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Body over Mind - 'no body, never mind'

An exegesis presented in partial fulfilment of the requirements for the degree of Masters of Fine Arts

At Massey University, Wellington, New Zealand

Katherine May Joyce-Kellaway January 2013

Abstract

My research critiques our visual and word-centric world through immersive installation environments. It explores our bodies' sensory perceptual capabilities by creating new ways of experiencing the world through its somatic intelligence. By fabricating an environment that promotes subtle disorientations of a persons proprioception and simultaneously provoking a sensuous joyous response this slide between comfort and discomfort aspires to reinvigorate an old language - that of the gut.

Only by being actively immersed in the work can these experiences be realized. This exegesis gives an understanding of the sources and processes in creating the work.

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It has always seemed to me that we are losing engagement with our physical world as we increasingly live within a virtual world. Through the writings of theorist and philosophers such as David Abram, Jhana Pallasamaa and Richard Shusterman there is a call for a repositioning of our sensory self in relation to our environment. This explores an understanding of the somatic relationship to our surroundings as an important element in defining our being. For many, the prescribed reality of 'normal' is unchallenged and seen as a singular reality. But it would appear from reading scientific and psychological literature suggests that there are a number of possible realities. I became interested in how my art practice might present the possibility of alternative realities to the viewer through the medium of installation.

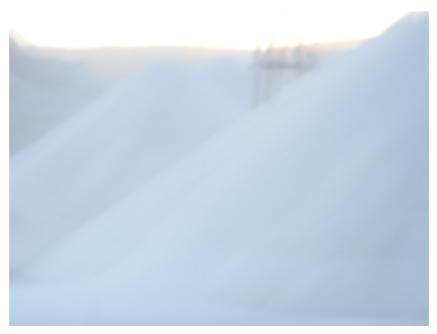
A visit with a fellow artist Helen Reynolds to the Lake Grassmere Saltworks, a stark and alien landscape, was the catalyst for this investigation. It was at Lake Grassmere that I became aware of effects of displacement, disorientation and dislocation and the way that they can alter our sense of reality. From this I developed a series of tests to explore these phenomena. I wanted to make a work which drew on an understanding of the science of perception but was also provocative and poetic.

White Sight

Observational Test Work One - Grassmere

The world we live in is a world of sense data; but the world we talk about is the world of physical objects. Ludwig Wittgensteinⁱⁱⁱ

Around the Saltworks there are visual contrasts that ground you in space. For example the salt mountains against the surrounding sunburnt amber hills. Beautiful subtle dusky hues of pinks, mauves and blues of the settling ponds contrast with the monumental incandescent white salt mountains. Staring intensely into these mountains whilst shutting out other external visual information you can start to experience a slight disturbance in your spatial perception.



1. Lake Grassmere Saltworks, (photograph Katherine Joyce-Kellaway) (2011)

This experience of blinding whiteness at the Saltworks was limited in its capacity to sustain any spatial disorientation due to the lack of being fully immersed in a whiteout. Yet it formed the basis of my first observational tests into what is known as the Ganzfeld effect. Derived from German Ganz = 'whole, entire' and Feld = 'field, are'. Ganzfeld became known as a term through the works of the psychologist Wolfgang Metzger's research into Gestalt theory. Explorers in Antarctic and Arctic territories had expressed an experience of blindness when immersed in a white out. Metzger found that in taking away a person's visual reference and subjecting them to a featureless colour field, they quickly experienced a sense of blindness. Metzger also found that immersing a person in a monochrome field could result in the person hallucinating.

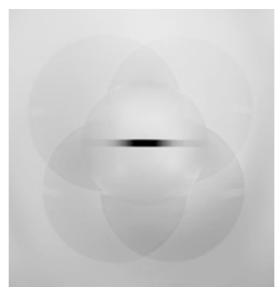
We live in a world that is increasingly saturated with visual information. I was curious to know what is it like to see within a space that is completely devoid of all distinguishable objects or the demarcations of walls. In a room where form, contour and surface are absent. What transpires in your perception when viewing a 'homogeneous field of vision' with infinite depth? How does this affect your perception of space? How does the lack of movement and a static position of your body interact with the perception of space? Can a lack of spatial reference and sound distortion trigger a hallucinatory state? At this initial point of my research I was not aiming to make work in regard to these questions. Rather I was wanting to create a framework in which to either experience first hand or reflect on, events that explore ideas of sensory deprivation, concepts of fragmentation, states of altered perception and distortions of space.



2. Katherine Joyce-Kellaway, Ganzfeld Experiment with Helen Reynalds, (2011)

There are multiple 'how to' instructions on the Internet which assist you to create your own Ganzfeld glasses. I made two different models, one using swimming goggles and the well-known ping-pong ball variety, which I found more successful than the goggles. The room I used had constant soft lighting. I also put on headphones with white noise, in the attempt to create 'unstructured' sounds for the brain vii.

What I experienced was also reflected in the findings of a research report on 'Ganzfeld-induced hallucinatory experience, its phenomenology and cerebral electrophysiology' from the Institute for Frontier Areas of Psychology and Mental Health (IGPP) in Germany (2008) viii. I started with a bluey-yellow cloudy fog; the floaters in my eyes became very prominent. The artist Robert Irwin's painting *Untitled* (#2220) (1969) strangely echoes the visual characteristics of my initial experience with the Ganzfeld effect. Ix Irwin was considering "how it might be possible to make an art of the incidental, the peripheral, the transitory – an art of things not looked at (indeed, invisible when looked at directly) yet still somehow perceived. "x Irwin blurs the boundaries between object and subject, perception and conception, physical and non-physical.



3. Robert Irwin, Untitled (#2220) (1969)

The floaters progressed into a complex endless scribbled pattern. On different occasions I thought I was asleep but realised I was thinking this whilst being awake - in fact my eyes were open. I was experiencing blindness, also described in the IGPP report as 'black-out' periods or the presence of 'nothingness'.xi At this point there also seemed a detachment from the presence of my body scheme, and I realised later there was a sense of no reference point as to where I was located (actually, on the sofa!). IGPP results showed some subjects reporting 'kinaesthetic or proprioceptive experience, such as extensions of their extremities, changes of perceived body weight or even a feeling of levitation.xii

From this 'nothingness' appeared images often described as hallucinations. The IGPP report description of 'Ganzfeld-induced imagery' tends to represent the experience better. I experienced a scenic image, which included a horse, parts of trees and fragments of a pinkish-fawn rabbit. Unlike a film rolling, the images unexpectedly appeared and disappeared without any logic or connection.

On completing several Ganzfeld sessions, a notable experience was that time disappeared. I thought I was there for ten minutes; actually it was at least a half hour each time.

American artist James Turrellxiii uses light and space to investigate the perceptual nature of our existence, wanting us as spectators to experience 'seeing the act of seeing' and realising the process of perception itself.xiv Turrell has created multiple works under the Ganzfeld title but one which relates specifically to my experience of the Ganzfeld effect is Gasworks / Ganzfeld Sphere, National Sculpture Factory, Cork,

Ireland (1996).** Participants expressed their experience of 'no point of view', time vanishing and distorting, a disorientation of where they were located, the sensation of thinking their eyes were closed when in fact they were open. One talked about feeling the sensation of the weight of colour on their skin with no presence of form or objects. "An experience of tangibility and touchability of the light as though the senses of the skin were recruited as part of the act of seeing." XVI Another described a sensation of 'viewing inside the eye.'



4. Cartsen Höller's, Psycho Tank (1999)

Another technique used in exploring outcomes of sensory deprivation is the flotation tank. Artist Carsten Höller investigates mental states, moral reactions and physical sensations in his work using processes such as hypnosis and hallucination. Höller's 'Psycho Tank, (1999)' from his retrospective 'Experience' exhibition 2011 at the New Museum, New York, reminded me of the experience I had during the eighties when I experimented with flotation tanks influenced by the film 'Altered States' starring William Hurt. I was not necessarily going for higher consciousness by putting drugs into the mix as Hurt's character was but I definitely wanted to achieve some altered experience of my body in space through a deprived sensation. It is an experience that has stayed with me and in hindsight is clearly formative in my research interests. Your brain and body naturally symbiotically connected are suspended literally in this sublime flotation of space and time. I remember a euphoric sensation when leaving the tank. My body was elevated and light as it moved through the room.

Höller's flotation tank was larger than the one I had experienced. Initially Höller's was designed for six people to get in (swimsuits optional) and share the experience. For health reasons this was changed to one person – creating quite a different self-focussed experience from the original concept of communal intimacy. Some audience members recalled 'an out of body' sensation. Höller appears to intentionally frame his work to set up an audience expectation as a mechanism to imply or perhaps instil the potential of the experience of phenomena.xvii This aspect of steering or influencing audience encounters with the work, or preparations for the experience I will address later in discussion of test works two, three and four.

Throughout the Masters programme I have engaged in deep trance hypnotism. This phenomena, has similar occurrences to both the Ganzfeld effect and to the floatation tank. Deep trance phenomena induces a relaxed state of your body and senses and focuses into the space of the unconscious mind. The use of narrated metaphorical scenarios creates vivid, unrelated and somewhat bizarre images and scenes of animals, people, landscapes and objects. While these are intense at the time, they are difficult to remember when you come out of the trance, similar to dreams, with flashbacks occurring for sometime later.

Hypnotherapy can also work on retrieving information from your memory, which you may not recall, yet it produces particular behaviour. The concept of memory and post hypnotic amnesia (PHA) was the basis of a research project conducted by neuroscientists at the Weizmann Institute of Science, Israel in 2008. With the use of functional magnetic resonance image (FMRI) and hypnotism they could identify brain activity associated with PHA.xviii

Hypnotism has produced successful dissociations from my body and a shutting down of my sensory system such that when someone pricks my arm or hand with a needle I am unaware of it. The distortion of time produces both experiences of expanding and shrinking time.

Flotation tank, Ganzfeld experiences and hypnotherapy are all burdened with complex histories, marginalised through entrepreneurs into the alternative therapies, new age transcendental experience, and stage-show genres. Beyond this superficial appropriation, many scientists and artists discussed later in this exegesis have continued a discourse into the value of these processes in understanding our sensory system, perception, brain and body functioning.

I would argue that Irwin, Turrell and Höller's work aligns with Maurice Merleau Ponty's notion that perception is not simply the act of looking through the eyes but involves the whole body; it is an embodied perception. "I do not see (space) according to its exterior envelope; I live it from the inside; I am immersed in it, after all the world is all around me, not in front of me." xix

Through my experiments with the Ganzfeld, effect flotation tanks and hypnotherapy I have developed a greater understanding of the way in which perception can construct itself through a multitude of fragmented stimulations such as deprived visual information and distorted oral stimulation. Placing the body within situations that magnify or intensify a sensation has the ability to confuse, disassociate, conjure and construct what we experience. What has been highlighted for me through this enquiry is the significant role the body plays in the construction of our reality.

Having observed the deprivation of the visual, the next area that I felt needed exploration was the addition of controlled sound to a visually deprived space.

Dark Sound

Observational Test Work Two - Grassmere

Clarity is not the only fundamental substance of life; we also live in the night. Isn't it necessary? Perchance, to turn our eyes toward it? But I no longer have the black night, complete obscurity before me, instead, it covers me completely, it penetrates my whole being, it touches me in a much more intimate way than the clarity of visual space. Eugene Minkowski xx

I recalled the road trip from Picton to our Lake Grassmere accommodation. On leaving the ferry we were hassled by the unexpected intensity in the traffic from locals who knew the road intimately and just wanted to get home.

South of Blenheim, the cars gone, we suddenly plunged into complete darkness as if somebody was playing a joke on us and had switched the lights off. Dylan Thomas's *Under Milk Wood* rolled off the tongue.

...

It is spring, moonless night in the small town, starless and bible-black, the cobblestreets silent and the hunched courters'-and-rabbits' wood limping invisible down to the sloe black, slow, black, crow black, fishing boat-bobbing sea. xxi

We couldn't see the sea, the grass or the cobblestones; we couldn't see past the ring of our car lights. There was a sensation of feeling cocooned within the car. The blue lights beaming off the stereo giving us an android glow as the car lights drove a tunnel through the blackness. Inevitably in this darkness we got completely lost trying to find our accommodation.

Even though we couldn't see the sea or the railway tracks, having sighted them on the map I knew they were on my left (whilst driving). When we finally found the house, the sea was straight ahead. My ears confirmed it when I got out of the car. I remember feeling the different temperature and strength of the breeze as received through my body. I could feel but I could not see these elements. When I saw the vista in the morning, the previous night's orientation of the sea and railway tracks was correct. However, with the lack of depth of field, the imagined distance was notably

different. I had perceived the sea to be much closer than it actually was, and the entire vista before me had been quite exaggerated in my imagination. These observations of the relationship between fragments of sensory information, connected through the body's sensors and imagined, associated and recalled through the brain to construct a reality, formed the basis of my next test work.

Architect and theorist Juhani Pallasmaa suggests in his writing a need for artists and architects to be mindful of the necessity to engage the body and the senses. In *The Eye of Skin: Architecture and the Senses* (2005), he suggests that in recent times the true human experience has been dominated by the visual and the intellect. In acceding to this domination we are negating our sensory experience and the possibilities of perceiving in new ways, which could ultimately present new realities of a 'lived world'. Detached from an intuitive response to our surroundings, through the use of sophisticated digital tools, bodily connections are not made between the viewer and the environment. People become entrapped by received abstractions of the world. When experiencing something through our body, the connection is very different from the abstract.

Reflecting on this, the nighttime visually restricted experience of the vista was an internal, embodied, sensuous experience – it felt more connected and more intense. In contrast, during the day my visual perception located me in the external space.

"Vision reveals what touch ("the body") already knows. We could think of the sense of touch as the unconscious of vision." xxiii

The experience of darkness at Lake Grassmere suggested ways of creating infinite space through blackness, rather than whiteness. The test work focused on the auditory as the dominant sense, given the experience of orientating myself in the dark moonless environment. Sound also has a strong embodied quality. It vibrates not only through your ear drums, but can be felt through your body's sensory receptors – from the hairs on your skin through to the muscles on your bones. To explore the idea of fragmentation of information from which you construct a scenario, I built a sound track. I wanted it to allude to particular elements but not be a real time or linear narrative-based collation of any of those elements. I wanted to further examine how our interior reality (memory, associations, personal history, emotional responses and self image) might be constructed from our past exterior, bodily experience with the world, through our auditory perception.

I reflected on poetry's ability to shape our thoughts based on the way in which a poem can manifest itself as a physical image in our minds and in our bodies. Poetry uses the device of metaphor and allusion to evoke emotions and physical states, for instance in the love poem And My Heart Goes Swimming (1996) by Roma Potiki

and my heart goes swimming

wet and lipid it hangs between waves and salt.

a warm heart in cold green waters

deep

to the bottom.

wave after wave washing the little skin saline. xxiv

The poem juxtaposes the love of the sea and the love of the heart. It evokes the rhythm of the water and the associations of water and love. It achieves this by the rhythm of the words, the contrast between the metaphors of the warm heart in the green cold water and the tactile qualities and taste of the salt water. All these elements stir within a sense of the romance of the sea.

And My Heart Goes Swimming is both physiological and emotional. It is the evocation between the real and the imaginary, which is pivotal in this research. Although I was not thinking of using the spoken word as a mechanism in this test, key qualities of poetry helped me construct the soundscape.

In creating this work I drew on the tests artists Irwin and Turrell carried out with psychologist Ed Wortz (1969) in the Experiments in Los Angeles County Museum, Art and Technology Project (E.A.T).xxv The artists researched the effects of multiple and lengthy times within an anechoic (soundproof) chamber (up to eight hours at a time) on their sensory perception and brain functioning. These tests affirmed my concept of using complete darkness to give visual blackness, in contrast to the visual whiteness of the Ganzfeld experiment, to create a space where one sense dominates the other.xxvi One aspect that Irwin describes is

... how [what] the anechoic chamber was helping us to see was the extreme complexity and richness of our sense mechanism and how little of it we use

most of the time. We edit from it severely, in time to see only what we expect to see.xxvii

Moreover when Irwin and Turrell left the chamber they experienced everything outside as being altered. I noted for this for future reference and planned at this point to incorporate it in later work.



 Malcolm Lubliner and Craig Krull Gallery, Santa Monica, Robert Irwin and James Turrell visit an anechoic chamber at the University of California, Los Angeles. (1969)

Generally most of us live in a saturated, light-infused world. As night falls we turn on artificial light, lighting our rooms, our shopping malls and our streets. It is rarely that the general population experience total blackouts, except, notably, New Yorkers after Hurricane Sandy. In darkness we have to renegotiate the relationship of our body in space when there are no reference counterpoints. Boundaries become dispersed and fragmented with no exterior objects to define spaces that exist between them and the body. Objects become your enemy, their size exaggerated and distorted, their distance dispelled, often causing collision with the environment. Darkness not only surrounds you as a cloak and veil, but also permeates your entire body. Internally our organs are in perpetual darkness and are able to sense movement and balance without light.

However those who are totally blind, or who spend a lengthy time in total darkness, learn to orientate their body in space with remarkable skill. This was evident when I observed a blind person in an office building and spent time with my husband in his darkroom, processing film in complete darkness.

Unlike traditional art forms such as painting and sculpture, where light is essential to their being, installation art has harnessed the use of darkened space as a mechanism to displace, distort, focus, heighten or nullify the viewer's sensory perception. For instance, Jan Evangelista Purkinje discovered that the eye, through cone and rods, has different perceptions of colour depending on the level of light. What is red in daylight becomes black in low light and what is blue remains brightly coloured. Through this understanding of the 'purkinji shift', Turrell has created several works which deal with the experience of the adaptation to darkness.xxviii Drawing on human visual phenomena such as the purkinji shift, one example *Pleides* (1983) heightens our experience of perceptual shift.xxix

For the 'dark sound' experiential test work I aim to introduce the listener to the filtering of our senses in the construction of the narratives we build through perception. By reducing the visual senses, limiting external sounds and putting in a controlled, immersive soundscape, I wanted to explore the idea that the listener's imaginative, associative and memory response could build an internalised visual scene or narrative.

According to Pallasmer,

we have an innate capacity for remembering and imagining places. Perception, memory and imagination are in constant interaction; the domain of presence fuses into images of memory and fantasy. We keep constructing an immense city of evocation and remembrance, and all the cities we have visited are precincts in this metropolis of the mind.**xxx

I built a deprivation room, excluding as much external sound and light as was possible. Fortunately Massey University already had a small sound recording room that I could modify with blackout fabric and additional sound-absorbing foam. The room was very cell-like, measuring three by one metres. I placed one chair within the space with the intention that it would be a single listener's experience. I was also thinking that the chair would offer comfort and could potentially extend the time the person stayed within the room. My decision here was also influenced by an anechoic chamber work that Turrell and Irwin proposed to the Los Angeles County Museum of Art as a product of the E.A.T project, which involved a singular participant's chair.





6 & 7 Sound Booth Massey University, (photograph Tony Kellaway) (2011)

I also considered John Cage's description of his experience inside an anechoic chamber at Harvard University where he believed that he could hear his bodily systems. According to the engineer present at the time, the 'high sound' he was hearing was from his nervous system and the 'low notes' his blood circulating.xxxi

My experiment, which was part of a masters' critique, involved some thirty people from the fine art school and a small number of visitors of mixed gender and age, who entered the space over a week.

The sound booth limited external sounds and I also asked individual people to leave behind any distracting objects, such as cell phones. I aimed to minimize distraction, so that, in the silence and blackness, the participant might become more aware of their bodily functions – breath, stomach rumblings and movement. I thought their body sounds would become a subconscious part of the fabric of the sound work, and through that position the listener would become the person to whom they are listening (hear themselves hearing.)

I had an experience of body sounds becoming exaggerated in the silence of the isolated landscape of the Saltworks. The space in which the Saltworks exists resembled an amphitheatre, surrounded by hills at one end, and a large basin area that stretches out to the sea at the other end. Possibly this, and the cloudless, windless day, made it seem as though every sound was intensified. At times there was such a hushed silence you could hear the seeds popping off the wild fennel plants. Sounds such as the brutal gunshots that went off randomly in neighboring, unseen vineyards

were dislocated from my visual perception. Every now and then I would hear the presence of somebody, the echo of footprints, high pitched tinkling of tools and machinery striking each other, or the hum of a machine.

In the stillness there was discordance, not just with what I was seeing and hearing but also with what I was hearing and not seeing. I had taken some sound recordings on my camera and cellphone at Grassmere, but decided that the quality and character of sounds was not conducive to devising a work from them. I liked the idea of recording or creating sounds based on everyday mundane activities. Sounds so familiar that we hardly hear them anymore. How often do we hear ourselves walking?

I was using these sounds as switches to create a visual space within the mind of the listener. This test drew on the work of extreme minimalist sound artist Richard Chartier, not in regard to structure but the embodied experience when listening to Chartier's work and what he aimed to explore: "the inter-relationship between the spatial nature of sound, silence, focus, perception and the act of listening." xxxiii

In the construction of the soundscape I first used real and Foley sound recordings around a very simple structure, creating discordant sounds that were familiar as everyday sounds, but limiting any cohesive reference to a particular space.xxxiii The intention of this mix and, in particular, the Foley sounds, was to create ambiguity in order for the listener to create their own narrative around what was occurring, for the listener to become the body performing the task within the soundscape. In the second cycle of the recording, the sounds were slowly abstracted, each sound being distorted further from the literal. In this distortion my objective was for the listener to reconsider the narrative they had just created and in doing that consider what was happening internally, potentially reconstructing a new narrative.

I drew upon recordings or simulations of everyday actions of a body being, doing, moving around and responding to space and objects. These included recordings of the sound of:

eating
clearing dishes
putting on clothing
walking – around a space
opening and closing a door
entering another space – walking
chopping

Together with ambient sounds of birds, insects and phone ringing.

(A recording of 'dark sound' can be heard on the DVD attached. Silence occurs in the first two minutes.)

Each of these sounds tends to have a metaphorical meaning often greater than a purely literal reading of them. For instance, the opening and closing of the door may well evoke a memory of a departure or even loss with all its emotional connotations. This layering of associations takes the literal or objective into the sphere of the subjective or imaginative.

There were a few problems with this test, such as the lack of clear signposting for participants to engage with the work within the intentioned structural framework of the test. An usher present to engage and manage people entering the work, rather than signage, would have worked better. An usher could have added a further dimension to the work; the character that people were presented with might have functioned either in contrast to, or generated a specific mood that enhanced the work. There was a lack of resolution in creating the sound system. My thought at the time was to allow some space between the sound and the listener's body. This linear structure of the sound had its benefits as in a film score. On reflection, the positioning of multiple speakers and the spatialisation of mimicking of the way we hear sound in the everyday would have been an interesting idea to develop. Again I made a note to explore this in the final work through the formulation of a surround-sound system.

A fascinating aspect of this test work was the descriptive clarity with which audience members were able to reassemble fragments, drawing upon previous experiences and associations to create remarkably detailed narratives. Someone suggested they were "walking down the garden path". Clearly the walking footsteps and associated ambient sounds triggered this experience. One person related to the sounds of an opossum being skinned and chopped up, which relied strongly on the imagination and less on a literal reading of the audio track.xxxiv

In the second cycle the more distorted or ambiguous the sounds were, the more the person enjoyed the experience, which appeared to be a non-associative, non-narrative, sublime spatial reality similar to that I recall experiencing when listening to Chartiers' work. This gave the listeners their own opportunity to create their own imaginative reality.xxxx Interestingly, during the critique feedback discussion of the work, most of the audience preferred the distorted sounds to the literal. "I found that

the sounds themselves the ones that were not so determinate were the ones that I really wanted to key in on." "It's the enigma of those ("distorted") sounds." xxxvi

In the small space of darkness, some people naturally felt claustrophobic, and with the infinite space of darkness they felt even more so. However others, such as one person exploring the darkness by opening and shutting his eyes, said that he "actually physically had to be conscious to keep my eyes shut." xxxvii When his eyes were shut it appeared there was more light.

It became clear, in the absence of light and with the introduction of sound, a particularly abstract effect (that was both similar to, and different from, the Ganzfeld effect) was experienced. Where darkness and sound where combined, heightened, transcendent and highly individualised experiences resulted from a combination of sensory deprivation and abstracted sound construction.

Two Fold

Observational test work three - Grassmere

Imagine if you're in multiple places at the same time. What would that be like? How would your consciousness handle your body being delocalized in space? Aaron O'Connellxxxviii

Background reading on quantum physics, neuroscience and cognitive science at this time had an impact on my process. In 2011, quantum physicist Aaron O'Connell had a breakthrough experiment where he created "an object which was visible to the unaided eye, but probably in two places at the same time." xxxix Inspired by these concepts, I engaged with the idea that a single image, projected through a two-way Mylar screen, presented itself as two vastly different images in the same space. "Things are not what they seem". XI This type of theoretical physics expands our concept of what reality is. It emphasises that our reality is a shifting perception, that what we believe to be reality is constantly being redefined. By placing both the image and the abstraction of the image in the space I was attempting to engage with this idea.

This next test was a departure from looking at our sensory perceptual behavior in spatially deprived situations such as the Ganzfeld and the dark sound chamber.

In considering Pallasmaa's discourse on the imbalance of the body and its senses compared with that of the visual and intellect, I wanted to experiment with a scenario where the focus was on visual information, but where the experience of viewing it potentially activated a bodily response through ambiguous associations and movement.

On the opposite side of the Saltworks was Lake Grassmere. Sculpted by the wind, it was in vast contrast to the controlled and 'manufactured landscape' of the Saltworks. The edge of lake was alive with planktonic algae. XII It's sludgy, sulking forms moved back and forth with the tide, the intense colour and movement in harsh contrast to the stillness and whiteness of the Saltworks. The filming of this organic substance provided the raw material for this video test work.

When watching film or video, especially with a cinematic setting, our bodies become static. There is passivity attached to our being in the space; our eyes and ears are to

the fore. Rather than this static, passive experience I wanted to invite viewers to actively move around the room to become immersed in the video.

Theorist and critic, Roland Barthes, in *Leaving the Movie Theatre*, describes cinema as a spatial experience, that in the watching we become hypnotized and the whole experience of entering and leaving the cinema space influences our experience of the event. All Barthes makes a distinction between cinema and installation art, regarding them as intrinsically different. The spatial engagement of an installation is inclusive of the external and internal experience. In contrast to the hypnotic experience of cinema, the audience's sensory perceptions are invariably heightened in active participation in constructing the work. From this I drew that installation is an active form rather than passive. The viewer also becomes the subject and that this is a key characteristic in developing an immersive artwork. What I wanted to explore in this test was whether it was possible to incorporate video which engages the audiences actively.

An intuitive response, when filming the algae as it moved in the water, was reference to the body. The movement of the algae suggested the idea of our internal flesh and muscles in continuous motion moving through space. This interpretation seeded the idea of recontextualising this film as an ambiguous notion of filming a meaty, fleshy substance. This was achieved through re-colouring the film footage, which created a more abject image that elicited stronger associations of visceral and tactile sensations. One can have a dual response at the very same time, creating a disconnection through the flux of rejection and fascination.



8. Katherine Joyce-Kellaway still from Two Fold (2011)

I recalled Stan Brakage's film *Mothlight* (1963), where he created a technique using amputated moth wings which he pulled through an optical printer by placing them between two clear Mylar sheets. This inspired me to consider the ways we can fragment images while retaining their essence. I find it fascinating, in Brakage's film, that although we are looking at fragments of a moth pulsing, fluttering and abstracting our perception and associative memories, Brakage resurrects the moth before us. One sees the moth literally flying around a light bulb.



9. Katherine Joyce-Kellaway, Refracted image from Image 1 (2011)

I set up a screen, which acted as both a lens and a filter. The properties of the Mylar film (I tested many samples) meant the video image was simultaneously projected through the film onto the wall at one end of the room as a fragmented and fractured, refracted and reflected by the Mylar film/filters image (see fig 9) presenting as a continuous evolving and expanding form. This was intended to suggest a feeling of being immersed and soothed. In contrast, at the other end of the room, there was a projection of the actual video image in finer and more visceral resolution, where viewers could be seduced and repulsed by the corpulent, pulsing mass. The intention was to test the concept of presenting simultaneously alternate versions of the same content, and attempting to split the viewer's relationship between the images and the physical space in which they exist. However, feedback showed that such a response was not experienced by the audience.xiii Rather, presenting the information derived from the one source in two distinct ways created a discord of organic versus electrically charged, physical versus visceral, abject versus decorative and calming

versus disturbing feelings, which I was interested in because of the disorientation and confusion it created.



10. Tony Kellaway, Two Fold (2011)

Within the visual content of the work I was aiming to achieve several outcomes. The content of the video - fleshy bodily, rhythmic in its movement, echoing the inhaling and exhaling of breath and slowly increasing as if picking up momentum when walking - was designed to engage the viewer's body through ambiguous associations. I hoped that, when the audience moved around the room, a conscious sensation of feeling or a consideration of flesh and energy might be encountered.

I created this work at the same time as the sound work and installed them in close proximity. My aim was to be able to elucidate the distance in which two works could sit together and whether information from one could be carried over into the other. Ineffective signage meant that several people missed this second work. However I concluded that the two works were too disparate. The institutional room and hallway separating them made it difficult to carry the experience over between the two works. What I was investigating in both sound and video experimental works was what occurred within the body when it was given ambiguous and visceral information in an immersive environment. The context of the two tests, works two and three, was separated by a 'normal' context, a waiting room and corridor. The effect of this was to reset a person's experience back to the everyday. On entering the video test, assuming that those involved did not carry on out the main door, the remapping required in the video test had no connection to the experience of the sound test. This

made me aware of the need to carefully manage and control the transition between the different experiences.

Unfortunately seats were inserted into the space for the viewing of the video test work. This impeded what I was wanting people to explore since being, moving, walking around and viewing the work from varying angles was a necessity in engaging with it. This highlighted the importance of controlling or influencing the architecture of the space, or the way the work related to its context. Accidental or improvised insertions or additions (such as the chairs) can affect the reading of the work, and can provoke particular viewing behaviors.

I came to the conclusion that I was trying to achieve far too many outcomes within these two linked tests. The work has to be a cohesive whole. I needed to create a work that dealt with all these aspects but not scattered around sites. In conclusion, given the difficulties of creating an active rather than a passive video experience and the complexity of the works that I later made, I decided not to tackle this aspect at this stage. What I took from this test was the knowledge of the malleability and reflectance of the Mylar sheeting and the way the light created spaces, which became a key element in my later work.

Having experimented with light both as subject and material by deleting, adding, diffusing, and projecting image (light) through a two-way mirror film to create space, I better understand the relationship of light to the functioning of the eyes. Our conventional wisdom is that vision dominates our senses but recent research tends to indicate that the body is a primary receptor.xliv

Center Shift

Observational test work four - Grassmere

Our bodies and movements are in constant interaction with the environment; the world and the self inform and redefine each other constantly. The percept of the body and the image of the world turn into one single continuous existential experience; there is no body separate from its domicile in space, and there is no space unrelated to the unconscious image of the perceiving self. Juhani Pallasmaa^{XIV}

We behold, touch, listen and measure the world with our entire bodily existence, and the experiential world becomes organised and articulated around the centre of the body. Juhani Pallasmaaxivi

Another experience drawn from the Saltworks visit and the related ferry trip was the involuntary disorientation of internal sensory functions of the body. During our time experiencing and surveying the Saltworks we were allowed within the grounds and were taken on a personal tour by the manager. We were given the opportunity to experience the harvesting of the salt. This involved climbing into the harvesting machine. We were fully briefed on health and safety requirements and instructed not to touch any button, lever or handle. The pep-talk did nothing to prepare us for the bodily experience of being inside the harvester while in operation. We were straddling a moving, chopping, dicing and extracting machine. It completely interfered with our natural body movement. It was as if our bodies moved left, right, up and down all at the same time. This conflict between the movement of the machine overloaded our proprioceptors (motion and orientation) and kinesthesia (awareness of the position and movement of body parts) vestibular system (balance) and introceptive (internal bodily) stimuli particularly involving the viscera.

Our body's movement was dislocated from our visual field, which appeared relatively stable in relation to what was occurring underfoot. I became interested in exploring this disorientation between the brain's perception and the body's internal, navigational sensory receptors when the body was made to traverse an external unstable foundation within a space.

In her paper *Bodily Awareness*, Frédérique de Vignemont, philosopher of cognitive science, suggests that the awareness of our bodies is extremely difficult to define.xivii One of the extraordinary aspects of our body and its being in the world is the *touchant-touché* phenomenon. In touching our leg with our hand we have a tactile experience of feeling the leg both internally and externally and then of the hand itself that is touching. We do not experience this duality of external and internal sense through bodily sensation when touching anything else.

de Vignemont raises many questions of bodily awareness (and gives few concrete answers). In this test work I am particularly interested in exploring some of her questions, namely "what grounds the spatiality of bodily awareness?" and "in which spatial frames of reference is the body experienced?" xiviii Firstly, our conventional concepts of space (up, down, behind, front, right, left) and distance appear a somewhat inadequate framework in describing what eventuates. Secondly our body's ability to have 'dual spatial content', with the internal and external sense of space occurring at the same time, is evident from the experience in the harvester. Thirdly the peripersonal experience, which is also described as an aura, "is represented as neither purely bodily nor purely external." xlix During the trip on the harvester I experienced this duality of both internal and external dislocation in space.

When we consider the processing that our body is constantly engaged in, our awareness of it is relatively weak. However our bodily awareness is always on the edge of our consciousness and quickly comes to the fore when the body is challenged.

Philosopher Maurice Merleau-Ponty published his English version of the 'Phenomenology of Perception' in 1962 at the time that Turrell and Irwin, amongst others, were exploring the physiological and psychological effects on the viewer's perception considering the viewer as subject rather than creating art as objects. We then saw the emergence of installation art in the 1970's as a prominent genre within the conceptual art movement. The audiences perception became a central subject within the discourse of the installation artist's practice. Bodily awareness and perception were an integral part of the viewer experience of many installations. Fifty years later, this area of thought still offers fertile ground for further exploration and it is from this antecedent that my work is rooted.

Frédérique de Vignemont questions Merleau-Ponty's notion that the action towards an object defines the body. She argues that the body is not an object. de Vignemont

challenges Merleau-Ponty, who refers to neuroscience's logical studies to frame his theories. These studies define the body as being an object to be studied. In trying to simply define bodily awareness, scientists and philosophers have used dysfunctional case histories to understand bodily awareness. Functional body awareness is, in itself, a notional or abstract condition that is only definable in this manner by the lack of normal function.

de Vingnemont describes two concepts of bodily awareness. The first is that of the 'representational', mind mapping out its sense of the body, like a wireframe of where various parts of the body are in space – 'spatial organisation of bodily sensations'. The second concept involves the 'sensorimotor' approach, intensively covered by Merleau-Ponty in his seminal work 'Phenomenology of Perception', which defines bodily awareness in terms of actions. When we do something it makes us aware of our own body whereas when we are still, we are less aware. It's not a grid that we have mapped out but the actions that define bodily awareness. de Vingnemont postulates that maybe a hybrid of the two approaches is closer to a complete definition of bodily awareness.

In this test work, I wanted to eliminate light and thus the external gaze, but give form to the space and body through a tactile, sensory experience that came from the feet up through the body. My aim here was to challenge participants' coordinates of space and their sense of orientation in the darkness, thereby exaggerating external bodily awareness. I wanted to highlight concepts of internal and external processing, causing re-negotiation of the subject and object, to consider proximity and distance in defining space. Through this process I was attempting to expose the audience to the question of bodily awareness.

At the Saltworks there were many unusual textural experiences underfoot such as walking on the salt itself. Our daily recognition of the substance is that it is flowing, soft and fine, whereas walking on it in its unprocessed state, it felt hard, sharp and solid. The steps up and the walk way along the salt washer and up to the conveyor belt that sat at the top of the salt mountains were narrow and strangely textural. Sometimes you were on thin uneven wood, other times grids of steel, straying salt crystals, then grated steel. In some parts water was gushing. Because the gantry by the conveyer belt was up disturbingly high, you became very conscious of what was under foot and the fragility of it or of you on it. It was these textural qualities from the Saltworks that helped inform the materiality of the unstable floor that I built in this test work.

I used a building within the institutional setting that fascinated me with its semi-abandoned state, which in itself created a feeling of uncertainly through emptiness and an ambiguous sense of purpose. The room I used was windowless with a single door. The aim of my test work was to create a textural, unstable floor using a variety of materials, including filled water bed bladders, gravel, foam, polystyrene balls, feathers, wood, metal and plastics. The floor was built up, cavities were made in a variety of sizes and each was filled with one of the materials. A fabric or plastic covered each cavity. A plastic tarpaulin covered the floor and was suspended from the wall using elastic ties. These allowed the tarpaulin to move up and down as the body moved over the alternating surfaces. The body's movement was reinforced through the sounds the body made when it came in contact with the tarpaulin. The participants entered the work by climbing up three steps, then stepping off the top step. Their bodies lunged into the space, the door was shut and they navigated the space in complete darkness as in test work two.

All of these elements created a sense of dislocation. The overall effect was to completely disorientate the person stepping into the space with a high likelihood of creating fear from the outset. I used the device of creating this fear as a trigger to heighten the person's awareness of their body. Brazilian artist Cildo Meireles explored this device in many of his works, specifically *Volatile*, (1980/94) where he manipulated physical space to change normality, giving rise to the dislocation. He says, "when you have fear, your senses become heightened. You become more attentive to your environment. Taking someone to the point of fear is a kind of initiation. That person becomes engaged."



10. Cildo Meireles, Volatile (1980 - 1994 / 2008)

Discussions about my work in reference to New Zealand-based Australian artist David Cross's work, in particular *Lean* (2011) and *Hold* (2007 & 2010) revealed some strong contrasts. For example, in his work *Lean* there was a choice between being a spectator or entering the work. This was not an option in my test. The experience, once you committed, was solitary, somewhat private, and you had to enter the work to experience it. There was no option to be a passive spectator. There were elements of curiosity that induced people to enter the work including having to enter through a blind door. As one person observed, there is "something about a door I am just so curious, the idea of entering through a door is very compelling, because of the uncertainty and the unknown." Moreover when there was more than one person waiting to enter the work the reactions of the exiting participant induced curiosity in the others to enter the work. III

Learning from test works two and three, where the absence of an usher to assist participants with engaging with the work had several consequences as already outlined, I organised a person to be present at the entry door of this test to instruct people. This person acted as a 'quasi-ritualistic character'. This also created an opportunity to converse and discuss audience members' experiences of the work, which extended to participants being invited to fill in an account of their experience on exiting from the work. I suggested prompts such as physical, emotional or intellectual responses. I also recorded a group discussion that followed participation in the work which gave insight into people's responses.

Only one person could enter the work at a time and participants were asked to leave bags and take off their shoes, all jewelry, and remove keys and sharp objects from their body. The anticipation of potentially hurting themselves charged the experience. From this test I observed that control of the audience is an important device in the development of an immersive installation.

It was only by physically entering the room that people could discover what was going on. For multiple visitors, the experience of navigating themselves around the room, even though they were able to momentarily glimpse it before entering, produced sensations of instability, disorientation, a loss of sense of space and a loss of balance. People fell over a lot. They became acutely aware of the sense of touch, experiencing varying surface textures and temperature changes through their feet. Their hands and feet became their primary navigation means.

Putting a person in a dark room with an unstable surface created a strong psychological reaction. Obviously this varied between individuals but was characterized by feelings of unease, anxiety and vulnerability brought on by the unfamiliar and unknown. Some people got the giggles while others yelled in panic.

Deprived of sight and therefore reference points, and with an exaggeration of sounds from the body movements, people experienced a heightened sense of their own body and whilst this maybe frightening, it also bought pleasure and humour to the situation.

Body Thought

Summary of Leanings from the Test Works

A mind is so closely shaped by the body and destined to serve it that only one mind could possibly arise in it. No body, never mind. Antonio Damasio Damasio

After testing it became apparent to me that there were a number of underlying themes and processes in the area I was exploring. These can be viewed from the perspective work through its physical manifestation and technical realization, and through the body in its response to the setting of the installation. I also became intrigued with the interaction of the body and the work and that together they are the work and can not be seen as acting independently.

In considering the work I gained an understanding of the following:

The reality of an immersive environment that the audience could actively engage with through touch, feel and movement. To place my work in a historical context, I see a direct line to the concepts arising in Allan Kaprow's Activities, a series of paintings where Kaprow studied the 'everyday' of human activity, creating an interaction with the art by the viewer, rather than just a reading of the art by the viewer. Similarly, a decade later, New Zealand artist Jim Allen used this immersive environment in his work Environment No. 1, (1969) later reconstructed in the retrospective at Adam Art Gallery in 2010.

Another aspect that I discovered in creating installations was that disorientation and dislocation experienced by the viewer could be manipulated by generating continuous movement. Argentinean artist Julio Le Parc in his work the *Displacement Series* (1966) and especially *Light and Movement* (1962) resonates with my work in the use of non-geometric space, light and movement.

It became evident to me that the experiential nature of the installation required controlled space and the transition from the outside to the interior. This helps to draw the audience into the installation, through curiosity and fear of the unknown. Controlled space can be seen as a preoccupation of the Dada movement and is an essential aspect of Kaprow's activities.

In transforming the physical site I have discovered that the non-geometric without prescribed views encourages the desired disorientation in the work. I see parallels in my work to that of Julio Le Parc. This device of disorientation of space is also found in the work of Cildo Meireles in *Espaços Virtuais Cantos (Virtual Spaces: Corners)* (1967 – 68), *Fontes (Fountain/sources)* (1992) and *Artavés (Through)* 1983-89.

Meireles was part of a Brazilian art movement in the 1960s and 1970s. His work continued on from the founders of the concrete art movement, which included artists such as Helio Ocitiia and Lygia Clarke. This movement distanced visual expression from figurative art. Concrete art had as its antecedent 'constructivism', which explored the 'constructs' laid over reality. Its basis was the notion of learning from firsthand experience of the environment, that is, experiential learning. A contemporary expression of this approach in learning is the Montessori Pre-school Movement.

Having created a physical space I began to understand that the space itself needed the interaction with the viewer to be realised as a whole. Without the interaction the space is static and lifeless and questionable as an object. The purpose of the installation is to create an interaction between the space and the body and to jolt the viewer outside of normality by immersing involving the viewer in the space. Kaprow's work involves this process; he described it as "shifting concepts of space as subjectively expressed by the viewer." In realised that the body is placed in a dynamic space-time continuum through the mechanism. I included in the space the non-geometric shape, the reflective surfaces, the soundscape and the use of controlled light.

Moreover, I realised that denial of visual primacy and the complexities of the interaction of these elements forced a constant renegotiation by the viewer of references to space and time. The overall effects are to create disorientation, psychological and physiological displacement and a dislocation from the normal. Further, the introduction of a group exaggerated this phenomenon. One intriguing element I found was that I could generate an element of subtle fear through these devices. This is an important and evocative phenomena, as instinctively the audience is torn between the fear and an innate, childlike curiosity to expose itself to fear and to resolve it.

All of these elements identified above shift the emphasis from the artist or artwork being the subject to the viewer as subject. One common theme that came out of discussions of the work is that the work has a visceral quality, preoccupied with the low-level bodily responses of the viewer rather than an intellectual, rational engagement.

In my process I became aware of the primacy of my thoughts and ideas over the material. Because I am always exploring new possibilities, the materials are selected after rather than before the development of the concept. My approach is to use everyday materials rather than high technology in the development of my experiential installations.

In summary, while 1950-60s installations of the concrete art movement were motivated by political activism, I see my work as not overtly political. I am asking the audience to question normality, to examine the de-centered nature of current life, to recognise how out-of-touch we have become with our environment. Also I am attempting to make the viewer aware, in the immersion of the installation, of their body senses, the place of their body in mind rather than the detached intellectual or rationally received perceptions of contemporary life.

Each of these elements is discussed and analysed in the following sections.

The sensory and bodily observations gathered from the personal experiences during the Grasmere Saltworks research trip formed the basis of the series of test works. This foreign environment created the framework to explore questions around the fragmented nature of our sensory perception. Through the test works I developed an increased awareness and interest in the functioning of our internal sensory system in contrast to our external sensory system and how this affects our spatial understanding of reality. I explored how our sentient body responds to varying conditions of stimuli, being deprived, deceived, prompted or surprised and the effect of these responses on our spatial awareness. Current scientific theories suggest that one's body and mind are intrinsically connected and create one's conscious reality. The mind/body, by emotionally responding to our surroundings through metaphor, association and memory, creates our perceived reality. If we could observe ourselves experiencing this, would we contemplate its potential to construct a different reality?

In considering this, the next body of work is developed with the goal of initiating an experience of altered perceptions as a rupture from day-to-day existence. The aim in this project is to create an immersive physical experience that interacts with our somatic being and questions our sense of normality, sense of space and sense of boundaries, thereby creating the experience of seeing the world in a different way.

Soma

Our somatic awareness refers to how our body relates internally and externally to our surroundings. Somatics is characterised by two aspects of the body: our external senses (sight, hearing, taste, smell and touch) which we are generally aware of and our sense of movement. This is the concept of proprioception, which is the study of three key elements -kinesthetics, vestibular sense and visceral feeling. Kinesthetics is the feedback to our movements, weight, resistance and the positioning of our body. The positioning leads onto the notion of the vestibular which is our spatial awareness of our surroundings. While these things have a bodily aspect, somatics introduces the notion of the visceral, the internalisation of our response to stimulation whether internal or external. Examples of these internalised reactions include excitement, joy, fear, horror and fatigue. Ivi

Somatics at its heart is an investigation into our 'lived body' bodily sensations, movements, perceptions, emotions and thoughts'.

How many of us actually consider our internal sensory system? Like most of our body we allow it to move and function through life, doing the multitude of complex tasks that we carry out every millisecond of our lives, some conscious some subconscious.

A leading professor of neuroscience, Antonia Damasio, hypothesizes the somatic marker theory by which external stimulation coming through eyes is processed by the brain, which then sends signals to the internal body. Then the body sends signals back up the brain as to its response to the change brought about in the body by the stimuli. The brain then combines the representation of the object seen with the representation presented to it from the body in response to the object. The brain is thereby able to decide whether or not an object is beneficial to the body. Damasio theorises that this is at the heart of the somatic bodily experience. In my work I am creating an arena for the audience to both observe and experience these processes.

Dance theory, education and practice have considered somatic movement as part of their development over the past five decades. Writing on the place of somatics in dance, Jill Green sees dance as "describing movement as being sensed and shaped from an internal source compared to an external source." Richard Serra refers in interviews to the dancer and choreographer Yvonne Rainer as a pivotal source of inspiration and understanding of the soma. He describes being able "to see time and movement in relation to material, material in relation to space, body movement in

relation to balance and counterbalance, choreography in relation to space. The distribution of objects in space, the opening and closing of space." Vilia

Richard Shusterman who has recently published *Thinking through the Body - Essays in Somaesthetics*, (2012) is developing a new philosophical sub-discipline. Central to Shusterman's philosophy is his devotion to the 'soma' (body). He argues that the body has generally been ignored through the humanities and when it is not ignored, it is associated with "negative ambiguities such as weakness, ignorance, bestiality, as an object rather than subject and we usually identify all the positive things with the mind." Somaesthetics contrasts with other Western philosophy through Shusterman's practical manifestation of his theory, where he draws on Feldenkrais practice, physically engaging himself and others in living the theory through workshops. His project concerns the "sentient lived body rather than merely a physical body." The 'sentient lived body' is that of sensation and experience.

Through the 'sentient lived body' I draw a link between Shusterman and my practice, I aim to focus on the centrality of the engagement of the viewer's 'body-mind' to the work. The viewer activates the work; their presence and their direct experience of the artwork are central to the realisation or completeness of the project. Shusterman's concept of the mind-body is integral to the ways in which the work is experienced. Through the processes of experience and sensation the viewer, through reorganisation, renegotiation of reference points and a redefining of where the body is in space, becomes the subject of the work.

Shusterman's Somaesthetics builds on Merleau-Ponty's phenomenological philosophical approach where the body forms a central perspective that helps construct the world rather existing as a discreet physical object. The thinking is furthered by a pragmatic approach, which 'walks the talk' rather than positioning itself as philosophical discourse. It inserts the phenomenology into an active artistic practice. Shusterman sees the "body as locus for a sensory – aesthetic appreciation and a creative self-fashioning" lxi.

The experimentations with the test works gave opportunity to be able to deduce modes of production in installation art that potentially work to 'decentre' an audience from the everyday. Within this body of work I have employed what I perceive as a few key characteristics of installation art: the centrality of the viewer to the work both in activating and completing it, immersive three-dimensionality, the

staging of space, the conceptual specificity of site, and the concept of time and temporality.

I realised the potential of a transformed space within an institutional setting when visiting the *Infinity Mirror (Fireflies on the Water)* (2000) of Yayoi Kusama at the City Gallery, Wellington in 2009. In this installation, there was a white wall and a white door with no suggestion of what lay inside. The contrast between the banality of waiting outside and the sudden transformation on entering the installation was extraordinary. The room had no boundaries, spaces were in a state of flux generated by our presence, and a single space was multiplied and became another world.

Theatricality

The staging of a space in contrast to the institutional setting questions the use of 'theatricality' within this project. The art critic and historian Michael Fried's use of the term 'theatricality' in his seminal essay *Art and Objecthood* in Artforum1967 is repeatedly quoted and seems to have become quasi-essential when discussing installation art. This was written originally as a critical assault on the works of Minimalist artists Robert Morris and Donald Judd, accusing them of being 'theatrical' and of "confusing the meaning of 'art' and 'object" Fried later acknowledged that in criticising Minimalist art he inadvertently defined the essential characteristics of the Installation art genre - theatricality and the consideration of space being central to its construction, the changing relationship of how the work communicated to the viewer and temporality.

Coming as I do from a theatrical background, with training in Constantine Stanislavsky's 'System', |xiii I can make a connection between concepts in the system and somatic theory. In brief, the principles of the 'system' work specifically with concepts of being aware of your senses, how they incite a movement and how that movement engages with your body to form an action, which in turn creates an emotional response. During my time in theatre, I experienced a multitude of approaches. Perhaps the most influential would be works that were physical and interdisciplinary in nature. These worked at deconstructing and transforming the theatre space, or creating new scenic environments by reconstruction of external spaces, often dismantling the "fourth wall" or the capacity to be a passive observer. This knowledge of theatrical constructs informs my practice.

In her essay Between *image* and stage: The theatricality and performativity of *installation* art, art theorist Anne Ring Peterson highlights two aspects of theatricality which are employed in this body of installation work. Ixiv Ring Peterson considers that installation uses the same devices of 'stage setting' used by theatre to create an imaginary space ("the stage"), by organising and transforming the way which the audience enters the physical space. Also, she sees that installation artists recognise the important part played by the viewer as a 'performer' in the installation. This theatrical awareness is an important input into the construction of the installation. The work becomes an "object in a situation-one that, virtually by definition, includes the beholder". Ixiv

Construction and Materials

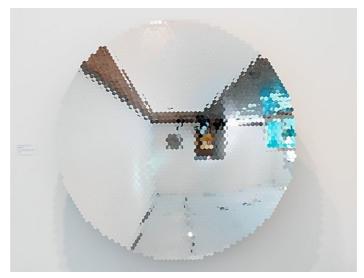
In this installation test and the final work I bring together materials explored in the earlier test works that had qualities and properties that heighten a sensory response and can abstract a space into an ambiguous reality. I worked with sound, lighting, reflective film, temperature controlling equipment and simple kinetic devices.

Whereas an artist like Richard Serra has an ongoing pre-occupation with a particular material (e.g. steel) and uses it to develop an idea through process, I start with experience, memory and thought and from that seek out possible materials to explore the concept. Quite often these are simple, everyday materials and I tend not to use high technology solutions. Like Cildo Meireles "it is obvious that my personal project is that each one be completely different from the others. That they should have a certain autonomy." IXVI

Our usual spatial reference of the built environment is cubic or rectilinear with shape folds and right angles; essentially this gives us a grid map in our perception. To shift the viewer out of this construct I have used the curvilinear and the non-geometrical to force the viewer to constantly remap the space as they move through it or look around.

In the 1960s -1970s such artists as Yoyoi Kusamu, Luc Peire, Dan Graham and Lucas Samaras used mirrors in their work in painting objects and installation art. Mirrors were used often as a literal medium to reflect upon our phenomenological perception. "Reflective glass and mirrors are used to disrupt the idea that subjectivity is stable and centered." Ixvii The French psychoanalyst Jacques Lacan describes the use of reflection, not as a material in which we see ourselves reflected but where we are

destabilised by the experience, either drawn in by our egos or disorientated by viewing ourselves from what appears outside of ourselves. Ixviii In contrast Merleau Ponty simply says that reflection is "seeing itself seeing itself" without the disorientation recognized by Lacan. Lacan's perspective, that our reflection is much more complex a view, is one that I tend to agree with.



11. Anish Kapoor, As Yet Untitled (2007) Image Metropolitan Museum of art

Seeing artist Anish Kapoor's As Yet Untitled (2007) at the Metropolitan Museum of Art, New York in 2009, two observations remain with me; the engagement of viewers, seduced by their reflection, moving their bodies back and forth towards and away from the artwork, dancing with their image being fragmented, fractured, becoming one then many, and the multiplicity of reflections within the sculpture that were continuously in flux. Just when it seemed a viewer had captured a moment, the slightest movement or someone entering the peripheral space changed it, the surface creating infinite possibilities.

Art historian and critic, Claire Bishop in her book *Installation Art* (2005) brackets several artists who employ the use of reflective mirrors in their works as "oceanic bliss or claustrophobic horror" lxix. This aptly describes the dual experience that can occur when faced with environments that manipulate the perception of space with the aim of disorienting the viewer with infinite playful reflections yet disturbing, continuously expanding worlds. lxx

Two such works I have experienced are Yayoi Kusama's Infinity Mirror Room (Fireflies on the Water), (2000), (mirror, plexiglass, 150 lights and water) at City Gallery Wellington and Environment 3 by Luc Peire at Auckland Art Gallery Toi o Tamaki,

(mirrored glass, paint, Perspex, Formica, metal, wood, audio and fluorescent lights). Both artists used mirror and perspex but, by introducing additional elements within a mirror structure, a vastly different experience occurs. Kusama's work engages your body (as one of many objects) inciting the playful child and creating a sense of abandonment of one reality for another. However, Peire's *Environment 3* made me feel entrapped with an infinite bar code matrix when looking down and a neverending high-rise building when looking up. There were slight moments of feeling as if you were going to tip off the edge into the matrix. Because you were in control of your movement, the work failed to fully disorientate.

Reflection offers both uncontrollable and controlled elements. In my work I tend to see value in both of these approaches, allowing chaos but at the same time glimpses of reference points for the viewer to remap within the space. The intention is for the audience to flux in and out of being the subject in the installation. It also avoids people being overwhelmed by the work, which is not my intention.

Artist Lucas Samaras' (1966) mirror room is described as a multiple fragmented environment, 'a kinetic happening'. Immersion within it is a kaleidoscopic experience "dissolving the viewer's perception of both body and space." Ixxi In recalling these works and thinking about mirror's ability to fragment and expand a space, I was curious as to what would occur to a space and to our experience of space if the reflective Mylar material I had sourced moved and was in continuous flux. I hypothesised that there would be more distortion, but wanted to test its capacity to 'de-centre' a person's spatial perception.



12. Lucas Samaras Mirror room (1966)

In staging the test version of the final MFA project, I made fifteen screens of very thin reflective Mylar (three hundred and fifty by one hundred and twenty centimetres) that I suspended from the grid. Each screen was suspended on ball-bearing pivots, which allowed them to revolve effortlessly. The installation was lit axially by six low-wattage theatre lights with a palette of blue gels. A surround-sound audio system was installed behind the curtains. The screens were highly sensitive to the slightest air movement within the room. In configuring the screens consideration was given to the room in which they were installed. The distribution of the screens through the space was created by a number of rows, each offset from the other, so that the row behind was visible through the ever-moving gap, creating a labyrinth. Within the space I deliberately left indicators of the existing room as anchor points. Too many and the sensation became relentless and ever-expanding as in the work of Yayoi Kusama. The aim was a random, complex interaction between the screens and the infinite possibilities of reflection, disrupting the depth of field and resulting in spatial disorientation.



13. Katherine Joyce-Kellaway, Body Thought (2012)

The final work in this MFA project is being constructed for examination/ exhibition, and is not fully completed at time of writing, therefore detailed analysis on how the work operates within the site and the viewer behaviours and responses cannot comprise part of this exegesis. The current iteration seeks to address, through honed development, issues encountered in the test version and the previous test works undertaken during the course of study.

Given the complexity of both iterations it is difficult to predict the outcome until the completion of and immersion in the new site. As Richard Serra observes,

you can't place yourself within the experience of a work until you build it. What you do in terms of an artifice whether you build a model or video that doesn't give you the 'real-time experience of the work in place, post-cards don't work. [XXII]

I used the understanding I gained from the (modulating) test work four, that the mind plays tricks when a sense of space is interrupted. In the final exhibition work an unstable floor will be constructed from high-grade salt and a fabric stretched over it. Hiding the salt adds to the sensation of experiencing something soft and moving under foot without a literal visual distraction of the salt and foot prints made by the audience. The fabric also allows for a projection surface for the light reflections. The aim of installing the floor is to subtly concentrate the viewer to further consider the body and to emphasis the body moving through the space, this movement in turn responding to the Mylar screens. As the Mylar was highly sensitive to the slightest movement, even air eddies in the space meant the installation was in constant flux. The viewer's spatial point of reference was constantly changing as it did in response to the unstable floor of the 'modulation' test work. As the viewer moved through space a process of re-orientation took place. As the point of location changes our perception of the space also changes. Our tendency is to stop and/or slow down and think a way through, to remap our perception of the space. Meireles see's this as a "thoughtful attentive search". Ixiii This is not only the movement of the viewer but also the movement of the objects in the space.

Sound

In this work my objective is to create an ambience within the space by using sound to build an 'internal' space for the participant, engaging with their memory, body or imagination. After I made the test work two, it became clear that in this work I needed 'surround sound' to achieve an immersive experience. Having the sound moving about the space can also assist in creating spatial depth.

Although in *Sculpting in Time* Andrei Tarkovsky talks about music's ability to distort a person's perception and evoke emotional responses, I would argue that the same can be said of sound. In his films *Nostalgia* (1983) and *Stalker* (1979), Tarkovsky experimented with the concept of sound evoking sensorial feeling of being in the place of the characters through the use of sounds rather than music.

Music can be used to produce a necessary distortion of the visual material in the audience's perception, to make it heavier, lighter, more transparent, subtle, or, on the contrary, coarser. By using music, it is possible for the director to prompt the emotions of the audience in a particular direction, by widening the range of their perception of the visual image. The meaning of the object is not changed, but the object itself takes on a new colouring. The audiences see it (or at least, is given the opportunity of seeing it) as part of a new entity, to which the music is integral. Perception is deepened. Direction of the visual image.

The sound used in this installation is a construction of recorded everyday domestic sounds within a house setting that we tend to move to the background of our consciousness. We are aware of them but we give them little importance. These sounds are at the periphery of our perceptual awareness of where we are in a space and are part of the fabric forming that reality. I tend to focus on the ongoing sounds that exist after an event such as the sound after the toilet flushes, the kettle cooling down, the stove warming up and cooling down, water moving through the pipes under the house after the tap has been used. I also choose to retain the natural reverberations that occurred within the space and distort the sounds to engage with peripheral perceptual knowledge. I create ambiguity with the aim that the viewer can make connections, associations or create metaphors and that the distorted sounds may have a bodily connection to the viewer.

In the test work the soundscape complemented the movement of the Mylar screens and the colour palette of the lighting; it enhanced the experience by evoking associative memories. One person said, "I started to panic and wanted to get out ... it was reminding of a drowning experience that I had as a small child." In contrast another person felt she was safe and indulged in synchronised swimming. |xxv|

Light

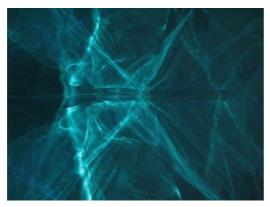
"..for all artists who use actual light as material, light gains its content from its application but always retains a quality of pure abstraction or 'pure information' that lends a particular, if indefinable, power." |xxvi

Light gives us vision and, as Turrell says, "we are literally light eaters". IXXVII Artists are preoccupied with light both as material, object and subject. "Light, for all its simplicity

and its universal presence, is a complex tool artistically. It triggers primal bodily responses as well as contradictory emotions." |xxviii

Within this project I have experimented with the deprivation of light and the fragmenting of projected light. In installing theatrical light into the test work my aim was to achieve several effects. I used the medium to assist in the shaping and expanding of space. The controlled light diffused the overall lighting in the room and de-emphasised elements of the room, creating a more condensed space. An example of this was pushing the grid from the mid to the background when I previously installed the work in the 'Green Screen' room.

In planning the final work the constraints of the room and a lack of a grid determined that the lights be placed in each corner of the room at the highest point. It should be noted that the lack of headroom in this room will alter the lighting design. I have also built a curved anteroom to separate the external corridor from the installation to allow control over lighting and to more deliberately control the movement of people into the space through architecture.





14 & 15 Katherine Joyce-Kellaway, Body Thought (2012)

I experimented with a variety of colour lighting gels in the test work to evoke a perceptual response and to expand space through an emotive connection in the viewer. The blue and green palettes have a natural synergy with the fluidity and movement of the Mylar screens and work cohesively with the soundscape to embellish a watery, bodily feel. Not wishing to create too much of an experience of plunging into cold water I used warmer blues to modify the temperature of the space, to achieve a certain tonal warmth.

Audience

It is likely that audience members were largely unaware of how their presence in the installation activated the work. The union of their movements, changing coloured light and the soundscape heightened the somatic experience.

In the test work version once a person entered the space, their body and the door movement immediately created an air draft that activated movement of the Mylar screens. Just standing in the space a person's body changed the natural air currents of the room, activating movement. The more the viewer moved about the space the more the screens moved and the more the visual information fluctuated through the reflective qualities of the screens. If another person entered the space their bodily movement added to the flux created in the room.

In this project I have been very interested in the experience of the viewer in setting up either an individualised encounter or a communal experience with other viewers. In the test and final work I am interested in how both of these experiences play out in the same work. I am particularly interested in what occurs when multiple viewers enter the work and how that may change or heighten the experience through increasing spatial disorientation of the work.

With the change of venue for the final work the addition of an anteroom develops another layer to the experience, creating a transition space separating the 'real world' from the artwork. Necessitated by the constraints of the new venue, this exploits some of the aspects identified in earlier tests where a separation of active and passive viewing was tested. In this work you can not be an idle spectator.



16. Carston Höller Mirror Carousel, Experience Exhibition, New Museum. New York (2011)

The work of artists Carston Höller, Olafur Eliasson and Ernesto Neto, has been described at various times as being 'playgrounds', 'entertainment', 'playful', and 'science experiments'. IXXIX To some, these qualities may be seen as frivolous. Often one of the effects of immersive installations is to release peoples' inhibitions, to provoke giggling, laughter, through offering a space where 'everyday' modes of perception do not apply. I see these aspects as central to my work, in no way diminishing it's serious intent.

There are limited spaces within the public realm where inhibitions can be released. Within the context of contemporary art viewing, codes of behaviour are regularly upheld (look don't touch, remain observant but respectful, don't run, don't shout etc.). For non-specialist publics there can be apprehension as to whether they have the requisite references or intellectual touchstones to access and understand the work. The experiential qualities of immersive installations involving a combination of visual, tactile and aural components and the integration of the felt and the thought through a somatic encounter can enable a more accessible encounter – to be experienced by specialist and non-specialist audiences alike.

In the staging of the test and final work the audience are prompted to remove their shoes. The act of removing shoes is not just practical in the sense of keeping the place clean, nor a cultural or social construct, for example on entering a whare rūnanga. My intention in asking people to remove their shoes is to connect the viewer's body to the

tactile qualities of the floor, an integral part of the installation. Furthermore, taking one's shoes off is a signifier to relax and to possibly be playful, rather like the loosening of a tie.

"Joy is physical as well as mental. Joy is also physical before it is mental." Antonia Damasio^{IXXX}

Martin Creed's deceptively simple, sculptural work exemplifies this. His work and public personal constantly ask us to question and be aware of personal self-consciousness. Creed often uses materials or actions that he draws from the everyday or that may have some associative or memorable quality. In his installations, the viewer's body is constantly engaged, whether it is through a mimetic bodily action that is being watched such as the runners sprinting the length of 'Tate Britain's neo-classical sculpture galleries' in his Work No 850, (2008) or in work No.990 A curtain opening an closing, (2009).

Creed's work *No. 200, half the air in a given space* (1998) has been recreated many times. The work involves filling half of the air in a room with balloons (of a colour and size specified by the artist). The room can be entered and explored by the audience. The use of balloons evokes memories and associations of celebrations, childhood, fair grounds or car sale yards. The bodily action of being able to walk into and be immersed in a room of balloons, gives a feeling of losing all sense of space and inhibition. "Visitor responses spanned from terror, claustrophobia, exhilaration, giddiness, to loss of a sense of direction, panic and giggling." IXXXI

It has been observed that my work exhibits a similar quality of the 'playful' and is 'joyful'. I would suggest that the full participation of the viewer within my work releases the same sort of experiential behaviour which is complex and often results in an individualistic perception of the work, one which includes stimulation of an intellectual response but does not prioritise this aspect of perception. I noticed, from observation within the installation and feedback from a group discussion, a full range of felt emotions and reactions to the test installation, from panic to blissful meditation. Ixxxiii

Actively being part of the work means that the work is accessible to a wide range of people of all ages. They are not necessarily aware of the complex constructions and provoked interactions that have been employed in the formulation of this work. It is not a requirement of viewing to have a priori knowledge of art history or contemporary art. By the very nature of it being an immersive and bodily experience,

intellectual analysis rooted in the mind tends to be overcome by the bodily reaction to the work. This tends to make the work accessible and open to all ages. I observed children as young as three enjoying the work along side seventy year-olds.

In designer Ingrid Fettell's current project - a blog and book in progress called the Aesthetics of Joy - she sees one element of joy as "a momentary burst of positive emotion, triggered by an external source." |xxxxiii

Over the course of my test and the development of the final work I have come to the realisation that, in creating an installation to explore the themes of the effect of disorientation, dislocation and displacement of the viewer, there was a set of complex interactions between the physical space and the viewer which in many ways defies analysis.

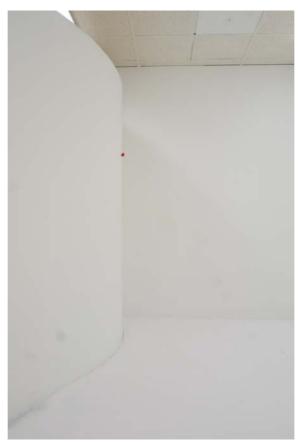
The nature of my art practice, which is non-linear, experiential, intuitive and non-narrative, lends itself to the exploration of creating multiple possible realities for the viewer in the installation. An intriguing part of the process is that it is difficult, if not impossible, to be prescriptive of the outcomes of the installation during its development. As I discussed earlier, Richard Serra points out that the artist does not know the outcome until the work is finished. Moreover, in my observations and discussions with viewers the outcomes are multiple and complex as each 'viewer is the subject' and brings their own memories, associations and responses to the work.

The fundamentals of the exhibited installation were successfully tested. However, given that every space has an individual profile (such as natural or machine generated air currents, electrical forces, temperature and dimensions) this determines the final work. The audience and their interaction within it, either independently or communally, continuously activates the work. All these factors define this installation.

While this exegesis outlines the sources and observations informing the work, it has become apparent that a full understanding of the interaction of the work, the variables, and the audience is yet to be achieved.

Body over Mind

'no body – never mind'



17. Body over Mind, (photograph by Tony Kellaway) (2013)



18. Room Construction - Entranceway Body over Mind, (photograph by Tony Kellaway) (2013)



19. Room construction – curved walls for Body over Mind, (photograph by Tony Kellaway) (2013)



20. Salt and fabric floor installed for Body over Mind, (photograph by Tony Kellaway) (2013)



21. Katherine Joyce-Kellaway Mylar Screens installed for Body over Mind, (photograph by Tony Kellaway) (2012)



22. Katherine Joyce-Kellaway, Mylar Screens installed for *Body over Mind*, (photograph by Tony Kellaway), (2012)



23. Katherine Joyce-Kellaway, Body over Mind Detail, (photograph by Tony Kellaway), (2012)



 $24.\ Katherine\ Joyce-Kellaway,\ \textit{Body}\ over\ \textit{Mind}\ Detail,\ (photograph\ by\ Tony\ Kellaway),\ (2012)$

¹I am referring broadly here to the writing of Antonio Damasio and numerous New Scientists' articles; for example 'Issue 14th May 2011, The Grand Delusion p 35, The Existential Issue: The staggering mysteries of being. 23 July 2011.

- ^{II} Lake Grassmere solar Saltworks situated east off the Blenheim Christchurch Highway, South Island, New Zealand. Originally established in 1943 by George. W. Skellerup. Currently owned and operated by Dominion Salt
- Abbushi Alexander, Franke Ivana (2012) Seeing with eyes closed. Berlin: Association of Neuroesthetics.
- ^{iv} Ganzfeld effect has been studied from various research perspectives: sensory physiology, psychology and psychophysics, psychology of consciousness, and even parapsychology (Ganzfeld-induced hallucinatory experience, phenomenology and cerebral electrophysiology).
- V Wakermann Jiri, P. P. (n.d.). *Science Direct*. Retrieved April 5, 2011, from Elsvier.com: www.efectoganzfeld.com/uploads/5/3/0/3/5303662/ganzfeld.pdf.
- vi Metzgers was a German psychologist whose passion was: 'to discern the lawful order within the manifold complexities of the phenomenal world." His studies on the perception of the homogeneous visual field (Ganzfeld) were so widely read that ganzfeld was adopted as a generally accepted term.
- vii_{vii} Bell, Vaughan, (2008). Mindhack.com, retrieved April 5 2011 www.http://mindhacks.com/2008/11/17/ganzfeld-hallucinations/
- viii Wakermann Jiri, P. P. (n.d.). *Science Direct*. Retrieved April 5, 2011, from Elsvier.com: www.efectoganzfeld.com/uploads/5/3/0/3/5303662/ganzfeld.pdf.
- Schuld, Dawna. (2012). Beyond mimesis and convention: Representation in art and science, lost in space: Consciousness and experiment in the work of Irwin and Turrell. Boston: Springer ebooks Robert Irwin (1928 -) an American installation artist.
- * Weschler, Lawrence. (2008). Seeing is forgetting the name of the thing one sees: Over thirty years of conversations with ROBERT IRWIN. Canada: University of California Press, p.114.
- xi Ibid Wakermann
- xii Wakermann Jiri, P. P. (n.d.). Science Direct. Retrieved April 5, 2011, from Elsvier.com: www.efectoganzfeld.com/uploads/5/3/0/3/5303662/ganzfeld.pdf.
- James Turrell and Robert Irwin are regularly labelled as artists of the Light and Space Movement. This term was applied to West Coast minimalist artists of the 1960s 1970s, who were specifically interested in exploring the subject of light and sensory perceptual phenomena on their viewers. They we're also known as the "California Minimalism" group and included such artists as John McCraken, Larry Bell and Bruce Nauman.
- xiv James Turrell: "We live within this reality we create, and we're quite unaware of how we create the reality. So the work is often a general koan into how we go about forming this world in which we live, in particular with seeing.
- ^{xv} Ciaran, Benson. (2001). Theoretical issues in psychology. *Points of view and the visual arts: James Turrell,* Antonia Damasio and the "no point of view" phenomenon. Dublin: Kulwer Academic Publishers.
- xvi Gasworks / Ganzfeld Sphere was first created in 1993 (Henry Moore Institute Leeds). I am referring here to feedback from the audience at a later exhibition of the work in 1996 at the National Sculpture Factory, Cork, Ireland.
- xviiPhillips Lynne, Gioni Massimiliano. (2011). *Carsten Höller: EXPERIENCE*. United States: Skira Rizzoli Publications.
- wiii Mendelsohn Avi, Chalamish Yossi, Solo. (2008). Mesmerizing memories: brain substrates of episodic memory suppression in posthypnotic amnesia. Neuron, 57(1). pp 159-170. Retrieved from: http://www.cell.com/neuron/abstract/S0896-6273%2807%2900982-8
- xix Merleau-Ponty. Maurice 'Eye and Mind',1961), in Merleau-Ponty, *The primacy of perception*, Evanston, 1964, p.178.
- ** Cataldi Sue, L. (1993). Emotion, depth. and Flesh: A study of sensitive space: Reflections on Merleau-Ponty's philosophy of embodiment. USA: State University of New York Press. p.48.
- xxi Thomas Dylan (1954). *Under milk wood*. Reprinted 1984 Great Britain: The Chaucer Press, p.1.
- xxii Pallasmaa, Juhani. (2005). The eyes of the skin: architecture and the senses. Great Britain: Wiley Academy Division of John Wiley & sons Ltd.

xxiii Ibid, p.42.

- ^{xxiv} Bornholdt Jenny and O'Brien Gregory. (1996). *My heart goes swimming: New Zealand love poems.* Auckland NZ: Godwit Publishing Ltd, p.24.
- xxv Report on the Art and Technology Programme of the Los Angeles County Museum of Art 1967 1971 retrieved http://collectionsonline.lacma.org/mwebcqi/mweb.exe?request=epage;id=502074;type=803
- xxvi An anechoic chamber is a room designed to suppress internal sound reflections. Used for acoustical measurements. Retrieved from http://eckelusa.com/products/test-chambers/anechoic-chambers.html.
- wwii Weschler, Lawrence. (2008). Seeing is forgetting the name of the thing one sees: Over thirty years of conversations with ROBERT IRWIN. Canada: University of California Press, p.134.
- The Purkinje Shift is named after physiologist Jan Evangelista Purkinje who recorded that the human eye has two systems of capturing light: adaptation of bright light and low light conditions. The change in human colour perception in low light is known as the Purkinje shift. For example, after sunset a red flower will appear black whereas a blue flower will remain brightly coloured.
- Pramanik, Debasis. (1st 2006, 2nd 2007). *Principles of Physiology*. Kolkata: B.K. of Academic Publishers. p 64 Retrieved:http://books.google.co.nz/books?id=XLNoc6vpVOYC&pg=PA505&lpg=PA505&dq=purkinje+shift+phenomenon&source=bl&ots=e3SEsm5tyt&sig=EgdInmy8i-AStwrquo_frYcXOVo&hl=en&sa=X&ei=8nLfUKbIH-iSiAK9wIDICA&ved=0CEwQ6AEwBTgK#v=onepage&q=purkinje%20shift%20phenomenon&f=false
- xxix Adock, Craig. (1990). James Turrell: The art of light and space. USA: University of California Press, pp.106 114.
- xxx Pallasamaa, Juhani. (2005). The eyes of the skin: Architecture and the senses. Great Britain: Wiley Academy Division of John Wiley & sons Ltd.
- xxxi Silverman, Kenneth. (2010). Begin Again: A Biography of John Cage. USA, Alfred. A Knopf, New York. Story recounted of John Cage visiting the anechoic chamber in 1950 at Harvard University. Cage "heard two sounds, one high and one low." He asked the sound engineer why, since the chamber absorbed sounds, he had heard any...the engineer replied: "the high sound was your nervous system in operation and the low one was your blood circulation."
- xxxii Richard, Chatier. website http://www.3particles.com/
- xxxiii Foley sounds are sounds created in the studio rather than on location. They can be created by using reacted materials or those that imitate natural sounds.
- xxxiv Feedback was extracted from a recording of a group of external people from the MFA Massey University on 21st June 2011 at Massey University.
- xxxx Feedback was extracted from a recording of a critique session on 23rd June 2011 at Massey University.

xxxvi Lbid

xxxvii Lbid

Aaron O'Connell is a physicist and was completing his PHD at the University of California (UC), Santa Barbara, in 2011 when he created his breakthrough experiment. Retrieved: http://www.ted.com/talks/aaron o connell making sense of a visible quantum object.html http://sciencecareers.sciencemag.org/career-magazine/previous-issues/articles/2010-12-17/caredit.a1000-120

xxxix Ibid

xl Ibid

- **Barrar, Wayne. (2001) Shifting nature photographs by Wayne Barrar with an essay by Geoff Park. New Zealand: Otago University Press. Referencing here the photographic project of Barrars at the Grassmere Saltworks
- ^{xiii} Barthes, Roland. Howard, Richard. (1989) *The rustle of language*. California: University of California Press. pp 345 350.

xliii Feedback was extracted from a recording of a critique session on 23^{rd} June 2011 at Massey University.

- xiiv Lawton Graham. (16th March 2013). New scientist: Secrets of the body, pp.32 49.
- xIV Juhani Pallasmaa , The Eyes of the Skin: Architecture and the Senses, West Sussex, John Wiley & Sons Ltd, 2005, p.40.
- xlvi Ibid, p.64.
- xlvii de Vignemont, Frédérique. Bodily Awareness. The Stanford Encyclopaedia of Philosophy (Fall 2011 Edition), Edward N. Zalta (ed.), Retrieved 15th Aug 2012 from URL =
- http://plato.stanford.edu/archives/fall2011/entries/bodily-awareness/>.
- xlviii Ibid
- xlix Ibid
- ¹ Farmer, Alan, John. *Art Journal*, Vol. 59, No. 3 (Autumn, 2000), Through the Labyrinth: An interview with Cildo Meireles p. 38. Retrieved from Jstor 10th December 2012.
- David Cross works can be sited at http://www.davidcrossartist.com/
- Feedback was extracted from a recording of a critique session on 27th April 2012 at Massey University.
- Damasio R. Antonio. (1999) The feeling of What Happens Body and Emotion in the Making of Consciousness. Harcourt Brace & Company, p.886.
- № Reiss H. Julie. (1999). From Margin to Centre The Spaces of Installation Art. USA: Massachusetts Institute of Technology.
- lvi Shusterman, Richard. (2012) Thinking through the body essays in somaesthetics. Cambridge. USA: University Press.
- Wii Green Jill. (1999) Somatic authority and the myth of the Ideal body in dance education. *Dance Research Journal*, 33(2), 80 -100. Retrieved 19th September 2012 from http://www.jstor.org/stable/1478333
- MicShine Kynaston, Cooke, Lynne. (2007/8) *Richard Serra sculpture: Forty years.* New York: Museum of Modern Art, p.25.
- is Shusterman, Richard. (2012) Thinking through the body essays in somaesthetics. Cambridge. USA: University Press.
- ^{IX} Richard Shusterman *Thinking through the body.* Talking at CambridgeUp. Japan. http://www.youtube.com/watch?v=fOu32uXx20l
- lxi Shusterman, Richard. (2012) Thinking through the body essays in somaesthetics. Cambridge. USA: University Press, p.27
- Fried, Michael. (June 1967). Art and objecthood. New York: Artforum 5, pp.12-23.
- hill Notably different from the 'Method' devised by Lee Strasberg from Constantine Stanislavsky's first teachings.
- Miv Gade Rune & Jerslev Anne. (2005) Performative realism: Interdisciplinary studies in Art and Media. Denmark: Museum Tusculanum Press, pp.209 232.
- Ixv Lbid, p.215.
- Ixvi Herenhoff, Paul. Mosquera, Gerardo. Cameron, Dan. (1999) Cildo Meireles. London: Phaidon Press Ltd.
- lixvii Bishop, Claire. (2005) Installation art a critical history. London: Tate Publishing. p.87.
- lacan Jaques The Mirror Stage as a formative of I. Retrieved 10 October 2012 from http://www.iep.utm.edu/lacweb/
- lxix Bishop, Claire. (2005) Installation Art A Critical History. London: Tate publishing, p.92.
- lxx Ibid. p.82.

lexi Geisdorfer-Feal R. & Carlos Feal-Diebe. (1995). Painting on the Page: Interartistic approaches to modern hispanic text: Reflections on the mirrored room: From word to work. Albany: State University of New York Press. www.sunypress.edu/pdf/53271.pdf

- lxxii Richard Serra Talk with Charlie Rose (Part 2) 2/3. http://www.youtube.com/watch?v=trxSezGQ2sc
- lxxiii Herenhoff, Paul. Mosquera, Gerardo. Cameron, Dan. (1999) Cildo Meireles. London: Phaidon Press Ltd.
- looiv Tarkovisky Andrey. (1986). Sculpting in time reflections on the cinema. London: The Bodley Head, p.158.
- bxxv Feedback was extracted from a recording of a critique session on 22nd June 2012 at Massey University.
- kwi Ravenal, John, B. (2006). Artificial light: New light-based sculpture and installation art. Virginia: VCUarts Anderson Gallery, p.9.
- whittaker Richard, (1999) Greeting the light: An interview with James Turrell. Retrieved 6 June 2012 http://www.conversations.org/story.php?sid=32
- Ravenal, John, B. (2006). Artificial light: New light-based sculpture and installation art. Virginia: VCUarts Anderson Gallery, p.87.
- lxxix Atwood, Roger. (April 2012) Serious fun. http://www.artnews.com/2012/04/26/serious-fun/

Karen Rosenberg, (October 2011). Where visitors take the plunge, or plunges. http://www.nytimes.com/2011/10/28/arts/design/carsten-holler-experience-at-the-new-museum-review.html?pagewanted=all

- lxxx Damasio R. Antonio. (1999) The feeling of What Happens Body and Emotion in the Making of Consciousness. Harcourt Brace & Company.
- luxui Heather Galbraith who installed Creed's work at Camden Arts Centre, London in 2000.
- laxxiii Feedback was extracted from a recording of a critique session on 22nd June 2012 at Massey University.

lxxxiii_{lxxxiii} Ingrid Fettell at http://www.ingridfetell.com/

Appendix: Other explorations

In the initial stages of this research attempts were made to revisit Lake Grassmere Saltworks to elucidate further potential material such as video and sound recordings and interviews with the staff in regard to their perceptual experiences at the site. However permission to re-visit was refused by senior management of Dominion Salt.

Interviews were conducted with six people, asking them what came into their consciousness immediately after awakening and then the first hour of the day. This was bracketed around their sensory recollections of that time.

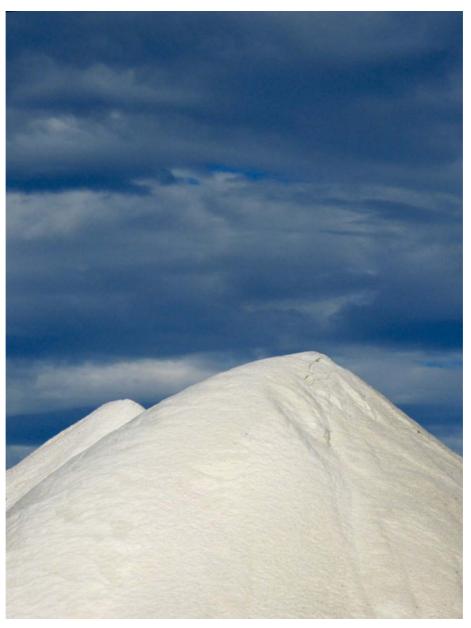
For the exhibition *Translucent Landscapes* March 2012, I explored the materiality of translucency. In the first explorations I used it as a mechanism to create a sensory space where people could travel their own landscape through their perception of what is presented to them. This may occur through triggers such as memory, emotions, imagination or physical exploration.

What I ended up exploring was the viewer's relationship to the sculptural aspect and how their perception changed as they moved around the light form. This felt like a departure from the through line of my investigations and I have not incorporated it into the development of my work.





1 & 2 Katherine Joyce-Kellaway Translucent Landscapes installation 1 & 2 (2011)



1. Lake Grassmere salt mountains, (photograph Katherine Joyce-Kellaway) (2011)



2. Lake Grassmere conveyer belt, (photograph Katherine Joyce-Kellaway) (2011)



3. Lake Grassmere settling ponds, (photograph Katherine Joyce-Kellaway) (2011)



4. Lake Grassmere harvester's huts on salt ready for harvesting (photograph Katherine Joyce-Kellaway) (2011)



5. Lake Grassmere salt crystals (photograph Katherine Joyce-Kellaway) (2011)

Bibliography

Abram, David. (1996). The Spell of the Sensuous. USA: Vintage Books, a division of Random House.

Bacci, Francesca & Melcher, David. (2011). Art & the Senses. USA: Oxford University Press. pp.105 – 114.

Bahamon, Alejandro & Alvarez, Ana Maria. (2010). Sensory Effects in Contemporary Architecture: Light, Colour, and Sound. USA: W.W. Norton & Company.

Barthes, Roland & Howard, Richard. (1989). *The Rustle of Language*. California: University of California Press. pp.345 – 350.

Birnbaum, Daniel & Grynsztejn, Madeleine. (2002). *Olafur Elliasson*. London: Phaidon Press Ltd.

Bishop, Claire. (2005). Installation Art: A Critical History. London: Tate Publishing.

Blakeslee, Sandra & Mathew, Blakeslee. (2007). The Body Has A Mind Of its Own: How the Body in Your Brain Help you do (Almost) Everything Better. New York: Random House.

Bornholdt, Jenny & O'Brien, Gregory. (1996). My Heart Goes Swimming: New Zealand Love Poems. Auckland NZ: Godwit Publishing Ltd,. p.24.

Cataldi, L, Sue. (1993). Emotion, Depth and Flesh: A Study of Sensitive Space: Reflections on Merleau-Ponty's Philosophy of Embodiment. USA: State University of New York Press. pp.48 – 59 & 109-176.

Ciaran, B. (2001). Points of View and The Visual Arts: James Turrell, Antonia Damasio and The "No Point of View" Phenomenon. Theoretical Issues in Psychology. (N. S. John R. Morss, Ed.) Dublin, Ireland: Kluwer Academic Publishers.

Creed, Martin. (2010). Martin Creed Works. London: Thames and Hudson.

Damasio, Antonio. (2010). Self Comes to Mind: Constructing the Conscious Brain. London: William Heinmann.

Damasio, R, Antonio. (1999). The feeling of What Happens: Body and Emotion in the Making of Consciousness. Harcourt Brace & Company. pp.31 – 81 & 133 – 276.

de Vignemont, Frédérique. Bodily Awareness. *The Stanford Encyclopaedia of Philosophy (Fall 2011 Edition)*, Edward N. Zalta (ed.) Retrieved 15 August 2012 from URL = http://plato.stanford.edu/archives/fall2011/entries/bodily-awareness/

De Oliveira, Nicolas & Oxley, Nicola & Petry, Michael. (eds.) (2003). *Installation Art in the New Millennium: The Empire of the Senses.* Great Britain & USA: Thames & Hudson Ltd.

De Oliveira, Nicolas & Oxley, Nicola & Petry, Michael. (ed.)(1994). *Installation Art.* Great Britain & USA: Thames & Hudson Ltd.

Farmer, Alan, John. *Art Journal*, 59(3) (Autumn, 2000). Through the Labyrinth: An interview with Cildo Meireles pp. 34-43 Retrieved from Jstor 10th December 2012.

Gade, Rune & Jerslev, Anne. (2005). *Performative Realism: Interdisciplinary Studies in Art and Media*. Denmark: Museum Tusculanum Press. pp.7 – 18 & 209 – 232.

Giménez, Carmen. (2005). Richard Serra: The Matter of Time. Germany: Steidl Publishers.

Haldemann, für, Matthais. (2003). *James Turrell: Zug Zuoz.* Germany: Hatje Cantz Verlag.

Herenhoff, Paul. Mosquera, Gerardo. Cameron, Dan. (1999). *Cildo Meireles*. London: Phaidon Press Ltd.

Höller Carsten. (2011). Experience. USA: Skira Rizzoli Publications Inc.

Johnson, Don Hanlon (ed.) (1995). Bone Breath and Gesture: Practices of Embodiment. California: North Atlantic Books. pp.109 -147.

Johnson, Mark. (1987). The Body In The Mind: The Bodily Basis of Meaning, Imagination, and Reason. United States: The University of Chicago Press.

Jones, A, Caroline. (2006). Sensorium: Embodied Experience, Technology, and Contemporary art. Cambridge Massachusetts: The MIT List Visual Art Centre.

Klanten, Robert et al. (2011). A Touch of Code: Interactive Installations and Experiences. Berlin: Gestalten.

Kwon, Miwon. (2002). One Place After Another: Site Specific Art and Locational Identity. Massachusetts and England: The MIT Press. pp.11 – 55.

Kozel, Susan. (2007). Closer: Performance, Technologies, and Phenomenology. Cambridge & London: Massachusetts Institute of Technology. pp.4-43.

Kunstmuseum, Wolfsburg. (2004). *Olafur Eliasson: Your Lighthouse. Works With Light 1991-2004.* Germany: Hatje Cantz Publishers.

Mak, Bridgette-Barbara. (2010). Carsten Höller 2001 – 2010 184: Object, Experiments, Events. Germany: Hatje Cantz Verlag.

Mehigan, Tim. (2008). Frameworks, Artworks, Place: The Space of Perception in the Modern World. Amsterdam – New York: Rodopi. pp.7 – 20 & 117 – 157.

Merleau-Ponty, Maurice, Smith Colin .(transl)(1962). *Phenomenology of Perception*. London: Routledge & Kegan Paul Ltd.

Merleau-Ponty, Maurice. (1964). *The Primacy of Perception*. USA: Northwestern University Press.

Merleau-Ponty, Maurice. (1975). *The Visible and the Invisible*. USA: Northwestern University Press.

Morris, Frances. (ed.) (2012). Yoyoi Kusama. London: Tate Publishing.

McShine, Kynaston & Cooke, Lynne. (2007/8). *Richard Serra Sculpture: Forty Years.* New York: Museum of Modern Art.

O'Reilly, Sally. (2009). The Body In Contemporary Art. United Kingdom: Thames and Hudson Ltd.

Pallasamaa, Juhani. (2005). The Eyes of The Skin: Architecture and the Senses. Great Britain: Wiley – Academy division of John Wiley & Sons Ltd.

Pallasamaa, Juhani. (2009). *The Thinking Hand*. Great Britain: Wiley – Academy Division of John Wiley & Sons Ltd.

Parry, D, Joseph. (2011). Art And Phenomenology. USA & Canada: Routledge.

Pelzer, Birgit & Francis, Mark & Colomina, Beatriz. (2001). Dan Graham. New York & London: Phaidon Press Ltd.

Radelijkovic, Nikola. (ed.) (2010). *Installation.* USA: Art Gingko Press: Sandu Publishing Ltd.

Ravenal, B, John. (2006). Artificial Light: New Light-Based Sculpture and Installation Art. Virginia: VCUarts Anderson Gallery.

Rennie, Bob & Fer, Briony. (2011). *Martin Creed*. Canada: Library & Archives Canada Cataloguing in Publication.

Reiss, H, Julie. (1999). From Margin to Centre: The Spaces of Installation Art. USA: Massachusetts Institute of Technology.

Rugolff, R. (2008). Psycho Buildings: Artist Take on Architecture. London: Hayward Publishing.

Rosenthal, Mark. (2003). *Understand Installation Art: From Duchamp to Holzer*. Germany: Prestel Publishing.

Sauter, Joachim & Jaschko, Susanne & Ängslevä, Jussi. (2011). ART+COM: Media Spaces and Installations. Berlin: Gestalten.

Shusterman, Richard. (2012). Thinking Through The Body: Essays in Somaesthetics. Cambridge. USA: University Press.

Storr, Robert & Fondazione, La Biennale di Venezia. (2007). Think with the senses feel with the mind: art in the present tense. New York: Rizzoli.

Suderburg Erika. (2000). Space, Site, Intervention Situating Installation Art. Minneapolis London: University of Minnesota. pp.158 – 170.

Sullivan, Sharon. (2001). Living Across and Through the Skins: Transactional Bodies, Pragmatism and Feminism. Bloomington & Indianapolis: Indiana University Press. pp.111 – 132.

Thomas, Dylan. (Reset ed.1976). *Under Milk Wood*. Great Britain: Richard Clay (The Chaucer Press). p 1.

Tarkovisky, Andrey. (1986). Sculpting In Time: Reflections on the Cinema. London: The Bodley Head. pp.113 – 124 & 155 & 163.

Voegelin, Salome. (2010). Listening To Noise And Silence: Towards A Philosophy of Sound Art. New York: The Continuum International Publishing Group Ltd.

Weschler, Lawrence. (2008). Seeing Is Forgetting The Name of the Thing One Sees. Over thirty Years of Conversations with Robert Irwin. Berkley and Los Angeles: The Regents of the University of California.

Wilson Smith, Mathew. (2007). The Total Work of Art From Bayreuth to Cyberspace. New York: Routledge. pp.1 -7 & 114 &120 & 187&189.

Articles Retrieved

Alan, D. (2010, December 15 – 17). ColourBlind: Machine Imagination, Closed Eye Hallucination and the Ganzfeld Effect. Retrieved April 5, 2011, from Academia.edu: http://www.academia.edu/455637/ColourBlind Machine Imagination_Closed Eye Hallucination and the Ganzfeld Effect

Courteir-Smith, Graham. (2006). *Deconstructing Installation Art.* CASIAD Publishing. Retrieved April 12 2012 from http://www.installationart.net/

Heinz, H. (1983). Wolfgang Metzger: 1899 – 1979. American Journal of Pschology, 96, pp.567-571.

http://rd.springer.com/chapter/10.1007/978-90-481-3851-7_10 Lost in Space: Consciousness and Experiment in the Work of Irwin and Turrell. http://neuro.caltech.edu/page/media/turrell/

Engelham, Sasha. Breaking the Frame: Olafur Eliasson's Art, Merleau-Ponty's Phenomenology. And the Rhetoric of Eco-Activism. Retrieved 2 April 2012 from http://www.artandeducation.net/paper/breaking-the-frame-olafur-eliasson%E2%80%99s-art-merleau-ponty%E2%80%99s-phenomenology-and-the-rhetoric-of-eco-activism/

Fried, Michael. Retrieved 23 Oct 2012 from the http://www.theartstory.org/

Green, Jill. (1999) Somatic authority and the myth of the ideal body in dance education. *Dance Research Journal*, 33 (2), 80 -100. Retrieved 19th September 2012 from http://www.jstor.org/stable/1478333

Green, Jill. (2002) Somatic Knowledge: the body as content and methodology in dance. Dance Research Journal, 33 (2), 80 -100. Retrieved 19th September 2012 from http://www.jstor.org/stable/1478333

IMMA Talk Series. (2003) What is Installation Art? Retrieved April 12 2012 from www.imma.ie/en/downloads/what_is_installationbooklet.pdf

Multimodal Ganzfeld Gives Mild Hallucinations. (2008, Septmeber 02). Retrieved April 05, 2011, from Mind Modifications: http://mindmodifications.com/2008/02/09/ganzfeld-effect

Eliasson, Olafur & Irwin, Robert. (2006) *Take Your Time: A Conversation*. Eliasson Olafur & Irwin Robert. Museum of Modern Art. London. Retrieved May 9th 2012 from www.olafureliasson.net/publications/download.../Take_your_time.pd...

Driscoll, Roslyn.(2011-). By the Light of The Body: The Somatic Sense in Visual Arts. Retrieved August 12 2012 from www.roslyndriscoll.com

Pallasmaa, Juhani. *Lived Space in Architecture and Cinema*. Retrieved 10 September 2012 from www.c-s-p.org/flyers/9781847180032-sample.pdf

Petkova, Valeria & Ehrsson, I & Henrik, H. (2008) If I Were You: Perceptual Illusion of Body Swapping. Retrieved 18 May 2012 from http://www.ehrssonlab.se/publications.php

Malone, Meredith. (2007) *Olafur Eliasson. Your Imploded View.* Retrieved 9th May 2012 from Kempeartmuseum.wustl.edu/files/spotlight

Riestra Roderiguez, Eva. (2009). Return of the Site: Relational Spatiality and the Reclamation of Public Space. Retrieved 22 August 2012 from http://www.onedaysculpture.org.nz

Peat, David. Space and the Body. Retrieved 4 August 2012 from www.fdavidpeat.com/biblography/essay/archit.htm

Khut, George. (2011). *Thinking Through the Body*. Retrieved 28 September 2012 from http://georgekhut.com/thinking-through-the-body/#12

Wakermann, Jiri, P. P. (n.d.). *Science Direct*. Retrieved April 5, 2011, from Elsvier.com: www.efectoganzfeld.com/uploads/5/3/0/3/5303662/ganzfeld.pdf