Tête-à-Tête

A Conversation Between the Maker and the Made

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School of Art and Design

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Attestation of Authorship

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



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Abstract

This practice-led project investigates the ubiquitous but invisible space between the maker and the made in the performance of making, and engages in an heuristic methodology to examine how the body experiences this space. This is underpinned by an examination of a phenomenological approach to lived experience, embodiment and the epistemology of empirical knowledge.

This practice-led project explores the relationship between the researcher's body as maker and handspun textiles as the made. Although the performance of making is cognitive in its practice, this project also explores the techniques of spinning's articulated performance in the space of making to explore repetition, ritual and gesture.

This exploration identifies the space between the maker and the made as experiential and as a conversation between the body, material and tools, as well as kinaesthesia, auditory and haptic perception. This space also reveals a transformation of body and perceptive components by way of embodied action, sensorimotor engagement and spatial awareness. This established a role for the body in the building of knowledge during the creative process and adds to the ongoing discussion into the phenomenological approach to body and knowledge through creative process.

Introduction

In the language of surf culture there is an expression:

Only a surfer knows

This expression relates to the cerebral and physical sensations experienced when in the act of surfing. Engagement and experience of surfing adds to the knowledge gained through the body in its active enquiry through tactility, vision and embodied action. Simply put: it is the knowing through doing.

This project explores the invisible space between the maker and the made during the process of making. The phenomena of experiencing the world through participation of the perceptive body creates knowledge; a knowledge that informs one's view of the world and one's place within it. This project argues for a phenomenological approach to the role of the body in building knowledge through lived experience engaging embodiment, sensorimotor skills, proprioception and active enquiry. This practice-led enquiry is positioned within the realms of textile art, and with the body of the researcher as maker, uses an heuristic approach which confirms the phenomenological premise that knowledge is gained through the lived experience of the body. This is practised through the making of handspun textiles, sound, and kinaesthesia.

My Story

My interest in the process of making began in my formative years. Growing up, I observed the women in my family 'making from scratch'. This included clothing, knitwear, bedding and household furnishings. In my pre-teen and teenage years my mother worked as a seamstress/out-worker for a clothing manufacturing company sewing mostly women's clothing. I also worked for the same manufacturing company sewing during the school holiday breaks. It was through these experiences that my passion for textiles and making began.

My own experiences of making evolved. Making was a practical element in everyday life to produce an end object to be put to good use. However, the process of making – sewing, cutting, stretching, draping, fitting, ripping and starting again – was the most enjoyable phase. It was also the phase of lived experience and where knowledge was gained. The process of discovery through doing was fundamental as there was never any formal education on 'how to make' in my household. Skill and knowledge were acquired through the making and doing.

It was at the commencement of this study that I began to pay closer attention to the space between the maker and the made in the creative process, and how

knowledge is acquired through the body. It was through this awareness that this exploration began to unfold.

This exegesis is divided into four chapters. Chapter One identifies the contextual framework, positioning the project through a theoretical discussion of the role of the body and knowing. Chapter Two identifies the research methodology, materials utilised and methods of making applied to the series of works. Chapter Three discusses the role of the creative practice and documents the process of the research practice and its development, and identifies various components linking to the contextual discussion. Chapter Four consists of images and commentary of the final presentation, which will be added after the examination. The conclusion closes this research project.

This thesis is constituted as an 80% practice-based exploration accompanied by an exegesis of 20%.

Chapter One

Beneath the Skin

Concepts and Critical Contexts



Figure 1. Hamilton, A. (1984-1993). Untitled (body object series) #5-bushhead. From See Yourself Sensing. Redefining Human Perception, (p. 18), by Schwartzman, M. (2011), London: Black Dog Publishing Limited.

Artist Ann Hamilton's Body Object series (1984-1993) questions embodiment and sensation. Hamilton discusses the conceptual theme of her series of works as follows: "How does making participate in the recuperation and recognition of embodied knowledge?

What are the places and forms for live, tactile, visceral, face to face experiences in a media saturated world?" (as cited in Schwartzman, 2011, p. 21)

Head in My Hands

According to Howse, the Cashinahua Tribe of Eastern Peru have a saying '*Ichi Una*', which loosely translates to 'skin knowledge' (Howse, 2005, p. 27). Skin knowledge is the narrative used to describe knowledge gained through touch and experience that enables them to exist within their environment. The experience of the sun, wind, or rain on the skin, these experiences encapsulate the body's way of knowing.

This chapter discusses an epistemological approach to empirical knowledge. O'Brien (n. d.) argues perception is a core issue in the theory of knowledge, and the perceptive body, senses and active enquiry is grounded in how we move through the world and acquire information.

Lived Experience

Phenomenology

As a discipline of philosophy, phenomenology is the study of phenomena in the way one experiences the world. Smith (2013) discusses this as "things as they appear in our experience, or the ways we experience things, thus the meanings things have in our experience" (para. 4). What we live through or perform allows "conscious experience" from a "subjective point of view" (Smith, 2013, para. 4). Smith explains making an experience conscious as "a certain awareness one has of the experience while living through or performing it" (para. 18). "Living through or performing" experiences, discusses Smith (2013), include differing accounts of awareness including "spatial awareness" (perception), "embodied action" (movement) and our surroundings in the world (para. 9). The acts of experiencing involve our moving through the world past the point of observation and into engagement.

The idea of living or performing through experiences and active engagement to understand the world signifies a perceptive body. Perception is, states O'Brien (n. d.) "the process by which we acquire information about the world around us using our five senses" (para. 3). The perceptive body acquires information through equal engagement of the senses which allows for participation within our world and our understanding of our place in it. Pallasmaa (2005) refers to this as 'lived experience' and that the "very essences of lived experience is

moulded by hapticity and peripheral unfocussed vision. Focussed vision confronts us with the world whereas peripheral vision envelopes us in the flesh of the world" (p. 10). Perception of the world through the visual produces only a flat picture. To perceive and gain experiential knowledge would require one to go out into the world, to move about and take hold in a tactile, kinaesthetic and visual manner. Therefore, as Pallasmaa (2005) argues "all senses, including vision, are extensions of the tactile sense; the senses are specialisations of skin tissue" (p. 10). However, in terms of this project, the central focus of senses within the creative practice are vision, touch and hearing, as smell and taste are not relevant in the physicality of making.

A Clear Vision

Historically in Western culture, the sense of vision was privileged. Classical thought held that the visible confirmed reality and this became analogous with knowledge. During the Renaissance period, the five senses were formed into a hierarchy from vision to touch lending distinction to the optic organ (Pallasmaa, 2005, p. 15). The ocular metaphors of 'seeing clearly' and 'seeing the light' operated as truth and reality. Lee and Duncum (2011) illustrate this belief stating "reliable knowledge was considered to be independent of bodily perception because sensory experiences were thought to distort the essence of truth" (p. 234). Nonetheless, favouring sight as the premier sense leads to a detachment from the world through disengaged observation. Pallasmaa (2005) discusses the negative inclinations of the supremacy of vision; suppressing the other senses is to "push us into detachment. The art of the eye has certainly

produced imposing and thought provoking structures, but it has not facilitated human rootedness in the world" (p. 19).

Skin Deep

Against the backdrop of ocular favouritism, touch has laboured for its place in the hierarchy of the senses. In a social context, class distinction separated those who worked with their heads and those with their hands. The simple physicality of touch has placed this sense beneath the cognitive intellect, yet touch is not so far removed from thought given that descriptions of thought are mostly tactile-based – grasping an idea, holding that thought or twisting the words (Claasen, 2005, p. 5). Touch is the sense that offers a diverse range of sensations and information that feed the mental process. Sennett (2008) considers this way of knowing as providing "unbounded data. The eye supplies images, if you touch a hot stove your whole body goes into sudden trauma" (p. 152).

The degree of bodily knowledge that is generated through tactile engagement adds value to the significance of the tactile sense. The eyes will uncover what the skin of the fingers already know. Howse (2005) discusses this thought as an immersion "in tactile sensations, enveloped by the wind or by heat, yet at the same time register minute, local perceptions, the tickle of an insect or brush of a leaf. (If sight worked this way we could see the blue expanse of the sky and at the same time be looking at grains of sand on the ground)" (p. 28). In terms of this project and working with the material, the eyes will observe the

surface of the fibre – be it loose strands or the shape of the made. Data gained through touch during the making will determine the strength, tension and softness of the made. The visual and touch senses inform each other simultaneously.

Haptics

Skin of the body is nature's boundary line between the body and the world. Skin possess sensory detectors that function on varying levels in response to pressures and textures, and responses also determined by properties of skin (Brynie, 2009, p.17). The relationship between skin and the world builds on a broader idea of haptic perception, or human sensing through touch. The word "haptic" originates from the Greek word *Haptikos*. The *English Oxford Living Dictionary* (n. d.) defines "haptic" as "relating to the sense of touch", and "perception" as "become aware of something through the senses".

Haptics is commonly considered in relation to touch and tactility. However, this perceptual system is also multi-sensory and closely connected with the kinaesthetic senses in terms of body movement and spatial awareness in relation to our external environment. Prytherch and McLundie (2002) discuss skin and touch collectively as somaesthesia, the faculty of body perception, stating "the brain's awareness of the position and movement of the body by means of sensory nerves within the muscles and joints. With the addition of the variety of internal sensitivity within the body, all these are collectively described by the term somaesthesia, the sense associated with body contact; the skin

senses" (p. 3). This makes haptic perception an overall term referring to the spatial, kinaesthetic and tactile senses and its relationship with the external environment. Longstaff (2003) defines the role of haptics as deriving "information about one's own body or about the exterior environment and so is both proprioceptive and exteroceptive" (para. 19). Proprioception (as discussed in The Body Matrix, p. 22) relates to perceptive joints and muscles, and exteroceptors relates to perceptive skin, eyes and ears.

Working Hand

The significance of touch and the haptic for this research project is that the connecting element between the making, the tools and the material is the body where the primary engagement is through the hand. The hand engages in varied activities: pinching and pressing material, picking up tools, absorbing sensation: applying pressure, feeling tension. An uninterrupted probing of the hand can help perceive more than just the surface that the visual can only fixate on. For example, density, weight, pressure and surface are what the hands can engage with, which contribute to object and spatial awareness. The hands also unearth, explore and move. McCullough (1996) discusses the hands in the making as "having a life of their own that leads them into explorations. A sculptor's feel for a material will suggest actions to try, and places to cut. Learning through the hand shapes creativity" (p. 8). Becoming aware of material through the skin and body creates a form of presence and therefore understanding. Hetherington (2003) defines this form of understanding as

"praesentia" or "a way of knowing the world that is both inside and outside knowledge" (p. 1937). The inside knowledge is gained through lived experience, and outside knowledge is in relation to our external environment.

To summarise the discussion in this section, a broader hapticity of kinaesthetic, tactility, somaesthesia and lived experience leads the perceptive body to knowledge.

The Importance of the Moving Body in Perception

The Body Matrix

Movement of the body in relation to material surfaces expands on kinaesthetic senses and sensations. The working hand in creative practices engages the maker with their entire body. Ananthaswamy (2015) refers to this as the "body matrix – a sense of our physical body and the immediate space around it" (p. 77). Perception of movement and spatial awareness from stimulus of the body is referred to as proprioception. Given the spatial sense of the body, proprioception and touch work on equivalent receptors. Longstaff (2003) suggests that "bodily movements, positions, and touch, all arise from the same system of receptors and so they can be conceived to belong to the same sensory system" (para. 7). Brynie (2009) breaks this down into scientific terms related to impulses of the skin, stating "receptors that initiate impulses of pressure, vibration and temperature lie in the skin. The receptors more important for proprioception lie deeper in the joints, tendons and muscles" (p. 17).

An Understanding of the Body in Science

The view that perception is only a process of the brain, rather than a bodily engagement is debatable. Without a doubt there would be aspects of perceptual activity dependent on brain activity; however, perception involves

the whole body in gaining skills and knowledge. The cephalocentric view on knowledge is a contrast to other ideas on the perceptual body. For example, Ingold (1993) argues against the distinction between perception as a "property of mind" and "bodily execution", and rather than separate mechanisms in operation, suggests observing the whole, in that "somehow inside processes the data of perception and pulls the strings of action" (p. 431).

The view that bodily activity leads to perceptual knowledge has been given some consideration in the field of neurological research; however, some cognitive scientists hold the view that experience happens as a result of neurobiological process. Searle (2000) takes the position that "Consciousness and other sorts of mental phenomena are caused by neurobiological processess in the brain, the conscious mind is caused by brain processess and is itself a higher level feature of the brain" (p. 566). However, as discussed in the first section, it is not unreasonable to suggest that experience is gained by how we move in our environment, and how this affects us. It is through thoughtful activity from the perciever that knowledge is acquired. Noe (2004) challenges the scientific model of thinking by suggesting that, to date, there is no evidence of consciousness produced by the brain (p. 210). The conversation between science and philosophical ideas remains open. Lederman and Klatzky (1996) emphasise "the importance of understanding sensory-motor interface between action and perception" (p. 444) in developing new understandings of interactions between the sensory and motor skills.

The Active Body

The embodiment of the capability to become aware of something through the senses – through touch, hearing or vision – and for these to be understood embraces the theory of phenomenology or lived experience. As Noe (2004) argues perception is "something we do" (p. 1).

To state that perceiving is an active bodily participatory activity goes against historical ideas about perception. As discussed in the previous section, ocular culture operated within the idea of vision alone acting as the primary representation of the perceptual realm. However, to perceive is to engage both sensory and motor skills. This is referred to as sensorimotor skill or knowledge and can be understood as the relationship between the perceiver, movement and the senses. Visually, objects change shape upon moving nearer, away from or around. As discussed in the previous section, probing investigation over surfaces with the fingertips sparks sensations in the body and processes mental data. Sound either booms or quietens or even spurs body movement, like toe tapping to a favourite song. To perceive is to possess these sensorimotor skills and enact them automatically. Noe (2004) discusses perceivers as experts of sensorimotor pattern stating "This mastery shows itself in the thoughtless automaticity with which we move our eyes, head and body taking in what is around us" (p. 1).

Moving On

Gaining spatial and temporal awareness and knowledge through lived experience from movement is something we take for granted. To move is to make sense of the body and the path to discovery of bodily movement: bending of the arms, twisting of the torso, craning of the neck, blinking of the eye (Sheets-Johnstone, 2011, p. 117). Movement is imbued into the body through our engagement with perception and with the world. The body moves with or without inclination through space and time.

It is through the active participation of movement that an understanding of the body matrix and spatial awareness forms. Bodily movement stimulates the senses and feeds the sensorimotor skills. Our perception of the world is formed as we move through it. Quite simply put, movement informs perception. Sheets-Johnstone (2011) suggests this for two reasons; "creaturely movement is the very condition of all forms of creaturely perception; and creaturely movement, being itself a creature-perceived phenomenon, is in and of itself a source of knowledge" (p. 113).

Therefore, the relationship between movement and perception is intertwined. Sheets-Johnstone (2011) argues that movement is the most basic means of sensory experience of the perceptual body; "going back to actual experience - to us ourselves – thereby showing first how movement is the generative source of our primal sense of aliveness and of our primal capacity for sense making" (p. 114). The acquisition of knowledge is through active touch, and touch is a

kind of movement. This automatic movement is something Sheets-Johnstone (2011) refers to as a "spatio-temporal phenomenon" (p. 129). By skilful probing, a person perceives by touch while moving through space. Therefore, this active approach to building knowledge also leads to the perception of spatial content. Noe (2004) summarises this proposal by suggesting the relationship between spatial awareness and touch as "intrinsically active" (p. 97), whilst also arguing the role of vision as intrinsically active, stating "spatial content is available to other modalities such as vision in just the way that it is available to touch, namely, in terms of its immediate significance for movement and action" (p. 97).

Conclusion

Whilst bodily movement is central to the active participation of perception and knowledge building, the integration of the kinaesthetic, visual and touch modalities inform each other. Noe (2004) argues for the dependence on each other in determining sensorimotor patterns, rather than a primary source of just one, stating "one should expect that visual content depends on the sensory effects of movement. By the same token, it is not particularly surprising that kinesthesis and proprioception depend on vision (and on other modalities)" (p. 95).

To summarise, this chapter argues for the phenomenlogical approach to the role of the perceptive body in building knowledge. This argument is supported by the discussion on lived experience, embodiment and engagement of the senses.

Chapter Two

The Working Body

Methodology, Material and Methods of Making



Figure 2. Irish Spinner Using a Big Wheel. Circa 1905. From Spinning Wheels, Spinners and Spinning, (p. 61), by Baines, P. (1977), London: B.T. Batsford Limited.

The function of a spinning wheel is to combine and twist fibre into yarn, with the yarn woven

The function of a spinning wheel is to combine and twist fibre into yarn, with the yarn woven as cloth or knitted into a garment.

The 3 M's

This chapter discusses the research methodology, the materials, and the main methods of making utilised in this practice-led research.

"Research Methodology" refers to the overall process and approach to the researching, investigating and documenting process. I have not employed one single methodology, rather I employed fragments of different methodologies. This has consisted of mostly an heuristic approach, with elements of reflection on action, somatic and active enquiry, leading to a mixed methodology. As Gray & Malins (2004) suggest no set methodology may apply in practice-led research; existing methodologies can be altered and new methodologies created (p. 18). This approach of altering existing methodologies has revealed a customised methodology. This compliments the research practice as it engages myself both as maker and researcher.

The "Material in Hand" section discusses the protein, vegetable, and polymer fibres utilised and transformed in the making within the creative practice. Handspun textiles and their relevance to the project are also discussed.

The "Methods of Making" section discusses the tools and techniques used. The spinning wheel was the key tool utilised with three different types of spinning wheels for each technique of corespinning, spinning and plying.

Research Methodology

Heuristic Approach

The heuristic methodology was developed by Moustakas (1990). The Heuristic method incorporates discovery through self-enquiry and dialogue in the research process. Moustakas (1990) discusses how a view of "the self" is central to the heuristic approach which is a process that "incorporates creative self-process and self-discoveries" (p. 9).

There are several phases in the heuristic process that Moustakas (1990) discusses as engagement, immersion, incubation, illumination and culmination of research (p. 27). As a textile artist interested in process, I have sought to explore and make the invisible space between maker and the made during the performance of making visible, and understand the role of the body in the formation of knowledge about the making. Given that the creative practice is process driven, this has allowed for immersion into these phases in both the heuristic enquiry and the making. The initial engagement has identified the area of potential exploration (for example: refer to works discussed in Chapter Three, pp. 38-40). The immersion phase has taken place within the creative practice of this project, by establishing a research question which gradually arises from the practical engagement of making (for example: refer to works discussed in Chapter Three, pp. 45-46). An incubation process follows allowing the newly discovered knowledge to sit and eventually reveal itself. Swann (2002) discusses this percolation process as an accumulation of "fragmented bits of information and then – usually after a period of incubation – invents a coherent and often elegant proposition that embodies all of the rag-bag of bits" (p. 54). Accumulation of "rag-bag bits", immersion and incubation have been central to the creative practice. The illumination process has unearthed the importance of the role of the body in the formation of knowledge about the making (for example: refer to works discussed in Chapter Three (pp. 51-60). While this has always been present it remained unnamed. Moustakas (1990) discusses the illumination process as "something that has been present for some time yet beyond immediate awareness" (p. 30). Within this process, and with the help of journalling (Fig. 3) and mind mapping (Fig. 4) the research question slowly began to reveal itself, specifically during the engagement of making which explored the relationship between the body and the spun material (refer pp. 45-46).

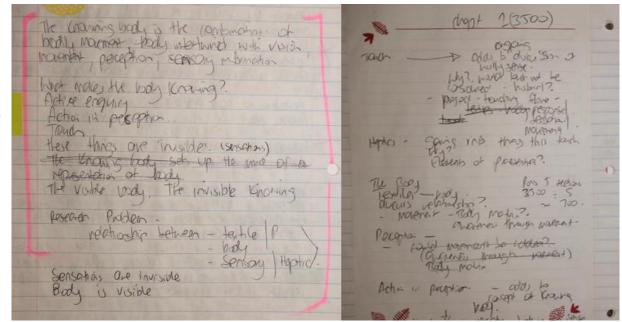
Somatic

Hanna (1995) discusses somatics as "the body as perceived from within by first-person perception" (p. 341). Researching with the heuristic approach has allowed for me, as the maker, to explore and reflect on the role of the physical body in the making from a subjective point of view. Hanna (1995) defines the self as "being internally perceived" whereby "the mode of viewpoint is immediate proprioception – a sensory mode that provides unique data" (p. 341). Jackson (2005) discusses another perspective on the self by suggesting an understanding "from the inside out" to "explore knowledge embedded in practice itself" (para. 3). Perception, embodied action and lived experience allows for the body in building knowledge (refer Chapter One, Phenomenology,

p. 19 and The Body Matrix, p. 22), and is explored further in the creative practice.

Reflection on Action

In addition to the heuristic approach of immersion, incubation and illumination, there has been a process of reflection with each investigation. As discussed in the previous paragraph, the process of illumination has unearthed awareness of aspects of the making space that are present but often unnamed. Schon (1983) refers to reflection on action as "tacit knowing in action" and "often we cannot say what it is that we know" (p. 49). Within each process-driven investigation, a reflection on the actions has been applied with a view to reframing thought and problem solving. Reflecting on action is also a useful tool in revealing Figure 3. Kingi, M. (2016). Journalling. Research Methodology. "a kind of knowing which does not stem from a prior intellectual operation" (Schon, 1983, p. 51).



Active Enquiry

The processes discussed above and self-discovery lead to an active enquiry pursuing answers to questions posed through the making. Active enquiry develops from "the impulse to alter an inner state" (Wilson, 1998, p. 292). This method also results from the reflection process to reframing the thought process, and proceeding with further action.

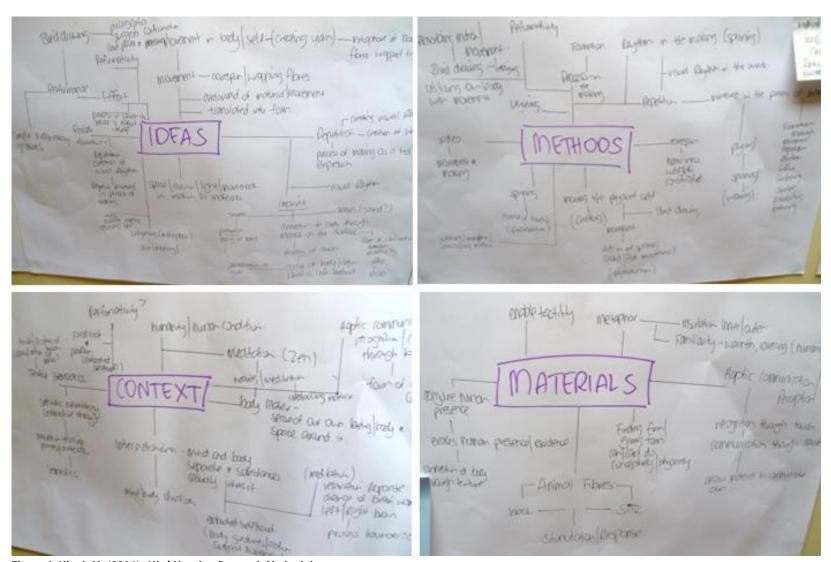


Figure 4. Kingi, M. (2016). Mind Mapping. Research Methodology.

Material in Hand

This research project engages with the creation of handspun textiles to explore the relationship between researcher's body as maker and the made.

In consideration of this project's focus on the maker and the body, the use of handspun textiles is also significant. Textiles are ubiquitous, and the uses of textiles stretch across many domains of human activity from spiritual, cultural, economic, practical, social and aesthetic values. Gordon (2011) suggests textiles are central to everyday activities and to important moments, and all that is in between (p. 55). Using Abraham Maslow's Hierarchy of Human Needs (Fig. 5) Gordon (2011) breaks these activities down into specifics (p. 56). This framework refers to a variety of human experiences and lines of enquiry which

This image has been removed by the author of this thesis for copyright reasons.

Figure 5. Maslow's Hierarchy of Human Needs. From Textiles. The Whole Story. Uses, Meanings, Significance, (p. 56), by Gordon, B. (2011), London: Thames & Hudson.

we move through to build knowledge and establish our place in the world. Textiles can supplement the body on this exploration, which Gordon (2011) discusses as "a constant companion through our journey. They help us relate to the earth, to other people, to ourselves" (p. 57).

The fibres utilised in this project are protein, vegetable and polymer fibres (Table. 1). Each fibre has distinct properties, as well as specific lengths and thicknesses. The length of each fibre is known as the staple length, and the diameter is measured in microns. For example, wool has a fibre diameter of 28-30 microns and a staple length of 75-125mm. It is also a hair fibre, which has scales that latch on to each other in acts of friction. When spinning, this enables a rhythmic flow which spins fibre into yarn with minimal breakage, due in part to the longer staple lengths and latching scales. In contrast, bamboo, a vegetable fibre, has a staple length of about 38mm. When spinning, the shorter staple lengths lead to breakage of the fibre, and this can result in a broken rhythm of bodily movement.

Ascertaining the performance of the fibre strands through touch, such as whether they are weak, strong, clumped, overtwisted, undertwisted or broken, becomes an engagement of active exploration with the hand (refer Chapter One, The Working Hand, p. 21). Sennett (2008) describes the probing hand devoid of conscious intent as "localised" touch, whereby "fingers search for some particular spot on an object that stimulates the brain to starting thinking" (p. 152).

Active exploration through handling the fibre stimulates the senses through touch and informs bodily understanding. Understanding could be in the form of knowing to tighten the tension on the spinning wheel, knowing to bend the wrist while weaving a structure, or knowing to separate fingers when teasing out fibre. Nimkulrat (2010) defines this exploration as "thinking through the senses", therefore establishing "a rhythmic interplay between bodily and thinking practices" (p. 77).

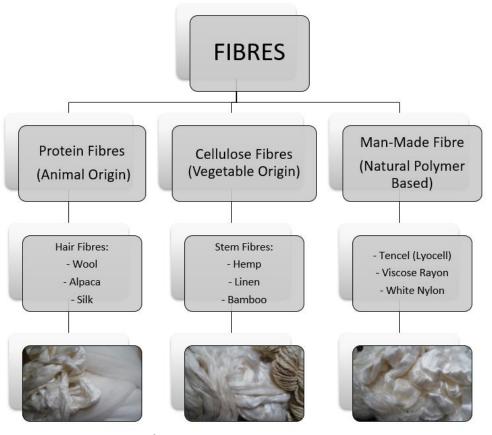


Table 1. Kingi, M. (2016). Fibres. Material in Hand.

Methods of Making

A key element in the making space of this project are the acts of repeated rhythmic movement. I have utilised craft tools and methods that involve some degree of physical repeated body movement to enable these tools to operate. These consist of an upright spinning wheel for basic spinning, a traditional spinning wheel for plying yarn and a country wheel for basic corespinning (Fig. 6). I have engaged in other methods of making to a lesser extent such as hand dyeing, weaving and hand silk paper making (Table. 2).

Repetition and Gesture

Each wheel is operated manually by pedalling foot plates to make the apparatus spin, and this sets the rhythmic aspect in the making. During the operation of the tools, individual parts of the body such as arms, fingers, ankles







Figure 6. Kingi, M. (2016). Spinning Wheels. Methods of Making.

Left photo: Spinning wheel for spinning single thread yarn.

Middle photo: Spinning wheel for plying two single thread yarn

Right photo: Spinning wheel specifically for chunky or corespun yarn

and neck, engage in repeated gestures, and the overall body moves in a rhythmic cohesion with the spinning wheel.

Repetitive physical gestures in spinning become a ritualistic process. The ritual lies in the sequenced order of movements as they are performed when spinning, such as the order of the feet pedalling upwards and downwards, to the order the elbows are lifted when feeding spun fibre strands onto the wheel bobbin.

Learning through repetition is a technique applied to many practices. Levy (1996) discusses the uses of repetition in art, suggesting "repetition can go beyond rote articulation to invoke experience and memory, in turn involving reproduction and reflection" (p. 79). In the context of building knowledge, repetition leads to skill development, which then leads to new knowledge. Maynard (2006) discusses gaining knowledge through repetition and suggests that "excelling at skills in one's life experience brings into play the idea of repetition" (p. 70).

Knowing through Doing

Experiencing repetition, rhythm and ritual in spinning offers a reflection process through a state of meditation. Understanding the intricacy in bodily interactions through making processes in a non-dialectal approach is experienced in the creative practice of this project. With spinning, weaver Baines (1977) also reflects on this, stating that there is a difficulty in unfolding "something which is

a continuous movement, a rhythm and co-ordination between hands, foot and fibre, and which also sharpens the sense of feel" (p. 13). This also refers to Schon's (1983) discussion on tacit knowing.

Other Methods of Making within the Creative Practice



Table 2. Kingi, M. (2016). Research Methods of Making. Methods of Making.

Chapter Three

An Understanding of the Knowing Body

The Creative Practice



Figure 7. Malstaf, L. (1995). Shrink. From See Yourself Sensing. Redefining Human Perception, (p. 59), by Schwartzman, M. (2011), London: Black Dog Publishing Limited.

Artist Lawrence Malstaf's works titled 'Shrink' (1995) considers touch and the environment. Schwartzman (2011) discusses the artists' work in the context of body and environment;

"Environments come in vastly different scales, shapes and materials, and they trigger perception using a range of mechanisms. They focus on the sounds, sights, smells and touch between the body and another surface and the space in between, across which the sensory experience is enacted" (p. 58)

A Series of Works Making the Invisible Space Visible

This chapter discusses the processes and the development of the works constituting the practice-based element of this project.

An heuristic approach was utilised within the creative practice, and establishing the research question gradually arose within the process of making. As discussed in Chapter Two (Heuristic Approach, p. 28), the investigation into the space between the maker and the made during the making process started with the initial engagement, immersion, incubation and then illumination. The impetus for these investigations was to identify and experience via first-person experience (with my body as that of the maker) the invisible space of the making.

Consequently, the working practice focusses on process, and is an accumulation of 'rag-bag bits' (Swann, 2002, p. 54) where reflection on elements of the exploration have moved it forward.

Material Explorations, Process, and Engagement with the Body of the Maker

The creative practice commenced with several explorations into aspects of my making processes such as material explorations, and the maker's engagement in the making. After many years of making with textiles, I tacitly knew how to make. However, for this investigation I have focused on the making process to unpick the role of the body in the space of making. I have looked at and observed other artists as a strategy to understand my practice of making.

I have referred to artist Richard Serra's 'Verb List' (Fig. 8) with a view to observing the resulting object's existence as a response to the actions performed by the body and hand within the making process. Through physically handling and experiencing material, Nimkulrat's (2012) proposal of "thinking through the hand manipulating a material" (p. 1) is reinforced through this investigation. With mulberry silk paper that I made (Fig. 9) I considered the materiality through the acts of folding, tearing, bunching and twisting. The silk paper was also machine sewn and coated with beeswax, which added density and solidified the delicate fibre strands allowing the material to retain shape resulting from hand manipulation. It also felt greasy to the working hand.

4 . 10	to		
toroll	to curve	toscatter	to modulate
to crease	tolest	to arrange	to distill
to fold	to inlay	to repair	of waves
to store	to impress	to discard	of electromagnetic
tobrand	to fire	to pair	of inertia
to phorten	to flood	to distribute	of ionization
to turst	to smear	to surject	of poldrination
to dapple	to rotate	to complement	of polarization
to crimple	to swirl	to enclose	of simultaneite
to shave	to support	to surround	of simultaneity
to tear	to nook	to encurcle	of reflection
to chip	to suspend	to hide	of edulebrium
to split	to spread	to cover	of Symmetry
to cut	to hang	to was	of fliction &
to sevar	to collect	to dia	to stretch
to drop	of tension	to til	to bounce
	of gravety	to bind	to erase
to remove	A entrous	to weave	to spray
to simplify	of entropy	to som	to systematize
to differ	I marie	to match	u recer
to disarrange	of grouping	to laminate	to force
to open	of Grouping layering	to bond	of mapping
to mix	to Jetting	to hinge	of locations
to Splash	no grasp	to mark	of context
to knot	to tighten	togrand	
to spill	to bundle	to delute	of time
to droop	to heap		to continue
to flow	to gather	to light	
0			

Figure 8. Serra, R. (1967-1968). Verb List. From Work Ethic, (p. 74), by Molesworth, H. (2003), University Park, PA: The Pennsylvania State University Press.

On reflection, this investigation tended to make the material conform to the commands of the body, which in turn suggests knowledge gained through previous experience. It also overlooked the experiencing and thinking through the making. However, new knowledge was gained through bodily engagement and through the active investigation of pulling, grasping and absorbing sensations through the material. The knowledge gained was an understanding of the fibre and its properties to hold shape and retain a memory.



Figure 9. Kingi, M. (2016). Silk and Beeswax. Material Explorations, Process, and Engagement with the Body of the Maker. Hand dyed and handmade Mulberry silk paper. Beeswax. Machine stitched.

Further material explorations were conducted with Tussah silk that I hand spun to determine, for example, durability and flexibility of the fibre (Fig. 10). Referencing Serra's 'Verb List', I proceeded to cut, twist, hook, suspend, crumple, drop, knot, bounce, disarrange, wind and tighten, and burn and mark. On reflection, through experience came an understanding of fibre properties when subjected to further forms of manipulation with the hand.

I knew on a tacit level of the potential capability of the fibre, however these material explorations confirmed that knowledge of material manipulation is gained in textile practices by lived experience and thinking through the working hand. Serra's 'Verb List' was a fundamental tool to experience the materials, given the nature of the "doing" words, and knowledge builds through doing. Engaging the hand and absorbing material sensation gave awareness of the material through the skin (refer Chapter One, Working Hand, p. 21).



Figure 10. Kingi, M. (2016). Tussah Silk Yarn. Material Explorations, Process, and Engagement with the Body of the Maker. Hand dyed and handspun Tussah silk.



Figure 11. Kingi, M. (2016). *Traces of the Body in the Making*. Material Explorations, Process, and Engagement with the Body of the Maker. Hand dyed and handmade Mulberry Silk paper. Beeswax. Machine stitched.

While engaging in material explorations with the working hand, I also investigated the traces of the body's existence in the making that were left on the handmade silk paper (Fig. 11). As discussed in Chapter One (Working Hand, p. 21), the connecting element between tools and materials is the body.

A further exploration to transfer traces of bodily existence into a visible form began by placing graphite paper onto silk paper and placing these on to the



Figure 12. Kingi, M. (2016). *Traces of the Body in the Making*. Material Explorations, Process, and Engagement with the Body of the Maker. Silk and Graphite Paper. Corriedale Wool. Burnt Tussah Silk powder.

foot pedals of the spinning wheel (Fig. 12). While pedalling, the pressure of the foot leaves a trace of the movement of the body on paper (Fig. 12). At the same time, wool was spun in the making. Tussah silk was burnt and the ashes were pressed into a power form. By pressing the hand into the dry powder and then on to the fibre while spinning, a visual record of the working hand was left embedded (Fig. 13). Other textile artists, such as Susan Lasch Krevitt also place emphasis on process-driven work by exploring shape and form through



Figure 13. Kingi, M. (2016). *Traces of the Body in the Making.* Material Explorations, Process, and Engagement with the Body of the Maker. Handspun Corriedale Wool. Burnt Tussah Silk powder.

repetition and manipulation, and she suggests a making that "evokes human existence. A record of hands at work..." (Natale, 2015, p. 31) (Fig. 14).

Embedding a visible trace of touch onto the made revealed the importance of a human existence in the process of spinning. This process connects body to tools, body to material and to the made in the space of making. A visual record of the working body exists in the foot imprint on the paper and smudges on the yarn from the hand. This investigation revealed visual traces of the working



Figure 14. Red Fold. From Susan Lasch Krevitt. The Rhythm of the Hand by Natale, N., (2015/2016), Surface Design Journal, Volume 39, pp. 26-31.

Material exploration is a part of Lasch Krevitt's process in her works. Natale (2015) discusses the use of added media to provide "permanence, strength, muscle." (p. 28).

hand applying pressure and moving over fibre surface to transform fibre to yarn. During these material and process-driven explorations, the focus of the body in the making was revealed, Therefore, further explorations were also needed into experiencing the space of making.

I then examined experiences of elements from the space of making such as body movement, repetition, and gesture through the method of corespinning (Fig. 16). While artist Leah Decter (2006) uses felted fibre to imply the human body (Fig. 15) she discusses the importance of repetition in her making, stating "my process of making begins with experimentation and involves a great deal of repetition. Repetition in the process of making is often mirrored as a tool of expression in the resulting work" (p. 3). In corespinning, continued rhythmic repetition of body gestures were identified; pedalling of the feet (refer Fig. 12), lifting of the arms (refer Video. 6), and gripping and loosening with the fingers. In addition, the ordered gestures with the fingers over the surface of the fibre engaged the skin receptors that determined pressure to apply or decrease between the material and the hand (refer Video. 3). Experiencing physical sensations also arose from the body's repeated relationships with the corespun wheel from absorbing the physical structure of the wheel when applying pressure with the body; wood on skin of the foot; cramping calf muscles from pedalling and moving joints (refer Chapter One, Haptics, p. 20, Working Hand, p. 21 and Body Matrix, p. 22)

Over time these repeated gestures create a substantial amount of yarn (Fig. 16). The labour and duration in the making produced a heavy and dense corespun yarn which generated additional materialities and experiences of mass and volume.



Figure 15. Raze. From Here....is the place where you are. From *Textile Society of America Symposium Proceedings*, by Decter, L., (2006). Retrieved from http://digitalcommons.unl.edu/tsaconf/293/.

Decter's series titled "Raze" (2006) engaged the use of felted fibre to connect human existence and haptic. Dector discusses felted fibre as "a remarkably haptic and evocative material, felt also conjures human presence, connecting to the body through the sensuality of its texture and the process of its construction." (p. 4).



Figure 16. Kingi, M. (2016). Corespun Yarn. Material Explorations, Process, and Engagement with the Body of the Maker. Hand dyed, handspun, and corespun Corriedale, Merino and Alpaca Wool, and Tussah and Mulberry Silk. Sections of the corespun are overspun, underspun and spun evenly (refer Glossary p. 70).

While weight, mass and volume were a manifestation of the elements of repetition, gesture, body movement, bodily sensation and the physical body at work in the space of making, the resulting dense corespun yarn of wool and silk does not reflect the labour and duration involved. For example, the pictured yarn (Fig. 17) was generated from its loose natural fibre state to dyed and spun yarn over approximately five days, and the weight of the yarn is only 2.5kgs. I have observed textile artist Angela Wright's installation of wool fibre (Fig. 18) where the elements of labour and duration producing weight, mass, and volume



Figure 17. Kingi, M. (2016). Corespun Yarn. Material Explorations, Process, and Engagement with the Body of the Maker. Hand dyed, handspun, and corespun Corriedale, Merino and Alpaca Wool, and Tussah and Mulberry Silk.

This sample of corespun yarn weighed in at 2.5kgs

is perceptible. With Wright's installation, the relationship between the spun material and the body's existence takes place in terms of the practical, where wool provides warmth to the body, and the abstract, touch evokes memory.

To investigate the relationship between the body, the spun material and these ideas I focused on the made object. I again referred to Serra's 'Verb List' as this informed the performance of the maker's body at work. The body's action of draping, twisting, combing out, knotting and heaping were applied to the



Figure 18. Wool Installation (ver. 4). From Angela Wright - Artist, by Wright, A., (2012), Retrieved from http://www.angelawright.co.uk/index.html#.



Figure 19. Kingi, M. (2016). Corespun Yarn. Material Explorations, Process, and Engagement with the Body of the Maker. Hand dyed, handspun, and corespun Corriedale, Merino and Alpaca Wool, and Tussah and Mulberry Silk.

corespun yarn in my studio space (Fig. 19). This was accompanied with handspun yarn to better reflect the idea of the labour and duration in the process of making. This consisted of hand dyeing, combing the fibre, corespinning and spinning the loose fibre to yarn, and finally setting the yarn. The total making time from loose natural fibre to draping the finished yarn took approximately seven days.

I also handspun additional yarn for the sole purpose of testing in the AUT Test Space (Fig. 20). Despite engaging bodily with the material in the space again, the finished installations did not reflect the labourious nature of making this handspun yarn; in this case the spinning took approximately one month. However, the length of the yarn used in this investigation did modify the actions of the body working in the installation space. For example, stretching the arms while shifting the weight brought about sensations of cramping in the shoulders and wrists. Energy levels were altered with blurred vision and yawning. In addition, twisting, knotting, heaping and separating the material allowed for its materiality to be more identifiable.



Figure 20. Kingi, M. (2016). Handspun and Corespun Yarn. Material Explorations, Process, and Engagement with the Body of the Maker. Handspun and corespun Corriedale, Merino and Alpaca Wool.

I further considered the physicality of the moving body while exploring ritual, gesture and repetition in installing cross-threaded yarn in a 3-D space. With cross threading yarn, the body is actively moving and is within the physical space between the maker and the made. Artists Toluwalase Rufai and Khai Grubbs' installation of yarn (Fig. 21) explored rhythm and movement of the body, enabling the body to move within the space and experience the installation.

The experience of repetition for the working hand in looping, stretching and threading was ritualistic in terms of the need for structured order and gestures. The repetition also existed visually within the ordered structure of cross threading (Fig. 22) and (Fig. 23). Experiencing the physicality while making brought about muscular and joint sensations such as cramped shoulders, tight calf muscles and slowed breath. As with the previous installation space exploration, this modified the actions of the working body in terms of stretching and cramping.

Initially, this investigation was focused on the body and the made. However, on reflection, notions of labour and duration again emerged from the space of making that are not reflected in the lightness and delicacy of final installations.



Figure 21. The Synth Series. From Design Milk, by Rufai, T and Grubbs, K, (2015), Retrieved from http://design-milk.com/yarn-installation-allows-experience-music-physically/.



Figure 22. Kingi, M. (2016). Crossthreading. Material Explorations, Process, and Engagement with the Body of the Maker. Handspun Corriedale. Merino and Alpaca Wool.



Figure 23. Kingi, M. (2016). Crossthreading. Material Explorations, Process, and Engagement with the Body of the Maker. Synthetic pre-spun yarn.

Exploring the Space between the Body and the Made

The next phase of the project was pivotal for the creative practice as the research question became clearer during the immersion phase within the practical engagement of making.

The conversation between the maker and the made revealed itself to be more complex than just a conversation with body, material and tools. Other elements included; repetition, rhythm, ritual, gesture, and movement of the body, body positioning, senses working simultaneously, body sensations, shifting energy levels, spatial and temporal concerns, and labour and duration. A relationship occurs between the body and materials, tools and the body, and the material and the tools which revealed the importance of the body in the conversation.

What I discovered in these investigations to date is that everything within the space of making moves and shifts, nothing remains static; not the senses, the body, nor the knowledge gained. Every moment there is an ongoing transformation of every element; the senses adjusting with the body, the body tiring and a different understanding of what is happening in the space of making. This section discusses what occurred during the making process of spinning with the body, the tools, and the material.

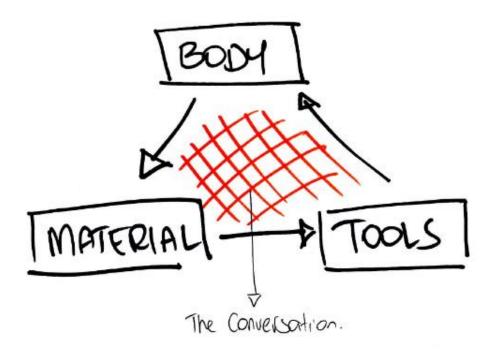


Figure 24. Kingi, M. (2016). Basic Sketch Outline. Exploring the Space between the Body and the Made. Marker on paper.

Repetition, Rhythm, Ritual, Gesture, and Movement of the Working Body

The ritualistic gestures of the hand and body lead in the making space of this project. To understand this, I have made a series of videos mimicking the action of the moving body in the making. Winding loose fibre comprises the repeated motion of the arms swinging in a circular motion (Video. 1). The constant repetition of action becomes laboured over time — the arms tire and the shoulders cramp.

Engaging haptic senses of feeling tension through the fingers, hands and arms (Fig. 25) results in pulling or loosening the fibre while simultaneously widening or closing the fingers (Video. 2). The fingers loosen and tighten when spinning on to the bobbin to create the yarn. (Fig. 26) and (Video. 3). Both fingers and hands incorporate a rhythmic repetition of opening and closing, and tightening and loosening

By engaging the body in the making, by just doing, knowledge of how to make is embedded into the body and can also evoke memory. As discussed in Chapter Two (Repetition and Gesture, p. 33) repetition of movement means movement becomes learned by just doing. Dormer (1994) discusses learning by doing stating "the rules of a craft are only learned by actually doing. You cannot understand it or know it until you can do it" (p. 42).



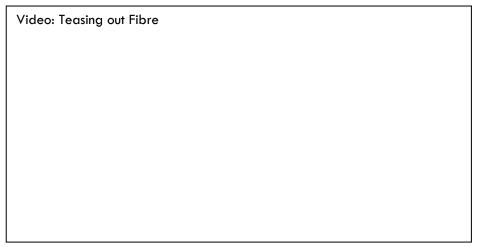
Video 1. Kingi, M. (2016). Body Movement with Arms. Repetition, Rhythm, Ritual, Gesture and Movement of the Working Body. 00.36 Seconds. Click on Image to View.





Figure 25. Kingi, M. (2016). Gesture of the Working Hand in Teasing. Repetition, Rhythm, Ritual, Gesture and Movement of the Working Body.

Preparing fibre to spin is called teasing out fibre. This separates the fibre strands in preparation for spinning the fibre to yarn



Video 2. Kingi, M. (2016). Gesture of the Working Hand in Teasing. Repetition, Rhythm, Ritual, Gesture and Movement of the Working Body. 00.48 Seconds. Click on Image to View.

Video: Clasping Fibre Movement with spinning (hands)





Figure 26. Kingi, M. (2016). Gesture of the Working Hand in Clasping. Repetition, Rhythm, Ritual, Gesture and Movement of the Working Body.

Clasping the fibre while spinning controls the amount of fibre being fed through onto the bobbin, and controls tension of the fibre.

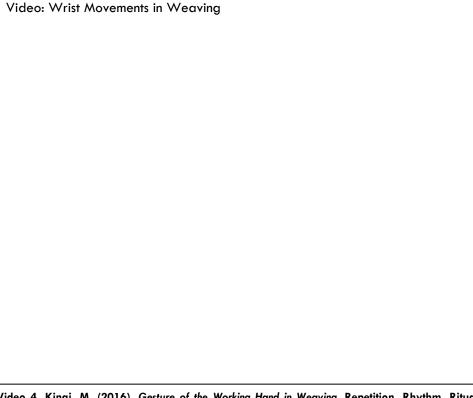
Video 3. Kingi, M. (2016). Gesture of the Working Hand in Clasping. Repetition, Rhythm, Ritual, Gesture and Movement of the Working Body. 00.39 Seconds. Click on Image to View.

The repeated ritualistic gesture of the hand can move in other ways that manifest in woven pieces. The hand holding the shuttle engages in a rhythm of moving the hand across the body to connect to the opposite hand and vice versa (Video. 4) and (Video. 5). Within this ritualistic and rhythmic space, the body opens and closes with the fanned out and closed in hand (Fig. 27), and the arms moving across the body. This evokes both restriction and unfettering of the body. The manifestation of such is reflected in woven pieces that are structured and tensioned, and then loose and draped (Fig 28).



Figure 27. Kingi, M. (2016). Gesture of the Working Hand in Weaving. Repetition, Rhythm, Ritual, Gesture and Movement of the Working Body.

When weaving the weft thread into the weave, the yarn is wrapped onto the shuttle as the tool to feed through the weft yarn. This is then threaded through constructing row by row.



Video 4. Kingi, M. (2016). Gesture of the Working Hand in Weaving. Repetition, Rhythm, Ritual, Gesture and Movement of the Working Body. 00.50 Seconds. Click on Image to View.

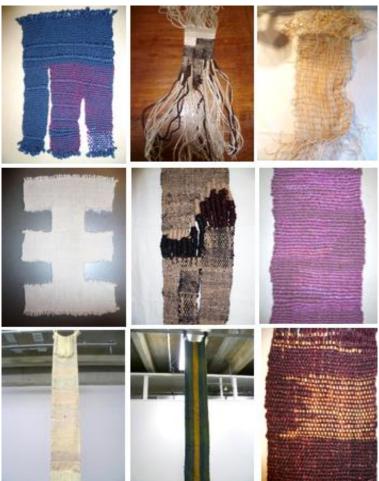


Figure 28. Kingi, M. (2016). Woven Work. Repetition, Rhythm, Ritual, Gesture and Movement of the Working Body.

The woven pieces were completed as part of a further exploration into repetition and movement. The final made was because of the actions performed by the moving body in rhythm and repetition, and the working hand in material exploration (refer pp. 38-40)

Video: Weaving

Video 5. Kingi, M. (2016). Gesture of the Working Body in Weaving. Repetition, Rhythm, Ritual, Gesture and Movement of the Working Body. 1 Minute 30 Seconds. Click on Image to View.

With spinning, repetitive and rhythmic gestures unlocks the entire body for movement and the body is positioned to physically move: the feet pedalling, the core body twisting from side to side and the elbows pulling back behind the body (Table. 3, p. 57). The movement in repetition (Video. 6) evokes a sense of strength and purpose and, at the same time, fatigue in the physicality. It also evokes something of an enigmatic language when communicated through gesture only. Subsequently, we can understand how the yarn is so delicate when twisted and plied (Fig. 29).



Figure 29. Kingi, M. (2016). The Positioned Body in Spinning. Repetition, Rhythm, Ritual, Gesture and Movement of the Working Body. Handspun and Corespun Corriedale, Merino and Alpaca Wool. Mulberry and Tussah Silk.

Video: Spinning – Feet, Fingers, Core Body, Skein

Video 6. Kingi, M. (2016). The Positioned Body in Spinning. Repetition, Rhythm, Ritual, Gesture and Movement of the Working Body. 2 Minutes 32 Seconds. Click on Image to View.

Corespinning is similar yet different to spinning. The moving body is positioned physically closer to the wheel with minimal physical action, in that the feet are closer together on the foot pedal, the arms stay closer to the core body and the core body does not twist (Video. 7). The forward action of the body suggests compression, or intensity existing in the space of making, and evokes an almost reticent or restrained gesture. However, the subsequent made is a thick, dense yarn where the twist is more noticeable (Fig. 30).



Figure 30. Kingi, M. (2016). The Positioned Body in Corespinning. Repetition, Rhythm, Ritual, Gesture and Movement of the Working Body. Hand dyed and Corespun Corriedale and Merino Wool. Mulberry and Tussah Silk.

Video: Hands, Feet and Body in Corespinning

Video 7. Kingi, M. (2016). The Positioned Body in Corespinning. Repetition, Rhythm, Ritual, Gesture and Movement of the Working Body. 00.54 Seconds. Click on Image to View.

In each method of making, the working body revealed itself to operate simultaneously using levels of ritual, repetition and rhythm which inform each other (Table. 3). Experiencing this space revealed the resulting made was subject to the positioning of the body, i.e. an open working body makes delicate and weightless yarn, while a closed working body makes a dense and heavy yarn. Actively engaging in these acts builds knowledge of how to move and position the body while responding to material exploration.

The Moving Body in Spinning and Corespinning

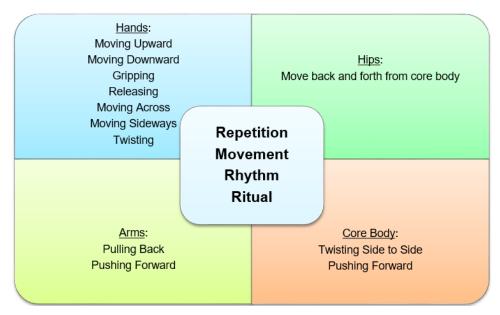


Table 3. Kingi, M. (2016). The Perceptual Body in Spinning and Corespinning. Repetition, Rhythm, Ritual, Gesture and Movement of the Working Body.

The entire body is physically engaged within the space of making. The repetition of movement and gesture develops a pattern of movement that embeds the practice of spinning into the perceptual body. This is not embedded through a cephalocentric manner, rather the practice of doing through repetition leads to skill, and then to knowledge and a knowing that becomes tacit. Through experience, the tacit body is revealed. The knowledge is only fixed within the action itself in the performance of making; the core body twisting while stretching particular fibres, or the feet pedalling simultaneously. These actions are performed in response to data received from sensory receptors, fibre surface and the tools of making at a particular point in time.

Body Sensations in the Making

The body experiences sensations through the skin absorbing the materiality of the fibres as mentioned above, and the working tools in operation. These consist of:

Wooden Foot Pedals: Cool/Rigid

- Wooden Bobbin: Cool

Metal Whorl Hook: Cool, SharpWooden Spinner's Chair: Rigid

The physical actions of the working body while spinning render sensations from muscle, bone and breath (Table. 4). The body experiences muscular cramping from pressure on the lower body, bone joints clicking and breath slowing. During the making, these sensations increased in depth over time. This revealed a slowing of the body's performance and an awareness and understanding of the body's muscle, bone and breath. Consequently, the body's energy levels are constantly fluctuating in the space of every minute during the making (Table. 5). For example, the calf muscles cramp from the constant pedalling of the wheel, and this modifies the tension and speed of the fibre fed on to the bobbin, resulting in unbalanced yarn. The spine stiffens and cramps which increases the rest intervals; this prolongs the making. Both

during and post making, the body responds to the fluctuating energy levels. The

knowledge of this and the fatigue are utilised in the plans for making.

Sensations of the Perceptual Body

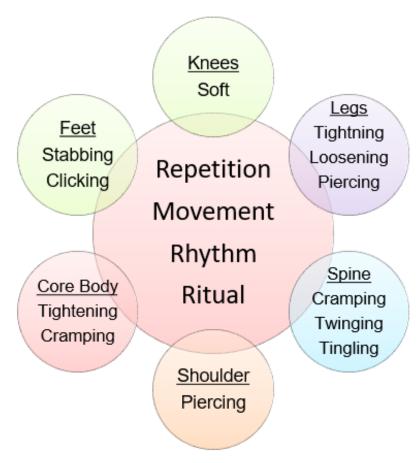


Table 4. Kingi, M. (2016). Sensations of the Perceptual Body. Body Sensations in the Making.

Muscle, Breath and Energy of the Perceptual Body

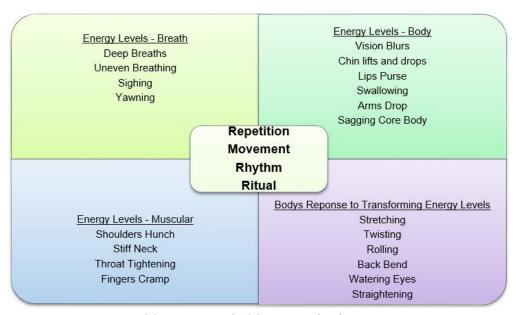


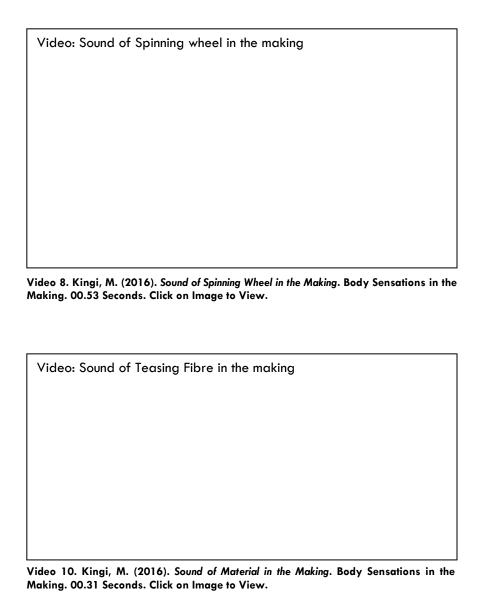
Table 5. Kingi, M. (2016). Shifting Energy Levels of the Perceptual Body. Body Sensations in the Making.

As outlined in Chapter One, lived experience and gaining knowledge involves a broader sense of the tactile, kinaesthetic and visual working simultaneously, in other words the senses working simultaneously. Therefore, the perceptual body engages the auditory sense during the making. Perceiving sound from the working tools and materials can indicate labour and duration in the making. While spinning transforms the body through spatio-temporal experiences through muscle, bone and breath (Table. 6, p. 62), the tools transform through gradual wear and tear, and the material transforms from loose fibre to yarn. Sound is temporal in that it moves through time. The sound of the working spinning wheel suggests the nature of the performance of making, and it confirms the relationship between the body and the tools. Sounds occur during the action of my working body such as the clicking of ankle bones while pedalling, or wrist bones clicking when twisting fibre. Sounds occur with the movement of the spinning wheel; the airflow from the wheel spinning, or thumping of the foot pedals (Video. 8) and (Video. 9). Sounds also occur with the handling of fibre (Video. 10).

The sound of the working spinning and corespinning wheel have been recorded to understand their nature. This is similar to Robert Morris's recording of the sound of carpentry tools at work in making 'Box with the Sound of its Own Making' (Fig. 31). Bryan-Wilson (2003) suggest that this piece "offers a record of the time and effort that went into its making" (p. 113). Molesworth (2003) suggests the labour is the performance itself, and the value lies in the performance, not the artefact (p. 107).



Figure 31. Morris, R. (1961). Box with the Sound of its Own Making. From Work Ethic, (p.113), by Molesworth, H., (2003). University Park, PA: The Pennsylvania State University Press.



Video: Sound of Corespinning in the Making

Video 9. Kingi, M. (2016). Sound of Corespinning Wheel in the Making. Body Sensations in the Making. 00.50 Seconds. Click on Image to View.

Sound of the Tools and the Perceptual Body in the Making

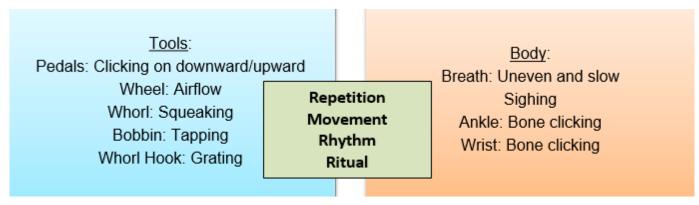


Table 6. Kingi, M. (2016). Labour and Duration of the Perceptual Body. Body Sensations in the Making.

Chapter Four

Thesis Presentation

AUT Test Space

AUT Test Space, Wellesley Street, City Campus

Within an heuristic approach of positioning my body as that of the maker, I have examined how the body experiences the space between the maker and the made. This has revealed three central elements that exist within the conversation between the body, tools and material, and the experience within the space of making. These are the performance of making the handspun textiles, the performance of the moving body and the performance of the perceptual body. Consequently, the final made for the exhibition is handspun yarn, video of the moving body and sound of the tools in the making.

The final outcome culminated in the presentation of work in the AUT Testspace, City Campus consisting of the three separate elements working together; audio, visual and the tactile. It was presented in a semi-lit space with three white walls and one concrete wall. Two walls were utilised for the visual element, the floor was utilised for both audio and visual, and an overhead frame situated in the middle of the space was used to drape the textiles. Upon entering the space, the viewer was surrounded by both the visual of the video showing the body in movement in the making and the sound of the tools in the making (Fig. 32). A textile sculpture consisting of a mass of handspun yarn was draped in the middle of the room and softly lit by four overhead spotlights (Fig. 33 and 34). The considered placement of each of these elements allowed the viewer to move freely around the room, and to engage in and experience the work both separately and collectively.

The speakers for the audio were placed on the floor in a corner of the room to enable the sound to travel further and encompass the space. The two sound files consisted of both the corespinning wheel and the spinning wheel in the making of spinning fibre. The corespinning audio was slower in rhythm but heavier and loud in sound. The single foot pedalling 'thumping' sound was dominant, and the chafing sound of the synthetic drive band driving the wooden wheel, and the fibre being fed onto the bobbin, were less dominant but perceived (Audio. 1). The spinning wheel audio was the opposite of the corespinning, in that the audio was faster in rhythm, and delicate in sound. The single wheel airflow and wheel spinning was the dominant sound, and the double pedal gentle 'clicking' was less overriding but also perceived (Audio. 2).

Two monitors were mounted on two walls presenting the core body movement at eye level. The third monitor was placed on the floor presenting the foot movements (Fig. 35). The videos exhibited the working body miming the action of making. The 'hands' video mimes two different elements of separating fibre on two different spinning wheels. The first performance was the working hand separating fibre when corespinning. The movement is slow, rigid and demonstrates the tension in separating the fibre strands. The second performance is of the working hand twisting fibre when spinning. The movement is fast and fluid in motion, and demonstrates a more graceful flow in twisting and pulling the fibre strands (Video. 11). The 'core body' video demonstrate two different methods of making; being spinning and weaving. The spinning element demonstrates the core body twisting to the side in unison with the arms lifting and pulling behind the body when twisting fibre strands before

feeding the fibre onto the bobbin. The weaving element demonstrates the arms in a pushing forward away from the body, and pulling back to the body while in the act of operating a reed and shuttle on a table loom (Video. 12). The 'feet' video exhibits both elements of rhythmic movement when pedalling two types of spinning wheel. The first is pedalling on a corespin wheel. The feet are touching side by side and moving together. The movement is slow, heavy and tense, however the second motion of pedalling on a spinning wheel double pedal demonstrates an expeditious co-ordination and harmonious flow between the feet pedalling in opposition to each other (Video. 13).

The intent of the exhibition was to provide an experiential space. These three elements work independently and simultaneously within the space of making, and give visibility to the invisible space of making. For example, the yarn can evoke memory, labour and a space to engage with the materiality. The balanced elements of labour, repetition, gesture and ritual with tools and material manifest into weight, mass and volume of yarn. These elements also lie within the textiles which display elements of repetition and rhythm in the structure of the yarn. The video of the physicality of the moving body evokes an intensity in concentration, strength, purpose and stamina. The gesture of mimicking the body in making is suggestive; relying on memory and embedded knowledge through repetition, yet reaching out with the hand, or opening or closing the body could allude to other meaning in conventional body language. Perceiving sound is spatial in terms of unfolding in space and time. Perceiving sound can suggest a physicality, and evoke a meditative quality within the rhythmic structure of the making.

These three elements working together encompass the performance of making within the space between maker and made, with emphasis being on the process rather than the outcome. For possible future exhibits of this work, it was recommended that information be provided regarding properties of materials and the type of spinning wheels at work. This potentially would provide a clearer understanding of the research undertaken.



Figure 32. Kingi, M. (2016). Exhibit Space. Exhibition of Tête-à-Tête. A Conversation Between the Maker and the Made.

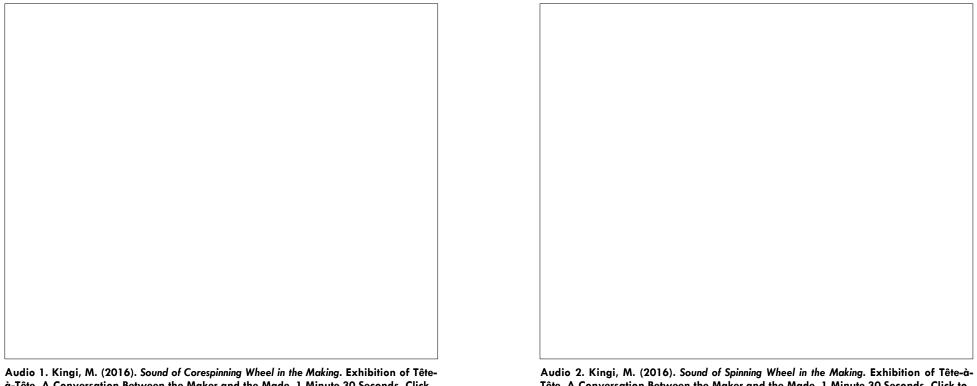


Figure 33. Kingi, M. (2016). Textiles. Exhibition of Tête-à-Tête. A Conversation Between the Maker and the Made.





Figure 34. Kingi, M. (2016). Textiles. Exhibition of Tête-à-Tête. A Conversation Between the Maker and the Made.



à-Tête. A Conversation Between the Maker and the Made. 1 Minute 30 Seconds. Click to Activate.

Tête. A Conversation Between the Maker and the Made. 1 Minute 30 Seconds. Click to Activate.



Figure 35. Kingi, M. (2016). Video in the Space. Exhibition of Tête-à-Tête. A Conversation Between the Maker and the Made.

eo 11. Kingi, M. (201 Maker and the Made	6). Hands. Exhibitio . 00.35 Seconds. Cli	n of Tête-à-Tête. ck on Image to V	A Conversation	Between
Video: Feet				

the Maker and the Made. 00.20 Seconds. Click on Image to View.

Video: Hands

Video: Core Body

Video 12. Kingi, M. (2016). Core Body. Exhibition of Tête-à-Tête. A Conversation Between the Maker and the Made. 00.50 Seconds. Click on Image to View.

Conclusion

The primary aim of this practice-led project was to investigate the invisible space between the maker and the made in the performance of making. This project also argued the importance of a phenomenological approach to the role of the body in building knowledge. A heuristic approach was used to position myself, the researcher, as body of the maker, to explore this space from a subjective point of view.

Within the creative practice, elements of repetition, ritual and gesture were explored with textiles as the made. Methods of spinning, investigating materiality, body movement, spatio-temporal and sound of tools in the making were investigated. Within the experiential space of making, the body, tools, material, senses and knowledge are constantly shifting and adjusting at every minute. This results in a diverse space of making where all elements are working simultaneously and individually.

Simply put: it is the knowing through doing. This project concludes that through the experiential space of making; of the senses, embodied action, sensorimotor engagement and spatial awareness, the perceptive body is a fundamental tool in the acquisition of knowledge.

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Glossary

Bobbin:

A reel or cylinder upon which the strands of spun fibre are wound on to during spinning. Bobbins for spinning wheels are generally made of wood.

Corespinning:

The method of corespinning consists of staple fibre twisted onto a central core yarn. Usually the core yarn is a synthetic fibre that offers stability and gives strength to the finished yarn.

Loom:

A loom is a device used to weave cloth. The purpose of the loom is to hold the warp threads under tension to assist the threading of the weft yarn.

Overspun Yarn:

Overspun yarn is achieved by quickening the pedaling movement on the wheel and pinching and pressing with the hand. This twists the fibre strands tight and increases tension.

Plying:

The method of plying is a process consisting of two separately twisted spun yarn strands intertwined to form a balanced yarn. The strands are plied together and twisted in the opposite direction to the spun strands.

Setting Process:

The setting process of setting yarn is a simple method of soaking the yarn in a mix of warm water and soap detergent. This sets the ply together creating the balanced yarn.

Shuttle:

This tool is designed for the thread/yarn/fibre to wrap around to enable the yarn to be fed through the warp while weaving on a loom.

Spinning:

The method of spinning consists of staple fibre (of most materials) twisted in a clockwise direction. This produces strands of yarn spun onto a bobbin.

Teasing Out Fibre:

Teasing out the fibre is done mostly before spinning. The fibres are mostly compacted together, and separating the fibres before spinning allows for the fibres to air and to thin out the fibres.

Underspun Yarn:

Underspinning yarn is achieved by the opposite motion of slowing the pedaling movement on the wheel and loosening the pinching and pressing with the hand. This loosens the fibre strands and decreases tension.

Warp:

The warp thread refers to the thread strung vertically on a weaving loom.

Weft:

The weft thread refers to the thread strung horizontally on a weaving loom.