soundscape in itself. As a society, we learnt to accept these sounds to the point where the aurality of machines were never considered a problem when people spoke of poor conditions in the workplace. The flat line drone is a phenomenon that Schafer explores in relation to the industrial and electrical revolution. The flat line drone is represented when the recording of sound occurs. Sounds that are more intermittent and random with peaks and falls are recorded as a jagged line on a sound graph, whereas sounds that are recorded with a consistent pattern or drone are recorded with a straighter line.

Schafer uses Henri Bergson to illustrate that we have been conditioned by the introduction of machinery to need an ongoing flat line drone as a “narcotic for the brain” (Schafer 1994, p. 79). As the evolution of machinery progressed, the flat line became ‘flatter’ and our
awareness of the sound decreased, however natural sounds are ones that are infrequent and therefore our natural soundscape as human beings has changed. Schafer says that people listen “differently in the presence of drones and the importance of this change in perception is becoming evident in the West” (Schafer 1994, p. 79). Using Schafer’s ideas on people ‘listening differently’, I aim to strip back the process of listening to something operating on a subconscious level, removing any outside influence, like the drone of technology. As much as I would aspire to create a soundscape that was one hundred percent live, and therefore cutting out technology altogether, it wouldn’t then sit in the intermedial realm of theatre I wish to explore and wouldn’t have the ability to directly adapt to an individual’s unique rhythm.

“Listening makes the invisible present in a way similar to presence of the mute in vision” (Ihde 1976, p. 51). In this statement Ihde is addressing the isolated instances of sound without vision and how paying attention to something is giving it purpose and making it present in your world as the listener. The horizons of silence and invisibility do not cancel out existence; just because you can’t hear it or perceive it doesn’t mean it doesn’t exist and the same goes if you can’t see it. As my sound practice targets the aural senses, I decided to put the audience members in a pitch-black box. This is to create an environment that forces the individual to listen without visual distraction. Ihde also notes that sound is the only one of our senses that reacts with the human body both spatially and aurally, as sound can change based upon a space. Language and music are the only forms that target the ear specifically. I created a soundscape that sits between language and music. Using vocal and body sounds, yet mixing them to create something with rhythm and pace. Ihde writes that there are two primary types of sound: global and precise (Ihde 1976, p. 60). Global sound is what we are constantly surrounded by, and precise sound is what we focus on when we are listening. Ihde believes we do both all the time but our brain decides which to process. I will be using a mixture of global and precise sounds with my sound design. This is due to the elimination of all undesigned sounds in the box and the participant’s ability to tune out what is undesirable. The soundscape will be layered with different types of sound. Therefore, the participant’s ear will create a new type of filtering system based upon what is given.

Ihde also mentions the notion of reflective listening, which is knowing the shapes of familiar sounds and learning new shapes all the time. The sound shape is based upon its location in the space against its pattern in time. Ihde discusses how sounds must exist in time in order to
be present. Sound artists play with sound in time when changing the perception of a piece such as Rosenfeld’s *Teenage Lonato* (2008) (Image 4 in this exegesis).

Ihde also discusses the use of imagination in relation to sound. In the chapter *Auditory Imagination* (Ihde 1976, p. 133) he talks of the sounds recreated in the mind. This extends beyond internal thought processors. Ihde uses the example of sound crowing in your head and ‘not being able to hear myself think’, and how hearing yourself is the basis of auditory imagination. It then can extend from there and you can have the ability to create echoes of noises or music just heard.

> Impression is only half of perception. The other half is expression. Uniting these is intelligence- accurate knowledge of perceptual observations. With impression we accommodate the information we receive from the environment. Impression draws it in and orders; expression moves out and designs. Together these activities make up what Dr. Otto Laske has called ‘sonological competence’ (Schafer 1977, p. 152).

Laske discusses sonological competence as something more than pure reception of information but the ability to process that sound and reanimate it in the form of design. This can only be determined through tests; it is only when subjects are asked to reproduce the sounds using their own voice that it can be seen that they are taking in the information. Using this as a basis for my own research, I will not be recording the perception of my audience’s reactions. Therefore, based on Laske’s and Schafer’s theories, I will never know if audiences are truly processing the information. However, it is only really my role as designer to thoroughly understand the sounds that I have created and that I have a level of sonological competence myself.

**Sound Art and the Phenomenological:**

As I began to form ideas around my own practice, other artists emerged who used sound in unique ways. American sound artist John Cage had a passion for silence, which was most prominently reflected in his famous piece 4’33 (1952), where a pianist sat at a piano for four and half minutes and made no sound. Cage referred to it as the ‘silent piece’ and its aim was to make people listen:

> There’s no such thing as silence,” Cage said after the performance, “You could hear the wind stirring outside during the first movement. During the second, raindrops began pattering the roof, and during the third people themselves made all kinds of interesting sounds as they talked or walked out (Cage 1952 in Ross 2010, p. 1).
Some audience members didn’t understand Cage’s purpose and even his mother commented: “Don’t you think that John has gone too far this time?” (Ross 2010, p. 1). Kyle Gann published Cage’s 4’33 and defines it as; “an act of framing, of enclosing environmental and unintended sounds in a moment of attention in order to open the mind to the fact that all sounds are music” (Gann 2010, p. 1). Gann’s interpretation of Cage’s work highlights the fact that there is no silence in the world, just the tuning out of unnecessary sounds. Schafer makes the point that “The ears only protection is an elaborate psychological mechanism for filtering out undesirable sound in order to concentrate on what is desirable” (1977, p. 11). The soundscape I created for Cycle One was layered and therefore gave the participant the choice (albeit subconscious) on which layer to focus on.

In early stages of the research plan for this project, I started to consider works that incorporated the visual perception of where the sound was coming from. This idea branched into something that included speakers playing through pipes that filled one side of a room, an idea drawn from Tristan Perich’s Microtonal Wall (2011), an installation of 1,500 miniature speakers emitting sound in a wide range of pitches.

“At a young age I learned to play the piano. The physicality of this massive instrument was a reminder that sound is intimately connected to action” (Perich 2011, p. 1). All actions have sounds, whether we can hear them or not. It’s how you use the sounds created to form something unusual which can change an audience’s perception of a piece.
Another example of sound art is the work of Ryoji Ikeda entitled *Superposition* (2015) which combined visual stimulus with aural.

I went to experience Ikeda’s work myself in 2016. On entering the theatre, audience members are given earplugs due to the volume and frequencies of the sound design. Ikeda synchronised the use of flashing lights and images with the loud eruptions of sound, giving the audience an intense overload on the brain. The piece ran for an hour and ranged from extreme sound and light flashes to two people sitting on stage performing Morse Code. As I was watching this performance in person, I wondered what it would have been like to see the work without visual stimuli, and came to the conclusion that it would have to have run a lot shorter due to audience’s attention spans regarding non-visual components. This is another reason why I have chosen to perform *Breath*; it runs under a minute and, as I am focusing solely on aural stimuli, this is an appropriate amount of time to keep the audience interested.
chose to abandon this idea of visual and aural for my first cycle of practice due to the impact sight has on sound. I want to first create something that stands alone in the sound field.

“As media and performance have become the default modes for many artists, sound has moved up through the ranks to be recognised and exhibited as an art form in its own right,” (London 2013, p. 1). The manipulation of sound is an age-old practice; however, artists have evolved with their use of sound: “We are beyond the era of sound ‘effects’. Sound is no longer an effect, an extra, a garni supplied from time to time to mask a scene change or ease a transition.” (Sellars 1992, p. 9). Cycle One explores the notion of sound as ‘performer’ rather than an “effect”. As there is an absence of actors in the piece, the sound design will work as the performer along with the participant that is linked to the piece. Artist Mark Bain and his work The Live Room (1998) used infrasound to create a physical presence and effect on his viewers. In this way, the sound design becomes a ‘performer’. Bain created small machines that spun around off balance to make the machines shake. He then placed the machines at the base of a building’s foundation pillars. These pillars carried vibrations through the building and the top floor was filled with infrasound, that is, sounds at frequencies below the threshold of human hearing. Bain uses infrasound:

    to investigate the unpredictable effects on movement, sensation, and mood. For example, a typical occurrence related to vibration is its effects on the vestibular system and the sense of orientation in which balance can be modulated so that suddenly your perception is, as Bain describes it, that of ‘surfing the architectural plane (Bosma 1999, p. 76).

Pam Howard asserts that the use of space and sound come hand in hand as:

    sound and space have always been synonymous. Church bells have rung out in the space above a town or village, and the Muezzin’s tower uses vertical space reaching into the sky to call the faithful to prayer (Howard 2009, p. 16).

In order to create a sound enriched environment, you need to first understand the way that soundwaves travel through the air. Bain used the architecture of the building and buildings around him in order to create something that resonated perfectly, and through this, became the performer. The relationship between space and sound influenced my decisions when staging Cycle One’s practice as I wanted to create an environment that favoured the reception of sound.

Marina Rosenfeld doesn’t “think of sound as a pure vehicle of experience, because even the experience of its reception is touched by so many complexities—including the nature of the listener and the context of the room” (Rosenfeld 2008, p. 1). Her work Teenage Lontano
(2008) explored the use of unconventional placement of sound. She used teenagers listening to MP3 players to sing along to a piece which she then played the score to from speakers above them. “This piece is happening in the air between” (Rosenfeld 2008, p. 1) she explained. She understood the formation of the space and deliberately challenged it. She describes her work as occurring “in the transactional space between sound’s disbursement and its reception” (Rosenfeld 2008 p. 1). Such a concept as that, sounds impossible as an audience cannot hear it without perceiving it. However, Rosenfeld created the idea of the audience hearing something as if in a delay, like the sensation of seeing the firework go off, and then hearing the bang a couple of seconds later. Although, the audience wasn’t actually experiencing the delay, it just seemed as much due to the unsynchronised nature of the piece.

Rosenfeld’s use of sound in performance shaped my use of sound when editing. I used effects such as panning from one ear to another to create a feeling of being surrounded by the experience. This same technique is used in Complicite’s The Encounter (2017) (which I will discuss in chapter 4).

Brown discusses Ihde’s relationship to sound and the human body and how our breathing can alter how each individual processes sound. This in depth thinking into individual’s perception of sound opens up a new world of thinking in acoustic design. Much like Schafer’s views on internal rhythms, Ihde discusses the connection between breath and sounds we make and covers such topics as the spaces, shapes and depths that sounds can create in everyday environments. Ihde deals with theories of Phenomenology in extreme detail and relates it to how we experience sound. Audience experience on a phenomenological level is the essence of my project. I am encouraging audience members to engage with the performance piece spontaneously; therefore, the experience that they have is controlled by them individually.
Practice Cycle 1 (and a response to the Literature):
The practice that came with this cycle of my project needed to allow me to test my ideas about sound design. For Cycle One’s experiment, I have chosen to use Beckett’s *Breath* as a base for a soundscape because of Beckett’s non-conventional style when approaching the dramatic and how his work has influenced recent thinking in Postdramatic theatre.

As I chose Beckett as a platform for this to happen, I knew I had to find a script that well suited my needs. *Breath* was chosen and from that point on I needed to decide how I was going to represent it.

*Breath* is Beckett’s shortest piece, running for approximately 35 seconds. The stage directions state that the stage is to be littered with miscellaneous rubbish, none of which is vertical. The piece begins with what Beckett describes as an “instant of recorded vagitus” (Beckett 1969, p. 1) also known as a birth cry. Following that there is a long amplified recording of someone inhaling and then exhaling and then the cry is repeated. Then curtain. It was said to have been written for Kenneth Tynan’s review *Oh! Calcutta!* (1969), where Beckett wrote *Breath* down on a postcard to send to Tynan. However, Tynan’s review was somewhat risqué in nature and the staging was altered and naked bodies were added to the ‘rubbish’ on stage. Audiences then interpreted the piece as one about sex and intercourse which angered Beckett.

In one of his few displays of public anger, Beckett called Tynan a ‘liar’ and a ‘cheat’, prompting Tynan to send a formal notice through his lawyers that he was not responsible for the travesty, which he claimed was due to others … Beckett decided the incident wasn’t worth the argument and dropped it (Bair 1990, p. 640).

Many have speculated on the meaning behind *Breath*. The most widespread conclusion that reviewers and audiences have agreed upon is that it is a symbol of the briefness of life between your first breath at birth and your last at death (Maiorino 2008, pg. 166). This is fitting with Beckett’s morbid reflections on life throughout many of his other works and can be seen as a progression towards *Not I* (1972) where a mouth is the main character. I draw similarities between *Breath* and *Not I* due to their minimalistic, abstract nature and how the audience is confronted with a disembodied figure; whether it be a voice or a mouth or bodily sounds. This investigation aims to perform *Breath* as a soundscape based on its original form. The rubbish of the piece will be portrayed by the sounds of the everyday internal beats,
littering our ears without us consciously perceiving it. I will be using multiple breaths within my sound design as a representation of all the breaths we take between the first and the last. Learning about sound and how it is received, I knew I wanted to create an environment that catered purely for sound and one way to do that is to remove any visual stimuli. As mentioned above, I wanted to create a unique soundtrack that could cater to the listener. The performance for Cycle One consists of an audience member sitting in an isolation booth with noise cancelling head phones on. They are linked to a device that records heart rate and breathing patterns. The device receives the information and adapts it into the pre-existing sound design which adjusts the tempo and rhythm to the audience member’s internal beat. The person in isolation hears nothing for the first 15 seconds and then they hear their own personal sound scape for the next 15 seconds. The rest of the audience listens to the entire piece. The purpose of this performance is for the individual and the larger audience to experience something live and new. The liveness comes from the live adaption of the soundscape to the individual’s heart rate and breathing patterns. The individual sits in absolute silence. Silence allows us to listen inwards to hear our beats and breathing. Once the soundscape plays, it seamlessly becomes a part of what they are already hearing in themselves. The audience will be able to notice the difference in the beat/pace when the individual begins to hear themselves. While the individual is in the isolated booth, four others sit just outside. Three of them are connected to the feed that is in the booth and the fourth is connected with a microphone in the foyer. The microphone is placed on a music stand with the script of Breath (1969) sitting on it. Audience members in the foyer are encouraged to read the script into the microphone while they wait their turn. This design decision came from the detritus mentioned in the original script and the tuning out of everyday sounds. In addition to the direct interaction of reading the provided text, the microphone would pick up the noise of the ambient foyer sounds. I wanted to consciously place them as a reminder of the outside world while the audience was enclosed in this isolated space.

Beckett:

In order to understand the intentions and meanings behind Beckett’s Breath, and consequently, Beckett’s Quad (1981), I had to first understand the man himself. Samuel Beckett was an Irish playwright who spent most of his adult life in Paris; writing both in English and French. He was born on Good Friday, 13th April in 1906 which was said to have pleased Beckett as it was not only the day of Christ’s crucifixion, but also Friday the 13th.
Beckett embraced the morbid nature of life and, as Anthony Cronin states, “what better birthdate could there be for someone so conscious of the suffering which underlies human existence; and conscious also that misfortune, in comic or tragic guise, awaited every venture and departure” (Cronin, 1999, pg. 1). He was raised in Dublin in the suburb of Foxrock and resided there until he moved to attend Earlsfort House School in the city centre near Harcourt Street. His mother and father’s relationship was strained due to his father loving another woman prior to their marriage. Beckett’s father, William Beckett, loved a Catholic girl but due to his family being Protestant, they could never marry. William Beckett, or Bill, became sick with pneumonia, perhaps due to being separated from his love. He found himself in the hospital where he was nursed back to health by a tall young nurse named Maria, or May. They married, as May’s family was well known and wealthy. It was a smart match, but Bill never loved her as much as he probably should have. Due to his father’s distance from his mother, Beckett’s childhood was troubling. His mother developed severe manic depression and would lash out on Sam and his older brother Frank. His father, failing to recognise her needs, would take long walks over the land and would often take Sam with him. Beckett’s relationship with his mother is seen to have shaped his relationship with all women. Although Beckett said there was no reasoning behind the underlying troubled nature of his works, I believe it stemmed from his childhood as does Bair:

> When asked to describe his childhood, Beckett called it “…uneventful. You might say I had a happy childhood… although I had little talent for happiness. My parents did everything that could make a child happy. But I was often lonely… My father did not beat me, nor did my mother run away from home” […] Why, one wonders, of all the images that he could have used to describe his life, did he choose to say that his father did not beat him, nor his mother run away from home? These are hardly images to convey an idyllic existence. Perhaps the interior realities of the situation did indeed belie the exterior trappings of the perfect childhood (Bair 1990, p. 14).

He began as a lecturer and writer of novels and short stories. Starting from a literature base, Beckett always believed in the power of words. Although Beckett is said to have challenged the norms of conventional playwriting, he was still rather traditional in his views on the execution of his plays; stating for example that Godot in *Waiting for Godot* (1953) could never be played by a woman. Beckett wrote to those wishing to produce an all-female cast of *Waiting for Godot* saying “Theatre sex is not interchangeable and *Godot* by women would sound as spurious as *Happy Days or Not I* played by all men” (Beckett 1973, p. 561). There were few times where Beckett has been said to be angry, but those occasions come about
whenever someone tried to change one of his scripts. Beckett was determined to create the hierarchy where the playwright was on the top of the pyramid, and to do so his scripts usually consisted of lengthy and precise stage directions where there is little left open to interpretation. Hence why he became so upset when someone would take it upon themselves to change what he has purposefully written. Beckett’s design of theatre sits within a timeline which predates the Postdramatic, however his style somewhat predicted the hierarchy shift. He seamlessly incorporated technical components with scripted dramas which would then (not by his hand) turn into a style that valued images over traditional text.

Beckett’s characters have a pattern of hearing things as internal monologues and this was something that Enoch Brater described as “transmission of the interior consciousness” (Brater 1987, p. 11). His interest in recorded sound started with Beckett’s first radio drama All That Fall (1956). He used voices in radio dramas to create a new world of sound that could be easily adapted to the theatre. “Such unearthly sounds, materialised as voices onstage, become the hallmark of Beckett’s late style, yet it is his work with the contingencies of radio drama that prepares us for their adaptation to the live theatre” (Brater 1987, p. 11). Beckett embraced the ambiguity of disembodied voices onstage and targeted audience’s imagination with this use of minimalistic designs. Beckett’s scripts were described as “visually suggestive” (Brater 1987, p. 13) as they were poetic in their nature and therefore a banquet for an audience’s imagination. He used language as blocking:

Beckett buries Winnie up to her waist in a mound of earth in the first act; in the second, we see her buried up to her neck as she is literally ‘devoured by the earth’. But Winnie has language, Beckett’s language…(Brater 1987, p. 16).

Although many of his plays are static on stage, they appear full of life through the language used. My decision to choose Beckett was a hesitant one at first as I knew how passionate he used to be about keeping his plays the way he intended. It may seem a contradiction for me to use Beckett’s work as a base for an abstract installation piece, however, I am taking his lead when it comes to shifting the hierarchy for the purpose of the piece. My objective is to create a work which centres on the design and what role a contemporary audience plays within it. I am creating a work that has very little room for reinterpretation and that is why Beckett is suited to my designs; his ambitions were similar in nature. Although Beckett wouldn’t be pleased about my interpretation and adaptation of Breath, I would hope he would
respect the angle at which I am approaching it from. I am merely taking his lead is regard to creating my own hierarchy, which suits my own selfish needs.

Beckett sat in the grey area of text based abstract theatre, and utilising his ideas, and his script, I planned to produce something that challenged the ideas of narrative in theatre and demonstrates how the use of technical elements can describe a world constructed in an individual’s mind during a theatrical experience. Beckett also paved the way for my investigation into the Postdramatic.
Chapter 2: Postdramatic:

When defining my project, I needed to decide what style it sat in. After coming across many styles through my literature scan, I decided my investigation best sits in the Postdramatic, since my approach to performance is from a theatrical, element based hierarchy rather than a dramatic, literature based one. Through this chapter I will define what Postdramatic is in the context of my practice.

The non-hierarchy is a term that refers to the technical elements of a production coming to the foreground. As scenography has become a more recognised craft in theatre, it has opened up the possibility of shifting the dominance to a performance from language to design components. The term used in the definition of the non-hierarchy is that the audience must possess the ability to have “evenly hovering attention” (Lehmann 2006, p. 87). In this process, the audience must be open to connections and create a story of their own. This style of thinking links onto the term simultaneity; which is defined as the audience viewing a piece in its entirety all at the one time. I will not be using the concept of simultaneity in Cycle One of my project but attempting the contrasting view when designing each experimental performance piece. I wish to first isolate each component in order to understand what each of them can do, before incorporating more than one in a final performance piece. This final performance piece is where simultaneity will come into play.

It becomes more presence than representation, more shared than communicated, more process than product, more manifestation than signification, more energetic impulse than information (Lehmann 2006, p. 85).

Postdramatic Theatre (2006) by Hans-Thies Lehmann discusses the separation of drama from theatre. It defines drama as something that is narrative based and sits in the realm of ‘conventional’ theatre (Lehmann 2006, pp. 24, 57). It discusses the attitudes that arose when theatre evolved into something that was based upon expression not only the telling of stories. Over history, theatre has evolved through many styles and approaches. From Symbolism in the late 1800’s, Naturalism, made famous by Stanislavski, to Surrealism and Theatre of Cruelty with Artaud, Expressionism in the early nineteenth century followed by Absurdism and Modernism in the early twentieth century. Postmodernism followed and then came the Postdramatic. Although these theatre styles are listed as if in a linear timeline, they cross over each other and the lines begin to blur when defining each one’s specific dates. Each style, however has their purpose, and the most recent styles are Modernism and Postmodernism.
which provided audiences with a lot of questions without many answers, and this is a phenomenon which is too board a field to venture into in this exegesis. Theatre has once again evolved, this time into a form that invites the audiences to experience something that they can define within themselves. Postdramatic theatre gives audiences answers without intending to. Their imagination provides the material that fills the gaps that were left by the structures of literacy based drama. Although imagination isn’t a new concept in theatre, my project offers audiences an environment without boundaries, that has just enough stimuli to encourage exploration with their imagination.

**Postdramatic Theatre:**

In this project, I use the term Theatre as less about text and more about images and elements. Robert Wilson’s theatre of images talks about the poetry that comes from space and light in the theatre. Edward Gordon Craig’s views on stage poetry were quite specific, as Lehmann states: “Craig claims that the great plays of Shakespeare cannot be performed, that they are not ‘scenic’, and that staging them is dangerous” (Lehmann 2006. p. 59). Theatre’s association with drama was almost inseparable by preference of the public in the early 1900’s. According to Lehmann, theatre-goers were less likely to appreciate the era of Brecht due to its abstract nature as Brecht’s style spoke of things being articulated through other avenues apart from literary storylines. Lehmann poses the idea that Postdramatic theatre was also Post-Brechtian theatre due to the fact that, although Brecht challenged the norms of the current theatre era, Postdramatic theatre evolved further than that to create something that could incorporate Brechtian style but also could encompass many others as well. “A scenic ecriture captures the attention, compared to which the dramatic plot is secondary” (Lehmann 2006, p. 74). Lehmann discusses the success of theatre without drama due to the audience’s capacity to adapt to a given situation. He says that audiences can find connections and plot when there is none given. “Intrigue, story and drama are hardly present; instead distance, emptiness and in-between-space are turned into autonomous protagonists” (Lehmann 2006, p. 76). My project embraces the notion of ‘less is more’, similar to Cage’s 4’33 (1952), and therefore invites the audience to explore the gaps in the design with their imagination, thus creating a design that speaks to each individual personally.

“The unconscious of every person offered the possibility for poetic creation” (Lehmann, 2006, p. 74). Lehmann’s quote highlights Postdramatic theatre’s potential to encompass a style of expression that is rich with triggers for the imagination. In dramatic theatre, drama
was heavily structured with spoken and unspoken restrictions on a performance, although it still played the important part of representing human beings on stage.

Once the unconscious and the imagination are acknowledged as realities in their own right, the structure of drama- which could claim to have offered an adequate representation of what happens between human being in reality of consciousness – becomes obsolete. (Lehmann 2006, p. 65)

The representation of people on stage was always limited to the constraints of the script, yet in a Postdramatic theatre era, the avenues of expression are limitless and therefore continually evolving.

**Postdramatic Performance:**

While the spectator of the modern theatre must develop an ever-progressing ability to connect heterogeneous elements, the gradual expansion of connections becomes increasingly less meaningful, and the evermore impatient eye is satisfied with evermore scant allusions (Lehmann 2006, p. 66).

Lehmann discusses surrealism in comparison to performance, which is one of the challenges I encountered when defining my own style of design. I had to decide whether what I created was theatre or performance art, and then also define the difference between the two. Artistic examples of similar works predominantly identify with being art based as opposed to theatre design. Jonathon Fox’s book *Acts of Service* (1994) discusses non-scripted theatre and its general attitude about conventional drama by explaining: “theatre is strongly associated with a play in the popular mind that is, a production that starts with a script written by a playwright” (Fox 1994, p. 4). Although this view is still relevant, Fox then explains that the era of Postdramatic theatre aims to change the definition of what theatre is capable of, “the discussion will demonstrate that the therapeutic uses of theatre, which are largely non-scripted, have as much claim to legitimacy as the literary theatre” (Fox 1994, p. 4). Theatre is defined as “The activity or profession of acting in, producing, directing, or writing plays.” (Oxford English Dictionary 2015). However, I define theatre as a vehicle for expression and imagination still within the parameters of an illusion. Performance will be defined in the context of this project as something real and without façade. Both theatre and performance have their functions and this project takes components from each discipline.
Marina Abramovic’s view on the divide between theatre and performance:

To be a performance artist, you have to hate theatre,” she replied. “Theatre is fake… The knife is not real, the blood is not real, and the emotions are not real. Performance is just the opposite: the knife is real, the blood is real, and the emotions are real (Abramovic 2010).

Based on Abramovic’s definition of theatre and performance art, I believe my piece is liminal. Liminality is a phrase coined by Van Gennep in 1909, but wasn’t made popular until the 1960’s where Victor Turner defined it as a threshold or in-between space. My project is liminal due to its combination of both performance and theatre. I am using a theatre piece (Breath 1969, Quad 1981) in a performance setting. My design utilises a script and the design is thoroughly structured; it will be rehearsed in a controlled environment. However, the reactions from the audience are real. It affects them on a physical and emotional level, more than what can usually be produced in a conventional theatre environment as their bodies are integrated with and respond to the piece as well as their minds. Lehmann based the connection between surrealist theatre and performance on the shared experience the artist has with the audience through the piece which is what is at the core of my investigation. My performance piece gives the audience a sense of connection to the piece and therefore to me, the designer. This connection comes through the intimacy of the performance and the isolation that is required to experience it- not to mention the physical interaction with the piece itself, without which the performance could not exist.

The media and technology in my practice is connected with the audience members in a way that the performance would not function without it. This is known as intermediality; in this instance, humans and media having a co-dependent relationship where they work together to create a whole performance.

Irina Rajewski (2005: 44) is right when she states that everybody who uses the concept intermediality is obliged to define it. As far as the concept is used as distinct from other concepts of mediality, it emphasizes, in particular, the aspect of mutual influence (interaction) (Kattenbelt 2008 p. 25).

I am defining intermediality as a form of technology that interacts directly with the human participant, therefore creating a intermedial piece that wouldn’t operate without them. This is when my investigation into sound began to really define itself. I wanted to create a piece that spoke to individuals on a personalized level, without assuming anything about them. Using
Schafer’s internal soundtrack theory, I commissioned an electrical engineer to create a device that recorded heart rate and breathing patterns in an individual. The guidelines for this device were that it had to be easily connected to audience members in a non-invasive way, it was small enough to be installed in an isolation booth and it needed to be able to have audio files played through it. The device was created successfully and with a few tweaks in the programming, I had something that changed the pace of a track purely on the participant’s internal beats. This allowed an audience member to have a personalised and unique sound track that was continually adapting to the live feed they were providing. This use of technology was required to work within certain physical constructs, which created the task of designing a physical environment to house it. Although set design and staging aren’t focused on directly in this investigation, it is always present. Brown talks about the relationship between space and sound and how the architecture of a theatre should be designed based on acoustic resonance, “a sound, the indefinite article, cannot exist without its acoustic environment; without its attendant theatre” (Brown 2010, p. 5). He talks about the different types of sound we hear in the theatre. He states that audiences need to accept three different sonic worlds:

The ‘real’ world of actor’s voices, stage movements and audience’s coughs, the world of the ‘live’ noises off – the thunder sheet, the ‘practical’ telephone or doorbell and the coconut shell, which the audience accepted by convention but which were obviously live but not ‘real’, and a separate, mediatised electroacoustic world of replayed sound, which was ‘realistic’ but not ‘real’ or live. (Brown 2010, p. 31)

This separation of different sound atmospheres gives us a deeper understanding of what we perceive and how we can distinguish between recorded noises and live ones. My project is working with recorded sounds but they are being adapted in a live setting. The two main points of sound in the theatre still exist today as even the most refined sound equipment still differs from the live acoustic sound. To minimize external sounds and interference, the participants are to wear noise cancelling headphones and to enter a sound-proof isolation box. Brown discusses the limitations of electroacoustic sounds in theatres and how;

the cultured ear can easily recognise two distinct realms of sound: one immediate and the other mediated. The aural experience of the theatre thus became what we might term intermediate” (Brown 2010, p. 31).

This intermediate theatre sound has been accepted by audiences purely based on the nature of theatre and the knowledge of the illusion. My own work defines itself as true intermediate
theatre sound, based on Brown’s definition. It incorporates the mediated sound designs with the immediate live evolution of those sounds.
Chapter 3: Audience/Immersive Theatre:

“Spectators are thus trained to be passive in their demonstrated behaviour during a theatrical performance, but to be active in their decoding of the signs systems made available” (Bennett 1997, p. 206). This investigation calls on the need to change the passive audience status to a physically active one. Not only are the audience members traditionally active in their analysis of the signs and images, but they are also invited to be physical co-creators and observers simultaneously. This project allows audiences to fill their imaginative worlds, in conjunction with the environment I have created for them, sparked, unknowingly from their own body.

When beginning this investigation my focus was purely on design, however, as I have progressed, the audience has come to play a major role in processing the design. However the overall aim for this project is to still investigate design. This lead my thinking towards taking audience involvement to the next stage with the concept of immersive theatres. In Immersive Theatres Josephine Machon gives her definition of immersive as “that which provides information or stimulation for a number of senses…” (Machon 2013, p. 21), and “diverse events that assimilate a variety of art forms and seek to exploit all that is experiential in performance, placing the audience at the heart of the work” (Machon 2013, p. 22). This is what my project aims to create; an immersive theatre piece that revolves around the audience and that cannot exist without it. Machon discusses the different types of immersive practices in theatre and claims there has been an increase in ‘one-on-one’ encounters in recent years:

Within immersive theatres there has been a recent upsurge in intimate encounters in the performance experience; ‘one-on-one or –one-to-one’ performance, which explores the direct connection between performer and audience member, space and individual interaction (Machon 2013, pg. 22).

There are many different types of immersive theatre. This ranges from Punchdrunk’s Sleep No (2016), where an audience could leave and the show would still carry on, to extreme examples of ‘one-on-one’ encounters in theatre like the works of Adrian Howells and his Foot Washing for the Sole (2010) or his The Pleasure of Being: Washing, Feeding, Holding (2011). These works consisted of Howells himself interacting with each audience member ‘one-on-one’; washing and feeding them throughout the piece. My piece taps into the concept of ‘one-on-one’ type of immersive theatre but instead of myself as the artist being in this relationship with the audience members, it is the work itself that is interacting with them. As
I have chosen to remove actors from the piece, the audience members would essentially be alone, yet through its ‘give and take’ nature, they will be a part of a larger system. The piece acts as a responsive, integrated experience for the audience members and without them there, it would not happen. Silvia Mercuriali’s Autoteatro series is very similar in nature to mine as the audience members are who appear to create the work:

functioning automatically: there are no actors or human input during the work other than the participants. An Autoteatro work is a 'trigger' for a subsequently self-generating performance (Mercuriali 2007, p. 2).

This style of work is where my project sits as I am using audience members to generate a performance, and through that they are experiencing the discussed design theories.

Machon comments that “At every stage of this process the work is responsive to the actions of its audience, moulding them as co-authors of their experience” (Machon 2013, p. 23) Participants who are taking part in Cycle One’s (and consequently Cycle Two’s) practice will be co-authors with the work itself, not necessarily solely the scenographer. Although the piece is structured and designed, ultimately, it is the audience member who drives the experience.

Tailoring a work to an individual gives a unique experience for the audience member but also invites a need and expectation from audiences of that level of immersion which can lead to the need for “…practitioners to be inventive, to surprise; not to be complacent nor rely on formulaic approaches” (Machon 2013, p. 25). This isn't necessarily a bad thing for artists who work in the Postdramatic style, as they are more likely to push boundaries and
experiment with new and exciting ideas. The particular style of immersive theatre that I am embarking on is seen to fit under the category of the Postdramatic, as it is inventive, unconventional and challenging. Traditional theatre consists of a set of unspoken rules, cued by the house lights or the blackout on stage. The difference with this particular style of immersive theatres is that if the audience were to stand up and walk out of a traditional theatre performance, the show would still go on. This concept also created the need to define the term *live* in relation to the context of a theatre piece.

*Liveness: Performance in a Mediatised Culture* (Auslander1999) discusses the relationship between theatre, television and film and how performance was never referred to as ‘live’ until there was the capacity for it to be recorded. Auslander discusses how the over-use of media in theatres has conditioned us to expect everything to be amplified so as the entire audience can experience the performance at relatively the same level. He highlights the craft of theatre direction where the eye of the audience is drawn without the use of a camera. My Cycle Two’s practice piece will play with idea of direction and perception of a *live* theatre show through the use of technology. Auslander wrote of the use of media to devalue to concept of the live in performance, yet I am using it to serve as an advantage. The use of my technology allows the *live* theatre piece to respond to the audience members in real time, and therefore creating something that is unique, *live*, and new every time it is performed. Peggy Phelan discusses the beauty of the live performance and how to document it is to alter it:

“In performance art spectatorship there is an element of consumption: there are no left-overs, the gazing spectator must try to take everything in…To attempt to write about the undocumented event of performance is to invoke the rules of the written document and thereby alter the event itself” (Phelan 1993, p. 148)

Phelan’s concept of documenting performance has informed my method of collating data from this investigation and cornered my reflective practice of the work into an observer’s perspective. This method of reflection will sit purely with me as an artist, observing and processing the experiences of each individual by gauging their response in conversation. This project intends to change the relationship between audience and the work.
Chapter 4: Light:

Once I had explored sound and how it can operate in an artistic scenario as well as the wider world, my next challenge was to turn my focus to light. This chapter on light is focused predominately on light as a physical entity and how humans interact with that force, as well as practice based examples.

Light is not an afterthought. It’s something that’s architectural, its structure, it’s thought about from the beginning, it’s part of the book, it’s like an actor. So it’s not a decoration (Wilson 1994, p. 1).

Light is defined as “Something that makes vision possible” by Merriam-Webster online Dictionary (2016). This definition is used in a broader sense of what light is, however it can be taken poetically in the context of theatre and art. Light is a tool for theatre-makers, but, as Wilson states, it must first start with a vision of that process. Theatre light is something unique and special as it can create worlds where once there were none, and will be none again. It can bring warmth and openness and then at a press of a button, create the darkest most isolated environment you’d ever imagine. In a theatre, we begin from an absence of light and must introduce what we need. This is a highly specialised and selective process. Light is a power of its own in the theatre and it must be respected.

My project’s research into light endeavoured to exercise the element of light in all its glory. As my overall project is focusing on how an individual can connect with a performance, and the audience’s relationship to the physical performance piece, my research in Cycle Two covers the process involved in receiving the information and how it is communicated with the brain- and light’s only access to our brain is through our eyes. My investigation will span across retina processors, the visual light spectrum as well as colour mixing and the emotional, psychological and physical attributes we connect to colour and light.

Lighting and the Phenomenological:

In a visual sense, the phenomenology of the theatre depends on the light by which the audience sees, as light is one of the chief mechanisms of our perception (Gertz 2010, p. 36).
Phenomenology bases its methods on perception and how an audience processes a performance. In my second cycle of practice, the ability to perceive rests mainly on the ability to see. Unlike the first cycle of practice (where you were relying on your ears to perceive) this second cycle incorporates visual stimuli. This presentation will be presented through another work by Beckett.

At first I needed to read up on some lighting knowledge. Stage lighting can be categorised by four criteria: intensity, colour, distribution and movement. These four qualities associated with light are what lighting designers utilise and deploy in order to create the desired effect. Intensity refers to the brightness of the light itself, and this must be taken into account when selecting colour also. The intensity of the light will determine in most cases how saturated the colour will be in standard tungsten lights. Distribution is the application, selectivity, isolation and angle of the light on stage. Intensity, colour and distribution can all be controlled by movement. Movement is the speed the lights happen, whether it is lights up, down or a crossfade. It should be noted that, intelligent or moving lights which add extra dimension and factors of movement will not be explored within the scope of this research project. These categories helped me pinpoint my research into audience, perception and interaction to a finer degree.

Australian lighting designer Nigel Levings talks of the importance of light to enhance the drama. He speaks of Shakespeare as an example of how you can take a drama, script based play and challenge it with light; “We should examine how naturalism has constrained us….the point I am trying to make is that even in naturalism our range can be extensive” (Levings 1991, p. 112). Although Shakespeare is not considered Naturalism, in this statement, Levings is admitting to the conventions of theatre lighting and how we can break free of those moulds, set perhaps in part by Naturalism decades ago. Levings addresses the over thinking process when designing and how the aesthetics of the image created must be at the source of a design.

I want to find a language of light for the stage where a light is a light and nothing more. It is not the sun or a door shaft or a candle’s glow, it is simply a light illuminating a performer in an interesting way. A simplicity of gesture and an abstraction from the naturalistic world are what I search for in my lighting (Levings 1991, p.112).
Light for the sake of light is a challenging concept for theatre-practitioners as we are always taught to justify our choices. Levings’ philosophies a more abstract and textural approach to light connected to the performance itself and not the representational approach so often used in theatre. I aimed to explore light as an element, a physical force, and therefore not necessarily have a literal source behind my design choice. Instead, I do have theoretical reasoning on why the design decisions were made (which I will go on to discuss in this chapter) and this is the rigor, I feel, designs choices need to be backed up by.

In *Stage Lighting Design* (2008) Richard Pilbrow mentions the objectives of stage lighting and how the “cardinal rule is: each member of the audience must be able to see clearly and correctly those things that (s)he is intended to see” (Pilbrow, 2008, pg.7). He then discusses that 99% of theatre light should be to light the actors, the other 1% would be for dramatic effect (Pilbrow, 2008 p. 9). Although still true, that the primary function of light is to illuminate performance, this now outdated view on lighting design prompted my research to focus on a Postdramatic side to theatre lighting, and to use these traditional texts merely as a framework to motivate me to push the conceptual boundaries in my own designs. Pilbrow covers the fundamentals in relation to lighting a production. All his examples are actor-based situations. Actor-based lighting designs are seen to be the conventional standard, yet in the early 1900’s, as the era of Modernism was gaining ground, practitioners such as Appia and Craig were challenging such concepts in stage design.

**History of lighting:**

Adolphe Appia and Robert Edmund Jones were early lighting visionaries, however the origin of the role of a lighting designer didn’t come about until the early 19th century where it was ‘invented’ by Abe Feder. This invention came about due to the fact that “Many years ago the English professional theatre traditionally held the director responsible. In America, it was the set designers prerogative” (Pilbrow 2008, p. 33). As lighting systems have grown more complex over the years, it has had to become a more specialised role within the theatre. Although Pilbrow mentions the evolution of the role of a lighting designer, it is still seen as a role which does not operate on its own.

The director is the leader of the team. It is quite useless for the designer to pursue an idea of his/her own that is at variance with the director’s intention. Wherever there is a disagreement,
the lighting designer can, of course, try to persuade his/her colleagues to his/her way of thinking, but if he/she cannot, then he/she must bow to the director’s wishes (Pilbrow 2008, p. 36).

My research is questioning this very statement. I understand the importance of a director in the institution of theatre, but I am questioning the ranking of roles in this system.

Robert Edmund Jones’ _Dramatic Imagination_ (1941) is often quoted when discussing poetry in lighting. Although Jones always pares it back to the importance of lighting the actors on stage, there is evidence that the abstract Postdramatic era of scenography based theatre was beginning through the poetry of a single element like lighting, as seen in Appia, Craig and Jones’ work. Although traditional theatre in the 1940’s was typically conventional in comparison to today’s performances, there was an opportunity for a style shift through the Modernist revolution.

Does this mean that we are the carry images of poetry and vision and high passion in our minds while we are shouting out orders to electricians on ladders in light-rehearsals? Yes. This is what it means (Jones 1941, p. 115).

Adolphe Appia was an artist who understood the poetics of theatre design. His ideas into theatre design were way beyond anyone else's at the time. Richard C. Beacham’s _Adolphe Appia: Texts on Theatre_ (2002) provides a comprehensive account of Appia’s ideas and how he became one of the most famous designers in theatre history. Beacham wrote that Appia was fascinated by the works of Richard Wagner when he was quite young: “With few exceptions the stagings that he saw both from Wagner’s own hand and by others were disappointing and dispiriting for him” (Beacham 2002, p. 28). But it was through this disappointment that Appia found his own craft. He saw the potential for something more, something expressive and imaginative. It was the crude and dry stagings he had witnessed in the past that sparked his desire to create beautiful worlds.

Beacham mourns the squandered potentials of Appia and light:

It was placed in the service not of genuine artistic creation and the active expression of experience of profound emotions, but was confined to imitating surface reality and, in a phrase, to putting on a show (Beacham 2002, p. 3).
Beacham highlights the problem with theatre that is not based on artistic vision or with creation in mind at the core of the expressive medium. Understanding each component’s role in a production and then giving each justice to perform in its own capacity is key to producing a well-rounded theatre piece. This is why my project is purely design based; to give the technical elements the weight of the show and explore potentials for expression and audience ‘contact’ through only these elements. In no way do I believe all shows should be executed this way, I am merely posing an example of what is possible.

The second major premise informing Appia’s work in this period was the perception that theatre could never be an internal and genuine art form unless the conception, fashioning and ultimate realisation of the work of art - the production itself - could be guided and controlled by the intentions of the original autonomous artist. Otherwise, the final expression of the work in it’s staging had no direct connection with its creator (Beacham 2002, p. 4).

In this statement, Beacham is describing Appia’s frustration with an incongruity within staged productions of the time. The painted set/backdrops did not meld with the onstage action and there was a poetically void juxtaposition of the two on stage. Appia strove to make theatre an overall masterpiece and at the centre of it was a single artist. This thinking is directly related to my own research with the view that the designer/director is that one *single artist*. Beacham also talks about Appia’s desire to have the musical composer to be the head of this hierarchy we all operate under. He believed that if the musical score was at the centre of the production, all elements would be easily able to fit within the timing and rhythm of that piece. This shifting of the hierarchy to favour something other than the director, writer and actors is the step in the direction that my project endeavoured to go. Although Appia talked of one element dominating, my research aims for all technical elements to work in harmony as a new shifted hierarchal order. No one element on top but having the script (if there is one) to work in favour of the production elements, not the other way around.

It was vitally important that the entire production process be coordinated by a single, highly sensitive artist, whom Appia conceived as a ‘designer-director’, responsible for carrying out the complex task of applying the hierarchical principle to the particular work that was being produced (Beacham 2002, p.4).
This is the role I am taking on in my research. As I had the scenographical vision in my mind, it only made sense that I was the one who made all the design decisions. As it is also solely my research project, I needed to have control over every element of the design.

Edward Gordon Craig is a major theorist when it comes to theatrical design. Along with Appia, Craig developed ideas about the design being something more than a garnish, to be applied after the actors and director have done their work. Although Craig’s views on acting and directing were also groundbreaking, he found a middle ground between design and dramatic action with the creation of his infamous Uber-marionette. There are many interpretations about the Uber-marionette’s actual execution; whether the intention was one of shapes representing actors on stage or whether it was about actors being fully controlled in their movements and emotions.

Edward Gordon Craig is famous for his innovative ideas on staging and scenography, but the ‘über-marionette’ concept is certainly his most intriguing creation. The article in which he presented it, ‘The Actor and the Uber-Marionette’ (written in 1907 and published in The Mask) was hailed by his contemporaries as both controversial and inspiring, but it does not contain a single clue as to the actual nature of what Craig meant by the term ‘übermarionette’ (LeBoeuf 2009, pg. 1).

The interpretations are far too numerous to recount in the scope of this research project, except to say: Craig’s Uber-marionette concept turned my thinking towards the notion of removing actors from a piece entirely.

As my previous cycle of work with Breath (1969) required no actors, I wanted to continue to follow down that same path. This decision then defined my whole research topic as a project that was centered around the audience and their contact/communication with me, the scenographer, through my designs. By not having actors present in my performance, I felt a sense of freedom when choosing the framework for my final performance based piece. I wanted to stay with Beckett, for the previously mentioned reasons, but I wasn’t sure which of his works would lend itself well to something that was to showcase both the components of light and sound in one performance. Through my research on Beckett and his works, one particular piece emerged as an appropriate vessel to house both design components.
Beckett’s *Quad*:

Beckett’s *Quad* was originally written as a television play in 1981 and then a text print was released in 1984. The television version had two segments to it; the first being four coloured characters entering the space and executing a choreographed set of movements with musical accompaniment, the second was in black and white without music. These two versions are known now as *Quad I* and *Quad II*. Sidney Homan describes *Quad*’s world as a "faceless, emotionless one of the far future, a world where people are born, go through prescribed movements, fear non-being even though their lives are meaningless, and then they disappear or die” (Homan 1992, p. 23). There are many other interpretations of *Quad* (1981), the most common being that of routine and the despair of life. This theme of death and cynicism appears often in Beckett’s work. *Quad or Quod* translates to a slang for gaol in French (Collins Dictionary 2017). This has been interpreted as *Quad* being a symbol of a system we all live within, many different faceless beings crossing paths but never connecting or that they are prisoners pacing in the prison yard. My interpretation stems from a gaol having power over how things operate, much like the power I am giving my audience members. I will be tapping into the notion of control and actions having consequences, but also dealing with the illusion of power in a closed system.

My research project aims to view light as an individual medium, capable of its own artistic suggestion. I am choosing to use *Quad* because of the connection between the colours of the characters and the sound that accompanies the overall choreography. For the purpose of my project, actors are not required as a part of the shapes in the space. Instead I will be using a technical component in the form of a robotic mechanism. These ‘robots’ follow the path pattern of *Quad*. Instead of having the colours of the ‘performers’ static from the start, the audience will be integrated and active within the performance by applying the colours onto the ‘performers’ as the movements of *Quad* play out. As the colours are applied, positions of power will emerge and audiences are invited to find their own meaning and hierarchy as they deem appropriate. This illusion of power will come from the position the audience members have found themselves in as part of the performance. Although it may seem like they are controlling the action, in fact they are merely cogs in a larger system that is ultimately my design. In Beckett’s *Quad*, the characters move in the same pattern over and over (occasionally leaving and re-entering the space to continue the pattern). Drawing from Craig’s concept of the *Uber-Marionette*, I decided to use robots to act as the moving shapes
in the space that are usually played by actors. This use of robots touches on the era of the Post-human, which in my research is present through the augmentation of the performance and audience’s integration and experience with technology via the conduit of intermediality and design.

**Post-human:**

Over the past twenty years, the concept of the posthuman - part-human, part-intelligent machine - has come to symbolise the inevitable endpoint of human technological progress. Proponents of the literal posthuman, alternatively referred to as a ‘cyborg’, herald an eventual union between organic and artificial intelligence— between digital and biological code (Hayles 1999, p. 4)

The concept of the post-human being similar to a cyborg as a hybrid connection appears to me as something already evident in today’s modern society. Technology and human existence has always co-existed and it’s through that connection that we can evolve. I believe that same concept is true for theatre practice and performance. A particular performance that displays a co-dependent relationship with technology is Complicite’s *The Encounter* (2017). This performance demonstrated how sound design can be tailored to an individual based on positioning of sound and that each audience member had their own set of headphones. The design created the feeling of being in the middle of the storyline and every person’s experience was the same. *The Encounter* (2017) will be discussed further at the end of this chapter. Denying technology’s input into contemporary practice could potentially impair your chances to evolve and move forward as a working artist. Although scenography is a design profession, it requires an understanding of technology to create those design visions. My vision for this practice came from me challenging myself to think outside the box and to come up with something Post-dramatic and Post-human. Integrating robotics within my project’s practice cycle creates a performance which encourages an audience to engage with the technology to create something that is a cyborg hybrid mix and therefore a unique and live experience. As the technology and design I am using has the ability to adapt to an individual, the role the audience play within this performance is a vital one.
Masahiro Mori observed that as robots come to look more humanlike, they seem more familiar, until a point is reached at which subtle deviations from human norms cause them to look creepy. He referred to this dip in familiarity and corresponding surge in strangeness as the *uncanny valley* (MacDorman 2006, p. 3).

MacDorman’s research article, *An Exploration of the Uncanny Valley* (2006) discusses a human being’s connection with robots, or another form of artificial being, and the likeness of that perception. I have chosen to use robots as stand-ins for the actors in the original piece, yet I wasn’t aware of the *creepiness* of this design choice until I actually saw them in action, moving around the space. A lot of the reactions I received from participants were that of fear and hesitation towards the robots as they resembled the human form. (See figure 4)

The robots used for my practice based test run were the mechanisms that moved the mannequin figures around the space. The robots were remote controlled by a technician in the space and therefore moved very unnaturally. As I am using *Quad* as a framework for my project, I will be utilising robotics to ‘act’ as my bodies in the space. These robots will run on a circuit which is the choreography needed for *Quad*. Once I knew what my framework piece was, I needed to understand how I could implement lighting design, philosophies and principles to enhance, manipulate and impact my audience’s perception of the piece. The use of robots was a decision that, for me, connected the concepts of faceless drones in *Quad* to the technical process of lighting. Using robots was a challenging concept yet I believe it was important to show what lighting could do upon non-human subjects, as to not draw focus from the designs at play. The choice to use robots for lighting and not sound was a decision made to create unnatural shapes in the space. As the sound cycle was in darkness, there was
no need to see anything. I also wanted to remove the human element so as to isolate the viewer in the space.

Mechanisms of Light:

The human eye can register: differences in brightness, colour differences, shapes, movements and distances. “The waves differ in length and frequency and these two factors produce the speed” (Keller 2010, p. 28). The speed of the light waves determines the colour which we perceive. Blue/violet’s speed being the shorter wavelength end of the spectrum and orange/red’s speed being at the longer wavelength end. This is why the rainbow is ordered in that way.

Cycle Two aims to explore the visual light spectrum in the way of manipulating what the audience can see and therefore what they perceive.

There are two main processes to understand when discussing perception of colour: wavelengths and sensitivity to colour. There are two types of photoreceptors in the human retina, rods and cones (Keller 2010, p. 29). Rods are more sensitive and cones are less sensitive to light. When viewing something bright and in full daylight, the rods aren’t designed to process full light so the cones take over. The pupil is what regulates how much light enters the eye, but the cones are the ones that process the colour/light information. Due to rods being more sensitive to light, they are able to process information in less light and therefore take over when it gets darker (dusk or dawn). Rods do not have the function to process colour, which is why colours seem to fade when the light does. The light levels where both rods and cones are operational are called mesopic and these are the circumstances present in most theatre spaces. It’s this knowledge into the human eye that allows me, as a designer, to manipulate what an audience is viewing. Through the use of specific light levels, an audience member can have a completely unique experience, with also allowing enough room for their own imagination to fill in the gaps. There are three cone arches when it comes to processing colour information, which are shown in the diagram below. Our eyes are most sensitive to greens, yellows and purples which are represented by the peaks of the curves. Therefore, we are less sensitive to blues and the longer wavelengths of the reds as well. Sensitivity to colour allows our eyes to view them easier. Green is one of the easiest colours to view because our sensitivity towards it is so high.
64% of our cones are red spectrum based and 32% of the remaining are green spectrum. Very few a blue spectrum based (2%), which is why red and green stand out more than blue, which is also why they are the light colours chosen for traffic lights.

There are distinguishing characteristics when it comes to colour and light. Chromatic colour types are the elementary colours. Achromatic colour types are black and white and all the greyscales. Colour degree is what the extent of the colour is. The greater the colour degree, the more intense the colour is.

The chromatic type, achromatic type, colour degree and brightness of a colour hue lead to a certain perception of colour. Unlike the ear, the eye is integrative. For example, if the ear is trained, it can distinguish the overtones of a sound. But the eye is not able to recognise the individual components of a beam of light (Keller 2010, p. 45)

My overall project will incorporate both light and sound, keeping in mind the differences in perception within the two modes of stimuli.
Image 8 shows a small snapshot of the retina; the centre of the image being the fovea. The fovea is the centre of the retina and has no rods in that area. When we look at something bright, our cones are over saturated and our rods are absent, which is why we are left with a blind spot in the centre of our eyes. This is also why when we begin to regain our vision, the spot may appear green or red. The cones that are present are purely red and green sensitive which would add to our decreased sensitivity of blue colours if we are looking directly at it. This information is useful as a lighting designer when manipulating an audience’s experience as they could target a viewer’s colour sensitivity by angling certain colours into their field of vision. I am using this theory in Cycle Two’s practice by using colour mixing (which I will discuss in this paper shortly). Using colour mixing, and the information about rods and cones, I designed a lighting grid to create colours in the peripherals of vision rather than directly in front.

This then brings me to discuss colour mixing. Colour mixing is the creation of new colours through the use of elementary colours. There are different forms of colour mixing; additive colour mixing and subtractive colour mixing: additive colour mixing refers to the “putting of individual colours together to produce the achromatic colour white” (Keller, 2010, p. 50). Subtractive mixing refers to “…filtering out spectral bands, modulating primary colours with overlaid filters” (Keller 2010, p. 50). The three ideal chromatic primary colours to combine are orange/red, green and violet blue. When all three of these colours are together in additive colour mixing, they make the achromatic white colour because they have subtracted the base colour which is the achromatic colour black. The black colour is out in the space, an absence of light. To create a particular colour to the eye, the coloured light used must omit all other parts of the spectrum. The primary colours of the additive mixing are the complete opposite
of that of the subtractive mixing. “When two (additive) primary colours that are to be projected are mixed, the colour mix produced is a subtractive primary colour” (Keller 2010, p. 50).

For example:
Violet blue + orange/red = magenta
Green + violet blue = cyan
orange/red + green = yellow

This means you can manipulate how you achieve what is perceived on stage. For example, instead of using an open white light, you can choose a violet blue, an orange/red and primary green filter from three different lamps to create something that gives off colourful shadows or enhances the depth of the stage, while still achieving the achromatic white wash. During experimentation, I discovered the colour mixing only works when you have the correct colour gel filters. Even the next shade up from the required colour can skew the result. After discovering the right gels, mixing the three primary colours: red, blue and green, they create a brilliant white light upon the subject. It is true that all colours of the spectrum are present on the subject but we perceive it as white light. When I put my hand in front of the white material and therefore blocking one light source I expected the shadows created to be red, green and blue. Instead they came out as yellow, cyan and magenta, when there were none of those colour gel filters in the lamps. See below:

Right:

Image 10:
Test of the gel filters in lamps onto a white sheet.
(Roberts 2016)

Right:

Image 11:
Showing of three primary overlapping shadows behind a white light from multiple lamps.
(Roberts 2016)

It is only when the shadows crossed over, that they created the expected result. I had the lamps rigged at different angles to the sheet, so the shadows were separated. See image 11 for
the result of crossing over shadows. This was due to the fact that my hand was blocking the colours hitting the white sheet, and therefore creating new secondary colours (or primary subtractive colours). Using three of the subtractive primary colours (secondary additive colours), the achromatic white colour is produced, yet the shadows created are red, green and blue.

Left:

Image 12:

Three secondary additive colours in three different lamps, creating primary colours in the shadows.

(Roberts 2016)

Left:

Image 13&14:

Using two opposite colours in the light spectrum to create white light and double shadows. Colours used were cyan, red, blue and yellow.

(Roberts 2016)

Subtractive mixing is using one light source and by placing filters in the light’s path, subtracting the amount of light by blocking parts of the colour spectrum from hitting the stage. Due to subtractive mixing, having the achromatic colour white as the base colour (open white light in theatre), when all three of the subtractive colours mix, they create the achromatic colour black. Results of subtractive mixes are:
Cyan + magenta = violet blue
Yellow + cyan = green
Magenta + yellow = orange/red

Once understanding the uses of different colours and how they behave, you can then pair the opposites together and create white or black light with only two colours. The main thing to remember about additive and subtractive colour mixing is that additive colour mixing focusses on the subject as a palette by introducing light/colour to the space, whereas subtractive colour mixing uses the gel frame as the palette but filters light/colour from the space, so all the mixing is happening before it hits the subject. As the vehicle for this project is Beckett’s Quad (1981), the four colours that Beckett associated with the work are primary pigment colours: white, yellow, red and blue. My research is centered on audience perception of a piece and how I can manipulate that to create a desired response. Manipulation of the colours will be applied in the filter and frame in which I allow the audience to view the performance through.

When dealing with pigment colour and light colour, it is important to understand the way light enhances or absorbs certain colours it meets. Max Keller uses an example in his book Light Fantastic (2010) on coloured objects and how different light filters react on the object when perceived.

The pigmented coloured objects only show the colour that is reflected by the light source on them. This is called colour rendering.

Body colours constantly change their appearance because of light. Only the radiated energy contained in light can be reflected by the object. If the light does not contain any radiation that can be reflected by the object, then it appears achromatic or dark (Keller 2010, p. 47).
This method of coloured lighting fueled my thinking towards creating a performance situation where elements could disappear and reappear purely through the controls of light.

This is a complex and involved process as pigmented colours on objects are harder to manipulate with light sourced colours as the colour correction must be exact.

Above Left:
Image 15:
Colour examples of pigmented material under white light.
(Roberts 2016)

Above Right:
Image 16:
Colour examples of pigmented material under green light.
(Roberts 2016)

The green gel filter over the light colour corrected the red material which turned it into the achromatic colour black (see image 15). This is due to the fact that green cancels out the reflectors in the red fabric, therefore appearing black. This is what I plan to do with the three colours involved in Beckett’s *Quad* (1981). Each audience member will enter their own individual booth where they will have a small viewing window to see out of. This viewing window is how I intend to alter the perception of the performance. As there are three colours that are applied to the ‘performers’, through this lighting theory, the booths have colour
filters that are applied over the windows that *colour correct* the pigment that covers the figures in the space. This colour correction makes the paint appear black to the corresponding booth and therefore distorts their perception of the experience. It isn’t until the performance has ended that the audience can exit their booth and view the space and colours in their ‘true’ form. This design choice stems from the political standpoint of illusion, control and the distortion of facts and concealing of the big picture.

Sassily Kandinsky (1866-1944) was an artist and theoretician who delved into colour and light theory. He says that if yellow is added to green would come back to life, joyful and free, but it blue were added it would become reflective and serious (Keller 2010, pg. 154). This theory highlights that the adding of colour activates physical and emotional responses and with it perceived hierarchies and systems. Kandinsky also spoke of orange and violet and how they are the in-between colours of the primary three; yellow, red and blue. Red was seen as the static colour in the middle of the two, much like green, yet the active pairing of it. Although much like green, adding yellow to the red, the colour orange came closer to the viewer. On the other side, adding blue to the red, the colour violet withdrew from the viewer. These theories into colour and associations that audience members have help me to understand what kind of experience participants will have when attending my performance and through the uncanny valley theory, how they associate personality and identity to the figures in the space. This theory suggests that hierarchies within the performance will be discovered and/or created by the audience during *Quad* through colour perception.

**Practice Cycle 2 (and a response to the Literature):**

The performance for Cycle Two consists of four audience members entering a room where there are four booths surrounding an open space. Each booth is linked to a colour, unknown to the audience members. Each participant enters a booth of their choosing and sits down. In three of the four booth’s there is a window looking into the arena and a button. As they sit, an instructional voice over comes on explaining what they must do:

> “Good evening participants. Welcome and thank you for being involved in this investigation into theatre design. Tonight’s performance is an investigation into light and sound, through an interpretation of Samuel Beckett’s *Quad*. In front of you is a button. To your side is a countdown clock. You must press the button when the clock hits zero. Please keep your headphones on for the entire performance, thank you. Enjoy.”
What the participants don't know is that the button activates a light on the outside of their booth and when all lights are on is when the performance starts. The performance begins with characters starting in the space and moving in the choreographed way. However, instead of the characters being coloured, they are all dressed in white. The fourth booth has a window and instead of a button it has a shelf with a hand rest on it. Their voice recording goes as follows:

“Good evening participant. Welcome and thank you for being involved in this investigation into theatre design. Tonight’s performance is an investigation into light and sound, through an interpretation of Samuel Beckett’s Quad. In front of you is a hand rest. Please place you hand on the rest and assure your middle finger is sitting on the hole on the end of the shelf. Please keep your hand here for the duration of the performance. Please keep your headphones on for the entire performance, thank you.”

The characters are robots who are dressed in identical white ponchos, this is to ensure neutrality of character, consistency and pace in the performance. The hand rest in the fourth booth is linked to a heart rate monitor. The heart rate of that person controls the speed of the soundtrack and therefore the illusion of the speed of the performance. Further development of this work would have the heart rate monitor controlling the speed of the robots themselves but for the purposes of this project, it is purely sound based control. Simultaneously, the booth that was associated with their colour will have a tinted shield fall over the window. The colour of the tinted shield is the opposite/complementary colour corresponding to one of the colours that fell. This will result in the pigment of the paint that fell to look black or achromatic dark in colour. The participant in the fourth booth will sit in darkness until all buttons are pressed, then their window will open. After all colours are released, the three of the four participants can exit their booths and join the fourth in theirs to view the overall result.

When designing this overall performance piece, I needed to decide how I was going to integrate both light and audience in one scenario. As the Quad script is set out more like a set of choreographed movements rather than a text based script, it was easy for me to apply my own concepts and ideas that I had discovered through the research into this project. The lighting design for the performance is based on theories mentioned in this paper. The general playing area for the robots will be lit by twelve lamps, all of which will be focused on one particular floor area space. This floor space will appear to be lit with an open white light, however, it will be a colour mixing result of three primary colours. Therefore, the shadows created are subtly rainbow in nature. This design choice came from the distortion of
perception that is a running theme in this final piece. The shadows created are minimal as the lighting rig isn’t allowing for severe shadowing, yet it is a subtle underscoring of the entire piece.

The use of sound, lighting, technology, audience isolation, Post-human and Postdramatic is an idea that was recently showcased in The Encounter (2017). Produced by Complicite, The Encounter was a live performance where every audience member was required to wear headphones as the performance was catered to an individual experience. This performance was a one man show and an amazing example of the hybridization between live and pre-recorded sounds (defined earlier in this paper as intermediate sound). There was a binaural head center stage which was calibrated so it seemed like you were on stage with the actor, Richard Katz. A binaural head is a head-shaped recording device that has microphones implanted within it allowing the recording of sound to happen in a 360 degree setting. In this research project a similar experience is created through sound engineering and editing as outlined earlier in this exegesis. In the question and answer session of The Encounter, Katz commented on the minimalism of the design and how… “it’s great when you can allow people to dream their own experiences in” (Katz 2017, p. 1). This is yet another element of Complicite’s work that aligns with the philosophies at play within this research project. “I want people to experience being both alone and together simultaneously …” (McBurney 2016, p. 1).

Above:
Image 17:

Richard Katz performing in Complicite’s The Encounter
Photo: Kate Prior. (2017).
A Dramaturgy of Sound: On Complicite's 'The Encounter' and Being Alone Together.
The *Encounter*’s narrative followed a man stranded in the Amazon and how he joined a local tribe and became lost within their culture. The original narrative was based on a true story by Loren McIntyre who told no one about his experience in the Amazon until approximately 15 years after the incident when he then told Petru Popescu who adapted it into a novel that was published in 1991 titled *Amazon Beaming*. This novel was picked up by Simon McBurney in 1994 and the subsequent performance *The Encounter* has been in development for approximately 20 years. The reason behind the extended timeline for this production was because of the technological demands of the show. McBurney didn’t want to compromise the story for something that couldn’t accurately represent the emotion and feeling behind McIntyre’s experience.

Everyone has a list of different things they want to do, and turning this into a play remained on mine. There was something fundamental in it, but I didn’t know how to bring it out so that it should feel immediate and necessary for an audience. All I knew is that it wasn’t a piece that could be performed conventionally as a piece of theatre. (McBurney 2016, p. 1)

This performance used sound, light, technology and audience in a unique way, and watching it first-hand gave me confidence in my own project’s concepts and inspired me to think further outside of the box.
Conclusion:

The research undertaken in *Deconstructing, Refocusing and Reframing the Post Dramatic Experience* was a snapshot of the capabilities of sound and lighting in a theatrical setting. Although I grasped a firm understanding of both of these components of design, there were many pathways I didn’t travel down as my research progressed as they were not in the scope of this project. The theory of emergence along with phenomenology that drove the methodology of my practice, allowed me to find what really interested me as a designer, and through that I found the connection to audience through the Postdramatic style. At the beginning of this journey I knew that audience had an important place in a theatre system but I wasn’t open to the possibilities of involving them on such an advanced level. It was only through my recognition with the Postdramatic style that I found my tribe and was able to fully exercise my ideas, knowing they were backed by solid theoretical frameworks.

Now this research journey is drawing to an end, I believe that this project can be something that I continue for many more years, as there is so much more potential that each cycle can uncover. The particular area of research that intrigues me the most are the interactions with audience members in a Postdramatic and Post-human style and the way you can alter audience experience of a performance. Emotion and personality of a design was an area I wanted to branch into further yet due to many and varied constraints, it wasn’t possible in the scope of a MFA structure. Even though these avenues weren’t directly focused on (much like set and staging), I believe it was still evident as an integral part of the overall theatrical experience.

As I sit and write this conclusion, I let my mind run through all I have learnt and investigated over the last two years. The moments that really stay with me are the moments where audience members engaged with my work. The responses ranged from confusion and a sense of unsureness, to excitement and the feeling of having fun. I believe there is a certain seriousness and rigor around post graduate research that members of the general public find daunting. Although my operating crew, ushers and I were encouraging the participation of audience members, there was always a sense of solemnity to their responses, as if they weren’t sure if they could find it amusing or whether that was disrespectful. In the end, the final piece has definite tones of seriousness about it (with all its political and social
undertones), but I also think it’s perfectly okay to see it as a stand-alone performance without the subtext and to enjoy and experience it. When stepping back to view it as an uninformed individual, it seems quite bizarre; robots wearing ponchos rolling around a space until they get covered in falling paint. I think it’s important to acknowledge and embrace all audience reactions, as they are reacting to something you have created, and therefore you have affected them on a certain level.

This style of performance in a regional city such as Launceston was seen to be very different. The majority of performances that the general public are exposed to under the umbrella of theatre in this region are dramas or musical theatre. Although the community of Launceston are very supportive of the Arts, there is a very limited market for them to see something in the style of Postdramatic theatre. This is why my practice and others like mine are an essential part of the growing arts community in Launceston and afar.

The findings of my investigation were measured through the experience of the audience members. Although no scientific data was collated, I believe the balance between audience interaction and their place within a Postdramatic style boiled down to the immersion of the audience within a piece. Instead the data was collated by me, the artist, observing their reactions, experiences and having discussions with them after the fact. I found that each person had a different reaction to the work. Many of the responses were “That was interesting” and the majority couldn’t put into words how they felt until a few days after. Once I had gotten some form of response from everyone, I reflected on whether the goals of the project were met. I came to the conclusion that Breath was more successful than Quad due to the complexity of Quad and not having pulled it off in a professional standard setting. This was very disappointing but everyone who I spoke to still understood some element of the concept behind the piece and appreciated the effort and theories behind the overall staging.

Technology’s effect on an individual today is so present in all aspects of our lives and is also continually making our lives more convenient (when it works). Due to technology also having a tendency to alienate us from the world, I decided to create a performance with technology to make an audience member feel more connected to the piece, both emotionally and physically responding to it; through the heart rate monitoring system. Both Breath and Quad will be presented as my final practical submission; Breath acting as support material in
the research into Quad. Although I am defining both pieces as individual isolation experiences, the communal nature of theatre is still present through a shared experience and discussion of the pieces after the fact. Isolation was important for this project, as not only did the technology demand a one on one interaction (similar to that described by Machon), but I also wanted to break down the hive-mind mentality that usually takes over in a different/potentially confronting situation.

There isn’t anyone watching, there isn’t an audience, nobody’s judging you and you’re totally free within that yet you know there’s a big group of people that have taken part in it (Mercuriali 2013, p. 189)

This situation meant that audiences had to fend for themselves and make their own choices, which is how some of the unsureness came into it. This also allowed each individual more freedom to create with their own imagination and to craft their own experience.

*Audience and the Roles They Play in a Postdramatic Experience* is by no means the only structure to take when approaching design research, as perhaps even I may have taken a different path if I were to start over. However, I may not have discovered the connections I did through the emergence of audience in a Postdramatic setting. Staging a production that demonstrated what design is capable of is completely open to interpretation, which is why design is such a personalised profession. This project used numerous theories when creating the design which, in my experience, conventional theatre practice would usually shy away from. This was my example of how you can change a performance piece based on design choices, and how those choices can affect an audience on an emotional and even biological level. I shifted the hierarchical order to serve the design and as a result I produced an expressive theatre-as-performance that connects intimately with an individual. This project, although not the poster model for design, demonstrates the power non-text based theatre can have on an audience and how allowing space for imagination can create an experience that is unique, personal and meaningful for everyone.
References:


Gann, K 2010, *There’s no Such Thing as Silence,* Yale University Press, United States.


Jones, R 1969, Dramatic Imagination, Routledge, United States.

Katz, R (Actor in Complicite’s The Encounter) 2017, interview, Victoria, 7 February.


Mercuriali, S 2007, ‘*Autoteatro*’, artistic website, 23/02/17, Rotozaza Blog, viewed 23/02/17 at [http://www.rotozaza.co.uk/autoteatro.html](http://www.rotozaza.co.uk/autoteatro.html).

Nave, R 2000, *Light and Vision*, viewed 04/11/16 <[http://hyperphysics.phy-astr.gsu.edu/hbase/vision/rodcone.html](http://hyperphysics.phy-astr.gsu.edu/hbase/vision/rodcone.html)>


Pollack, B 2013, ‘*Now Hear This; Sound Art Has Arrived*’, Art News. vol. 1, no. 1, p. 1.


Rosenfeld, 2008, *Teenage Lontano*.
viewed 21/07/15 at <[http://chiaragiovando.com/Produced/TeenageLontano/](http://chiaragiovando.com/Produced/TeenageLontano/)>


---

**Appendix 1:**

QUAD SCRIPT:
The players (1, 2, 3, 4) pace the given area, each following his particular course.

Area: square. Length of side: 6 paces.

Course 1: AC, CB, BA, AD, DB, BC, CD, DA
Course 2: BA, AD, DB, BC, CD, DA, AC, CB
Course 3: CD, DA, AC, CB, BA, AD, DB, BC
Course 4: DB, BC, CD, DA, AC, CB, BA, AD

1 enters at A, completes his course and is joined by 3. Together they complete their courses and are joined by 4. Together all three complete their courses and are joined by 2. Together all four complete their courses. Exit 1. 2, 3 and 4 continue and complete their courses. Exit 3. 2 and 4 continue and complete their courses. Exit 4. End of 1st series. 2 continues, opening 2nd series, completes his course and is joined by 1. Etc.

**Appendix 2:**

<table>
<thead>
<tr>
<th>Stage</th>
<th>Series 1</th>
<th>Series 2</th>
<th>Series 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>One</td>
<td>white</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Two</td>
<td>white</td>
<td>blue</td>
<td>-</td>
</tr>
<tr>
<td>Three</td>
<td>white</td>
<td>blue</td>
<td>red</td>
</tr>
<tr>
<td>Four</td>
<td>white</td>
<td>blue</td>
<td>red</td>
</tr>
<tr>
<td>Five</td>
<td>-</td>
<td>blue</td>
<td>red</td>
</tr>
<tr>
<td>Six</td>
<td>-</td>
<td>-</td>
<td>red</td>
</tr>
</tbody>
</table>
Breath Script:

Curtain.

1. Faint light on stage littered with miscellaneous rubbish. Hold for about five seconds.

2. Faint brief cry and immediately inspiration and slow increase of light together reaching maximum together in about ten seconds. Silence and hold about five seconds.

3. Expiration and slow decrease of light together reaching minimum together (light as in I) in about ten seconds and immediately cry as before. Silence and hold for about five seconds.

Rubbish. No verticals, all scattered and lying.

Cry. Instant of recorded vagitus. Important that two cries be identical, switching on and off strictly synchronized light and breath.

Breath. Amplified recording.

Maximum light. Not bright. If 0 = dark and 10 = bright, light should move from about 3 to 6 and back.