THE INTIMACY OF PRESENCE

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ABSTRACT

This thesis discusses the importance of the body in perceptive cognition and human-to-human co-presence and attempts to build an argument, using research in the fields of philosophy, social science, neuroscience, architectural theory, and cultural anthropology. As a researcher, I developed a qualitative field study and embedded myself as a participant with eighteen volunteers in order to obtain first-hand experience and to try and locate for myself in a very visceral way, what constitutes the communicative event between individuals. Combining and comparing my own experience with responses from the participant group, I was able to formulate significant conclusions regarding embodied cognition and use these in the production of a body of work. These, together with my practice-based research and history as a figurative artist, have resulted in an interdisciplinary final body of artwork, titled ***The Intimacy of Presence.***

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INTRODUCTION: THE INTIMACY OF PRESENCE

Before my graduate studies at OCADU, my art practice primarily focused on figurative painting. To a large extent, my work has addressed existential questions, often focusing on issues of identity and gender politics. In centering my work on figuration, I have used the body (at times also representing myself) not only as a means of insistence on visibility and redefinition of the female body in art, but also as an exploration of psychological interiority.[1] Artists such as Frida Kahlo, Betty Goodwin, Marlene Dumas, Kiki Smith, Odd Nurdrum, and Joel-Peter Witkin have been of interest and influence in my work for their allegorical use of (self) portraiture and the body. The painted figures in my work are usually presented iconically, avoiding specific cultural signifiers and sometimes appear to float in an unspecified space, leading the viewer back to the body, to the metaphor, or perhaps to the directed gaze which solicits interaction. This earlier work in painting has often maintained associations to feminist ideas and politics around the body, and this thesis could have been investigated from a feminist standpoint of bodily knowing. Rather than taking a highly politicized route, I have chosen to investigate embodied cognition in co-presence from an interdisciplinary and personally motivated position.

1 *Psychological interiority* in this instance refers to using images of the body and/or the self metaphorically to reflect mental/emotional states of mind. In doing so, the subject's portrayal does not always correspond to physical reality and/or employs signs and symbols to augment the narrative.

Building on my interest in figuration and existential inquiry, my desire has been to engage an interdisciplinary methodology that will allow me to gain greater understanding of the body as an instrument of cognition and respond to this understanding in my art practice. More specifically, my research has been directed towards illuminating the subtleties and invisible qualities of embodied cognition as well as looking for new forms of representation that bring these qualities into the materiality of artistic practice. By integrating theory, a qualitative field-based research and studio practice supported by an exhibition, this interdisciplinary thesis project exemplifies my desire to re-examine the body as a rich and complex *means* of perception and social interaction.

Embodied cognition entails the processes by which the body interacts with the world (Internet Encyclopedia of Psychology, sec. 2) and informs the process of meaning making. Embodied cognition incorporates the view that abstract thinking and sensory (i.e. body-based) experiences do not occur as divided activities in the brain, but rather, are interconnected to generate a holistic perception of the world. In my thesis, the concept of embodied cognition is explored through the lens of human-to-human interaction in co-presence. According to Zhao, co-presence signifies "… a form of human co-location in which individuals become 'accessible, available, and subject to one another'" (1). Co-presence can refer to a continuum of communicative experiences ranging from co-presence in

tele-/cyber-communicative worlds to face-to-face corporeal, *real-time* co-presence.

Twenty years ago, the use of computer and digital technology was not as prevalent as it is today. With ongoing innovations, we have been provided in leaps and bounds with new and diverse means of (mediated) communication. While they have been highly significant in increasing global communication and building networked communities, one could argue that the exchange of sensorial information at nonverbal and embodied levels has to some degree been forfeited. Does this, in turn, leave us deprived and unpracticed in our sensorial/physical readings of one another?

The fact is, bodily knowing is an essential and irreplaceable component of cognition. As it will be demonstrated throughout this paper, embodied cognition rests within the realm of the experiential and the pre-lingual, where it can readily resist interpretation and naming. Defined as a felt sense, embodied cognition is something that rests in the sphere of fleeting tangibility. If attentively attuned to it, we can assign it value as a legitimate form of knowledge and a means to better understand how the body comprehends and experiences its environs on a visceral level.

RESEARCH OBJECTIVES

The impetus for this project stems from two main questions: Firstly, to what extent can the invisible and subtle qualities of embodied cognition be shared and realized in co-presence? And secondly, how can these perceived qualities of embodied cognition be visualized and materialized in an art form?

Formally stated, the questions are as follows:

1. How can an interdisciplinary research methodology capture the subtleties and invisible qualities of embodied cognition?

2. How can these qualities be translated into artistic practice; that is, is it possible create a material translation of an immaterial experience?

THEORETICAL FRAMEWORK

My investigation into embodied cognition has led me to read and research the work of authors and practitioners from a broad range of disciplines. The review of literature presented in this section constitutes the building blocks for the theoretical framework that may be perceived as a roundtable discussion on various concepts that shed light on the meaning and elusive nature of the qualities of embodied cognition.

To begin with, I discuss two practitioners who do not speak directly to embodied cognition *per se*, but who, in their focus on a body-centred approach in their fields, directed me back toward the body and its legitimacy as a means of cognition: Architect and Jungian psychologist, Andrew Levitt, and architect-writer, Juhani Pallasmaa. Following this I briefly summarize my research on the observable properties of communication in co-presence that include nonverbal communication, personal and social space and a reflection on what can be visibly exchanged at various distances of personal space in the work of authors Hall, Mehrabian, Waskul & Vannini and Burgoon, Buller & Woodall. The reseach of Csordas, Cacioppo & Patrick, Damasio, Howson, and Johnson is more directly situated within the realm of embodied cognition. With their combined research in the fields of architectural theory, anthropology, philosophy, social science and neuroscience, I endeavor to further substantiate the validity of bodily knowing.

"Although our bodies are always present, we do not always attend to and with them"

(Thomas Csordas 139).

Architect and Jungian psychoanalyst Andrew Levitt's book, *The Inner Studio: A Designer's Guide to the Resources of the Psyche,* was instrumental in underscoring the legitimacy of bodily knowing and in particular, how much of one's perception of the environment is *bodily* perceived.[2] The goal, says Levitt, is to "allow ourselves to register the impressions of the world in ourselves and let expressions of ourselves be represented in the world" (35). He discusses "kinesthetic knowing" as a bodily awareness and a means of sensing dissonance that is centred in "the sensations of the body" rather than the intellect (58). Levitt suggested reading the writing of architect Juhani Pallasmaa, who also places great emphasis on the entirety of the body as an instrument of perception. While Pallasmaa concentrates mainly on the experience of architecture, his overriding focus is on the senses and the sensual nature of our bodily experience of the world. He views the focus on the body's awareness and experience of its surroundings as essential

2 Levitt lives and works in Toronto. After reading his book in the autumn of 2008, I was able to contact him and meet personally several times to discuss issues around human interaction, awareness and embodied cognition, which helped me to reevaluate and re-value my mode of bodily perception.

for a deeper perceptual understanding of the world and links this bodily awareness to one's perception of architecture and the physical effects of its material components. He laments the disappearance of architecture's "physical, sensual and embodied essence" (32). Pallasmaa criticizes what he perceives as a growing reliance on occularcentrism, which has created an imbalance in our sensory systems and has led to '"detachment, isolation and exteriority." [3] He writes, "The growing experiences of alienation, detachment and solitude in the technological world today, for instance, may be related with a certain pathology of the senses" (19). Indeed, in our world saturated with images and visual information this favouring of vision seems inevitable and it may be seen as an extension of the modernist paradigm. Most notably, Pallasmaa's citation of Merleau-Ponty resonated with me. Merleau-Ponty writes "I perceive in a total way with my whole being: I grasp a unique structure of a thing, a unique way of being, which speaks to all my senses at once" (21). This became the basis of my inquiry into embodied cognition. Although people generally send and receive messages in verbal and textual forms, a large percentage[4] of what is exchanged is achieved through nonverbal communication and gesture;

3 For these ideas Pallasmaa cites the anti-ocular positions of many of the seminal French theorists such as Bergson, Bataille, Sartre, Merleau-Ponty, Lacan, Althusser, Debord, Barthes, Derrida, Irigaray, Levinas and Lyotard. p19.

4 Studies regarding how much is conveyed via nonverbal communication vary. Albert Mehrabian conducted studies with results of up to 93% of information being conveyed through face and voice.

that is, bodies may present and perceive much more than what is actually verbalized.

> **"Our bodies transmit a dizzying array of complex information about ourselves, with or without our intention"** (Reischer and Koo 300).

Anthropologist and cross-cultural researcher Edward T. Hall explores the relevance of communication through the (silent) language of behaviour and how gestures and actions often reveal far more than words. Studies regarding this can provide an analytical means of interpreting conduct in social settings. A significant aspect in the study of human interaction is the theory of proxemics, as discussed in *The Hidden Dimension,* in which Hall examines human behaviour and spatial relations from an anthropological perspec-tive[5]. In his theory of proxemics, Hall defines four zones of human personal space and interaction distance. The zones, *intimate, personal, social,* and *public*, take into account both social setting and cultural background and can vary accordingly (117).

According to Hall, *intimate space* (0 -18 inches) is the closest space

5 Hall is widely referred to in other sociology texts on the subject of non-verbal communication and in many ways did much of the groundwork in this area. He is particularly known as one of the first to study the anthropology of space, that is, how space and design affects interaction, as well as the disjunctures in cross-cultural communication.

surrounding a person and usually reserved for one's closest friends and those with whom one is intimate. *Personal and social spaces* (ranging from 1.5 to 4 ft) are the spaces in which people feel comfortable conducting routine social interactions with acquaintances as well as strangers. *Public space,* which includes both *social-consultive* distance (4 to 10 ft) as well as a more *formal public distance* (10 ft and further), is the area of space beyond which people will perceive interactions as impersonal and relatively anonymous[6] (Hall 117-127). These zones were significant for me in terms of thinking about the distance at which we are able to bodily (physically) read people. Hall describes heightened sensory input (heat, smell, sound for example) at the intimate distance and that when this close, the "presence" of the other person and involvement with [their] body is "unmistakable" and potentially overwhelming (116). This information was crucial when establishing the distance between participants in the booth study.

Albert Mehrabian, one of the foremost researchers of nonverbal communication, writes about the role that implicit (nonverbal) behaviour has on processes of communication and suggests that "speech-oriented

6 More recent studies of nonverbal communication in the area of haptics and proxemics have been undertaken by sociologists J. K. Burgoon, D. Buller, & W.G Woodall (1989) and propose that research done by Heston & Garner, (1972) as well as Altman & Vinsel (1977) would suggest the following updated distance categories: (a) a very narrow intimate zone of 0 to 12 inches that is reserved for the most private and intimate encounters; (b) a very large personal and social zone of 1 to 7 feet that is the "normal contact" zone; (c) a public zone of 7 feet and beyond that is used for more formal encounters (100).

culture" is beginning to pay more attention to the contribution of the embodied message; that is, the methods and emotions informing one's delivery of a message is as important as its content (intro: iii). While much of what bodies transmit may be categorized as physical or gestural and may support or contradict what is being said, it cannot really be categorized as the *felt sense* of the body in co-presence. Although body language, gestures, and voice intonation may be interpreted to ascertain the sense of a message, I hope to show through the writers I will subsequently discuss, that there are yet more layers of bodily knowing that can be uncovered.

Dennis Waskul and Phillip Vannini, writing from a symbolic interactionist point of view, identify the various 'bodies in symbolic interaction'. They discuss Simmel, Synnott and Cooley's ideas about reflexivity and the gaze, which, they remind us, are essential in interaction. They write, "Simmel understood that the union of a glance is no mere action, but a nuanced form of *inter*action. Or stated more precisely, 'the eye *creates* the I'" (Waskul and Vannini 4). The body and experiences of embodiment are layered, nuanced, complex and multifaceted – at the level of human subjective experience, interaction, and social organization. From a general interactionist perspective, the body is always more than a tangible, physical, corporeal object – infinitely more than "a mere skeleton wrapped in muscles and stuffed with organs"(Waskul and Vannini 6).

Burgoon, Buller and Woodall, researchers in nonverbal communication, identify the concept of *immediacy*, a larger system of

behaviours, of which haptics and proxemics are a part. They state that *immediacy* involves a combination of nonverbal and verbal behaviors working together as a system to increase or decrease the degree of physical, temporal, and psychological closeness between individuals (100). Immediacy is also defined as the "lack of an intervening or mediating agency" and/or "directness" (thefreedictionary.com*)*. This would make immediacy obligatory for perceiving comprehensively with one's whole body and returns to my proposal that technologically mediated communication can leave us deprived and unpracticed in our sensorial/ physical readings of one another.

"I PERCEIVE IN A TOTAL WAY WITH MY WHOLE BEING"

(Merleau-Ponty quoted by Pallasmaa 21).

My research findings led me to consider another interactional phenomenon called *interpersonal synchrony*. For Dennis Smith and Keith Williamson, *interpersonal synchrony,* as they describe it, has to do with person-to-person bodily rhythms, and is very simply "a shared beat between two people in an interpersonal communication transaction" (232). Studies have been made using slowed-down films to micro-analyze the actions (the rates of breathing, blinking, body movement and speaking are measured and compared) of two people interacting. Most people will never be conscious of synchrony in this way – rather, it manifests in the

participants having a feeling of rapport, cadence or more colloquially, "a good vibe" with the other. In instances where synchrony does not occur, we may notice it by feeling uneasy or that there is something disconcerting and irregular about the other person. Much like Cacioppo and William (the authors of *Loneliness)*, Smith and Williamson write "…our entire communicative lives are oriented toward such transcendence of personal isolation or loneliness and the achievement of the experience of this rapport or communion with others" (233). Quoting Mark Johnson and co-author George Lakoff, as a response to Smith and Williamson's point regarding our need and desire for rapport with others, they ask us to consider that the mind is embodied "in such a way that our conceptual systems draw largely upon the commonalities of our bodies and the environments we live in (Lakoff and Johnson 6).

Let us also consider the notion of *somatic modes of attention* as another bodily phenomenon of intersubjectivity. Cultural anthropologist Thomas Csordas, in his article titled "Somatic Modes of Perception," writes:

> Because we are not isolated subjectivities trapped within our bodies, but share an intersubjective milieu with others, we must also specify that a somatic mode of attention means not only attention to and with one's body, but includes attention to the bodies of others" (139).

Csordas refers to Alfred Shütz's definition of attention as a "conscious

turning toward" an object and suggests this *turning toward* "would seem to imply more bodily and multisensory engagement than we usually allow for in psychological definitions of attention" (138). As such, he defines somatic modes of attention as "culturally elaborated ways of attending to and with one's body in surroundings that include the embodied presence of others" (ibid). Paying close attention to our bodies can provide a valuable source of visceral information about the world, and those in it. Csordas uses examples of bodily phenomena experienced by Catholic Charismatic healers and the Puerto Rican healing tradition of *espiritismo*, as related somatic modes of attention. Suffice it to say, that healers of these respective traditions, when working with their congregation or clients, experience visceral bodily reactions. These can include a general feeling of heaviness, or extreme lightness, tingling, heat, and outflow of power similar to an electrical current, felt as vibrations often in the hands, and at times in other parts of the body as well as emotional feelings such as empathy, sympathy and compassion when "anointing" people. In *espiritismo*, the *espiritistas* believe spirits enter and possess their bodies–either guiding or distressing in nature– and the impact can be felt directly by the healer, described as hearing distinct and recognizable voices, smelling odors and feeling the pain and distress as experienced by the client by spirits (Csordas 147). The claim by the *espiritistas* is that these bodily phenomena are a form of perception given to them by a spirit entering their body. The Charismatic healers on teh other hand rely either on 'direct inspiration' from God when "*anointing*"

people, or using the "*word of knowledge*" to detect people's ailments, etc. The latter is described as far more somatic, with seemingly more intense physical manifestation in the healer[7] (Csordas 141).

Could this phenomenon be understood as alchemical, or as Schwartz-Salant[8] suggests, the result of an interactive field between two people that is "capable of manifesting energy in its own dynamics and phenomenology" (Csordas 148)? This field between two people, suggests Csordas, is only palpable if, in effect, their imaginations can become like a sensory organ and perceive unconscious processes. As an anthropologist, Csordas has approached embodiment through cultural phenomena, but claims that anthropology is not yet developed enough to add to "an already mature body of writing," and hopes to be able to develop embodiment as a "methodological field" (137). Csordas articulates a couple of interesting challenges: He claims that there is no independent way of verifying what is being perceived during embodied cognition. To be able to experience embodied cognition, heightened self-awareness and self-consciousness are necessary. Csordas also refers to the ambiguous nature of phenomena collected as 'somatic modes of attention'; here he refers to Merleau-Ponty saying that *indeterminacy* is an essential element of existence (148). This indeterminacy is part of the impetus for my desire to

7 Such as pain transference, queasiness and confused agitation indicating the activity of evil spirits.

8 Schwartz-Salant (1987: 139)) The Dead Self in Borderline Personality Disorders, as quoted by Csordas.

substantiate the experience of embodied cognition with some amount of empirical evidence. As becomes evident in my *Findings* section, participants and I did at times, struggle to describe our experiences. An accompanying sense, at least on my part, was that perhaps I was allowing my imagination to interfere, or that in fact, I was creating (imagined) explanations for what I believed to be a pre-lingual, bodily sensed mode of perception. However, noticeable parallels between the experiences of the charismatic healers and the booth participants can be drawn.[9]

While Csordas has elaborated the ways that attending to and with one's body can be a cultural phenomenon, John Cacioppo and William Patrick discuss the phenomenon from a biological viewpoint, directly implicating DNA in people's essential desire and need for social connection. They discuss intelligence as necessarily embodied within a complex network of "emotional, cognitive, behavioral, and neurophysiological processes"(116). Through an interdisciplinary approach, they seek to find out how and why loneliness generally leads to ill health in the population. Their research into the causes, nature and consequences of loneliness has brought together practitioners in various disciplines and crossed international boundaries in order to determine just how necessary social

9 Compare the visceral reactions of the healers (feeling of heaviness, or lightness, tingling, heat, outflow of power similar to electrical current felt as vibrations in the hands or other parts of the body as well as feelings of empathy, sympathy and compassion) to those of participants in the Groebner Booth (see participant quotes in the Findings and Analysis Section pp 42-46)

interaction is for humans.[10] Cacioppo suggests:

> The roots of our human impulse for social connection run so deep that feeling isolated can undermine our ability to think clearly [and that] the sensory experience of social connection, deeply woven into who we are, helps regulate our physiological and emotional equilibrium" (11).

Patrick and Cacioppo's research points to the fact that our brains and bodies have been designed for communal social interaction and not for isolation (127). Social isolation leads to a far greater risk for physical illness and depression (99), and trying to deny this fundamental need violates the essential blueprint of our beings. Our ability to feel the damaging sensations related to loneliness or the warmth of connection is programmed in our DNA as "physiological prompts" (120). Most interestingly, however, they state that "the key concept for us is the extent to which the effortless sharing of knowledge or intuition relies on physical cues and sensations that are, themselves, imperceptible to our conscious minds"(120). Their findings, related to a deep physiological need for social interaction suggest that our psyches as well as our bodies inherently require the co-presence of fellow human beings for well being. While social interaction via the Internet, for

10 Their interdisciplinary group consisted of psychologists, psychiatrists, sociologists and biostatisticians, cardiologists and endocrinologists, behavioral geneticists as well as neuroscientists, philosophers and theologians.

instance, may provide us with access to a greater number of people, the work of Cacioppo and Patrick place bodily co-presence at the forefront by illustrating the qualitative difference it makes.

Sociologist Alfred Schütz meticulously describes the reciprocal process of what he calls the "we-relationship" as being a continuous process of influence, revision, and expanding knowledge - a "…thousand faceted mirroring of each other" (191-192) and something that we *live through* "…for there is a true social relationship only if you reciprocate my awareness of you in some manner or other" (188). According to Schütz, once two individuals are participating in a we-relationship, their knowledge of the other develops reciprocally and they are "always enlarging and contracting," their relationship becoming spatial as well as temporal. "*It embraces the body of the other person as well as his consciousness*" (Schütz 188). This points toward our bodies and minds forming an integrated experience capable of also extending to another through various perceptual abilities. Schütz points to a kind of intersubjective responsibility that we have as social beings in an intersubjective environment. [11]

11 Schütz writes: "The world of my daily life is by no means my private world but is from the outset an intersubjective one, shared with my fellow men [*sic*], experienced and interpreted by others; in brief it is a world common to all of us…. This means that this world is not only mine, but also my fellow men's environment; (and to a very small extent of my own making) moreover these fellow men are elements of my situation, as I am of theirs" (163).

"Your body is not just a vehicle for your brain to cruise around in. The relationship is perfectly reciprocal: Your body and your brain exist for one another" (Blakeslee and Blakeslee 32).

Bodies are biologically programmed to interact with and sense other bodies in a myriad of interconnecting modalities. The role of the body's main senses–sight, smell, taste, hearing and touch–in understanding any given environment or when encountering another person are important; however it is the fainter cues and sensations perceived by the body and perhaps less consciously which add another realm of experience to our beings, and which in my research and my artistic practice, I attempt to uncover.

Neuroscientist Antonio Damasio asserts, "despite the many examples of such complex cycles of interaction [between body, brain and environment] body and brain are usually conceptualized as separate, in structure and function" (224). He explores many examples of integrated reciprocity and suggests that our concepts of the brain, the mind, and the body may be inaccurate. He writes: "The mind is embodied, in the full sense of the term, not just embrained" (118). According to Damasio, the body and mind interact and respond to each other in an indivisible system

of reciprocal signals.[12] "Nature appears to have built the apparatus of rationality not just on top of the apparatus of biological regulation, but also *from* it and *with* it" (128). Failure to see this is "Descartes' Error", as Damasio[13] writes, explaining the title of his book.

Thus, the body map that our brains create from the interaction of touch, vision, proprioception, balance, and hearing is referred to as our *body schema* and is a physiological construct. Although it is largely an unconscious functioning, it even extends out into the space that surrounds us and helps us to locate objects around our bodies (Blakeslee and Blakeslee, 32). We possess body maps for our *intentions* as well as for *the potential for action*. We also have another that "automatically tracks and emulates the actions of other people around [us]" (ibid 11). This mapped space around our bodies (approximately the measure of an arm's length) is also referred to as *peripersonal* space by neuroscientists (ibid 110).Peripersonal space points more directly to an inherent capability within our body's sensory apparatus to sense others at an embodied level (through a holistic blend of neural and bodily perception) if they move within the boundaries

12 A. Damasio. Descartes' Error. New York: Penguin. 1994. p 224. Damasio discusses integrated body and mind functioning with the example of a flight response. Imagine you are walking alone at night and hear footsteps behind you. Your mind responds with the possibility of danger. In response, your body reacts with adrenaline and the feeling of fear. This in turn, acts again on the mind; the two responses reciprocal and intertwined.

13 ibid. Damasio, explaining the title of his book, makes a case against Descartes' error, that is the traditional mind/body spilt.

of our personal space. Anything we observe or *sense* entering this space will cause the mapping brain cells to fire. Because of this, we possess an almost hyperawareness of anything that invades this personal bubble of space. In more intimate situations, (such as lovemaking or a parent holding a sleeping child)this personal space becomes blended as a larger single sphere (ibid 137).

"We have to start deep down in the bodily processes where meaning emerges, lives, and grows"

(Mark Johnson xii).

In the German language there are two words that refer to the body: *Körper* and *Leib*.[14] *Körper* refers to the body as the purely physical or biological while *Leib* denotes the felt, experienced body. There is no English equivalent for the word *Leib* and perhaps not being able to define and name our bodies as such points to an absence of its acknowledgment. Yet it is the felt, experienced body–the *Leib* as experienced beyond the senses–that adds a complexity to our lived experience. As Alexandra Howson asserts, embodiment "…precedes and grounds reflective thought …we *are* our bodies" (36).[15] Howson writes about the body from a sociological

14 These are terms first used by Husserl, Heidegger and later Schmitz.

15 Howson references Merleau-Ponty directly (specifically "being-in-the-world") ([1962] 2001:140), as well as via others' interpretations (Csordas, Burkitt, Schmitz).

perspective; like many feminists writing on the body,[16] she contends that it is not possible to theorize the body as a separate entity, disconnected from the mind. We are in fact so in*corporated with* our bodies that to think of them as not being instrumental in how we communicate and perceive the world is to ignore our corporeality. She proposes the term "*intercorporeality*" as this "process of action in relation to others" (36). It is intercorporeality– or bodies in co-presence–that is the basis for my field-based research. For the purpose of studying the experience of co-presence at an intimate distance, I designed and built a booth (the Groebner Booth), which offers a meditative space that creates circumstances for participants to *pay attention* to the cognition of their own reciprocal mind-body interface as well as the communication that may occur in bodily co-presence by crossing habitual corporeal constraints.

In *The Meaning of the Body*, Mark Johnson addresses how embodied cognition and meaning making occurs, covering topics such as infant psychology, cognitive neuroscience and how the origins of meaning begin with the body and our encounters with the world. Philosophers of language who place meaning in language alone overlook "…anything that cannot be linguistically encoded." This denies the status of *meaning* to most of the meaning making "…that occurs beneath our conscious

16 For other examples of feminist body politics, see *Writing on the Body: Female Embodiment & Feminist Theory* (eds) K. Conboy, N. Medina, & S. Stansbury, *Volatile Bodies: Towards a Corporeal Feminism*, Elisabeth Grosz., *Feminist Theory and the Body*, Eds J. Price and M. Shildrick.

awareness and beneath representational structures" [17](207). Embodied cognition is a process that generally occurs–unless we are acutely attuned to it–beneath our conscious awareness. It occurs so naturally as a biological function that we rarely, if ever, articulate or consciously focus on the nature of it. It is something that occurs for which, as Johnson suggests, there is no representational (lingual) structure. It simply *is*, as something sensed and perceived, pre-lingual and not something easily defined. This tangible, invisible quality of perception that occurs during co-presence, however, adds significantly to our sense and knowledge of each other and the world around us.

Johnson argues that meaning making is in fact rooted in the realm of the aesthetic, and points to the arts where "…bodily meaning is paramount" (209). Dance and music are always brought to the forefront as prime examples, as they are powerfully experienced and remembered in the body. Like Howson, Johnson believes that embodied cognition is intercorporeal as it is necessarily intersubjective. He tells us "…cognition does not take place only within the brain and body of a single individual but is partly constituted by social interactions, social relations, and cultural

17 By "representational," Johnson is specifically referring to *linguistic representation* and not representation in artistic mark making. In Johnson's view, the arts are an area in which we make and perceive meaning at an embodied level. In its scope this thesis does not, however, compare this to knowledge obtained through language (in which reality only takes on meaning once it has been linguistically encoded), as this would require an entirely different investigative perspective

artifacts and practices (147).

In reference to *Art as Experience* by John Dewey[18], Johnson considers experience rather than linguistics, the root of human meaning making. With this he shows us how learning (the infant's acquisition of knowledge for example), meaning making (how we make sense of the world), and abstract reasoning (how cognitive activities rely on perception and stimuli from the body) begin at the biological – or embodied level:

> I am suggesting that the very possibility of abstract conceptualization and reasoning depends directly on the fact the "body" and "mind" are not two separate things, but rather are abstractions from our ongoing, continuous, interactive experience (140).

Johnson suggests that the embodied cognition has its roots in American pragmatist philosophy via William James and John Dewey. He draws several parallel characteristics between the two approaches[19]

18 "Dewey recognized the underlying continuity that connects our physical interactions in the world with our activities of imagining and thinking." Johnson, p139.

19 "Pragmatism and cognitive science of the embodied mind are characterized by:
- a profound, nonreductionist respect for the richness, depth, and complexity of human experience and cognition
- an evolutionary perspective that appreciates the role of dynamic change in all development (as opposed to fixity and finality)
- a commitment to the embodiment of meaning, tied to the continuity of body

and claims, "it [embodied cognition] is being supported and extended by recent work in second-generation cognitive science" (152-153). His background in philosophy leads him to question: "How can meaning emerge in our bodily experience" (i.e., in sensorimotor activity) and "still be the basis for abstract thought?" (136). Pure reason and self-reflection as a way of knowing the self and others is only a part of the equation. It is through the reciprocal interconnectedness of body and mind and our somatic interconnectedness with others that we can truly gain awareness of others and ourselves (5).

If we proceed with the premise that we are embodied beings whose cognition relies on an intricately woven network of neural and biological circuits,[20] then it stands to reason that our bodies possess intrinsic intelligence, awareness and ability to perceive in ways not always consciously recognized. In my introduction I suggest that due to increased reliance on technologically-mediated communication our bodies are becoming deprived and unpracticed in our sensorial/physical

---

and mind
- recognition that human cognition and creativity arise in response to problematic situations that involve values, interests, and social interaction. Pragmatists thus have an embodied cognition perspective." Johnson p152-153

20 Mark Johnson refers to V. Gallese who analyzes the energies with which we as living organisms interact: electromagnetic, mechanical and chemical energy. "In short, in the context of organism-environment interactions, patterns of energy become stimuli for the organism; these patterns are converted within the organism to action potentials in neurons, thus initiating vast neuronal "communication" (158).

re/perception of one other. While we may be able to maintain relationships through the use of technology and social networking sites, it is the face-to-face relationship that provides us with an immediate and complex source of integral (embodied) perception.

The somewhat elusive nature of embodied cognition has led to my inquiry into its subtle and invisible qualities. Arguably, our bodies have the potential to *tangibly* perceive, but this sensing can be, at best, fleeting or ephemeral, and hard to define. In other words, it simply *is*, as something one perceives by being immersed in it, but not something one is necessarily always aware of. My research questions presented a twofold problem: The first asked whether an interdisciplinary research methodology could possibly capture the invisible qualities of embodied cognition[21] and the second addressed the issue of how something that is ostensibly invisible can be represented or translated as something tangible and material.

My initial studio practice focused on transitioning from the two-dimensional figure/ground (in painting) to a type of work that would be more interactive and/or participatory in its realization. By combining two trajectories of interdisciplinary methodology, like a Möbius strip the research enriched and further propelled my studio practice in new and exciting directions, while my studio practice continued to urge the research

21 Embodied Cognition as "…the notion that the brain circuits responsible for abstract thinking are closely tied to those circuits that analyze and process sensory experiences – and its role in how we think and feel about our world." Isanski & West, 2010.

forward, the two continuously reflecting and incorporating one another.

In order to deepen my understanding of the cognitive process, I designed a module of field research in the form of an installation called *The Groebner Booth*, which explores embodied cognition in co-presence involving two human participants with one always being myself as the researcher. A significant finding from *The Groebner Booth* study was participants' extraordinary awareness or consciousness of themselves and their bodies in relation to me. I had also not expected this deeper awareness or consciousness of my own body and the sense of my own energies in relation to them. This sense of transcendent simultaneity became the impetus for a new body of work titled *The Intimacy of Presence*. Following the fieldwork, it felt important to look for purely biological evidence for what was occurring between us in order to somehow 'prove' that it wasn't imagined phenomena. However, not all avenues of research could be satisfactorily taken on. For example, I realized I could only go so far in researching the biological before I was out of my depth. And because it is also not the central focus of this thesis, I include only a more tangential treatment of it.[22]

22 See this paper p15: Cacioppo and William's implication of DNA in our desire for social connection, their discussion of intelligence as necessarily embodied within a complex network of "emotional, cognitive, behavioral, and neurophysiological processes"(116). I include Damasio, who speaks to embodiment as a neuroscientist in Descartes' Error. Blakeslee and Blakeslee, a team of science writers, are quoted (this paper p18-19) on proprioception and peripersonal space as investigated by neuroscientists(110).

Ultimately, the process of embodied cognition cannot be neatly located within a single paradigm. The embodied process incorporates the notions of nonverbal communication, inter/corporeality and/or co-presence, intersubjectivity, environment as the space of social interaction, and the felt, experienced body of the *Leib*. This thesis presents an interdisciplinary model synthesized from a myriad of theoretical disciplines, field research and studio practice.

THE GROEBNER BOOTH: RESEARCH DESIGN

We have almost all had the experience of forced proximity on a crowded subway or elevator. I have also had the experience of sharing very, very small European elevators and they seem to be single person size, but in fact, can often hold up to four people. With two people, quarters are close and once inside it is extremely hard to deny the presence of the other person; you are standing mere inches apart, and to face the wall or turn one's back would seem not only socially impolite, but also highly irregular. On crowded subways we are expertly able to keep privacy barriers in place, whereas in the more confined space of the small lift, to do so becomes a glaring act of bad manners. It is these instances co-presence of two people in a shared, small space that motivated the design of my qualitative field-based research and led me to *The Groebner Booth*.

The qualitative research using participants undertaken with *The Groebner Booth* was a methodological approach used to illuminate the phenomena and effects occurring within the sphere of embodied cognition during co-presence. My initial inquiry included investigating the various facets of environmental design, that is, how materiality, aurality and scale affect us physically and psychologically, as well as looking at how can space be designed specifically to initiate a bodily engagement of it. As one of many factors influencing human interaction overall, my initial research led me to consider the built environment as fundamental in

influencing one's behaviour and proclivity for or rejection of face-to-face-interaction.[23] With this notion in mind, I began to think about space and relational strategies that would encourage encounter and instigate our awareness of embodied cognition.

In developing a relational spatial strategy, it was fundamentally necessary to explore how proximity could be spatially constructed or designed much like the idea of the small elevator. How might I recreate such a small room that two people would enter and be induced to acknowledge, or *direct their attention* at one another? I wanted participants to be in such close quarters that they could not *avoid* acknowledging one another.

This led me to the initial concept of designing a *booth*. My first maquette was little more than an empty tissue box painted brown, with swinging doors cut into it to mimic an elevator-like space. Iterations of the maquette progressed to more sophisticated designs, taking into consideration what I wanted to achieve with the booth. Scale, and materials were aptly considered and discussed with committee members who encouraged me to build maquettes of my various designs. I used software called Sketch-Up to create virtual 3D models of the booth and continued to build maquettes.

Initially I imagined the booth as an environmental refuge–a

23 The work and writing about Frank Lloyd Wright, and Juhani Pallasmaa's *The Eyes of the Skin: Architecture and the Senses* were fundamental in bringing these elements to light.

contemplative space that would allow people to enter and feel more open to sharing time with each another in co-presence. The booth's two requirements were that it needed to directly motivate participation and that it could also be used as a research instrument to monitor the results. Because I was also interested in nonverbal communication and how the body communicated, I did not want the booth to be a lounge-like environment where those who entered could easily choose *not* to willingly participate in the act of co-presence. This would defeat the purpose of the booth altogether. Ultimately it needed to be designed and constructed in a way that would foster co-presence in an almost meditative setting. But this needed to be further defined: Who would the participants be? Would this be a public installation open to anyone passing by? How would they know what to do? Would they use the booth the way I'd imagined? How would I as the creator know what the results, if any, were?

The first full-sized booth was based on sketches and the maquette and used for the initial pilot study built from sheets of 4x7 ft black foam core and duct tape. A second booth made from opaque white Plasticore was also constructed with a more spiral-like design. It was once the two prototypes were built,[24] that I had to decide whether I would in fact participate in the sessions, or recruit two separate people for each one.

With the initial sessions it seemed most expedient to be one of the

24 Prototypes consisted of the black foam core booth and a white version made from white plasticore, which attempted a somewhat more spiral design.

participants. This would provide me an assured amount of control and to see and feel for myself whether the booth was doing what I imagined and intended. I conducted several information-gathering sessions, which included testing the booths for physical comfort and ambience as well as how conducive they would be to participants being able to relax and focus on their experience. Most people preferred the dark booth and for very tangible and practical reasons.[25] I therefore decided to conduct pilot studies in the black booth. For this I designed a Booth Consent Form document that included a short description of the research and basic procedural instructions. Inside the booth with eyes almost closed, as per instructions, the black walls of this booth seemed to almost disappear and created a sense of enclosed comfort. Because the light was dim, participants felt far less exposed and physical proximity definitely felt less challenging. The dark interior was specifically designed to reduce ocular sensory input – something we rely on excessively in most instances. It was also meant to necessitate having to rely more on 'seeing' or sensing with one's entire body.

Before entering, a timer was set to five minutes. With these trials I was able to determine a period of five minutes as being enough time for a participant and myself to establish a sense of each other in this space.

25 The white booth, although able to transmit light translucently was found to be too bright, and for several others as well as myself, was reminiscent of clinical or bathroom-like settings. In a face-to-face situation, the inherent brightness produced a heightened sense of exposure and self-consciousness.

Because participants were asked to stand more or less still for five minutes, any longer might have made the experience start to feel uncomfortable or perhaps even redundant. Particularly in instances such as these, one must keep in mind that time takes on a relative quality, which became evident in the initial results with some people reporting that the five minutes passed quickly while for others it seemed very long. I also felt that the span of five minutes was sufficient for collecting the data I wanted, such as physical and emotional responses to proximity as well as any changes over the five-minute period.

Following the small pilot study I decided on a two-entrance booth in which both participants could enter the booth simultaneously and meet in a small common space. With only one entrance, either the participant had to follow me into the booth or enter into the dim space first. While this detail was not absolutely critical to the functioning of the booth, having two entrances would better suggest the idea of a mutual meeting of two people. As well, when displayed, the two-entrance version (form) of the booth would, ideally, marry both form and function more readily.

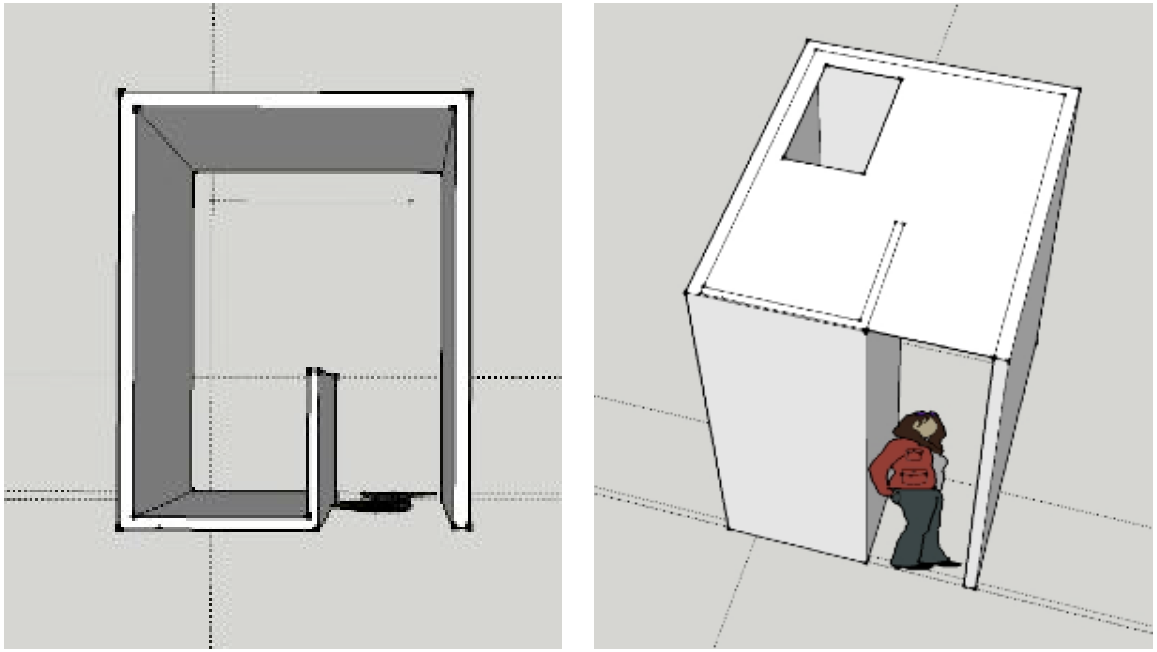

Figure 1: Sketch-Up Designs

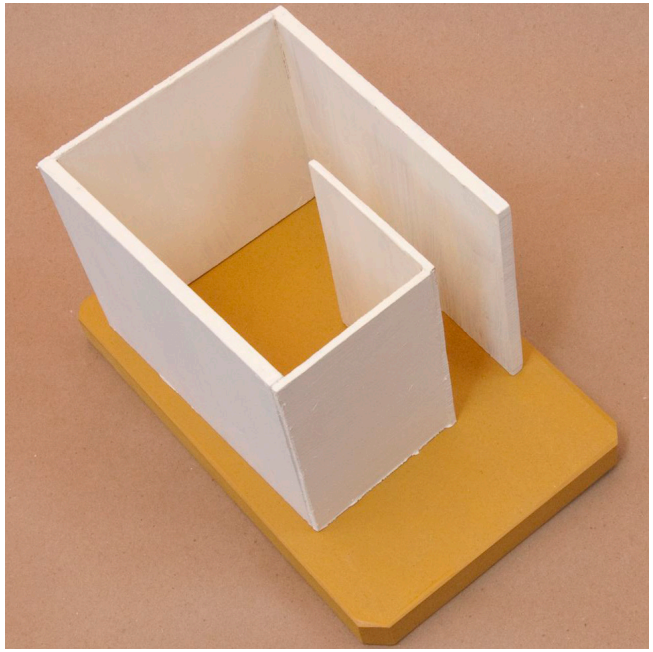

Figure 2: Wooden Maquette and Pilot Booth

The final version of the Groebner Booth[26] was designed and constructed with a series of nine modular pine frame and Masonite panels, each measuring 4 feet wide x 8 feet high in order to avoid feelings of claustrophobia within the booth. Two short hall-like entrances on either side of the front of the booth lead to a common inner space curtained off with black felt. The inside walls are painted with a dark grey (with the ambient interior sky lighting, the black walls again seem to almost disappear, which manages to have the dual effect of creating a feeling of containment but without the closeness of walls).[27] The three panels comprising the common inner space are filled with insulating Styrofoam in order to provide a quiet contemplative compartment in which participants may focus more readily on bodily sensations and self-awareness. Two rectangular skylights (app.

26 I decided to call the booth *The Groebner Booth* in order to avoid giving participants any preconceptions about the booth's function. Many names carried with them associations or could lead to misconceptions. For example, an early name was The Listening Booth. One can see how this might make participants expect that they should or would be listening for something in a very literal sense.

27 It was necessary to find these balances as I wanted the booth to be big enough for two people to enter and stand face-to-face, but ideally, not to have too much room to keep their distance, as everyone – without exception – will initially want to stand 18"- 24" apart, or what is socially and culturally a comfortable distance. Despite their having read instructions regarding standing 10"-12" apart, many people were either unsure of the distance or too uncomfortable to actively assume the position themselves. To aid people in standing in the right place I placed a narrow piece of masking tape on the floor as a dividing line for them to step up to. This was something I hadn't done in the pilot tests and it was interesting to note that this small detail really helped participants to place themselves without my having to be overly explicit once inside.

10"x18" each) made from two pieces of decorative mesh metal, which let in both air [28] and ambient light. Because the booth has been designed with modular panels, it can be disassembled, moved and reassembled elsewhere with relative ease.

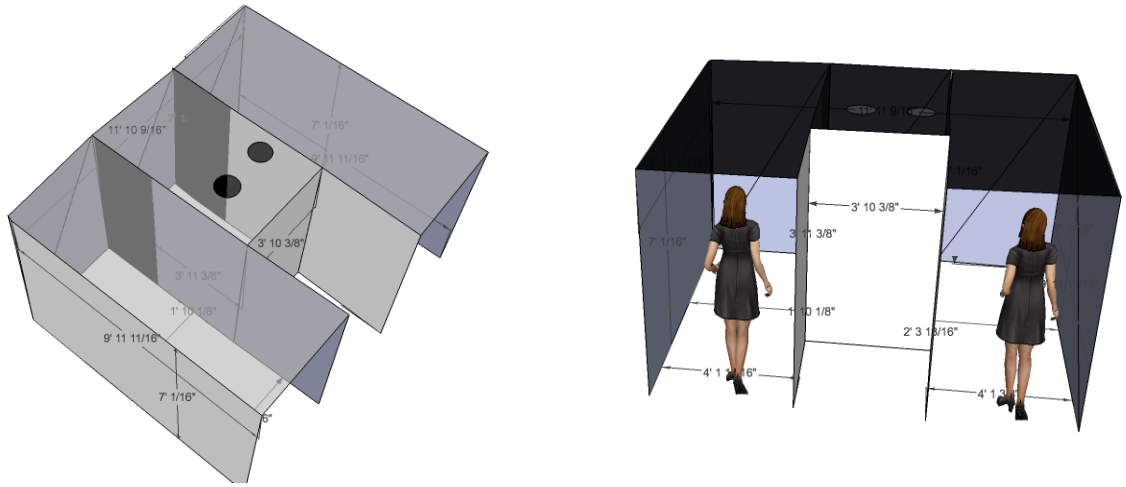

Figure 3: Two Views of Final Two-entrance Booth Design using Sketch-Up

28 Initially I used pieces of opaque white plasticore, which created a good ambient light but with the curtains over the doorways, I realized there would be little airflow within the booth.

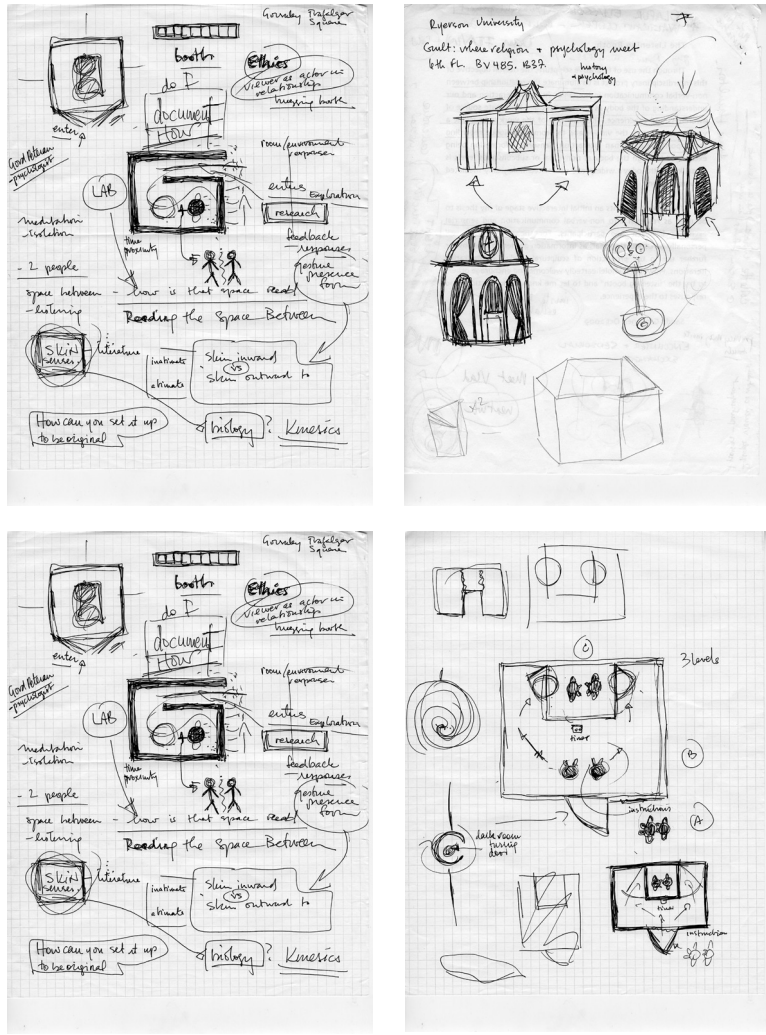

Figure 4: Brainstorming Sketches for Two-entrance Booth

GROEBNER BOOTH: SELECTION OF PARTICIPANTS

For the purposes of using participants to conduct research and gather data in the booth, an application was submitted to the OCADU Research Ethics Board (REB) in order to *a)* follow proper research protocol *b)* be able to recruit from beyond OCADU's population and *c)* to be able to use the data findings in my thesis work. (Refer to Appendix A: REB Application)

Once approval was gained I began recruitment. I had not decided on a set number of participants before beginning the new sessions. I simply decided to recruit people over the course of two to three weeks and to continue for as long as I was getting new and different results. In total, eighteen people were recruited to participate in the booth research sessions during the month of May 2010. Participants were given a short statement to read regarding the intent of the research, as well as an instruction page regarding booth procedures and set of questions, (Refer to Appendix B: Final Booth Consent and Questionnaire). The questions generally ask about their experience in the booth and the final question asks participants to respond with a visual annotation of their experience using coloured pencils and blank paper provided. Before beginning, each participant was asked to sign a consent form and to choose a pseudonym for anonymity's sake, which would allow me to refer to their data and use the drawing they had produced in either my thesis document or in the final

exhibition.

As previously mentioned, I had decided to be a participant myself in the pilot study. At that stage, my involvement allowed me to experience the booth personally and make small adjustments as necessary for the final design. Once the final Groebner Booth was ready, I still felt invested in conducting the sessions myself. It seemed critical to do so in the role of researcher due to the nature of the research topic. As I was also approaching this research as a means of gathering data for my exhibition work, and wanted to address the question of capturing the subtleties and invisible qualities of embodied cognition, being able to personally experience embodied cognition in co-presence was essential. Personally experiencing co-presence with the eighteen participants allowed me to reflect more deeply on the nature of experience instigated by the Groebner Booth and to become more aware of the qualities that emerged in this process.

GROEBNER BOOTH: DATA COLLECTION

As mentioned, each participant was given a questionnaire regarding his or her experience in the booth. I asked each of them them to sit and answer the questions directly following the experience in order to capture its immediacy. I had debated allowing them to leave and to answer and submit the questions at a later date. Answering the questions right away, I believed, would allow for candid feedback while the experience was still extremely fresh in their minds and bodies. Participants were asked to provide a "visual annotation of [their] experience of the space between [themselves] and the other participant" (Groebner Booth Consent form question #4). For this they were given white paper and coloured pencil crayons. In order to compare data as a constant among the variables I answered the questions along with participants and made drawings of my own experiences in the booth.

GROEBNER BOOTH: FINDINGS & ANALYSIS

Reading and analysing the participants' responses regarding their experiences in the booth was made richer by the fact that I had embedded myself not only as observer, but also as a participant. Many of their reactions and responses were not that dissimilar to mine, and so rather than having to experience vicariously what the participants had, I could draw on my own perspective and understanding to facilitate the data analysis. The written data was transcribed and studied for common words and phases. These were then entered into a chart corresponding to each participant's pseudonym and from this I was able to determine several patterns of physical, mental and emotional response. For full-sized Analysis Charts please refer to Appendix C, page 74.

Once the responses had been transcribed I also created "wordclouds" from the transcripts using an online tool. This helped to create a visual representation of each participant's response document's most prominent words and phrases. Interestingly enough, these wordclouds almost resemble fingerprints and seem to be as individual as the personalities who wrote them. Following are several examples: Two were made from two individuals who mainly expressed discomfort with the session while the second two reported more positive reactions and generally felt comfortable.

P1

PARTICIPANT ANALYSIS CHART: GROEBNER BOOTH 05/2010

PARTICIPANT	PHYSICAL FEELING	EMOTIONAL FEELING	CHANGE IN COMFORT	REACTION TO OTHER	SENSE OF TIME
1.Hank	Comfortable Natural	Open, Grounded Connected	Steady comfortable	Open Grounded	n/c
2. MPP	Warmth Relaxed Force field	Uncomfortable Self-conscious about body	Shift in comfort: awkward to connection	Magnetic force field, warmth Connected	n/c
3. Blue	Nothing particular	Relaxed	Relaxing	Nil	n/c
4. Spunky	Relaxed Drawn forward Some tension in legs	Relaxed	Comfortable except for balance issue	Felt little presence but Drawn forward	n/c
5. Tialinda	Warmth Leaning forward Wavering	Desire for eye contact. Much thinking	Ok throughout	Leaning forward and pulling away	Time went fast
6. Mary	Comfortable Relaxed Swaying	Calm Peaceful Comfortable	Comfort constant Enjoyed time	Little sense of other	Time went fast
7. Ben	Leaning Swaying	Desire for eye contact. Much thinking	Wanted to be calm. Relaxed somewhat	Self-conscious Nervous	n/c
8. Carl	Comfortable Hands open	Accepting Calm Secure Grounded	Comfort constant	Felt energy and openness	Time went fast
9. Frog28	Conscious of space Swaying	Uneasy Challenged Discomfited Worried	Shifted to only slightly less uncomfortable	Conscious and worried of little space between	n/c
10. Seahorse	Calming Drawn forward Warmth and in hands	Relaxed Open	Comfortable More meditative	Warmth in hands, arms from perceived proximity	Time went fast
11. Invisible Wall	Rocking back and forth	Extreme discomfort Wanting to exit	Discomfort throughout but less panicky at end	Not any really	Time went fast

Figure 5: Participant Analysis Findings Charts (see Appendix C: Analysis Charts)

P2.

PARTICIPANT ANALYSIS CHART: GROEBNER BOOTH 05/2010

PARTICIPANT	PHYSICAL FEELING	EMOTIONAL FEELING	CHANGE IN COMFORT	REACTION TO OTHER	SENSE OF TIME
12. Francisco	Warmth Tension	Calm Too much thinking	More comfortable over 5 minutes Slowed thinking Relaxed more	Steady warmth Sense of board between us holding apart	n/c
13. Running Girl	Uncomfortable Could not look	Thinking a lot about discomfort Anxious	Uncomfortable throughout	Researcher comfortable	n/c
14. Andria	Tight, constricted Uncomfortable Heaviness in toes Stiffness	Uneasy	Uncomfortable to slightly more comfortable	Calm and collected	n/c
15. Persinger	Swaying back and forth Energy flow Energy palpable like puffy egg	Clam Aligned Settled as anxiety and negativity left	Comfortable throughout but settled more	Calming Palpable energy field	n/c
16. Marcello	Swaying Aware of heartbeat and being	Resigned Passive acceptance	Slightly awkward. Only slightly more comfortable	Aware of movement of head (swaying?)	n/c
17. Caroula	Swaying Heat and heaviness in Hands to tingling numbness	Calm Hands felt red	Comfort throughout	Could smell perfume. Breathing quiet questioned whether present?	n/c
18 Franky	Rocking, being pulled back and forth Warmth Felt left arm	Internal to external shifting of orientation and sensations Anxiety re: proximity	Anxiety shifted to better comfort with proximity	Energy in waves pulling forwards and back	n/c

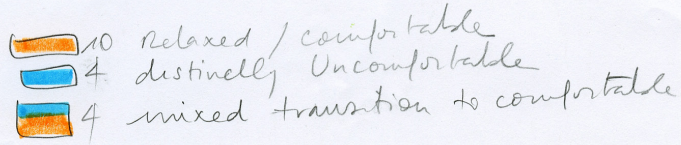

Figure 6: Word Clouds: Two Uncomfortable Participants

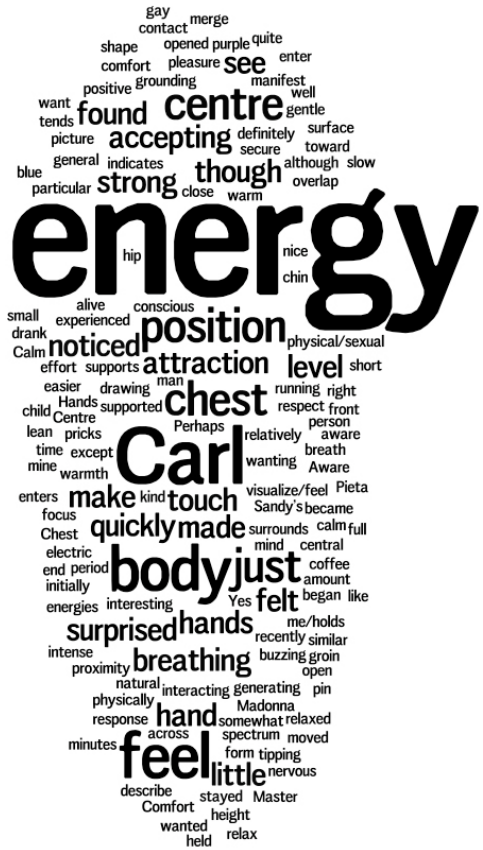

Figure 7: Word Clouds: Two Comfortable Participants

One of the most common occurrences or sensations felt by participants was that of swaying or feeling pulled forward. Some participants who reported this assumed that it had to do with the fact that they had their eyes closed and their sense of balance was being affected. Again, having participated in all eighteen sessions allowed me to form a different conclusion. Initially, I too, thought the swaying had something to do with vision and balance. As the researcher this was something I could pay specific attention to and track variations from participant to participant.[29] Variations did occur and they were significant enough for me to propose that the swaying or feeling pulled back and forth was not necessarily due to balance. I experienced this quite noticeably with some participants while with others it was virtually nonexistent (despite my eyes always being closed). For some participants (as well as myself) it presented as swaying while at other times it was a feeling of being drawn forward only:

> **Franky**: "My perception kept shifting between internal sensation and external sensation/ orientations. I kept feeling like I was rocking and being pulled back and forth."
>
> **Spunky**: "I felt very little actual presence of the other

29 The instructions I provided to participants suggested that they could either close their eyes or keep them slightly open, and that that was what I intended to do (and not observe them), the idea being, of course, to allow one's body to experience the other person without the interference of vision.

participant other than the occasional hint of breath. Strangely though, any time my balance seemed to go I was always drawn forward like a magnet unless I consciously leaned back"

Myself: "After a couple of minutes I felt myself swaying back and forth slightly – but not feeling as if I would lose balance. It was just like a gentle pulse/ sway. As well, my hands kind of began to open – somewhat like a flower slowly opening."

Using the drawings and the data presented, one can also infer that our bodies can sense (cognate) and are affected by the energy of the others, and that the energy, depending on its potency and our receptivity, can be sensed quite physically and manifest itself through a feeling of warmth and/or swaying. A couple of participants have likened the sensation to the feeling of a "force field":

MPP: "Then as I relaxed I felt a connection between myself and the other body. Almost a magnetic force field. I could also feel warmth."

Seahorse: "Also I wonder if the feeling of being drawn forward was an issue of balance or gravity – of being drawn to another being and their "force field" – not to get too science fiction-y."

Another major finding of the sessions, and not wholly anticipated, was at times, participants' extraordinary awareness or consciousness of themselves and their bodies in situ. I had also not expected this deeper awareness/consciousness of my own body and the sense of my own energies in relation to the others.[30] Ultimately, this transcendent simultaneity became an important thread of response throughout the study and reflects quite explicitly the theory posited by Csordas: To be able to tap into embodied cognition, heightened self-awareness and self-consciousness are necessary. He also suggests that the perceived 'field' between two people is only palpable if, in effect, their imaginations can become like a sensory organ and perceive unconscious processes (Csordas 148*)*.

On a psychological level, participants (myself included) also reported interesting and variable results. It would be easy to make assumptions that those participants whom I knew well would feel more comfortable participating in the session than those who knew me to a lesser degree or not at all. This however, proved not to be the case, nor did gender, sexual orientation, or age seem to permit me to presume what

30 In designing the Booth sessions, I had expected that standing within twelve inches of another person would allow for each individual to "read" (to some extent) the energies of the other and that it would, in a sense, be about the perception of something external to the self. The surprising factor was that not only was it about being able to sense or read the other, but an extreme awareness of oneself often emerged simultaneously, as epitomized by participant Frankie's response: " My perception kept shifting between internal sensations and external sensation/orientations…."

the outcomes would be. For instance one participant, an acquaintance named "Carl," a gay male approximately 45 years old, proved to be the most profound experience in terms of the exchange and palpability of energies between us (see the responses that follow). The experiences recounted and the resulting images of overlapping and emerging energy that both of us drew, would seem to indicate a far more intimate relationship or even sexual attraction, although none was present. Conversely, the experience with another participant, "Francesco," (a straight male) whom I have known for approximately 20 years and with whom I have a more intimate friendship, proved to be far less tangible despite my expectation of a more open exchange of energies.

Most participants reported some degree of initial discomfort, which was not surprising given that I was asking them to stand at an "intimate" distance.[31] The majority of participants felt relatively relaxed to quite comfortable and felt a sense of warmth or energy between him- or herself and myself, the researcher. Some others reported a mixed experience transitioning from uncomfortable to more comfortable while several others

31 Judee Burgoon et al. Nonverbal Communication: The Unspoken Dialogue. Recall that Intimate distance is 0-18 inches. "This range is reserved for the most private and intimate of interactions. At this distance, people's kinesthetic receptors are highly aware of the presence of another. You can feel another's breath, smell body odors, perhaps even sense body heat." p98. We often are forced into this kind of intimate proximity on public transit or elevators but have developed admirable systems of shielding ourselves against others. Within the booth I attempt to recreate this intimate distance hoping that participants would not choose to shield themselves in the same way.

reported being distinctly uncomfortable during the session and were more or less unable to relax or focus very well throughout the entire session. I imagine this was based to a large degree on their inability to tolerate occupying the space and/or the proximity co-presence.[32] Here are some specific excerpts from the responses:

> **Invisible Wall:** "Extreme discomfort, a feeling that I want to immediately exit from the project etc."
>
> **Running Girl** "I went from uncomfortable to really uncomfortable then to thinking it's just a research experiment so get over it."
>
> **Frog28**: "I have a very wide "personal zone" and this experiment made me feel distinctly uneasy to begin with […] I was afraid of losing my balance and violating the barrier between us […] the intimacy of the experience was discomfiting."

The results also led me to consider the question of receptivity and its link to embodied cognition. Those who reported greater levels of (mental) comfort also seemed to exhibit greater levels of physical comfort–even in close physical proximity. For these participants and for myself there was a palpable sense of the energy between us, sometimes reported as a soft

32 See Edward T. Hall as outlined in theoretical framework. We all recognize that we have a zone of personal space around us and become highly aware of it if and when someone enters it. Tolerance for who may enter and how close, obviously will vary from individual to individual.

pillowy bubble. With two participants in particular, I experienced a feeling of overlapping or intermingling energies. They also seemed to be highly in tune with their own as well as others' energies. For example:

> **Carl**: "Aware of her energy running down the centre of her body and across her chest […] for both a circle of energy at hand height – blue to purple surrounds us. From her in a cross-like shape where the centre of her body is the centre form and her chest is the cross. Red: Chest does not enter mine but supports me/holds me from tipping over. Centre enters the surface of my body. My hands are alive accepting her energy – full spectrum."
>
> **Persinger**: "The energy seemed calm and palpable like a dark cotton – like being held in place by a cloud. I did not see any colors or lights. I tried to. I only sensed energy like a puffy egg around us…"
>
> **Myself with Carl:** "I felt calm and noticed that I wanted to make contact, to touch his hands, his chest, or just lean into him. This became somewhat more intense toward the end of the 5 minutes and I began to visualize/feel a kind of overlap of our energies."
>
> **Myself with Persinger:** "My sensory/energy experience - low ebb at first- the stream of warmth down the centre of my body as described in number one (I could feel a warmth from my forehead to about my belly button…) The swaying – I felt buoyed by a kind of softness between us – like a soft, gentle energy balloon."

Besides answering questions, each participant was asked to provide a visual annotation of their experience. In total the thirty-six drawings[33] have provided me with a rich and inspiring source of research data. Some of the participants were quite hesitant to draw or found it more difficult due to their professed lack of skills in the area. Others plunged right in, making quite elaborate and colourful illustrations. Some were more figurative while others were very abstract and/or minimal. Mine seem to vary in this regard from person to person depending on the timbre of the experience. I tried not to develop any "style" or "shorthand" from doing so many; instead I allowed the experience to dictate whether it would be figurative, colour field-like or somewhere in between.

If the drawings are matched in pairs by session, interesting correlations occur at times. Obviously the visuals create a far richer representation of the participants' experiences when viewed with the written responses. However, even without the text, they present a vivid impression of participants' reactions, and struggles to depict something that could only be felt or sensed but not seen. [34] Some images seem to depict energy fields or flow, or a sensation of warmth, which was perhaps not particularly unusual given the proximity of bodies; however, as the constant participant myself, I experienced this as a highly variable

33 Comprised of eighteen from participants with my own eighteen corresponding drawings.

34 These drawings are included in the final thesis exhibition.

sensation, occurring, for example, across the whole front of my body with one or two participants, in my hands only with another and still with others none at all. Generally, these variations were also reported amongst the eighteen participants, but not necessarily coinciding with mine and not necessarily by everyone.[35]

35 Recall Thomas Csordas's Charismatic healers, (T. Csordas, "Somatic Modes of Attention." Cultural Anthropology Vol 8 , No 2. (May 1993) p147) who experienced similar sensations of bodily warmth. At times they also experienced feelings of empathy and/or compassion, which was something I also experienced with at least two participants, accompanied by the desire to hug them.

Designing the booth, the field research, and analyzing the data have proven to be extremely useful components of my overall research into embodied cognition. Without participants, the ideas or "notions" would have remained conjecture and I would not have gained first hand experience. The data and the drawings have been an important source of information and visual inspiration for my artistic practice, and they will be included in my final exhibition.

Before I move on to my studio practice methodology, I would like to conclude this section with a few final quotes from participants concerning their experience in the booth and what I hope may remain as a lasting impression for them as well as for the reader:

"***Without the eyes, we appear to be more. We appear/feel the same"*** (Hank)

"***My experience reminded me of how I rush around doing and how I can live in my head without taking the time to just be still and aware–especially with others."*** (Francesco)

"…This has been a vivid reminder of our essential corporeality…" (Frog28)

GROEBNER BOOTH: EXAMPLES OF VISUAL ANNOTATIONS

Figure 8: Visual Annotations: Three from Participants

Figure 9: Visual Annotations: Three from Researcher-participant (myself).

STUDIO PRACTICE METHODOLOGY

The Intimacy of Presence has evolved out of the combination of my interdisciplinary research and studio practice and draws on the experience and results of the fieldwork carried out in the Groebner Booth. A significant component of the participants' responses consisted of their visual annotations. These provided me with a non-lingual, or as Johnson says, a "non-representational" form of meaning making and were seminal in the production of my final body of work. Their drawings as well as my own attempt to capture the invisible yet tangible impressions experienced in the Booth; to give the immaterial a material shape.

The final piece is comprised of 18 hanging panels made out of a light cream coloured organza (a diaphanous curtain-like material). Eighteen reflect the number of participants in the study. The piece tries to bring together various aspects of the research and experience, and to situate the viewer as a participant within it. The title refers to the intimacy of bodily co-presence, and its potential effects.

I intend the work to embody the sense of heightened bodily awareness and self-reflection, which occurred in the booth in (intimate) co-presence between participants. The 10-foot material panels are supported by dowels, hang from ceiling to floor and are placed in the gallery space at varying adjacent angles. The outer boundary shape of a figure is cut out of the centre of each panel

Figure 10: Installation Views of The Intimacy of Presence

and is meant to reflect the impression of each participant. The panels are arranged in the gallery in such a way that viewers must walk through two of them immediately upon entering the space. This sets the 'interactive' stage so to speak, as the work expects viewers to become participants and perform the work. If this is not done at the outset, viewers may maintain a respectful distance from the work, remaining outside it and not interacting with it as intended. In this sense the panels also perform an architectural function as they lead the viewer through the work and around the space. The panels that are not cut out but instead have the shape stitched onto them impose a barrier-like quality, and do not allow one to pass through them. These, too, reflect other experiences in the booth, such as the impenetrability and the discomfort experienced by some during their session.[36]

As one moves through the open silhouette of each panel, however, sensations of touching and being touched (by the fabric) are simultaneously elicited creating a conscious awareness of one's embodied self. One's body becomes animated through sensory perception, as one's imagination registers the absence of the body in the silhouette; sublimely sensed, invisible yet fully implied and offered as the sensation of passing 'through' another person. Juhani Pallasmaa writes about artistic expression,

36 As participant "Invisible Wall" stated: "Extreme discomfort! The pseudonym was selected because I constantly use this ploy when in a public environment. I was able to use the wall for this experiment, but the extremely close proximity made it very difficult to maintain!"

saying that its engagement "with pre-verbal meanings of the world, ... that are incorporated and lived rather than simply intellectually understood" (2005: 25). In this way, *The Intimacy of Presence* attempts to incorporate experiences that have been lived, experiences that were pre- or non-verbal, to implicate the bodies of others, and to involve one's own body. Through engagement with the work, it is my hope that the work may elicit this sense of bodily knowing and corporeal awareness as it becomes simultaneously manifest in the body and mind.

The field study was designed to bring interpersonal sensory communication to light and to try to define the qualities of the embodied cognitive experience. With this new body of work, the invisible qualities of the "other" are sublimely *encountered* in the 'absent' figures of the panels. The final exhibition attempts to translate these qualities of embodied cognition into a tangible form that can be experienced by interacting with the bodily evocation of another person and ultimately too, the self.

"I'M INTERESTED IN USING SCULPTURE TO IDENTIFY THE PLACE WHERE A BODY ONCE WAS—AND THAT COULD INCLUDE THE VIEWER" (Antony Gormley qtd in Gayford, "Mud Upwards")

Integral to studio practice has been the study of the work and ideas of various figurative sculptors such as Antony Gormley, Kiki Smith, Hanneke Beaumont, Steinunn Thorarinsdottir and Olafur Eliasson. Of the group of sculptors, Antony Gormley has been the most influential in my thinking about sculpture and installation work. His philosophy on sculpture as well as on the body resonates with ideas of embodied cognition in terms of artistic production and reception of the work. Olafur Eliasson, in installations like *The Weather Project* and *Beauty*, and Antony Gormley in *Blind Light* have created atmospheric settings, in which viewers participate and palpably experience the work and necessarily, themselves. Their work in these instances has inspired me in resolving the issue of combining the figurative with the immaterial or invisible aspects of embodied cognition.

I found the work of these artists physically resonant and powerful in that they are not just representational; inherent in the figures and their juxtapositions or installations, multifaceted meaning is conveyed on both emotional and physical levels. These include memory, interaction, boundaries, energy, and corporeal space–interior as well as exterior. But the question remained: Could I make figurative work that would convey

the immaterial? The projects of James Turrell and Olafur Eliason[37] both frequently employ light and space and motivated me to consider whether I might realize ephemeral qualities/sensations using light and/or heat. My challenge was to find a way to make work about something that was sensed but unseen, tangible yet transitory.

In *A Conversation with Antony Gormley: Being the Void Sculpture*, Karlyn de Jongh relates Gormley's thoughts on his sculptures. He speaks about them containing residues of presence – his presence at the time when his body was cast. He talks about the body as a place of memory and transformation. His recent work seems to be moving away from the solid, to work that is much more about the energy of the body, about "containment and extension, what can be seen and what can be sensed" (de Jongh 2010). Two of his works that have influenced my work in profound ways have been *Domain Field* and *Blind Light*.[38] *Domain Field* is comprised of 200 or so figures made of connected steel bars and based on the plaster casts of volunteers aged 2 to 85 years. The figures are placed throughout the gallery and Gormley intends them "to be inhabited by the living bodies of the viewers. It is their motion through the piece that [makes] the work."[39]

37 Turrell, as seen in an episode of *Art:21* talks about the "physicality of light." Eliason, in an interview on *ArtNow Episode 1:Olafur Eliason in Conversation* asks: "…do you create space or does space create you?"

38 See antonygormley.com: shows/past/solo.

39 http://artobserved.com/2009/08/go-see-moscow-antony-gormley-domain-field-at-the-garage-. centre-for-contemporary-culture-through-september-2-2009/

For *Blind Light*, Gormley designed an 8x10 metre glass box and had it filled it with dense vapour generated by oscillating ultrasonic humidifiers. The 'fog' severely reduces visibility inside the box and visitors must literally feel their way around the space and other people. In these two exhibitions his work becomes interactive and moves beyond the confines of the object, actively involving the viewer in the piece on a visceral level, activating bodily awareness and consciousness of space. Gormley speaks about his work thus:

> "I like the idea that the sculptures are not representations of a particular person, but a potential place where life might rest. In a sense, they are all invitations for empathetic inhabitation…. By inhabiting the space of sculpture, you can in some way escape from your own condition into another's; through the works, viewers can experience feelings and thoughts they wouldn't otherwise have felt." (Cole quoting Gormley: 2003:47)

Olafur Eliasson, in his installation *The Weather Project,* installed a huge sun-like lamp, which filled the otherwise empty gallery space with a radiant mock sunshine. Gallery goers enjoyed the space in various ways, some even going so far as to lie on the floor, taking pleasure in the sensations evoked by basking in the orange glowing light. In *Beauty*, a spotlight shines down on descending mist in an otherwise dark room creating a rainbow effect in the light. Viewers enter the room and depending on their angle of

viewing can see the rainbow or not. They may even move close enough to feel the mist on their bodies if they choose to.

Eve Blau, writing in the "The Third Project." discusses Eliasson's work titled *Your Chance Encounter:*

> What is being staged is an event, a coming together, a meeting, a collective experience. It is *your* encounter. How it unfolds and what you take away from the encounter depends on what you bring to it. Experience, Eliasson reminds us, is never unmediated (Blau).

Your Chance Encounter is comprised of several installations throughout the museum space. With the work, Eliasson hopes to shift the experience and the perception of our surroundings, and to create interaction with both the piece and the museum. Some of the works "unfold in the entire exhibition space," so that as viewers make their way through the museum, they are drawn in and made a part of the work. Eliasson, in writing about the various installations in this project states, "through these means, [challenging the visitors' sense of movement and orientation within and around the museum building] I hope to make people (re)consider the potential of the museum as a public space for critical engagement with art and reality" (Eliasson, statement).

Eliasson and Gormley have often created unique and interactive spaces with their work, filled with atmospheric light or ephemeral

elements, and which either contain figurative components or implicate the viewer as an active figure in the work. With my new exhibition and the shift from figurative painting to installation-based work, it has been my goal to incorporate both of these elements in order to create work that engages the viewer more deeply through encounter with the work and ultimately, with themselves.

Figure 10: Installation View of The Intimacy of Presence

CONCLUSION

It is my hope that this interdisciplinary thesis project will lead me to consider new questions and toward the formulation of a more comprehensive research methodology that is dedicated to the investigation of embodied cognition. It has been a two-year journey filled with learning many new skills and discovering many new areas of research and exploration. Combining these areas and building upon new skills has presented an exciting and intense new focus to my art practice, and has propelled me into a more professional realm of thinking about and making interdisciplinary work.

With the scope of this MFA thesis project, I hope to contribute a new perspective on embodied cognition, one that combines an art practice that draws on theory and field research to inform and inspire. I expect this deeper knowledge and experience of embodied cognition will allow me to re-imagine my focus on figuration and the body and to creatively explore new methods of interdisciplinary research and production in relation to it. I am also considering pursuing doctoral research that would allow me to investigate more deeply the elusive nature of embodied cognition. In this sense, the ideas and reflections generated in this research project may be seen as building blocks for a more comprehensive interdisciplinary inquiry.

My research in the field of embodied cognition is far from complete. This thesis could have been approached from any number of perspectives, as it is an area of interest in many fields (philosophy, the social sciences,

feminism, anthropology, aesthetics, neuroscience, and/or any combination of these) of research.

The Groebner Booth field research has inspired me to imagine other research projects in connection with embodied cognition, setting alternate parameters and spaces in which to set the booth up. My studio practice has and will continue to be broadened by further research in fields not covered in my initial framework, such as a more feminist reading of bodily knowing, or expanding the biological aspect which could add more solidly to the aspects of the physical research – to that of the *Körper* as well as the *Leib*.

Csordas's cultural anthropological studies were a fascinating look into different cultural practices and attitudes toward the body. In anthropological research there are many studies of cultures whose relationship to their bodies and the way in which they interact with one another are completely different than paradigms more prevalent in the north western hemisphere. Cultural differences in spatial thinking related to the body would also provide an intriguing perspective on installation practices. The relation of embodied cognition to art/aesthetics is particularly interesting as is bodily knowing from a feminist or gendered perspective.[40]

40 E.g., Ellen Dissanayake's Homo Aestheticus: Where Art Come From and Why and the chapter titled "Empathy Theory" Reconsidered: The Psychobiology of Aesthetic Responses, Shaun Gallagher: How The Body Shapes The Mind , Anthony Varela: The Embodied Mind: Cognitive Science And Human Experience, Andy Clark: Being There: Putting Brain, Body And The World Together Again and

The area of embodied memory was another area of research that I touched on in my research but was unable to pursue. This area further presents various streams of inquiry; for instance, embodied memory in relation to others, as well as in relation to physically embodied knowledge and skills.

Research always seems to spawn further research and there is always the feeling that there is "more out there". In the area of embodied cognition I feel as if I have managed to investigate a small component of it, which was further developed by the incorporated elements of field research and exhibition. Further research to expand the notion of embodied cognition could be continued within the realm of studio practice including field work or research at a doctoral level that continues to combine research and (art)work in a studio-based program. I first came to embodiment and embodied cognition through the study of space, which led to thinking about the perceptive potential of our bodies. As I began my research I wanted to find corroborative evidence of bodily knowing as something legitimate and recognized. I found that embodied cognition as a reciprocal system of perception was an area that was being investigated from many different theoretical perspectives. Cognition and knowing are always approached as an embodied process in relation to the environment and those in it and

Supersizing The Mind: Embodiment, Action, And Cognitive Extension (Philosophy Of The Mind), Price and Shildrick (eds) Feminist Theory and the Body: A Reader, Anthony Chemero: Radical Embodied Cognitive Science

is presented as a kind of perception that occurs *beyond the realm* of what is customarily recognized.

Starting at the surface of the body, I wanted to investigate nonverbal means of communication and gather an understanding of accepted modes of interaction. Social scientists and philosophers have sought to explain means of perception by studying our interaction with others, objects, and the environment. Because perception is customarily accepted as an indivisible process between body and brain, it has also been investigated in the neurosciences.

The somewhat elusive nature of embodied cognition is what led me to this inquiry into its subtle and invisible qualities. Arguably, our bodies have the potential to *tangibly* perceive, but this sensing can be, at best, fleeting or ephemeral, and hard to define. In other words, it simply *is*, as something we perceive by being immersed in it, but not something we are necessarily always aware of. In order to deepen my understanding of the cognitive process, I also designed a module of field research to explore embodied cognition in co-presence involving two human participants with one always being myself as the researcher. Following the fieldwork, it felt important to look look closer at what was occurring between myself and the participants in order to demonstrate that it wasn't just imagined phenomena. However, not all avenues of research could be satisfactorily taken on before I was out of my depth, specifically in the sciences.

My final exhibition, *The Intimacy of Presence* expects to activate the viewer-cum-participant by leading them through the work to create a conscious awareness of their bodies and the process of mind-body reciprocating interaction. Like the sensations experienced during the booth session research between participants in co-presence, *The Intimacy of Presence* holds the residue of intimate presence in the absences of silent and compelling silhouettes. To be alive is to be embodied. Our bodies are integral to who and what we are as human beings, inseparable from our imagination and consciousness, reason and intellect. The importance of embodied cognition is that it speaks to how we perceive with our bodies and how they are a rich and complex means of experiencing our environment and thus our most immediate, intimate and candid source of knowledge.

POST SCRIPT

These past two years of studio and theoretical research have presented new avenues for considering the body and its meaning as the central subject matter of my artistic practice. Importantly, my Interdisciplinary Master's research has allowed me to pursue exploration of the body in the three-dimensional realm, specifically, in my initial figuraive studies in wood and then in bronze and aluminum. Furthermore my work has responded to theoretical ideas–most notably, to embodied cognition– and has endeavored to incorporate interactive and ephemeral elements recorded in the field research results. Interestingly, however, certain parallels with my figurative painting persist.

In much the same way, the panel figures from *The Intimacy of Presence* appear iconically, beyond cultural signifiers, and float in space between presence and absence, memory and desire soliciting peraps, closer interaction from the viewer. I have no doubt that my understanding of figuration has expanded, enabling me to delve deeper into the meaning of the body and into my figurative artistic practice. As an artist and researcher, I will continue to explore notions of figuration, the body, and embodied cognition.

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- "Desolated Figures in Abstract Sculptures. Beaumont's Reinvention of Western Body." By *Dinah Guimaraens*
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APPENDIX A: REB APPLICATION

ONTARIO COLLEGE OF ART & DESIGN

OCAD Research Ethics Board (REB)

Application for Ethical Review of Research Involving Human Participants

Reviewer Disposition

(For REB Use Only) ► File # :_____ Reviewers:_____ Due Date:_____

Decision: Accepted as is ☐ Approval Pending Revision ☐ Clarification Required ☐
Resubmission ☐ Full Review ☐ Withhold Approval ☐

Name: Sandy Groebner	Faculty number:
Email address: sg04st@student.ocad.ca	Program: IAMD Masters

Please refer to the documents "OCAD Research Ethics Guidelines", which can be found at http://www.ocad.ca/research/re_policies.htm prior to completion and submission of this application.

If you have questions about or require assistance with the completion of this form, please contact the Research Office at ext. 474, or research@ocad.ca.

Return your completed application and all accompanying material **in triplicate** to the **Research Ethics Office at rm 7520, 5th floor, 205 Richmond Street, Toronto, ON.**
Please ensure all necessary items are attached prior to submission (see checklist below).
Handwritten applications will ***not*** be accepted.

No research with human participants shall commence prior to approval from the Research Ethics Board.

DOCUMENT CHECKLIST	✓ if applicable
Recruitment Materials	
• Letter of invitation	☒
• Verbal script	☐
• Telephone script	☐
• Advertisements (newspapers, posters, SONA)	☐
• Electronic correspondence guide	☐
Consent Materials	
• Consent form	☒
• Assent form for minors	☐
• Parental/3rd party consent	☐
• Transcriber confidentiality agreement	☐
Data Gathering Instruments	
• Questionnaires	☒
• Interview guides	☐
• Tests	☐
Feedback Letter	☐
Letter of Approval for research from cooperating organizations, school board(s), or other institutions	☐
Any previously approved protocol to which you refer	☐
Request for use of human tissue sample in research Please Note: this form is required for all research projects involving human tissue, bodily fluids, etc.	☐
Signed Application Form	☒

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SIGNATURES

PLEASE NOTE: The title "principal investigator" designates the person who is "in charge" of the research. In this position, the principal investigator is assumed to have the abilities to supervise other researchers, be responsible for the financial administration of the project, have the authority to ensure that appropriate guidelines and regulations are followed, and be competent to conduct the research in the absence of faculty supervision. The restriction of the term "principal investigator" to faculty or post-doctoral fellows does not have implications for ownership of intellectual property or publication authorship.

A **student cannot be identified as a "principal investigator"**. However, for the purpose of recognizing a student's leadership role in the research, a faculty member may designate a "principal *student* investigator" below.

INVESTIGATORS:

Please indicate that you have read and fully understand all ethics obligations by checking the box beside each statement and signing below.

☒ I have read OCAD's Research Ethics Policy and agree to comply with the policies and procedures outlined therein.
☒ Any additions/changes to research procedures after approval has been granted will be submitted to the REB.
☒ I agree to request a renewal of approval for any project continuing beyond the expected date of completion or for more than one year.
☒ I will submit a final report once the research has been completed.
☒ I take full responsibility for ensuring that all other investigators involved in this research follow the protocol as outlined in this application.

Principal Investigator

Signature _____ Date: _____

Principal Student Investigator (optional)

Signature _____ Date: Jan. 18th, 2010

Co-Investigators:

Signature _____ Date: _____

FACULTY SUPERVISOR:

Please indicate that you have read and fully understand the obligations as faculty supervisor listed below by checking the box beside each statement.

☐ I agree to provide the proper supervision of this study to ensure that the rights and welfare of all human participants are protected.
☐ I will ensure a request for renewal of a proposal is submitted if the study continues beyond the expected date of completion or for more than one year.
☐ I will ensure that a final report is submitted to the Office of Research Services.
☐ I have read and approved this application and proposal.

Signature _____ Date: _____

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SECTION A – GENERAL INFORMATION

1. **Title of the Research Project:** The Groebner Booth

2. **Investigator Information:**

	Name	Position	Dept./Address	Phone No.	E-Mail
Principal Investigator					
Principal Student Investigator	Sandy Groebner	MFA Candidate	IAMD	416 902 4114	sg04st@student.ocad.ca
Co-Investigator(s)					
Faculty Supervisor(s)	Vladimir Spicanovic	Dean,	Faculty of Art	ext. 331	vspicanovic@ocad.ca

3. **Proposed Date of commencement:** ☒ upon approval, OR ☐ other. **(dd/mm/yyyy)** _____

   Proposed Date of completion (dd/mm/yyyy): **30/08/2010**

4. **Indicate the location**(s) where the research will be conducted:

OCAD	☒	
Community Site	☐	Specify _____
School Board	☐	Specify _____
Hospital	☐	Specify _____
Other	☐	Specify _____

5. **Other Ethics Clearance/Permission:**

(a) Has another University or Institutional Research Ethics Board approved this research? ☐ **Yes** ☒ **No**

If **YES**, there is no need to provide further details about the protocol **at this time,** provided that **all** of the following information is provided:

Title of the project approved elsewhere: _____
Name of the Other Institution: _____
Name of the Other REB: _____
Date of the Decision: _____
A contact name and phone number for the other REB: _____

Please provide a copy of the application to the other institution together with all accompanying materials, as well as a copy of the clearance certificate / approval.

If **NO**, will another University or Institutional REB also be asked for approval? ☐ **Yes** ☒ **No**

If yes, specify (e.g., university, hospital, school board, community organization, proprietor) **provide details and attach any relevant documentation.** _____

If **NO**, will any other person(s) or institutions be asked for approval? ☐ **Yes** ☒ **No**
Specify (e.g., hospital, school board, community organization, proprietor) _____

ONTARIO COLLEGE OF ART & DESIGN

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6. **Level of the Research:**

☐ Undergraduate Thesis	☒ Masters Thesis/Project	☐ Ph.D
☐ Post Doctorate	☐ Faculty Research	☐ Administration
☐ Undergraduate Course Assignment (specify course) _____	☐ Graduate Course Assignment (specify) _____	☐ Other (specify course) _____

7. **Funding of the Project:**

(a) Is this project currently being funded ☐ **Yes** ☒ **No**
(b) If **No**, is funding being sought ☒ **Yes** ☐ **No**

If Applicable:
(c) Period of Funding (dd/mm/yyyy): From: 15/02/2010 To: 30/06/2010
(d) Agency or Sponsor (funded or applied for)
☐ CIHR ☐ NSERC ☐ SSHRC ☒ Other (specify): OCAD Graduate Office

(e) Funding / Agency File # (**not** your Tri-Council PIN) _____

8. **Conflict of Interest:**

(a) Will the researcher(s), members of the research team, and/or their partners or immediate family members receive any personal benefits related to this study – Examples include financial remuneration, patent and ownership, employment, consultancies, board membership, share ownership. ☐ **Yes** ☒ **No**

If **Yes**, please describe the benefits below.

(b) Describe any restrictions regarding access to or disclosure of information (during or at the end of the study) that the sponsor has placed on the investigator(s).

SECTION B – SUMMARY OF THE PROPOSED RESEARCH

9. **Rationale:**

Briefly describe the purpose and background rationale for the proposed project, as well as the hypothesis(es)/research question(s) to be examined.

The Groebner Booth was conceived and built initially as a research tool for the basis of my hypothesis and one of my main research questions. The experience I have designed for the Groebner Booth involves two participants entering the booth and standing facing one another for a total of five minutes. The purpose of this and the data collected from my own and the participant's answers to a series of questions is to determine the value of face-to-face human interaction and to evaluate the affects of non-verbal communication. With participant involvement, I, the researcher, hope to establish whether there is a relationship between non-verbal communication in human-to-human interaction and an understanding of the body as an important and legitimate source of experience, awareness and knowledge.

The data collected and analyzed in this research project will then to be used to inform both the meaning and the aesthetic of the figurative sculptural work I wish to undertake.

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10. **Methods:**

Are any of the following procedures or methods involved in this study? Check **all** that apply.

- ☐ Questionnaire (mail)
- ☐ Questionnaire (email/web)
- ☐ Questionnaire (in person)
- ☐ Interview(s) (telephone)
- ☐ Interview(s) (in person)
- ☐ Secondary Data
- ☐ Computer-administered tasks
- ☐ Focus Groups
- ☐ Journals/Diaries/Personal Correspondence
- ☐ Audio/video taping specify)
- ☐ Observations

Describe sequentially the methods involved in this study and all procedures in which the research participants will be involved (paper and pencil tasks, interviews, questionnaires, physical assessments, physiological tests, time requirements, etc.)
Attach a copy of all questionnaire(s), interview guides or other test instruments. If reference is made to previous protocols, please provide copies of relevant documentation.

1.Participants will be selected from the OCAD community of Students Faculty and Staff based on obtaining a cross-section of age, gender and cultural background.

2. The selected participant will be given the letter of informed consent to read (see attached) and sign. I will also verbally go over issues such as how the session will be timed and that a timer will indicate the end of the session for us. I will also remind the participant that I will not be observing them and will, for the most part, have my eyes only slightly open.

3. The participant will then be taken inside the booth to get a pre-view of the interior. This step is important in that it allows the participant to see the inside of the booth and to decrease curiosity about the environment they are in once inside and participating. Return to outside the booth.

4. Following this step, I will confirm with the participant whether they are ready to continue and if so, I will set the timer for 5 minutes.

5. The participant and I enter the booth and take our positions approximately 10-12 inches apart and facing one another.

6. When the timer indicates, the session will be ended. I acknowledge this verbally and invite the participant to exit the booth.

7. Once outside, both the participant and I then answer the questionnaire regarding our experience in the booth.

8. I collect the participant's consent and questionnaire forms and store them with my own questionnaire answers for the same session.
9. Following several sessions in the Groebner Booth, data is analyzed and consolidated into findings.

10. Participants are updated regarding these findings if they have an indicated interest in this.

11. **Professional Expertise/Qualifications:**

Does this procedure require professional expertise/recognized qualifications (e.g., registration as a clinical psychologist, first aid certification)?
☐ **Yes** specify: _____ ☒ **No**

If **YES**, indicate whether you, your supervisor, or any members of your research team have the professional expertise/recognized qualifications required? ☐ **Yes** ☐ **No**

12. **Participants:**

Describe the number of participants and any required demographic characteristics (e.g., age, gender).

Given the time frame for this field work I expect the number of participants will be at least ten but no more than twenty. Participants will be recruited from the OCAD community of students, staff and faculty, and will vary in age, gender and cultural background. Some of my initial theoretical findings suggest that communication styles may vary with age, gender and cultural background. As such, I am interested in obtaining the maximum variety of sample. It is also important to note that as the researcher, I will also be participating in the sessions with each participant as a research instrument.

13. **Recruitment:**

Describe how and from what sources the participants will be recruited, including any relationship between the investigator(s), sponsor(s) and participant(s) (e.g., family member, instructor-student; manager-employee).
Attach a copy of any poster(s), advertisement(s) and/or letter(s) to be used for recruitment.

Participants may be recruited via direct verbal solicitation as well as via posters if necessary. No poster as such has yet been designed.

14. **Compensation:**

a) Will participants receive compensation for participation? ☐ **Yes** ☒ **No**
b) If yes, please provide details.

SECTION C – DESCRIPTION OF THE RISKS AND BENEFITS OF THE PROPOSED RESEARCH

15. **Possible Risks:**

a) Indicate if the participants might experience any of the following risks:

i. Physical risks (including any bodily contact, physical stress, or administration of any substance)?
☐ **Yes** ☒ **No**

ii. Psychological risks (including feeling demeaned, embarrassed worried or upset, emotional stress)?
☒ **Yes** ☐ **No**

iii. Social risks (including possible loss of status, privacy, and / or reputation)?
☐ **Yes** ☒ **No**

iv. Are any possible risks to participants greater than those that the participants might encounter in their everyday life?
☐ **Yes** ☒ **No**

v. Is there any deception involved?
☐ **Yes** ☒ **No**

vi. Is there potential for participants to feel obligated to participate or coerced into contributing to this research (because of regular contact between participants and the researcher, relationships that involve power-dynamics, etc.)?
☐ **Yes** ☒ **No**

b) If you answered **Yes** to any of 1a – 1f above, please explain the risk.

Some participants may experience some initial (emotional) stress or physical discomfort during the session due to the proximity of the researcher and the containment of the booth.

c) Describe how the risks will be managed and include the availability of appropriate medical or clinical expertise or qualified persons. Explain why less risky alternative approaches could not be used.

Participants will have the "procedure" outlined in the explanation and consent form and will be shown the interior of the booth prior to the session beginning to allay any anxiety. Participants are also instructed that they are free to withdraw from the session at at point if they so choose.

16. **Possible Benefits:**

Discuss any potential direct benefits to the participants from their involvement in the project. Comment on the (potential) benefits to the scientific community/society that would justify involvement of participants in this study.

Potential benefits for the participants may include a new awareness regarding human-to-human interaction at the visceral/physical level. They will be introduced to a unique experience/research in relation to space as well as human interaction. It is my hope that this research will also add to the body of work being done on the importance of the senses and the intelligence of the body.

SECTION D – THE INFORMED CONSENT PROCESS

17. **The Consent Process:**

Describe the process that the investigator(s) will be using to obtain informed consent. Include a description of who will be obtaining the informed consent. If there will be no written consent form, explain why not.

If applicable, attach a copy of the Letter of Invitation, the Consent Form, the content of any telephone script, and any other material that will be utilized in the informed consent process.

Please see the attached Letter of Invitation and the Consent Form for the Groebner Booth.

18. **Consent by an authorized party:**

If the participants are minors or for other reasons are not competent to consent, describe the proposed alternative source of consent, including any permission form to be provided to the person(s) providing the alternative consent.

19. **Alternatives to prior individual consent:**

If obtaining individual participant consent prior to commencement of the research project is not appropriate for this research, please explain and provide details for a proposed alternative consent process.

20. **Feedback to Participants:**

Explain what feedback/ information will be provided to the participants after participation in the project. This should include a more complete description of the purpose of the research, and access to the results of the research. Also, describe the method and timing for delivering the feedback.

In the Consent Form I make an offer to participants to provide them with updates on the project as I progress with my research. Participants will also have the opportunity to see the finished exhibition work as well as read the final thesis paper.

21. **Participant withdrawal:**

a) Describe how the participants will be informed of their right to withdraw from the project. Outline the procedures that will be followed to allow the participants to exercise this right.

In the Letter of Invitation, under the heading 'How Does the Groebner Booth Function' I make a note which says: Participants are free to withdraw at any point during the session. This can be done verbally, at which point the session will be aborted.

b) Indicate what will be done with the participant's data should the participant choose to withdraw. Describe what, if any, consequences withdrawal might have on the participant, including any effect that withdrawal may have on participant compensation.

If the participant should choose to withdrawat any point during the session or during answering the questionnaire, I will not seek any explanation (unless they wish to discuss the experience) and simply accept their withdrawal. There will be no consequences whatsoever should the participant choose to withdraw and compensation, as there is none, is not an issue.

SECTION E – CONFIDENTIALITY & ANONYMITY

***Confidentiality*:** information revealed by participants that holds the expectation of privacy. This means that all data collected will not be shared with anyone except the researchers listed on this application.

***Anonymity of data*:** information revealed by participants will not have any distinctive character or recognition factor, such that information can be matched **(even by the researcher)** to individual participants. Any information collected using audio-taping, video recording, or interview cannot be considered anonymous. **Please note that this refers to the anonymity of the data itself and not the reporting of results.**

22. Given the definitions above:

a) Will the data be treated as confidential? ☒ **Yes** ☐ **No**
b) Are the data anonymous? ☒ **Yes** ☐ **No**

c) Describe any **personal identifiers** that will be collected during the course of the research (e.g., participant names, initials, addresses, birth dates, student numbers, organizational names and titles etc.). Indicate how personal identifiers will be secured and if they will be **retained** once data collection is complete.

On the Questionnaire Form, participant identifiers will maintain anonymity and only refer to age, gender and cultural background (if significant). This data will be indicated on the questionnaire and these will be retained in a secure place with the researcher (myself). Each participant will have the opportunity to choose a fictitious name for the sake of being able to write about their experiences anonymously.

d) If any personal identifiers will be **retained** once data collection is complete, provide a comprehensive rationale explaining why it is necessary to retain this information, **including the retention of master lists that link participant identifiers with unique study codes and de-identified data.**

These identifiers are being collected and retained in order to discern any patterns regarding participant experience.

e) State who will have access to the data.

Only myself as the researcher. Data will be analyzed and presented in my thesis. In the case of the solicited drawings, I would potentially like to use these in some forum - either within my thesis or in my final exhibition. Permission to do so will be solicited from participants.

f) Describe the procedures to be used to ensure anonymity of participants and/or confidentiality of data **both during the conduct of the research and in the release of its findings.**

During the conduct of the research, gender and age markers will be used as well as the participant's chosen fictitious name.and research will be kept in my possession. Using the analyzed data, I may refer more specifically to participants, but will use the pseudonyms they have chosen for themselves. All the research data will be kept private and confidential and in the possession of the researcher. Actual names of the participants will not be disclosed and any reference to the participant's identity or voice will only be used under their pseudonym.

g) If participant anonymity and/or confidentiality is not appropriate to this research project, explain, in detail, how all participants will be advised that data will not be anonymous or confidential.

N/A

h) Explain how written records, video/audio tapes, and questionnaires will be secured, and provide details of their final disposal or storage, including how long they will be secured and the disposal method to be used.

Data gathered in this research study as well as any written records will remain securely in my sole possession and will be kept private and confidential. The only person who will have access to the data will be myself - the researcher - and only as long as deemed necessary for my thesis work.

SECTION F – SECONDARY USE OF DATA

23. Use of data:
a) Is it your intention to reanalyze the data **for purposes other than described in this application**?

☐ **Yes** ☒ **No**

b) Is it your intention to allow the study and data to be reanalyzed by colleagues, students, or other researchers outside of the original research purposes? If this is the case, explain how you will allow your participants the opportunity to choose to participate in a study where their data would be distributed to others (state how you will contact participants to obtain their re-consent)

No it is not my intention to allow the study and data to be reanalyzed by anyone other than myself as the principle researcher.

c) If there are no plans to reanalyze the data for secondary purposes and, yet, you wish to keep the data indefinitely, please explain why.

At this point I forsee extending the research study, in which case I may want to keep the data.

SECTION G – MONITORING ONGOING RESEARCH

It is the investigator's responsibility to notify the REB using the "Renewal/Project Completed" form, when the project is completed or if it is cancelled.

24. **Annual Review and Serious Adverse Events (SAE):**

a) **MINIMUM REVIEW REQUIRES THE RESEARCHER COMPLETE A "RENEWAL/PROJECT COMPLETED" FORM AT LEAST ANNUALLY**.
Indicate whether any additional monitoring or review would be appropriate for this project.

I do not think so as I plan to graduate before the end of 2010.

***Serious adverse events** (negative consequences or results affecting participants) **must be reported** to the Research Ethics Officer and the REB Chair, **as soon as possible** and, in any event, no more than 3 days subsequent to their occurrence.

APPENDIX B: GROEBNER BOOTH CONSENT FORM

★ The Groebner Booth ★

WHAT IS THE GROEBNER BOOTH?

The Groebner Booth is an 8ftx12ft booth constructed of modular Masonite panels with a roof and two small skylights to allow for minimal ambient light to enter. The booth has been designed in such a way that sensory input (sight in particular) is moderately minimized. In this way, participants are less aurally and visually distracted and more able to concentrate on physical/mental sensations. The objective of the Groebner Booth is to promote human-to-human contact through a heightened awareness of bodily energy and the latent potency of non-verbal communication. The Groebner Booth will also serve as a means for collecting evidence of non-verbal communication and relies specifically on the collaborative efforts of participants. The data feedback will be collected, analyzed and used for a future visual project.

HOW DOES THE GROEBNER BOOTH FUNCTION?

Before entering the booth, you the participant, will be asked to sign a consent form allowing me, the researcher to use data collected during the trial in my thesis document. The main purpose of the Groebner Booth is to explore non-verbal communication and sensory awareness of the body. The session relies on two participants entering the booth and standing facing one another in a relaxed position at approximately *10-12 inches apart*, (toe-to-toe) without physical contact.

During the session, the researcher will not be making any eye contact the participant, as the research is not based on visual observation, but rather, as previously stated, sensory awareness of the body. It is suggested that participants follow suit: you may keep your eyes partially open or closed if you feel comfortable to do so, but eye contact or observation is **not** part of the exercise. A timer will be set to indicate an interval of 5 minutes, after which its beep will indicate the end of the session. ****Note:** Participants are free to withdraw at any point during the session without consequence or any questions asked.

WHAT HAPPENS AFTERWARDS?

Participants are asked to provide feedback about their experience in the booth through a series of written questions. They will also be asked to choose a pseudonym, which will allow the researcher to reference their responses and maintain their anonymity.

CONFIDENTIALITY

Information revealed by participants holds the expectation of privacy. This means that all data collected will not be shared with anyone except myself, the researcher. The data collected will be analyzed and referred to within the thesis paper. Participants are welcome to request a project update once the data has been analyzed.

ANONYMITY OF DATA

Information revealed by participants will not have any distinctive character or recognition factor, such that information can be matched to individual participants. Questionnaires are to be dated and initialed by participants for authenticity only. Any visual material provided (the drawing) will also remain anonymous unless otherwise requested by the participant.

In order that the researcher may refer to participants within the thesis document and maintain participant anonymity, it is requested that the participant select a pseudonym for him or herself.

INFORMED CONSENT

#1) I have read and understood the above information and procedures:

Signed _____

#2) I agree to allow the drawing I have provided for question #4 be used (anonymously) by the researcher/artist in the context of her thesis and/or final exhibition.

Signed _____

My Pseudonym _____ (so the researcher may refer to you and/or your data in the thesis paper and maintain your anonymity)

Dated _____

PARTICIPANT QUESTIONNAIRE

Please answer the following 6 questions, taking as much time and using the paper provided:

1. Describe how you felt physically (i.e. any particular sensations).
2. Describe how you felt mentally/emotionally.
3. Tell me about any change in comfort level over the 5-minute time period in the booth.
4. What was your sensory or 'energy' experience/impression of the other participant?
5. Please provide a visual annotation (drawing) of your experience of the **space between** you and the other participant. Please use the separate sheet of paper provided for this.
6. Do you have any further comments or reactions to the 'session' or would you care to further discuss your experience with the researcher?

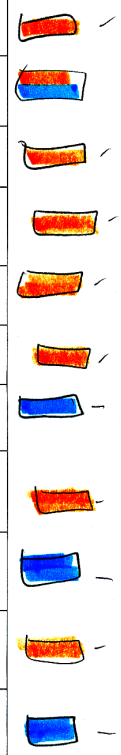
Research Follow-Up: Once I have collected all the data I require I will be analyzing it and writing it into my thesis research concerning human interaction. If you are interested in hearing about these findings, please leave me an email contact and I will be happy to forward any pertinent information.

email _____.

APPENDIX C: FINDINGS ANALYSIS CHARTS 1 & 2

PARTICIPANT ANALYSIS CHART: GROEBNER BOOTH 05/2010

PARTICIPANT	PHYSICAL FEELING	EMOTIONAL FEELING	CHANGE IN COMFORT	REACTION TO OTHER	SENSE OF TIME
1.Hank	Comfortable Natural	Open, Grounded Connected	Steady comfortable	Open Grounded	n/c
2. MPP	Warmth Relaxed Force field	Uncomfortable Self-conscious about body	Shift in comfort: awkward to connection	Magnetic force field, warmth Connected	n/c
3. Blue	Nothing particular	Relaxed	Relaxing	Nil	n/c
4. Spunky	Relaxed Drawn forward Some tension in legs	Relaxed	Comfortable except for balance issue	Felt little presence but Drawn forward	n/c
5. Tialinda	Warmth Leaning forward Wavering	Desire for eye contact, Much thinking	Ok throughout	Leaning forward and pulling away	Time went fast
6. Mary	Comfortable Relaxed Swaying	Calm Peaceful Comfortable	Comfort constant Enjoyed time	Little sense of other	Time went fast
7. Ben	Leaning Swaying	Desire for eye contact, Much thinking	Wanted to be calm. Relaxed somewhat	Self-conscious Nervous	n/c
8. Carl	Comfortable Hands open	Accepting Calm Secure Grounded	Comfort constant	Felt energy and openness	Time went fast
9. Frog28	Conscious of space Swaying	Uneasy Challenged Discomfited Worried	Shifted to only slightly less uncomfortable	Conscious and worried of little space between	n/c
10. Seahorse	Calming Drawn forward Warmth and in hands	Relaxed Open	Comfortable More meditative	Warmth in hands, arms from perceived proximity	Time went fast
11. Invisible Wall	Rocking back and forth	Extreme discomfort Wanting to exit	Discomfort throughout but less panicky at end	Not any really	Time went fast



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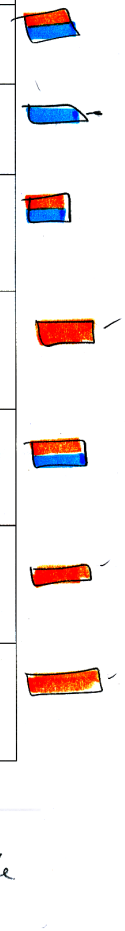
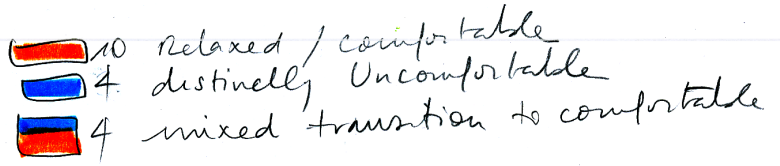
12. Francisco	Warmth Tension	Calm Too much thinking	More comfortable over 5 minutes Slowed thinking Relaxed more	Steady warmth Sense of board between us holding apart	n/c
13. Running Girl	Uncomfortable Could not look	Thinking a lot about discomfort Anxious	Uncomfortable throughout	Researcher comfortable	n/c
14. Andria	Tight, constricted Uncomfortable Heaviness in toes Stiffness	Uneasy	Uncomfortable to slightly more comfortable	Calm and collected	n/c
15. Persinger	Swaying back and forth Energy flow Energy palpable like puffy egg	Clam Aligned Settled as anxiety and negativity left	Comfortable throughout but settled more	Calming Palpable energy field	n/c
16. Marcello	Swaying Aware of heartbeat and being	Resigned Passive acceptance	Slightly awkward Only slightly more comfortable	Aware of movement of head (swaying?)	n/c
17. Caroula	Swaying Heat and heaviness in Hands to tingling numbness	Calm Hands felt red	Comfort throughout	Could smell perfume. Breathing quiet questioned whether present?	n/c
18 Franky	Rocking, being pulled back and forth Warmth Felt left arm	Internal to external shifting of orientation and sensations Anxiety re: proximity	Anxiety shifted to better comfort with proximity	Energy in waves pulling forwards and back	n/c





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