

The Materiality of Winter

Imogen Zino

This page has been intentionally left White

ABSTRACT

This exploration embraces materiality through the poetics of Winter. An aim of this project has been to enable a greater sense of connection between the internal sensory world of the participant and the inhabited environment. Tactile, audible and visual metaphors of Winter sparked hidden narratives revealing realms transcending what the eye can see. Embodied experiences and performative interactions activated deep and ongoing conversation about being-in and being-within oneself and the space we inhabit. Through a phenomenological perspective, I have imaginatively explored conscious and subconscious effects capable of absorbing the viewer in distracting and exclusive ways. Kindling bodily interactions through the creation and installation of a myriad of fragile shards, Winter stimulates otherworldly perceptions. Merleau-Ponty believed that our bodies are primary and subjective vessels responding to the dynamic and transforming landscapes of materials and material interaction. The textures of sound, shape and surface activate our perceptual selves, immersing us in and connecting us to the world. In this state the self is transient and open to feeling happiness, with Winter in my mind, I have created an immersive experiential work that seeks to elicit a sense of awe-filled wonder.

Winter,

Nowadays as the slow summer breezes gasp into rushing winter tempests I sit in the tyre swing on the south lawn and watch the fluffy clouds become grim with depressions. The early Saturday mornings no longer are greeted by birdsong but, rather, pale moans of ghosts and ghouls shivering in their corsetry of railings and pipe heads. Leaves begin to wilt and the flowers begin to crinkle; all the while the air freezes and drops to the ground, shattering into thousands of pieces, coating the grass in a dainty lace. the ocean swells with pride and waves crash to the shore in their majesty, the serenity of early months is over. even the cries of the birds, once melodious and sweet, now turns bitter with crude cawing and clacking, gaping beaks giving birth to screams of furious determination. my neighbours glance up to the skies "looks like rain," they whisper as if not to disturb the icicles; "oooooh yes, definitely rain." and they scuttle inside to their heaters and ovens and stroke wrinkled hands, numb with the flushed embarrassment of bare skin. some delve into books, others into the wonder of the kitchen. we now relieve the season of summer fruits and charge wholeheartedly in to a chasm of stews, soups, roasts, custards, and gravies. rich and smooth, buttery, velvety, food that makes you tingle to the tips of your toes and the spikes of your hair. food that warms you like a chrysalis, ensconces your body in a sheath of an impenetrable glow. and soon, for all such things come to this end, you fall into the deep, deep sleep. time loses all potency, gravity collides with the imagination and you are both at once falling and flying. ah sleep, your triumph is your flaw, that to awaken the mind that is inside, we must close the mind, the eyes, the nose, the skin, that is the outside. to see, we must become blind. and such are the times to come.

(I don't actually have a tyre swing, nor a south lawn, but for the sake of the telling of the story I am making one or two embellishments of artistic whimsy. Effectually that all served the purpose of saying it's cold and I wish it wasn't.)

- *Rain on my parade*, May 2010, Michael Boyes

CONTENTS

ABSTRACT.....	ii
AN INTRODUCTION TO WINTER.....	iii
ATTESTATION OF AUTHORSHIP.....	vi
LIST OF FIGURES.....	vii
KNOWLEDGEMENTS.....	ix
INQUIRY.....	x
INTRODUCTION.....	1
CONTEXTUAL FRAMEWORK.....	2
A Sense of Awe.....	2
Soft Fascinations.....	3
Immersive & Sensory.....	7
Materiality.....	11
Being-In & Being-Within.....	12
METHODOLOGICAL DESIGN.....	14
Engaging Texture: Making Rituals.....	15
Reactive Making & Reciprocal Practice.....	19
Licence to Wonder.....	22
Embodied Communication & Eliciting Emotion.....	24
Time as matter & openness to failure.....	26
WINTER.....	29
Part A.	30
The Winter (Being-In & Being-Within).....	31
Associations of Winter.....	33
A Lack of Colour.....	36
The Caves of Winter.....	39
Sounds that Toll but do not Chime.....	42
Noticing.....	44
The Shape of Sound.....	48
Closing my Eyes to See.....	52
Sensory Collisions.....	54
Part B.	56
Solitary Existence.....	57
Paradox & Form.....	63
Emerging Ritual.....	68
States of Reverie.....	70
CONCLUSION.....	72
APPENDIX.....	73
REFERENCES.....	81

ATTESTATION OF AUTHORSHIP

I hereby declare that this submission is my own work and that, to the best of my knowledge and belief, it contains no material previously published or written by another person (except where explicitly defined in the Acknowledgements), nor material which to a substantial extent has been submitted for the award of any other degree or diploma of a university or other institution of higher learning.

Signed: 

LIST OF FIGURES

Figure 1. <i>A Soft Fascination</i> (2019).....	02
Figure 2. <i>Hand interacting with form</i> (2019).....	03
Figure 3. <i>Yayoi Kusama's: Infinity room</i> (2017).....	08
Figure 4. <i>Cold wet clay</i> (2019).....	10
Figure 5. <i>Texture on flat surface 01</i> (2019).....	15
Figure 6. <i>Texture on flat surface 02</i> (2019).....	17
Figure 7. <i>Texture on flat surface 03</i> (2019).....	17
Figure 8. <i>Texture on flat surface 04</i> (2019).....	18
Figure 9. <i>Suspended reality test from board</i> (2019).....	18
Figure 10. <i>An array of pieces air-drying</i> (2019).....	20
Figure 11. <i>An array of pieces air-drying continued</i> (2019).....	21
Figure 12. <i>Hand giving form to clay and leaving imprints</i> (2019).....	23
Figure 13. <i>Where material and body meet</i> (2019).....	25
Figure 14. <i>Warped re-fired stand</i> (2019).....	27
Figure 15. <i>A graveyard of pieces awaiting reconstruction 01</i> (2019).....	29
Figure 16. <i>Cold wet clay</i> (2019).....	33
Figure 17. <i>Layering of forms</i> (2019).....	35
Figure 18. <i>A test of sharpness</i> (2019).....	36
Figure 19. <i>Forging new pathways by firing objects wedged in silica sand</i> (2019).....	37
Figure 20. <i>Takuro Kuwata's: Platinum Kairagi Shino bowl</i> (n.d.).....	38
Figure 21. <i>The Snow in Tokujin Yoshioka's exhibition: Sensing Nature</i> (2010).....	38
Figure 22. <i>Caves</i> (2019).....	40
Figure 23. <i>Firing trays version 03</i> (2019).....	41
Figure 24. <i>Chiharu Shiota's installation: Where Are We Going</i> (2016).....	41
Figure 25. <i>Individually hung, Suspending method for glaze fired sound test</i> (2019).....	43
Figure 26. <i>Leaves and sound</i> (2019).....	46
Figure 27. <i>Remnants</i> (2019).....	47
Figure 28. <i>Texture, form and sound exploration 01 and 02</i> (2019).....	49
Figure 29. <i>Size array for sound tests</i> (2019).....	50
Figure 30. <i>A touch and sound based comparison of matte and glazed pieces</i> (2019).....	51
Figure 31. <i>Striking sound 02</i> (2019).....	53
Figure 32. <i>Pieces in motion threaded onto steel wire</i> (2019).....	55
Figure 33. <i>A single form has no sound</i> (2019).....	58
Figure 34. <i>Exploring boundaries and pushing back</i> (2019).....	59

Figure 35. <i>Multiple components 03</i> (2019).....	60
Figure 36. <i>Single file rig on steel testing unilateral movement and sound</i> (2019).....	61
Figure 37. <i>Multi-layer rig on steel testing unilateral movement and sound</i> (2019).....	62
Figure 38. <i>Grid of pieces attached to board using short lengths of string testing multi-directional layered sound and dynamic interaction</i> (2019).....	64
Figure 39. <i>Clusters on lengths of string testing multi-directional sound and dynamic interaction</i> (2019)	65
Figure 40. <i>A memory of the maker in clay 02</i> (2019).....	66
Figure 41. <i>Sandy remnants from an imperfect process adding texture</i> (2019).....	67
Figure 42. <i>3 Stages of setup pre-firing</i> (2019)	69
Figure 43. <i>Multi-layered firing lowered into the kiln</i> (2019)	70
Figure 44. <i>Multi-layered firing emerging from kiln</i> (2019)	70
Figure 45. <i>Stacked</i> (2019).....	71
Figure 46. <i>Grid of pieces attached to board using short lengths of string testing multi-directional layered sound and dynamic interaction</i> (2019).....	73

ACKNOWLEDGEMENTS

I would like to acknowledge the vast & unrelenting contributions to this body of research. I feel privileged to be surrounded by such phenomenal networks of talented people who are so wonder-full & invested in me & this project. It took a village to raise this thesis and I'm sure it will take similar to dismount the final application of it.

To

- *My Supervisor Sue Jowsey who allowed me to dream, invested in me, challenged me constantly, kept me humble & answered my emails even when she probably shouldn't have.*
- *Andrew Withell, who believed in my potential and brought me a savoury muffin when I forgot my lunch.*
- *Rainie Yu and Antony Nobbs, who knew what I needed, sometimes before I did & who I am proud to call friends.*
- *AUT's school of Art & Design, for granting me a Research Masters Scholarship that covered the fees for this degree. I am grateful for this privilege.*
- *My proofreader David Parker, you came most highly recommended and exceeded all expectations.*
- *My fellow photographers and partners in crime Paascalino Schaller, Ruby Reihana-Wilson, Ellard Clout & Zoe McBride.*
- *My parents without whom I would not exist and my brothers' who also keep me humble.*
- *My team at Good Health Design, Stephen Reay for the life coaching, Ivana Nakarada-Kordic for the endless cups of tea, Guy Collier for the words of wisdom, Cassie Khoo for the dedication & graphic assistance & Mike Grobelny for the constant digital fabrication advice.*
- *Zoe McBride for the countless discussions & silliness which is necessary when trying to take something so seriously, for finding all the digital shortcuts and for being there until the 11th hour.*
- *My fellow fledglings Gabrielle McKone, Angela Francis, Tracey Dennis, Rose Christan and Yvette Tufuga for their constant support of all my creative endeavours and for always trying to understand them.*
- *To Sofia and Joe for creating paradise and providing all the much needed Northland escapes.*
- *The collective of people who materialised time by making pieces and pieces and pieces: Melanie Webster, Ruby Reihana-Wilson, Clare Gebbie, Hadleigh Thomson, Eve Double, Ana Scotney, Simon Brash, George Daroux, Jacco Foote, Angus Webster, Anna Harcourt, Elle Wootton, , Nita Blake-Persen, Fred Double, Hannah Diack, Alyssa Tang, Jade Harvey, Benny Butcher and the many many more. Anyone I have forgotten who also made a piece of this work, your fingerprints in clay will live on.*
- *My peers and fellow researchers most especially Jade Harvey, Estère Dalton, Esther Deans, Evona Lee, Daniel Collings, Una Mowatt, Debbie Harris & Benny Butcher who shared, listened, engaged and understood.*
- *My advisors and technicians and teachers Harold Barton, Angus Roberts, Layne Waerea, Anne Lohrentz, Yana Dombrowky M'Baye, Rachel Carley, Robyn Ramage, Eddie Clemens, Matthew Davis, Glenn Maxwell and David Yetton, without whom nothing could be done.*
- *My friends who are more like family Phoebe Webster, Anna Harcourt, Clare Gebbie, Masina Taulapapa & Grace Tully.*
- *The most prolific, pragmatic & optimistic friend/sister/business partner I have ever known, who flew to my side not once, but twice Ellard Clout.*
- *Nita Blake-Persen for reading, editing & questioning everything, always & for keeping your phone on all night, just in case. I think my 11 year old self was right, we shall be friends forever.*
- *Michael Boyes who still manages to inspire me, from beyond this world.*

And lastly to Harriet Stockman, for whom I have no words, only gratitude, admiration & aroha.

The Materiality of Winter

Through an exploration of immersive sensory interactions and their potential to elicit awe and wonder, I will consider ways in which embodied experiences might lead to a deeper connection with one's self and the inhabited environment.

INTRODUCTION

The Materiality of Winter is an exploration traversing the senses and pondering the potentiality of other imagined worlds. The investigation is a response to the Western world's obsession with the mind and unequivocal reverence of sight to the detriment of the self and all other senses. It considers ways in which other senses, such as dynamic touch and reactive sound, may be ignited and re-united with sight, to hegemonise and re-engage the self and the inhabited environment. It posits that inspiring a sense of awe and wonder through the art of interaction may just be the antidote to the disconnected world. In order to subvert the status quo, I have employed multiple unconventional modes of interaction.

This exegesis is comprised of three parts. Firstly, there is an underlying contextual framework that considers senses of awe and wonder and the perceptual potential that they possess through soft fascinations, material exploration and the notion of being-in and being-within. Secondly, there is a research design that embraces a mixture of poetic practices and uses a phenomenological lens to enable a deeper understanding of embodied encounters. It is this lens that allows this research to deeply understand elusive moments of wonder. Through novel yet ritualistic, corporeal entanglements, the research absorbs the participants in activity, connecting them with the mindful self. And, lastly, there is an analysis of an awe-filled, active approach to communicating sensorially charged experiences that may give licence to wonder.

I invited the winter in and used its shapes to unpack more questions than answers. I engaged with its cold, wet textures and hardened exteriors to create sounds and traces of what had been. I used its slow and introspective nature to encounter and embrace failure time and time again. Its darkness produced light. Ritualistic cycles of production gained impetus and reflexivity granted me permission to visit and re-visit ideas anew. From beyond a state of reverie, a speculative and immersive installation emerged: an experience designed to engulf the body and elicit a sense of awe and wonder.

CONTEXTUAL FRAMEWORK

A Sense of Awe

Through our sensory matrix we make sense of our experiences in the world. The sensory matrix here refers to the network of nerves that make up the sensory system, allowing us to perceive and situate ourselves in our bodies and our environments. Creating and facilitating embodied experiences has allowed me to explore some of the ways in which the human body perceives the world. Techniques such as prototyping, repetition and scaling have been employed to better understand these embodied experiences. This research has focused on evoking awe. By simultaneously engaging the body in the present moment, it expands horizons of the mind and the imagination, allowing the viewer to consider alternate worlds filled with alternate realities and possibilities.

For many years, Western culture has held vision in high esteem and prioritised it above all other senses.¹ Juhani Pallasmaa, an architect and architectural theorist, states that the current status of sensory hierarchy is heightened by the “technological and consumer culture” in which we reside. He believes that the consequence of the “suppression of the other sensory realms, has led to an impoverishment of our environment causing a feeling of detachment and alienation”.

Immersive installations that integrate sensory experiences such as touch, sound and sight have the potential to spark a sense of awe and wonder. Awe is an essential and specific component of the type of wonder I have attempted to elicit in this installation. This is because awe has the capacity for meaning-making and it has been suggested that experiences that engage the sensorium have the potential to play a significant role in provoking interconnectivity.² Psychologist and professor Paul K. Piff states that “awe arises in evanescent experiences”³ and may serve an important social function by enabling people to perceive the world as greater than and/or outside of one’s own immediate existence, resulting in more prosocial and collective tendencies.

Wonder in this context is equally important. Wonder has many literary ties to childhood and refers to a particular way of seeing the world. It is often described as the gateway to realms of potential and imagination. Many authors claim that there is a moral significance that accompanies a sense of wonder and that, while it can be a good thing, it may not necessarily always be used for good.⁴ Hence why I feel the need to preface the specific kind of wonder I have sought to evoke, with awe at its core.

1. Juhani Pallasmaa, *The Eyes of the Skin: Architecture and the Senses* (Somerset, NJ: John Wiley & Sons, 2013). Proquest eBook Central.

2. Paul K. Piff et al., “Awe, the Small Self, and Prosocial Behavior,” *Journal of Personality and Social Psychology* 108, no. 6 (2015): 883–99.

3. Piff et al., 897.

4. Anders Schinkel, “Wonder and Moral Education,” *Educational Theory* 68, no. 1 (February 2018): 31.



Figure 1. Imogen Zino, *A Soft Fascination*, 2019, photograph, Turangi.

Soft Fascinations

Professor of Psychology Stephen Kaplan believes that the “soft fascinations’ of the natural environment provide an effortless attention that restores cognitive resources.”⁵ Similarly, in a study conducted by the Faculty of Health and Medicine at the University of Newcastle by Cavanagh et al. (2018), it was found that artistically designed multisensory environments have the capability to stimulate restorative effects.⁶ It does this by creating experiences based on surreal representations of nature and inviting participants to actively engage with them. This project is a tangible point of contact that stimulates embodied experience, aiming to elicit beneficial conscious and subconscious effects. If visceral interactions and all emotions stem “from our corporeal entanglements in our world” and these entanglements are the things that “provide the basis for all our meaning-making and reflective activity”⁷, then as Psychiatrist Richard Almond states, “embodiment is a further concept that has substantial effect on immersion.”⁸ Artist and researcher Jinsil Seo investigates the *Aesthetics of Interactive Experience* and designs alternative immersive environments.⁹ Seo creates alternate worlds by building installations (often using elements of virtual reality) that integrate the user’s mind and body.¹⁰ Despite utilising multimodal interaction, Seo’s work tends to focus largely on haptic perception. She believes touch provides a unique, direct and immediate responsiveness, affecting the whole body surface.¹¹

4. Stephen Kaplan, “The Restorative Benefits of Nature: Toward an Integrative Framework,” *Journal of Environmental Psychology*, Green Psychology, 15, no. 3 (September 1, 1995): 169–82. [https://doi.org/10.1016/0272-4944\(95\)90001-2](https://doi.org/10.1016/0272-4944(95)90001-2).

5. Bliss Cavanagh et al., “It’s like Another World: The Perceived Beneficial Effects of an Artistically Designed Multisensory Environment,” *Medical Humanities*, July 16, 2018, medhum-2018-011492 <https://doi.org/10.1136/medhum-2018-011492>.

6. Mark Johnson, “The Aesthetics of Embodied Life,” in *Aesthetics and the Embodied Mind: Beyond Art Theory and the Cartesian Mind-Body Dichotomy*, ed. Alfonsina Scarinzi (Berlin: Springer, November 2014). https://doi.org/10.1007/978-94-017-9379-7_2.

7. Richard Almond, “Sensory and Emotional Immersion in Art, Technology and Architecture” (Mackintosh School of Architecture, Glasgow School of Art, 2011).

8. Diane Gromala and Jinsil Seo, “Reducing Pain in Alternative Immersive Environments: A Proposal,” in *New Realities, Being Syncretic*, eds. Roy Ascott et al. (Berlin: Springer, January 1, 2009). https://doi.org/10.1007/978-3-211-78891-2_62;

9. Jinsil Seo, “Jinsil Hwaryoung Seo: Embodied Immersion: Art/Design/Research,” 2019, http://www.embodiedimmersion.com/?page_id=31; Takashi Yamauchi, Jinsil Hwaryoung Seo, and Annie Sungkajun, “Interactive Plants: Multisensory Visual-Tactile Interaction Enhances Emotional Experience,” *Mathematics*, no. 11 (2018): 225. <https://doi.org/10.3390/math6110225>.

10. Jinsil Hwaryoung Seo, “Aesthetics of Immersion in Interactive Immersive Installation : Phenomenological Case Study,” 2011.

11. Seo, “Jinsil Hwaryoung Seo”; Takashi Yamauchi, Jinsil Hwaryoung Seo, and Annie Sungkajun, “Interactive Plants.”



Figure 2. Imogen Zino, *Hand interacting with form*, 2019, photograph and sound, Auckland.

For similar reasons to Seo, I have adopted this perceptual hierarchy in my installation and process. Focusing on elemental haptic interaction, inescapably and closely followed by audible and visual interactions. Interweaving multiple sensory modalities such as the visual, audible and tangible – into a contrived experience, I have attempted to absorb users in an immersive and unique way. Immersion (being-inside) is an essential tool in this research.¹² Craving a deeper interaction that is all-encompassing has led me to investigate installation-based interactions and contrived spaces, rather than simple artefacts. This is due to the fact that immersive environments have the capacity to consume the body.

Sentience in the context of immersion refers to our capacity to experience subjectively; experience is based on perception, and refers to our ability to interpret a situation using the sensory matrix. I would argue that we can never isolate a single-sensory interaction; however, we may be able to shift and focus our attention. Through tactile, audible and visual interaction, the intention of this designed experience is to channel focus and elicit emotion in its audience.

12. Almond, “Sensory and Emotional Immersion in Art, Technology and Architecture.”

Immersive & Sensory

Immersive sensory art-spaces (SAS),¹³ while sometimes praised for their healing potential, have been identified by users as effective because of their surreal qualities. In Cavanagh et al.'s (2018) study, the most common perception of the sensory art-space was the feeling that it was 'other-worldly' and the second observation of users was that they felt an increased ability to focus. Snoezelen multi-sensory environments¹⁴ are similar to SAS in that they move away from a traditional model of multi-sensory environments (which have often been designed within the context of education or therapy) but retain some key components. For example, they focus on facilitating free-form recreational experiences. An underlying intention of this project is to empower and facilitate a greater sense of connection with oneself through corporeal interaction. The most obvious intention is for the user to feel absorbed or stimulated by whichever elements they feel personally drawn to.

13. Cavanagh et al., "It's like Another World."

14. Justin A. Haegele and David L. Porretta, "Snoezelen Multisensory Environment," *Palaestra* 28, no. 4 (December 2014): 29–32. Ebscohost.

Artist Yayoi Kusama's installations are famous because of their ability to transform spaces using repetitive components. Her work engulfs the audience in an other-worldly experience. Art theorist Taro Masushio writes about Kusama's work as being "motile and created as an attempt to merge oneself into an interconnected, nebulous body."¹⁵ The importance of feeling connected is heavily embedded in this design practice. To create a space that helps people to feel a sense of belonging, it must first grounding themselves in their environment. Kusama's work embodies a tacit method of creation that resonates with my own material processes, as she states that her "hand just makes the pictures by itself" and it is only after the fact that she realises her intentions in creating the artwork.¹⁶ Kusama's installations are predominantly visual and it is the other-worldliness and simplicity of her designs that I find alluring. Like Kusama, I have used repetition in the form of tactile, auditory and other sensory methods.

This content has been removed for copyright reasons

Figure 3. David Zwirner, *In Yayoi Kusama's: Infinity room*, 2nd November 2017, photograph, Festival of life, New York, 20th April 2019, <https://www.artsy.net/show/david-zwirner-yayoi-kusama-festival-of-life>

15. Taro Masushio, "Yayoi Kusama," *ArtAsiaPacific*, no. 87 (April 3, 2014): 122–122. Ebscohost.

16. Edan Corkill, "Yayoi Kusama," *ArtAsiaPacific*, no. 83 (June 5, 2013): 207–10 Ebscohost.

Philosopher Maurice Merleau-Ponty, author of *Phenomenology of Perception*, believed that we are situated in ourselves and our environment, and that our bodies are the primary and subjective vessels through which we experience and perceive our world. In essence, Merleau-Ponty believed our body to be the basis for all perception. It is from this position that I have drawn the conclusion that, through knowing and better understanding our bodily interactions by means of embodied experience, we may be able to better understand ourselves as situated within a greater context.



Figure 4. Imogen Zino, *Cold wet clay*, 2019,
photograph, Auckland.

Anthropologist Tim Ingold believes that the road to better understanding requires embodied participation¹⁷. With this in mind, I thought it particularly important to consider the materials used and the materiality of each embodied experience. Ingold refers to the immersive nature of the human experience, of swimming in an ocean of materials,¹⁸ and the dynamic and transformative nature of all materials and material interaction.

Applying Ingold's theory to my own work meant engaging with the tactile world in order to consciously incorporate the material world in the process of developing each interaction. These considerations quickly became paramount to the investigation. Djonov and Van Leeuwen, in their study "The Semiotics of Texture,"¹⁹ refer to the sum of the three-dimensional components of texture being comprised of shape, volume and weight. They also define the qualities of surface textures, for example things like temperature, viscosity, density and rigidity. They believe that texture could inherently have experiential meaning-making potential, but that the process of better understanding materiality first involves extracting the varying qualities of materials in order to compare and contrast them with others.²⁰ Pallasmaa discusses how our engagement with senses other than sight can unite us with the world²¹. He specifically refers to touch as being able to connect and integrate ourselves into our environments, acknowledging that there is value in dynamic materials that age over time, responding to their environments.²² Design anthropologist Cranny-Francis is a professor of cultural studies and much of her work focusses on touch-based technologies:

Positioning physically, touch creates an awareness of our location in space/time through embodied engagement with the world around us. The proprioceptive and vestibular senses are internal touch senses that enable us to position our bodies in space, even without visual stimuli, and to achieve equilibrium or balance. For example, sculpture occupies the same space/time continuum as its viewers, challenging them to compare their own occupation of space/time with that of the work.²³

The sculptural nature of the making is what brings each component to life, engaging the maker with the materiality at each stage of the process. Then it is the scale of the installation that allows the user to enter into the space and facilitates the embodied experience.

17. Tim Ingold, *Being Alive: Essays on Movement, Knowledge and Description* (Abingdon, UK: Routledge, 2011), 20.

18. Ingold, 24.

19. Emilia Djonov and Theo Van Leeuwen, "The Semiotics of Texture: From Tactile to Visual," *Visual Communication* 10, no. 4 (November 2011): 541–64. <https://doi.org/10.1177/1470357211415786>.

20. Djonov and Van Leeuwen, 548–49.

21. Pallasmaa, *The Eyes of the Skin*, 12.

22. Pallasmaa, 12.

23. Anne Cranny-Francis, "Semefulness: A Social Semiotics of Touch," *Social Semiotics* 21, no. 4 (September 2011): 476. <https://doi.org/10.1080/10350330.2011.591993>.

Being-In & Being-Within

Adopting from the outset the approach that there is no pre-conceived notion of ‘success’ within the space of my installation – no right way to experience it – the work offers a simple invitation to engage, to touch, to enter. Once inside, the senses are stimulated by what Johnson refers to as the “aesthetic dimensions of embodied life”²⁴. My hope is that experiences like this one may allow people to feel “‘at home’ in our world - connected to our environment and the people around us.”²⁵ This project could be viewed as part of a movement to be more mindful: to be back in our bodies: to remember the potential for connection with each other and our environments.

As psychologist Michael Dambrun’s study suggests²⁶, happiness may increase when the salience of body boundaries decreases. Dambrun claims there is a close relationship between happiness and various self-conscious states. He posits that the perceived separation between one’s body and the world may increase anxiety and cause fluctuations in happiness levels.²⁷ He continues:

Selflessness is intimately related to self-transcendence, the process of seeing things as they are with clear awareness and without strong distortion coming from biological and social conditioning (Le & Levenson, 2005). Furthermore, selflessness is based on benevolent emotions, such as compassion. It emerges when the self is reified as a dynamic network of evanescent relations with a causal coherence. In other words, the “self” is perceived as an interconnected transient event.²⁸

24. Johnson, “The Aesthetics of Embodied Life,” 14.

25. Johnson, 14.

26. Michaël Dambrun, “When the Dissolution of Perceived Body Boundaries Elicits Happiness: The Effect of Selflessness Induced by a Body Scan Meditation,” *Consciousness and Cognition* 46 (November 1, 2016): 96. <https://doi.org/10.1016/j.concog.2016.09.013>.

27. Dambrun, 89.

28. Dambrun, 90.

These experiential creations are designed to expand horizons by acting as catalysts for reflexive and reflective insight through the manipulation of contrived experiences and inescapable multimodal interactions. Sensory interactions have been used, more specifically touch, sound and sight, as the gateways to re-connect people to their sensory selves through external and responsive stimuli.

We know ourselves and the world through the sense of touch, crucially including our ability to touch ourselves and to make sense/meaning of that touch. At the point of touch, of contact (com- “together” + tangere “to touch”), we know both the self and the other, including the other that is also the self; that can reflect on and position the self. This is a point of connection, at which we perceive connection only through the perception of difference; otherwise all would be “slippery smooth” continuous - the world and the self as undifferentiated.²⁹

METHODOLOGICAL DESIGN

The methodology I have adopted is mixed and combines poetic practices; these practices draw on an array of performative interactions explored through a phenomenological lens. Methodologically, poetic practices encompass participatory design, material affect, human interaction, time as material, dimensions of the handmade, impetus, speculation, hidden narratives, heuristic learning, sensory-based perception, the art of inefficiency and utter failure. Artist, teacher and researcher Charity Becker believes that viewing the world with a phenomenological, pedagogical and artistic lens is to see the world poetically. She states that “Phenomenology, teaching, art, and poetry all necessitate an openness to and a sense of wonder of the world.”³⁰

It is the unique combination of these poetic approaches that defines my research. In his book, *Phenomenology of Perception*, Merleau-Ponty posits that the physical body should be regarded as the body that situates ourselves within our environment and all experiences.³¹ The body is therefore central to poetic practices, driving the explorative nature of my work. Dambrun suggests that there are modes of psychological functioning that have the capacity to alter perceived space between the body and the world, and that positive emotional states are more likely when the difference is perceived as less. In such states, he suggests, the self is embodied.³² Attempting to minimise the perceived space between the body and the world we inhabit, I have chosen to employ a range of sensory methods. The final outcome of this research is an event that offers the viewer a glimpse of the weight and body of the exploration I have undertaken. Throughout this process, I have endeavoured to celebrate states of selflessness that shrink the perceptual boundaries between oneself and the environment.³³

30. Charity Becker, “A Sense of Wonder: An A/r/Tographer’s Musings on Seeing and Being in the World,” *Canadian Review of Art Education: Research & Issues* 45, no. 1 (January 2018): 115–16. Ebscohost.

31. Maurice Merleau-Ponty, *Phenomenology of Perception* (Abingdon, UK: Routledge, 2012). Proquest eBook Central.

32. Michaël Dambrun, “When the Dissolution of Perceived Body Boundaries Elicits Happiness: The Effect of Selflessness Induced by a Body Scan Meditation,” *Consciousness and Cognition* 46 (November 1, 2016): 90. <https://doi.org/10.1016/j.concog.2016.09.013>.

33. Dambrun, 89.

Engaging Texture: Making Rituals



Figure 5. Imogen Zino, *Texture on flat surface 01*, 2019, photograph, Auckland.

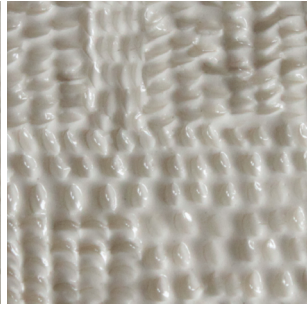


Figure 7. Imogen Zino, *Texture on flat surface 02*, 2019, photograph, Auckland.

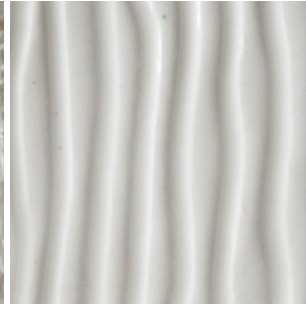


Figure 6. Imogen Zino, *Texture on flat surface 03*, 2019, photograph, Auckland.



Figure 8. Imogen Zino, *Texture on flat surface 04*, 2019, photograph, Auckland.

Component parts were derived from the materiality of winter. The production of said parts required an unfolding relationship with my chosen materials – clay, glazes and time. Making multiple pieces (5000 are used in the installation) engaged body-based acts of repetition and ritual. I had to consider how multiple abstract forms could be combined to create texture and how this translation might be scaled to immerse the viewer's whole body. Professor of film and media and author Alison Griffiths states that,

Immersive spaces create subliminal awe helping the viewer/participant become aware of inherent or internal body senses. Physically immersive environments expand the boundary of our vision and create imagination evoking immersive feelings from materials that affect with perceptions of dimension.³⁴

34. Alison Griffiths, *Shivers down Your Spine: Cinema, Museums, and the Immersive View* (New York: Columbia University Press, 2008). Quoted in Jinsil Hwaryoung Seo, "Aesthetics of Immersion in Interactive Immersive Installation: Phenomenological Case Study," 2011.



Figure 9. Ruby Reihana-Wilson and Imogen Zino, *Suspended reality test from board*, 2019, photograph, Auckland.

Wanting to inspire awe, I realised I needed to scale, not only the outcome but also the process. Making the same form over and over was incredibly slow. It was physically impossible for me to fashion each artefact individually – I had to engage others in the making process. Outwardly, the artefacts appear similar, but each piece had to conform to a standard. This standard is difficult to articulate and requires a feeling – an engagement in a textural conversation.

Each piece of clay was rolled, pierced and stamped by the hands of the maker; each maker had engaged with and affected the material, and each piece stored the memory of the handmade. The ritual and participation gave the project impetus. The impetus came with a sense of responsibility and momentum that drove the making ritual. In this way, construction was a precursor to the creation of the phenomenon.

Reactive Making & Reciprocal Practice

The immersive and environmental scaling of this research meant I needed to formulate a means to negotiate and create via a participatory practice. Professor Bud Hall claims that participatory research “has the explicit intention of collectively investigating reality”³⁵ and that this kind of investigation is required in order for transformation to occur. I soon formed a collective (of volunteers) who worked alongside me, making the clay forms. This communal activity led to an organic, material-informed process. Design Professor Maarit Makela states that throughout this kind of practice-based process “the artist or the designer may re-arrange a number of ideas, beliefs and conceptions, and thus advance her or his knowledge, understanding and insight.”³⁶

Figure 10. Ellard Clout, *An array of pieces air-drying*, 2019, photograph, Auckland.



35. Budd Hall, Arthur Gillette, and Rajesh Tandon, *Creating Knowledge: A Monopoly? Participatory Research in Development. Participatory Research Network Series No. 1* (Toronto: International Council for Adult Education, 1982), 3.

36. Maarit Makela, “Knowing Through Making: The Role of the Artefact in Practice-Led Research,” *Knowledge, Technology & Policy* 20, no. 3 (September 11, 2007): 160. <https://doi.org/10.1007/s12130-007-9028-2>.



Figure 11. Ellard Clout, *An array of pieces air-drying continued*, 2019, photograph, Auckland.

Though I had an idea of what was needed, I could not anticipate the requirements due to the magnitude of the imagined endpoint. This lack of definition enabled me to focus on the phenomenological aspects of the process. It allowed for in-depth exploration of making early on, as we concentrated our energies on individual pieces – the making of fragments, not the whole, in order to remain mindful.³⁷ This ritualised micro-process was empowering: in the act of making, each person became the maker and the research began to reveal itself. The space for reactivity in the practice welcomed reflexivity³⁸ and led to constantly evolving processes and inquiry. Psychologist Clark Moustakas believes that through “exploratory open-ended inquiry, self-directed search, and immersion in active experience, one is able to get inside the question, become one with it, and thus achieve an understanding of it.”³⁹

37. Yi-Yuan Tang, *The Neuroscience of Mindfulness Meditation : How the Body and Mind Work Together to Change Our Behaviour* (London: Palgrave Macmillan, 2017); Goleman, Daniel, Ellen Langer, Susan David, and Christina Congleton. *Mindfulness*, HBR Emotional Intelligence Series (Brighton, MA: Harvard Business Review Press, 2017); Karen Ragoonaden (ed.), *Mindful Teaching and Learning : Developing a Pedagogy of Well-Being* (Lanham, MD: Lexington Books, 2015), Ebscohost.

38. Cher M. Hill, “More-than-Reflective Practice: Becoming a Diffractive Practitioner,” *Teacher Learning and Professional Development* 2, no. 1 (March 5, 2018), <http://journals.sfu.ca/tlpd/index.php/tlpd/article/view/28>.

39. Clark Moustakas, *Heuristic Research: Design, Methodology, and Applications* (Thousand Oaks, CA: SAGE Publications, 1990). <https://doi.org/10.4135/9781412995641>.

Licence to Wonder



Figure 12. Imogen Zino, *Hand giving form to clay and leaving imprints*, 2019, photograph, Auckland.

Each hand that rolled forms used in the final installation inquired about what it would become. Making and participating in itself became a cause to wonder and to imagine. Wondering requires a level of human interaction and engagement with the phenomenon. Collectively, minds began painting pictures that at times could not be articulated. In these speculative moments, filled with wonder, I began to unravel the potential of this project and iteratively imagine and design the space. Designing “other-worldly” spaces as referred to in Cavanagh et al.’s study⁴⁰ requires altering people’s perceptions by creating an experience of inhabiting a space lacking in definition. It means learning to trust that wonder could materialise out of the weight of forms, that sensory-based perception would be stimulated and that, as a participant in and of the experience, one could be filled with wonder. This method gives licence to wonder by proposing alternative realities. It is simultaneously dulling certain sensory inputs and placing emphasis on others, creating spaces that aren’t defined by prior experience and that idiosyncratically engage the viewer.

40. Cavanagh et al., “It’s like Another World,” 1.

Embodied Communication & Eliciting Emotion



Figure 13. Imogen Zino, *Where material and body meet*, 2019, photograph, Auckland.

For the making process to communicate using embodied experience, it required underlying narrative, heuristic practice and an activity that was novel. Hidden narratives are communicated through the semiotics of the repeated clay components and the implications of the experience are reminiscent of winter, playing in the mud, and having cold, wet hands. The material may have been familiar but the mode of interaction was unique. The physical novelty of the experience is what kept the mind in an actively embodied state. The curiosity prompted by the potential output invited the sense of wonder. Eliciting emotion through physical actions requires an endless curiosity and questioning, as the task was repetitive, it was a combination of this type of embodiment and the not-yet-materialised outcome helped to spark intrigue. If one small object or sound could make someone feel something, what might an entire space or experience have the potential to achieve? This is the potential that can be bottled up and used to elicit states of reverie, evoking wonder, awe, possibility, other worlds, imagined futures. Becker believes that art is able to move beyond the literal and into imaginary realms, and that it is the form that may be able to materialise wonder.⁴¹

41. Hall, Gillette, and Tandon, 3.

Time as Matter & Openness to Failure



Figure 14. Imogen Zino, *Warped re-fired stand*, 2019, photograph, Auckland.

In the same way that Moustakas believes “heuristic inquiry requires that one be open, receptive,”⁴² this method embraces the ideology that, in order to deeply understand the facets of a phenomenon, one cannot begin any inquiry with all the answers. Openness to failure offers a generous and nonlinear trajectory. It requires a process of materialising time and a willingness to retrace and repeat steps. Rather than adopting a fixed mindset or attempting to pre-emptively anticipate what could go wrong, this method is secure in itself and knows it doesn’t need to begin with all the answers. To let stages of a process fail means to remain open. Expecting failure and allowing time to recover encourages a depth of exploration that is not otherwise possible. It allows outcomes to be trialled and rejected rather than considered and dismissed.

42. Moustakas, 16.

The exploration faced failures at every turn, material failures, technological failures, supply and demand failures; but each of these experiences actively led to the next procedural change and informed every stage of the process. Welcoming challenges related to scale, time and a sense of perpetual motion is a mode of being that does not allow a halt in production. Embracing trust and sacrificing certainty are key components of this method. As a method it can be consuming, yet it is this approach that may allow newness to occur. Newness as a concept is generally associated with originality but, in this research project, newness is aligned with making anew. It speaks to both the process of hand-making over 5,000 individual component parts and to adopting a participatory method, allowing us to see anew through the process of making.

Figure 15. Imogen Zino, *A graveyard of pieces awaiting reconstruction 01*, 2019, photograph, Auckland.



WINTER

Winter has allowed me to embrace metaphor and hidden narratives. In this work, winter is symbolic of burrowing in and being on the inside, of existing in a hibernational state. It has permitted me to forage within the meanings nested inside my research question. Winter, caves and the tools we use to endure the season of regeneration have become catalysts for understanding. Like winter's timid light, and shortened days, time has become an integral material, one there could never be enough of.

Part A.

The Winter (Being-in & Being-Within)

Winter has such potential.



Figure 16. Imogen Zino, *Cold wet clay*, 2019, photograph, Auckland.

It is a time when we inhabit the inside of our homes and ourselves. Outside, the earth is cold, wet, icy, snow-covered or muddy.

Clay is cold and wet like winter, moving slowly between states. Kaplan would define clay, as a natural material, as a ‘soft fascination’.⁴³ The rituals of winter are reflected in the making processes, the lighting of fires, the need to endure and the dwelling in, forging on and withstanding of a state of winteriness. Artist JJ Peel describes clay as being an immediate and reactive material: “In ceramics, a thought or feeling goes from your brain or your gut, through your hands, and into the object.”⁴⁴ He believes that this creates a connection with material unlike many other substances such as wood or concrete. Making clay more durable requires heat and fire. It is a direct, tactile material, lending itself to human interaction and interference. To imprinting.

43. Kaplan, “The Restorative Benefits of Nature.”

44. Tom Sachs, “Ritual Activity,” *Modern Painters* 26, no. 9 (October 2014): 75. Ebscohost.

Associations of Winter

*Winter formed
Shapes and ideas were teased out
Words repeated.
I asked and their echo answered my call,
with snowflakes.*

Figure 17. Imogen Zino, *Layering of forms*, 2019, photograph, Auckland.



From bodies of snow and clusters of crystal the essential elements of my work emerged. Small particles converging, making a blanket of white, amongst which I could celebrate human touch and the relationship with the body, with each unique element coming together to create a whole.

Winter can be uninviting too, often spiky, rough, cold, standoffish, its surfaces frozen and barren. But even this state of winteriness invites the body to test boundaries, to be inquisitive and ask ... just how spiky is it? I have designed a cold and unfamiliar surface with the hope that people will want to reach out and trace its boundaries, to have their expectations challenged, to be driven by and respond with wonder, awe and surprise. To discover that beyond the surface there is more to Winter.

To achieve this, I've played with the notion of perceptual hierarchy, I've focused on elemental haptic interaction, inescapably and closely followed by audible and then visual interactions. Into this contrived experience I have interwoven multiple sensory modalities – the newness, as visual, audible and tangible experiences absorbing users in an immersive experience as they are invited to enter⁴⁵ Winter.

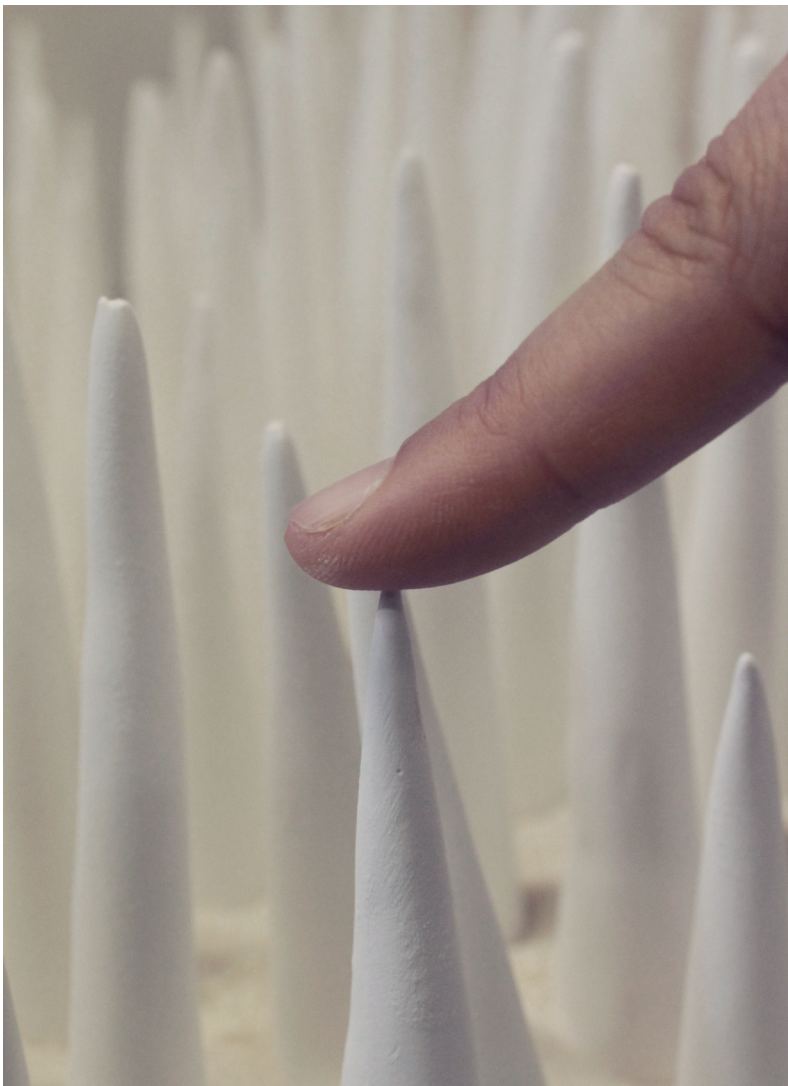


Figure 18. Imogen Zino, *A test of sharpness*, 2019, photograph, Auckland.

A Lack of Colour



*White is all that remained,
its quiet softness
muffling the world*

Figure 19. Imogen Zino, *Forging new pathways by firing objects wedged in silica sand*, 2019, photograph, Auckland.

Winter whiteness produces a surface on to which touch, sound and form can be projected. This clear, white surface highlights imperfections, human traces and variance of detail. Ceramic artist Takuro Kuwata,

explains that the meaning of his work changes depending on its environment, as ‘the person who owns it creates its purpose.’ It’s related, Kuwata believes, to the concept of *mitateru* — a poetic process of triggering the imagination through an object’s allusive qualities. He translates this word as ‘thinking of something as something else’; a glaze can become a snowstorm, or the line of a rim can delineate a horizon.⁴⁶

This content has been removed for copyright reasons

Figure 20. Yasushi Ichikawa, *Takuro Kuwata’s: Platinum Kairagi Shino bowl*, n.d., photograph, Tomio Koyama Gallery, Tokyo, 10th May 2019, <http://www.takurokuwata.com/works/>

When asked in an interview about Tokujin Yoshioka’s perpetually white installations and lack of colour, Japanese designer Kenya Hara⁴⁷ suggests that when Tokujin abandons colour in his work “the expression becomes more focused on the material directly.”⁴⁸ Hara describes this not as a lack of colour but as a choice not to use it in order to shift focus.

This content has been removed for copyright reasons

Figure 21. Tokujin Yoshioka, *The Snow in Tokujin Yoshioka’s exhibition: Sensing Nature*, July 2010, photograph, Mori Art Museum, Tokyo, 10th March 2019, <https://www.dezeen.com/2010/07/26/the-snow-by-tokujin-yoshioka/>

45. Almond, “Sensory and Emotional Immersion in Art, Technology and Architecture.”

46. Janet Koplos, “Kuwata Takuro, I’m Home, Tea Bowl, at Kosaku Kanechika Gallery, Tokyo,” *Ceramics Art and Perception*, no. 107 (January 2018): 16. Informit.

47. Kenya Hara, *White* (Baden, Switzerland: Lars Muller, 2009).

48. Justin McGuirk, “Why Is Everything White?” *Icon*, February 2009, <https://www.iconeye.com/component/k2/item/3912-why-is-everything-white>.

The Caves of Winter

*Hibernating and resting
Hidden in a space of unknown darkness,
a world of shadow and resonance.*



Figure 22. Paascalino Schaller, *Caves*, 2019, photograph, Featherston, Wellington.



Figure 23. Ruby Reihana-Wilson and Imogen Zino, *Firing trays version 03 with different clay to avoid contamination and modular components*, 2019, photograph, Auckland.

The cave informed my exploration of an immersive sensory environment by carving out a space for embodied dwelling. The overall enveloping form of the installation symbolises the transition from outside in; external sensation merges with internal sensation. Stimuli such as surfaces and textures from our external world against our skin, evoke emotions that we feel within our bodies. The place within acts as a place to retreat to and be alone in; a space that becomes more enclosing the further in we go. The cave represents the suppression of other sensory realms, creating a stillness or a sensation of selflessness; a state that occurs when we become internally, rather than, externally conscious.⁴⁹

This content has been removed for copyright reasons

Figure 24. Gabriel de la Chapelle, *In Chiharu Shiota's installation: Where Are We Going*, 2016, photograph, Le bon marché, Paris, 5th August 2019, <https://www.frameweb.com/news/chiharu-shiota-s-sculptures-highlight-the-invisible-networks-that-we-re-entangled-in>

49. This metaphoric state of being-in does not align with Plato's Allegory of the Cave. Plato and Benjamin Jowett, *The Republic of Plato* (Electronic Text Center, University of Virginia Library, 1994).

Sounds that Toll but do not Chime

Windchimes, though often now considered ornamental, were originally used to ward off evil spirits. Their history can be traced back as early as 1100 B.C.⁵⁰ A windchime is an instrument, a tool that measures and responds to its environment, creating sound when exposed to external force. This installation could be considered a responsive instrument that produces sound, not unlike a windchime. However, its primary purpose is to create a response that animates the inner world of the viewer, not to amuse the external world. It has been designed to engage with the human body. Its multisensory mode of interaction seeks to unite body and mind, engaging the self in an embodied and therefore *selfless* experience.⁵¹ It produce a sonic experience. Each grouping creates soundscapes that vary in pitch when brushed by the hand or body.



Figure 25. Imogen Zino, *Individually hung, suspending method for glaze fired sound test*, 2019, photograph and sound, Auckland.

50. Marina McLerren, "A Brief History of Wind Chimes," *McLerran Journal*, October 1, 2017, <https://www.mclerranjournal.com/technology-1/2017/9/9/a-brief-history-of-wind-chimes>.

51. Dambrun, "When the Dissolution of Perceived Body Boundaries Elicits Happiness."

Noticing

The simple act of noticing.

Figure 26. Ruby Reihana-Wilson and Imogen Zino, *Leaves and sound*, 2019, photograph and sound, Turangi.



One wintery moment, I found myself walking through a pile of leaves. They crunched under my feet, producing a satisfying sound. The leaves were a mixture of brown and red tones, each leaf unique. Laying haphazardly together, they created a wonderful surface. My sensory experience with fallen leaves led me to wonder if an installation or experience that was considered and manufactured could bring the outside in. The fallen leaves were symbolic of the season, they showed the passing of time. As I walked on them, in their brittle state they became smaller and smaller, they crunched to dust; this dust would eventually blow away, becoming earth. This simple, satisfying feeling arose from noticing the world around me. The mnemonic qualities of stomping in drifts of leaves had evoked memories of childhood, of a dynamic world that responded to your presence as you did to its.



Figure 27. Ruby Reihana-Wilson and Imogen Zino, *Remnants*, 2019, photograph, Turangi.

The Shape of Sound

*Hands interacting with objects
creating friction
sensing sounds*



Figure 28. Ruby Reihana-Wilson and Imogen Zino, *Texture, form and sound exploration 01 and 02*, 2019, photograph, Auckland.

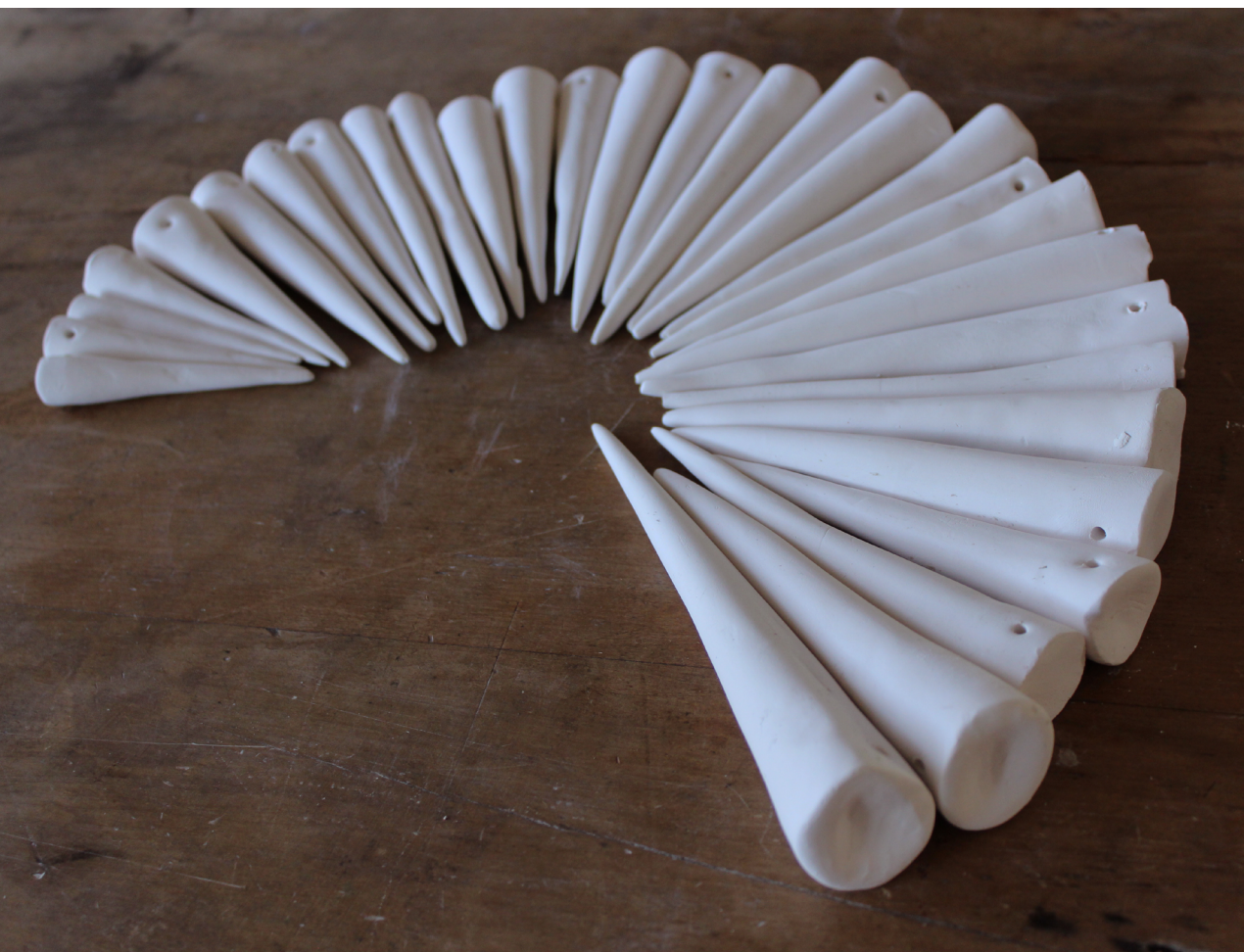


Figure 29. Imogen Zino, *Size array for sound tests*, 2019, photograph, Auckland.

I explored the sound of different shapes, first by listening to them in real time. Then I recorded the sounds, isolating them and replaying them through headphones. I took the time to feel the sounds. Some sounds were satisfying, others hair-raising.

I determined that tapered forms offered the widest range of potential to produce the sounds of winter. As the diameter narrowed, there was a direct and responsive change in the sound produced. By adjusting the form, texture and scale of each piece, I was able to manipulate its sonic resonance. I used digital software to layer and enhance the experience, so that I could gain a sense and understanding of what sounds the installation might produce when touched.

Glazed, shiny surfaces produced a more delicate sound than unglazed, earthy surfaces. This discovery seemed paradoxical. The more delicate sounds produced were more reminiscent of winter and ice. It was a high-pitched frozen sound, as pieces collided, a fragile and varied tone resonated. The higher the firing temperature, the higher the final tonal range of the objects. In his book *Sound Poetics*,⁵² Sean Street argues that sound is a force that drives our connection to the world we inhabit. It seemed to me that sound, though undeniably a vibratory force, is at its most forceful when combined with other sensory experiences.

52. Sean Street, *Sound Poetics: Interaction and Personal Identity* (New York, NY: Springer, 2017).



Figure 30. Zoe McBride, *A touch and sound based comparison of matte and glazed pieces*, 2019, photograph, Auckland.

Closing my Eyes to See

Re-connecting.
Re-locating our senses.
Re-attaching ourselves.

Many designers, architects and researchers agree that the eye has exerted its dominance in the West for too long. The other senses have not gone anywhere – they have been sending signals and messages to our brains, but we just listen to them less. They have become less distinct than the sights we see.

There are senses I have not been able to easily re-join in my research. Apologetically, I am referring to taste and smell. To incorporate these senses – especially an element of smell – would have been physiologically problematic. Smells affect us in a deeply personal and inherently mnemonic way. To choose a smell, in order to create an evocative experience, would be beyond the bounds of this research project. Similarly, Winter creates forms of sensory deprivation and hierarchy by minimising, isolating or enhancing perceptions through the senses.⁵³ The senses are not merely sound, touch, sight, taste and smell; they are made up of a matrix of interacting elements. It seemed to me that I was attempting to inspire distraction, as a form of introspective focus and a sense of wonder and awe. Seo's immersive artworks suggest that it is possible to use immersive experiences to uniquely affect the body⁵⁴ and Street's understanding of listening, were both important aspects of my research. I wanted to produce an affect that would correspond to our sense of who we are, and how we navigate the world around us.



Figure 31. Imogen Zino, *Striking sound 02*, 2019, photograph and sound, Auckland.

53. Lee Ann Paradise, "Sensory Deprivation," in *Encyclopedia.com*, accessed September 16, 2019, <https://www.encyclopedia.com/medicine/psychology/psychology-and-psychiatry/sensory-deprivation>.

54. Seo, "Jinsil Hwaryoung Seo"; Seo, "Aesthetics of Immersion in Interactive Immersive Installation"; Takashi Yamauchi, Jinsil Hwaryoung Seo, and Annie Sungkajun, "Interactive Plants."

Sensory Collisions



Figure 32. Ruby Reihana-Wilson and Imogen Zino, *Pieces in motion threaded onto steel wire*, 2019, photograph, Auckland.

The exploration of sensory collisions has been a process of discovering the connection points of sensory interaction. For example, when touch causes movement, in turn causing sound, the ripples of affect and interaction continue, creating a chain of engagement and a feedback loop between the body and surrounding stimuli. In order to narrow the scope, this project began with emphasis placed on the expectations of touch, sound and sight and the way in which these components, dynamically interacting with one another, could inspire the imagination. “Experience is comprised holistically, and is not split off entirely into the realm of, say, the haptic sense. Nonetheless, it is important to know the workings of the human body and how some senses achieve temporary emphasis in experience.”⁵⁵

This meaning of touch encompasses the polysemy of touch as a physical, emotional and intellectual practice. Engagement, derived etymologically from the notion of a pledge or binding, captures the sense of touch as “being with”: touching as a way of contacting being with physically; as a way of feeling, empathizing being with emotionally; as a way of understanding, knowing being with intellectually. This meaning of touch places the toucher in an intimate relation to the touched, an acceptance of “being with” that creates the opportunity for an empathetic relationship between the two.⁵⁶

In a wider context, environmental scientist and writer Haydn Washington writes about the need to rejuvenate a sense of wonder in order to save the world.⁵⁷ I pondered whether this wonder could seed in the self and then ripple outward, reconnecting us to our environment.

55. Diane J. Gromala, “Towards a Phenomenological Theory of the Visceral in the Interactive Arts” (2007), 60.

56. Cranny-Francis, “Semefulness,” 470.

57. Haydn Washington, *A Sense of Wonder Towards Nature: Healing the Planet Through Belonging* (Abingdon, UK: Routledge, 2018). Proquest eBook Central.

Part B.

Solitary Existence



Figure 33. Imogen Zino, *A single form has no sound*, 2019, photograph, Auckland.

*Conversation between body,
and object
and object
and object*

Figure 34. Imogen Zino, *Exploring boundaries and pushing back*, 2019, photograph, Auckland.

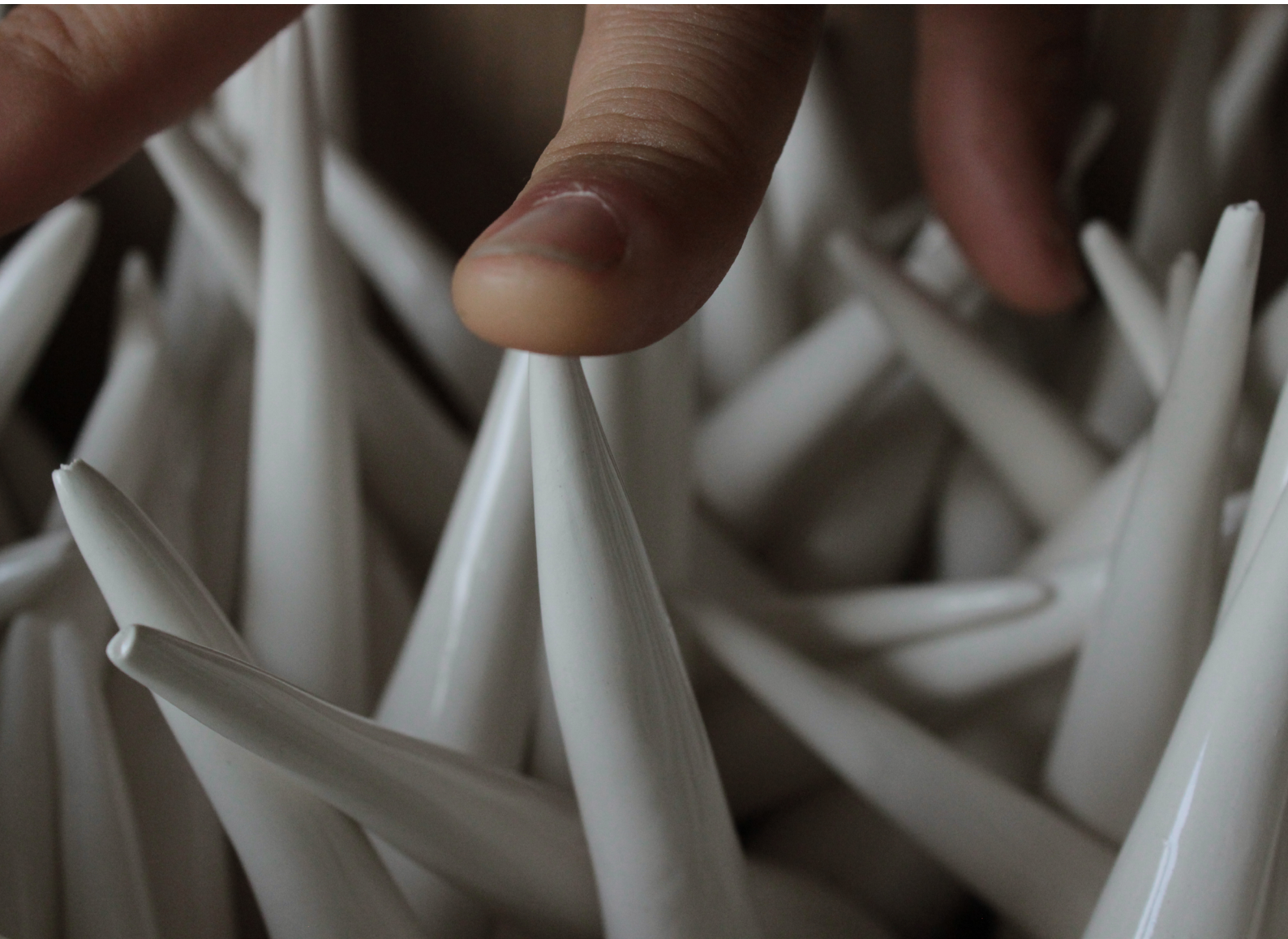




Figure 35. Imogen Zino, *Multiple components 03*, 2019, photograph, Auckland.

A solitary existence was reflected in each of the objects created. Seldom does one object, alone, create a noise; it is only when it comes in to contact with another that a reaction occurs. Creating multiple objects allowed me to prioritise and understand interaction over object. No longer was I looking at a tangible “thing” but at the relationship: how one thing interacted with another. It was an active conversation between body and object and object and object, rather than the object itself. I had to consider how to design a controlled experience while allowing components to remain dynamic. This was a challenge. “People typically experience awe in response to asocial stimuli,”⁵⁸ state Piff et al., referring to things such as the wonders of nature and certain artworks.

58. Piff et al., 883.



Figure 36. Imogen Zino, *Single file rig on steel testing unilateral movement and sound*, 2019, photograph, Auckland.

The repeated accumulation and assembly of component parts created evocative surfaces that chatter when touched. As single components, each piece bears little weight, noise or potential for dynamic interaction – it is but an object. This drove me to consider how an object becomes a surface with the potential to bond and react to other surfaces of similar form. In the same way that Kusama builds interconnected worlds using repeated elements,⁵⁹ the sheer accumulation of forms

59. Taro Masushio, “Yayoi Kusama.”



Figure 37. Imogen Zino, *Multi-layer rig on steel testing unilateral movement and sound*, 2019, photograph, Auckland

Paradox & Form

Teeth,
stalactites,
pyramids,
icicles,
cilia,
cones,
anemones,
sea creatures,
steels,
crystals,
wind chimes,
leaves, and
porcupine spines.



Figure 38. Imogen Zino, *Grid of pieces attached to board using short lengths of string testing multi-directional layered sound and dynamic interaction*, 2019, photograph, Auckland.



Figure 39. Imogen Zino, *Clusters on lengths of string testing multi-directional sound and dynamic interaction*, 2019, photograph, Auckland.

Each person found a different reference in the form. Sharp but gentle. Pointy but smooth. Large but light. Solid but delicate. It is the contradiction to expectation and the paradox of form that invites curiosity and interaction. The lightness of sound that the glassy surface creates. The amplified fact that a solid object that was aggressive in its standoffish form produced a gentle and resonant sound. When, at times, I grew less enchanted with the scale of the undertaking, the components too began to grow bigger in size. This change in perspective is now reflected in the undulating surface. “Art goes beyond the image to create what is imaginary, open, evasive, new.”⁶⁰

When you look at the elements that make up a body, sand dunes, water, grass, a forest from a distance, they may seem uniform. They are wonder-full. These nebulous bodies, from a distance, called themselves whole but, upon closer inspection, are really the opposite.



Figure 40. Imogen Zino, *A memory of the maker in clay 02*, 2019, photograph, Auckland.



Figure 41. Imogen Zino, *Sandy remnants from an imperfect process adding texture*, 2019, photograph, Auckland.

The variety of cracks, sandy collars, fingerprints and shapes come together to make up a body of unique and yet surprisingly similar pieces. Each piece is made from the same material, pierced, fired, glazed and strung up. Traces of interference pay homage to time and history. Some appear near perfect, others far from it. From a distance, the traces are barely visible. Participants, more than anyone, can acknowledge and appreciate the investment; they take ownership over their creations. Peet expresses his love for clay specifically as a material that is able to remember and expose the maker completely.⁶¹

61. Sachs, "Ritual Activity," 75.

Emerging Ritual



Figure 42. Imogen Zino, *3 Stages of setup pre-firing*, 2019, photograph, Auckland.

In an interview, JJ Peet describes the word ritual: “Ritual for me means making an object that is focalized.”⁶² The scale of the project created the impetus for ritual. Pragmatically, a minimum number of pieces had to be rolled each day and if this goal was not achieved, then tomorrow would suffer and would have to compensate. Pieces would be left for 2-5 days to dry (depending on the climatic conditions) and transported with care, or sometimes not so much, to the workshop to be fired. Each piece required a minimum of 6 points of interaction. Rolling, smoothing and holing, firing, dipping in glaze, stacking in sand and lastly, firing again. There were many pieces lost to discovery and procedural failures early on. There were still failures and losses in the final stages of the iterative process, but the rate of survival was much higher.



Figure 43. Imogen Zino, *Multi-layered firing lowered into the kiln*, 2019, photograph, Auckland.



Figure 44. Imogen Zino, *Multi-layered firing emerging from kiln*, 2019, photograph, Auckland.

Every weekend, a team of people (at times this team was made up of only myself) would gather around a table, to make. My additional hands sought constant reassurance. I tried to keep in mind the need for the making experience to appear recreational and to a degree even therapeutic like a Sensory Art Space experience ⁶³, and I attempted to relinquish control.

Rotating participation in the ritual of making meant that suggestions and adaptations were constant. I was open to creative contributions and it was a process that remained reflexive. I wish we had discovered the difference a glass table made to the shaping process earlier than four weeks prior to the final deadline. Throughout this process many technological interventions were suggested. What if I were to use an extruder creating a tube that could be cut in to sections? What if I were to CNC a mould and slip cast multiple pieces at a time? While these options may have been effective – if the goal had been efficiency – my interest lay elsewhere. I was engaged in a conversation with Winter and it seemed to me that perseverance, repetition and the profound effect of learning reflexively, with the potential for constant and unapologetic failures, necessitated a rejection of many forms of technology.



Figure 45. Imogen Zino, *Stacked*, 2019, photograph, Auckland.

63. Cavanagh et al., “It’s like Another World”; Haegle and Porretta, “Snoezelen Multisensory Environment.”

States of Reverie

“The dreamed world teaches us the possibilities for expanding our being within our universe.”⁶⁴

In an article called *The Poetics of Touch*, author and co-founder of The Lauterstein-Conway Massage School, David Lauterstein⁶⁵ references philosopher and innovator Gaston Bachelard’s *Poetics of Reverie*.⁶⁶ He discusses Bachelard’s theory of the evocation of reveries through poetry and suggests this same theory may be translated and applied to touch, believing that touch is inherently poetic in nature. He states that the paramount phenomenological moment of inquiry is during the “complete illumination of the awareness of a subject who is struck with wonder by the experience” of touch. Both Bachelard and Lauterstein frequently associate the term wonder with a state of reverie. Lauterstein writes about phenomenological methods as having the potential to foster a co-creative experience, speaking to the idea that these forms of poetry may be the seeds required to provide an insight into the realms of creative imagination, wonder and alternate universes.

64. David Lauterstein, “The Poetics of Touch,” *Positive Health*, no. 254 (May 2019): 36. Ebscohost.

65. Lauterstein.

66. Gaston Bachelard, *The Poetics of Reverie: Childhood, Language, and the Cosmos* (Boston, MA: Beacon Press, 1971).

The design of this research aims to enhance certain experiences and cultivate an awareness through engaging in the activity of making and touching of reactive surfaces. Lauterstein defines the state of awareness “as an increment to consciousness.”⁶⁷ There is a specific kind of consciousness existing during embodied experience that locates the self within the body and the experience. I posit that it is during these encounters that our sense of self is strengthened in much the same way that Pallasmaa believes a sense of self “strengthened by art and architecture, also permits us to engage fully in the mental dimensions of dream, imagination and desire.”⁶⁸ This installation is tying together the state of reverie with a state of conscious embodiment through immersive interaction. Cultural and medical anthropologist Cassandra Hartblay describes the purpose or function of this type of work as something that “provokes awareness and imaginative engagement of the audience members with the subject matter”⁶⁹ and she describes installations as “curated or created environmental experience.”⁷⁰

67. Lauterstein, “The Poetics of Touch.”

68. Pallasmaa, 13.

69. Cassandra Hartblay, “This Is Not Thick Description: Conceptual Art Installation as Ethnographic Process,” *Ethnography* 19, no. 2 (June 2018): 153–82, <https://doi.org/10.1177/1466138117726191>.

70. Hartblay.

Figure 46. Imogen Zino, Grid of pieces attached to board using short lengths of string testing multi-directional layered sound and dynamic interaction, 2019, photograph, Auckland.



CONCLUSION

Exploring immersive sensory interactions, I have considered their potential to elicit awe and wonder, and experimented with many ways in which embodied experiences might lead to a deeper connection with one's self and the inhabited environment. Using a phenomenological lens and poetic practices, I have thought about and sought to emulate experiences that express an imaginative understanding of Winter.

Arranging and juxtaposing textures, sound, and touch with the body, I contemplated embodied possibility. Could the making of an immersive experience allow a deep and ongoing conversation with materiality, process and the imagination? Remaining reactive during the making stages revealed a rich and explorative field of inquiry. Being-within the making process, and being immersed in the work itself, provided a myriad of ways to envision Winter. To think about how it connects us through performed actions and our inner landscape to the external environment. The creation of this installation meant entering unknown, unmapped terrain that only now, at its conclusion, I am beginning to comprehend. Making necessitated grappling with unique and at times vague tasks, but the experiences gave me licence to gather together a group of curious volunteers, to share in awe and wonder.

Throughout this research, I have embraced failure, relinquishing the illusion of control and certainty, and surrendering the self to the materiality of time and process. Integrating and unravelling time as an element central to the ritual of making gave it explicit form. I came to realise, as Hall et al. suggest, that we are all engaged in "collectively investigating reality in order to transform it."⁷¹

I have learnt that sparking the body's awareness of its surrounding environment, and of itself, can activate the senses in innumerable ways, triggering unconscious responses and eliciting a sense of wonder. This phenomenon is, as Seo suggests, a place where "mind, body and environment interweave and communicate."⁷²

Being immersed in this body of work has led me to dream of immense scale. How would sharing the final experience intrinsically alter the experience itself? I have started to think beyond the bounds of Winter, to the potential inherent in shared spaces. Would such an installation ignite an entirely different set of neural and sensory responses? How would it feel to delve into the realms of imagination and create an immersive sonic-tactile expanse?

I am left in awe and remain entranced by wonder.

71. Hall, Gillette, and Tandon, 1.

72. Seo, "Aesthetics of Immersion in Interactive Immersive Installation," 1.

Appendix

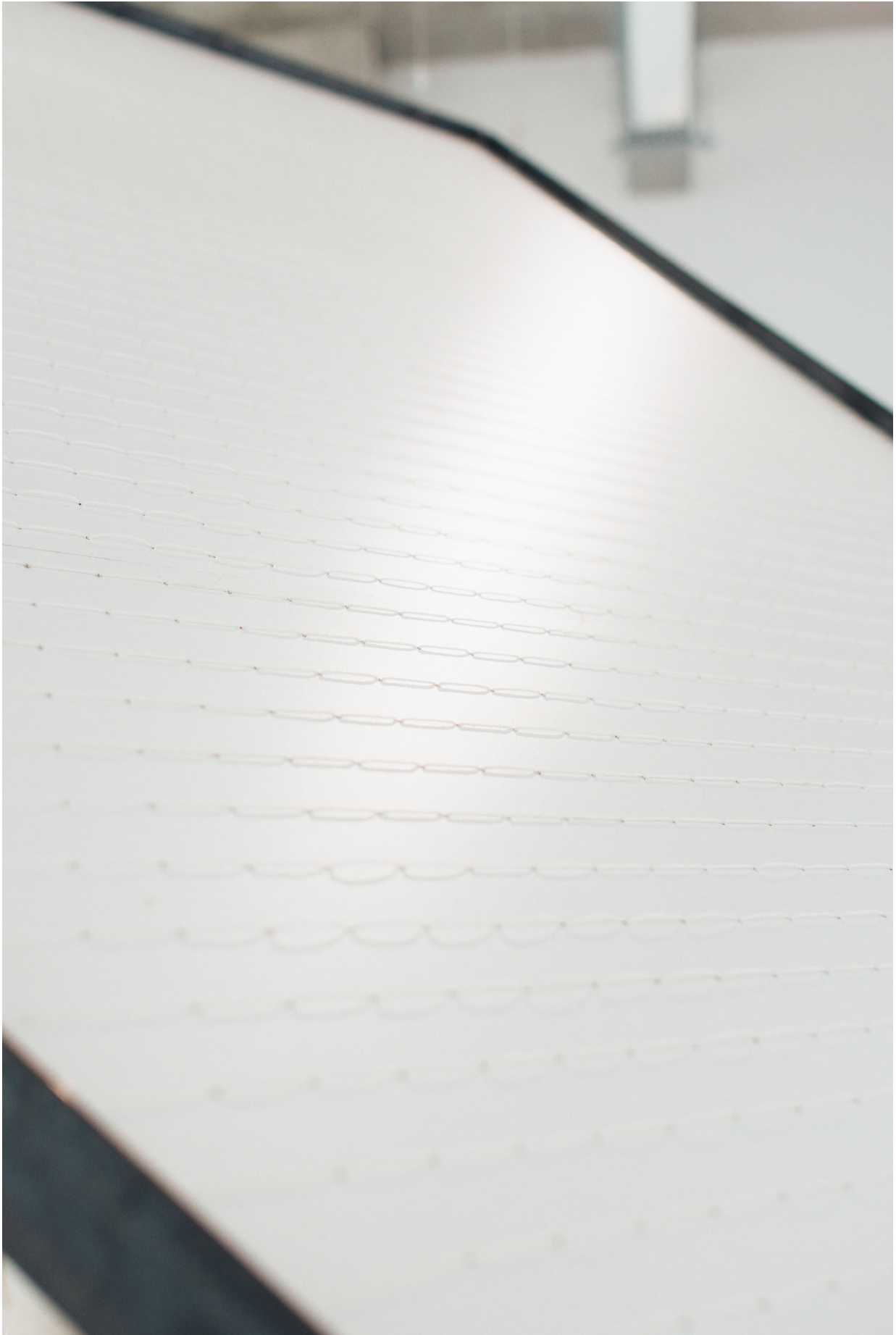


Appendix figures 47, 48, 49, 50, 51, 52 & 53 by Jenna Maxfield, *The Materiality of Winter*, 2019, photographs, St Paul St Gallery Auckland.













REFERENCES

- Alex, Gabriele. "A Sense of Belonging and Exclusion: 'Touchability' and 'Untouchability' in Tamil Nadu." *Ethnos: Journal of Anthropology* 73, no. 4 (December 2008): 523–43. <https://doi.org/10.1080/00141840802563956>.
- Almond, Richard. "Sensory and Emotional Immersion in Art, Technology and Architecture." Mackintosh School of Architecture, Glasgow School of Art, 2011.
- Andreasen, M. M., Claus Thorp Hansen, and Philip Cash. *Conceptual Design : Interpretations, Mindset and Models*. Cham : Springer, 2015., 2015.
- Aram, John D. "Concepts of Interdisciplinarity: Configurations of Knowledge and Action." *Human Relations* 57, no. 4 (April 2004): 379–412. <https://doi.org/10.1177/0018726704043893>.
- Bachelard, Gaston. *Earth and Reveries of Will: An Essay on the Imagination of Matter*. Dallas: The Dallas Institute Publications, 2002. *The Poetics of Reverie : Childhood, Language, and the Cosmos*. Boston, MA: Beacon Press, 1971.
- Banno, Hayaki, Hiroki Koga, Hiroki Yamamoto, and Jun Saiki. "Beyond the Subjective Experience of Colour: An Experimental Case Study of Grapheme–Texture Synesthesia." *Cognitive Neuropsychology* 34, no. 5. Accessed August 14, 2019. <https://doi.org/10.1080/02643294.2017.1373638>.
- Bannon, Brian E. *Nature and Experience : Phenomenology and the Environment*. Lanham, MD: Rowman & Littlefield International, 2016. Ebscohost.
- Barad, Karen. "Diffracting Diffraction: Cutting Together-Apart." *Parallax* 20, no. 3 (July 2014): 168–87. <https://doi.org/10.1080/13534645.2014.927623>.
- Barad, Karen Michelle. *Meeting the Universe Halfway: Quantum Physics and the Entanglement of Matter and Meaning*. E-Duke Books Scholarly Collection. Durham, NC: Duke University Press, 2007.
- Barnes, Carolyn, and Gavin Melles. "Managing Interdisciplinarity: A Discussion of the Contextual Review in Design Research" *International Association of Societies of Design Research Conference*, 2007. <https://www.sd.polyu.edu.hk/iasdr/proceeding/papers/MANAGING%20INTERDISCIPLINARITY.pdf>
- Barratt, Emma L., and Nick J. Davis. "Autonomous Sensory Meridian Response (ASMR): A Flow-like Mental State," 2015. <https://www.ncbi.nlm.nih.gov.ezproxy.aut.ac.nz/pmc/articles/PMC4380153/>.
- Becker, Charity. "A Sense of Wonder: An A/r/Tographer's Musings on Seeing and Being in the World." *Canadian Review of Art Education: Research & Issues* 45, no. 1 (January 2018): Ebscohost.
- Behar, Michael. "The Power of Awe." *Men's Health* 33, no. 5 (June 2018): 114–39.
- Beittel, Kenneth R. "The Teaching of Art in Relation to Body-Mind Integration and Self-Actualization in Art." *Art Education* 32, no. 7 (November 1979): 18–20.
- Berry, Sarah. "Marianne Moore's Cabinets of Curiosity." *Journal of Modern Literature* 41, no. 3 (August 15, 2018): 18–38. <https://muse.jhu.edu/article/700945>.
- Block, Peter. *Community: The Structure of Belonging*. Oakland, CA: Berrett-Koehler Publishers, 2018. <http://ebookcentral.proquest.com/lib/aut/detail.action?docID=5427481>.
- Boehnert, Joanna. *Design, Ecology, Politics : Towards the Ecocene*. Bloomsbury, 2018. Ebscohost.
- Boman, Eric, Iris Barrel Apfel, and Harold Koda. *Rare Bird of Fashion: The Irreverent Iris Apfel*. New York: Thames & Hudson, 2007.
- Bowen, Simon John. "A Critical Artefact Methodology: Using Provocative Conceptual Designs to Foster Human-Cen

ted Innovation.” PhD, Sheffield Hallam University, 2009. <http://shura.shu.ac.uk/3216/>.

Brook, Lesley. “Touching Jewellery: The Value of Touch for Visitors to Clinkproject3: Collaborism.” *Scope: Contemporary Research Topics (Art & Design)* 14 (November 2017): 82–88. Ebscohost.

Brown, Christopher, and Andrew Knight-Hill. “Stories of a Ruined Space: Filmic and Sonic Approaches to Practice-as-Research.” *Media Practice & Education* 19, no. 3 (November 2018): 313–25. <https://doi.org/10.1080/25741136.2018.1519989>.

Brownell, Blaine Erickson. *Matter in the Floating World : Conversations with Leading Japanese Architects and Designers : Hitoshi Abe, Tadao Ando, Jun Aoki, Masayo Ave, Shigeru Ban, Shuhei Endo, Terunobu Fujimori, Kenya Hara, Erika Horiki, Sachiko Kodama, Kengo Kuma, Toyo Ito, Oki Sato, Kazuyo Sejima, Reiko Sudo, Takaharu Tezuka, Akira Wakita, Makoto Sei Watanabe, Yasuhiro Yamashita, Tokujin Yoshioka*. Princeton: Princeton Architectural Press, 2011.

Bruni, Attila. “Sarah Pink, Doing Sensory Ethnography.” *Il Mulino*, April 2010.

Cacciamani, Laura, and Lora T. Likova. “Tactile Object Familiarity in the Blind Brain Reveals the Supramodal Perceptual-Mnemonic Nature of the Perirhinal Cortex.” *Frontiers in Human Neuroscience* 10 (2016). <https://doi.org/10.3389/fnhum.2016.00092>.

Calle-Escobar, Manuela, Ricardo Mejia-Gutierrez, Jean-Pierre Nadeau, and Jérôme PAILHES. “Heuristics-Based Design Process.” *International Journal on Interactive Design and Manufacturing*, 2014, 1–18. <https://hal.archives-ouvertes.fr/hal-01070213>.

Campo, Matias del. “Moods and Other Ontological Catastrophes.” *Architectural Design* 86, no. 6 (December 11, 2016): 6–13. <https://doi.org/10.1002/ad.2103>.

Candy, Linda. “Practice Based Research: A Guide,” 2006. https://www.researchgate.net/publication/257944497_Practice_Based_Research_A_Guide

Cavanagh, Bliss, Kirsti Haracz, Miranda Lawry, and Carole James. “It’s like Another World: The Perceived Beneficial Effects of an Artistically Designed Multisensory Environment.” *Medical Humanities*, July 16, 2018, medhum-2018-011492. <https://doi.org/10.1136/medhum-2018-011492>.

Chamberlain, Paul, and Claire Craig. “Engagingdesign – Methods for Collective Creativity.” In *Human-Computer Interaction. Human-Centred Design Approaches, Methods, Tools, and Environments*, edited by Masaaki Kurosu, 22–31. Lecture Notes in Computer Science. Berlin: Springer, 2013.

Chin, Andrea. “Tokujin Yoshioka for ‘sensing Nature’ Exhibition.” *Designboom*, July 24, 2010. <https://www.designboom.com/design/tokujin-yoshioka-for-sensing-nature-exhibition/>.

Choi, Bernard C. K., and Anita W. P. Pak. “Multidisciplinarity, Interdisciplinarity and Transdisciplinarity in Health Research, Services, Education and Policy: 1. Definitions, Objectives, and Evidence of Effectiveness.” *Clinical and Investigative Medicine. Medecine Clinique Et Experimentale* 29, no. 6 (December 2006): 351–64.

Choma, Joseph. *Morphing: A Guide to Mathematical Transformations for Architects and Designers*, 2015. <http://site.ebrary.com/id/11051364>.

Classen, Constance. *The Book of Touch. Sensory Formations*. Oxford: Berg, 2005.

Coleman, Rebecca. “A Sensory Sociology of the Future: Affect, Hope and Inventive Methodologies.” *Sociological Review* 65, no. 3 (September 2017): 525–43. <https://doi.org/10.1111/1467-954X.12445>.

Colombetti, Giovanna. *The Feeling Body: Affective Science Meets the Enactive Mind*. Cambridge, Massachusetts: The MIT Press, 2013. Ebscohost.

Cook, Tina. “Where Participatory Approaches Meet Pragmatism in Funded (Health) Research: The Challenge of Finding Meaningful Spaces.” *Forum: Qualitative Social Research* 13, no. 1 (January 2012): 1–22. Ebscohost.

Corkill, Edan. “Yayoi Kusama.” *ArtAsiaPacific*, no. 83 (June 5, 2013): 207–10. <http://ezproxy.aut.ac.nz/login?url=http://>

- Cranny-Francis, Anne. "Semefulness: A Social Semiotics of Touch." *Social Semiotics* 21, no. 4 (September 2011): 463–81. <https://doi.org/10.1080/10350330.2011.591993>.
- Daily, Laura. "Tips for Those Weighing Whether to Join the Heavy-Blanket Craze." *The Washington Post*, January 22, 2019. Ebscohost.
- Dambrun, Michaël. "When the Dissolution of Perceived Body Boundaries Elicits Happiness: The Effect of Selflessness Induced by a Body Scan Meditation." *Consciousness and Cognition* 46 (November 1, 2016): 89–98. <https://doi.org/10.1016/j.concog.2016.09.013>.
- Davey, Nicholas. *Unquiet Understanding: Gadamer's Philosophical Hermeneutics*. Ithaca, NY: State University of New York Press, 2006. Proquest eBook central.
- De Villers, Linda. "Getting in Touch with Touch: A Use of Caressing Exercises to Enrich Sensual Connection and Evoke Ecstatic Experience in Couples." *Sexual & Relationship Therapy* 29, no. 1 (February 2014): 87–97. <https://doi.org/10.1080/14681994.2013.870336>.
- deNeufville, J. I., and D. A. Schon. "Reflective Practitioner: How Professionals Think in Action (Book Review)." *Journal of the American Planning Association* 50, no. 1 (1984): 87–88. Ebscohost.
- Djonov, Emilia, and Theo Van Leeuwen. "The Semiotics of Texture: From Tactile to Visual." *Visual Communication* 10, no. 4 (November 2011): 541–64. <https://doi.org/10.1177/1470357211415786>.
- Dogramaci, Burcu, and Fabienne Liptay. "Immersion in the Visual Arts and Media." *Studies in Intermediality* 9 (October 2015): 1–17. Ebscohost.
- Duffy, Michelle, and Judith Mair. "Engaging the Senses to Explore Community Events." *Event Management* 22, no. 1 (February 2018): 49–63. <https://doi.org/10.3727/152599517X15111988553991>.
- Earnshaw, Rae. "Models for Research in Art, Design, and Creativity." In *Research and Development in Art, Design and Creativity*, edited by Rae Earnshaw, 19–30. SpringerBriefs in Computer Science. Cham, Switzerland: Springer International Publishing, 2016. https://doi.org/10.1007/978-3-319-33005-1_2.
- Enright, Robert. "The Touching Art: An Interview with Trevor Gould." *Border Crossings* 38, no. 2 (June 2019): 58–69. Ebscohost.
- Etherington, Rose. "The Snow by Tokujin Yoshioka." *Dezeen*, July 26, 2010. <https://www.dezeen.com/2010/07/26/the-snow-by-tokujin-yoshioka/>.
- Ferro, Antonino. *Reveries: An Unfettered Mind*. London: Karnac Books, 2015. <http://ebookcentral.proquest.com/lib/aut/detail.action?docID=2065502>.
- Finlay, Linda. "'Outing' the Researcher: The Provenance, Process, and Practice of Reflexivity." *Qualitative Health Research* 12, no. 4 (April 2002): 531–45. <https://doi.org/10.1177/104973202129120052>.
- Fisher, Fiona, ed. *Performance, Fashion and the Modern Interior: From the Victorians to Today*. Oxford: Berg, 2011.
- Fredborg, Beverkley K., James M. Clark, and Stephen D. Smith. "Mindfulness and Autonomous Sensory Meridian Response (ASMR)," August 7, 2018. <https://www.ncbi-nlm-nih-gov.ezproxy.aut.ac.nz/pmc/articles/PMC6086079/>.
- Fuss, Diana. *The Sense of an Interior: Four Writers and the Rooms That Shaped Them*. Abingdon, UK: Routledge, 2004.
- Gabel, Laine. "Time-Based Art in a Sensorially Immersive Environment." *The Senses and Society* 7, no. 3 (November 1, 2012): 374–77. <https://doi.org/10.2752/174589312X13412372515475>.
- Ganis, William. "Total Immersion. (Cover Story)." *Glass Quarterly*, no. 142 (Spring 2016): 20–29. Ebscohost.
- Garzàs, Javier, and Mario Piattini. *Object-Oriented Design Knowledge: Principles, Heuristics, and Best Practices*. Hershey, PA: Idea Group Pub, 2007.

- Gatti, E., G. Caruso, M. Bordegoni, and C. Spence. "Can the Feel of the Haptic Interaction Modify a User's Emotional State?" In 2013 World Haptics Conference (WHC), 247–52, 2013. <https://doi.org/10.1109/WHC.2013.6548416>.
- Gillespie, Alex, and Tania Zittoun. "Meaning Making in Motion: Bodies and Minds Moving through Institutional and Semiotic Structures." *Culture & Psychology* 19, no. 4 (December 2013): 518–32. <https://doi.org/10.1177/1354067X13500325>.
- Goleman, Daniel, Ellen Langer, Susan David, and Christina Congleton. *Mindfulness*. HBR Emotional Intelligence Series. Brighton, MA: Harvard Business Review Press, 2017.
- Gray, Carole, and Julian Malins. *Visualizing Research : A Guide to the Research Process in Art and Design*. Accessed October 22, 2018. Ebscohost.
- Griffiths, Alison. *Shivers down Your Spine: Cinema, Museums, and the Immersive View*. New York: Columbia University Press, 2008.
- Gromala, Diane J. "Towards a Phenomenological Theory of the Visceral in the Interactive Arts," PhD, Plymouth University, 2007. <https://pearl.plymouth.ac.uk/handle/10026.1/653>
- Gromala, Diane, and Jinsil Seo. "Reducing Pain in Alternative Immersive Environments: A Proposal," January 1, 2009. https://doi.org/10.1007/978-3-211-78891-2_62.
- Guerin, Annie, and Trish McMenamin. *Belonging: Rethinking Inclusive Practices to Support Well-Being and Identity*. Boston, UNITED STATES: BRILL, 2018. Proquest eBook Central.
- Haegele, Justin A., and David L. Porretta. "Snoezelen Multisensory Environment." *Palaestra* 28, no. 4 (December 2014): 29–32. Ebscohost.
- Hagerty, Bonnie M. K., and Kathleen Patusky. "Developing a Measure Of Sense of Belonging." *Nursing Research* 44, no. 1 (February 1995): 9–13.
- Hale, C.A. "A Sense of Belonging in Re-Membering: Anthropocosmic Connection in the Twenty-First Century." *World Futures: Journal of General Evolution* 69, no. 1 (2013): 45–60. <https://www-tandfonline-com.ezproxy.aut.ac.nz/doi/full/10.1080/02604027.2012.730439>.
- Hall, Budd. *Creating Knowledge: A Monopoly? Participatory Research in Development*. Participatory Research Network Series No. 1. International Council for Adult Education, 1982.
- Hara, Kenya. White. Baden, Switzerland: Lars Muller, 2009.
- Hartblay, Cassandra. "This Is Not Thick Description: Conceptual Art Installation as Ethnographic Process." *Ethnography* 19, no. 2 (June 2018): 153–82. <https://doi.org/10.1177/1466138117726191>.
- Hasegawa, Kanae. "'Issey Challenged Me to Use Colour.'" *Frame*, no. 97 (April 3, 2014): 86–8. Ebscohost.
- Haverkamp, Michael. *Synesthetic Design : Handbook for a Multisensory Approach*. Basel: Birkhäuser, 2013.
- Hess, Bart. "Bart Hess." Accessed October 1, 2018. <http://barthess.nl/biography.html>.
- Hideyoshi Yanagisawa, and Kenji Takatsuji. "Effects of Visual Expectation on Perceived Tactile Perception: An Evaluation Method of Surface Texture with Expectation Effect." *International Journal of Design* 9, no. 1 (April 2015): 39–51. Ebscohost.
- Hill, Cher M. "More-than-Reflective Practice: Becoming a Diffractive Practitioner." *Teacher Learning and Professional Development* 2, no. 1 (March 5, 2018). <http://journals.sfu.ca/tlpd/index.php/tlpd/article/view/28>.
- Holland, Sarah. "Community Arts, Creativity and Positive Mental Health and Well-Being: A Case Study of the Support to Recovery Art Gallery." *Journal of Applied Arts & Health* 6, no. 3 (December 2015): 257–68. https://doi.org/10.1386/jaah.6.3.257_1.

- Howes, David. *Empire of the Senses : The Sensual Culture Reader*. Sensory Formations Series. Oxford: Berg, 2005.
- Huppert, Felicia A. "Psychological Well-Being: Evidence Regarding Its Causes and Consequences†." *Applied Psychology: Health and Well-Being* 1, no. 2 (2009): 137–64. <https://doi.org/10.1111/j.1758-0854.2009.01008.x>.
- Hviit, Pernille, Nandita Chaudhary, and Brady Wagoner. *Cultural Psychology and Its Future : Complementarity in a New Key*. Charlotte, NC : Information Age Publishing., 2014. Ebscohost.
- Ingold, Tim. *Being Alive: Essays on Movement, Knowledge and Description*. Abingdon, UK: Routledge, 2011.
- Interactive Design Foundation. "What Is Emotional Design?" Accessed August 31, 2018. <https://www.interaction-design.org/literature/topics/emotional-design>.
- Johnson, Jeremy. "Sensory: Please Touch the Art." *Art Education* 71, no. 1 (January 2, 2018): 12–15. <https://doi.org/10.1080/00043125.2018.1389580>.
- Johnson, Mark. "The Aesthetics of Embodied Life." In *Aesthetics and the Embodied Mind: Beyond Art Theory and the Cartesian Mind-Body Dichotomy*, edited by Alfonsina Scarinzi Berlin: Springer, November 2014. https://doi.org/10.1007%2F978-94-017-9379-7_2.
- Jolly, Eshin, Diana I. Tamir, Bethany Burum, and Jason P. Mitchell. "Wanting without Enjoying: The Social Value of Sharing Experiences." *PLOS ONE* 14, no. 4 (April 18, 2019): e0215318. <https://doi.org/10.1371/journal.pone.0215318>.
- Jones, Caroline A., and Bill Arning. *Sensorium : Embodied Experience, Technology, and Contemporary Art*. Cambridge, MA: MIT Press, 2006.
- Jones, Chris. "Let's Get Physical: Supporting Arts Based Research through Haptic Learning." *Art Libraries Journal* 43, no. 3 (July 2018): 149–52. <https://doi.org/10.1017/alj.2018.20>.
- Juniper, Andrew. *Wabi Sabi: The Japanese Art of Impermanence*. North Clarendon, VT: Tuttle Publishing, 2011. <http://ebookcentral.proquest.com/lib/aut/detail.action?docID=900365>.
- Kampfer, K., B. Ivens, and A. Brem. "Multisensory Innovation: Haptic Input and Its Role in Product Design." *IEEE Engineering Management Review* 45, no. 4 (Fourth 2017): 32–38. <https://doi.org/10.1109/EMR.2017.2768504>.
- Kaplan, Joel H., and Sheila Stowell. *Theatre and Fashion: Oscar Wilde to the Suffragettes*. Cambridge, UK: Cambridge Univ. Press, 1995.
- Kaplan, Stephen. "The Restorative Benefits of Nature: Toward an Integrative Framework." *Journal of Environmental Psychology, Green Psychology*, 15, no. 3 (September 1, 1995): 169–82. [https://doi.org/10.1016/0272-4944\(95\)90001-2](https://doi.org/10.1016/0272-4944(95)90001-2).
- Karafotias, G., G. Korres, A. Teranishi, W. Park, and M. Eid. "Mid-Air Tactile Stimulation for Pain Distraction." *IEEE Transactions on Haptics* 11, no. 2 (April 2018): 185–91. <https://doi.org/10.1109/TOH.2017.2781693>.
- Kaur, Harsimran, Swati Srivastava, and Zeenat Ali. "Snoezelen Tent House a Multi-Sensory Environment Experience for Children." *Indian Journal of Physiotherapy & Occupational Therapy* 11, no. 4 (October 2017): 23–28. <https://doi.org/10.5958/0973-5674.2017.00114.9>.
- Moist, Kevin and David Banash. *Contemporary Collecting: Objects, Practices, and the Fate of Things*. Proquest eBook Central.
- Khosa, Deep K., and SimoneE. Volet. "Promoting Effective Collaborative Case-Based Learning at University: A Meta cognitive Intervention." *Studies in Higher Education* 38, no. 6 (August 2013): 870–89. <https://doi.org/10.1080/03075079.2011.604409>.
- Kleinsmann, Maaïke, Rianne Valkenburg, and Janneke Sluijs. "Capturing the Value of Design Thinking in Different Innovation Practices." *International Journal of Design* 11, no. 2 (August 2017): 25–40. Ebscohost.
- Koplos, Janet. "Kuwata Takuro, I'm Home, Tea Bowl, at Kosaku Kanechika Gallery, Tokyo." *Ceramics Art and Perception*, no. 107 (January 2018): 24. <http://search.informit.com.au/documentSummary;dn=695412511334003;res=IELAPA>.

- Kopmels, Aida. "The Problem with Disenchantment: A Case Study of Crystal Magic," n.d.
- Kovacevich, Alexandra, and David Huron. "Two Studies of Autonomous Sensory Meridian Response (ASMR): The Relationship between ASMR and Music-Induced Frisson | Kovacevich | Empirical Musicology Review." *Empirical Musicology Review* 13 (2018). <http://emusicology.org/article/view/6012>.
- Kozel, Susan. *Closer: Performance, Technologies, Phenomenology*. Leonardo. Cambridge, MA: MIT Press, 2007.
- Krauss, Rosalind. "Sculpture in the Expanded Field." October, 1979, 31. <https://doi.org/10.2307/778224>.
- Krishna, Aradhna, and Joann Peck. "A Broad View of the Notion of Sensory Interaction." *Advances in Consumer Research* 38 (January 2011): 215–18. Ebscohost.
- Ku, Kelly Y.L., Venus S.L. Lee, and James W. Ellis. "Short Communication: Using Artwork as Problem Context in Generic Critical Thinking Instruction: A Strategy for Thoughts." *Thinking Skills and Creativity* 25 (September 1, 2017): 53–59. <https://doi.org/10.1016/j.tsc.2017.07.001>.
- Kuwata, Takuro. "Works□□□□□Takuro Kuwata." Accessed October 8, 2019. <http://www.takurokuwata.com/works/>.
- Lacayo, Richard. "The Noisemaker." *TIME Magazine* 179 (March 27, 2012): 50. Ebscohost.
- Lakoff, George, and Mark Johnson. *Metaphors We Live By*. Chicago: University of Chicago Press, 1980. Ebscohost.
- Lauterstein, David. "The Poetics of Touch." *Positive Health*, no. 254 (May 2019): 36–36. Ebscohost.
- Leach, Neil, and Behnaz Farahi. *3-D Printed Body Architecture*. Newark: John Wiley & Sons, Incorporated, 2018. <http://public.eblib.com/choice/PublicFullRecord.aspx?p=5261390>.
- Lee, Jung Min, Jongsoo Baek, and Da Young Ju. "Anthropomorphic Design: Emotional Perception for Deformable Object." *Frontiers in Psychology* 9 (2018). <https://doi.org/10.3389/fpsyg.2018.01829>.
- Levack, William M. M., Nicola M. Kayes, and Joanna K. Fadyl. "Experience of Recovery and Outcome Following Traumatic Brain Injury: A Metasynthesis of Qualitative Research." *Disability & Rehabilitation* 32, no. 12 (July 15, 2010): 986–99.
- Livingston, George. "The Role of Story in Enhancing Critical Thinking and Group Discussion Skill..." *IUP Journal of Soft Skills* 10, no. 1 (March 2016).
- Lourenço, Pedro, Isabel Basto, Carla Cunha, and Tiago Bento. "Dialogism in Detail: Per Linell's Rethinking Language, Mind, and World Dialogically and Its Potentials." *Culture & Psychology* 19, no. 3 (September 2013): 421–30. <https://doi.org/10.1177/1354067X12456715>.
- Ludden, G. D. D., and T. J. L. van Rompay. "How Does It Feel? Exploring Touch on Different Levels of Product Experience." *Journal of Engineering Design* 26, no. 4–6 (April 2015): 157–68. <https://doi.org/10.1080/09544828.2015.1036011>.
- MacDonald, Pam. "Beyond the Ice Breaker: Group Energy, Motivation and Engagement." *Training and Development*, no. 3 (2015): 6. Ebscohost.
- Makela, Maarit. "Knowing Through Making: The Role of the Artefact in Practice-Led Research." *Knowledge, Technology & Policy* 20, no. 3 (September 11, 2007): 160. <https://doi.org/10.1007/s12130-007-9028-2>.
- Marshall, Kevin, Anja Thieme, Jayne Wallace, John Vines, Gavin Wood, and Madeline Balaam. "Making Wellbeing: A Process of User-Centered Design," *Proceedings of the 2014 Conference on Designing Interactive Systems* (2014): 755-764. <https://doi.org/10.1145/2598510.2600888>.
- Masushio, Taro. "Yayoi Kusama." *ArtAsiaPacific*, no. 87 (April 3, 2014): 122–122. Ebscohost.
- Maurette, Pablo. *The Forgotten Sense: Meditations on Touch*. Chicago and London: The University of Chicago Press, 2018.

- McAuliffe, Shena. "The Healing Machine." *Conjunctions* 58, Riveted: The Obsession Issue (2012): 316–31. https://www-jstor-org.ezproxy.aut.ac.nz/stable/24517155?seq=1#metadata_info_tab_contents.
- McGuirk, Justin. "Why Is Everything White? Icon (February 2009). <https://www.iconeye.com/component/k2/item/3912-why-is-everything-white>.
- McLerren, Marina. "A Brief History of Wind Chimes." *McLerran Journal*, October 1, 2017. <https://www.mclerranjournal.com/technology-1/2017/9/9/a-brief-history-of-wind-chimes>.
- McQuaid, Matilda, and Philip Beesley. *Extreme Textiles: Designing for High Performance*. New York: Princeton Architectural Press, 2005.
- McQueen, Alexander, and Claire Wilcox, eds. *Alexander McQueen*. New York: Abrams, 2015.
- Meier, Allison. "The Elaborate Healing Machines of Emery Blagdon - Atlas Obscura." Accessed August 14, 2019. <https://www.atlasobscura.com/articles/the-healing-machines-of-emery-blagdon>.
- Merleau-Ponty, Maurice. *Phenomenology of Perception*. Abingdon, UK: Routledge, 2012. <http://ebookcentral.proquest.com/lib/aut/detail.action?docID=1433878>.
- Michael, Mike, Brigid Costello, Julie Mooney-Somers, and Ian Kerridge. "Manifesto on Art, Design and Social Science - Method as Speculative Event." *Leonardo* 48, no. 2 (March 2015): 190–91. https://doi.org/10.1162/LEON_a_00983.
- Moustakas, Clark. *Heuristic Research : Design, Methodology, and Applications*. Thousand Oaks, CA: Sage Publications, 1990. <https://doi.org/10.4135/9781412995641>.
- Muratovski, Gjoko. *Research for Designers: A Guide to Methods and Practice*. London: Sage Publications, 2016.
- Netzer, Dorit, and Minyoung Chang. *Art-Based Organic Inquiry: Creative Expression with Natural Materials*. Los Angeles, CA: Sage Publications, 2016.
- Newberg, Andrew B., and Bruce Y. Lee. "The Neuroscientific Study of Religious and Spiritual Phenomena: Or Why God Doesn't Use Biostatistics." *Zygon* 40, no. 2 (2005): 469–90. <https://doi.org/10.1111/j.1467-9744.2005.00675.x>.
- Noble, Charles H., and Minu Kumar. "Exploring the Appeal of Product Design: A Grounded, Value-Based Model of Key Design Elements and Relationships." *Journal of Product Innovation Management* 27, no. 5 (September 2010): 640–57. <https://doi.org/10.1111/j.1540-5885.2010.00742.x>.
- Noe, Alva. *Out of Our Heads*. New York: Hill and Wang, 2009.
- Norman, Donald A. *Emotional Design: Why We Love (or Hate) Everyday Things*. New York : Basic Books, 2004.
- Nova, Nicolas. *Beyond Design Ethnography: How Designers Practice Ethnographic Research*. Accessed October 18, 2018. http://www.academia.edu/16469761/Beyond_Design_Ethnography_How_Designers_Practice_Ethnographic_Research.
- Openshaw, Jonathan. "Chiharu Shiota's Sculptures Highlight the Invisible Networks That We're Entangled In." *Frame* (February 2, 2017). <https://www.frameweb.com/news/chiharu-shiota-s-sculptures-highlight-the-invisible-networks-that-we-re-entangled-in>.
- Pallasmaa, Juhani. *The Eyes of the Skin: Architecture and the Senses*. Somerset, NJ: John Wiley & Sons, 2013. <http://ebookcentral.proquest.com/lib/aut/detail.action?docID=896076>.
- Paradise, Lee Ann. "Sensory Deprivation." In *Encyclopedia.com*. Accessed September 16, 2019. <https://www.encyclopedia.com/medicine/psychology/psychology-and-psychiatry/sensory-deprivation>.
- Paterson, Mark. *The Senses of Touch: Haptics, Affects and Technologies*. Oxford: Berg, 2007.

- Peck, Joann, and Suzanne B. Shu. "The Effect of Mere Touch on Perceived Ownership." *Journal of Consumer Research* 36, no. 3 (October 2009): 434–47. Ebscohost.
- Peters, Emma. "The Mnemonic Qualities of Textiles: Sustaining Lifelong Attachment." *Craft Plus Design Enquiry* 6 (January 2014): 75–94. Ebscohost.
- Piff, Paul K., Pia Dietze, Matthew Feinberg, Daniel M. Stancato, and Dacher Keltner. "Awe, the Small Self, and Prosocial Behavior." *Journal of Personality and Social Psychology* 108, no. 6 (2015): 883–99.
- Pink, Sarah. *Doing Sensory Ethnography*. London: Sage Publications, 2009. <https://doi.org/10.4135/9781446249383>.
- Plato, and Benjamin Jowett. *The Republic of Plato*. Charlottesville, VA: Electronic Text Center, University of Virginia Library, 1994.
- Potton, Craig, and World of WearableArt Limited. *The World of Wearable Art*. Nelson, NZ: Craig Potton & World of WearableArt, 2006.
- Ragoonaden, Karen. *Mindful Teaching and Learning: Developing a Pedagogy of Well-Being*, 2015. Ebscohost.
- Ravaja, N., V. Harjunen, I. Ahmed, G. Jacucci, and M. M. Spapé. "Feeling Touched: Emotional Modulation of Somatosensory Potentials to Interpersonal Touch." *Scientific Reports* 7 (January 12, 2017): 40504. <https://doi.org/10.1038/srep40504>.
- Rhodes, Colin. *Outsider Art. Spontaneous Alternatives*. London: Thames & Hudson, 2000.
- Roberts, Kevin J., Robert Docherty, and Rui Tamura. *Engineering Crystallography: From Molecule to Crystal to Functional Form*. Dordrecht, The Netherlands: Springer, 2017.
- Rothlauf, Franz. *Design of Modern Heuristics : Principles and Application*. Natural Computing Series. Berlin: Springer, 2011.
- Ruyak, Jacqueline. "Nick Cave in Residence." *Fiberarts* 28, no. 1 (Summer 2001): 28–28.
- S. L. A. "Inclusive Designs That Transmit Haptic Cues Are a Boon to the Visually Disabled." *Frame*, no. 122 (June 5, 2018): 26–30. Ebscohost.
- Sachs, Tom. "Ritual Activity." *Modern Painters* 26, no. 9 (October 2014): 72–76. Ebscohost.
- Salter, Chris, and Andrew Pickering. *Alien Agency : Experimental Encounters with Art in the Making*. Cambridge, MA: The MIT Press, 2015. Ebscohost.
- Sargeant, Anne-Maree. "Tokujin Yoshioka." *Belle*, January 12, 2011, 243–243.
- Scarpaci, Joseph L. "Material Culture and the Meaning of Objects." *Material Culture* 48, no. 1 (Spring 2016): 1–9. Ebscohost.
- Schaewen, Deidi von, John Maizels, and Angelika Taschen. *Fantasy Worlds*. Cologne, Germany: Taschen Books, 2000.
- Schinkel, Anders. "Wonder and Moral Education." *Educational Theory* 68, no. 1 (February 2018): 31.
- Schön, Donald A. *The Reflective Practitioner: How Professionals Think in Action*. London: Routledge, 2016.
- Schumacher, Patrik, Gordana Fontana-Giusti, and Zaha Hadid, eds. *Zaha Hadid: Complete Works*. London: Thames & Hudson, 2004.
- Seo, Jinsil. "Jinsil Hwaryoung Seo: Embodied Immersion: Art/Design/Research," 2019. http://www.embodiedimmersion.com/?page_id=31.
- Seo, Jinsil Hwaryoung. "Aesthetics of Immersion in Interactive Immersive Installation : Phenomenological Case Study," 2011.
- Shiota, Chiharu. "Chiharu Shiota—□□□□." Chiharu Shiota. Accessed October 5, 2019. <https://www.chiharu-shiota.com>.

- Simmer-Brown, Judith. “‘Listening Dangerously’: Dialogue Training as Contemplative Pedagogy.” *Buddhist-Christian Studies* 33 (2013): 33–40. <https://www.jstor.org/stable/43185106>.
- Simon, Richi. “Constructing Happiness: Role of Meaning Making, Constructive Living and Client System.” In *Scientific Concepts Behind Happiness, Kindness, and Empathy in Contemporary Society*, edited by Navi Simon, 156–177. Hershey, PA: IGI Global, 2019. <https://doi.org/10.4018/978-1-5225-5918-4.ch008>.
- Singh, Amitoj. *Managing Emotion in Design Innovation*. Boca Raton: Taylor & Francis, 2014.
- Sismondo, Christine. “Opinion: Weighing the Effectiveness of a Weighted Blanket.” *Toronto Star* (Canada), May 6, 2019. Ebscohost.
- Sissons, Juliana. *Knitwear. Basics Fashion Design 6*. Lausanne: AVA Academia, 2010.
- Skains, R. Lyle. “Creative Practice as Research: Discourse on Methodology.” *Media Practice & Education* 19, no. 1 (March 2018): 82–97. <https://doi.org/10.1080/14682753.2017.1362175>.
- Smith, Isabella. “Psychedelic Ceramics.” *Ceramic Review*, no. 288 (December 11, 2017): 12–16. Ebscohost.
- Springgay, Stephanie, and Sarah E. Truman. “On the Need for Methods Beyond Proceduralism: Speculative Middles, (In)Tensions, and Response-Ability in Research.” *Qualitative Inquiry* 24, no. 3 (March 2018): 203.
- Street, Sean. *Sound Poetics: Interaction and Personal Identity*. New York: Springer, 2017.
- Sullivan, Erin, and Jeremy Hudson. “The Cure That Lies Within: The Mind–Body Connection in Orthopaedics.” *Orthopaedic Nursing* 36, no. 2 (2017): 153–58. <https://doi.org/10.1097/NOR.0000000000000330>.
- T. I. “Workshop of Wonder.” *Frame*, no. 99 (August 7, 2014): 30. Ebscohost.
- Takashi Yamauchi, Jinsil Hwaryoung Seo, and Annie Sungkajun. “Interactive Plants: Multisensory Visual-Tactile Interaction Enhances Emotional Experience.” *Mathematics*, no. 11 (2018): 225. <https://doi.org/10.3390/math6110225>.
- Tang, Yi-Yuan. *The Neuroscience of Mindfulness Meditation : How the Body and Mind Work Together to Change Our Behaviour*. London: Palgrave Macmillan, 2017.
- Teng, H. Henry. “How Ions and Molecules Organize to Form Crystals.” *Elements* 9, no. 3: 189–94. Accessed August 14, 2019. <https://pubs.geoscienceworld.org/msa/elements/article-abstract/9/3/189/137963>.
- Thomson, Linda J. M., and Helen J. Chatterjee. “Well-Being With Objects: Evaluating a Museum Object-Handling Intervention for Older Adults in Health Care Settings.” *Journal of Applied Gerontology* 35, no. 3 (March 2016): 349–62. <https://doi.org/10.1177/0733464814558267>.
- Tihanyi, Tamea. “Fluid Exchange.” *Timea Tihanyi*. Accessed October 8, 2019. <https://www.timeatihanyi.com/fluid-exchange>.
- Toyama, Michiko. “Tokujin Yoshioka.” *Time Magazine* 165 (April 26, 2005): 35–35. Ebscohost.
- Trappi, Robert, Paolo Petta, and Sabine Payr. *Emotions in Humans and Artefacts*. Cambridge, MA: The MIT Press, 2002.
- Tzortzi, Kali. “Museum Architectures for Embodied Experience.” *Museum Management and Curatorship* 32, no. 5 (October 20, 2017): 491–508. <https://doi.org/10.1080/09647775.2017.1367258>.
- Van Rompay, Thomas, and Geke Ledden. “Types of Embodiment in Design: The Embodied Foundations of Meaning and Affect in Product Design.” *International Journal of Design* 9, no. 1 (April 2015): 1–11. Ebscohost.

- Varga, Somogy. "Embodied Concepts and Mental Health | The Journal of Medicine and Philosophy: A Forum for Bioethics and Philosophy of Medicine | Oxford Academic." *The Journal of Medicine and Philosophy: A Forum for Bioethics and Philosophy of Medicine* 43, no. 2 (April 2018): 241–60. <https://doi.org/10.1093/jmp/jhx040>.
- Vi, Chi Thanh, Damien Ablart, Elia Gatti, Carlos Velasco, and Marianna Obrist. "Not Just Seeing, but Also Feeling Art: Mid-Air Haptic Experiences Integrated in a Multisensory Art Exhibition." *International Journal of Human-Computer Studies* 108 (December 1, 2017): 1–14. <https://doi.org/10.1016/j.ijhcs.2017.06.004>.
- Washington, Haydn. *A Sense of Wonder Towards Nature: Healing the Planet Through Belonging*. Abingdon, UK: Routledge, 2018. Proquest eBook Central.
- Webb, Hillary S. "Communitas: The Anthropology of Collective Joy, Edith Turner." *Anthropology of Consciousness* 24, no. 1 (2013): 82–84. <https://doi.org/10.1111/anoc.12005>.
- Westoby, Peter, and Gerard Dowling. *Theory and Practice of Dialogical Community Development: International Perspectives*. London: Routledge, 2013. <http://ebookcentral.proquest.com/lib/aut/detail.action?docID=1172911>.
- Xuesong, Yang, and Cheng Chen. "Emotional Interaction in Product Design." 9th International Conference on Computer-Aided Industrial Design and Conceptual Design, CAID/CD 2008, 51. <https://doi.org/10.1109/CAIDCD.2008.4730517>.
- Yamamura, Midori. Review of *Infinity Net: The Autobiography of Yayoi Kusama*, by Yayoi Kusama and Ralph McCarthy. *Woman's Art Journal* 33, no. 2 (2012): 44–46. <https://www.jstor.org/stable/24395289>.
- Yanagisawa, Hideyoshi, and Kenji Takatsuji. "Expectation Effect of Perceptual Experience in Sensory Modality Transitions: Modeling with Information Theory." *Journal of Intelligent Manufacturing* 28, no. 7 (October 1, 2017): 1635–44. <https://doi.org/10.1007/s10845-015-1096-7>.
- Zachry, Mark. "An Interview With Donald A. Norman." *Technical Communication Quarterly* 14, no. 4 (October 2005): 469–87. https://doi.org/10.1207/s15427625tcq1404_5.
- Zhang, Chenyan, Andrew Perkis, and Sebastian Arndt. "Spatial Immersion versus Emotional Immersion, Which Is More Immersive?" 9th International Conference on Quality of Multimedia Experience, QoMEX, 2017. <https://doi.org/10.1109/QoMEX.2017.7965655>.
- Zwirner, David. "Yayoi Kusama: Festival of Life" Artsy. Accessed October 8, 2019. <https://www.artsy.net/show/david-zwirner-yayoi-kusama-festival-of-life>.

