

School of Media, Creative Arts and Social Inquiry

**The Haptic Dimension of Ceramic Practice:
Ways of Knowing**

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Declaration

To the best of my knowledge and belief this thesis contains no material previously published by any other person except where due acknowledgement has been made.

This thesis contains no material which has been accepted for the award of any other degree or diploma in any other university.



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Abstract

My research seeks to unravel how an influx of multiple streams of tacit knowledge and sensory awareness has impacted upon an Australian approach to ceramic art making. Through a combination of creative practice and exegesis, I consider how experiential knowledge, amassed over time by observing, replicating and doing, built a visual, cognitive and sensual vocabulary that has become embodied into a visceral form of making: a form of making and awareness that entered Australian ceramic studio practice from China, Japan, Korea and Britain primarily during the 1940s–1960s.

The writings of John Dewey, Bernard Leach and Michael Polanyi provide an historical foundation for the investigation into academic scholarly positions concerning tacit, experiential and sensory awareness. In addition, contemporary theorists, including Richard Sennett and Harriet Hawkins, reveal how knowledge acquired through observation, illustration and participation is acquired through the act of doing.

I examine the work of key Australian ceramists Gwyn Hanssen Pigott and Les Blakebrough to demonstrate how experiential learning entered and provided a foundation for Australian ceramic arts. The results of this investigation underpin my creative studio research which examines ceramic skills, techniques and methods through the medium of porcelain to evoke an essence of the process of making, with reference to cross-cultural positions, and traditional ceramic influences that are evolving in contemporary Australian ceramic practice.

Drawing upon my experiential knowledge gathering in Japan, China, Finland, Canada, Denmark and Australia, the research explores central concepts of tradition, and *experiencing* within the making, along with translucency, atmospheric light, and textures. The resultant exhibited works reveal haptic knowledge acquired over the duration of the investigation.

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Introduction

In my studio, I am surrounded by groups of images depicting exquisitely refined artworks created by ceramic masters. While I continue to grasp the complexities of ancient forms of wheel-thrown ceramic art, each of the images provides infinite stimulus for my studio practice. In my attempts to learn the ceramic skills of past practitioners evident in the works of my peers, I formulated a learning routine of repetitious practice, reproducing similar forms over and over again until the haptic sensations of making became familiar and intuitive. Over time, my rhythmic, habitual practice began to give rise to a silent intangible knowing I found difficult to describe or fully understand.

Curious to understand this awareness further, I began investigating the ceramic learning developments of Australian artists Les Blakebrough and Gwyn Hanssen Pigott. Examining both artists, I was able to identify a training method of first-hand experiential instruction in the form of apprenticeships and residencies in established studios. At the core of their apprenticeships was a hands-on learning, guided by observation, imitation and repetitious practice. Broadening the investigation revealed a significant lineage of ceramic influences weaving back to British potter Bernard Leach and his seminal text, *A Potter's Book*, 1940. Central to Leach's knowledge is a Zen-like philosophy set in the traditional Japanese master-apprentice system: learning by observing and imitating a master through repetitive practice. Additionally, Leach's paradigm entails a presence and silence of the mind, an aesthetic standard and a mind-body unity of the 'potter-artist'. The ceramic premise introduced by Leach offered Australian ceramic artists, particularly during the 1940s–1960s, a unique way of thinking concerning studio-based ceramic practice.

While simultaneously uncovering Leach's philosophical premise, in 2003 I spent time as an exhibition research assistant in Tokyo, interviewing¹ artists in various regions of Japan. The Japanese practitioners were from diverse disciplines, however the majority worked in ceramics. Throughout the interviews, the artists articulated a holistic approach to creative practice informed by a profusion of knowledge passed down by generations of masters. This holistic methodology was particularly evident in Takumi Sato's and Shigeo Shiga's ceramic practices and echoed the non-verbal, innermost knowing that was beginning to emerge in my own ceramic learning.

Arising out of these encounters was a consideration of the importance of sensory awareness in my own practice. Psychologist Robert W. Howard describes sensory awareness as the system connecting people to their environments and the external world (Howard 1995, 137). Philosopher John Dewey (1934 & 1939) refers to the senses as the means of gathering knowledge through the body to make contact with the physical world. In the context of ceramic practice, I define sensory awareness as a learning trajectory via the senses: seeing, touching, hearing, smelling and tasting. Realising the crucial roles that sight and the haptic sense of touch occupy in ceramic practice became a crucial step in forming this awareness. It was through the eyes and hands, touching and observing in making and doing, that a vital nexus began to emerge, thus shaping my eye-hand coordination. Additionally, within the scope of ceramic learning is the experiential method of skill gathering through observation, imitation and replication that is understood as tacit knowledge. In linking sensory awareness with tacit knowledge, it became important to understand that tacit knowledge is not a separate entity to sensory awareness. Instead, the combination of observation, imitation and replication (tacit knowledge) as well as haptic and eye-hand coordination (sensory awareness) emerged as a crucial learning methodology.

By pairing Leach's teachings with a personal awareness gained from experiences evolving in my own practice, my exegesis defines a theoretical framework for a specific sensory, experiential and tacit approach to studio-based ceramic practice in Australia. I establish connections between theorists, artists and my studio research while focusing on my body's sense-based responses that occur during making and doing. I will disclose the lineage of sensory awareness and tacit knowledge

¹ The interviews were a component of the 3 *Elements* exhibition that formed part of an educational package produced for the Western Australian Department of Education.

gathered via my lived experience as a ceramic artist in Australia. While my ceramic work follows Leach's model of thinking and doing, the corresponding creative practice examines residencies as sites for focused learning to disclose cross-cultural and creative responses to place.

The theoretical research examines Leach's philosophical proposition alongside the ideas of philosopher John Dewey, writer Philip Rawson and philosopher Michael Polanyi to provide a historical foundation for the investigation into academic scholarly positions of sensory awareness and tacit knowledge. Dewey's thoughts on fusing material awareness and experiencing within the making via the senses offer insight into this connection more generally, while Rawson's writing is cited to offer direct comprehension of sense use in ceramic practice. Polanyi, who lays claim to the phrase 'tacit knowledge' in his book *The Tacit Dimension*, 2009, is analysed to shed comprehensive insight into skill knowledge development that is otherwise difficult to explicitly articulate. Additionally, ceramist and academic Damon Moon's 2006 doctoral thesis, 'In the Beginning was the Word: Bernard Leach and Australian Studio Pottery from 1940-1964', provides comprehensive analysis concerning Leach's substantial impact on Australia's burgeoning ceramic practice during the 1940–1960s.

The creative component of this research forms two equally important streams. The first stream relates to the process of acquiring skills to shape and create translucency in porcelain forms which provoked my interest in the use of the senses during ceramic learning. The second stream is associated with the qualities of the purity and translucency of porcelain that have become a crucial component of my studio-based methodology. Through my practice, by way of the characteristics of porcelain, I aspire to capture and convey atmospheric light, hues, textures and markings, reflecting site-specific locations. The fine, pure white clay particles absorb light and at the same time reference the stark, bleaching summer daylight of Western Australia. Working with the translucent properties, I create paper-thin surface areas transmitting slithers of glaze, soft hues and shadows akin to cloud-filtered light. As such, this ceramic learning strategy has become a pivotal research focus underpinning the creative approach and ongoing developments in my practice linked to this inquiry.

The decision to work with Korean, Japanese and Chinese pottery stems, firstly, from the influences underpinning Leach's notion of the standard in pottery and ceramics. Secondly, my early learning inspired by Hanssen Pigott's and Blakebrough's vessels often reflect East Asian pots, particularly the rice vessels of Korea. Thirdly, upon viewing and using ceramics while in China and Japan I gained insight into not only the aesthetic qualities of these handmade pots, bottles and jars, but also the ergonomics of these traditional forms and their relevance in current Australian ceramic practice.

The ongoing creative, sensory and tacit awareness occurring throughout this research was expedited during a series of artist

2. Prior to colonisation, Indigenous Australians held many uses for clay including for medicinal purposes - curing a range of gastro-intestinal ailments, curing diarrhea and absorbing toxins. Clay also held great value as a trade commodity along the Aboriginal island trade paths. Importantly, clay enabled Aboriginal people to expand their diet to include toxic plants without triggering serious illness or death. Additional uses for clay included ochres, kaolin, white ochre and pipeclay as an undercoat for body painting during mourning ceremonies and conveying sorrow. While attempts to introduce Indigenous Australians to ceramics through established Sydney-based potteries during the 1940s, this aim was not realised until the 1960s, through the Hermannsburg Lutheran Mission. The mission was established in 1877 on the ancestral land of the Western Arrernte people (130 kilometers south-west of Alice Springs), by German missionaries A.H. Kempe and W.F. Schwarz along with fellow Lutheran travelers. Although Hermannsburg gardener, Victor Jaensch, had limited pottery knowledge he became the first instructor to introduce pottery to the indigenous men living at the mission (Nicholls 2013, 127-130). Instructed by Jaensch the students made miniature handmade figures which were then fired in a kiln also built by Jaensch. Jaensch remained at the mission from 1960 – 1966 establishing pottery within the creative training at Hermannsburg during this time. Limited clay making occurred after 1966 at the mission until 1990 when Naomi Sharp commenced as the ceramic coordinator (Nicholls 2013, 131& 134).

residencies I undertook while exploring experiential learning methods first-hand. The residencies included the International Masters Workshops 2009 in Jingdezhen, China; three months in Fiskars, Finland, in 2011; one month in Canada, 2012; and six weeks in Tolne, Denmark, in 2013. The specific parameters of the respective residencies have had a lasting effect on my approach to making. Each experience reinforced a heightened understanding of the relevance, value and influence this form of experiential knowledge holds within ceramic practice. Thus the exposure and learning method augmented my interest. I quickly realised that the brief pockets of time in each new location meant setting strict working schedules to address my aims, experiential learning and exhibition outcomes. Furthermore, moving from the bright, sun-drenched light of Western Australia to the duller light of the northern hemisphere had an unexpected impact on my working methodology. Due to the diffused and hazy light of the northern hemisphere I found it difficult to see the moving profile as accurately as I could in the clarity of the bright Australian light. Therefore, I struggled to produce profile lines as accurately as I had created at my home in Western Australia. Instead the outlines had slight undulations that I felt detracted from the overall aesthetic of each vessel. This difficulty disrupted my usual eye-hand coordination and enforced a shift in my sense use. Under these conditions, I became attuned to the haptic sense of touch to guide my making. This realisation ignited further theoretical investigation and creative responses concerning touch sense in ceramic making.

In developing the exegesis and creative responses encompassing this investigation, it is important to define the terminology used in articulating key concerns surrounding Leach's philosophical premise. Firstly, while Leach does not explicitly use the term 'sensory awareness', and his methods at times are self-contradictory, nonetheless his ideas about a 'ceramic standard', human expression, and apprenticeship training gave rise to a unique philosophical stream of ceramic thinking and making. Therefore, the term 'sensory awareness' is used in this exegesis to explain ceramic skill knowledge gathered through the senses. For the ceramist, the senses, in particular touch and sight, are essential, for without the senses, ceramic learning could not begin. Secondly, to synthesise both my practical and theoretical positions throughout this investigation, I consider these ideas through my position as a ceramist and educator, along with my skill learning and knowledge and sensory awareness, juxtaposed with past and contemporary ceramists and scholarly theory. In describing felt sensations, I will interchange between both haptic and touch sense in a similar vein as theorists such as Juhani Pallasmaa and Howard Risatti. Equally, when addressing ceramic makers, I will alternate between terms used by writers and makers including Leach, Michael Cardew, Rawson and Mari Sorri as 'pottery', 'potter', 'potter-artist', 'ceramics' and 'ceramist' throughout the exegesis.

A considerable challenge that arose during this research was finding ways to articulate the silent, non-verbal forms of sensory awareness and tacit knowledge that drive the investigation. To overcome this struggle, I documented my ideas as a series of thoughts and used this as a strategy to link sensations experienced during the making with findings sourced from established theoretical concepts. This method includes noting feelings experienced during making when working away from my usual studio space, and recording my understanding of the pressure and impressions occurring with the increased scale of work. I also carried small visual diaries to document written notes, reflections, ideas, quotes, and workshop information and comments. Documenting work in progress, textures, markings, light, reflections, visual information and thumbnail sketches also informed my series of thoughts.

The key objectives within this enquiry are to disclose the origins of sensory awareness as well as tacit and embodied knowledge in studio-based ceramic practice, and to reveal how ceramists in Australia have worked within this area of knowledge. The aim is to seize a deeper understanding of how experiential ceramic skill knowledge manifests as a holistic, non-verbal learning method.

Of particular significance, I disclose, by way my own ceramic learning experience and skill development, how, over time and through repetitive practice I have established a way of filling the between Leach's explicit and implicit ceramic skill learning

and knowledge. Through critical discussion concerning existing theory and practice, I identify the implication of the gap in written instruction and how this gap impacts on ceramic learning generally. From this finding, I hope to position the vital importance of sensory awareness as well as experiential, tacit and embodied knowledge within the discourse of ceramic learning. Examining this valuable approach to ceramic skill learning is essential as it is a methodology that, I argue has been largely overlooked in the narration of Australian ceramic history.

The aim of this research is to examine sensory awareness, tacit and experiential knowledge, rooted in traditional Japanese pottery training, to show how this specific approach to ceramic learning entered Australian studio-based practice and why it continues to hold relevance. I consider how experiential knowledge, amassed by observing and replicating, built a visual, cognitive and sensual vocabulary, which became embodied as a visceral form of making that entered Australia from China, Japan, Korea and Britain during the 1940s–1960s. The results of the investigation underpin my creative research which examines ceramic skills and methods through the medium of porcelain to evoke an essence of the process of making, cross-cultural positions and traditional ceramic influences in ceramic practice in Australia.

Chapter one, 'Ways of Knowing', introduces Leach's philosophical concept with reference to studio-based ceramic practice. In order to unravel his distinctive premise, the theoretical enquiry draws attention to the significant impact Leach's ideas have had in the West generally, and in Australia particularly where potters were primarily without a ceramic history² of their own. Drawing on the concepts outlined by Leach, I aim to define a connection between his theories, and Mari Sorri's ideas of tacit knowing in thinking and making, and Edmund de Waal's studies identifying discrepancies in Leach's hypothesis. Both Grace Cochrane's and Damon Moon's research concerning Leach's presence in Australian ceramics are analysed to identify how experiential ceramic learning has evolved in studio-based ceramics in Australia since 1940. Sensory awareness is touched on, and linked to, Leach's views through Australian artists Ivan McMeekin, Peter Rushforth, Gwyn Hanssen Pigott and Joan Campbell. A Leach-induced zeitgeist spanning generations of Australian ceramics is examined to disclose the impact Leach's theories had on returning post-war soldiers and personnel in search of new directions.

The practical impact of Leach's influence in Australian ceramic practice is examined through artists Gwyn Hansen Pigott and Les Blakeborough to demonstrate how experiential learning entered and established a foundation for studio-based ceramic practice. Central to forming this understanding, I examine Leach's cross-cultural and lived experiences in Japan, and visits to China and Korea underpinning his philosophical premise. In this chapter, I argue Leach's philosophical approach – specifically, the technical, practical and cognitive knowledge – enabled Australian potters to establish a ceramic history of their own. Leach's theories hold substantial bearing on this research.

Through my own learning experiences, I reveal how Leach's experiential pottery training in Japan resonates with and underpins my ceramic learning via observation, imitation and replication. My understanding of sensory awareness is briefly outlined as a silent, intangible knowing evolving through the senses during repetitious making occurring during my own practice. Contradictions arising in Leach's theory are examined with reference to de Waal's critique of Leach's hypothesis and the practice he maintained. In concluding this chapter, I examine the Leach-influenced zeitgeist across generations of Australian ceramicists which is discussed through the studio practice of Peter Rushforth.

Chapter two, 'Tacit Knowing', examines Leach's traditional Japanese pottery training under the master-apprenticeship system to demonstrate how his skill learning via observation, imitation and replication – tacit knowledge – formed the basis of his ceramic knowledge. Leach's traditional Japanese pottery training is linked to Polanyi's concept of tacit knowledge as a means of examining the interlaced threads forming Leach's philosophical position. As Polanyi states, tacit knowledge is '... the outcome of an active shaping of experience performed in the pursuit of knowledge' (Polanyi 2009). Hence, this inquiry reveals the nexuses in Leach's ceramic apprenticeship and Japanese residencies. Through related analysis, I identify how tacit knowledge has framed my ceramic practice. I will expand on my own learning and personal experience to disclose a

significant gap in Leach's explicit written ceramic knowledge, skill learning and development.

Chapter three, 'Sensory Awareness', examines the sensory body, and the relationship between the senses used in everyday activities to identify how this awareness intersects with ceramic practice. The investigation takes into account the writings of Dewey and academic author Polly Ullrich to distinguish the essential function haptic/touch and sensory awareness hold within creative practice. By considering my own awareness, I examine notions of a synthesis of mind, body and sensory learning to disclose my body's responses to these crucial elements occurring in practice. I establish a connection between tacit knowledge and sensory awareness as a learning trajectory, and link this to Leach's concept of the mind-body unity, 'potter-artist', human expression and embodied knowledge.

Although their terminology differs to Leach's philosophical expression, current theorists offer a broader perception on streams of thinking resonating with ceramic practice and ways of knowing. Academic writer Estelle Barrett provides insight concerning artistic research informed by lived experience, materials and objects as a means of inducing viable knowledge creation. Artist and writer Barbara Bolt's views on a specific type of knowing occurring during the 'handling' of materials during the making share a link with my awareness of a silent inner knowing emerging during ceramic practice. Additionally, academic and ceramist Mari Sorri (1994) contextualises my understanding of knowing mobilised during making and doing as an awareness understood by the body, although it is not possible to accurately or explicitly describe such awareness (Sorri 1994, 15).

A vital component of chapter three draws on my studio research and traces the senses I utilise in my making and doing. In my attempt to identify and comprehend sense awareness occurring in practice, I reflect on my actions, the haptic sense of touch, and eye-hand coordination during the making process. This method not only assisted my cognisance of porcelain's nuanced subtleties, but also gave rise to sense use and knowledge informing my skill learning. Over time, the sensorial mindfulness guiding my developments became instinctive and embodied knowing. While this intangible knowing defies articulation, it loosely takes hold as a practical and cognitive method of absorbing and developing ceramic knowledge – a knowing I have come to understand as sensory awareness.

Chapter four, 'Residencies: Sense of Place', discusses lived experiential learning and sensory awareness occurring during residencies. I examine first-hand, sensory, tacit and cross-cultural stimulus occurring while living and working in residencies alongside Leach's apprenticeship and lived encounters when residing in Japan.

Drawing on two key residencies, in Finland in 2011 and Canada in 2012, I reflect on how my senses allied with place, atmospheric light, and cross-cultural stimulus to explore the ways in which these experiences have shaped my ceramic practice and the resulting creative outcomes. The investigation considers Harriet Hawkins's concept of residencies as 'creative geographies' to inform the underlying social implications of this learning experience. Moving from my familiar working site enforced drawing upon existing knowledge and rapidly soaking up elements of thinking and doing. My knowledge developments became rapid out of necessity, and also because I was more receptive to the type of learning offered by the focused, designated working time, and diminished distraction from daily commitments connected to home and teaching. The learning experience was further enhanced by the cross-cultural stimuli unique to the experiences within each residency, which offered insight into long-held traditions and techniques, knowledge and thinking in relation to creative possibilities.

Moreover, working in unfamiliar locations and cultures evoked questions concerning my sense of place, a feeling driven by the need to become cognisant of new locations via the senses. Artist and academic Lesley Duxbury suggests this awareness is 'not only the physical act of looking but also its relationship to perception, of using the senses to acquire information about one's surroundings' (Duxbury 2008, 17). Duxbury's point echoes my tangible lived experiences of place: specifically, the sensory information provided by the natural and built environments while navigating unfamiliar residency

locations via sight, touch, smell and sound. My knowledge of place is predominantly gathered by walking, which lends itself to a sensorial awakening as I manoeuvre in and around each new locality. This perceptive method of gleaning knowledge of sites often filters through my senses, and emerges in my work. In this context, walking is a sensory, rhythmic practice which, I believe, occurs because as writer Rebecca Solnit states, '[W]alking itself is the intentional act closest to the unwilled rhythms of the body, to breathing and the beating of the heart' (Solnit 2000, 5). These are similar rhythms I associate with ceramic wheel-throwing, particularly during repetitious practice.

The works presented in this research display specific qualities that help trace the major themes in my research on haptic, tacit and sensory awareness, light, and cross-cultural stimulus filtering into Australian ceramic studio practice from China, Japan and Korea. Blending these influences, the vessels I produced are based on the traditional Korean rice bowl, Japanese tea bowls and Chinese jars.

The resultant exhibited works reveal haptic knowledge acquired over the duration of the investigation, beginning with the first vessels showing the initial challenge of coming to terms with the northern light of Finland (In the Beginning – Finnish Series: 1 – 3, 2011) and the felt heaviness of clouds and damp troposphere of Canada (Canada; Northern Light Series: 1 – Medicine Hat, 2 – Medicine Hat, 1 – Medalta & Saskatchewan, 2012).

In presenting these works, I aim to convey the lightness of the Australian responses, and the heaviness of the northern hemisphere atmospheres in which the vessels were made. To indicate the subdued light, the works in the Canadian and Finnish series were developed without translucency. These works are juxtaposed with the sweeping cloud movement, brilliant light and hues of the vast, wide skies, and natural light over the built environment, sea and landscapes surrounding Fremantle, Western Australia.

Continuing with the fusion of traditional cross-cultural influences entering Australia, the bowls reference customary Asian serving dishes, albeit larger in scale, marginally heavier for functional use, and with slightly curved lips to reduce spillage. By basing the jade coloured glaze on traditional Chinese glazes, this colour also references the deep green hue of the seawater of the Fremantle harbour. The tea bowls have been made and shaped to reflect the 'cupping' of hands around the bowls, enhancing the fit within the hands of the holder.

This research project has become the genesis of my ceramic practice - a practice based on learned knowledge via sensory awareness, observation, imitation and replication gained through tacit learning; an awareness that has become pivotal to my creative approaches. Examining Leach's critical and theoretical perception offers a comprehensive understanding of the impact his ceramic studio practice method held particularly in 1940–1960s Australia. By way of this research, I seek to position sensory awareness, tacit knowledge and experiential learning within contemporary ceramic discourse. Through personal creative enquiry, I strive to grasp the depth of Leach's notion of the potter-artist's mind-body fusion, human expression and the 'ceramic standard' he embraced and imparted on Australian ceramic history and culture.

Chapter One

Ways of Knowing

From both theoretical and practical positions, I consider how experiential knowledge, amassed over time by observing, replicating and doing, builds a visual, cognitive and sensual vocabulary that becomes embodied as a visceral form of making. It is this specific way of making and awareness that entered Australian ceramic studio-based practice from China, Japan, Korea and Britain, primarily during the 1940s to 1960s via British ceramist Bernard Leach. Leach's philosophical approach to studio-based ceramic practice was significant for Australian ceramists as they were largely without a ceramic history of their own.

This chapter considers Leach's theories of the potter-artist's mind-body unity, human expression, cross-cultural references, and a ceramic standard, as well as the Zen-like silence of the mind to explain his approach to ceramic practice. I will demonstrate how experiential learning entered, and provided a foundation for ceramic arts in Australia through artists Gwyn Hansen Pigott, Les Blakeborough and Ivan McMeekin. Expanding on experiential learning, I identify how Leach's ideals filtered into the apprenticeship system through McMeekin, the director and ceramist at Sturt Pottery. Leach's theories and experiential pottery training are analysed in connection with Mari Sorri's ideas concerning tacit knowing in ceramic practice. In concluding this chapter, I examine the Leach-inspired zeitgeist spanning generations of Australian potters which is discussed through the studio-based practice of Peter Rushforth.

In 2016, my then three-and-a-half-year-old grandson was relaying a discussion he had earlier with his Japanese grandfather. Whilst looking for trinkets along a trekking pathway in Tokyo, he said, 'Jiji say we must look slowly so we can find the treasure'. It is in looking slowly that I examine a form of knowing I have come to understand through studio-based ceramic practice.

As I attempt to articulate this knowing, it seems that text, lexicons and syntax³ have limited capacity to accurately convey this form of awareness I have come to understand through studio-based ceramic practice. It is a knowing that breathes and sees, a knowing deeply embedded within my being. It is a knowing that is familiar when it appears; a felt sense of presence that is not tangible, though almost so.

Over many years, I have come to realise this intangible presence of knowing by observing experienced ceramic practitioners and replicating their techniques. In reproducing similar forms over and over again, this indefinable knowing began to emerge as a practical and cognitive method for understanding and developing ceramic skills – a specific type of awareness I now recognise as sensory awareness. Russell T. Hurlburt, Christopher L. Heavey and Arva Bensaheb explain such awareness as a phenomenon of inner experience, a commonly occurring internal sensation that transpires largely unnoticed (Hurlburt 2009, 231). In this chapter, I use the term 'sensory awareness' to identify a process of learning through the senses, along with the process of becoming cognisant of how I use my senses. I have formed this understanding by considering the role the senses – seeing, hearing, smelling, tasting and touching – play in the transference of practical and cognitive knowledge within my studio practice.

³ Anthropologists suggest that crucial to every human community is a symbolic system programmed in language, assisted by spoken understanding whereby 'sensory experience' is arranged into ongoing 'shapes and patterns' which are then perceived by the inhabitants of their environment. Systems are unique to each community, as Ingold states, 'the members of each will perceive different things, even though the physical reality with which they are confronted may be one and the same' (Ingold 1996, 114).

While I am aware that sensory awareness is something unique to each artist, and is at times largely indescribable, nonetheless I believe sensory awareness within practice is familiar for many Australian ceramists, whether knowingly or unknowingly. Curious to understand more of this inner experience, I began investigating the background and studio methods of ceramic practitioners. This analysis included looking at two artists seminal in establishing my interest in ceramic practice: Gwyn Hanssen Pigott and Les Blakebrough. Examining both artists uncovered a lineage of influences leading back to Leach.

Leach was instrumental in the formative years of ceramic practice in Australia. *A Potter's Book*, 1940, introduced a philosophical approach to ceramic making. This introduction had a momentous impact on his Australian audience as they were largely without a ceramic history of their own. Accordingly, writer Damon Moon in his 2006 doctoral thesis, 'In the Beginning was the Word: Bernard Leach and Australian Studio Pottery from 1940-1964', notes that for Australian ceramists, Leach's '... *A Potter's Book* is arguably the most influential book published about craft [with particular reference to ceramics] in the twentieth century' (D. Moon 2006, x).⁴

Background:

In untangling Leach's philosophical approach to ceramic practice, it is important to note that while a British citizen, he was born in Hong Kong (1887) spending the first ten years of his life between Hong Kong, Japan and Singapore before travelling to school in England in 1897. Upon completion of his education at the Beaumont Jesuit College near Winsor, England, the Slade School of Art, London (1903) and the London School of Art (1908), Leach moved to Japan in 1909 for the first time (Leach 1978, 311 & 312). Therefore, it is possible to determine that his knowledge was underpinned by his earlier lived East Asian cultural encounters. And equally his pottery teaching stems from a Zen-like philosophy of a holistic, simple everyday way of living (Nagatomo 2019, Paragraphs 1 & 3), adapted from traditional Japanese ceramic practice while living in Japan and training under the master-apprentice system. This approach involved learning by observation, imitation and replication, and formed the foundation of his knowledge.

In his attempt to determine a holistic way of ceramic making, Leach drew on his lived experiences including the Zen⁵ concept of mindfulness, which focused on being present in the moment, devoid of internal chatter and being able to silence the mind. As academic Shigenori Nagatomo outlines, practitioners celebrating Zen engage '... with a stillness of mind, a life of tending toward the concrete thing-events of everyday life and nature' (Nagatomo 2017b, paragraph 1). These ideas are inherent in, and guided through, the Tea Ceremony as an agent for 'harmonizing life and beauty...' and form the spirit of Leach's aesthetic perception (Yanagi cited in Leach 1940, 8). In terms of the Japanese Tea Ceremony, *Cha-no-yu*⁶, Yanagi wrote, this ritual 'may be defined as the aesthetics of actual living, in which utility is the first principle of beauty' (Yanagi 1940, 8).

These same values noted by Yanagi of 'harmonizing life and beauty' cross over, forming a holistic way of being for the potter. According to Rushforth, these specific ideologies took hold in Australia's emerging ceramic discourse:

⁴ Damon Moon refers to *A Potter's Book* as containing valuable technical information, although it is Leach's philosophical perspective in chapter one, 'Towards a Standard', that is primarily the focus of this research.

⁵ In this instance I am referring to the aspect of Zen philosophy that acknowledges a 'holistic perspective in cognition' and 'a stillness of mind' (Nagatomo 2017a, 1).

⁶ *Cha-no-yu* is the hot water used for tea (D. Moon 2006, 2). However, Yanagi terms *Cha-no-yu* as the Japanese Tea Ceremony where principles of 'harmonising life and beauty...' are important. Yanagi further claims the Tea Ceremony 'may be thought of as an aesthetic of the practical arts' (Yanagi 1940, 8).

There are values that transcend the activity of making objects, such as a search for beauty and the validity of one's work in relation to the community in which one lives.... (The) notion that pottery could evoke deep human emotions and develop exquisite aesthetic qualities are [sic] not commonly held in the West . (Rushforth cited in Keefer Bell 2003, 244)

Within this aesthetic paradigm, Leach advocated working towards a heightened 'standard'. Moreover, Leach focused on 'the standards of craftsmanship', traditions and hand-made ceramic objects since lost to mass production throughout England, rather than the artisan's lifelong commitment and dedication to 'age-old traditions' built over centuries (Leach 1940, 4). While Leach acknowledged machine production offered low-cost, accurate original precision, this very mechanical duplication he claimed, excludes 'choice, variety and pleasure' resulting in pots lacking life (Leach 1978, 127). These are qualities Leach believed evolved via the artisan's lifelong commitment and dedication to 'age-old traditions' built over centuries (Leach 1940, 4). He proposed that 'beauty will emerge from a fusion of the individual character and culture of the potter with the nature of his [sic] materials – clay, pigment, glaze, and his [sic] management of the fire ...' (Leach 1940, 18). The standard he maintained exemplified simplicity and tradition as essential principles of the work (Tappere 2003, 97). In assessing the standard, philosopher and mentor to Leach, Soyetsu Yanagi⁷ specified that 'aesthetic appreciation is something learnt and is dependent on experience' (Tappere 2003, 97). Leach believed that while there is some acknowledgement of an emerging 'criterion' consistent with the unwritten tacit values appraising art, literature and music, yet the same serious judgement is not conveyed to the realm of pottery (Leach 1978, 129).

In judging a pottery standard Leach claimed only a small number of people in Britain considered ceramics an art form. Moreover, of the rare few who do, the 'majority have no criterion of aesthetic values which would enable them to distinguish between genuinely good and the meretricious' (Leach 1940, 1). Such elements of a 'criterion', he states, stem from ceramic traditions, in particular, the traditions of Asia⁸ Reinforcing this position, Leach wrote about the exemplars of a superior measure: '[I]t is obvious that the standards of the world's best pottery, for example, [are] those of the T'ang and Sung periods in China and the best of the Ming, Korean celadons⁹ and Ri-cho, early Japanese tea-master's wares ...' (Leach 1940, 4)

Leach considered the examples¹⁰ outlined above to be exceptional because of the cohesive 'human expression' evident in the craftsmanship of this pottery (Leach 1940, 4). He uses 'human expression' to refer to work made by the potter's hand rather than industrially made work (Leach 1940, 4). Hence, as a guide to superior standards and human expression, Leach advised the studio potter to examine the finest pottery from previous eras, and to '... accept the Sung standard without hesitation' (Leach 1940, 5).

⁷ Within this research I have found that Soyetsu Yanagi's name is spelt in two ways; Soetsu and Soyetsu in the introduction of *A Potter's Book*, 1940. Yanagi (1889-1961) was a Japanese Philosopher, and Director of the National Folk Museum, Tokyo, Japan, from 1936, and Intellectual leader of the Japanese *Mingei* craft movement from the late 1920s–1930s (Lucken 2012, 2).

⁸ Leach proposed that the superior qualities evident in the work of Chinese potters were achieved through the 'use of natural colours and textures in clays, the quality of their glazes (e.g. the Ying-ching and Tz'ou Chau families) the beauty and vitality of their well-balanced and proportioned forms ...' (Leach 1940, 5). Furthermore, the standard applied by Leach in *A Potter's Book* is the standard set by the T'ang, Sung and Ming periods of China, and Korean celadon ceramics.

⁹ Celadon is '[a] high-fired, grey-green glaze often used over incised or carved decoration' (Lane 1995, 215).

¹⁰ The superior standards offered by Leach also included early Persian, Syrian, Hispano-Moresque, German Bellarmines, and some Delft and English slip-ware' (Leach 1940, 4).

The model of ceramic practice Leach championed offered Western ceramists new ways of thinking and doing. For work created wholly by 'one hand one brain', Leach argues, retains evidence of the critical element of 'human activity', thus elevating this creative approach to a superior aesthetic category, that of the 'potter-artist'¹¹ (Leach 1940, 1 & 2).

In characterising the potter-artist, Leach states,

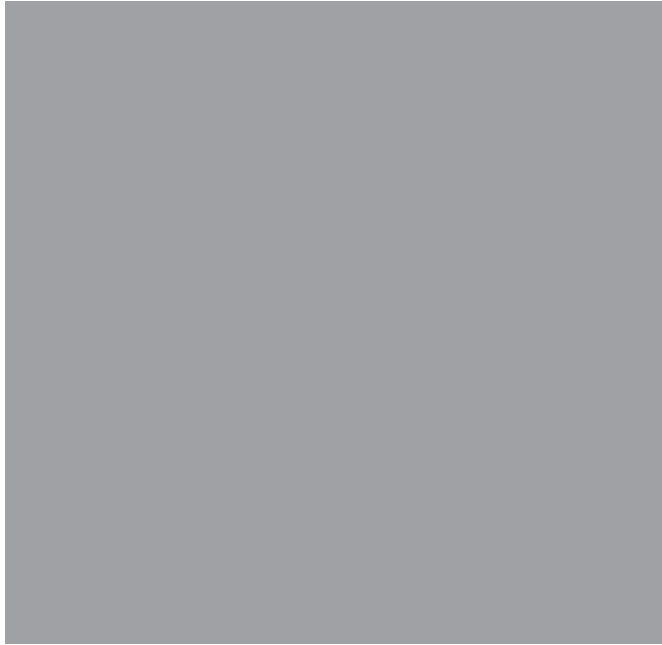
[G]ood hand craftsmanship is directly subject to the prime source of human activity, whereas machine crafts, even at their best, are activated at one remove – by the intellect. No doubt the work of the intuitive craftsman would be considered by most people to be of a higher, more personal, order of beauty
(Leach 1940, 2)

These quotes identify Leach's aversion to industrially made pottery and his reasoning that machine-made work is 'activated at one remove' and therefore devoid of 'intellect' because the designer and maker are no longer one. As a consequence, Leach elevates the value and qualities of pottery made by the hand and mind of the 'craftsman' or potter-artist to the highest echelon. It is here I reason that Leach frames his critical hypothesis of the superior unity of mind and body in the potter-artist.

While the unified body and mind is an essential aspect of Leach's philosophical approach to making and doing, little evidence or explanation is offered to grasp how the intellectual-mind and hand/body unify. Instead, his discussion surrounding this concept only indicates how a unity may occur, therefore leaving practitioners to draw their own conclusions. Sorri provides some further insight into the notion of mind-body unison. Sorri suggests cognitive processing commences and cultivates through the body to the mind, rather than arising in the mind to inform the body (Sorri 1994, 15). These ideas are comparable to my conceptualisation of sensory awareness, which occurs when information gathering, activated through the bodily senses, such as seeing and touching for the ceramist, informs the mind and becomes interwoven as a mind-body fusion. In other words, this occurs when thinking and doing merge simultaneously. This awareness, I believe, is only achieved over time, and through sustained, rigorous practice.

While Leach's text puts forward the notion of a unified approach to ceramic making, further examination is required to comprehend how ways of learning and knowing occur through the senses and, more importantly, how the linking and unison of mind and body manifest for the ceramist. A comprehensive investigation of Leach's notion of the potter-artist's 'co-operation' and integration of hand and mind has disclosed what I believe is a contradiction in his hypothesis. This paradox occurs because although Leach trained through the master-apprentice tradition, he was, as Moon notes, 'never a natural thrower', and from his earliest days he employed an assistant to throw his designs for him (D. Moon 2006, 59). Acknowledging his skill limitation while working in Mashiko, Japan in 1934 Leach sought the aid of a thrower to produce large pots under his supervision. Leach claimed, '[T]he local technique for dealing with large jars was beyond my skill level, so I made the smaller pieces' (Leach 1978, 177) while the thrower produced the larger pieces. Continuing this working method when returning to England in his St Ives studio, Leach

¹¹ Leach refers to two distinct categories of ceramists, one being the potter-artist who completes all his/her own work, in contrast to the ceramist working in industrialised manufactured mass production as belonging to a second category (Leach 1940, 1 & 2). Soetsu Yanagi also stated that 'beyond all question of old or new, the human hand is the ever-present tool of human feeling', and 'no machine can compare with a [hu]man's hands. Machinery gives speed, power, complete uniformity and precision, but it cannot give creativity, adaptability, freedom, heterogeneity. These the machine is incapable of' (Yanagi 2004, 199)



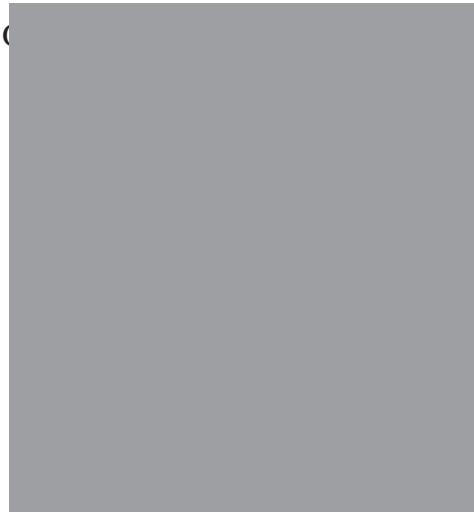
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Figure 1. Bernard Leach, Spherical Vase, 1927, medium unknown, dimensions unknown.



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Figure 2. Sung Dynasty Celadons, 960-1279, medium unknown, dimensions variable.



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Figure 3. T'ang Dynasty Bottle, 618-907, medium unknown, dimension unknown.

employed William Marshall as the chief thrower to create his work at his St Ives studio. Marshall's work was then trimmed and signed by Leach (Britt 2000, 106). Echoing Moon's point, writer and ceramist Edmund de Waal also reveals that throughout Leach's career, he employed skilled potters to produce most of his thrown work (de Waal 1997, 23). While I acknowledge that engaging a thrower to produce work is a legitimate working method, and his throwing training would have availed some insight about mind-body unity despite this instruction only being limited to one year. Nonetheless I argue this notion of mind-body unity would never have been fully realised. Consequently, the points that Moon and de Waal raise are critical as they question Leach's fundamental theories: human expression and mind-body unity. To clarify, if Leach was only the designer and did not take part in the process of making, the unity is ruptured. Knowing this information, I also question how Leach formed his awareness of unity – one hand one brain in the work of the potter-artist/craftsperson – given that the designer and maker, in this case, are two separate minds and two separate bodies.

It is also worth noting in my opinion that the vessels Leach cites as his own, including works such as Spherical Vase, 1927, are heavy and amateurish (Figure 1). This position is confirmed after viewing several of his work first-hand at the Victoria and Albert Museum, London and the Mashiko Museum of Ceramic Art in Japan. Furthermore, his works in *A Potter's Book* do not come close to reflecting the refinement and qualities of the examples of the Japanese Tea Masters, Ming, Korean celadons's, Sung¹² and T'ang Dynasties he so admired. Leach formed his view of the standard upon examining the Korean imperial collection of pottery while visiting Korea in 1935. In emphasising his regard for the pots in this collection he claimed, the 'celadons of the twelfth and thirteenth centuries, many delicately inlaid with white and black patterns' (Leach 1978, 201) were the first pots he came to appreciate. Moreover, he was particularly drawn to the pots made for the Koryo Dynasty Buddhist society for their 'quiet' qualities. In years to come his love of celadons was overtaken by the Mohammendan inspired white, and blue and white Ming China porcelains (Leach 1978, 201).

¹² Sung dynasty, now known as Song, spanned the years 960-1127 (Liu 2016, 34).

As such, based on my readings of Moon and de Waal, it is my belief that it is not Leach's ceramics work that Australian ceramicists have tried to replicate or been influenced by, but rather the Westernised Japanese philosophies he implanted in his writing, in particular the characteristics of Shibui,¹³ traits attributed to works generated through mindfulness that Leach describes as superior (Leach 1940, 9). Such qualities of refinement, simplicity and restraint are evident in the ceramics examples in figures 2 and 3. Moreover, as de Waal argues, 'given Leach's status as a Western artist and a Kenzan as a paid teacher, the significance of the transference of this title after only a year, to someone who could barely speak Japanese let alone fully comprehend or literally read the allusions implicit in the tradition arouses curiosity' (de Waal 1997, 15).

Although Leach's authority as a master ceramist is disputable, I believe his writing had an impact on a fledging ceramic practice in Australia and his philosophy shaped a recognisable aesthetic across generations. Therefore, this was a philosophy that he did not primarily practice himself, but one realised through other people. As such, Leach was instrumental in the formative years of ceramics in Australia, not because he was a gifted potter, but more specifically because he introduced a philosophical way of thinking and making to his Australian audience.

I suggest the impact of Leach's writing was heightened in the mid-twentieth century because Australia was geographically isolated from other Western countries and often sat outside current movements or trends due to the lag in the information received from overseas. For example, as Moon states, 'Australian potters began to be aware of Leach during a later period than their British counterparts ...', making this text in Australia 'a post-war phenomenon' (D. Moon 2006, xi). Moon refers to *A Potter's Book* as a substantial and 'invaluable technical aid, at a time when there was little practical information specifically tailored to the needs of the studio potter' (D. Moon 2006, vi). Adding to this sentiment, Western Australian potter Eileen Keys notes it was not until the 1950s while 'working in the dark in Perth' (Bell 1986, 5) that Leach's book became available as a source of information and influence. Australia's isolation is also noted by art director John Kaldor who states that fifty years ago, '... we didn't have the internet. Transport wasn't what it is today: you could take days to get to London or New York' (Kaldor cited in Cosic 2019, 27). This delay meant that when publications finally arrived, they often held added significance, and had a greater lifespan than they would have had in other countries.

The Zeitgeist:

Leach's timing was significant in that he articulated a tenet of thought that was part of a zeitgeist, a spirit of the time. He was a visionary especially concerning ceramics. Parallel cultural symmetries were occurring at the same time. Of particular significance was the Great Depression of the 1930s, which caused a global economic crisis and high unemployment (Government nd, paragraph 1). This cataclysm was followed by the impact of World War II from 1939–1945. Post-war countries similar to Australia were looking for a new direction. Leach's book was pervasive during the 1940s–1950s in describing a bohemian way of life and reinforcing the idea of artists buying into the holistic life of the potter-artist. Through pottery, many artists such as Rushforth found a productive, 'self-sufficient' lifestyle aided by ideas and information established in *A Potter's Book* (Howlin 2012, 30 & 31). As a post-war returning soldier seeking re-entry to the workforce, Rushforth wrote, motivation for choosing pottery as my life-long work '... was the attraction of the lifestyle, and the great pleasure of being involved in a constructive activity' (Rushforth cited in Howlin 2012, 35). He further revealed, 'Bernard Leach described craft as good works proceeding from the whole man [sic].

¹³ In referring to *Shibui*, Leach is expressing a form of beauty and humility that occurs with 'the nobleness of poverty' (Leach 1940, 8-9).

Heart, head and hand in proper balance' (Rushforth cited in Howlin 2012, 35). These quotes by Rushforth emphasise the significant cohesive life/work existence, and illustrate Leach's philosophical influence on ceramists searching for a renewed direction in the aftermath of global turmoil.

Experiential Learning – Apprenticeship:

According to Howlin, the training schemes operating in Australia during the 1950s, saw a substantially increased interest in studio-based ceramics (Howlin 2012, 33). Consequently, in gathering skills, emerging potters began sourcing experiential training in the form of apprenticeships, studios and established ceramic industries. Pottery apprenticeships in Australia stem from as early as the 1880s through various companies such as Mashman and Sandison in NSW. An early example of such training was fourteen-year-old Charles Courtland beginning his apprenticeship at Marshman and Sandison in 1887 (Ford 1995, 104 & 394). However, rather than studio-based ceramic art practice, the apprentices were trained as production potters, mould making and slip-casting to produce a broad range of commercial pottery including jars, bottles, chimney tops, bird fountains, ornamental and bakers tiles, flower pots and domestic ware (Ford 1995, 100,101 & 102). This method of apprenticeship training continued and included notable potters such as Mervyn Feeney. Feeney began an informal apprenticeship at Ramsey Pottery in Bundamba, Queensland in 1931 before moving to Stone's Pottery in Brisbane in 1938 and Rylance Refractories in Dinmore in 1940 (M. Moon 2004, 13). This training tradition continued to thread throughout Australia commercial potteries extending to potters such as Milton Moon who was introduced to pottery by Feeney in 1949 (M. Moon 2004, 12-13). Moon undertook an apprenticeship at the Sandison Pottery in Annerly, Brisbane under Feeney (Cochrane 2019, 8) before moving into studio-based ceramics.

Yet in the early post-war years Australia had very few pottery throwers, rather production was concerned with basic machinery mass-produced ceramics leaving the wheel for refining or remodelling each form (M. Moon 2004, 14). Meeting quotas, deadlines and mass-production to ensure business survived were of prime concern for most industrial Potteries rather than art-based ceramic outcomes. Indeed, as Timms suggests prior to the nineteenth century 'the notion of the artist potter had just not arisen' in Australia (Timms 1978, 9).

When Australians did begin using clay for art-based creative expression, rather than working with established potteries and drawing upon their knowledge, the initial Australian studio-based ceramists in the first half of the century created unsophisticated earthenware pottery depicting decoration and references to the local landscape (D. Moon 2009, paragraph 6 & 7). Included in this group of early artists was sculptor turned potter William Merric Boyd noted as one of Australia's first studio potters. Working from his farm at Yarra Glen in Victoria in 1908, Boyd also produced rudimentary and primitive work depicting the Australian landscape (Timms 1978, 13 & 21). Still, Timms argues that it was Boyd who initiated an Australian pottery trend that remained until the late 1940s when Australians became interested in Japanese pottery, stoneware clay and the influence of Leach (Timms 1978, 13). Many of these artists included McMeekin, Col Levy, Rushforth, Blakeborough, and Hanssen Pigott. In essence, while a form of pottery apprenticeship existed in Australia as early as 1880s this training was based on production throwing, slip-casting and machine mass production rather than the notion of the studio-based artist-potter and the philosophical premise rooted in traditional Japanese pottery introduced in Leach's *A Potters Book*, 1940.

This included artists like Blakeborough and Hanssen Pigott. Both artists enrolled in apprenticeships at Sturt Pottery in Mittagong, New South Wales, under the guidance of acknowledged ceramic master McMeekin (Higson 2005, 16), the first Australian ceramist to communicate directly with Leach's pottery practice (D. Moon 2009, paragraph 16) (D.

Moon 2009, paragraph 16). Hanssen Pigott enrolled in 1955 and Blakebrough in 1957. Their training at Sturt was within a system¹⁴ founded on the philosophical influences derived from Japanese ceramics, with aspects of traditional English pottery, most prominently the practices implemented by Leach, and also Michael Cardew¹⁵ who had trained under Leach (Cochrane 2010, 29). Moreover, McMeekin's teaching drew on his own experiential knowledge gathered through first-hand observation during his three years (1950–53) working with Cardew¹⁶ at Wenford Bridge studio in Cornwall, UK (Cochrane 2010, 29). It was during this time that McMeekin's on-the-job training, guided by Cardew, introduced him to the complexities and spirit of ceramic practice.

The influential position Sturt Pottery held within the context of Australia's developing ceramic tradition is emphasised by Australian academic Neil Brown. He refers to Sturt as the ceramic centre that 'established the professional identity of crafts in Australia', demonstrated by ideals that include an authentic aesthetic principle, origination and valuing traditional practice (Brown cited in Weiss 2004, 20). The principles, values and traditions at Sturt, Brown notes, originate from the ethos of Leach's paradigm, the traditions of East Asian ceramics, master-apprenticeship learning, the ceramic standard, and human expression. Furthermore, and most notably, one of the earliest values instilled at Sturt was a respect for the connection of the hand and mind (Cochrane nd, paragraph 2).



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Figure 4. Gwyn Hanssen Pigott, *Exodus 11*, 1996, porcelain, dimensions variable.

¹⁴ Dating back as far as the medieval guild, a fundamental element to the continuation of craftsmanship was also the handing down of practical knowledge from one generation to the next, to ensure that 'knowledge capital' was sustained 'as the source of the guild's economic power' (Sennett 2008, 56-57). As Sennett notes, just as the 'ancient Greek weavers, these medieval craftsmen sought to hand down craft practices intact from generation to generation' (Sennett 2008, 60).

¹⁵ English potter Michael Cardew (1901-1983) studied pottery under Bernard Leach at his St Ives studio in Cornwall from 1923 to 1926. He continued his practice at Winchcombe Pottery in Gloucestershire and Wenford Bridge in Cornwall before travelling to Africa. He was in Ghana from 1943–1945 and worked at Achimota College in Accra. He established his own pottery workshop at Vume on the Volta River in 1945 before moving to Nigeria to work in the Ministry of Trade as the Senior Pottery Officer, returning to Wenford Bridge in 1965. His awards include an MBE in 1964 and OBE in 1976 (Farmer 2014, paragraph 1).

¹⁶ Notably, McMeekin credits Cardew as the master acquainting him with the multifaceted technologies and practical skills of ceramics (Moon 2006, 159). Sturt was founded in 1941 by Winifred West (1881–1971). McMeekin's interest in ceramics emerged while living in China during the late 1940s. His fascination strengthened after moving to art school in London and meeting the author of *Chinese Ceramic Glazes*, 1948 by A. L. Heatherington. Expressing a desire to learn Chinese ceramic techniques Heatherington advised McMeekin to travel to Leach's Cornwall studio as the only site in England with the practical knowledge to make ceramics of this quality. With no places available at St Ives studio, Leach suggested McMeekin apply to work with Cardew (D. Moon 2009, paragraph 19). After working with Cardew, McMeekin returned to Australia from England in 1953 to plan the ceramics department at Sturt. McMeekin began working at Sturt in 1954 (Cochrane 2011, paragraph 1).

Accordingly, McMeekin's substantial contribution to the teaching ethos at Sturt as one of the two founding directors¹⁷ was informed by his experiential tutelage under Cardew. Consequently, Leach's philosophy was transferred to McMeekin via Cardew, and onto Hanssen Pigott and Blakebrough who were students at Sturt. Blakebrough continued the tradition of the master-apprenticeship instruction by training seventeen apprentices during his own tenure at Sturt (Cochrane 2010, 30). Thus, he ensured that much of the philosophical and experiential knowledge championed by Leach, and adopted at Sturt, endured.

The interwoven strands and continuity of Leach's philosophical and practical ceramic knowledge, I propose, remained in Australia through the ceramics apprenticeship system. Of specific relevance is the discipline which comprised of 'valuing the experience of apprenticeship with a master' (Cochrane 2010, 29) in much the same way that Leach had been taught pottery by his Japanese master, as will be discussed later in chapter two. McMeekin continued the Leach/Cardew's aphorism of sourcing raw materials, which resulted in his vast ceramic knowledge of clays and glaze making ingredients, and offered a valuable contribution to the development of Australian pottery (D. Moon 2009, paragraph 21). In following the dictum set by Leach, McMeekin introduced Blakebrough and Hanssen Pigott to the experiential method of learning by observation and replication. Both artists recall their early training under McMeekin as rigorous, with long hours of work, digging, crushing rocks, sieving and analysing clay – learning by doing. Blakebrough recounts an early training exercise set by McMeekin which involved throwing 1,000 mugs. McMeekin considered this a useful way for students to absorb knowledge through repetition. However, as Blakebrough notes, '[W]hen I was allowed to throw ... everything I made for the first eighteen months was recycled through the waste clay barrel' (Blakebrough cited in Weiss 2004, 17-18). Significantly, McMeekin was given a similar task by Cardew while training at his Wenford Bridge studio (Cochrane 2010, 29). In essence, both Blakebrough and Hanssen Pigott sum up their three years' training at Sturt as teaching them tenacity and application, thoroughness and patience (Weiss



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Figure 5. Les Blakebrough, *The Kelp 1*, 2010, porcelain and Metal Salt's, 17.5 x 20.5 cm.



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Figure 6. Les Blakebrough, *Forrest Floor. Ship Form*, 2002, porcelain, 16.5 x 17.5 cm.

¹⁷ Sturt Pottery was founded by Winifred West who encouraged McMeekin to return to Australia to work at Sturt as the founding director

2004, 17-18) and knowledge building by trial and error. Moon maintains the development of Hanssen Pigott's progress was primarily acquired 'through a process of trial and error' (D. Moon 2006, 118). This method is a necessary form of learning by doing, which is also evident in the training of Leach, Cardew and McMeekin. Moreover, the repetitious throwing practice instilled in Cardew by Leach was then given to McMeekin. McMeekin, in turn, imparted this training technique to Blakebrough while at Sturt. A skill training method, I contend, is the very conduit to a silent intangible knowing. The rhythm and continuity occurring during 1,000 repetitions, particularly when repeated regularly over eighteen months as in Blakebrough's case, affords time for the mind and body to recognise sensations unknowingly. It is via time, repetition and the senses that this skill manifests as an inner knowing. I consider this knowing is, as Hurlburt previously describes, an 'inner experience, a commonly occurring internal sensation that transpires largely unnoticed' (Hurlburt 2011, 231).

Further evidence of the philosophical stimuli emanating from Leach's lineage filtering through to Blakebrough's and Hanssen Pigott's training at Sturt, is his assertion of working to a standard. As noted earlier, in referring to the standard, Leach proposed the ceramics of the Korean celadons's, Ming, T'ang and Sung dynasties of China as exemplars of the aesthetic criterion he advocated. In writing on the fiftieth year of the Sturt Pottery exhibition in 2003, Karen Weiss comments that 'what is evident from viewing this show is the strong influence classic Chinese and Japanese ceramics, as well as British traditional ceramics, has had and continues to have on Sturt' (Weiss 2004, 20). This not only indicates the magnitude of Leach's influence, but also identifies how his philosophical premise continues to hold relevance in Australia through the numerous past and present students training at Sturt. Prominent artists, including Col Levy, Paul Davis, Alan Peascod and John Campbell, along with Hanssen Pigott and Blakebrough, all trained at Sturt Pottery.

Leach's Japanese philosophical premise evident at Sturt offers an entry point to considering whether Hanssen Pigott's and Blakebrough's interest in refined minimal work and East Asian pottery is a vestige of their training at Sturt.

Origin and Influence:

In acknowledging the influence of Leach, Cardew and traditional East Asian ceramics in her practice, Hanssen Pigott wrote that as a student she attempted to capture 'the liveliness Leach spoke of; I wanted to find the beauty I'd felt in the Sung wares, here, right now, alive' (Hanssen Pigott cited in Moon 2006, 171). Therefore, as Moon suggests, through her lived experiential training under McMeekin, she 'had found the direct conduit to the Oriental stoneware tradition she so admired' (D. Moon 2006, 171).

Additionally, Leach's influence emerged in Hanssen Pigott's practice after reading his book *The Art of the Potter*. She affirms that it '... was quite a significant book at the time, and so I started visiting Australian potters, using as a touchstone those Asian pots and Leach's book' (Hanssen Pigott cited in Higson 2005, 14). A collection of Sung Dynasty wares, along with the Kent¹⁸ ceramic collection of works from Korea, China and Japan held in the National Gallery of Victoria, afforded further inducement (Weiss 2006, 82) throughout her career. As a result, the minimal qualities of simplicity and refinement revered in the Korean rice dishes noted by Yanagi and Leach are, I contend, clearly evident in her still-life groupings of everyday objects.

¹⁸ The Kent Collection is a collection of Asian ceramics (including Song Dynasty ceramics) and art at the National Gallery of Victoria (NGV). The collection was donated to the NGV by H.W. Kent (Weiss 2006, 82).



Figure 7. Alana McVeigh, *Of Place, Time & Tradition Series6-8: Then and Now*, 2018, porcelain, dimensions variable.

Furthermore, the work presented in her 2005 retrospective, *Gwyn Hanssen Pigott: A Survey 1965–2005*, held at the National Gallery of Victoria, displayed a porcelain dish of hers made in 1963 alongside a bowl from the Northern Sung Dynasty. Both dishes carry fine edges that rise and incline. The Sung Dynasty bowl has, as Weiss describes, an ‘... edge [that] moves up and down to a similar rhythm set a thousand years before’ (Weiss 2006, 83). This point by Weiss once again clearly indicates the lineage of stimulus in Hanssen Pigott’s work.

Through this finding, I have come to understand that the T’ang, Sung and Kent collections¹⁹ had a substantial impact on Hanssen Pigott’s aesthetic approach. This stimulus also ensured that a continuum of superior craftsmanship established in Asian ceramics and espoused by Leach took hold in Australia. As Moon explains,

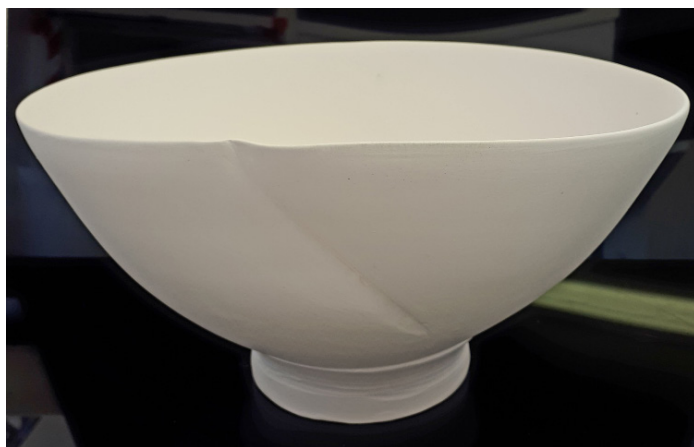


Figure 8. Alana McVeigh, *progress documentation*, 2018, porcelain, 21 x 24 cm.

¹⁹Australian potter Harold Hughan became influenced by the National Gallery of Victoria’s Chinese Sung and T’ang ceramics collection, and in particular Leach’s *A Potter’s Book*. Aided by his son Robert, a ceramic technologist with CSIRO, they began researching stoneware clay bodies and glazes. Harold Hughan held his first solo exhibition at Georges Gallery in 1950. Through his work, knowledge and influence, he introduced a generation of Australian studio-potters to the aesthetic of Leach (Pearce 2008, 1) (Terrence 2007, 1).

[I]t is unlikely that Kent would have envisaged the impact his work would have on the development of Australian pottery, yet his timing was perfect. A Potter's Book would be published in 1940 and Harold Hughan would be introduced to Leach's book and the Kent collection in that same year. For many Australian potters in the years to come, the Kent collection would reify Leach's message regarding the Sung standard. (D. Moon 2006, 108)

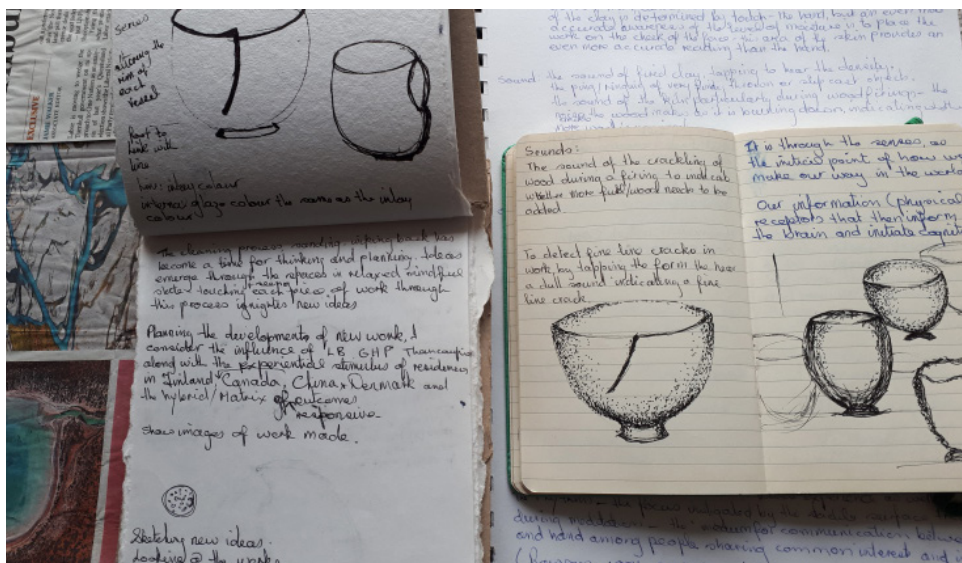


Figure 9. Alana McVeigh, visual diary documentation, 2018.

Similar aesthetic characteristics found in the Kent, T'ang and Sung collection are evident in the work of Blakebrough. Take, for example, the delicate rims in *The Kelp 1*, 2010 (figure 5), and *Forrest Floor Ship Form*, 2002 (figure 6). Both vessels capture subtle glimpses of light across the fine edges in much the same way as the bowls of the Northern Sung Dynasty, and that of Hanssen Pigott's 1963 dish. Within each artist's aesthetic approach to simplicity, minimalism and refined pottery, the influence of the East Asian ceramics introduced by Leach is visibly evident.

Examining the skill and knowledge development of Hanssen Pigott and Blakebrough more closely provides a useful way to comprehend how Leach's notion of a unity of mind and body established a different way of thinking and doing in ceramics in Australia. This line of enquiry has uncovered a ceramic training model established in learning by doing. This is a training system whereby the body and mind are at the core of knowledge gathering, observation, imitation and replication over years of sustained practice and guidance in the form of apprenticeship; a way of learning formed and introduced to Australia by Leach. Therefore, in examining both artists' working methodologies, it is possible to determine that Leach's teaching of a unified creative process, as adopted at Sturt, has a distinctive approach to thinking and doing. The realisation of this unity was an essential step in forming an understanding of the heightened aesthetic qualities that captured my attention in the ceramics of both Hanssen Pigott and Blakebrough which convey ideals and influences that lead directly back to Leach. After studying both artists work first-hand, it is my view that their familiarity with Leach's philosophies has resulted in bodies of work that speak of elegance, refinement and timelessness – qualities and traits I specifically relish in the art of hand-thrown ceramics.



Figure 10. Alana McVeigh, *Of Place, Time & Tradition: Then and Now Series 1*, 2018, porcelain, 29 x 22cm.

The Lens of the Maker:

The artwork of Hanssen Pigott and Blakebrough are seminal to my interest in ceramic arts. Although their practices are different, both artists and their work have significantly influenced the progression of my development in method and aesthetic outcomes. In their ceramics, I recognise elements inspired by Leach's unified human expression, and traces of the maker's hand. Along with this essential component, I am specifically drawn to their appreciation of refinement, superior use of glazes, meticulous consideration of proportions, and unique approach to simplicity. As such, when I began learning the challenging task of wheel throwing, I was keen to introduce aspects of their qualities and aesthetics into my own ceramic outcomes.

Along with unified human expression and the essential aesthetic consideration expressed in the work of Hanssen Pigott and Blakebrough is Leach's criterion of the ceramic standard. When considering this standard, along with his resistance to industrially made ceramics, I am reminded of my early childhood tea rituals with my grandmother. On holiday sleepovers, I was given the privilege of staying up with her until the late night television test pattern appeared on the screen. Before going to bed, I would select a cup and saucer from her collection of fine bone china, and she would do the same. We would sit together in the kitchen drinking tea from our elegant teacups, poured from the well-used porcelain teapot. The quietness of night, sprinkled with sounds of our soft chatter, the tick-tock of the old wooden clock on the mantelpiece, and the aroma of freshly brewed tea, fused with her squeeze of lemon. Holding my cup, feeling the warmth of the tea penetrating through the translucent walls, the soft patterns of English roses and fine gold-lustred rims, is in complete contrast to Leach's 'unified human expression' within ceramics. Instead, the early childhood experience spoke of engaging with the feelings of the shape, form and material garnered through our nightly ritual. It was not until many years later that I came to appreciate Leach's concept of the unified human expression captured through the fusion of the hand/body and mind. I now wonder if it is because of this warmly held experience that my fixation with porcelain and vessels originated, and why I am drawn to qualities of refinement within ceramic objects, albeit factory-made wares in the case of my childhood experience.

When reflecting on the vessels I had seen and used in my childhood, I began developing new work that considered these memories, layered with the ideas introduced by Leach, namely, cross-cultural references, unified human expression and the ceramic standard.

My aim in fusing East Asian forms with the light and hues of my local environment, Fremantle, involved employing a range of techniques, including 'trial and error'. Captivated by the intense sunlight and hue of the cloud-covered sky, I began developing a series of tea bowls. Making intimate-scale tea bowls is a method I use to ease into work, a way of loosening and synthesising mind and body. Producing each form as finely as possible creates translucency. It also allows the vibrant glaze colour to penetrate and filter through the vessel walls casting a faint blue shadow surrounding the base of each bowls (see figure 7). While drinking from these vessels, the warmth of the fluid drifting through the walls to my hands reawakens my childhood experiences and more recent memories of tea drinking while in China and Japan.

These memories remained as I continued developing a series of dishes based on the Chinese vessels and the humble Korea rice bowls Leach admired. When I use these dishes, I recall sensations and the awareness of the making process entailed in each vessel. Feeling the weight of each bowl, I can estimate the amount of clay used to construct the piece, taking into account the clay shrinkage during the firings. Running my fingers over the bowl, I feel traces of the throwing lines, which spark images of the maker and making process.

During these times, I took note of the vessels' specific characteristics: their form, glazes, and ergonomic design. Upon considering these qualities, I made these vessels larger in scale and marginally heavier for functional use. The serving dish (figure 10) is slightly curved at the lip to reduce spillage, and has a slightly ribbed pattern to lessen slippage when being held or carried. Considerations such as scale, shape and utility occur because, as author Howard Risatti proposes, 'the hand is a reflection of the entire human organism; it is a direct extension of the mind' (Risatti 2007, 109). Risatti proposes that during the making process, the mind via the 'skilled hand' explores the medium to create a useful, practical object. Accordingly, more than merely making, the skilled hand must also measure to ensure the correct scale and proportion of the form to 'accommodate the body both physically and psychically' (Risatti 2007, 109). In this context, Risatti's point provides a clear example indicating how Leach's notion of mind-body unity might occur when the maker and designer are one.

Of particular significance in further considering design and the fusing of Asian and Australian aesthetics is the glaze. Selecting the jade colour based on traditional Chinese glaze, I also used this tone to suggest the blue/green hue of the Fremantle harbour sea water. My aim in using gloss glaze on the internal surface is to capture and reflect light. The unglazed pure white texture of the exterior porcelain surface allows the natural material qualities and subtle traces of the making process to remain evident.

In seeking to infuse evidence of 'human activity' in the making process, particularly cross-cultural references, I am now mindful of how the skills embedded in each of the vessels stem from an ancient lineage of Japanese, Chinese and Korean masters and apprentices; an ageless knowledge which, I now understand, continues in ceramic practice in Australia.

The threads linking Leach's specific philosophical approach to studio-based ceramic practice in Australia are evident across the broad-ranging spectrum of creative responses to ceramics. In a timeline spanning from the 1940s, to present-day ceramic practice, Leach's lineage is evident in the ceramic legacies of Hanssen Pigott, Rushforth and current practice of Blakebrough.

Research undertaken for this thesis suggests that Leach's teachings were taken on-board and propagated, knowingly and unknowingly, by artists from the 1940s and beyond, thus it represents the passing of the baton to future generations.

By the 1950s onwards, the perspective and practical approach offered by Leach had filtered into the pottery vernacular and inspired Australians to initiate a local ceramic history of their own. Many of Australia's founding potters investigated Japanese ceramics 'almost exclusively', and as a result, an Anglo-Oriental aesthetic dominated Australian studio ceramics during the 1960s and 1970s²⁰ (DeBoos 2014, 20).

While Leach never directly speaks of sensory awareness, and some of his approaches are contradictory, it is possible to see how his ideas concerning a ceramic standard, human expression, the potter-artist and apprenticeship training have given rise to a unique ceramic attitude. By examining the impact of the critical philosophical perspective that Leach offered to ceramic practitioners in Australia, I have a greater understanding of his specific approach to ceramic studio-based practice. Though, more importantly, it is only through the lens of a maker that I can fully grasp the depth of 'one hand one brain' unity and the mind-body fusion he espoused. This fusion and understanding, I believe, is only realised through experiential practice, gathered by observation, imitation, and habitual, repetitious practice arising as an inner knowing.

By engaging in a similar learning method to Leach's pottery training in Japan and testing his idea in my own practice, many of his claims now resonate with and underpin my knowing. Just as Leach's pottery training developed under the guidance of a master, observing and imitating shown action, my learning began to take hold by observing and replicating Western Australian ceramist Bela Kotai's teaching. With an analogue in traditional Japanese pottery training, this learning methodology forms a lineage from Leach to Cardew, McMeekin, Blakebrough and one that frames my ceramic perception.

I now appreciate the vital aspect of being present in the moment during the act of making because I feel, touch and see through practice the written concepts I believe Leach was expressing. Through making, I enter a seamless, silent, timeless sphere where work evolves through an easy knowing, a mode of working deeply imbedded within my being. It is because of this cognisance of sensory awareness that I am prompted to delve further into my art practice and search for ways to better understand and engage at a deeper level with the act of making.

²⁰ Singapore, Thailand, Indonesia and post-war Vietnam also became destinations of interest for Australian potters throughout this time (DeBoos 2014, 21).

Chapter Two

Tacit Knowing

In acknowledging the distinct philosophical approach to ceramic practice introduced by Leach, it is essential to unravel and examine the interwoven strands framing his specific position. Leach's training under the traditional Japanese master-apprentice system is examined to reveal the basis of his pottery learning through observation, imitation and replication. Further examination explores Leach's experiences in Japan to disclose how these encounters shaped his ceramic perspective and informed the fusion of Eastern and Western spiritual values underpinning his philosophy.

I examine tacit knowledge, habit and repetition through both practical and theoretical perspectives by referring to Michael Polanyi, Richard Sennett, K. Anders Ericsson, Michael Carroll, Janet DeBoos and Juhani Pallasmaa. Through related discussion, I demonstrate how tacit knowledge has framed my own ceramic practice, knowledge and skill gathering. By way of personal experience, I have determined Leach's pottery skill training to be tacit knowledge, and I examine his written guidance to articulate a gap in his explicit and implicit ceramic information, knowledge and ceramic learning.

Unravelling Tacit Knowledge:

Tacit knowledge cannot be “captured”, “translated”, or “converted” but only displayed and manifested, in what we do. (Tsoukas 2002, 1)

Tacit knowledge as a concept has been researched through a broad range of contexts, including science (Stephen Gourlay 2002), management²¹ (Haridimos Tsoukas 2002), environmental management (Oliver Boiral 2002), organizations (Philippe Baumard 1999), engineering (Beverley Sauer 1998), and nursing (Christine Fox 1997). Nevertheless, it was physical chemist and philosopher Michael Polanyi who initially devised the term ‘tacit knowledge’ in his book *The Tacit Dimension*, originally published in 1966. The premise of the book is based on the phrase ‘we can know more than we can tell’ (Sen 2009, x). In explaining this expression, Polanyi offers physiognomy – being able to recognise someone's face amongst a large crowd – as a means of clarifying tacit knowledge. The significance of this example is, as Polanyi points out, that it is not possible to disclose *how* people can make the recognition (Polanyi 2009, x). Therefore, we know more than we can tell. Furthermore, Polanyi asserts that tacit knowledge is a form of awareness that defies explanation. It is a silent, experiential way of absorbing information and skills by observation, illustration and imitation.

Academic Stephen Gourlay notes that Polanyi wrote of and referred to the term ‘tacit knowledge’ as being tacit; however, he predominantly used the phrase ‘tacit knowing’ in his written series (Gourlay 2002, 8). Gourlay clarifies this point by citing Polanyi: ‘[S]ince tacit knowing establishes a meaningful relation between two terms, we may identify it with the understanding of the comprehensive entity which these two terms jointly constitute’ (Polanyi, cited in Gourlay 2002, 11).

Tacit knowledge in learning and educational groups is understood and referred to as automaticity. It is an awareness that is intuitive and recognised as being the most efficient method of participating in one's occupation. This mode of knowing is based in, as psychologist Michael Carroll states, the action of ‘doing the work’ (Carroll 2009, 39). Thus, tacit knowledge gained by practical involvement marks the difference between an experienced professional and a less skilled person. This evident difference arises because, throughout the working process, the experienced practitioner subconsciously draws on a base of tacit knowledge to direct their most effective actions. By comparison, a less experienced person needs to think and make conscious decisions prior to each step, causing a decline in decision making. Carroll refers to

²¹ Through management studies, tacit knowledge has been positioned as the opposite to explicit knowledge; however, Haridimos Tsoukas in his research paper on tacit knowledge in management studies maintains it is ‘simply the other side’ (Tsoukas 2002, 3).

this knowledge as 'knowing-in-action' or 'knowing-in-use' – the capacity to retrieve information during the action (Carroll 2009, 39). Informed by Polanyi's and Carroll's viewpoints, I understand that developing practical knowledge stems from the body's ability to gather and store information as an awareness that ensures the continuous and efficient progression of an ongoing task.

In gathering and storing practical knowledge, Polanyi states that our experiential understanding of the world is gained *from* our bodies, although our bodies are not ever 'experienced as an object' (Polanyi 2009, 16). Corporal awareness, he further maintains, makes our bodies the necessary tool in gaining all our external practical and intellectual knowledge (Polanyi 2009, 15). Or, as Maurice Merleau-Ponty claims, '... I am conscious of the world through the medium of my body' (Merleau-Ponty 2002, 94-95). Essentially, it is through the body that the senses gather the effects of the environment, relayed to the mind and interpreted by the individual (Ullom 2012, 7).

In concurring with Polanyi, Sorri claims that all human cognition is largely bodily, and although it is absorbed and recognised individually, it generally defies communication by the informed person (Sorri 1994, 15). Sorri contends that experiencing an inarticulate knowledge in her wheel-work throwing practice occurs when 'my body frequently knows more than my mind can explicate' (Sorri 1994, 15). She further adds that, therefore, 'to be a potter one must be in touch with one's body' (Sorri 1994, 22). I propose that eventually the 'in touch' body acts as a conduit for absorbing information gathered by the senses, informing and facilitating the synthesis of coordinated bodily movements required for ceramic production.

Within the learning process, the body becomes increasingly aware of intricate and slight material qualities and variances occurring in the making which emerge as cognisance of sensory, bodily information. Therefore, when observing instructors, students have a greater comprehension of sensory information as they have already begun to build a corporal, haptic and visual vocabulary of their own. Hence, drawing from their own developing bodily knowledge, the learner can recognise, imagine and interpret the feelings and actions the tutor is experiencing as well as projecting. In this way, tacit skill learning, observation, illustration and imitation are essential aspects of Polanyi's tacit knowing concept. As such, Polanyi's theories became imperative to how I comprehend Leach's pottery training as tacit knowledge and how this mode of learning came to pass as the foundation of ceramic learning in Australia.

Central to this comprehension is the method of instruction informing Leach's pottery training. Under the guidance of Urano Shigekichi (1851-1923), also known by the title of Kenzan VI (de Waal 1997, 12), Leach's traditional Japanese ceramic training centred on observation, imitation and illustration. Leach recalled his instruction under Urano as follows: '[T] here, sitting on his [Urano's] hard floor, I began to learn my alphabet of clay, turning a potter's wheel with a stick, making either the soft ware with wet hands, or turning the cheese-hard pots. He said very little; in fact my many questions in very limited Japanese bothered him ...' (Leach cited in Wilson 1999). Importantly, Leach notes Urano's instruction to him: '[D] o what I show you, which is how my master taught me' (Urano cited in Wilson 1999, 11). By examining Leach's training system, it is possible to identify how critical shown instruction was to his knowledge development. This investigation also informs my understanding of tacit and sensory awareness, and, importantly, how this tenet of learning, propagated by the master-apprenticeship system, underpins ceramic practice in Australia from the 1940s and beyond. Sorri advises that tacit knowledge 'is crucial to learning through the process of apprenticeship' (Sorri 1994, 19). In effect, tacit knowledge, as Polanyi argues, is '... the outcome of an active shaping of experience performed in the pursuit of knowledge' (Polanyi 2009, 6).

Working with Masters:

The master craftsman assumes that the good will succeed by their own efforts and that the failures will fail. The master does not disgorge advice and techniques which it has taken him a lifetime to learn, he shows off, and he gets a dry satisfaction, a kind of artistic *Schadenfreude*, out of watching the young try to learn. (Pryor 1967 ,15)

The pottery master-craftsperson method of experiential, tacit learning in Australian ceramics during the 1940s continued and prospered into the 1950s–1960s. Australian ceramist Milton Moon attributes much of his ceramic knowledge to Mervin (Merv) Feeney's²² teaching by *shown* example rather than explained instruction. Moon acknowledged, in this format, his pottery learning evolved '... in much the same way as a Japanese or any traditional potter has learned the craft over centuries' (Pryor 1967, 15-17). Similarly, the process of acquiring ceramic skills for Joan Campbell, a Western Australian potter, began through implicit tacit learning in the studio of Johannes de Blanken, a production potter. As she recalled, 'I learnt by working alongside him and watching what he did and observing his techniques, as well as being given tasks' (Campbell 1977, 6). I maintain, as identified in chapter one, that within the training of Leach and numerous Australian potters, it is the lived experiential component of tacit learning that informs their knowledge and underpins the master-apprentice relationship. As tacit knowledge is a form of awareness that transpires through experience (Toom 2012, 624), it is in the first-hand seeing and doing that ensures an efficient conveyance of skill information.

Emphasising the importance of direct tacit learning, psychologist K. Anders Ericsson argues that practical experience is crucial to skill development. In gaining knowledge, he suggests students often seek work experience in the form of apprenticeships upon completion of initial and formal training (Ericsson 2006, 685). In accord with Ericsson, I assert that time is central in ensuring that skill development is grasped when the apprentice is immersed in sustained, lived making and doing. Over a three-year apprenticeship, knowledge is tacitly absorbed constantly as outlined in chapter one in the example of Blakebrough, Hanssen Piggot and McMeekin. Tacit learning in this system is constant, whereby time and a creative environment become essential to ceramic skill learning, a process which enables knowledge to become ingrained, embodied and instinctive.

In commenting on the importance of the ceramist's extended lived experience, author Dennis Pryor puts forward,

In a modern technical college students are taught in three months what the old-style apprentice took years to learn by observation; the crucial difference is that the traditional training built the techniques into the muscular and nerve structure of the apprentice. (Pryor 1967, 15-16)

Pryor's point is significant as it identifies how extended time as well as a training system and environment foster skills and knowledge to imbibe the very body of the trainee. Over time, practice trains the mind, muscles, nerves and senses to synthesise, and permits work to flow from an embodied awareness described by Carroll as 'knowing-in-action' or 'knowing-in-use'. It is my view that prolonged training, repetitive and observed actions gained while experiencing, doing and making allow knowledge to become a part of the person. This essential method, as noted earlier, is a key aspect of apprenticeship training.

²² Mervin Feeney is an Australian industrial chemist, who developed clay bodies, including Feeneys Clay, and was the instructor and mentor to Milton Moon (M. Moon 2013, 11-12).

Explicit – Implicit Void

Analogous to Leach, ceramicists in Australia from the 1950s onwards continued to amass knowledge by utilising practical experience through potter's studios and undertaking apprenticeships. Additional expert tuition was also availed in Technical Colleges under the direction of specialists including Peter Rushforth at East Sydney Technical College (ESTC) and Allan Lowe and Klytie Pate at Melbourne Technical College (MTC) during the 1930s (Timms 1978, 40 & 45). By contrast, in the early 2000s, my initial attempts to learn ceramics was principally²³ through explicit instruction located in the pages of numerous practical ceramic-making guides. Finding explicit instruction confusing and challenging to put into practice, I enrolled in a tertiary art course to learn ceramics. Yet, it was not until I began attending various ceramic demonstrations and observing artists at work that I became aware of an abundance of intricate practical information evident in the physical act of making. This detailed information was not often identified or clarified via text, but rather only grasped through an implicit transference of first-hand knowledge. As my growing awareness of unspoken, silent, empirical communication evolved, I became aware of the impact the substantial gap between written ceramic directive and implicit, tacit learning incurred while learning this challenging skill. The vast amounts of incidental fine detail and subtle information linking steps through each technique was either overlooked or extremely difficult to articulate accurately through text. While I had an awareness of the void between explicit and implicit ceramic knowledge, I continued to engage in this experiential format as a learning method.

In due course, I found that tacit awareness and direct learning have offered a bridge linking the void left by purely explicit ceramic knowledge. I became intrigued by this method of skill development and began to seek further clarification. At this point, I found that Peter Dormer offered some insight. Dormer maintains that in the process of first-hand learning, experiential know-how is a knowledge acquired with higher levels of accuracy during direct involvement, rather than through literature (Dormer 1994, 11).

The disparity between explicit and tacit information is particularly evident in the written instructions offered by Leach in *A Potter's Book*. His text provides relevant technical information concerning throwing a pot, although the articulation of essential sensory information, such as the feelings of the hands/body experience during the making process, is at best only alluded to. For example, Leach wrote: 'the clay being centred in a comfortable clasp of the right hand, the thumb is pressed firmly down the middle of the dome ...'; and 'even pressure between thumb within and fingers without allows a certain thickness of clay to pass between them' (Leach 1940, 72). From this information, it is difficult to determine the amount of pressure that is to be applied between the thumb and fingers, and more precisely, the feeling of a 'comfortable clasp'. The written description offered by Leach to novice potters is an indication of the difficulty in conveying written ceramic instruction. Therefore, I argue while Leach has been instrumental in Australian ceramics, it is primarily for the philosophies that underpin his way of making pottery rather than a cohesive experiential approach to studio-based practice.

By contrast, being present to see and hear a skilled ceramist transcend written information, which is often complex and nuanced, provides clarity of communication that often slips through the gaps in written text. For instance, observing the positioning and movements of the body and hearing the demonstrator's commentary increases the level of understanding

²³ While undertaking art training through tertiary colleges, ceramics was a component of each course. The training was very basic and informal. My ceramic learning took hold once I enrolled in the second year of a diploma under the tutelage of Bela Kotai. Studying at university, my major was painting with ceramics as a minor, where the training was predominantly theoretical rather than practical.

regarding sensory information that is otherwise difficult to explicitly articulate. Additionally, seeing and hearing presenters describe the level of pressure applied to the clay, and the feeling of a 'comfortable clasp', afford lucid indication as to how actions are applied and used throughout the entirety of the making process. In replicating observed practical instruction, potters can begin to make sense of such terms as 'firm', 'comfortable', and 'pressure'.

In the process of undertaking this research, I have found evidence concerning the gap between explicit and implicit ceramic knowledge. However, to more fully understand this gap, I had to look outside the discipline of ceramic practice to source comprehensive scholarly research. Though discussed in detail in chapter three, I will briefly mention here that, as part of my research, I came across a five-year study undertaken by academic Beverley Sauer and funded by NATO and the National Science Foundation of mining safety in the United States of America and Britain. Her paper 'Embodied Knowledge: The Textual Representation of Embodied Sensory Information in a Dynamic and Uncertain Material Environment', 1998, though far removed from ceramic practice, offers comprehensive insight on tacit and sensory knowing. Of particular interest to this research, Sauer's study examines the disparity between implicit and explicit information.

After realising the gap between implicit and explicit ceramic information, observed practical instruction subsequently evolved as the major learning trajectory within my own progression in my practice. As my grasp of unspoken and sensory information grew, I found, as Sorri suggests, that explicit knowledge can only emerge from tacit knowing; the reverse is not possible (Sorri 1994, 18). Significantly, this awareness ignited my interest in examining the relevance of tacit knowledge from the perspective of my own making, and ceramic practice more broadly. It was here that tacit knowledge had become the vital link increasing my level of skill in basic wheel throwing. Encapsulating the difficulty entailed in learning this skill, art critic Christopher Allen writes,

As anyone who has watched a potter at work or tried it themselves, knows well, it is a process that is deceptively simple in appearance and extremely difficult to do well, demanding high levels of manual and mental presence. (Allen 2013, 13)

Allen's sentiments indeed accurately convey the complexity of wheel throwing. Nevertheless, determined to learn, I persisted through a prolonged process of trial and error, progressively becoming cognisant of clay's qualities, the centrifugal force of the wheel-head, and the point of focus during each phase of the procedure.

As I became increasingly cognisant of the links between experiential, tacit and sensory information as an overarching learning method, I progressively relied on these three central elements to acquire throwing skills. Coupled with sustained and rigorous making, observing artists at work and imitating each step until I could see, feel and anticipate the necessary actions, I gradually improved my awareness and know-how. As a result of this methodology, I have come to understand how experiential knowledge, accumulated over time, builds a visual, cognitive and sensual vocabulary that becomes embodied as a visceral form of making. This tacit structure of training was a crucial initial step in my ceramic learning. Yet, it was not until entering artist and educator Bela Kotai's formal ceramic training classes that I was able to fully grasp the intricate, practical wheel throwing information his step-by-step instruction afforded. His instruction may be described in the following terms:

The performer co-ordinates his moves by indwelling in them as parts of his body, while the watcher tries to correlate these moves by seeking to dwell in them from outside. He dwells in these moves by interiorizing them. By such exploratory indwelling the pupil gets the feel of a master's skill and may learn to rival him. (Polanyi 2009, 30)

Polanyi's description captures the essence of Kotai's tacit teaching method. Through visual communication, physical information transfers from the teacher's bodily action to the student through a type of empathy. This understanding arises from a knowing already gathered during practice by the observer, who then recalls the senses/feelings the instructor was expressing. Thus, I understood Kotai's technique, knowledge and skills conveyed through his live teaching demonstration as an efficient transferal of ceramic knowledge.

Within this training method, Kotai's pupils were invited to compile a list of skills they wished to learn, which he then demonstrated via practical instruction. Students were encouraged to take note of his actions, including his body, arm, and hand movements, throughout the process. Such hands-on method of skill learning, as Pallasmaa points out, '... is not primarily founded on verbal teaching but rather on the transference of the skill from the muscles of the teacher directly to the muscles of the apprentice through the act of sensory perception and bodily mimesis' (Pallasmaa 2009, 15). In many ways, the manner of teaching emphasised by Pallasmaa echoes Urano's instructions to Leach; 'do what I show you'.

By replicating Kotai's demonstrated steps, I began applying the significant shifts and adjustments observed in his techniques – for example, his body positioning at the wheel, and the angles and placement of his eyes/head, arms, elbows and hands. I also noted his even fluid actions in rhythm with the speed of the wheel, thus ensuring a seamless transition linking each process. This is vital information, I emphasise, that is difficult to explicitly articulate. Following the practical instructions, students were required to repeat the observed actions during daily designated studio time until the applied information for each technique became absorbed knowledge. In essence, by imitating Kotai's movements and adjusting them, where needed, to suit my body structure, size and height, I rapidly grasped each skill step.

Author of *The Master and His Emissary: The Divided Brain and the Making of the Western World*, 2009, Iain McGilchrist, points out that this method of learning occurs through the dissemination of knowledge from one person to another via the human ability to imitate. In general terms, from early childhood our learning begins through the imitation²⁴ of human behaviour, thus enabling individuals to break away from the limitations of personal experience to engage in the experiences of another. This, McGilchrist writes, 'comes about through our ability to transform what we perceive into something we directly experience'²⁵ (McGilchrist 2009, 248). This ability, as noted earlier, manifests as a type of empathy, or fellow feeling, where a person can convert observed actions and emotions into an immediate understanding. Essential neural structures are established when we imagine a situation, observe someone's action, and envisage ourselves performing the same action. In place of concrete visual stimulus, mental representations activate neurons that give rise to direct perception (McGilchrist 2009, 248 -250).

Eventually, by imitating direct experiences, sensory awareness arises through a silent absorption of felt information, forming a specific way of knowing. This knowing occurs because, as Pallasmaa contends, 'many of our most crucial skills are internalised as automatic reactions that we are not consciously aware of. Even in the case of learning skills, sequence of movement in a task is internalised and embodied rather than understood and remembered intellectually'²⁶ (Pallasmaa 2010, 21).

²⁴ Humans are the only species to imitate with a direct purpose, as an aim as well as an outcome, thereby learning a skill for a particular purpose. Imitation is considered to be, arguably, our most valuable skill as it is a crucial aspect in the continual development of the human brain (McGilchrist 2009, 248).

²⁵ Concerning imitation, essential neural structures are established when we imagine a situation, observe someone's actions, and imagine ourselves performing the same action (McGilchrist 2009, 250).

²⁶ Juhanna Pallasmaa also notes that 'prevailing educational philosophies have emphasised conceptual, intellectual and verbal knowledge over this tacit and non-conceptual wisdom of our embodied processes, which is so essential to our experience and understanding of the physical and the built' (Pallasmaa cited in Taylor 2010, 64).

I contend that the internalised and embodied information put forward by Pallasmaa eventually gives rise to insight and comprehension, where knowing becomes instinctive, familiar and effortless. Sennett posits this awareness as follows:

When we speak of doing something “instinctively,” we are often referring to behaviour we have so routinized that we don’t have to think about it. In learning a skill, we develop a complicated repertoire of such procedures. In the higher stages of skill, there is a constant interplay between tacit knowledge and self-conscious awareness, the tacit knowledge serving as an anchor, the explicit awareness serving as critique and corrective. Craft quality emerges from this higher stage, in judgments made on tacit habits and suppositions. (Sennett 2008, 50)

When restructuring improvements, Sennett advises that if the ‘tacit anchor’ does not develop, ‘motor’ assessment is delayed, thus leaving workers without the required experience to determine proficient work standards as the implemented proposals are too abstract (Sennett 2008, 50). Therefore, in terms of craftsmanship, Sennett states that training and benchmarks must be set in place by a senior director, otherwise experience and skill inequities in a workshop convert to ‘face-to-face’ concerns (Sennett 2008, 54). The point made by Sennett concerning the tacit anchor, training and benchmarks occurred primarily in my attempts to learn ceramic skills in practice rather than in a workshop setting. The difficulty arose when written instruction was not sufficiently or accurately conveyed through written text. Without the assistance of an experienced practitioner to critique, interpret, demonstrate and correct skill deficiencies, learning continued to be hindered.

Additionally, Sennett’s second point regarding instinctive behaviour arising from routinised skill performance correlates with Sorri’s point about the assimilation of physical-body actions, and how subsidiary tacit awareness is gathered through repetitive practice (Sorri 1994, 20). As Sorri adds, through the process of repetitive practice, new skill knowledge becomes integrated as a component of the learner’s ‘bodily cognition’, thus converting the learner to a ‘knower’ (Sorri 1994, 24). In further defining this aspect of tacit knowledge, Sorri explains that ‘we are focally aware of that to which we are directing our attention and subsidiary aware of those things that we are directing our attention from or through’ (Sorri 1994, 16). Sorri refers to the example of hitting a nail with a hammer to define the two forms of awareness. She contends one must be focally attentive to hitting the nail while being subsidiarily focused on holding the hammer in one hand and the nail in the other hand to complete the task successfully (Sorri 1994, 16). In applying focal and subsidiary awareness to ceramic practice, Sorri contends that while learning to wheel-throw, her attention was focally aware of numerous aspects of the process simultaneously. Over time, many of those same aspects slowly drifted to subsidiary focus (Sorri 1994, 22). For example, the correct forward left-hand pressure and downward right-hand pressure during centring, along with when to add water, were all initially focal awareness tasks. With practice, these tasks slid into subsidiary focus, allowing her attention to shift to other aspects of the making (Sorri 1994, 22).

Sorri’s focal and subsidiary awareness in ceramic practice reflects similar experiences occurring in my own practice. This line of enquiry became a useful, practical way of elucidating the complex facets of tacit knowledge through studio practice. In the initial stages of ceramic learning, I was also primarily focally aware of all my bodily actions and requirements occurring during the process of making and doing. For instance, and to add to Sorri’s example, to centre clay, I had to continually remind myself to keep the speed of the wheel at an even steady pace, while at the same time focusing on the placement of my body, hands and arms. Simultaneously, focal awareness meant knowing when to add the correct amount of water to keep the clay sliding through my hands, the level of pressure required for centring²⁷, and judging when the clay was centred. My ability gradually improved with extensive practice. All elements requiring focal awareness, including

²⁷ Centring clay is both the most challenging skill in wheel throwing to learn and the most essential component of the process. If the clay is not centred, it is not possible to produce a uniform, symmetrical vessel.

the wheel speed, hand, arm, body placement, water quantity and pressure, slowly began to drop back into subsidiary awareness. Thus, I became focally cognisant on the form I was aiming to create, while merely being subsidiarily conscious of all other aspects of the centring process.

An additional feature of ceramic practice is trimming, cutting and shaping work, which demands the knowledge and skill of specific tools. In the beginning, feeling or sensing the unfamiliar tools with the fingers and hands is meaningless to the user. Polanyi asserts that, over time, a growing recognition of impressions, such as the point of the tool making contact with the object, begins to emerge. Gradually, the initial insignificant sensations are converted to meaningful feelings ensuring competent use of the instruments (Polanyi 2009, 12). Polanyi frames this aspect of tacit knowledge as tacit semantic knowledge. Relatedly, Maurice Merleau-Ponty illustrates this awareness by using the example of a stick. He contends, '[O]nce the stick has become a familiar instrument, the world of feeling things recedes and now begins, not at the outer skin of the hand, but at the end of the stick' (Merleau-Ponty 2002 (1945), 175-176).

Additionally, Polanyi's idea of tacit semantic knowledge resonates with Martin Heidegger's concept of entanglement. According to Heidegger, with practice, the more competent and knowledgeable the learner becomes, the less likely they are to notice their own actions (Royle 2018, paragraph 7). Explaining entanglement further, drama therapist Andrew Royle refers to Heidegger's model of a worker's use of a hammer. Picking up the hammer, the worker instinctively feels the weight of the tool in his/her hand. Through the nailing process, automatic fine-tuning is made by the worker to accommodate the pace and line of each strike, even though the worker is mainly unaware of the amendments he or she is making. In effect, Royle reveals, as the worker's proficiency increases, conscious awareness of the hammer will steadily decrease allowing the worker to 'simply hammer' (Royle 2018, paragraph 8). Thus, the hammer becomes an 'extension' of the hand via the felt movement of the tool in the user's hand. Through this synthesis, the worker and the hammer are one. Heidegger's notion of entanglement, as relayed by Royle, encapsulates the essence of awareness informed by the senses – here, the sense of touch becomes embodied over time, and the actions become instinctive.

The hammer in the hand of a worker acts as an extension of the hand, guided through somatic information. Correspondingly, Polanyi contends 'we become aware of the feelings in our hand in terms of their meaning located at the tip of the probe or stick to which we are attending' (Polanyi 2009, 12). In due course, sensations become familiar, actions become instinctive, and the worker and tools are entangled.

In this understanding, Polanyi's notion of tacit semantic knowledge, along with Royle's and Heidegger's theories of entanglement, relates to a vital aspect of ceramic learning. For, as the ceramicist begins to recognise distinguishing details such as vibrations and pressure relayed via instruments to the hand and body, the more efficient and competent the maker becomes throughout the making process. As such, mark-making, decorating and trimming tools become an extension of the arm and hand. The maker's focus intrinsically shifts to creating patterns and trimming, rather than focusing on the tool or the amount of pressure required for the task. As a comparison, the wheel becomes integrated with the body in a similar way to a musician playing an instrument.

When repeated practice gives rise to a heightened level of competency, automatic fine-tuning is made by both the worker and ceramist alike. Both are generally unaware of the amendments required through the process of making and doing. Therefore, in this way, the ceramist, worker and their tools become as one.

Skill, Repetition and Habit:

Central to achieving heightened skill competency levels, prolonged, repetitive practice is vital to knowledge retention, which, in turn, shapes habit. Philosopher Felix Ravaisson maintains that sustained repetitious practice in terms of movement progressively becomes 'easier, quicker and more assured' (Ravaisson 2009, 8). Therefore, as habits develop, the need for direct focus on the actions required to carry out tasks declines. Over time, habitual activity encapsulates methods which are then absorbed by the body, allowing, as John-David Dewsbury states, 'the body to do the thinking' (Dewsbury 2015, 33).



Figure 11. Alana McVeigh, *Shape of Light Series 3*, 2018, porcelain, 23 x 14 cm



Figure 12. Alana McVeigh, *Of Place, Time & Tradition: Then & Now Series 4*, 2018, porcelain, 14.5 x 31.5 cm.

Examined through my own repetitive learning activity, I came to realise a greater recognition of the vital role of replication – that is, imitation and repetition in habitual practice. Throughout my practice, I have made small to medium-sized vessels, and while my skills were developed well before this investigation began, I set myself a challenge in this inquiry. To engage in the principle of research, I decided to increase the scale of the forms while still maintaining a level of translucency.

Initially, this task posed some difficulty, although a schedule of repetitive habitual practice noting the physical, sensory and cognitive activity undertaken in shaping larger amounts of porcelain gave insight to knowing. The daily program consisted of working six hours a day, five days a week, for three months. Setting out with a kilo of clay, I began making vessels over and over, gradually increasing the amount of clay until I did not have to think about each step consciously. My awareness of the clay volume and process became instinctive, and as Dewsbury points out, from habitual practice, the body begins to take over the thinking. Additionally, Ravaisson explains that as perception is connected to movement, like repetitive action, perception ‘becomes clearer, swifter and more certain’ (Ravaisson 2009, 8). Therefore, awareness evolving via routine filters through the body and mind as well as muscular and nervous systems to become entrenched as embodied knowing (Sennett 2008, 20). While a majority of the work made through repetitious practice are returned to the bucket for recycling, examples of repetitive testing, and trial and error practice are used for glaze testing and mark-making as evident in figures 13 and 14.

Pivotal to this method of learning is a heightening of one’s skills which ensures, as Sennett suggests, ‘technique is no longer a mechanical activity; people can feel fully and think deeply about what they are doing once they are doing it well’ (Sennett 2008, 20). Parallel to Sennett’s ideas, Dewsbury maintains that as the trainee increasingly evolves from beginner to skilled practitioner, what was once a struggle becomes graceful as experiences between material and the body are repeated (Dewsbury 2015, 35). As such, repetitive, habitual practice trains the mind and body – the muscles, senses and thinking – to merge, where the innermost feelings become conversant. Additionally, in clarifying the distinction between skill acquisition and skill enactment, I believe skill enactment arises from watching and doing while skill acquisition evolves and becomes established through sustained repetitious making.



Figure 13. Alana McVeigh, documentation of repetitious throwing examples, 2018, porcelain, dimensions variable.



Figure 14a. Alana McVeigh, documentation of repetitious throwing examples, 2018, porcelain, dimensions variable.



Figure 14b. Alana McVeigh, documentation of repetitious throwing examples, 2018, porcelain, dimensions variable.

At this juncture, Pallasmaa explains, the abundance of essential skills becomes intuitive, reflexive and responsive. These responses are also evident in skill learning²⁸ where, as he maintains, “the sequence of movements in a task are internalised and embodied’ more readily than comprehended and memorised mentally (Pallasmaa 2010, 21). While repetitive throwing has become vital in gaining my wheel throwing skills it has also been essential in understanding the nuanced material qualities of porcelain. The sensory awareness required when working with this malleable medium could only be realised by sensory associations occurring during repetitious practice. During repeated making my sensing body built an intuitive insight of the refined quality of each clay particle throughout the soft plastic movement of the walls of each form during shaping. Through continuous repetitive throwing I came to recognise and spontaneously respond to the growing embodied knowledge gathered over many years. In other words, through repetitive practice, the brain trains itself to amalgamate ‘visual and tactile perceptions by’ forcing the eye and hand to operate simultaneously (Wilson 1998, 97).

Neurologist Frank R. Wilson’s notion of a synthesis of visual and tactile perception bears a resemblance to academic and artist Barbara Bolt’s ideas concerning material thinking. Bolt suggests there is a certain type of awareness achieved by way of the artist’s use of materials, equipment and management of ideas throughout the creative process. This understanding is arrived at, she believes, by the union of the ‘hand, eye and mind’ (Barrett and Bolt 2010, 30-31). This is an emergent knowing realised through repetitive, habitual practice.

Acknowledging habitual repetitive throwing as a pathway to achieving unity of form and material, Leach wrote,

[O]ne may throw fifty pots in an hour, on the same model, which only vary in fractions of an inch, and yet only half a dozen of them may possess that right relationship of parts which gives vitality – life flowing for a few moments perfectly through the hands of the potter. (Leach 1940, 19)

Leach espoused such emphasis on the physical, yet for the most part he did not throw his own pots, therefore disseminating this insight primarily through his written work. Due to Leach’s limited practical ceramic making, author and ceramist John Britt challenges Leach’s supposition concerning repetition. Britt argues that as Leach had a thrower throughout his career, there was never a need for him to ‘sacrifice’ the lengthy amount of time required for repetitious practice (Britt 2000, 161). While acknowledging Leach’s text offered relevant technical guidance for ceramists in Australia at a time when information was very limited (D. Moon 2006, vi), as noted in chapter one, his references to practical making are nonetheless vague. Britt’s point once again raises a further contradictory aspect in Leach’s philosophy concerning the advice he explicitly advocated and the practice he maintained. This contradiction is significant because without engaging in prolonged, repetitive practice, I deem that Leach would never have realised a silent, inner knowing arising through habitual, rhythmic making. Moreover, the crucial links between body movement and perception, noted earlier by Ravaissou, would not have taken purchase for Leach because it was not his body that was doing the thinking during the making. Leach’s inconsistency here once again raises questions concerning how he arrived at an understanding of the right relationship in achieving ‘vitality and a life flowing for a few moments perfectly through the hands of the potter’ (Leach 1940, 19). As such, Leach’s explicit written communication identifies a sound philosophical awareness of repetitious practice; however, his studio practice suggests he never realised the implicit awareness arising from habitual practice.

Nevertheless, the process of repetitive practice championed by Leach was subsequently passed on to Cardew and McMeekin. Drawing from his work experience under Cardew, McMeekin wove repetitive practice into the training at Sturt

²⁸ Pallasmaa also notes ‘prevailing educational philosophies have emphasised conceptual, intellectual and verbal knowledge over this tacit and non-conceptual wisdom of our embodied processes, which is so essential to our experience and understanding of the physical and the built’ (Pallasmaa 2010, 21).

as noted earlier in Blakebrough's repetitive working method. As Timms points out, 'only when he'd [Blakebrough] made and discarded a thousand mugs did he feel he had mastered the form' (Timms 2005, 23). In tracing the lineage of learning via repetition as a highly effective method of ceramic learning, philosopher Eugen Herrigel contends that practice and repetition, and then repetition of the repeated, is the prime mode of Japanese instruction in the development of skill (Herrigel 1953, 58). Herrigel's point reinforces how Leach's Japanese training and skill gathering took hold, and how, in time, this system also became a key learning methodology for ceramists in Australia.

Training for a skill implies endless practice and repetition that borders upon boredom. However, the gradual improvement of performance, combined with dedication, keeps the negative sense of boredom at bay. In fact, the experience of slow time and boredom initiates meditative mental activity. (Pallasmaa 2009, 81)

Acknowledging the idea of boredom linked to repetitive practice, it is also essential to note that skill involves more than merely technical know-how; it also requires an inner presence of mind. The repetitive action of throwing the same form continuously, as ceramist and academic Janet DeBoos points out, could be construed as a form of boredom.²⁹ Yet, rather than a condition of boredom, repetitive production throwing, she suggests, evokes a state of mind. In characterising her own experiences of this distinctive mindset, she writes, '[T]hey [vessels] were of various sizes, but the action of their manufacture was repeated and my skill in making them allowed me to enjoy a state of mind and body that I more recently have learned could be described as "flow"' (DeBoos 2012, 2). The notion of flow described by DeBoos occurs when as psychologist Mihaly Csikszentmihalyi points out, a person is deeply immersed in an activity. Csikszentmihalyi affirms that while in this mental state of intense concentration consciousness is usually very methodical and assists 'the self' to assimilate (Csikszentmihalyi 1992, 41). He further emphasizes that '[T]houghts, intentions, feelings and all the senses are focused on the same goal' and accordingly the occurrence is harmonious (Csikszentmihalyi 1992, 41). Csikszentmihalyi terms this awareness as an 'optimal experience'. He suggests that commonly as a person becomes totally absorbed in a task, the task becomes so instinctive and reflexive, whereby the person – the self, loses any awareness of being separate from the task being undertaken (Csikszentmihalyi 1992, 53).

The immersive, harmonious state of mind and body articulated by Csikszentmihalyi and DeBoos is one I also experience within repetitious throwing. A sinuous, graceful rhythm of making pulls together when mind with body and the senses operate in accord. In these moments, I am aware I am working in a way that is felt implicitly, rather than logically, as each piece transforms from a solid mass to a state of completion, ready for the next phase of refinement. Csikszentmihalyi's research reveals that flow, or a state of mind arising from otherwise boring activities are expressed as 'exhilarating', self-fulfilling and feelings of being 'relaxed, comfortable and energetic' (Csikszentmihalyi 1992, 40 & 53). Additionally, along with such awareness he also notes that there is often a heightened sense of achievement expressed following the activity. The points made by Csikszentmihalyi bring to mind an important additional consideration posed by DeBoos that is whether the process of repetitive practice is the very act that prompts a reconnection of the heart with the head, or perhaps, as Leach asserts, one hand one brain.

²⁹ DeBoos bases her essay 'On the Edge: Boredom, Repetition and the Creative Act', 2012, on the philosophies surrounding 'boredom' by people such as Heidegger, Lars Svendsen, John Cage and Siegfried Kracauer. Here, I am using DeBoos' ideas of repetitive acts as a link to evoking a state of mind.

Zen – Silence and the Meditative Mind

The ideas DeBoos suggests are familiar to Buddhist monks and anyone practising meditation (DeBoos 2012, 5). That is to say, the essence of the state of mind conveyed by DeBoos is suggestive of the characteristics firmly embedded in the beliefs of Zen Buddhism,³⁰ namely, a silence of the mind, intuition, of being focused and in the moment. The essence of being as portrayed in Zen Buddhism is conveyed by Shigenori Nagatomo:

Zen cherishes simplicity and straightforwardness in grasping reality and acting on it “here and now,” for it believes that a thing-event that is immediately *presencing* before one’s eyes or under one’s foot is no other than an expression of suchness, i.e., it *is* such *that* it is showing its primordial mode of *being*. (Nagatomo 2017, paragraph 1, 'original italics')

The notion of immediate ‘*presencing*’, the here and now of being wholly focused on and in the moment identified by Nagatomo, encapsulates the essence of the state of mind emerging through repetitious making. Author Arthur Reber identifies similar characteristics and principles within Zen³¹ teaching and implicit learning. For Reber, Csikszentmihalyi and DeBoos, knowledge can be gained by thoughtful engagement with the situation under deliberation. In these cases, perception is assisted by consciously avoiding attempting to comprehend the nature of the world. Understanding achieved through sustained attentive awareness with one’s environment allows for suitable responses and logical functioning within that environment. Though for both implicit learning and Zen teaching, this is an understanding not easily articulated, an understanding gained only through the process of considered engagement (Reber 1993, 159).

Within my own creative practice, I understand this mode of being as mindfulness – of being at one in the moment. In these instances, time dissolves through a fluid sequence of habitual, instinctive activity seeping from a reservoir of silent knowing. This is when, as DeBoos suggests, making and doing enable ‘the unconscious mind to take over allowing us to “get lost” in the task’ (DeBoos 2012, 6). Getting lost in the task, as I have come to understand, transpires as knowledge gained through repetition, which then gradually becomes embodied as an intrinsic knowing evolving through a meditative drift, when time, mind and body fuse, work moves through the hands, mind and spirit of the maker, emanating, as Leach notes earlier, ‘human expression’.

Leach’s devout conviction to the Baha’i faith was fundamental in his efforts in blending Eastern and Western spiritual values (de Waal 1997, 44). More specifically, this philosophical awareness was directed through the Japanese tea ceremony, *Cha-no-yu*, where sensory aesthetics and the harmonising of life and beauty formed much of his ethos. The ceremony was developed over centuries by Zen monks, whereby the tenets of harmony (*wa*), respect (*kae*), purity (*sae*) and tranquillity (*jubuo*) exist as a state of mind, to purify the soul and to become one with nature (Cartwright 2019, paragraph 6). The tea bowls of the *Cha-no-yu* ‘... came to be treated as direct vehicles of that spontaneity and mental illumination, which was the aim of Zen life ...’ (Rawson 1971, 84).

³⁰ Zen entered Japan from China in AD 1200. It infiltrated not only Japanese religion, but also Japanese culture generally through the encouragement of the political powers and the patronage of Japanese aristocrats. The influence of Zen on artists is attributed to art being taught almost exclusively in Zen monasteries by monks who were also artists, scholars and mystics, particularly during the Kamakura and Muromachi eras (Suzuki 2010, 28). Students were taught to recognise that Zen is the *experiencing* of everyday rituals from within, rather than as external experience (Suzuki 2010, 13). Similarly, the Japanese philosophical approach to ceramic practice and creative education is an experiential way of absorbing knowledge through observation, imitation and illustration (Herrigel 1953, 58).

³¹ Students were taught to recognise that Zen is the experiencing of everyday rituals from within, rather than as external experience (Suzuki 2010, 13). Similarly, the Japanese philosophical approach to ceramic practice and creative education is an experiential way of absorbing knowledge through observation, imitation and illustration (Herrigel 1953, 58).

Citing the founding tea masters of the Way of Tea³² (Japanese Tea Ceremony) as holding a specific means of seeing, Leach advocated that the masters identified 'the inner nature of things, the reality of things ...', along with 'the eternal mode'. The eternal mode, as espoused by Leach, was derived from his mentor Yanagi's concept of harmonising life with beauty (Yanagi cited in Leach 1940, 8).

The qualities of Zen, ritual, tranquillity, and harmonising life with beauty, as conveyed by Leach, formed the spiritual essence within his approach to ceramic making. In further grasping the multi-layered tenets of this traditional ceramic practice, Rushforth writes,

One soon realized that woven into the Japanese ceramic tradition were thousands of strands, and weaving it together was the influence of the tea-master and Zen Buddhism. Generation after generation of potters and laymen had pondered over the qualities that they considered made a good pot (Rushforth cited in Cochrane 1992, 66).

The time I have spent developing skills has also become a ritual evolving as a form of meditation and tranquillity, space where I feel a complete connectedness to my work. This aspect of sensory lived experience and understanding of tacit knowledge is integral to my skill development, and I believe this to be true of most ceramic-based practitioners. Emerging from this silent, reflective learning, I am also inspired to strive for greater development and understanding of the empirical and cognitive structures linking non-verbal forms of knowledge.

In examining tacit knowledge, this chapter has discussed the practical and theoretical positions of empirical experiential learning – observing, imitating and replicating. Further investigation has formed an understanding of how this method of ceramic training has manifest in studio-based ceramic practice as a cognitive and sensual vocabulary. Examining Leach's ideas through personal experience, I have identified a significant gap between his explicit written expression, and the tacit ceramic knowledge and skill learning occurring in my practice. The implications of this gap, I believe, not only confused ceramic learning, but also identifies the importance of shown, person-to-person instruction as a necessary learning method in ceramic development. Further examination identifies how this form of non-verbal knowledge transference has become a part of the Australian ceramic vernacular from the 1940s onwards, and how it has been instrumental in framing my own practice.

In essence, Leach's book is a useful ceramic training manual, and also offers a philosophical approach to pottery making drawing from tacit learning and sensory awareness evident in the traditional Japanese pottery apprenticeship system. While at times Leach contradicts essential elements of his philosophy by employing a thrower to create his work, I believe his text poses both beneficial and flawed points. Although there are disparities in Leach's writing and claims that I reject, there are nonetheless many aspects of his philosophy which I support and believe hold relevance to this research.

³²'The aesthetic sensibility informing the way of tea traces its roots through Zen Buddhism, to Chinese Ch'an Buddhism and Taoism' (Kondo 1985, 287).

Chapter Three

Sensory Awareness

The ceramist's consideration of skill and technique within practice is often limited to *how* to work with and render materials. To look beyond these technical concerns, this chapter introduces the body in relation to the senses. In order to analyse the sensing body, the discussion considers how seeing, hearing, touching, smelling and tasting shape daily activity, and how this awareness intersects with creative practice.

I explore studies from broader perspectives, including my previous experiences of nursing, phlebotomy training, and walking, to determine an understanding of the role sensory awareness occupies in differing spheres of our daily lives. I examine sensory awareness through the writings of Bernard Leach, Barbara Bolt, Beverley Sauer, John Dewey, Juhani Pallasmaa and Polly Ullrich to assess the essential function this awareness, in tandem with tacit learning, holds within the development of ceramic knowledge.

The discussion draws on my own awareness to identify crucial aspects of the synthesis of mind, body, and sensory and tacit learning to examine my body's responses to these qualities in ceramic practice.

The Senses:

The delicate tremble of a butterfly's wings in my hand, the soft petals of violets curling in the cool folds of their leaves or lifting sweetly out of the meadow grass, the clear, firm outlines of face and limb, the smooth arch of a horse's neck and the velvety touch of his nose – all these, and a thousand resultant combinations, which take shape in my mind constitute my world. (Keller cited in Lash 1980, 345)

From the moment of birth, our senses provide vital information³³ linking us to our surroundings and the outside world (Howard 1995, 137). In daily activity, knowledge gathering is amassed through the body by way of the senses; seeing, hearing, tasting, smelling and touching to engage with the material world (Dewey 1939, 957). In comprehending retained sensory information, philosopher John Dewey asserts that the mind provides the agency to gain understanding via the senses by giving meaning and value to each experience. Each experience, he claims, then adds to our knowledge base, thereby drawing on, and putting to use, accumulated knowledge throughout the process of daily life (Dewey 1939, 958). Architect and academic Juhani Pallasmaa also concurs that 'we are connected with the world through our senses' (Pallasmaa 2009, 13). In essence, as Merleau-Ponty puts forward, 'the body is the vehicle for being in the world, and having a body is, for a living creature, to be involved in a definite environment ...' (Merleau-Ponty 2002 (1945), 94).

Sensory awareness, like tacit knowledge, has been investigated through a broad range of disciplines, including ethnography (Sarah Pink 2009), anthropology (Tim Ingold 1996; David Howes 2005), presence studies (Enrico Pitozzi 2014), psychotherapy (Richard Lowe 2016), mining engineering (Beverley Sauer 1998) and art (John Dewey 1934). In order to broaden my examination of sensory awareness at an in-depth scholarly level, I also looked to disciplines outside of ceramics. Through the research I discovered a five-year mining study undertaken by academic Beverley Sauer, who published the findings in the article 'Embodied Knowledge: The Textual Representation of Embodied Sensory Information in a Dynamic and Uncertain Material Environment'. Although mining engineering, which is the focus of Sauer's research, assumes a position far removed from creative practice, her findings concerning sensory awareness and tacit knowledge

³³ This knowledge develops via the numerous sensory systems that exist throughout the body, providing internal and external information through electrical impulses to the brain (Bourne, Felipe and Russo 1998, 136). This sensory information is then arranged and deciphered through a mental process we know as perception (Risatti 2007, 119).

parallel aspects of ceramic practice. This similarity will be discussed, but first it is necessary to illustrate Sauer's key findings.

Sauer argues that in a rapidly changing environment, workers are required to 'observe, evaluate and interpret' sensory information that is altering quickly (Sauer 1998, 132). She frames this form of embodied sensory awareness as 'pit sense', a knowledge based on the feelings, instinct and intuition that miners develop within the physical environment of the mine. As Sauer clarifies, 'it is a physical sensory knowledge in the most literal sense' (Sauer 1998, 137). Sauer identifies the sense of hearing, smelling, seeing and feelings, along with instinct, intuition and embodied knowledge, as an aspect of the everyday working environment of mining engineers. For instance, this physical sensory awareness occurs when the human body experiences shifts in pressure, or hears sound vibrations, cracking or springy noises that warn miners of the need to evacuate. Popping sounds further alert miners to methane pressure, while bumping sounds signify unstable pillars. Additionally, sensory understanding informs miners of the need to act when bodily reactions such as headaches occur due to 'changing material conditions', for example, rising carbon monoxide levels. Vital to miners is the flame safety lamp, which requires the same oxygen level as humans to survive. By monitoring their environment and observing the colour change of the flame, miners can assess whether the oxygen level is high enough to prevent suffocation (Sauer 1998, 137). Nevertheless, Sauer found that explicit sensory knowledge, like tacit knowledge, was not translated or accurately communicated (Sauer 1998, 134). It is a means of acknowledging sensory awareness as an agent for engaging in everyday activity, which, as Sauer argues, is a vital form of knowledge that is mainly misunderstood (Sauer 1998, 134). I contend the difficulty in expressing sensory awareness arises because it is a silent inner knowing. As noted in chapter one, Russell T. Hurlburt, Christopher L. Heavey and Arva Bensaheb maintain sensory awareness '... is a frequently occurring yet rarely recognized phenomenon of inner experience'; yet, 'despite its high frequency, many people do not notice its appearance nor recognize its theoretical import ...' (Hurlburt 2009, 231).

Examining ideas put forward by Sauer offered a tangible way of grasping sensory awareness and knowledge that is often silent, misunderstood and very difficult to communicate. In comprehending the findings in this particular study, I drew a parallel between mining-related sensory awareness and sensory awareness in ceramic practice, and thus began to formulate a way of explicitly communicating this unspoken knowledge.

Sauer's investigation extends a cogent perspective for comprehending how sensory awareness is grasped, transferred and used generally in creative practice. Moreover, I believe Dewey's ideas of sensory awareness, Polanyi's earlier discussion of tacit knowledge and Sauer's study converge with concepts put forward by Estelle Barrett in her article 'Experiential Learning in Practice as Research: Context, Method, Knowledge', 2007. Barrett claims that creative practice, in contrast to scientific processes, is 'artistic research which draws predominantly on lived experience and more direct engagement with materials and objects ...', which, in turn, generates different possibilities for knowledge creation (Barrett 2007, 118). The connection between everyday living and artistic experience, she states, is drawn from a compulsion to touch 'materials and to think and feel through their handling' (Barrett 2007, 115). Additionally, comprehending the connections between 'experience, practice and knowledge', she reasons, is 'aesthetic experience' understood as 'sense activity' (Barrett 2007, 115).

Dewey offers a specific structure to reinforce the vital components of sensory awareness in ongoing daily life experience. He proposes that in shaping our perceptual scope this structure requires a culmination of factors, that is, when all of our senses are operating in harmony (Dewey cited in Jackson 1998, 59). In clarifying this view, Dewey writes,

Seeing, hearing, tasting become esthetic when relation to a distinct manner of activity qualifies what is perceived. Nothing is perceived except when different senses work in relation to one another.... Unless these various sensory-motor energies are coordinated with one another there is no perceived sense of object. But equally there is none where-by a condition impossible to fulfil in fact a single sense alone is operative. (Dewey cited in Jackson 1998, 59)

Sense coordination specific to ceramic practice, I contend, emerges most noticeably in making via seeing and touching mediums. The blend of touch and sight stimulates and brings into action muscles, tendons and nerves. Harmonised, seamless making and feeling, and observing porcelain gliding through my hands stir a familiar knowing, as Dewey suggests in the above quote. Moreover, according to Barrett, sense activity is grasped in perception and the handling of the medium (Barrett 2007, 115).



Figure 15. Alana McVeigh, progress documentation, 2013, porcelain, 13

Eye-Hand Relationship:

Touch, sight and timing direct all stages of the ceramic process. Each created form must sit, allowing the walls and base sufficient time to become firm enough to trim. Through touch and sight, I monitor the subtle changes in the drying porcelain. By this information, I know precisely when each form is at its optimum, not too damp or too dry, but ready for the refinement of base trimming. Once again, the vessels are left to dry slowly and evenly to avoid cracking and warping. By touch or by placing each form against the cheek of my face, I accurately feel the amount of moisture deeply embedded in every piece. In this case, the sensitive flesh of my cheek provides more enhanced sensory information than sight or the stroke of my hand. By way of this sensory information, I can determine when the work is dry enough to be placed in the kiln for bisque firing.

Dewey proposes that for the artist, the senses experienced within the process of creative expression occur through the sensitivity and understanding of materials that 'we touch and feel, as we look we see, as we listen we hear' (Dewey 1939, 975). Therefore, I reason, working in combination with techniques, methods, material features, skill and knowledge, the senses are the agents gathering information and enabling creative expression to manifest as material awareness. Moreover, for the maker, creative expression is principally achieved by way of using the senses. Artist and academic Barbara Bolt claims that 'handling' materials during the making allows for a particular kind of 'knowing' to emerge (Barrett and Bolt 2010, 29). She further maintains this way of knowing is an aspect of tacit knowledge. That is, in the same way as tacit knowledge 'provides a very specific way of understanding the world', absorbing this distinctive type of knowing emerges through doing and making, a knowing 'grounded in material practice' (Barrett and Bolt 2010, 29). This knowing, I propose, is not an immediate comprehension, but a knowing that develops in the fullness of time. Over prolonged engagement, testing, examining and working with materials give rise to knowledge of feeling and observed qualities, capabilities and possibilities. Time fosters eye,



Figure 16. Alana McVeigh, progress documentation, 2011, porcelain, 9 x 6 cm.



Figure 17. Alana McVeigh, Tea Bowl 1, 2018, porcelain, 8 x 6 cm.



Figure 18. Alana McVeigh, Tea Bowl 3, 2018, porcelain, 7 x 7.5 cm



Figure 19. Alana McVeigh, Tea Bowl 2, 2018, porcelain, 8 x 9 cm

hand and cognitive unity, which often occur during trial and error, and repetitive practice.

Rawson defines a hierarchy of the senses particular to ceramic practice:

The only senses to which ceramics may not legitimately appeal directly are, perhaps, smell and taste. It is true, however, that certain visual and tactile qualities can evoke, by synaesthetic suggestion, memories from those other two sense-fields which may strongly reinforce the total effect of the object. (Rawson 1971, 18)

Although smell is a sense used in wood-firing, I concur with Rawson's analysis of a sense hierarchy in ceramic practice. I believe, touch precision, working in tandem with sight, informs cognition and ensures unified, cohesive ceramic making. Reflecting on the haptic sense of touch assisted by sight in my own making prompted a desire to grasp an immersive understanding of my prime medium, porcelain. Central to this goal was, as noted in chapter two, the aim to engage in a routine daily practice to establish skill development alongside a resonant synergy between the porcelain, the wheel and myself.

Learning Through Sensing:

When I commenced this inquiry, I took note of the qualities intrinsic to porcelain while making a series of fine rimmed vessels (figure 16). The shell-like appearance, translucency, fragility and transient sense of beauty inherent in porcelain are the main reasons why I choose to work with this material. Through habitual, repetitive practice, a feeling of familiarity emerges as my senses, of touch along with sight, distinguished the plasticity and nuanced subtleties of the clay, thus igniting new ways of working *with* the medium. To be precise, rather than compelling or forcing the porcelain to take shape, I realised that the natural fluidity of the medium must be allowed to move. Hence, as the maker, I must also work with that movement to coax each particle of clay into shape. It is by way of this form of responsiveness that I draw on a silent understanding of

the material qualities of porcelain. This in-depth awareness fuses as a synthesis of mind, body and the wheel, culminating as a seamless working methodology.

Pallasmaa reinforces the notion of working *with* materials as ‘collaboration’ with mediums: ‘[I]nstead of imposing a preconceived idea or shape, he [sic] needs to listen to his [sic] material’ (Pallasmaa 2009, 55). In clarifying this point, Pallasmaa refers to a quote by sculptor Constantine Brancusi, who notes all materials have a life of their own, and that ‘we must go with them to the point where others will understand their language’ (Brancusi cited in Pallasmaa 2009, 55).

In similarly acknowledging an artist’s innate insight into material qualities, Leach wrote, when commenting on industrially made ceramics, that ‘the tendency to employ sculptors and painters of reputation to make designs for industry is useful up to a point’ (Leach 1940, 21). He goes on to add that this ‘gives no guarantee that these artists know and feel their medium, nor that the factories and their reduplicating processes will do justice to the designs. The link is not close enough’ (Leach 1940, 21). Leach’s comments, when paired with Bolt’s earlier explanation of material practice, offer an avenue to consider the interactions occurring within the actual activity, or as Bolt describes, the ‘tissue of the making’ (Barrett and Bolt 2010, 29). Accordingly, rather than being merely ‘passive’, the material substances are used actively by artists (Barrett and Bolt, 2010, 29), emerging as an intrinsic fusing of artist, tools and medium. This material awareness and understanding, Bolt acknowledges, ‘originates in and through practice’ (Barrett and Bolt 2010, 30).

Consequently, as my research contends, it is in the making and doing that the ceramicist forges a relationship linking the medium with the body via sensory information. Learnt information and techniques become familiar when steadily gathered via tacit knowledge. In the fullness of time, the culmination of sensory awareness and tacit knowledge filters into the muscular and nerve structure through habitual and sustained engagement. Therefore, sensory awareness, via haptic sense and sight in particular, is crucial to ceramic learning. Equally, conclusive knowledge comprehension of sensory awareness and refinement in making are realised only through sustained, repetitive and habitual practices. As Sennett notes, ‘[E]very good craftsman conducts a dialogue between concrete practice and thinking; his [sic] dialogue evolves into sustaining habits, and these habits establish a rhythm between problem solving and problem finding’ (Sennett 2008, 9). Dewey further emphasises the significance of habitual practice by stating that the making is considered, gradually built up and controlled by both action and perception. The continuity of purposeful, deliberate and focused learning is only made possible by the eye, hand and ‘esthetic’³⁴ working in unity with perception.

Dewey and Bolt both argue that learning emerges through the process of doing and making, the hand through the sense of touch manipulates the materials, and the eye informs the results to the maker. In a catalogue essay I wrote entitled ‘A Presentation of Time’, 2013, I reflect on this eye-hand synthesis:

[W]ithin the making process, the constant sensory information becomes heightened when streams of connections are flowing. Here, touch, sight and mental state connect. In time, the sensation of touch aided by sight becomes instinctive, forming as a specific type of knowing. The hand, through the sense of touch for the ceramist, acts as a prime tool. In this way, as Aristotle proposed, information gained by our external senses informs our internal feelings through the simple action of touch (McVeigh 2013, 3).

As Rawson claims, knowledge gathered through touch arises because ‘... the hand is a live instrument of experience’ (Rawson 1971, 21).

³⁴ Dictionary.com defines esthetics as ‘the philosophical theory or set of principles governing the idea of beauty at a given time and place: the clean lines, bare surfaces, and sense of space that bespeak the machine-age aesthetic; the Cubist aesthetic’ (original italics).

The Haptic Dimension:

The haptic sense of touch from a ceramic teaching perspective conveys information that is otherwise difficult to articulate to a novice potter. For instance, in place of written or verbal information concerning the pressure required to centre clay, I find the most effective method is to place my hands upon the student's hands through *their* centring process. By applying the correct amount of pressure through my hands clasped around the pupil's hands, the pupil can feel the precise force and strength required to bring the clay online. The information provided through the physical act of placing my hands upon their hands delivers greater accuracy of communication when felt, rather than when explained or conveyed through explicit instruction. For the student, it is the immediate realisation of the correct pressure and the subsequent feeling of



Figure 20. Alana McVeigh, *Visibility*, 2016, porcelain, 17 x 10 cm.

clay moving from off-centre to an even smooth mound. Through repeated practice, the awareness associated with centred clay becomes ingrained with the nerves, muscles and tissue of the body and mind. While initiated by the haptic sense, in due course this technique will no longer require conscious attention and instead emerge as an intuitive reflective action.

My apprehension of sensory awareness became heightened while participating in the 2016 exhibition *Visibility*,³⁵ an event for the Association for the Blind of Western Australia. The series of work I exhibited referenced coastal textures – limestone, rocks, grasses and smooth areas of erosion, all of which provided critical information to a visually impaired/blind audience via the haptic sense. Guided by touch alone, the audience recognised subtle transitions between ceramic surface texture, markings, carved recesses and the smooth, gloss glaze which evoked images of environmental associations, in this case the Western Australian coastline. For the participants, the mental impression sparked by the felt surface qualities on each ceramic vessel linked back to previously touched coastal textures, a knowing already similar to Dewsbury's earlier point. This finding emphasised the essential function touch alone can convey in providing accurate information to a community where sight is not the most dominant sense. However, in this case, it is the receiver recognising the work via touch rather than the maker. Designer and craftsman Tapio Wirkkala echoes similar sentiments, '[I]f my eyesight fails, my fingertips see the movement and the continuous emergence of geometric forms' (Wirkkala cited in Pallasmaa 2009, 54).

The significance of the haptic sense for the visually impaired in conveying vital information above all other senses compelled my desire to continue this line of enquiry. The conference paper 'Tactile Augmentation: Reaching for Tacit Knowledge', 2014, by Camilla Groth, Maarit Mäkelä, Pirita Seitamaa-Hakkarainen and Krista Kosonen, presents research relevant to my consideration of the importance of touch in ceramic practice. Their five-day study assessed the 'tactual interface, tactile sensitivity, awareness' and embodied experience of a blindfolded wheel-thrower during the process of making (Groth 2014, 4). Of particular relevance is that although this highly experienced thrower could not see the actions occurring during the making, the study found that it is possible her embodied touch knowledge replaced eye-hand coordination. In other words, while throwing blindfolded, the ceramist's 'tactile memory became a tool in the attempt to "see" through the hands' (Groth 2014, 8). As a consequence, in place of sight, embodied knowledge provided the missing



Figure 21. Alana McVeigh, studio work-in-progress documentation, Fremantle, Western Australia 2018.

³⁵ The Association for the Blind of WA in Victoria Park, Perth, invited artists to develop work for the *Visibility* exhibition to be held in conjunction with the *Visibility* Expo in 2016.



Figure 22. Alana McVeigh, studio work-in-progress documentation, Fremantle, Western Australia 2018.

link.

Examining the varied experiences between the blindfolded ceramist and the participants of the *Visibility* exhibition, I can determine that embodied knowledge for the ceramist similarly intersects with the felt information, a form of knowing already, which I will further discuss in the next section. This finding prompted questions concerning my understanding and perception of haptic sensitivity, in particular the depth and accuracy of information sourced through haptic sense. Consequently, I began to harness a more personal awareness of sensory haptic knowledge by making a conscious effort to focus on haptic awareness through the course of my making as a means of fully comprehending this sense activity.

While working in my studio each day, I often take meticulous note of haptic information. By placing my hands on the cool freshly wedged porcelain I can directly *feel* the smooth porcelain properties. In creating objects, the felt revolving motion of the wheel reminds my senses of the shape I am aiming for, along with the consistent, fine walls. I knowingly feel the proportions, weight and density of the work, making adjustments informed directly through my haptic sense. By way of this continued learning process, I understand the accuracy of my haptic knowledge as an incessantly developing source of information. Unlike other mediums, the link between sensory receptions occurring during wheel-thrown production is direct. For example, while it is possible to manipulate and shape all mediums by my hands alone, skills such as sketching, painting, sculpting and printmaking most often require pencils, brushes, tools and screens to produce work. Therefore, as wheel-throwing requires no devices between the hand and the medium, the hands guided by sensory awareness become the tools of creation. This is an understanding I came to ultimately recognise when working in the diffused light of the northern hemisphere, which is discussed further in chapter four.

While acknowledging the acute sensitivity of the haptic sense or touch guiding actions during wheel-throwing, my attention became drawn more specifically to the sensitivity my fingertips acquired. Paying closer attention to the making process, I realised that while forming the clay, the palms of my hands offer concise pressure and shaping information. Conversely, the heightened sensitivity of my fingertips provides greater sensory awareness when developing the thin, transparent vessel walls. Instead of considering haptic sense as an equally dispersed sense of awareness, I discovered that specific areas of the hands and fingers give varying levels of sense information. In essence, this insight is a discovery arising through this project as I had never considered the differing haptic sense levels prior to this research. The realisation led me to work with my fingertips in instances where their sensitivity enabled heightened precision in making, supporting, adjusting and achieving finer levels of translucency. While I had a conscious awareness of the making requirements, I had never fully considered the importance or accuracy of the sensitivity of my fingertips. This heightened awareness offered marked insight into the refinement, accuracy and delicacy in accomplishing specific outcomes.

Furthermore, the findings arising from the focused self-evaluation assisted my ongoing learning in several ways. I note my accumulated sensory awareness knowledge can only be gathered empirically; as academic Susan Stewart argues our life experiences form and alter our senses and that these bodily occurrences hold a 'somatic memory' (Stewart 2005, 61). Stewart's point is at the core of sensory awareness in accruing knowledge in ongoing practice. However, because of the difficulties in conveying this crucial knowledge, I believe sensory awareness is often overlooked in ceramic learning as outlined in chapter two. While acknowledging this difficulty, I have found that paying attention to sensory awareness in the making process has enhanced my comprehension of this knowing and allowed it to evolve within my practice. This form of mindfulness has forged a way of uncovering and naming a deep-seated sensory awareness that has sequentially materialised as a type of *sense language*. Accordingly, this appraisal has paved a way (for me) to explicitly communicate the sensory awareness I experience within ceramic practice.

A Knowing Already:

In examining touch from a broader context, I also reflect on my own earlier training to assess the links between experiential, sensory and tacit know-how. My previous employment in nursing and phlebotomy³⁶ reveals a history of sensory and tacit knowledge often gathered unknowingly in lived training processes. My tasks included taking blood from patients of varying body sizes, ranging from infants to the elderly, which made accessing their veins very challenging. Over time, my sense of touch evolved to the point where I could run my fingers over the skin area, and through the layers of flesh, I could accurately feel and judge the size of the vein and the approximate amount of fluid passing through it. My sense of touch immediately ignited a mental image informing me of the exact pressure to puncture the flesh and the depth to penetrate the needle to prevent it from passing through the vein, which enabled the safe extraction of blood. Other tasks relying on sensory information when assessing patient wellbeing include the use of touch to evaluate body temperature and immediately measure inflammation. Touch is also required to assess pyrexia (a raised temperature), and feel a pulse to determine the pace, strength and weakness of the patient, along with using sight to observe the pallor or paleness of the skin.

Sensory awareness may be acquired in preceding vocations. As Dewsbury maintains, '[T]he previous occupations we have put our bodies through have entrained our bodies to be more or less affected by certain phenomena ...', including sensory information such as 'sound, smell, touch and senses of space and time like distance, speed, duration' arising from habit (Dewsbury 2015, 30). As Dewsbury notes, these affections are the passive affections of habit: thinking space

³⁶ 'Phlebotomy is the act of drawing or removing blood from the circulatory system through a cut (incision) or puncture in order to obtain a sample for analysis and diagnosis.' (2008)

³⁷ Here, Ullrich is expressing the sensing hand over machines and new technology.

faster, breathing without thinking, and knowing already without much thought (Dewsbury 2015, 30). This knowledge arises habitually by recreating thinking processes and hands-on activities. In this way, sensory information gathered through habitual nursing practices was absorbed unsuspectingly and resurfaced as 'knowing already' when I began relying on sense information in ceramic skill learning.

Dewsbury's assertion of a knowing already resembles Dewey's earlier claim that each sensorial experience adds to our knowledge base; this knowledge is, then, drawn on and used in the everyday engagements of our lives (Dewey 1939, 958). Similarly, author Philip Rawson writes, '[A]s we live our lives we accumulate a fund of memory-traces based on sensory experience. These remain in our minds charged, it seems, with vestiges of the emotions which accompanied the original experience' (Rawson 1971, 16). It is my view that is the circuitous sensory and cognitive interchanges occurring between the senses informing the body and mind facilitate cohesive functioning through daily experience. Therefore, as psychiatrist and author Ian McGilchrist argues, 'our experience of the world helps to mould our brains, and our brains help to mould our experience of the world' (McGilchrist 2009, 245). In this way, experiences gained from being in the world and understanding how knowledge shapes them can then be expressed creatively (McGilchrist 2009, 245).

Within the act of making, author Howard Risatti suggests that the hand in making is fundamental as 'it is more than a simple appendage of the physical body; the hand is a reflection of the entire human organism; it is a direct extension of mind' (Risatti 2007, 109). Based on experiential characteristics and sensation, touch provides human knowledge with an abundance of biological sensations. According to art critic and studio potter Polly Ulrich, '[T]he hand stands for an existential, being-centered quality in art of perception filtered through multi-dimensional sites in the body as well as the mind' (Ulrich 2005, 199). Additionally, Ulrich³⁷ proposes the hand is the ubiquitous implement for human sensation (Ulrich 2005, 199). The sense and refinement of touch provide an immediacy of direct contact requiring no medium between the hand and the tangible world (McVeigh 2013, 3).

I suggest the feeling hand is the very locus transcending and converting ideas into being through creative expression. For, as Pallasmaa elegantly articulates, the artist's hands are not only their eyes but also 'organs for thought' (Pallasmaa 2012, 60-61).

Silent Knowing:

Our eyes stroke distant surfaces, contours and edges, and the unconscious tactile sensations to determine the agreeableness or unpleasantness of the experience. The distant and the near are experienced with the same intensity, and they merge into one coherent experience. (Pallasmaa 2012, 46)

As an object maker, I relate to Pallasmaa's notion of tactile sensations ignited by sight as being derived from embodied knowledge recalled, particularly when assessing ceramic objects. In earlier describing the work *speaking* to the maker,

³⁷ Here, Ulrich is expressing the sensing hand over machines and new technology.

Pallasmaa's writes, 'the skin reads the texture,³⁸ weight, density and temperature of matter' (Pallasmaa 2012, 60 & 62). His sentiment captures the very essence of sensory awareness. Furthermore, I believe embodied sensory awareness is absorbed for the most part unknowingly. Although working from embodied knowledge of tactility, the maker nonetheless brings conscious awareness of such qualities to the design and creation of work through deliberate action in achieving distinctive aesthetic effects.

Perception:

In order to achieve distinctive aesthetic effects, the artist continually manipulates, adjusts and readjusts the materials until he or she is 'satisfied in perception', and only then will the work be deemed complete (Dewey 1939, 974). This experience, Dewey explains, is arrived at not only through intellectual means or external assessment, but also by 'direct perception' (Dewey 1939, 974).

Direct sensory perception, I determine, is crucial in knowledge building for the ceramist. This insight is perhaps because, as Gadamer maintains, 'our senses are spiritually organized in such a way as to determine in advance our perception and experience of art' (Gadamer cited in Bernasconi 1986, 11). I also understand this awareness has been a fundamental aspect of aesthetics filtering into ceramics in Australia via Leach. Hanssen Pigott attributes McMeekin with teaching her to 'read pots with my eyes and hands' (Hanssen Pigott cited in Higson 2005, 14). The quote by Hanssen Pigott indicates an early awareness and acknowledgement of sensory associations, a linking of mind and body that was emergent in her early training. Sensory awareness evident in traditional Japanese pottery training became an important strand of Leach's learning and writing. This perception was instilled in Cardew by Leach; then subsequently from Cardew to McMeekin; and finally along to Hanssen Pigott.

It is this recognition of sensory awareness that I believe Leach was aiming to express when writing of lived experience, the ceramic standard, and a unity of mind and body (one hand one brain); for example, Leach suggests that an awareness of the beauty and the superiority in ceramic objects is realised through the body (Leach 1940, 17). In forming this awareness, Leach drew from the celebrated Japanese potter Mr Kawai. According to Kawai, good work is determined 'with their bodies'; specifically, 'with the mind acting directly through the senses, taking form, texture, pattern and colour, and referring the sharp immediate impressions to personal experience of use and beauty combined' (Kawai cited in Leach 1940, 17).

Ceramists – The Mark of the Maker:

Through the mind and body, Ullrich reasons artists and academics in contemporary practice now engage with and employ assimilation of the instinctive body and the intellectual mind that has long been renounced by Western consideration (Ullrich 2005, 200). She further emphasises that art created through 'embodied perception' finds significance by working with the physicality of the world, as experienced by perception. Embodied art builds a sensual actuality through the corporeal course of action, 'the marks, the erasures', traces of the hand of the maker embedded in the work (Ullrich 2005, 208).

³⁸ As a means of teaching 'textural sensitivity', students of the Bauhaus were provided with first-hand experience. '[B]y recording their impressions of the various materials they worked with, the students gathered a compendium of valuable information for future use. Training tactile sense using experiments with textures systematically arranged according to degree of coarseness. By running their fingers over materials again and again, the students were finally to sense a sort of musical scale of textural values' (Malnar and Vodvarka 2004, 145).

I believe Ullrich's notion of corporeal action, the marks and erasures remaining in the artworks, stands as a visual and tactile narrative of each creative journey. These vestiges make visible the relationship between the maker and the medium, serving as an insight into the mind, hand and tools of the artist. For example, Australia's first Indigenous ceramist Thancoupie³⁹ (Gloria Fletcher) continued the Australian Aboriginal tradition of storytelling through the use of motif in her ceramic work. However, I find her clay sculptures also offer a second level of narrative. In this respect, her works reflect a personal creative journey that includes the thinking, the decision making and adjustments shown by the working lines, and more specifically, the marks, hand and fingerprints remaining in each form.

Furthermore, the creative steps apparent in Thancoupie's forms are qualities Leach championed – specifically, the evidence of human activity. These elements, I believe, offer a timeline of craftsmanship eternally imprinted in the work. In expressing the human activity of touch, hand and fingerprints in Thancoupie's sculptures, curator Janet Laver discerns that 'you can still feel her fingers pressing into it (the sculpture *Yam*, 2003), which gives a beautiful quality' (Janet Laver cited in Watson 2014, 11). This is a quality Laver believes has been lost in ceramics.

Although I find evidence of the maker's marks engaging in other artists' work, I had not considered leaving such traces in my vessels. Encountering Thancoupie's work, alongside Leach's and Ullrich's thoughts concerning embedded bodily action and human activity in artworks, prompted a reconsideration of the working/throwing lines evolving in the course of my making. My attempts to remove process indications have now altered by allowing remnants of throwing lines to remain, acting as permanent maps of making. Signs of human activity by the maker hold added significance; as Pallasmaa suggests, 'the tactile sense connects us with time and tradition; through marks of touch we shake the hands of countless generations' (Pallasmaa 2012, 62).

While placing significance on tactile sense, this research importantly considers all the senses in ceramic creation and daily lived experiences alike. The harmony of the senses with the motor energy evident in our daily activities is testament to the abundant sensory engagement required to make our way in the everyday environment. For example, the seemingly unassuming physical act of walking from one location to another incurs a coordinated synthesis of neural connections to undertake this activity. Grounding myself as I walk, I am aware of my location, the direction I am heading, and how I am to negotiate the journey through sight, sound and feeling. The flow of sensory connections activated is most often largely implicit, gained and embodied through lived experiential knowledge. I use walking as a way of awakening all my senses prior to engaging in the process of making. Walking has also become a useful way of examining the use of my senses informing this research.

Author Rebecca Solnit (2000) positions walking as a political and cultural pastime. The point of difference walking holds within my practice is that it is not only a means of identifying sensory awareness, but also a way of assessing my sensing body as a conduit for being in the world. I select and focus on sounds and impressions while walking from home to my studio. My sensory awareness is a conscious process detailing each sensation and keeping me 'in the moment'. Authors Kimberley A. Coffey, Marilyn Hartman and Barbara L. Fredrickson define this focused awareness as 'mindfulness',⁴⁰ an attentive awareness I engage in to track my sensorial perception; seeing, feeling and hearing sounds experienced and processed through the everyday activity of walking.

³⁹ Gloria Fletcher and Thancoupie are the anglicised names Thanakupi is known by (Cole 2006, 2).

⁴⁰ Mindfulness is 'defined by a two-factor construct including present-centred attention and acceptance of experience' (Coffey 2010 et al. 1).

Appraising my senses, I feel the ground through the soles of my shoes; I taste, smell and feel the silky breeze of the Indian Ocean floating over my body. The plethora of sounds undulating between the highway and the harbour inform and guide my journey through Fremantle. I take note of the sounds – the playful, squealing chatter of the gathering of seagulls, the gentle onshore ripple of breaking deep green seawater, the sounds of boats crisscrossing the port, all muted by the roar of the approaching city train. By observing the sensorial links through the seemingly mundane act of walking, this draws a focus in much the same way that Edensor describes: '[W]e can hear the vitality of the landscape in the breezes and raindrops that assail our faces, the sounds of water and wind, and the smells of decay and growth ...'. (Edensor 2017, 12)

Owing to this research, I have come to understand the pivotal role the sensorial structure provides in all our knowledge development with particular reference to the strands of sensory awareness filtering into my ceramic practice. This understanding reinforces the importance of the unity of sensation, tacit knowing and perception, thus prompting a desire to grasp how the continuity of overlapping sensory associations vital to everyday activities cross-over and manifest within ceramic practice. Just as I use my senses throughout my usual daily pursuits, in my practice I rely on the same sensory system to inform and guide my creative responses throughout the process of making.

Exploring the role of sensory associations from other disciplines has enabled deeper awareness of the intersections and cross-overs in ceramic practice, thus offering ways of understanding the essential role sensory awareness, in tandem with tacit knowledge, holds within the development of ceramic knowledge. Examining sensory knowledge absorbed and remembered by the mind and body in the studies of Dewey, Sauer, Dewsbury and Rawson has offered a useful way of comprehending the links, and the often unnoticed sensory growth in habitual daily pursuits. This insight poses questions concerning how the senses galvanise and are set in motion when recalled in ongoing life and creative experiences.

Chapter Four

Residencies: A Sense of Place

This chapter considers how lived experiential learning and sensory awareness in and out of place occurs through residencies as a vehicle for intense learning. I investigate ceramic knowledge gathering through first-hand tacit knowledge, sensory awareness and cross-cultural stimulus as a legacy of Leach's apprenticeship and his Japanese residency model.

Through the act of making and doing, I examine the senses associated with place, atmospheric light and environment occurring within the process of learning. The research draws on geographer Harriet Hawkins' book *For Creative Geographies: Geography, Visual Arts and the Making of Worlds*, 2014, which explores artist residencies as 'creative geographies'. Hawkins' position, which distinguishes residencies as a site where participants study and live 'differently' (Hawkins 2014, 247), is investigated in order to demonstrate the multi-layered residency learning experience.

The research further draws on my experiential knowledge gathering through two key residency experiences, one in Finland and one in Canada, undertaken during this research. Additional examination explores central concepts of tradition, social learning and references within the making to show how both residencies have shaped my practice.

The unity of the visual and haptic systems⁴¹ provides an understanding of 'our sense of place', along with tactile knowledge of the environment (Malnar and Vodvarka 2004, 42). Finding my way within a new environment is grasped mainly by sight, sound and touch. I realised that these senses are relied on more heavily when working away from Australia. Through closer examination of place, it is important to note that each new environment holds visual and tactile qualities culturally, ecologically and seasonally specific to each location. When encountering a new place, observing landmarks while adjusting to unknown sites offers a sense of locality. The touch of unfamiliar natural and built surface characteristics – such as vegetation, the wooden texture of an ancient temple, or feeling the cold stone of a gothic church – evokes the essence of a place. Seeing and feeling prompt a direct awareness of one's immediate environment. As Yi-Fu Tuan suggests, '[A]n object or place achieves concrete reality when our experience of it is total, that is, through all the senses as well as with the active and reflective mind' (Tuan 1977, 18). Yet, Pallasmaa contends that above all, it is the sense of touch that assimilates our knowledge of our environment with one's self (Pallasmaa 2012, 11).

Place – Finland, 2011:

In rich and invigorating experiences of place all sensory realms interact and fuse into memorable image of place. (Pallasmaa 2012, 53)

Arriving in Fiskars, Finland, from hot, sunny Perth to begin my first residency and Finnish exhibition, I was met with a landscape reduced to three colours: white snow, grey leafless Birch trees, and red barns. I found the limited visual palette and freezing sensation an exhilarating novelty, vastly different from the one I had imagined upon my departure from sun-drenched Western Australia.

The penetrating sun and luminous hues of home were replaced by sensations of crunching ice, and snow mounds covering a hidden world of vegetation. Abundant frozen ice lakes shone like mirrors reflecting a world above the ice-covered tree line.

⁴¹ The haptic system provides us with information through the sense of touch, a structure where humans are 'literally' in touch with their surroundings (Malnar and Vodvarka 2004, 42). 'Haptic perception reminds us that the whole self may grasp reality without seeing, hearing or thinking. It also calls attention to a primitive way of knowing that resembles mythical thought ... a unified structure of feeling and doing' (Walters cited in Malnar and Vodvarka 2004, 42).



Figure 23. Fiskars village, Finland, 2011.



Figure 24. Widnas Studio, Fiskars, Finland, 2011.

The feeling of fresh, crisp air clung to my exposed face like hundreds of fine tingling perforations.

Arriving at the studio of artist Karin Widnas,⁴² where I would spend the next three months working, gave respite from the damp atmosphere that was now beginning to penetrate my inadequate Australian-made winter clothing. The frozen landscape from which I had just arrived was framed by a full-length floor-to-ceiling window casting a snow-reflected filter of daylight into the studio.

The qualities unique to this location offered a type of sensory blending where I often found myself working to the sound of woodpeckers toiling at a rapid, precise tapping rhythm. Light and shadows reflected upon snowy pathways revealed frozen snow boot markings serving as a stimulus for vessel surface designs. Walking became my main form of transportation around the village and the daily commute to the studio one kilometre away. Walking, seeing, hearing and feeling provided a way of coming to know minute aspects of the creative hub of Fiskars.⁴³ Artist and academic Lesley Duxbury suggests such awareness involves 'not only the physical act of looking but also its relationship to perception, of using the senses to acquire information about one's surroundings' (Duxbury 2008, 17). Travelling by foot also offered opportunities along the journey to meet and interact with locals among whom I was initially referred to as 'the Nordic-looking foreigner'.

While living in and amongst this community, I recalled reading Leach's blend of lived, sensory and cultural experiences stemming from his birth in China, education in England and apprenticeship in Japan. It was in this culmination of lived experiences which shaped his knowledge of East Asian culture and pottery that underpins his philosophical paradigm. Accordingly, it was from these lived cultural encounters that beckoned Leach's return to Japan, where he proclaimed the fusion of East and West was utmost (Leach 1940, 16). In recollecting this time, Leach reveals, '[L]iving there among the younger men, I have with them learned to press forward in the hope of binding together those elements from the ends of the earth which are now giving form to the art of the coming of age' (Leach 1940, 16-17). Still, it was via Leach's daily lived experiences, Yanagi points out, where his engagement with the community of Japan strengthened because 'he lived among us as one of us' (Yanagi 1940, xiv).

In a comparable manner, during the daily encounters while living in and among the community, I found the spirit of the village of Fiskars. Manoeuvring through the town, I discovered a blend of practitioners working within various fields of the arts, many in the discipline of ceramics. Visiting the numerous studios and galleries also presented valuable opportunities to meet and observe practitioners at work, thus imparting a wealth of knowledge filtering through generations of creative makers. This occurs because, as Tuan suggests,

[P]lace is a special kind of object. It is a concretion of value, though not a valued thing that can be handled or carried about easily; it is an object in which one can dwell ... (Tuan 1977, 12).

⁴² Karin Windnas-Weckstrom is a ceramist, designer and educator. Her broad practice includes slip-cast and hand-built functional ware, experimentation with a range of materials and firing techniques, including wood-firing, raku and electric kilns collaborations with artists and

⁴³ Fiskars International Residency is situated in the Finnish village of Fiskars, ninety kilometres from Helsinki. Today approximately 120 artists and designers live and work in Fiskars. An international artist-in-residence program was set up where almost sixty artists from around the world have participated in the program since 2006 (Torma 2011).

Place as a 'concretion of value' further evolved via community interaction during our open studio days, exhibition openings and social functions. Additional opportunities included engaging in a society layered with various cultures, including the former occupation of Finland by Russia and Germany and the neighbouring Scandinavian countries of Norway, Sweden and Denmark, as well as Estonia, which is now independent from Russia. Comparable to Leach's cultural merging of place, I propose that the fusion arising from living 'among' and as a part of the local community also offers time where 'one can dwell' (Tuan 1977, 12) in the experiences, knowledge, culture and tradition of place. My lived experiences and dwelling, I believe, held greater value because I was seeing, feeling and absorbing the unique knowledge and history through a fresh perspective that was new to this place.

Light – Finland:

Although my lived residency experience of three months was significantly shorter than Leach's lengthy tenures in Japan, nonetheless the experience had a lasting impact on my practice. Intersecting work and routine daily life, I implicitly and explicitly absorbed customs, knowledge, histories and traditions unique to this land. This distinctive blend has been forged, as geographer Doreen Massey describes, through 'layer upon layer of different sets of linkages, both local and to the wider world' (Massey 1994, 155). As a result, a distinct blend of traditional ceramic skills, approaches, methods and knowledge has shaped the ceramic arts of Finland.

Initiating new work suggesting the blend of culture, firstly through the use of East Asian vessel shapes reflected in Leach's work along with the natural landscape, atmospheric light and observed sensory stimulus emanating from this locality, I commenced by using unfamiliar French porcelain, Limoges. The main reasons for choosing to work with porcelain are because there are no impurities in porcelain clays, therefore, the whiteness of this medium and clear glaze alludes to the abundance of the gloss of white snow in Finland. However, using this unfamiliar clay and the duller, muted northern hemisphere light further



Figure 25. Alana McVeigh, *In the Beginning – Finnish Series: 1–3*, 2011, porcelain, dimensions variable.

hindered my attempts to familiarise myself with the qualities of this medium. Unable to see the profile lines as accurately as when working in Australia, making became an additional challenge as the hazy appearance of the vessel line confused my usual eye-hand coordination and working rhythm. Consequently, I struggled with the shaping, pulling and the precision of the vessel walls, which evoked a sense of insecurity and frustration. Overcoming these obstacles and re-establishing a cohesive working rhythm, I reverted to repetitious throwing. By returning to basic learning strategies such as Blakebrough's habitual, repetitive 1,000-mug throwing strategy, I also repeatedly threw similar forms over and over.

Addressing the altered eye-hand coordination almost required a re-learning of my throwing skills and created a new reliance on touch. Initially, depending largely on one sense was daunting, and although I was familiar with touch sensations, sight has always assisted this technique. As a result, the earliest heavy forms were created without translucency, a direct result of my struggle to come to terms with, and adjust to, the light conditions (see figure 25). Through repetitious practice, the malleable porcelain characteristics became familiar, and throwing became rhythmic, almost alleviating the need for sight. Under these light conditions, touch emerged as my dominant sense within the making. I kept this series of work as a memento, a reminder of just how vital the haptic sense is to the making of ceramics.

Essayist David Levi Strauss, when referring to philosopher Henry Thoreau, states 'that we reason from our hands to our heads' (Levi Strauss 2010, 2). Strauss' point resonates with my aim of refining my haptic sense to reduce the need for sight while throwing. To achieve this goal, again I returned to repetitious practice, which entailed sustained physical contact with the clay. Through prolonged practice, the sense awareness of intricate processes occurring in the making is relayed to the mind for processing. As Strauss acknowledges, 'we know and understand things as we apprehend them through the labor and pleasure of our hands, so we tend to proceed from the perceptual to the conceptual and back again' (Levi Strauss 2010, 2). I deem achieving a circuitous hand-mind relationship which emerged through focused, repetitious labour as a haptic sensory awareness that informed my mind. As a result, rather than eye-hand unity, I was able to resume making via head-hand unity.

I realised that the unity of eye-hand coordination, which had been assisted by Australian light as a tool, had unknowingly become a component of my making process. While I had an awareness of Australia's unique sunlight qualities, I had never considered the relevance of this light in ceramic practice until my northern hemisphere experiences. Upon reflection, and by re-learning skills through touch alone, I gradually began to draw on instinctive, tacit, embodied haptic knowledge, a knowing already not dissimilar to the blindfolded throwing research discussed in chapter three.

Furthermore, contemplating the atmospheric conditions of Finland induced questions concerning how geographical light impacts vision. Tim Edensor's writing on the effects of light and dark rhythms became useful by revealing that

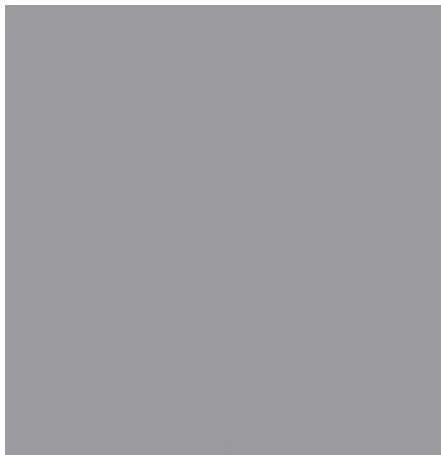
... the objects that we see possess varying hues and intensities produced by the light that shines on them. Light is mediated by various substances in the material world: being diffused by translucent clouds, shining through transparent windows, reflecting off water, and being absorbed by most other things ... (Edensor 2017, 3).



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Figure 26. Karin Widnas, *Kimono*, 2011, stoneware clay, dimensions unavailable.

Edensor's thoughts offer some consideration of light variation in general terms. Drawing on my own experiences, working during the winter months intensified the difficulty I experienced and this did not alter as significantly as I had hoped when winter ended. Edensor claims this occurs because 'the defining rhythms of light and dark are especially evident towards the poles, where darkness pervades diurnal experience in winter and light floods the night throughout summer' (Edensor 2017, 30). Edensor's insight encapsulates and underscores the challenges I encountered with this specific light.



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Figure 27. Riitta Talonpoika, functional wood-fired vessels, 2012, stoneware, dimensions unavailable.



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Figure 28. Riitta Talonpoika, *Longing for Snow*, 2010, porcelain, dimensions unavailable.

Residency – Apprenticeship:

Although the light posed challenges, the Fiskars residency nonetheless offered a unique opportunity to work alongside established artist Windas, who is well known for her broad-ranging ceramic practice and architectural tile sculptures. Observing Windas' daily studio activity, I was able to tacitly soak up her use of technical skills, firing processes, slip-casting and tile process, which informed my learning during this time. This method gave insight to concept development, practical considerations, aesthetics and the substantive scale of the work to meet the requirements of the building designs.

Additionally, a week working alongside wood-fire specialist Riitta Talonpoika in her Fiskars studio revealed unique, wide-ranging approaches in both functional and sculptural processes. Through her electric and wood-fired work, Talonpoika aspires 'to provide an alternative to mass-produced objects' (Talonpoika nd, 1). In this way, I find her objective similar to Leach's philosophical approach in that she believes qualities inherent in hand-made objects cannot be replicated through mechanised industrial production.

The practical experience gained by working with professional ceramists at the early stage of this research provided invaluable insight about implicit, sensory and tacit knowledge not accessible through any other format, such as art journals, books or online articles. While explicit text offers technical data as well as creative and visual stimulus, as noted in chapter two, explicit knowledge can only emerge from tacit knowing; the reverse is not possible (Sorri 1994, 18). Toom further points out that tacit knowledge can only transpire through experience. Immersed in ongoing close daily proximity to masters and artists where observing and hearing creative activity is constant, knowledge is implicitly taken in. Such examples are evident in the implicit learning methods discussed in chapter one by Leach's Japanese tenures, McMeekin's time with Cardew and Blakebrough, and Hanssen Pigott's training under McMeekin (Cochrane 2010, 29).

Sensory and tacit learning was also the premise of my participation in a wood-firing with Talanpoika and ceramist Patrick Bayer.⁴⁴ The accomplished firing team of both artists operates through an often unspoken reciprocal mode of knowing, informed by the senses and made implicit through experience. Their sensorial responses are in sync with the rhythm of the firing process; an awareness of the roar of the flame, sounds of falling ash, and burning wood.



Figure 29. Wood-firing, Fiskars, Finland, 2011.

In expressing similar sensory information entailed in wood-firing, Australian ceramist Gyan Daniel Wall explains,

[T]he sounds and smells of wood combusting in the kiln, the rustic visual ambience of wood stacks, cracked clay plasters and brick arches of the kiln, the bright flash as the door opens and the exclamations as the flames clear to reveal glistening creations in their molten state (Wall 2017, 35) .

This demanding sensory, physical and mental process takes between twelve to thirty-six hours to reach full temperature, and requires constant monitoring. Wood is added frequently to keep a steady increase of heat to achieve the required 1,300 degrees Celsius. The firer's working methodology is built on reciprocal trust in each other's abilities, informed primarily by instinct, tacit knowledge and sensory awareness. I became increasingly mindful of my own sensory awareness while participating, observing, replicating and interpreting information during this process.

Throughout this residency, the value of experiential learning when absorbed over an extended time became evident. My three-month residency led to unexpected learning opportunities, and exposure to wide-ranging disciplines, traditions and creative responses. Furthermore, contact with a broad range of creative practitioners included viewing work in progress, as well as meeting artists and the production team at Arabia Pottery in Helsinki. Invitations to speak, present work at forums and take part in the group exhibition at Widnas-Weckstrom gallery added to the experience. Finland's geographical location enabled visits to Stockholm, Sweden, and Tallinn in Estonia to view exhibition openings, meet artists and spend time in their studios and ceramic co-ops. Importantly, the proximity to an expansive cross-cultural stimulus pushed my ceramic practice into new territory.

Additionally, the shift from home and my established working methodology evoked a level of self-reflection concerning sensory awareness, responding to light conditions, overcoming challenges and discovering new ways of making. Working away from my usual environment opened fresh new creative possibilities availed by time to notice, contemplate, understand and explore unique geographical conditions and learning enmeshed with cultural codes beyond my familiar life.

By their very nature, residencies foster an environment promoting creativity, and encourage artists to reconsider established ideas and working methodologies through independent research. In promoting independent research, the Medalta Artists in Residence program in Canada proposes the following:

[I]t is through this activity that new horizons are achieved and learning is absorbed as much by observation, touch and the action of making, as it is through an intellectual process. This community of significant engagement creates a sense of intuitive responses which allows the best creative force for great art to be realized from the gut of the maker (Unknown in Finkleman 2008, 16).

The intuitive responses of 'observation, touch and the action of making' premised at Medalta not only identifies the ethos of this residency program. I believe the core premise of 'observation, touch and the action of making' also encapsulates key concepts put forward by Leach and which are also evident in traditional Japanese pottery apprenticeship, namely, observation, imitation and replication.

Light – Canada 2012:

Drawing on the learning opportunities in Finland, observation, touch and experiential making paved the transition to my second residency. Arriving in Calgary in November 2012, I embarked on a four-hour drive to the Medalta International Artist in Residence (MAIR) in Medicine Hat, Alberta. As the journey commenced, a light filter of snow began to fall across the city. I also noticed a shift in light when leaving the Calgary snow behind and entering the vast open skies and sun-drenched prairies. The muted sunlight and countryside palette emerged as a golden haze floating across the plains, rising to meet the clouds.

Although I had no preconceived ideas of the work I would develop during this residency, I was intrigued by the distinctive light conditions emanating in this topography, thus prompting ideas for responses.

Walking to the studio to prepare for my first working day, the impact of the decreasing late November temperatures began to take hold. Adjusting to the temperature culminated with becoming accustomed to another type of wheel, working with unfamiliar kilns and understanding the nuanced properties of the local Plainsman porcelain. Similarly to Finland, the purity of the Canadian Plainsman's porcelain meant the soda effects would not have been hindered by imperfections imbedded in the clay, thus affecting the surface effects.

In working with the new medium, I recognised slightly heavier, firmer qualities as opposed to the smooth, fine Australian-made Southern Ice Porcelain I normally work with. Importantly, realising the filtered snow-cloud light would impact my ability to accurately see the evolving vessel profile lines, I returned to the haptic sense of touch and the process of repetitious practice. Drawing on my haptic skill knowledge gathered in Finland made this second experience in diffused light less daunting. Nevertheless, it took multiple throwing sessions of trial and error before getting the forms right. In time, and with continuous making, touch evolved as the overriding sense providing greater accuracy than sight. Once again, working in the Canadian light reaffirmed my understanding of Rawson's earlier point that '... the hand is a live instrument of experience' (Rawson 1971, 21).

Adapting to the Canadian light and continuing with forms referencing East Asian vessels such as the bases of Chinese jars, I aimed to produce a sufficient amount of work to fill the kiln. This meant working approximately twelve to fifteen hours per day in the studio. During this focused and repetitious practice, the clay became familiar and work evolved, as DeBoos suggests, through a flow and meditative drift. The focused pace also assisted in adjusting to the new wheel, studio space and equipment. Though diffused, I took advantage of the natural daylight for wheel-throwing, leaving the evening halogen light for trimming, glazing and making test pieces. Using light in this way set a useful working tempo that produced enough vessels for my first firing.

Considering the Canadian light effects, juxtaposed with my unsuspecting reliance on Australian light, prompted further examination. Here, Edensor's writing once again offers salient explanation:

[O]ur experience of light is rarely subject to any conscious focus because it takes place in the unremarkable settings of everyday realms and as part of the quotidian routines in which we are entangled. The familiar space forms an unquestioned backdrop to daily tasks, pleasures, and movements, practices that are repeatedly and unreflexively carried out. The familiar environment is organized to enable continuity and stability, which in turn is re-created by these regular practices. Surrounded by familiar things, routines, and fixtures, we make our home by the repetitive performance of habits, gaining a sense of belonging through customary, routine engagement. (Edensor 2017, 27)

Removed from the familiar quotidian routines of home, I found Edensor's comments offered a lucid explanation to grasp my dependence on Australian light. This finding prompted a rethinking about how the natural light conditions might be further tested, through creative trial and error. As a result, the somatic engagement presented by walking meant closer physical proximity to the marks, surfaces and fragments observed and felt in the landscape and atmospheric light, thus evoking distinct responses. Accordingly, making came about as a consequence of recognising my own sensory experiences occurring via

seeing, feeling and hearing while engaging with this unique location.

In responding to the location, I decided that the aesthetic effects of soda firing⁴⁵ would most clearly render the hues, textures and distinctive light of this location. By selecting this firing method, I was aware that referencing such qualities would pose new challenges. Firstly, I was unfamiliar with this type of specialised firing technique. Secondly, the short-term four-week timeframe



Figure 30. Wood-fire kiln, Fiskars, Finland, 2011.

made learning this specialised process extremely difficult. Grasping the technical knowledge required for soda firing required many hours of observation.

Through acute observation, firstly by studying progress firings, I came to understand critical features entailed in wood and soda firings. As in Finland, this awareness included monitoring and interpreting the sensory and technical information required to keep the heat rising at a steady pace. This perception was primarily informed by the sense of sound and sight. For example, the tone and quality of the chimney smoke indicate whether an increase or decrease in oxygen flow is required. Sense-triggered reactions also help specify when gas adjustments are required, while cones⁴⁶ signal when to add the soda. To keep track of this critical information, I took notes and kept a firing log book specifying times and actions taken. The notebook became an essential tool for informing and guiding my activities throughout each subsequent firing. In essence, by observing highly experienced wood and soda firers at work, along with the assistance of a skilled practitioner, I fast-tracked these complex learning processes to one month.

⁴⁵Soda firing is an atmospheric firing technique where 'soda' is introduced into the kiln near top temperature (2350°, Δ10). The soda that we used was sodium bicarbonate, also known as baking soda and sodium carbonate, or soda ash. (Murphy 2006).

⁴⁶Cones are used to accurately signpost the temperature in various locations of the kiln. When cones begin to bend or drop, this indicates that a specific temperature has been reached.

⁴⁷Atmosphere firing is 'the action of taking oxygen away from metal oxides' during firing 'by controlling the atmosphere surrounding' the work throughout 'the firing and cooling' process. 'By altering the atmosphere he [sic] alters the metal oxide he [sic] is using for his [sic] colouring' (Hamer 1975)



Figure 31. Alana McVeigh, tactile mapping pattern and ideas testing, Medicine Hat, Canada, 2012.

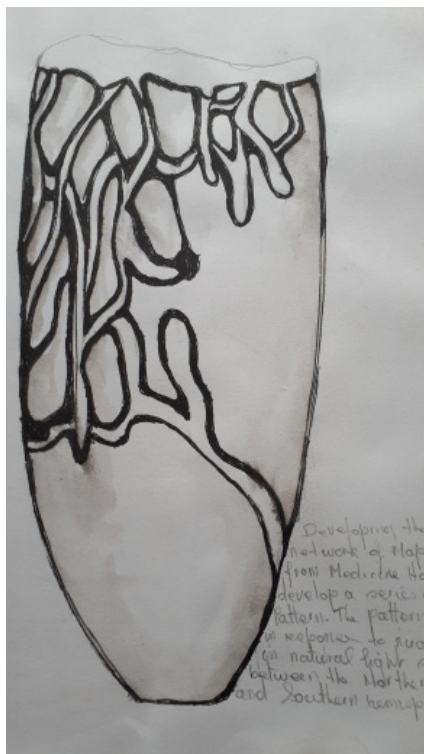


Figure 32. Alana McVeigh, tactile mapping patterns and sketching and ideas testing, Medicine Hat, Canada,

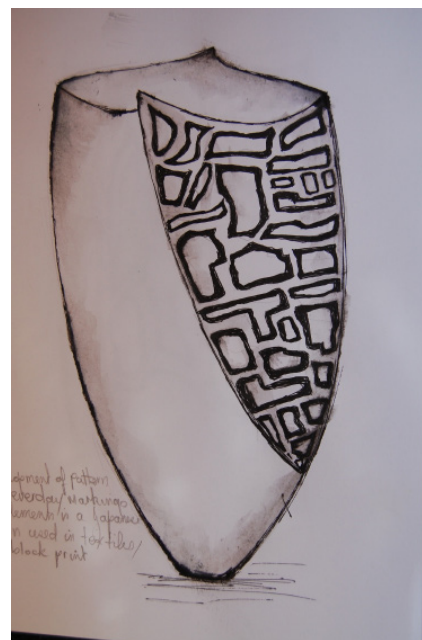


Figure 33. Alana McVeigh, tactile mapping patterns and sketching and ideas testing, Medicine Hat, Canada,

Additionally, by placing test pieces in various areas of the kiln, I could assess the differing resultant effects on the clay body. This approach enabled valuable planning insight on where to position each vessel during my firings for precise results. Approaching my second attempt at atmospheric firing⁴⁷ provided a sense of ease prompted by the sensory and practical knowledge gained from the Finnish wood-firers Talanpoika and Bayer. Therefore, as I began working in tandem with ceramist Astrid Kruse,⁴⁸ I allowed my sight and hearing to guide my responses.

For the initial firing phase, Kruse and I began working together and gradually increased the kiln temperature at an even steady pace. We worked in shifts, allowing time to rest throughout the night, and into the following day. The physicality of the firing process was demanding and carried out over twelve hours. The internal kiln workings during these firings resemble a hellfire of red-hot, glowing ceramic objects.

Throughout this process, the kiln became a tool I used to achieve flashes of auburn colour left behind by the lick of the passing flame, a colour which referenced the golden prairie's haze. The reduced oxygen and soda effects rendered soft, steely grey tones suggestive of snow-filled clouds and somatic velvety surfaces adhering to each vessel. By way of the sensory



Figure 34. Alana McVeigh, progress documentation, map marking, Medicine Hat, Canada, 2012.

⁴⁸ Canadian artist Astrid Kruse is highly experienced in soda and wood firing techniques, and became a valuable guide in my firing experience at MAIR.



Figure 35. Alana McVeigh, soda firing documentation, Medicine Hat, Canada, 2012.



Figure 36. Alana McVeigh, Canada; *Northern Light Series, Medicine Hat 1*, 2012, porcelain, 21 x 14 cm.



Figure 37. Alana McVeigh, Canada; *Northern Light Series, Medicine Hat 2*, 2012, porcelain, 20 x 13 cm.



Figure 38. Alana McVeigh, *Canada; Northern Light Series, Medalta 1*, porcelain, 21 x 10 cm.

awareness and hands-on learning experience, the outcomes of this firing informed and directed the development of my next body of work.

Place – Canada:

Place is a type of object. Places and objects define space, giving it geometric personality. (Tuan 1977, 17)

The stimulus informing the following work arose while orientating around the town following a map provided by the local post office. The mapped lines, streets and avenues followed during my walking became the premise for textured mark-making on each form, as shown in figure 31. When designing the new work, inspired by Thancoupie's markings and employing Blakebrough's water erosion technique,⁴⁹ I aimed to create relief patterns that emerge as tactile maps on the surface of each



Figure 39. Alana McVeigh, *Saskatchewan*, 2012, porcelain, dimensions variable.

⁴⁹Water erosion is a technique where resin or resist is painted onto the raw clay to form a marking, texture or pattern. Once the resist is dry, clay is removed using a damp sponge, which leaves the clay under the resin to remain, forming the surface markings/pattern. This technique is often used by Les Blakebrough.

vessel. The obscured light source and distinctive hues and textures continued to be the inspiration in this series of work. Additionally, the vessels are a memento of my daily journeys, permanently impressed into the clay.

In my view, responses to place that occur when living, working, sensing and experiencing a location are gradually and tacitly soaked up by the body through routine daily events. Expressing the notion of absorbing the milieu when living and working in new locations, Perth artist Clyde McGill states, 'If you are working in a place, the place comes out in the work' (McGill 2019). Continuing along these lines, Hawkins⁵⁰ observes that such responsiveness arises because of a 'sense of the situated, sensuous embodied knowledge of a place that develops around a rich, intimate organic togetherness of beings and things' (Hawkins 2014, 162). My absorbed perception of place emerged through daily walks where I encountered local fir trees, snow-covered mountains, geese and moose, but also through Canadian food, architecture, local accents and cultural events. In this case, my daily lived encounters resonate with Leach's Japanese experiences while living with his mentor Yanagi and his Japanese wife in a cottage overlooking the rice fields. Living amongst the artists and writers in the rural village of Abiko, Leach's place was a '... happy dovetailing into such a delightful region of Japanese life' (E.E. Speight cited in de Waal 1997, 18).

In the process of orientating new environments, the unity of the visual and haptic systems⁵¹ provides human beings with an understanding of 'our sense of place', along with tactile knowledge of the environment (Malnar and Vodvarka 2004, 42). Our sense of place via seeing and touch, I argue, is intensified when the awareness is taken in through the slower, meditative act of walking. The contemplative, sensory activity of walking is a way of being at one with the environment where the body senses the world more so than in a rapidly moving vehicle.

In developing a series of new work, my sensory response and physical proximity to the rhythmic flow of the Saskatchewan River running through the town of Medicine Hat induced the stimulus for the third series of vessels. Crisscrossing the waterway each day, I was captivated by the melting liquescent snow and atmospheric conditions, rising mist and diffused light source surrounding the location. The felt heaviness of clouds and the damp troposphere prevented full light penetration, thus creating a feeling of being cocooned in a tangible veil of dove-grey mist. As such, this series of works, *Saskatchewan*, 2012, carries the distinctive hues, river line and textures of this location. Moreover, to indicate the altered obscured light, the works were all developed without translucency, which is often an essential aesthetic quality in my work. The lack of translucency in the Canadian series was a deliberate consideration, unlike Finland, where I struggled to create translucent vessels.

In making this work, using the sense of touch, I aimed to create fine rims, encouraging the raw force of the kiln flame to slightly distort the lips, thereby imparting a permanent reminder of the organic silhouettes delineating the prairies and the horizon line.

The aesthetic and technical responses in this series of work have resulted from my heightened sensory awareness of light, place, ceramic culture, and the use of local porcelain and materials.

⁵⁰ Hawkins is referring to observations noted about the relationship to site cultivated by artist Annie Lovejoy during her one-year residency to develop the artwork *Insites: a Notebook*, 2009 (Hawkins 2014, 158-164).

⁵¹ The haptic system provides us with information through the sense of touch, where humans are 'literally' in touch with their surroundings (Malnar and Vodvarka 2004, 42). 'Haptic perception reminds us that the whole self may grasp reality without seeing, hearing or thinking. It also calls attention to a primitive way of knowing that resembles mythical thought ... a unified structure of feeling and doing' (Walters cited in Malnar and Vodvarka 2004, 42).

Additionally, the nature of lived experiential, sensory awareness and tacit learning occurring in residencies has forged a way of knowing which I have mainly absorbed implicitly. Hawkins suggests that when artists research and live differently, this method of learning offers ways of furthering knowledge and insight (Hawkins 2014, 247). Initially, I viewed my studio research in Finland and Canada as a struggle in coming to terms with new studio spaces, firing techniques and light and touch in the brief timeframes. Upon reflection, uncovering ways to overcome these difficulties opened new directions in my practice. In effect, by adapting to the conditions of place, I was able to push beyond my usual working methodology by implementing new making and firing approaches. As such, there are significant distinctions between the work made in Australia and the work I developed in the northern hemisphere. I have come to appreciate the varying responses to the natural environment, often incorporating enmeshed cultural codes suggesting place. This awareness as well as new making approaches came about naturally as a response to the inimitable cross-cultural situations, landscapes, distinctive geographical locations and atmospheric light conditions. In order to achieve these aesthetic responses, I impelled my practice to utilise specific techniques beyond my eye-hand coordination to accommodate and respond to the local conditions of each place.

In effect, my engagement with international residencies has reinforced the value of experiential awareness gained by working in new locations and within set time frames. The involvement has been enriched by the focused, experimental and observed learning, through tacit knowledge and sensory awareness. These factors prompted more creative risk-taking by engaging with techniques and processes I had limited knowledge of, thus expanding the learning experiences. Additionally, a significant finding arising from these experiences is uncovering an awareness of *how* I work, particularly concerning my own sensory engagement. I now understand that my model of working alters depending on the geographical location I am in at the time. Crucially, being away from my usual studio environment enabled me to gain cross-cultural awareness and develop both traditional and new skills. This exposure induced a level of self-reflection and re-examination, which in turn caused a shift in my systematic working methods.

Immersion in locations so unfamiliar to Western Australia has heightened my intrigue and desire for knowledge. My newfound interest in how established ancient histories and traditions continue to filter through the hands and minds of contemporary artists remains a part of my repertoire of approaches to making. Away from the familiarity of home, my testing and trial and error most clearly came about as a result of responding to place. I was not only captured by the unique qualities of each location, but also encouraged to respond to them creatively. This realisation has instigated new ways of seeing and feeling the distinctive characteristics of Western Australia upon my return. Essentially, finding new information has induced a reconsideration of my creative responses and, in particular, my responses arising from the unique light differences between hemispheres.

Sensing Light – Australia:

Continuing my investigation of light conditions, Edensor's writing once again informed my perception by proposing that light has always been central to the Australian colonial identity. As Edensor claims, '[T]he idealization of distinctive Australian sunlight guided the colony to differentiate itself from the grayness of Britain and encouraged residents to forge an affective connection to the harsh environment' (Edensor 2017, 35). Emphasising the austere Australian sunlight captured in the work of artist Arthur Streeton, art critic William Yeoman writes that it is in

... the Coogee of Streeton's Blue Pacific, blazing with so much colour and light you could warm your hand on them, that the full impact of this exhibition is felt: a confluence of softer European influences and the perception of the harsh Australian light



Figure 40. Studio window, 2018, Fremantle, Western Australia.

as something uncompromising, even fatal (Yeoman 2017, 36).

In terms of a 'Eurocentric' understanding of light, Bolt frames Australian daylight as 'another sunlight' (Bolt 2004a, 125). Bolt contends that European responses to light do not compare to the awareness derived 'from living in the glare of the Australian sun' (Bolt 2004b, 124). This understanding of the sun's intensity arises from her first-hand experience of attempting to paint the landscape of Kalgoorlie,⁵² Western Australian. Describing the challenge posed by the concentrated sunlight, she states that 'the glare was so intense that no-thing at all was revealed. Moreover, the landscape was so fractured and messy that no form emerged. It was impossible to use light to render form legible' (Bolt 2004b, 131). As a result, the concentration and brilliance of the sun rupture the connexion linking shape, illumination, 'knowledge and subjectivity' (Bolt 2004b, 125).

Unlike Bolt's difficulty with working in Australia's 'other' light, the brilliance and concentration of the sun is a crucial tool assisting my working methodology and, in particular, the eye-hand coordination required to accurately render vessel profile lines. The distinctive sunlight, as Edensor points out, is a fundamental Australian attribute, unaffected and 'ahistorical' (Edensor 2017, 35), a distinct light that is synonymous with Australia's national identity. I now concede this understanding after experiencing the absence of 'another light' while working away. This is a knowing also arrived at by way of this research.

The examination of Edensor's and Bolt's ideas concerning light, along with the experience of working in the absence of Australian light, emerged as the stimulus for more readily exploring the light synonymous with Australian national identity. Induced by this research, a physical and sensory connectedness to home as place has since become an essential

⁵² Kalgoorlie is a mining town 700 kilometres east of Perth, Western Australia, where the temperatures in summer reach approximately 40 degrees Celsius.



Figure 41. Alana McVeigh *Western Australia; Light of May*, 2018 progress documentation, porcelain, dimensions variable.



Figure 42. Alana McVeigh, *Western Australia; Light of May Series*, 2018, porcelain, dimensions variable.

consideration in my work.

Place – Australia:

Considering the development of new work upon my return to Western Australia triggered thoughts of Leach's Japanese-infused stimulus when he resumed work in Cornwall, England. Leach endeavoured to source regional materials with the aim of developing pottery depicting the local Cornish character (Leach cited in de Waal 1997, 29). With the assistance of Japanese master potter Shoji Hamada, Leach produced a range of sizeable dishes embellished with both East Asian motifs including tiered pagodas and willow trees as well as English heraldic beasts such as the Cornish *Mermaid of Zennor* (de Waal



Figure 43. Alana McVeigh, *The Shape of Light: Crepuscular Rays Series 1*, 2018, porcelain, 14 x 20 cm.



Figure 44. Documentation, Fremantle Harbour, 2018.

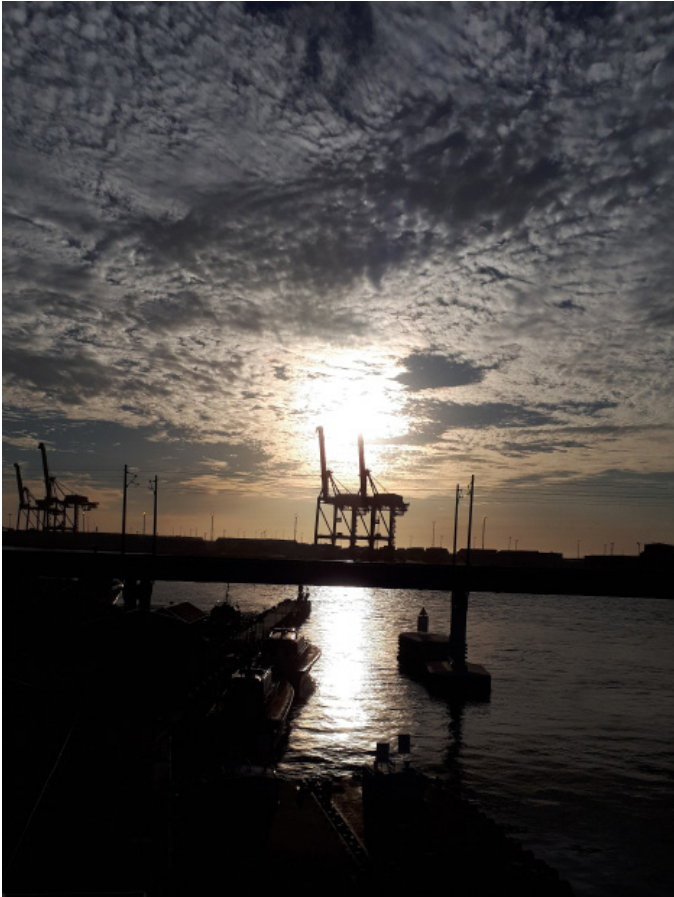


Figure 45. Documentation, Fremantle Harbour, 2018.

1997, 29). Commenting on the fusion of two cultures evident in this new work, a critic commented, '[H]ere and there will be found a piece which seems to interpret a traditional British form, the "cloarn bussa" of Cornwall in the more gracious idiom of the East' (Unknown cited in de Waal 1997, 29). Much of Leach's work continued to carry references to both cultures, a fusion that is also evident in the work of many ceramists in Australia, including Hanssen Pigott, Blakebrough and Rushforth.



Figure 46. Documentation, Left Bank, North Fremantle, 2018.



Figure 47. Alana McVeigh *The Shape of Light: Crepuscular Rays Series 2*, 2018, porcelain, 14 x 20

Underpinning my interest in the stream of influences filtering into Australia, my continued use of East Asian vessel shapes as well as light and place, my work also carries traces of cross-cultural stimuli layered with qualities unique to Western Australia.

Author Nikki Gemmell expresses the distinctive characteristic sensed when returning to Australia by acknowledging,

[A]fter travels in distant lands the smell of Australia taunts you like a benediction when you step out of the terminal's air conditioning. You hold your head high, you inhale deep; you are home, safe, at last. It's a comforting mixture of eucalyptus and desert dirt and distant seas; a succour of a scent that sings us home (Gemmell 2017, 13).

Gemmell's writing echoes the sense of home, sparking feelings of the familiar: the warmth of the December sun, the sounds of seagulls and the smell of the salty sea breezes.

Returning to my studio, I am almost eye to eye with the sweeping cloud movement and hues of the vast sky viewed from the third-floor window (figure 40). The light of my world from up here begins translating into the felt and seen qualities of Fremantle. While exploring ways to capture this locality, vestiges of my lived cultural experiences in 'distant lands' begin to fuse and embed themselves in the new testing of fine layers of thrown pure white porcelain.

Juxtaposing my renewed awareness of the sharp, bright Australian light against the diffused light and qualities of place in Finland and Canada underpins the contemplation for my new work. My aim to capture light continued by experimenting with slips and painted stains applied to the vessel surface at varying stages of the making. Yet, the outcomes of the early tests are mixed. Although there are a few pleasing results, the clarity and intensity of the colour after firing become muted and bruise-like in tone. Further testing entailed applying coloured slips to each form to depict the movement of the clouds across the bright blue skies. Again, the essence of these ideas worked well in the raw work. Though, again, this approach did not translate successfully: firing the forms left a dull, subdued surface finish on each vessel. Testing resumed by painting the raw surfaces with a blend of stains and print medium, but still the outcomes were unsuccessful.

The third round of testing comprised layering strips of heavily coloured clay onto the porcelain prior to centring and shaping as a form of laminating. Using the centrifugal movement of the wheel and varying levels of hand pressure eventually enabled the moving and blending of stained tones with the white porcelain. This approach offered the first glimpse of achieving the particular hues, movement and sky-like qualities (figures 41 and 42).

As summer transitioned into autumn, the skies continued to hold the shimmering crisp blue light and hue, although soft, steely-grey clouds also begin to drift across the skyline. Correspondingly, the forms are made lighter in weight and surface treatments to replace the heaviness of the northern hemisphere light.

In rendering the light of Fremantle, the natural colours of this location are distinct, stark and abundantly clear. The inherent pure white qualities of the Australian-made Southern Ice Porcelain is essential in conveying illumination suggestive of the glare and brilliance of Australia's 'other light'. The reflected light emanating from these forms is in stark contrast to the vessels made in Finland, and the soda fired series of Canada.

My concern in addressing the stark, atmospheric contrasts between the hemispheres converged with a sensed intensity of the late summer afternoon vista. Encased by the power of the sun's rays, the reflections and shimmering colour offered inspiration for another series of vessels. My aim in exploring site, which emerged from a newfound awareness of previously overlooked qualities of place, formed the premise of the *Shape of Light* series.

My making eventually returns to focused eye-hand coordination in forming fine translucent walls. In reflecting on the development of my haptic sense throughout this investigation, I feel elevated confidence in my sensory/touch awareness. My capturing of the softening glare and tone of the afternoon light has evolved from a reserve of embedded knowledge. My subconscious knowing affords a focused, more relaxed relationship with the medium. In order to continue contrasting the differences in light, the work in the *Shape of Light* Series 1–3 reflects light through breaches of thin layers of translucent clear glaze. In this work, the vessels must be made slight enough to achieve translucency and allow light to penetrate, while at the same time the layers of porcelain must also remain for pattern carving. The shapes of each form apportion slender porcelain windows allowing light to pierce the spheres of glaze.

While the skyline reflects light shapes, the daylight also continues to be a source of inspiration which is gathered on walking journeys to and from the studio. The reflected light form becomes the impetus for the *Shape of Light Series 2*. The vessel in figure 47 shows the reflected glistening circular discs floating on the Swan River which have been reinterpreted in this work.

Alongside this light testing, throughout my practice I have made small to medium-sized porcelain vessels. To engage in the underlying concerns of tacit and sensory learning within the making, I set myself a challenge by increasing the scale of the porcelain forms while maintaining their translucency.

The final works in this research reveal the haptic tacit knowledge and sensory awareness acquired through this investigation. By juxtaposing the work in this series with the vessels created in Finland and Canada, I highlight the sweeping cloud movement, brilliant light and hues of the vast skies and natural light surrounding the sea and landscapes of Fremantle.

My disrupted dependence on the shimmering Australian light while working in the northern hemisphere prompted a re-examination of *how* I work, with particular consideration of geographical light conditions. The reappraisal identified touch within my practice as the dominant sense offering a higher degree of accuracy than sight. This awareness arises when artists, as art historian Linda Nochlin points out, are 'away from the known, the familiar, the acceptable: everything that stands for home, and that home stands for', which frequently directs artists towards the abandoning of past modes of working (Nochlin 1996, 331).

Working in unfamiliar residency locations presents opportunities as sites for this very re-examination. It is my view that learning through observation, imitation, replication, along with living differently, is heightened because of the cross-pollination of cultural and traditional perspectives. My own residency experiences offer some insight into how this method of observed knowledge may have also informed Leach's ceramic training and lived Japanese experiences. His everyday encounters while living in the village of Abiko, visits to Tokyo and further afield to China and Korea are clearly expressed in his pottery designs and writing. Following Leach's documented example, numerous Australian⁵³ artists engaged in residencies to expand on early learning, including McMeekin, Hanssen Piggot, Blakebrough and Rushforth. The cross-cultural, sensory, tacit and experiential ceramic training model through apprenticeships and residencies took hold from the 1950s and beyond.

⁵³ Over the longevity of his career Blakebrough identified the importance of undertaking ceramic residencies and modes of apprenticeship training (Cochrane 2010, 26), undertaking residencies in Japan, Denmark and the United Kingdom to further his own development, as well as training apprentices while working at Sturt.

Conclusion

In closing this exegesis, I revisit the key threads underpinning the studio-based ceramic practice entering Australia during the 1940s and 1950s to disclose the discoveries made along the way. Examining Australian potters Hanssen Pigott and Blakebrough uncovered an experiential training system derived from the traditional Japanese master-apprenticeship system linking back to Leach and his instrumental text, *A Potter's Book*, 1940. Establishing a theoretical framework, fused with related studio-based enquiry, was critical to testing the sensory awareness as well as experiential and tacit knowledge linked to Leach's philosophical premise for ceramics.

Central to Leach's philosophical principle is the potter-artist's mind-body unity; yet, critically, Leach offered little clarification to comprehend how this union is to be realised. To investigate Leach's notion of mind-body unity, I examined my body's responses as a way of grasping and *experiencing* the potter-artist's silent, intuitive knowing, one hand one brain, and human activity. This method offered access to analysing the corporal understanding of the mind-body synthesis that transpired in the making and doing, thus affording comprehensive awareness of how this synthesis is achieved. As a result, this research has determined that the potter-artist's mind-body unity is an amalgamation of sensory awareness as well as embodied and tacit knowledge.

The comprehensive theoretical enquiry offered by both Moon's and Cochrane's writings, as well as the articles published in *The Journal of Australian Ceramics*, demonstrated a lineage of influences that linked back to Leach. This finding was significant in unravelling the impact of Leach's specific approach to studio-based practice in shaping Australia's burgeoning, post-war ceramic foundation. It is conceivable to define the cross-cultural stimulus filtering into and underpinning this important aspect of Australian ceramic history as distinct from any other global ceramic narrative.

Studio-based Research:

Drawing from my own making and doing, combined with a meticulous examination of Leach's book, I uncovered a way of articulating the substantial gap between experiential, hands-on learning and written ceramic instruction. Critical examination and studio practice were fundamental to identifying my own initial learning difficulties stemming from this gap but I ultimately resolved this by formulating a learning routine through repetitious making as well as trial and error. Significantly, repetitive practice evoked an awareness of the felt sensations occurring during making. Over time, the familiar perceptions gave rise to instinctive actions enabling, as Dewsbury states, 'the body to do the thinking' (Dewsbury 2015, 33). It was during this fluid, rhythmic, habitual practice that I realised the vital role the senses held in ceramic learning, making and doing. Eventually, the combination of observation, imitation and replication (tacit knowledge) and haptic and eye-hand coordination (sensory awareness) forged a link bridging the implicit and explicit gap, and emerged as a crucial learning methodology. From these findings, this research can conclude that it is only in the doing and making that written direction is most accurately understood and effectively utilised. Explicit knowledge can only emerge from tacit knowing; the reverse is not possible (Sorri 1994, 18).

In the realm and ritual of repetitious skill development, I found an immersive, meditative presence occurring in making as my thinking body took over, allowing an inner knowing mind and body to coalesce. In rhythmic, repetitious practice, a state of mind emerges, which Janet DeBoos describes as a flow. These ideas, DeBoos proposes, are synonymous with Buddhist monks and meditation (DeBoos 2012, 5). Drawing from the qualities enmeshed in Zen Buddhism, including a silenced mind, intuition, and a focused and in-the-moment presence, it is conceivable to define Leach's attributes of the potter-artist's mind-body unity as materialising through habitual, repetitive making. For, as DeBoos suggests, reconnecting the head with the heart is paved through repetitive production throwing.

By critically analysing theories offered by Polanyi, Bolt, Toom, Sauer and Dormer, I uncovered insight into awareness primarily absorbed via doing rather than through text (Dormer 1994, 11). This finding was essential in clarifying and deepening my perception of this specific knowing. Therefore, by connecting the theoretical enquiry with ceramic-based studio research, I discovered a type of language to express the intangible, non-verbal knowledge that is often overlooked, silent and extremely difficult to communicate.



Figure 48. Alana McVeigh, *Texture of Light 1*, 2018, porcelain, 16 x 14 cm.

Apprenticeship, Residencies and Place:

Following Leach's apprenticeship and Japanese residencies model, I discovered residencies as sites conducive to intense experiential learning. As my practice developed, I began working in the northern hemisphere where the shift from the precision of Australian light to the diffused, heavier daylight in Finland and Canada had unexpected effects on my making. No longer able to see the line as clearly as when working in Australian light, under these conditions, touch became my dominant sense. While this disruption initially caused frustration, my reliance on the haptic sense, I now understand, evolved as a natural progression. This awareness was reinforced by examining the blindfolded wheel-throwing study undertaken by Groth, Maarit, Seitamaa-Hakkarainen and Kosonen. Drawing on embodied knowledge, 'tactile memory became a tool in the attempt to "see" through the hands' (Groth et al. 2014, 8), thus providing the missing link.

Consequently, the development of my work altered while in the northern hemisphere, which occasioned a re-examination of *how* I work with particular regard to atmospheric and geographical light conditions. This realisation evoked a greater level of risk-taking and experimentation through the use and material properties of local porcelains, and pushed the ideas beyond my earlier making approaches. Considering the intangible, alongside somatic sensations emanating from built environments and landscapes, helped establish my ideas of place. To accomplish sensory responses to place, I acquired and incorporated new skills, firing processes, working with unfamiliar materials, tools and techniques. Within the studio research, I decided to



Figure 49. Alana McVeigh, *Higher Degrees 18*, John Curtin Gallery, Bentley, Western

increase the scale of the forms while still maintaining a level of translucency. Initially, this task posed some difficulty, though a schedule of repetitive habitual practice noting the physical, sensory and cognitive activity undertaken in shaping larger amounts of porcelain gave insight to achieving this aim. Previously untried making and methods led to new approaches, discoveries and creative outcomes evident in the artworks of the Canadian series, especially *Medicine Hat* and *Saskatchewan*.

During this research, I have discovered the critical function of sensory awareness and tacit knowledge in studio-based ceramic knowledge and learning. Through haptic sense and instinctive knowing, I am aware of when the revolving porcelain walls of each form are at their peak, fine enough to reveal the translucency and penetration of light I am aiming for. Through touch, I can determine the exact amount of porcelain to leave when forming the base, enabling stability and balance without being visually evident. The stream of sensory knowing flows when *touch*, *sight* and *mental state* unite.



Figure 50. Alana McVeigh, *Higher Degrees 18*, John Curtin Gallery, Bentley, Western

Emanating from the research, the presented artworks reveal the development of haptic knowledge, sensory awareness and tacit knowledge evolving over the duration of this investigation. Key themes underpinning the research that have influenced the creative project outcomes include the cross-cultural stimulus informing ceramic practice in Australia from Japan, China and Korea. In acknowledging the lineage of East Asian pottery introduced to Australia, I have based the forms made in this research on Korean, Japanese and Chinese pottery - forms that I maintain continue to hold relevance within contemporary ceramic practice.

My aim of juxtaposing works developed in Finland and Canada with work created in Western Australia aspires to evoke the essence of the diverse effects of geographical and atmospheric light conditions between hemispheres. As a result of sustained practice, refinement of skills and body thinking, a growing level of confidence has emerged, paving the way to stronger levels of experimentation, skill and technical knowledge. This level of testing became an essential aspect of my making during this investigation.

In the process of this research, I have strived for greater development and understanding of the empirical and cognitive structures linking inner knowing and non-verbal forms of knowledge. Through critical and scholarly examination, I aspire to extend the dialogue concerning the body's role in ceramic practice. In finding a significant gap between implicit and written ceramic instruction during this research, I have sought to draw attention to, and position, the fundamental value of repetitious practice, mind-body fusion, sensory awareness as well as experiential and tacit knowledge within the discourse of ceramic practice. I hope to have this largely overlooked, though essential, ceramic methodology absorbed into the narrative of Australian ceramic art history.

Ultimately, it is in merging the two streams of theoretical enquiry and creative practice that the entirety of the research pulled together as a cohesive whole. Linking gaps, silences, implicit knowledge, traditions and cross-cultural influences, this project presents potential for continued examination concerning the unity of the mind and sensing body in ceramic practice.

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Appendix



Studio documentation, repetitious throwing, photography by Alana McVeigh



Studio documentation, repetitious throwing photography by Alana McVeigh



Studio documentation, repetitious throwing, photography by Alana McVeigh



Studio documentation, photography by Alana McVeigh.



Studio documentation, photography by Alana McVeigh.



Studio documentation, photography by Alana McVeigh



Studio documentation, photography by Alana McVeigh



Studio documentation ideas testing, photography by Alana McVeigh



Studio documentation, photography by Alana McVeigh



Alana McVeigh *reFORMATION Exhibition*, Emerge Gallery Space, Perth, Western Australia (2014), Photography by Kevin Gondon.

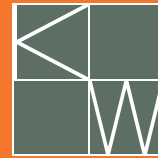




Studio documentation, photography by Alana McVeigh

KOTONA VI

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ALANA McVEIGH
FLEUR SCHELL
GÖSTA GRÄHS
KENT ERICSSON
KERSTIN HÖRNLUND
LAURA McKIBBON

AVAJAISET LAUANTAINA 7.5 klo 16:00
TERVETULOAA!
VERNISSAGE LÖRDAGEN 7.5 kl 16:00
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Kotona V1 3 Continents, Studio Karin Widnas-Weckstrom, Fiskars, Finland (2015) Exhibition Invitation.

